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## 5

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## Morfo-sintassi e fonologia

 Morphosyntax and Phonology
# From Phonological Rules to the Person Case Constraint. Monovalent vs. Bivalent Features in Grammar 

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#### Abstract

: In phonology, segmental content has been predominantly represented in terms of binary features. Although binary features may provide an elegant description of some segmental contrasts, it is far from clear that speaker/hearer's knowledge about segments is organized in a binary way, as we illustrated with specific reference to vocalic alternations (metaphony etc.). The debate about binarity in phonology has a potential parallel in morphosyntax. While syntactic categories ( $\mathrm{N}, \mathrm{V}, \mathrm{v}, \mathrm{T}$ etc.) are monovalent, a model like Distributed Morphology depends on standard generative phonology for a number of formal properties, including the adoption of binary features. Thus $1^{\text {st }}$ and $2^{\text {nd }}$ persons are [+participant] while $3{ }^{\text {rd }}$ person is the absence of such properties, namely [-participant]. We argue that this is not the most economical set of assumptions, specifically in the explanation of the syntactic generalization known as the Person Case Constraint (PCC). For both phonology and morphology, we show that the inherent richness of binary features leads to formal and conceptual problems, such as the fact that atomic segments or lexical items have as complex a feature matrix as non-atomic ones.


Keywords: Features, Elements, Vowel alternation, Person, Person Case Constraint

## 1. Introduction

In phonology, segmental content has been predominantly represented in terms of binary features. If we regard segmental features as mere notational devices to be used with the purpose of describing phonological facts by means of a formal vocabulary, we may conclude that e.g. [ $\pm$ nasal] is a convenient way to provide an elegant description of the fact that some segments are nasal and all
others are oral. However, two further aspects should be considered. First, only a part of segmental contrasts and related processes can be described as due to presence vs. absence of a given property. Second, in a theoretically oriented perspective, features are a hypothesis about the way phonetic information is categorized in the grammar. From this point of view, it is far from clear that speaker/hearer's knowledge about segments, differing from other modules of the grammar, is organized in a binary way.

An aspect of this debate which is not often appreciated is that it potentially has a parallel in morphosyntax. Leaving aside the brief interlude of Chomsky (1968), ssyntactic categories (N, V, v, T etc.) are monovalent. Thus D represents the quantificational/deictic anchoring of a predicative content, yielding a referential interpretation (Higginbotham 1985), while features like [+def] and [-def] are formally possible, but theoretically irrelevant. For instance, English some has the positive content of an existential quantifier, not some negative [-def] content. At the same time, what is widely perceived as the standard model in generative morphology, namely Distributed Morphology (DM, Halle and Marantz 1993), depends on standard generative phonology for a number of formal properties, including the adoption of binary features. Thus $1^{\text {st }}$ and $2^{\text {nd }}$ persons are [+participant] while $3^{\text {rd }}$ person is the absence of such properties, namely [-participant]. While there is no immediate contradiction, one wonders whether this is the most economical state of affairs.

This article consists of two main parts. In the first part, corresponding to section 2, the descriptive and explanatory adequacy of monovalent features compared to binary features are discussed in relation to vowels.

The second part of the article (sections 3-5) concerns the Person feature in morphology, given its importance for both binary features and underspecification theorists. Specifically sections 4-5 are a case study concerning the application of binary or underspecification feature systems in the explanation of the syntactic generalization known as the Person Case Constraint (PCC). Binary feature systems, being richer, allow formal interactions that cannot be mimicked by monovalent systems, specifically with respect to intervention constraints, i.e. Minimality. This suggests to us that intervention is the wrong key to the PCC.

For both phonology and morphology, we argue that no empirical evidence stands in the way of the adoption of simpler monovalent properties. As we will see, the inherent richness of binary features systems leads to formal problems and also to what we call 'ontological' problems, such as the fact that atomic segments or lexical items have as complex a feature matrix as non-atomic ones.

## 2. Phonology: Vowels

The fact that a binary feature model was adopted by Chomsky and Halle 1968, a hugely influential work in generative phonology, has certainly contributed to the overwhelming success of binarism in phonological theory. In fact, in most cases, the binary nature of features has been more taken
for granted than thoroughly discussed. The hypothesis that the primitives of segmental phonology are monovalent, positive units is the simplest one. As van der Hulst (2016: 85) puts it, "the burden of proof should be placed on proponents of binary features". Yet the assumption that binary features represent relevant phonological categories better is hardly supported by clear evidence. Nevertheless, as a matter of fact, binary feature theories have maintained their supremacy for decades.

The binarist tradition started with early work on distinctive features (Jakobson 1941, Jakobson, Fant, Halle 1963, but firstly appeared in 1952). In that work, the structuralist notion of contrastive pairs, considered as fundamental in the analysis of segmental systems of individual languages and of phonological acquisition (cf. Jakobson 1941; Dresher 2009), was extended to the representation of segmental content. Indeed, in Jakobson, Fant, Halle, the definition of distinctive feature does not directly imply the binary nature of segmental primitives; it is rather a way to conceptualize the way the hearers make choices about what they hear. According to Jakobson, Fant, Halle (1963: 3), a distinctive feature is the choice between "two polar qualities of the same categories", e.g. grave vs. acute, or "between the presence and absence of a certain quality", e.g. voiced vs. unvoiced. This definition corresponds, respectively, to the Trubetzkoyan distinction between equipollent oppositions, in which two different segmental properties give rise to the contrast, and privative oppositions. Notice that the [ $\pm$ feature] notation, that later on became generalized in phonological theory, accurately expresses the latter case, but not the former.

The ambiguity about binarity is retained in classical generative phonology. In binary feature theory, a given feature $[\mathrm{F}]$ defines two sets of segments, the $[+\mathrm{F}]$ set and the $[-\mathrm{F}]$ set, and again this may correspond to two different situations. In the first, both values of $[\mathrm{F}]$ define a natural class of sounds, i.e. they each correspond to a positive property, as in the case of [ $\pm$ sonorant], that identifies two classes of consonants, sonorant vs. obstruent, with different phonological behaviour. In the second, [F] is a positive characteristic of segments that may be either present or absent; only $[+\mathrm{F}]$ is active in phonological processes (e.g. processes of assimilation that involve feature spreading), while no phonological activity of $[-\mathrm{F}]$ is observable. This is the case of features like [nasal] or [round], whose positive value is the only relevant one.

Obviously, no ambiguity of the kind just mentioned arises in the unary view, in which each subsegmental unit is only identified by the phonologically relevant information it contains and may only be present in a segment or absent from it. So conceived, each feature can only give rise to privative contrasts, i.e. between segments that contain that feature, and segments that, everything else being equal, do not contain it. Examples of this kind of contrast are $[\mathrm{m}] /[\mathrm{b}]$ or $[\mathrm{b}] /[\mathrm{p}]$, due to the presence/absence of, respectively, [nasality] and [voice]. Equipollent contrasts, like [p]/[t], involve two different monovalent features, respectively [labiality] and [coronality].

In this conception, monovalency often goes together with stand-alone phonetic interpretability, whereby each feature has a phonetic identity. This means that features need not group in bundles to display their identity, i.e. to be pronounced. Though autonomous interpretability is not necessarily implied by monovalency (and not maintained in all unarist approaches), it reinforces the unary view; for, each feature, when it is the only content of a segment, reveals its positive nature. The combination of monovalency and stand-alone interpretability is consistent with a primary aim of Element Theory, integrated with a restricted model of phonological structure like Government Phonology (Kaye, Lowenstamm and Vergnaud 1998, 1990), that is, the aim of avoiding arbitrariness in phonological representation. Adopting only monovalent features means that only locally present positive features may be used in derivation and in the representation of phonological processes.

A key model of monovalent feature theory is Harris and Lindsey's Element Theory (Harris 1994; Harris and Lindsey 1995; 2000), and we will refer to that formulation here. Although in subsequent work many researchers have proposed significant changes concerning other aspects of the theory, monovalency and autonomous interpretability have remained identifying characteristics of any approach in the framework of Element Theory.

The conception of segmental primitives elements started in the approach to vowels, based on the empirical observation that, across the world's languages, the segments standing at the corners of the vocalic triangle have a pivotal role in vowel systems. In monovalent feature theories corner vowels are conceived as the embodiment of one of the elements AI U, while mid and front-round vowels are compounds of these elements (Anderson and Jones 1974, Schane 1984, Anderson and Ewen 1987, among others).

The classical model of Element Theory (Harris 1994, Harris and Lindsey 1995,2000 ) includes not only the resonance elements A I U but also the "neuter element" @, whose phonetic interpretation is a vowel belonging to the central area of the triangle, corresponding to schwa (approximately [ə]). The neutral element is defined as "a blank canvas to which the colours represented by [A], [I] and [U] can be applied" (Harris and Lindsey 1995: 60). Phonetically, schwa consists of formants that are equidistant in the spectrographic space, corresponding to the absence of articulatory modifications of the supralaryngeal tract, i.e. a vowel devoid of resonance characteristics, pronounced with articulators in neuter position. The introduction of @ in the inventory of vocalic elements conceptualises the behaviour of schwa as the vowel that emerges when other elements are absent, as in vowel epenthesis, or stripped away, as in vowel reduction. The neutral element is omnipresent in segmental expressions (i.e. segments), but reveals its identity in only two circumstances: when it is alone, as in the cases just mentioned, and when it is the head of the expression. In more recent versions of Element Theory, the neuter vowel has been excluded from the set of elements, mainly because of
its nature of inactive category, besides general arguments about economy of the representation (cf. Backley 2011).

We would argue that, compared with binary features, monovalent primitives offer considerable advantages in the explanation of the vowel patterns of the world's languages. In this regard, here we discuss three issues, partly intertwined with one another: vowel height, vowel neutralisation and vowel harmony and metaphony.

### 2.1 The representation of vowel height

In classical binary feature theory, the two features concerning height, [ $\pm$ high] and [ $\pm$ low], allow only three combinations, given that [+high +low] must be excluded because it is impossible for articulatory reasons. This exclusion follows from a conception of features as instructions for articulation (as in Bromberger and Halle 1989; Halle, Vaux e Wolfe 2000). On a different line of thinking, Element Theory maintains the Jakobsonian view that "the speech signal [...] is after all the communicative experience that is shared by both speaker and hearer" (Harris and Lindsey 1995: 50); as Kaye (2005: 285) puts it "phonological grounding is acoustically and not articulatory based. Phonological objects such as elements [...] are associated with acoustic signatures which are to be found somewhere in the signal". A consequence of this conception is that features cannot be prevented from combining on the basis of articulatory incompatibility. More specifically, it is possible in principle that the acoustic properties encoded by [+low] mix with the properties of [+high], which is what actually emerges in formant patterns of mid vowels.

Anyway, the restriction against [+high +low] is at odds with the fact that vowel systems with four (or five) degrees of height do exist. The problem has mostly been solved by bringing into play a third feature with the purpose of discriminating pairs of mid vowels, e.g. e/ع, o/s, having the same values [-high -low]. Usually, the crucial difference concerns tenseness, so that mid-high vowels are [+tense] (cf. Chomsky e Halle 1968) or [+ATR] (cf. Vaux 1996 for discussion), while mid-low vowels are [-tense] or [-ATR]. A seven-term inventory with four degree of height, such as the one that many Italian varieties show in stressed position, can be represented by means of $[ \pm$ ATR $]$ as in (1).

| (1) | i u | [+ high $]$ | [+ATR] |
| :--- | :--- | :--- | :--- |
|  | e o | [-high -low] | [+ATR] |
| ع o | [-high -low] | [-ATR] |  |
| a | $[+$ low $]$ | $[-A T R]$ |  |

Whether tenseness is a relevant category in all vowel systems is, at least to a certain extent, controversial (see Vaux 1996 for discussion); but even disregarding this point, the fact remains that binary features cannot adequately
deal with a scalar property like vowel height (cf. Fant 1966, Ladefoged and Maddieson 1996).

Tentative solutions for this puzzling aspect were put forward, by modifying the [ $\pm$ high $\pm$ low] combination. Wang (1968) replaces [low] with [mid], a solution that avoids the articulatory contradiction of [+high +low] and can describe four degree of vowel height, as in (2).
(2) iu [+ high -mid]
e o [+high +mid]
ع $\quad$ [-high +mid]
a [+low -mid]

Clements (1990 [2015]) proposes a hierarchical representation of vowel height, with the multiple occurrence of a single binary feature [ $\pm$ open], that may be active in a number of hierarchically embedded levels or "registers" (p.25). A language with only two degrees of height has the [+open]/[-open] contrast only at the first hierarchical level, while languages with three or four degrees involve respectively two or three levels. In this way, the binary feature is actually adapted to a multi-valued representation. Systems with two, three and four degrees of height are represented in (3).
(3) primary register
[topen]
a
a


Both models are able to express differentiation in vowel height by using only features that specifically encode properties of height or aperture, while maintaining a binary feature approach. However, the results so obtained attains more to a descriptive level than to a theoretical insight.

No problem concerning vowel height exists with elements, since monovalency and autonomous interpretability can coherently combine with the hypothesis that in a segmental expression one of the features contributes melodic content to a larger extent than the others do. In Element Theory, this unequal contribution to segmental content is formalised through headedness, whereby in each segmental expression an asymmetric relation holds between one element, the head, and the other elements, so that the properties of the head predominate in the segment. Applied to vowels, headedness provides a straightforward representation of height. For example, a set of vowels with four degrees of height, as in Standard Italian, can be represented as in (4) (the head is underlined).

| i | $[\mathrm{I}]$ | e | $[\underline{I} A]$ | $\varepsilon$ |
| :--- | :--- | :--- | :--- | :--- |
| u | $[\mathrm{U}]$ | o | $[\underline{\mathrm{U}} \mathrm{A}]$ |  |
| a | $[\mathrm{A}]$ |  | $[\mathrm{U} \underline{\mathrm{A}}]$ |  |

We will not go in further details into headedness; suffice to say here that this notion is independently motivated by empirical evidence of different kinds, concerning segmental inventories, phonotactics and phonological processes involving both vowels and consonants.

Further vocalic contrasts can be expressed by including the neuter element in segmental expressions. As noted above, @ is present in all the vowels, but it only emerges when it is the head or the only element in the segment. Therefore, the content of corner vowels is reformulated as in (a) (although in ordinary notation @ is omitted when non-head). Expressions containing @ as the head are exemplified in (5b).

| a. | i | $[\underline{I} @]$ | b. | I | $[\mathrm{I} @]$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | u | $[\underline{U} @]$ |  | v | $[\mathrm{U}$ @ $]$ |
|  | a | $[\underline{A} @]$ |  | e | $[\mathrm{A} @]$ |

It is also possible that the contrast between mid-high and mid-low vowels derives from the different role of @, respectively head vs. non-head. If so, the representations in (4) may be changed to (6) and a fifth degree of height may be easily represented. These representations show that the neutral element in the role of head serves the same cause of [-ATR]. In (4), the content of mid-low vowels corresponds to that in (1) involving [ $\pm$ ATR].
(6) i [ 1 @] $\quad$ e [IA@] $\varepsilon$ [IA@] $x$ [IA@@]
u [ $\underline{U} @] \quad$ o [UA@] $\quad$ [UA@] $\quad$ [U $\underline{A} @]$
a [ $\mathrm{A} @]$
If the neuter vowel is not assigned the role of element, as in the models mentioned above, the distinction between +ATR/-ATR vowels may be obtained by allowing a singleton element to either be a head or not. For example, Backley (2011: 47; 50) represents the contrast between tense vs. lax high vowels in English as in (7).

| a. | i | $[\mathrm{I}]$ (e.g. green) |
| :--- | :--- | :--- |
|  | u | $[\underline{\mathrm{U}}]$ (e.g. choose) |

b. I [ I ] (e.g. because)
u [ U ] (e.g. influence)

The representation in (7) are in fact equivalent to the ones in (5). They imply that the properties corresponding to I and U may be either dominant or recessive in the segment, compared to the carrier signal, represented by @ in (5). Therefore, although they appear simpler, the expressions in (7b) are as complex as those in (5b), the difference being a notational one. Furthermore, the assumption that the element of a singleton segment may be a head weak-
ens the relational conception of headedness, with consequences that cannot be pursued here (see Bafile 2015 for discussion).

To sum up, unary feature models are powerful enough to account for vocalic inventories of different size. Elements A, I, U, while forming an extremely small set of essential vocalic properties, may combine in more or less complex compounds and thus represent the variety of vowel systems of the world's languages.

### 2.2 Vowel neutralisation

Processes of neutralisation of vocalic contrasts are those where a syllabic nucleus is allowed to host only a subset of the vowels occurring elsewhere, when specific conditions are met.

Across the world's languages, a strong correlation emerges between prosodic conditions and segmental quality, whereby the presence vs. absence of stress on a nucleus may determine its capacity to display, respectively, a larger vs. a smaller variety of vowels. The reduction of vocalic sets in unstressed positions follows two possible patterns, seemingly opposite, a centrifugal and a centripetal one. By centrifugal neutralisation, vowel subsets reduce to corner vowels, by centripetal neutralisation they tend to centralise and reduce to schwa. Centralisation may also coexists with centrifugal reduction. This is the case, for example, of Neapolitan dialect that in pretonic syllables show raising of back mid vowels ( $[\mathrm{\rho} \circ \mathrm{o}]>[\mathrm{u}]$ ); front mid vowels may reduce to schwa or alternatively, in favourable contexts, e.g. before a palatal consonant, raise ( $[\varepsilon$ e $]>[i / \partial])$. As a result, in pretonic position [a u i/2] are allowed; by contrast, in post-tonic syllables only [ə] (and generally also [a]) may occur; see the alternations in (8a). The Romagna dialect of Finale Emilia (8b) shows centrifugal outcomes for pretonic mid vowels, while most final (except [a]) and post-tonic vowels are deleted:

[^1]What a phonological theory needs in order to explain prosodic vowel reduction is a way to express the descriptive concept of prosodic weakness:
why stress preserves segmental content, why in languages like Italian dialects the pretonic domain is stronger than the post-tonic one. As far as the segmental level is concerned, elements allow to represent straightforwardly what segmental weakening consists in: impoverishment of elemental content. The representation of segmental content in terms of elements sheds light on the nature of stress-connected vowel weakening. The restricted set of vowels that occur in unstressed nuclei, i.e. in prosodically weak positions, is the outcome of the loss of segmental content. Corner vowels [i a u] result from the exclusion of complex segmental expressions, while [ 2 ] is the effect of the loss of any content but the 'neuter' element @. This explains why the world’s languages exhibit two different patterns of neutralisation that may also coexist in the same language: in fact, they are not unrelated processes, but successive stages of elemental loss.

This is illustrated in (9), with vowel reduction after stress shift in Neapolitan. The alternation in (9a) exemplifies the centrifugal reduction that takes place in pretonic positions, where the previously stressed nucleus loses part of its content because of A-delinking. In the example in (9b), a posttonic nucleus, compared to the corresponding pretonic one, undergoes centripetal vowel reduction, i.e. reduction to schwa, consisting in the delinking of all elements but @.


Neutralisation of vocalic contrasts may also depend on morphological conditions, in which stress does not play any role. It is the case, for example, of some Bantu languages that have a five-vowel inventory in roots, but only allow $[\mathrm{ai} u$ ] in "extensional" suffixes. The following examples, referring to Punu, are taken from Hyman (1999: 240)

```
a. -kil-il-a 'repasser'
-sub-il-a 'uriner sur'
-ded-il-a 'obéir à'
-gol-il-a 'se frotter avec'
-gab-il-a 'distribuer à'
```

b. -kib-ul-a 'découvrir'
-fung-ul-a 'révéler'
-tes-ul-a 'briser'
-dob-ul-a 'extraire, extirper'
-gab-ul-a 'séparer'

As in the case of pretonic nuclei in Italian dialects, in Bantu languages the restricted set of vowels allowed in extensional suffixes consists of the corner vowels.

On the whole, the approach based on elements to vowel neutralisation phenomena provides a more coherent picture compared to binary feature analyses. Being unable to represent segmental complexity, and hence simplification as delinking of elements, binary features accounts leave unexplained the existence, sometimes in the same language, of two seemingly contradictory patterns of vowel weakening. As far as the centripetal reduction is concerned, it has been proposed that, in a binary approach, schwa should be characterised as having all the features with negative value, except [+syllabic], where negative value equals null specification. Interestingly, arguing in favour of this proposal, Pulleyblank (2011: 20) observes that the features "[high], [low], [front], and [labial] are not simply binary classificatory features that divide speech sound into opposite sets. They each correspond to specific actions of the vocal organs. [...] For example, [+front, +labial] y is, in a real sense, a combination of [+front, -labial] i and [-front, +labial] u, and not merely one of four equally possible slots". Clearly, this formalisation treats features in a privative way, assigning to binarity a mere notational significance. The problem is more serious with binary features applied to centrifugal reduction. On the one hand, vowel raising in unstressed positions cannot be connected in a non-arbitrary way to the weakening sites, because high vowels, as opposed to schwa, can not be characterised as 'lighter', 'simpler' or 'weaker' by only using features. Moreover, binary features fail to express the regularity emerging from both stress-dependent and morpholog-ically-conditioned centrifugal neutralisation, i.e. the fact that corner vowels are the restricted set that is allowed in neutralisation sites and therefore that they form a natural class as opposed to mid vowels (Harris and Lindsey 2000).

### 2.3 Vowel harmony

An alleged drawback of elements in the explanation of vowel alternations is the fact that they miss the generalisation expressed by [+high], and cannot depict high vowels as a natural class. The question emerges in phenomena like height harmony or metaphony, in which both [i] and [u] can trigger raising in both front and back vowels; for example when [i] and [u] trigger $e>i$ and $o>u$ raising in the target nuclei. Generally speaking, this kind of vowel raising is compatible with a [+high]-spreading analysis,
while it cannot be described as spreading of $\mathbf{I}$ or $\mathbf{U}$, since the spreading of $\mathbf{U}$ to $[\mathrm{e}]$ would yield a front round mid vowel $[\varnothing]$ and the same would result from I spreading to [o].

The approach to height harmony from the perspective of Element Theory is discussed by Harris and Lindsey (1995). Pasiego Spanish shows a stressdependent height harmony whereby, if the stressed vowel is [+high], all unstressed vowels to its left, except [a], are also [+high]. The following examples are taken from Harris and Lindsey (1995: 42)
a. bebér
b. $\quad \begin{aligned} & \text { beberé } \\ & \text { komeré }\end{aligned}$
$\begin{array}{ll}\text { c. } & \text { bibiri:s } \\ \text { kumiri:s } & \text { 'drink INF; FUT IP; FUT 2P' } \\ & \text { 'eat INF; FUT IP; FUT 2P' }\end{array}$

In Element Theory, while the spreading-analysis is not available for this kind of data, vowel raising can be represented as A-delinking. Again, the crucial distinction is the one between simple and complex vowels: only a complex vowel in the harmonic head, in this case the stressed nucleus, can license a complex vowel in recessive positions. When in a paradigm alternation, as in (11a) vs. (11b), (11c), a stressed nucleus becomes unstressed, it only retains A if $A$ is also present in the head, i.e. the stressed vowel (see 11 b and 12 a ); otherwise, the nucleus undergoes A-delinking (see 11c and 12b).


A classical case study of harmony affecting vowel height concerns several Bantu languages which, differing from the ones exemplified in (10), show a complex vowel system, combining centrifugal neutralisation with harmonic effects, the so called "low harmony" (cf. Katamba 1984; Goldsmith 1985; Harris and Moto 1989; Harris and Lindsey 1995, 2000). These languages follow the general Bantu pattern whereby roots may host any of the five vowels of the inventory, while suffixes may basically contain only [a $\mathrm{i} u$ ]. However, when a mid vowel is in the root, a mid vowel appears in the suffix, as in (13b). ${ }^{1}$ The following examples are about Luganda and are taken from Katamba (1984: 260)

[^2](13) Root
a. simb-a
fumb-a
lab-a
b. tem-a
gob-a

Root+causative
Root+conversive
simb-ul-a 'plant; cause to plant; uproot' 'cook; cause to cook'
lab-ul-a 'see; cause to see; warn'
tem-ul-a 'cut; cause to cut; murder'
gob-ol-a 'chase; cause to chase; draw bolt of a rifle'

Binarist analyses generally account for low harmony by referring to either the spreading of both values [ $\pm$ high] or the spreading of [-high]. Katamba (1984) accounts for phenomena of the kind reported in (13) in an autosegmental approach, in which both [+high] and [-high] spread from the root to the suffix (example in 14a is adapted from Katamba 1984).

The alternative analysis takes [-high] as the only harmonic feature and, assuming an underspecification framework, considers that vowels in extensional suffixes are unspecified as for [high]. Accordingly, they receive [+high] by a default rule, as in both simb-is-a and lab-is-a, and receive [-high] by spreading from the root, as in tem-es-a. (see 14b, adapted from Harris 1994b). Such an account actually results in a quasi-privative analysis, substantially very close to fullyfledged unarist approaches, whereby a monovalent feature $\mathbf{A}$ in the root extends to suffixes (cf. Goldsmith 1985). In the examples, dotted lines indicate spreading.

b. [-high]



A problem shared by all the accounts of Bantu low harmony that propose spreading of A or [-high] is that an [a] in the root has not the effect of lowering the high vowel in the suffixes, as lab-is-a, lab-ul-a in (13a) show. We will not go into the details of the different solutions proposed in this regard, in most cases resorting to some diacritic feature, with the effect of blocking A or [-high] spreading under specific circumstances. As Harris and Lindsey (2000) interestingly point out, Bantu low harmony can essentially be conceived as the contrastive behaviour of two sets of vowel: corner vowels, which occur in any position, and mid vowels, which basically may only occur in roots. The former is the set of simple, i.e. one-element vowels, the latter is the set of complex, i.e. two-element vowels. In this perspective, Bantu height harmony
simply consists in the fact that a complex vowel in a suffix may only occur if it is licensed by a complex vowel in the root, i.e. by the harmonic head. Therefore, this kind of harmony is not simply a matter of spreading, i.e. copying of features from the root to the suffixes; rather, it implies licensing relationship among nuclei that also concerns segmental complexity.

Crucially, this essential characterization cannot be obtained by means of binary features, because there is no meaningful way in which [+high] vowels [ iu ] and [+low] vowel [a] can be grouped together as a class while excluding mid vowels. Instead, the privative A, I, U elements can nicely capture the essence of $[\mathrm{ai} u]$ as a natural class.

The same contrast between corner and mid vowels characterises vowel system of the Piedmontese dialect of Piverone (Savoia 2005, Canalis 2008). In the dialect of Piverone, if the stressed vowel is high the final nucleus may contain [i u a], while if the stressed nucleus contains a mid vowel or [a] the final vowel may be [e o a]. The examples in (15) are from Canalis (2008); (15a) contains forms with low or mid stressed vowels, (16b) the forms with high stressed vowels.


In his discussion of possible analyses within binarist and unarist paradigms, Canalis (2008) considers the different hypotheses that may be put forward in the representation of height/low harmony.

In a binary feature approach, one hypothesis is that both [+high] and [-high] are harmonic triggers and spread from the stressed to the final nucleus. The clear drawback of this account is that it cannot explain the fact that a final $-a$ is not targeted by [+high] and remains unaffected. Canalis mentions two possible causes for this specific behaviour of [a], which acts as a trigger but not as a target. The first refers to a special status of [a] as an 'opaque' vowel, observable crosslinguistically in regard to harmony; however, as Canalis observes, this characterization is nothing more than a descriptive label. The second explanation is consistent with a fundamental constraint of binary feature theory against [+high]/[+low] combination, discussed here in section 2.1: the spreading of [+high] to the [+low] vowel is blocked, since its result would be filtered out as not phonetically interpretable. Interestingly, however, as Cana-
lis highlights, final [a] is affected by vowel raising in harmonic or metaphonic processes in some Italian dialects; we will return to this in section 2.4.

The second hypothesis in a binarist framework is that only [-high] is the harmonically active feature, which avoids the issue of the opacity of final [a]. The problem here is that with [i $u$ ] in the stressed nucleus [ $\mathrm{e} o$ ] are excluded in final position. If this correlation is not attributed to the spreading of [+high], the only consistent explanation is the now familiar claim that the basic set of final vowels only contains [aire and that [e o] are the harmonised outcomes. As already observed, the latter representation is not substantially different from the one assuming monovalent features, expressed in terms of spreading of $\mathbf{A}$. The following example is adapted from Canalis (2008: 25).


The effects of vowel harmony of the dialect of Piverone have strong analogies with those of Pasiego Spanish and of Luganda. On the one hand, low harmony of Piverone, like height harmony of Pasiego, is a prodically conditioned process, with the stressed nucleus playing the dominant role. At the same time, it is the position that can display the largest inventory of vowels and the trigger in the harmonic span (cf. Savoia 2005). On the other hand, just as in the case of Luganda, the effects of the harmonic head on the target vowels are superimposed to a pattern of asymmetric distribution of vowels due to neutralisation, whereby only the restricted set $\left[\begin{array}{lll}\text { i } & u\end{array}\right]$ is allowed in final position. Final $[i u]$ lower to $[\mathrm{e} o \mathrm{o}]$ when the conditions for harmony are met.

To sum up, given this complex of data, this kind of low harmony can be expressed in terms of binary or unary features, as the spreading of [-high] or of A, with substantially similar results. However, the crucial advantage of elements is that they can positively identify the restricted set [ai u] as the set of mono-elemental vowels.

### 2.4 Metaphony

Let us now turn to the representation of metaphony in Italian dialects, which is an intriguing issue for any segmental theory. Italo-Romance languages offer a wide and complex variety of metaphonic phenomena. A pretheoretical description of metaphony is that final high vowels exert their
influence on the stressed nucleus of the word. ${ }^{2}$ The most frequent pattern is metaphony of mid-high vowels, regularly resulting in raising $e>i, o>u$. Several Italian dialects also show metaphony of mid-low vowels, which produces a variety of outcomes, the most frequent being diphthongization with different results, as well as raising $\varepsilon>e / i, \supset>o / u$.

Italo-Romance metaphony has been treated within both binarist (cf. Calabrese 1995, 1998, 2011; Savoia 2015, 2016 among others) and unarist approaches (cf. Maiden 1991; Savoia 2005; Savoia and Baldi 2016, 2018; Canalis 2016 among others).

In the accounts using binary features, a controversial issue is whether midhigh and mid-low stressed vowels undergo one and the same phonological process (cf. Calabrese 1995, 1998, 2011) or should instead receive separate representations, thus accounting for the fact that they are independent phenomena from the historical point of view and that they produce different outcomes (cf. Savoia 2015, 2016). According to Calabrese, all different effects of metaphony on mid vowels are due to the spreading of [+high] from the final nucleus. ${ }^{3}$ Savoia argues for the alternative view that metaphony of mid-high vowels is triggered by [+high], while metaphony of mid-low vowels is triggered by [+ATR].

As already observed, this seems to be a weak point of Element Theory, in which the information encoded by [+high] is split between elements $\mathbf{I}$ and $\mathbf{U}$. We have seen however that in monovalent accounts of vowel raising, the absence of a [high] category does not constitute a theoretical issue, since the crucial role in vowel raising of any kind is played by the element $\mathbf{A}$. Partial raising $\varepsilon>e,\lrcorner>o$, due to $\mathbf{A}$ becoming recessive within the segment, and complete raising to $i$ and $u$, due to $\mathbf{A}$-delinking, are effects of progressive weakening of A, known as A-demotion (cf. Maiden 1991). As already observed about other kinds of vowel harmony, in Element Theory metaphony is not simply conceived as a matter of feature spreading; rather, in a more comprehensive view, it is defined as the effect of licensing relationship among nuclei within the dominant foot, i.e. the main stress domain. Put in other terms, A-demotion is the result

[^3]of a partial or complete alignment as for elemental content between the stressed nucleus and the final one (cf. Maiden 1991, Savoia 2005, 2015, 2016, Canalis 2016 among others). The following representations refer to the Abruzzese dialect of Mascioni (cf. Savoia 2015) in which metaphony causes the raising of the stressed mid vowels. Mid-low vowel raising corresponds to $\mathbf{A}$ loosing its headhood, mid-high vowel raising corresponds to A-delinking.

['serpa] / ['serpi] 'snake f.s / f.PL' '['roffa] / ['ruffu] 'red f.s / m.s'
Despite the now long history of the $\mathbf{A}$-demotion analysis, the issue about the incapacity of Element Theory to positively define high vowels as a natural class is not completely devoid of relevance for theorist defending monovalent features within various frameworks (cf. van der Hulst 2018). Within Element Theory, Savoia and Baldi $(2016,2018)$, propose a new element, namely F1, which encodes an acoustic property shared by high vowels, i.e. a low value of frequency for the first formant (F1). Thus, F1 categorizes an acoustic and therefore perceptual property, like all the other elements, althogh it does not share the autonomous interpretability that carachterizes the primes in the standard formulation of Element Theory (cf. Backley 2011).

We maintain here that autonomous interpretability is essential in the representation of different phonological phenomena, like consonant lenition and vowel weakening as loss of segmental content. More specifically, the explanation of vowel raising as $\mathbf{A}$-delinking preserves its crucial insight in regard to phenomena of vowel neutralisation and vowel harmony of the kind discussed above, especially when segmental simplification takes place in prosodically weak configurations.

To conclude our discussion about features in phonology, we now turn to the case of metaphony affecting [a]. This phenomenon rises a few descriptive intricacies that we believe are of some theoretical interest.

In Italian varieties, metaphony affects a stressed [a] much less frequently than stressed mid vowels. The phenomenon is documented for some North-ern-Western dialects, especially in the Alpine area and in Romagna, and for some Central-Southern dialects, mostly on the Adriatic side (cf. Rohlfs 1966: 43-46; Savoia and Maiden 1997). To the best of our knowledge, the only outcome of metaphony of á is a front vowel, in most cases [ $\varepsilon$ ] or [e], while back outcomes are undocumented. Almost without exceptions, the metaphony of á is only triggered by $-i$. In fact, in most systems that show metaphony of á, $-i$ is
the only metaphonic trigger for target vowels of any kind. In few dialects, while the metaphony of mid vowels is activated by both $-i$ and $-u$, á is only sensitive to - $i$. One such system is the Abruzzese dialect of Colledimacine (Savoia 2015: 234-235). In this dialect, final vowels are all reduced to schwa, and metaphony is caused by phonological features anchored to inflectional content (see footnote 2). The examples in (19) are taken from Savoia (2015: 234)
(18) a. final/i/
'me:sa / 'mi: $\int \partial \quad$ 'month s/pl'
've:tə / 'vi:tə 'see 1P/2P'
'dormə / 'duərmə 'sleep 1P/2P'
'ka:nə / 'ke:nə 'dog s/pl'
'magлə / 'mсллə 'eat 1p/2P'
$\begin{array}{ll}\text { b. } & \text { final /ul } \\ \text { 'korta / 'kurtə } & \text { 'short } \mathrm{f} / \mathrm{m} \text { ' } \\ \text { 'sordə / 'surdə } & \text { 'deaf } \mathrm{f} / \mathrm{m} \text { ' }\end{array}$

From the complex of data just presented, a strong correlation emerges between the presence of a final $/ \mathrm{i} /$ and the metaphony of $[\mathrm{a}$ ], a correlation that concerns both the conditions for application and the outcome of the process. On the one hand, this picture is naturally suitable for a representation by means of elements. A head I element contained in the final nucleus spreads to the stressed position containing $\mathbf{A}$, thus producing raised and fronted outcomes (cf. Canalis 2016 on Ticinese metaphony). This treatment is also consistent with the representation of metaphony of mid vowels as a process of A-demotion. In fact, the outcomes of raising and fronting of [a], i.e. $\varepsilon>e>i$, correspond to progressive steps of decreasing predominance of $\mathbf{A}$ within the segment. On the other hand, this model has no intrinsic explanation for the fact that, in systems like the one in (18), only $-i$, but not $-u$, is a metaphonic trigger for á. For these cases, some stipulation seems necessary to restrict the condition for á metaphony to the presence of $-i$.

In terms of binary features, the correlation between the metaphony of [a] and the final /i/ does not find a straightforward account. Firstly, the feature active in metaphony, i.e. [+high], is shared by [i] and [u] and cannot restrictively link metaphony to the presence of $-i$. Secondly, [+high] is not sufficient to account for the fact that a metaphonized á only results in front vowels. Further information is necessary for the process to take place, and two alternative solutions are available: i) the stipulation that [a] is inherently [-back], or ii) the statement that when [a] is the metaphonic target, and only then, [-back] together with [+high] spreads from the final nucleus (cf. Savoia 2015: 234-235). A further complication that arises in binarist analysis of metaphony of á is that the spreading of [+high] to a [+low] segment causes an impossible combination. This undesirable outcome can be avoided by stipulating that the repair strategy 'negation' applies, whereby [+high +low] $\rightarrow$ [-high -low] (cf. Calabrese 1995) or by stating that [-low] is the relevant feature instead of [+high] (cf. Savoia 2015: 235).

To resume up to this point, a drawback common to unarist and binarist approaches is that none of them can provide a wholly non-stipulative explanation of the special behaviour of á in metaphony.

We now briefly consider a last, much less frequent system showing the metaphony of á, which is documented for a small Campanian area, mostly represented by the dialect of Ischia, Procida and Pozzuoli (cf. Rohlfs 1966: 45). The data in (19), taken from Rohlfs (and adapted to IPA), refer to Monte di Procida e Pozzuoli, the ones in (20), reported by Savoia and Maiden (1998: 19), refer to Ischia. All the systems exemplified have final vowels reduced to schwa. In the examples, the phonological content anchored to inflectional endings is indicated in brackets.

+ metaphony - metaphony
'esənə 'donkey m.s/M.pL' (-u / -i) 'asənə 'donkey f.s/f.pl (-a / -e)
'nesə 'nose m.s' (-u) 'krapə 'goat f.s' (-a)
+ metaphony
kaja'netə 'brother-in-law m.s/m.pL' (-u / -i)
'kenə 'dog м.s' (-i)
- metaphony
kajə'natə ‘sister-in-law f.S/f.pL' (-a / -e) 'kanə 'dog M.pL' (-e)

In the dialects of (19) and (20), metaphony is activated for all target vowels, including á, by both $-i$ and $-u$; the outcome of metaphony of á is always a front mid vowel $[\varepsilon]$ or [e].

The data in (19) and (20) pose a puzzling question for any account, since two aspects in the metaphony of á must be explained, i.e. raising, and fronting in presence of $-u$. A unarist approach is at loss with this set of data, since elements cannot represent a change $a \rightarrow \varepsilon$ unless an element $\mathbf{I}$ is locally available. On the contrary, with binary features, raising is not a problem given a [+high] final vowel and the crucial question is the fronting of á. Indeed, in a strictly binary feature theory, any vowel must is either [+back] or [-back]. If [a] in the systems of (19) and (20) is labelled as [-back] the correct outcome is predicted, i.e. a front mid vowel. However, it could be noticed that in systems like many Italian varieties that do not contrast a front with a back low vowel, in absence of any other phonological evidence, the setting of [back] is an arbitrary operation.

With elements, the null hypothesis is that [a] is a central vowel. The representation is enriched with $\mathbf{I}$ or $\mathbf{U}$ when phonological evidence is available that this is the case. For example, Passino (2016) provides convincing evidence that in the dialect of Teramo (Adriatic Abruzzi) the outcome of Latin $\breve{A} / \bar{A}$ is a compound [ $\mathbf{A}$ I]. Passino's proposal accounts for the fact that the phonetic form $[æ]$ appears in specific contexts, but refers essentially to the behaviour of the segment in metaphonic and prosodically conditioned vowel alternations.

With this in mind, we believe that the exact content of /a/ in the systems of (19) and (20) should be reconsidered in light of a closer scrutiny of its pho-
nological and phonetic behaviour. Rohlfs (1966: 45) reports the presence of spontaneous, i.e. non-metaphonic fronting of á, which is typical of Adriatic Italian varieties, also in dialects of the small Campanian area to which also the systems in (19) and (20) belong. Therefore, we hypothesize provisionally that á in those varieties could be adequately represented as [ $\underline{\mathbf{A}} \mathbf{I}$ ]. If our hypothesis is on the right track, the fronting of á in presence of $-u$ ceases to be a problem for an Element Theory approach, since with I contained in the stressed nucleus, the metaphonic effects of raising and fronting can be represented as $\mathbf{A}$-demotion.

## 3. Morphology: Person

The question whether the primitives of the system are binary features or are monovalent properties applies not only to PHON primitives, but also to SEM primitives, which enter morphosyntactic computation. The framework of Distributed Morphology (DM, Halle and Marantz 1993) adopts the view that morphological features are binary. Specifically, a consistent stream of literature argues for a binary characterization of Person. Another feature which prominently enters the syntactic debate in a binary/underspecification format is Number, for instance as regards so-called omnivorous number effects in the Romance languages (D'Alessandro and Roberts 2010; Nevins 2011). In order to keep the discussion manageable, we disregard Number aside here (with a partial exception at the end of this section). In this section, we illustrate existing proposals arguing for binary features characterizations of Person or for what we take to be a variant of them, namely underspecification systems; we also propose a monovalent alternative.

Bobaljik (2008) presents an argument in favour of binary features for person based on a well-known substantive universal - namely the existence of exactly four persons: roughly 1 Exclusive (Speaker), 1 Inclusive (Speaker and Hearer), 2 (Hearer) and 3 (other, i.e. neither Speaker nor Hearer). This are exactly the persons predicted to exist by crossing the two binary features $\pm$ Speaker, $\pm$ Hearer, as indicated in (21).
(21) 1 Excl +speaker, -hearer

1 Incl +speaker, +hearer
2 -speaker, +hearer
3 -speaker, -hearer
On the basis of our general considerations concerning binary feature systems we expect to find two kinds of problems with this system. The first problem is formal. We take it that features are properties, and as such they define sets of individuals (or sets of sets of individuals) having the relevant property. This much seems unquestionable. More interestingly, we may wonder how
to interpret clusters of features. The natural interpretation would seem to be that a set of features defines a set of individuals each of which has the relevant properties. This construal seems to be the intended one for instance for 3 in (21) - which is the set of individuals which are both -Speaker and -Hearer. Similarly 1 Excl is a set of individuals each of which has both the property of being a hearer and the property of not being a speaker - and conversely for 2 .

However, the same cannot be true of 1Incl, since there is no single individual which has the property of both being a hearer and that of being a speaker; the intersection of the two sets is empty. In order for (21) to go through as a characterization of 1Incl we must construe the clustering of features in a different way from that adopted so far - we must join the individuals which are (only) speakers to those that are (only) hearers. But this in turn cannot be extended to 1 Excl or 2 . 1 Excl may include just the speaker - the conjunction with non-hearers (which include $3{ }^{\text {rd }}$ person) is not necessary - and similarly for 2 . The reason we run through this matter in some detail is to stress the general point that while single binary features are easily legible, their proposed clusters are not - nor are we aware of any general discussion of how they interact.

The issues that we just raised depend only in part on the specific proposal of Bobaljik (2008). Halle (1997) adopts a feature system which characterizes just three Persons, namely the traditional ones, as in (22). All three persons have a well-formed intersective reading. But then note that the supposed argument of Bobaljik in favour of binary features collapses - because it turns out that the crossing of two binary features does not yield four persons, but only three.
(22) 1 +author, +participant

2 -author, +participant
3 -author, -participant

* +author, -participant (logically impossible)

The second general problem with binary features is so to speak, ontological. For the purposes of illustration, we will stick with the system of features in (21). Consider 1Excl. In order to get reference to the Speaker, we need to partition the Person lattice by means of the $\pm$ speaker, $\pm$ hearer features. Therefore, the grammar contains only an indirect representation of the speaker, as a partition of the referential space. The speaker is any individual who has the speaker property but in addition - and in a completely redundant manner, also has the property of not being a hearer. Thus, the ontology of the conceptual system includes the primitive content SPEAKER - otherwise we wouldn't be able to define the predicates $\pm$ speaker at all. However the computational system does not recognize the SPEAKER content as a primitive, rather it is forced to define it as the crossing of both positive and negative values of various predicates. To put it otherwise, the Speaker and Hearer, anchoring the Universe of Discourse, cannot have an atomic
status in the computational component. They are as complex as non-participant referent, defined by the same crossing of binary features. ${ }^{4}$

For the sake of explicitness, in (23) we provide a formulation of what a monovalent system for Person looks like under the assumption that 1Excl and 2 are to be identified with the conceptual primitives SPEAKER and HEARER. IIncl is defined by the union of HEARER and SPEAKER. Remember that the conjunctive characterization of 1Incl was not argued to be a problem per se for binary feature systems. The issue that we highlighted was that there was no consistent reading of feature clusters. ${ }^{5}$

| 1Excl: | SPEAKER |
| :--- | :--- |
| 1Incl: | SPEAKER $\wedge$ HEARER |
| 2: | HEARER |

Under (23), we cannot characterize 3 as the non-person - apparently meeting the limit of our system. However, we argue that this consequence is correct. In the absence of Hearer and Speaker content, reference is achieved through deixis D or quantification Q , along the lines of (24). There is no sense in which s/be (or the) is defined by absence of speaker and hearer properties. Like everything else in grammar, it is defined by positive properties.
(24) 3: Def/Q

Summarizing so far, it is possible to characterize the person system both in terms of binary features and in terms of monovalent features/properties - along the lines of (21)-(22) and (23)-(24) respectively. If we have Speaker and Hearer primitives we do not need to turn them into binary features to

[^4]predict the 3 Participant persons. Rather, as in (23), the system consists of Speaker, of Hearer, and of the only logical operation that returns a meaning, namely their conjunction. Furthermore, as in (24), it is perfectly possible to identify 3P with D - effectively a different referential system than the Person/Participant system, based on operators binding variables restricted by descriptive content.

A possible argument in favour of the binary feature characterization is that it manages to capture natural classes (namely negative classes) that escape instead the conceptual primes characterization we are supporting. As pointed out in a classical work by Zwicky (1977), in languages which have only three persons, 1Incl is syncretic with 1Excl, as in English we - while 1Incl is never syncretic with 2 . As it turns out, the binary features schema in (21) is not able to capture this basic fact, since syncretism based on the +speaker feature between 1 Incl and 1 Excl is equally favoured as syncretism between 1 Excl and 2 based on the +hearer feature. In this respect, therefore, there is nothing to be gained with respect to the conceptual primes characterization in (23).

Noyer (1992), in his seminal discussion of Person, argues that the pattern is due to the interaction of the feature matrix with the Person hierarchy in (25). We take it that the latter is just the initial segment of the Animacy/ Definiteness hierarchy, which is generally deemed responsible for such behaviours as Differential Object Marking (DOM) and Differential Subject Marking (DSM, or split ergativity). Kiparsky (2008) suggests that it is a Dhierarchy, or as we shall say here a Referential Hierarchy.

## $1>2 /$ other

According to Noyer, the binary feature characterization of person interact with the hierarchy $1>2$ in the following terms. The syncretism of 1 Incl and 1 Excl is derived by Impoverishment (in the DM sense of the term), i.e. deletion of the [hearer] feature. However, in order to get syncretism between 1Incl and 2, one would need to impoverish the [speaker] feature. But "such deletions always obey the hierarchy of features" (Noyer 1992: 154), blocking Zwicky's *syou.

There is no reason why the hierarchy in (25) can be used in conjunction with a monovalent feature system. 1Incl can be syncretic with 1 Excl because this means that the highest ranked referent in 1Incl is externalized. However 2 cannot be syncretic with 1Incl - because this would mean that the highest ranked element in 1Incl remains without externalization. Formally, we may invoke the general principle that externalization is subject to the hierarchy (25) so that no 2 /other content can be lexicalized if 1 P content is not. This avoids Impoverishment, but seems otherwise comparable to what Noyer proposes.

Finally, an important variant of binarism, namely underspecification, has not been discussed so far, though it is applied to Person features in an important work of Harley and Ritter (2002). In the range of literature which we consider in section 4, devoted to the interaction of Person features with syntactic principles, the privative system is endorsed in particular by Bejar and Rezac (2009). In the notation used by Bejar and Rezac, the feature composition of the different persons is as in (26), assuming the standard Person hierarchy $1>2>3$. The feature $[\pi]$ stands for Person. The 1 Excl vs 1 Incl distinction is noted (in their fn.9) but not discussed.
$\pi$
2: $\quad \pi$, Participant
$1: \quad \pi$, Participant, Speaker
Bejar and Rezac are more explicit than most on the nature of the feature system they adopt. First, it "requires specifying default interpretations for underspecified representations". Therefore, despite the lack of plus and minus signs, the system in (26) is a variant of (22). Only positive, marked values are specified. In the absence of specification, however, the default negative value is implied. Furthermore, Bejar and Rezac explicitly note that "it is only the feature structure as a whole that corresponds to a traditional category like 1 st person", so that the segment [speaker] cannot be read as 1 P by itself. This is important in the economy of their analysis - and represents a particularly clear enunciation of what we have called the ontological complexity of binary/privative feature systems in previous discussion.

Now, recall that in section 2, we not only considered phonological segment inventories defined on the basis of monovalent and bivalent features - but we also discussed their interaction with phonological computation/representations. When it comes to morphological repertories, their interaction is with syntactic computation. Therefore, in the following sections, we will launch into a case study concerning the interaction of person feature systems with syntactic principles, as regards one specific phenomenon, namely the Person Case Constraint (PCC).

## 4. Interactions of bivalent feature systems with syntactic computation: The PCC

The bivalent characterization of Person has been used by recent syntactic theory in conjunction with the rule of Agree and with the locality conditions governing Agree (Minimality) to derive interactions between Person and Case/Agree such as the Person Case Constraint (PCC). We begin by introducing the basic PCC facts. In so called strong PCC languages, in Dat-Acc sequences the Acc can only be 3P. Pancheva and Zubizarreta (2017) describe French as strong PCC, as in (27).
(27) French, strong PCC
$\begin{array}{llll}\text { a. } & \begin{array}{ll}\text { IIl } & \text { te/me }\end{array} & \text { lui } & \text { presenterà } \\ \mathrm{He} & \text { me/you } & \text { to.him } & \begin{array}{l}\text { will.introduce }\end{array}\end{array}$ 'He will introduce me/you to him'
b. *Il me te/ te me presenterà *1/2Dat,1/2Acc He me you/ you me will.introduce 'He will introduce me to you/you to me'

Catalan is a Weak PCC language, characterized as such by Bonet (1991). It allows $1 / 2 \mathrm{P}$ Acc in dative contexts, when Dat is $1 / 2 \mathrm{P}$, along the lines of (28).
(28) Catalan, Weak PCC
a. *Al director, me li ha recomanat la Mireia. *3Dat, 1/2Acc to.the director, me to.him has recommended the Mireia 'As for the director, Mireia has recommended me to him'
b. Te ' m van recomanar per aquesta feina. OK $1 / 2 \mathrm{Dat}, 1 / 2 \mathrm{Acc}$ You me will recommend for this job 'They will recommend me to you/you to me for this job'
c. El director, mel' ha recomanat la Mireia. Ок $1 / 2 \mathrm{Dat}, 3 \mathrm{Acc}$ the director, me him has recommended the Mireia 'As for the director, Mireia has recommended him to me'

Romanian is described as observing a different PCC pattern yet, dubbed Me-First. In essence, Romanian is like a Weak PCC language in allowing combinations of Participant Dat with Participant Acc. However, it is consistently reported to differ from, say, Catalan, in that only 1Dat, 2Acc is allowed, not the reverse, along the lines of (29b-b'). One may expect 2 Acc to be allowed with 3Dat - which it is.
(29) Romanian, Me-First PCC
a. I te au recomandat ieri OK3Dat, 2Acc to.him you have recommended yesterday
'They have recommended you to him yesterday'
a' \# m au recomandat ieri \#3Dat, 1Acc
to.him me have recommended yesterday
'They have recommended me to him yesterday'
b. ${ }^{*} \mathrm{Ti} \mathrm{m}$ a prezentat Ion la petrecere ${ }^{*}$ 2Dat, 1Acc to.you me has introduced Ion at.the party 'Ion introduce me to you at the party'
b'. mi te a prezentat Ion la petrecere ${ }^{\text {ок }} 1 \mathrm{Dat}, 2 \mathrm{Acc}$ to.me you has introduced Ion at.the party 'Ion introduced you to me at the party'

One of the earliest Agree and Minimality accounts of the PCC is Anagnostopoulou's (2005). She takes 1/2P to be [+person/participant] and 3P datives to be [-person/ participant]. The schema in (30) summarizes how this distribution of feature values works in excluding the co-occurrence of 3Dat and $1 / 2$ Acc. For, a [-person] 3Dat counts as an intervener on the Agree relation between the Person probe on $v$ and its $1 / 2 \mathrm{P}$ object goal. In (30b), the radical absence of [Person] features on 3Acc removes the violation, because the object is no longer a goal for the person probe on $v$. There is however more than a disadvantage. First, in the schema in (30a), 3Dat acts as an intervener for the probing of $1 / 2 \mathrm{P}$ Acc by $v$, despite the fact that they have opposite value of [person]. Reported back to other instances of Minimality, this seems very dubious, as if -wh could act as an intervener for $+w h$.


Second, Anagnostopoulou assumes that 3P Acc elements lack the [person] feature altogether, while 3P Dat elements ae assigned the feature [-person]. From a very general perspective, it is difficult to see the difference between having the non-person feature and not having the person feature. But even disregarding this abstract concern, what does it mean empirically to have a 3Dat associated with the person/participant system (even if only negatively) and 3Acc not associated with it? 3P pronouns always function alike, has exactly the same referential range (deictic, anaphoric, bound variable) independently of the case slot it happens to be associated with.

A way out of this ontological problem is to invoke a connection between dative and animacy - so that 3Dat would have obligatory animacy properties accruing to it, unlike 3Acc. This line of justification does not work. In Italian, a Weak PCC language, 3Dat are actually preferred for inanimates in at least some contexts, such as those involving a possessor construal such as (31a). There are furthermore contexts where animate goals can be referred to by locative pronouns as in (31b).

| a. | (Al vestito) | gli/*ci | ho | rifatto | l'orlo |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | to.the dress | to.it/there | I.have | re-made | the hem |
|  | 'I made a new hem to the dress' |  |  |  |  |
| b. | A mia sorella, | non | ci/le | somiglio |  |
|  | to my sister | not | there/to.her | I.resemble |  |
|  | 'I don't resemb | my sister' |  |  |  |

As for the Weak PCC, Anagnostopoulou has recourse to Multiple Agree, i.e. the ability of one probe to have multiple goals. Under Multiple Agree, $v$ can probe into the [+person] feature of both a $1 / 2 \mathrm{P}$ Dat and a $1 / 2 \mathrm{P}$ Acc at the same time, explaining the Catalan pattern. 3P datives, being [-person] still block probing into $1 / 2 \mathrm{P}$ Acc. This strengthens the issue we noted for Minimality, since a [-person] element which cannot be a goal for [+person] Multiple Agree, nevertheless counts as an intervener on the Agree path. We are not sure about the formal status of this assumption - it certainly violates the spirit of Minimal Search, whereby an intervener is simply a goal closer to the probe. Anagnostopoulou also discusses why clitics but not full pronouns undergo the PCC. The answer is that "absence of an accusative clitic/agreement marker... signifies the absence of a Move/Agree relation between the accusative and $v$ ". Again, it is not clear that this is in keeping with standard Minimalism, specifically the assumption that accusative case is a reflex of Agree with $v$.

Zooming to a dozen years later, an account of the PCC based on binary features systems and on intervention constraints on Agree is proposed by Pancheva and Zubizarreta (2017) (Zubizarreta and Pancheva (2017) consider Inverse Agree within the same framework). These authors complicate the feature system further. The basis for the system in (32) is (22) above; an additional feature, namely [proximate] splits 3 P into a proximate and an obviative set. We quote: " 1 P and 2 P arguments are inherently proximate, being part of the speech event. 3P arguments may or may not be proximate, depending on context. Proximate 3Ps are grammatically marked as having a perspective on the described event".
(32) 1: [+proximate], [+participant], [+author]

2: [+proximate], [+participant], [-author]
3prox: [+proximate], [-participant], [-author]
3obv: [-proximate], [-participant], [-author]
According to Pancheva and Zubizarreta, Appl is a head of phase and a probe (an enrichment on which we will not comment further). By a constraint called P-principle (specifically the P-prominence clause), there must be a D in the edge of Appl that provides its goal. In the Strong PCC condition, Appl probes for [+proximate] and a constraint called P-uniqueness (also part of the P-principle) requires that there can be at most one D in the phase which provides Appl's goal. Since the indirect object, sitting in the edge of Appl, is [+proximate], a [+proximate] direct object is excluded, including a $1 / 2 \mathrm{P}$ one.

In the Weak PCC condition, P-Uniqueness does not hold. Therefore two [+proximate] elements, such as two $1 / 2 \mathrm{P}$ clitics can freely combine as Appl and Acc. Here another condition comes into play namely that 3P can be marked [+proximate] only in the context of another 3P. Therefore "in the
absence of another 3P, the 3 P indirect object in $<3,1>$ and $<3,2>$ cannot be marked proximate, leading to a violation". In the Me-First PCC what varies is that Appl probes for [+author]. P-Uniqueness then filters out contexts where the direct object is 1 P , allowing the others.

From the point of view of feature ontology, the system in (32) presents a proximate/obviative distinction which has abundant morphosyntactic correlates in Algonquian languages, but lacks such correlates in the Romance languages. One question then is whether the distribution of abstract [proximate] features in Romance matches that independently known from languages with overt proximate morphology. According to Aissen (1997) "in a context with two third persons, unbalanced for animacy, the animate must be proximate and the inanimate obviative". Thus leads us back to the question whether 3Dat is always animate. We have already seen that this is not the case - in fact in an example like (33), 3Dat is lower ranked in animacy with respect to 3 Acc.
(33) A questo tavolo, gli dobbiamo trovare un proprietario to this table, to.it we.must find an owner 'We must find an owner for this table'

Another problem is represented by the fact that in Algonquian [+proximate] is the unmarked value of the feature, since if a single 3P occurs, it is in the proximate morphology; the presence of an obviative 3P depends on that of a proximate 3P (Aissen 1997). Pancheva and Zubizarreta require the reverse condition for the Weak PCC, as summarized above. Obviously, Algonquian and Romance may differ - but this is precisely our point. If the comparison between the two families does not warrant extending the proximate/obviative distinction from Algonquian to Romance, then the Romance feature system loses explanatory force. ${ }^{6}$ Pancheva and Zubizarreta also address the question why full pronouns, unlike clitics, do not trigger the PCC. Their answer is essentially the same as Anagnostopoulou's (2005) - namely that "if the direct object does not agree with Appl - an agreement relation that is manifested as cliticization - it is excluded from the domain of application of the P-Constraint, even though it remains in the Appl phase". The same objection applies as for Anagnostopoulou. It is certainly not unreasonable to tie Agree to cliticization (in clitic languages) - yet this is not formalized either by the authors or by independent literature.

[^5]One difference between Anagnostopoulou and Pancheva and Zubizarreta is that the latter authors require a P-principle. Bejar and Rezac (2003) also propose a Person Licencing Condition (PLC) (see also Bejar and Rezac (2009) on Inverse Agree). The PLC states that "an interpretable $1^{\text {st }} / 2^{\text {nd }}$ person feature must be licensed by entering into an Agree relation with a functional category". They consider the Strong PCC, which they derive by the interaction of the PLC with minimalist Agree and the standard Minimality condition on it. The relevant configuration is roughly as in (34) where goals of the $v$ probe have $\pi=3 \mathrm{P}$ or $\pi=1 / 2 \mathrm{P}$. In (34), by Minimality, the $\pi$ probe on $v$ matches the $\pi$ value on the dative. This means that it "never enters into an Agree relationship with the accusative ... This is fine if the accusative is $3^{\text {rd }}$ person. If it is a $1^{\text {st }}$ or $2^{\text {nd }}$ person, the PLC will take effect".


In its early statement by Bejar and Rezac it is easier to see that the PLC encodes a certain amount of the PCC, which it is meant to derive - namely that licencing requirement applies to $1 / 2 \mathrm{P}$ internal arguments and not to 3 P ones. The same is true of the P-principle of Pancheva and Zubizarreta (2017). Bejar and Rezac also consider the question why the PLC would apply to clitics and not to full pronouns and they propose that "inherent case and focus" missing in clitics (Cardinaletti and Starke 1999) are present on full pronouns. This cannot be so. As for case, Romance clitics are overtly marked for Dat, whereas full pronouns generally are not. As for Focus, if we understand the Focus category proper, it is obvious that not all full pronouns are Foci even in Romance (for instance pronouns objects of prepositions). If we understand the ability to be stressed, then we have to look no further than French enclitics for examples of stressed clitics observing the PCC, as in (35).
(35) *Presente-lui-moi/-me-lui introduce-him-me/me-him
'Introduce me to him'
We are now ready to draw some conclusions on accounts of the PCC based on the interaction between the various binary/underspecification features systems, whether (20) or (22) or (32), and standard minimalist Agree and Minimality:
(i) binary/underspecification systems must be supplemented by assumptions such as the [-person] vs. lack of person feature distinction of Anagnostopoulou (2005); the application of the proximate feature to Romance in Pancheva and Zubizarreta (2017); the dative/animacy connection. All of these assumptions appear dubious on empirical as well as on simplicity grounds.
(ii) Agree and Minimality must be supplemented with dedicated principles, such as Bejar and Rezac's (2003) PLC or Pancheva and Zubizarreta's (2017) P-Principle.
(iii) Minimality is invoked to derive the PCC in languages, where Dat plays intervener on Agree even though it is incapable of agreeing. Why would an element which cannot serve as a goal for Agree, play Minimality intervener on the Agree path? Or in Anagnostopoulou's version, why would [-person] intervene on a [+person] path??

## 5. A monovalent account of the PCC in Romance

Are monovalent feature systems at all adequate to interact with Agree, Minimality, phases and the other fundamental principles and operations of minimalist grammars? We explore this question in relation to the PCC in Romance. In section 5.1 we preliminarily address the question of clitics, their derivation and structure. In section 5.2 we address DOM in Romance. In section 5.3 we return to the PCC arguing that it feeds not on Agree and Minimality but on DOM.

### 5.1 Clitic structures

Following Kayne's (1991) classical work, we take it that clitics in most Romance languages surface as heads adjoined to $\mathrm{T}(\mathrm{P})$. A few derivations are open and have been proposed in the theoretical literature. Kayne's classical proposal has cliticization from a first-merged DP position. Sportiche (1996) proposes base-generation of clitics in a clitic field associated with $v$, whence they raise to T. Roberts (2010) takes clitics to undergo head-movement to $v$. Here we assume first-merge of object clitics, construed as D heads, with vP, hence essentially Sportiche's analysis.

The Acc clitic enters Agree with the $v$ head; following Chomsky (2001), Acc case reduces to Agree with $v$. The Acc clitic further alternates with the Part(itive)

[^6]clitic in the expression of the IA. Other clitics are Oblique (Obl), namely Dat and Loc(ative)/Inst(rumental). The clitic series is closed the Voice clitic se/si. Manzini and Savoia (2017) propose that the order of the object clitics just listed reproduces that of phrasal arguments once one abstracts from the rightward orientation of the latter as opposed to the leftward orientation of clitics. Indeed there is a good match between the order of clitics in (36a) and the leftward oriented order of routinely assumed functional heads like those in (36b). The reverse order of Acc and Dat clitics in French is discussed in section 5.3, example (45).
(36) a. $\quad \mathrm{Obl}>\quad \mathrm{EA}>\quad \mathrm{Obl}>\quad \mathrm{Acc} / \mathrm{Part}$
b. [ApplP [VoiceP [ApplP [vP

Two different kinds of labelling are open for sequences like (36a). Under the cartographic labelling each clitic is the head of a projection Appl or Voice; alternatively all clitics added on top of $v$ correspond to the addition of an Appl or Voice elementary relator, but one which does not project, resulting in a recursive $v \mathrm{P}$ label for the whole clitic field. We adopt the latter.

Recall that in most Romance languages, including French, Italian and Romanian exemplified above, clitics are seen in the TP field of the sentence. Now, according to Chomsky (2001: 37-38) "a substantial core of head-raising processes... may fall within the phonological component... Overt V-toT raising, T -to- C raising and N -to- D raising are phonological properties, conditioned by the phonetically affixal character of the inflectional categories... Considerations of LF-uniformity might lead us to suspect that an LFinterpretive process brings together D-N and C-T-V... to form wordlike LF supercategories in all languages, not only those in which such processes are visible". The discussion just quoted falls short of a formal implementation. Yet, the overall idea is clear, namely that lexical categories and their functional spines form LF units which may be externalized at any of the positions that the extended projection comprises. In this perspective, we may assume that what applies to the C-T-v sequence applies to any heads adjoined to (a member of) the sequence - so that in the Romance languages the verb is pronounced in T and so are the clitics adjoined to vP. The $v$ field is simply pronounced at the next phase head up, namely T.

As for the leftward orientation of clitics, we do not adopt Kayne's (1994) LCA, but rather endorse Chomsky's (2005:15) proposal that Merge yields non-ordered couples (sets) of the type $\{\mathrm{X}, \mathrm{Y}\}$. At the same time, "one asymmetry imposed by the phonetic interface is that the syntactic object derived must be linearized... If linear order is restricted to the mapping to the phonetic interface, then it gives no reason to require the basic operation Merge to depart from the simplest form ... unstructured Merge, forming a set". In this perspective there is nothing much to be said about the leftward orientation of clitics in (36a) since it is the normal orientation of heads, as in (36b).

In short, (Romance) clitics are D heads first merged in vP adjoined position where they introduce either $\varphi$ features matching those of $v$ (Acc) or functional specifications of $v$ (Appl, Voice). Their ordering by dominance relations is predicted on the basis of whatever orders the corresponding verbal heads. Their linear ordering to the left is what is normally expected of heads in Romance.

### 5.2. 1/2P clitic DOM

Manzini and Savoia (2014b, 2018a), while remarking on some of the problems highlighted here in section 4 for current theories of the PCC, argue that the PCC should be discussed in the light of DOM, as applying to $1 / 2 \mathrm{P}$ referents. In this section we will briefly review the analysis of DOM we adopt and then go to consider $1 / 2 \mathrm{P}$ vs 3 P splits in the light of DOM.

Recent approaches to Romance DOM provide a theoretical framework in which DOM objects are not just morphologically syncretic with obliques (specifically datives), but are represented as obliques in the syntax. Torrego (2010), Pineda (2014), working in an Appl framework, assign both goal datives and DOM arguments to the Appl projection. Manzini and Franco (2016) avoid the Appl projection, in that it does not seem to correspond to the actual morphosyntactic organization of Indo-European languages. Rather, the oblique/dative content is lexicalized by adpositions or case inflections. In their terms, the Romance $a$ 'to' preposition, or the Punjabi -nu postposition, carry inclusion content in the sense of Belvin and den Dikken (1997), as does the oflgenitive preposition in DP contexts.

Following Kayne (1984) and much subsequent literature, in a goal dative sentence such as He gave the book to them, a possession relation holds between the dative (to them) and the theme of the ditransitive verb (the book). The elementary to relator takes as its internal argument its sister DP, them (the possessor) and as its external argument the sister to its projection, i.e. the theme of the verb, the book (the possessee) yielding a possession relation between them. The syncretism of goal dative and of DOM, is based on the fact that object DPs which are referentially highly ranked require the elementary relator P introducing goals for their embedding, as in (37). In Appl terminology, they must be introduced as Appl arguments, no less than goals.
(37) DOM
${ }_{\text {vp }} \ldots{ }^{*}$ ( $\left.\left.\left.\mathrm{P} / \mathrm{K}\right) \mathrm{DP}\right] \ldots\right]$ where DP is highly ranked on the referential / D-scale (where high ranking is subject to parametric variation)

The intuition is that in a Spanish example like (38a) the verb contratar 'hire' can be paraphrased as 'give/make a contract to/with'. In structure
(38b), we adopt the standard minimalist assumption that transitive predicates result from the incorporation of an elementary state/event V into a transitivizing $v$ layer. Within such a framework, in (38b) the two arguments of $a$ are its object DP una amiga 'a friend' and the result event contrato 'contract', where 'a friend' includes/locates/possesses the 'contract' result. Under (37), the sensitivity to the two layered $v$ - V structure characterizes only highly ranked referents. By contrast, indefinite/inanimate complements are embedded as accusative themes.
(38) a. Han contratado *(a) una amiga/Julia/mi amiga.
they.have hired (to) a friend/Julia/my friend
'They hired a friend/Julia/my friend' Spanish (Torrego 2010)
b. $\quad\left[_{\nu \mathrm{P}} v\left[_{\mathrm{VP}}\right.\right.$ contratado $\left[{ }_{\mathrm{PP}}\right.$ a $\left[{ }_{\mathrm{DP}}\right.$ una amiga $\left.\left.\left.]\right]\right]\right]$

With this much background on DOM, let us then consider how it applies to $1 / 2 \mathrm{P}$ clitics in Romance. Descriptively, 1/2P object clitics differ from 3P ones with respect to their distribution (i.e. their position in the clitic string), their morphological make-up (i.e. the presence vs. absence of gender and Case distinctions) and their agreement properties (i.e. the presence or absence of agreement with the perfect participle). We succinctly illustrate the case and agreement peculiarities in (39). In Italian, accusative 3P clitics have a different form from dative clitics, cf. the contrast between $l a$ in (39a) and $l e$ in (39c); however $1 / 2 \mathrm{P}$ clitics have a single morphology ( $m i$ for 1 P ) for both contexts. This may be treated as a syntactically irrelevant syncretism except that it corresponds to what are undoubtedly syntactically significant behaviours. Accusative 3P clitics obligatorily agree with the perfect participle, as in (39a) vs (39b). On the other hand, datives do not agree, as in (39c), independently of whether they are $1 / 2 \mathrm{P}$ or 3 P . In turn, $1 / 2 \mathrm{P}$ clitics corresponding to an internal argument can either agree with the perfect participle, as in (39a), or not agree with it, as in (39b). (39b) is therefore the crucial example, showing the contrast between 3 P and $1 / 2 \mathrm{P}$.


Consider first case patterns, namely the fact that there is a single $1 / 2 \mathrm{P}$ clitic for both direct objects (39a-b) and goal datives (39c), as opposed to the
different morphologies observed for 3P. Manzini and Savoia (2014a, 2018a) argue that $1 / 2 \mathrm{P}$ clitics undergo DOM , which in present terms means that they are obliques, consisting of a lexical base $m$ - $/ t$ - and of a K dative inflection $-i$, as illustrated in (40). ${ }^{8}$
(40) $\ldots\left[_{\mathrm{D}} \mathrm{m}\right]\left[_{\mathrm{K}} \mathrm{i}\right]\left[_{\mathrm{VP}}\right.$ chiamato/chiamata $]$

Let us then go on to consider agreement, provisionally accepting the conclusion that $1 / 2 \mathrm{P}$ clitics undergo DOM. Arguably, the two logically possible agreement patterns for an oblique which is also an internal argument of a verb are instantiated. Specifically, DOM elements may agree with perfect participles, patterning with other internal arguments, as in (39a). Alternatively, they may pattern with other obliques, for instance goal datives, in not undergoing perfect participle agreement, as in (39b). ${ }^{9}$

We follow Manzini and Franco (2019) in assuming that labelling is ultimately responsible for this double possibility. Specifically, we propose that the K relator may either label the whole clitic, i.e. behave like a traditional adposition, or not label it. In the latter case, the clitic is labelled by D , so that the K relator behaves more like a traditional case/inflection. We further propose that a DOM object labelled as D will undergo Agree like a bare object $\mathrm{D}(\mathrm{P})$. A DOM object labelled as K will not undergo Agree, like any KP/PP. Thus the structure in (40) is to be refined as in (41). If PP projects, agreement is not triggered, as in (41a). If DP projects, agreement is triggered, as in (41b)
(41) a. $\quad \ldots\left[_{K}\left[{ }_{D} m\right]\left[{ }_{K} i\right]\right]\left[{ }_{V P}\right.$ chiamato $]$
b. $\quad \ldots{ }_{[D}\left[{ }_{D} m\right]\left[{ }_{K} \mathrm{i}\right]$ [ ${ }_{V P}$ chiamata]

The double labelling possibility proposed for DOM arguments ultimately derived from that proposed by much literature on so-called pseudo-partitives (Pesetsky 1982). One non-obvious property of the labelling parameter is that it affects structural obliques (DOM objects, pseudopartitive complements of quantificational expressions), but not to inherent obliques. Thus, it does not affect dative goals as opposed to DOM objects. In other words, only a struc-

[^7]ture like (42) is possible for goal datives in (39c). We propose that labelling by D as opposed to labelling by K is impossible with inherent obliques, because they need to project the K content as part of their inherent status, i.e. as part of the fact that their $\mathrm{P} / \mathrm{K}$ properties are selected by a verb. Hence, the agreement parameter only affects structural obliques such as DOM and not the same cases when they are inherent. ${ }^{10}$

## (42) $\ldots\left[_{K}\left[{ }_{\mathrm{D}} \mathrm{m}\right]\left[{ }_{\mathrm{K}} \mathrm{i}\right]\right] \quad\left[{ }_{\mathrm{VP}}\right.$ parlato $]$

Other split behaviours of $1 / 2 \mathrm{P}$ vs 3 P clitics in Romance, which can only be briefly mentioned here, are consistent with the conclusion that $1 / 2 \mathrm{P}$ are obliques. Thus 3P accusative clitics follow all obliques in the clitic string (e.g. Italian ce lo porta 'He brings him/it there'). 1/2 P clitics precede some obliques, even when they are internal arguments (e.g. Italian mi ci porta 'He brings me there'), see Manzini and Savoia (2017). Even in acquisition, there is a well attested pattern of omission opposing 3Acc clitics (more frequently omitted) and 3Dat or 1/2P clitics, less frequently omitted (Guasti 2017: 299 and references quote there).

### 5.3 Core analysis of the PCC

The core configuration for the PCC is represented by Italian (43). The $1 / 2 / 3 \mathrm{Dat}-3 \mathrm{Acc}$ combination is allowed and the *3Dat $-1 / 2 \mathrm{Acc}$ combination is excluded under both the strong and the weak PCC.
a.

| Me lo/ | glielo/ $\quad$ gli mi | presentano |
| :--- | :--- | :--- |
| to.me him/ | to.him-him/ to.him me | they.introduce | 'They introduce me to him/him to me/him to him' Italian

b.


[^8]Let us begin with the wellformed combinations glielo (3Dat - 3Acc) and me lo (1Dat-3Acc). The D clitic lo merges with $\mathrm{v}(\mathrm{P})$; from its position, it is able to Agree with $v$ and hence satisfy the Case Filter/Visibility. Either gli or me can then be associated with the $\mathrm{Ob} / \mathrm{Appl}$ clitic position, interpreted as either a goal or as a DOM. Consider however the illformed pattern *gli mi (3Dat - 1Acc). The $1 / 2 \mathrm{P}$ clitic cannot be hosted by the direct case D clitic position for the simple reason that it must undergo DOM, and therefore become associated with Obl. If it is inserted under Obl it prevents a goal from doing so, leading to illformedness, given the absence of other suitable host positions for the goal argument.

This proposal is essentially as put forth by Manzini and Savoia (2014b, 2018a). In a similar vein, E. Kiss takes it that "the ... constraint ... restricting the assignment of accusative case to 1 st and 2 nd person nominals, is known cross-linguistically as the Person-Case Constraint". Effectively, then, we reduce the (apparently) global PCC to a local constraint. The insertion of $1 / 2 \mathrm{P}$ creates conditions (namely DOM, or pairing with Obl ) which put severe restrictions on the subsequent build-up of the structure, essentially in the way suggested by Georgi (2012). The crucial property of our account of the PCC, which sets it apart from the family of accounts reviewed in section 4, is that Minimality intervention on the Agree path plays no role in blocking PCC configurations. Furthermore, the account that we sketch is unlike the accounts reviewed in section 4 in not requiring any ad hoc principles stating the special visibility needs of $1 / 2 \mathrm{P}, \mathrm{P}$-uniqueness or other. For, the special status of $1 / 2 \mathrm{P}$ is taken care of directly by DOM.

Italian however is not a strong, but a weak PCC language, where1Dat > 2 Acc or $2 \mathrm{Dat}>1 \mathrm{Acc}$ are both licit. Though the surface order $m i t i$ in (44a) is obligated, either reading is possible. In Agree approaches the switch from strong to weak PCC is signaled by a switch from Agree to Multiple Agree (Anagnostopoulou 2005) or from P-uniqueness to lack thereof (Pancheva and Zubizarreta 2017). We suggest that weak PCC languages have a dedicated 1P or 2P position in addition to the Obl position used to far, along the lines of (44b).
(44) a. Miti/me lo presenta me you/me him he.introduces 'He introduces me to you/you to me/me to him' b.


Preliminarily, we need to insure that the facts in (43) still follow. To begin with, me lo 'to me it' is licit. A 3P internal argument is merged in D, creating no interference with the $1 / 2 \mathrm{P}$ clitic. By contrast * mi gli 'me to him' is still excluded. The 1P internal argument merges with the DOM position Obl blocking the 3P goal. Crucially, we need to assume that some principle of minimal merge (Earliness) makes the additional 1P position unavailable. Such a principle is not in any way construction specific or feature specific. Simply it imposes to Merge in the first available position - and can possibly be reduced to Minimal Search under the not unreasonable idea that selection (here argument selection) is probing (Cecchetto and Donati 2015).

Consider next the licit mi ti combination in the reading 'me to you'. Merger of the 2 P clitic as the internal argument of the verb leads to DOM and hence association with Obl . The specialty of Italian in (44b) is that there is an extra 1 P position where the goal 1 P clitic can be merged, saving the configuration. Furthermore, mi ti can have not only the 1Dat - 2Acc interpretation but also the reverse one, namely 1 Acc-2Dat. In order to understand this reading, we need to take a small detour. Recall that according to Kayne (1984), Pesetsky (1995), Harley (2002) and many others, ditransitive verbs embed a locative or possession predication between the theme and the dative - to the effect that the theme is possessed/located by the dative. In other words I gave a book to Peter embeds a small clause [the book to Peter], where the accusative is the possessee and the dative is the possessor in a possession relation.

Manzini and Savoia (2017) suggest the account in (45) for French le lui 'it/ him to him', where the order of clitics illustrated for Italian (36) is reversed. In (45), Acc/D is adjoined to Obl and the Obl constituent is attached to vP. The adjunction in (45) is read like a small clause predication, namely the D clitic le is a possessee/located element, while the Obl clitic lui is the possessor/locator. The structure in (45) does not interfere with the strong PCC, since $1 / 2 \mathrm{P}$ refuse association with D and require association with Obl , whatever the structure.


Something similar to (45) is formally possible for the mi ti string of Italian, in the reading 'me to you'. In (46), the extra 1 P position is adjoined to Obl allowing the reading where 1 P is the possessee element of the Obl predication, i.e. the theme. The 2 P element is read as the possessor, i.e. the dative argument. The structure in (46) does not interfere with the strong PCC, since any $1 / 2 \mathrm{P}$ internal argument homes in for Obl either by substitution of by adjunction, locking a 3P Dat out of it.
(46)


In short, the weak PCC in Italian depends on the availability of an extra 1P position, which can further be deployed in one of two logically possible structural ways, namely (44) and (46). Since Catalan is like Italian but the order of the string te $m$ is reversed, we can assume that the extra position available in Catalan is $2 P$. Other well-known facts also follow from the present approach. Spanish differs from both Italian and Catalan in presenting DOM with 3P clitics, in the so-called leista dialects. As predicted under the present account, these interact with $1 / 2 \mathrm{P}$ clitics exactly as any goal dative would, yielding instances of the PCC, for instance in (47b) (Ormazabal and Romero 2007, 2013).

| a. | Le | lleve | a tu hijo | a casa |
| :---: | :---: | :---: | :---: | :---: |
|  | 3DOM | brought.I | to your son | to home |
|  | 'I brought your son home' |  |  |  |
| b. | Te (*le) | lleve | (a) tu hijo | a cas |
|  | to.you 3DOM | brought.I | to your son | to home |
|  | 'I brought you your son home' |  |  |  |
| c. | Te | lo | lleve | a cas |
|  | to.you | him | brought.I | to home |
|  | 'I brought you | him home |  |  |

Before considering the Me-First PCC of Romanian, we take a brief detour into some Balkan languages. As detailed by Manzini and Savoia (2014b, 2018a), Albanian and its dialects have a clitic system similar to that of Italian. 3P singular clitics differentiate an accusative form $/ \varepsilon /$ from a dative form $/ \mathrm{i} /$. In the $1 / 2 \mathrm{P}$, there is a single form $/ \mathrm{m} \partial /$, $/ \mathrm{t} /$. Therefore we analyze Albanian as Italian, namely as presenting systematic DOM of $1 / 2 \mathrm{P}$. In the (Geg Albanian) variety of Shkodër, the co-occurrence of a $1 / 2 \mathrm{P}$ clitic with a 3 P dative or another $1 / 2 \mathrm{P}$ clitic is excluded (strong PCC), as in (48). The account of the strong PCC given in (43) can be adopted for Albanian.

| a. | *ai | m | i | ka |
| :---: | :---: | :---: | :--- | :--- |
| he | me | him | has | prezan'tu: |
| introduced |  |  |  |  |

Greek also has the strong PCC as in (49). Evidently, we want to be able to apply to Greek the same analysis adopted in the discussion surrounding (43) for Romance. In turn this implies that 1/2P clitics undergo DOM and are merged as Obl.

| a. | *Tha | su | me | sistisune |
| :---: | :---: | :---: | :---: | :---: |
|  | will | to.you | me | introduce |
| 'They will introduce me to you' |  |  |  |  |
| b. | *Tha | tu | se | stilune |
|  | will | to.him | you | send |
|  | 'They | you to h |  |  |

However, Greek presents the not insignificant problem that the language has distinct forms for $1 / 2 \mathrm{P}$ singular direct object ( Acc ) and $1 / 2 \mathrm{P}$ singular indirect objects (Dat), as seen in table (50).

|  | Acc (m./f./n.) | Obl (m./f./n.) |  |
| :--- | :--- | :--- | :--- |
| 1 sg | me | mu |  |
| 2sg | se |  | su |
| 3 sg | to-n/ti-n/to |  | tu/tis/tu |
| 1 pl |  | mas |  |
| 2pl |  | sas |  |
| 3pl | tus/tes/ta |  | tus/ta $\quad$ Greek |

Note that in (50), the $1 / 2 \mathrm{P}$ oblique forms $\mathrm{mu} / \mathrm{su}$ 'to/of me/you' have a clear morphological similarity to the 3P forms, specifically masculine/neuter tu 'to/of him/it'. On the contrary, the objective forms me/se 'me/you' lack the distinctive $-n$ morphology of 3P singular, e.g. ton/tin 'him/her', as well as any nominal class (i.e. gender) inflection. Importantly the $-n$ inflection characterizes the accusative singular of all non-neuter lexical Ns as well as their Ds and adjectival predicates. Therefore, $1 / 2 \mathrm{P}$ object clitics have a morphological shape distinct from that of 3P clitics and lexical categories. As ever, two routes of analysis are open to us. One is the traditional one, namely imputing the $1 / 2 \mathrm{P}$ vs. 3 P split to morphological quirks and external accidents, without any significance or consequence for the grammar as a whole. We take the alternative approach, namely that $1 / 2 \mathrm{P}$ me/se in (50) are morphologically different from 3P ton/tin because they are exponents of DOM case rather than Acc case. In other words, the conceptual prominence of $1 / 2 \mathrm{P}$ translates into a DOM syntactic treatment. The externalization component simply records this differential treatment in a transparent fashion.

Now, if the construal of DOM in section 5.1 is correct, DOM is a form of obliquization. In other words, the essence of DOM is that a highly ranked referent cannot be embedded as a theme, but must be raised to a possessor/ locator/experiencer position. Therefore, independently of syncretism, expo-
nents of DOM are lodged in the same slot as inherent Obl in the sentence tree. As a specific instance of this, $1 / 2 \mathrm{P}$ clitics can never be merged in the same D position as 3 P objects, but must be merged in the same Obl position as inherent goals. This creates configurations of the type in (51), which yield the strong PCC in Greek in exactly the same way as discussed for (43) - namely, first merging a $1 / 2 \mathrm{P}$ element in $\mathrm{Obl}(=\mathrm{DOM})$ prevents any inherent goal from doing so.


Finally, consider Romanian, where the PCC takes neither the strong not the weak shape but the Me-First shape. In essence, the data reproduced at the beginning of section 5 include any combination except *3Dat $>1$ Acc and *2Dat $>1$ Acc. The obvious conclusion seems to us to be that Romanian is a language where the PCC isolates 1 P as opposed to $2 / 3 \mathrm{P}$. The relevant structure is then as in (52), to be read as follows: any (i.e. $1 / 2 / 3 \mathrm{P}$ ) Dat element can combine with te in Acc position (and of course with a 3P clitic) but not with $m e$. We may assume that this is a language where 1 P is targeted by DOM ; as such it cannot be inserted under D, but targets Obl. Thus combinations Dat - 1P are excluded, while other logically possible combinations are allowed.


## 6. Conclusions

In sections 2-3 we have addressed binary features in the Hallean tradition, both in phonology and in morphology. In order to keep the discussion manageable we have focused on two specific case studies, namely vocalic features in phonology and person features in morphology. We have argued that the relative formal richness of bivalent features (as opposed to monovalent ones) does not have obvious empirical advantages - rather the reverse may be argued to be true. Specifically, under monovalent feature systems, the vocalic
triangle $/ \mathrm{i} /$, /a/, /u/ or the person referents Speaker (1P), Hearer (2P), Definite/Demonstrative (3P) can be treated as atomic - a treatment that has no possible counterpart under binary feature systems. We have seen that, being formally more complex, binary systems are prone to formal issues that do not touch monovalent systems, concerning for instance the interpretation of two positively specified and contradictory properties. We have found in Person feature repertories the same formal and substantive issues as in phonological ones. In essence, binary notation adds richness, creating potential formal problems and conceptual ones (e.g. the non-primitive status of 1 P ). The parallelism between binarism in phonology and morphology further shows that the issues we have raised are inherent to binarism and not simply accidental to one or other of its applications.

In section 2, we have considered vowel inventories defined on the basis of monovalent and bivalent features and their interaction with phonological computation/representations. Morphological inventories, such as those concerning Person in section 3, ultimately interact with syntactic computation. Therefore, sections 4-5 are devoted to the interaction of Person features with DOM, construed as a form of obliquization, and with the PCC. Our idea is that the latter does not involve Minimality. Rather $1 / 2 \mathrm{P}$ subject to DOM , hence to obliquization, merge in the $\mathrm{Obl}(\mathrm{Appl})$ position of the verbal spine, blocking merger of inherent obliques (dative goals) in the same position.

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# Auxiliary Selection in Italian Dialects: Person Split, OCls and Raddoppiamento Fonosintattico 

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#### Abstract

: This article addresses a classical phenomenon of Differential Subject Marking, i.e. the selection of auxiliary in the perfect in relation to person in some Central and Southern Italian dialects. In these systems bel have as auxiliaries alternate according to person and, partially, to active, non-active or passive voice. The attested patterns vary but a tendency emerges whereby $3^{\text {rd }}$ person requires have, while $1^{s t} / 2^{\text {nd }}$ person require $b e$. In the passive $b e$ is associated to all persons. We aim at describing the main types of the auxiliary patterns and proposing an analysis of the morpho-syntactic mechanism underlying the distribution of be and have. We connect the belhave alternation with the syntactic representation of the event and its relation with the distinction between deictic import of $1^{5 t} / 2^{\text {nd }}$ person and the argumental reading of $3^{\text {rd }}$ person elements. A core point of our discussion is the sandhi process of Raddoppiamento Fonosintattico in auxiliary contexts that the recent literature considers a cue of the syntactic difference between passive and active voice. Finally, a comparison with the Piedmontese systems selecting be as auxiliary regardless of the verbal voice is proposed as far as they can provide further elements for deepening the syntactic nature of auxiliary selection.


Keywords: Auxiliary selection, Differential Subject Marking, Distribution of OCls, Phases, Phono-syntactic Phenomena

## 1. Introduction

The main issue addressed by this work is the auxiliary selection and the phenomenon of Differential Person Marking (DPM) in the perfect in Central and Southern Italian dialects, where be and have alternate according to person and, partially, to active, non-active or passive voice (Rohlfs 1969 [1954]; Giammarco 1973; Kayne 1993; Cocchi 1995; Manzini and Savoia

2005, 2011; Ledgeway 2009; D'Alessandro and Roberts 2010; D'Alessandro and Scheer 2015). A person split emerges that separates $3^{\text {rd }}$ person from the deictic persons, $1^{\text {st }}$ and $2^{\text {nd }}$, in active (transitive, unergative) and in non-active (N-A), namely unaccusative and reflexive. A widespread pattern associates Habere 'have' (H) to the $3^{\text {rd }}$ person and ESSE 'be' (E) to $1^{\text {st }}$ and $2^{\text {nd }}$ persons. In some dialects unaccusatives and reflexives select be in the $3^{\text {rd }}$ person. The passive extends be to all persons. Moreover, there are Central varieties where in addition to the person split between be and have, a complementary difference emerges in the occurrence of the OCl , because OCl precede have but may follow be. This distribution recalls the one attested in Piedmontese dialects that extend be to all verbal forms, in alternation with have in actives. In these systems have requires a duplication of the OCl in pre-verbal position, confirming the hypothesis that have and be involve different morphosyntactic structures.

DPM and the other phenomena explored may be connected to the different properties of have and be as lexicalizations of T/v and to the nature of the past participle in Romance varieties. A look to a significant sample of dialects showing the alternation between be and have according to person and to the contrast between active and non-active voice, highlights a strong micro-variation involving syntactic, morpho-phonological and interpretive properties. ${ }^{1}$ Among the other factors that we will consider, the occurrence of Raddoppiamento Fonosintattico ${ }^{2}$ between auxiliary and participle will be tested as a possible clue of the structural status of the auxiliary (D'Alessandro and Scheer 2015).

The article is organized as follows: Sections 2. The patterns E E H E EH and Eен/EEEH, 2.1. The pattern EEH/EHH H with morpho-phonologically

[^9]driven alternation in $3^{\text {rd }}$ singular, 2.2. Partial overlapping between be and have, 2.3. Enclisis on be, 3. Piedmontese dialects with be, illustrate a complex of data coming from different dialects and showing different auxiliary paradigms. A first discussion of specific points concerning the distribution of the auxiliaries is introduced. Sections 4. Auxiliary and participle, 4.1. Auxiliary patterns and person split, 4.2. Enclisis on be and other phenomena, 4.3. Unexpected occurrences: be in the $3^{\text {rd }}$ and have in the $2^{\text {nd }}, 4.4$. Coincidence between be and have and incorporation of the $3^{\text {rd }}$ person $O C l$, address the main structural properties of the auxiliary-participle constructions, on the base of the relevant current literature. Specifically, we discuss the internal structure of participles and its interpretive properties and the morphosyntactic properties of the auxiliary structures. We also make some proposals as regards the mechanism of selection between be and have and its relation with person split. Finally, Sections 5. Phases and RF and 5.1. Phases, RF and agreement of the participle are devoted to discuss the notion of Phase in relation to the structural properties of actives, unaccustaives and passives/copular sentences.

## 2. The patterns E E H E E H and E E H/E E E H

The pattern ex heem, illustrated in (1) for the dialect of Sonnino (Lazio), ${ }^{3}$ is characterized by an uniform distribution of the auxiliaries in the perfect in all verbal classes and the event types (active, non-active and reflexive), except in passive, where be occurs, as in (1b). The auxiliary is indicated by $\mathrm{E}(b e)$, or H (have) in conjunction with each person and, in the case of the monosyllabic forms, the presence / absence of RF is specified. We introduce the glosses only where it is necessary for the sake of clarity. (1a) illustrates the active forms, (1a') the non-active forms, (1b) the passive forms, and, when present, ( $\mathrm{lb}^{\prime}$ ) the copular contexts. It is of note that the indication +/ RF will be inserted only in relevant contexts, specifically the monosyllabic forms of be and have.
(1) a. active

| 1-o/ l-a it-n/FSG | $\begin{aligned} & \text { so } \\ & \text { be. } 1^{\mathrm{st} \text { SG }} \end{aligned}$ | llavat-o/llavat-a washed-MSG/FSG | E | +RF |
| :---: | :---: | :---: | :---: | :---: |
| 1-o/ l-a <br> $\mathrm{it}-\mathrm{N} / \mathrm{FSG}$ | si be $2^{\text {nd }} \mathrm{SG}$ | llavat-o/ lavat-a washed-msg/FSG | E | +RF |
| 1 | a | lavat-o/lavat-a | H | -RF |
| it-n/FSG | have. 3 rd ${ }^{\text {rd }}$ | washed-msG/FSG |  |  |
| 1-o/ 1-a | semo | lavat-o/lavat-a | E |  |
| $\mathrm{it}-\mathrm{N} / \mathrm{FSG}$ | be. $1^{\text {st }} \mathrm{PL}$ | washed-MSG/FSG |  |  |

[^10]| l-o/l-a | sete | lavat-o/lavat-a | E |
| :--- | :--- | :--- | :--- |
| it-N/FSG | be. $2^{\text {nd }}$ PL | washed-MSG/FSG |  |
| 1 | ao | lavat-o/lavat-a | H |
| it-N/FSG | have. $3^{\text {rd }}$ PL | washed-mSG/FSG |  |
| 'I have washed it/ her, you have washed it/ her, etc.' |  |  |  |


| so | pparlat-o | E | +RF |
| :--- | :--- | :--- | :--- |
| be. stsG $^{\text {st }}$ | spoken |  |  |
| si | pparlat-o | E | +RF |
| a | parlat-o | H | -RF |
| semo | parlat-o | E |  |
| sete | parlat-o | E |  |
| a | opa'lat-o | H |  |
| 'I have spoken, you have spoken, etc.' |  |  |  |

a'. non-active

| so | mmenut-o/mmenut-a | E | +RF |
| :--- | :--- | :--- | :--- |
| be. 1st $^{\text {st }}$ | come-MSG/FSG |  |  |
| si | mmenut-o/mmenut-a | E | +RF |
| a | menut-o/menut-a | H | -RF |
| semo | mmenut-e | E |  |
| sete | menut-e | E |  |
| ao | menut-e | H |  |
| 'I have come, you have come, etc.' |  |  |  |


| me | so | llavat-o | E | +RF |
| :--- | :--- | :--- | :--- | :--- |
| me | be.1 ${ }^{\text {st }}$ SG | washed-mSG |  |  |
| te | si | llavat-o | E | +RF |
| s | a | lavat-o | H | -RF |
| tfe | semo | lavat-e | E |  |
| ve | sete | lavat-e m | E |  |
| s | ao | lavat-e | H |  |
| 'I have washed myself, you have washed yourself, etc.' |  |  |  |  |

b. passive and copular contexts
$\varepsilon$ ccamat-o da tutt-e $\mathrm{E} \quad+\mathrm{RF}$
be. $3^{\text {rd }}$ SG called-msg by all-pl
'he is called by everyone'
Sonnino
In other varieties the pattern E E H E E H is restricted to transitive and unergative forms, alternating with a pattern extending be to all persons in non-active forms, unaccusatives and reflexives, in addition naturally to the passive. So, in this type of systems, the selection according to the
eventive class of the verb overlaps the one based on the person split. This pattern is exemplified in (2) for Torricella Peligna (Abruzzo) and in (3) for Monte Giberto (Southern Marche). (2a, a') and (3a,a') illustrate active and non-active/ passive forms respectively. ( $2 \mathrm{~b}, \mathrm{~b}^{\prime}$ ) and ( $3 \mathrm{~b}, \mathrm{~b}^{\prime}$ ) illustrates passive and copular clauses.
(2) a. active

| 12 | so | camæ:t-ə | E | -RF |
| :---: | :---: | :---: | :---: | :---: |
| him | be. $1^{\text {st }}$ SG | called-INfL |  |  |
| la | Si | camæ:t-ə | E | -RF |
| him | be. $2{ }^{\text {nd }} \mathrm{SG}$ | called-Infl |  |  |
| 1 | a | camæ:t-ə | H | -RF |
| him | have. $3{ }^{\text {rd }}$ | called-Infl |  |  |
| la | semə | camæ:t-ə | E |  |
| him | be. $1^{\text {st }}$ PL | called-infl |  |  |
| la | seta | camæ:t-ə | E |  |
| him | be. $2{ }^{\text {nd }} \mathrm{PL}$ | called-Infl |  |  |
| 1 | a (nomə) | camæ:t-ə | H | -RF |
| him | have. $3^{\text {rd }}$ PL | called-infl |  |  |


a'. non-active

| so | məneut-ə | E | -RF |
| :---: | :---: | :---: | :---: |
| be. $1^{\text {st }}$ SG | come-INFL |  |  |
| Si | məneut-ə | E | -RF |
| be. $2^{\text {nd }}$ SG | come-INFL |  |  |
| e | mməneut-ə | E | +RF |
| be. $3{ }^{\text {rd }}$ | come-INFL |  |  |
| semə | məneut-ə | E |  |
| be. $1^{\text {st }} \mathrm{PL}$ | come-Infl |  |  |
| setə | məneut-ə | E |  |
| be. $2^{\text {nd }}$ PL | come-INFL |  |  |
|  | mmoneut-ə | E | +RF |
| be. $3^{\text {rd }}$ | come-INFL |  |  |

'I have come, you have come, etc.'

| mə | so | arrava:t-ə | E |
| :--- | :--- | :--- | :--- |
| me | be. $1^{\text {st } S G}$ | washed.SG-INFL |  |
| tə | $\int i$ | arrava:t-ə | E |
| s | e | arrava:t-ə | E |

'I have washed myself, you have washed yourself, etc.'
b. passive and copular contexts
e kkuriət-ə da lu medəkə E +RF
be. 3 rd cured.pl-INFL by the doctor
'they are cured by the doctor'

| s0 <br> be. $1^{\text {st }} \mathrm{SG}$ | kkondend-u/ kkondend-a glad-msg/FSG | E | +RF |
| :---: | :---: | :---: | :---: |
| Si | kondend-u / kondend-a | E | -RF |
| be. $2^{\text {nd }}$ SG | glad-MSG/FSG |  |  |
| $\varepsilon$ | kkondend-u | E | +RF |
| be. $3{ }^{\text {rd }}$ SG | glad- MSG |  |  |
| $\varepsilon$ | kkondend-i | E | +RF |
| be. $3{ }^{\text {rd }} \mathrm{PL}$ | glad-MPL |  |  |

Torricella Peligna
(3) a. active

| so be. $1^{\text {st } S G}$ | vvift-o <br> seen.NSG | frat-u-t-u E your brother-MSG- $2^{\text {nd }}-$ MSG | +RF |
| :---: | :---: | :---: | :---: |
| Si | vift-o | E | -RF |
| be. $2^{\text {nd }}$ SG | seen.NSG |  |  |
| a | vift-o | H | -RF |
| have. $3{ }^{\text {rd }}$ SG | seen.NSG |  |  |
| Semo | vift-o | E |  |
| be. $1^{\text {st }} \mathrm{PL}$ | seen.NSG |  |  |
| Sete | vift-o | E |  |
| be. $2^{\text {nd }}$ PL | seen.NSG |  |  |
| a | vift-o | H | -RF |
| have. $3{ }^{\text {rd }}$ PL | seen.NSG |  |  |
| 'I have seen | our broth | you have seen your brother |  |


| s0 | ddurmit-o | E | +RF |
| :---: | :---: | :---: | :---: |
| be. $1^{\text {st }} \mathrm{SG}$ | slept-msG |  |  |
| fi | ðurmit-o | E | -RF |
| a | ðurmit-o | H | -RF |
| Jemo | ðurmit-o | E |  |
| Sete | ðurmit-o | E |  |
| a | ðurmit-o | H | -RF |
| 'I have slept, you have slept, etc.' |  |  |  |

a'. non-active

| so | vvinut-u/-a | E | + RF |
| :--- | :--- | :--- | :--- |
| be. $1^{\text {st }}$ SG | come-MSG/FSG |  |  |


| Si | vinut-u/a | E | -RF |
| :---: | :---: | :---: | :---: |
| be. $2^{\text {nd }}$ SG | come-MSG/FSG |  |  |
| $\varepsilon$ | vvinut-u/a | E | +RF |
| be. 3 rd | come-MSG/FSG |  |  |
| Jemo | vinut-i/-e | E |  |
| be. $1{ }^{\text {st }} \mathrm{PL}$ | come-MSG/FPL |  |  |
| Sete | vinut-i/-e | E |  |
| be. $2^{\text {nd }}$ PL | come-mpl/fpl |  |  |
| $\varepsilon$ | vvinut-i/-e | E | +RF |
| be. 3 rd | come-mpl/fpl |  |  |

'I have come, you have come, etc.'

| me | so | mmist-u/-a | sse'ðe | E | +RF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| me | be. $1^{\text {st }}$ SG | put-msG/FSG | to sit |  |  |
| te | fi | mist-u/-a | a sse'ðe | E | -RF |
| you | be. $2^{\text {nd }}{ }^{\text {S }}$ G | put-msG/FSG | to sit |  |  |
| $s$ | $\varepsilon$ | mmist-u/-a | a sse'ðe | E | +RF |
| Rifl | be. $3{ }^{\text {rd }}$ | put-msG/FSG | to sit |  |  |
| tse | Semo | mist-i/-e | a sse'de | E |  |
| us | be. $1^{\text {st }}$ PL | put-mpl/-FPL | to sit |  |  |
| ve | Sete | mist-i/-e | a sse'ðe | E |  |
| you | be. $2^{\text {nd }}{ }^{\text {PL }}$ | put-mpl/-fPl | to sit |  |  |
| s | $\varepsilon$ | mmist-u/-a | a sse'ðe | E |  |
| Refl | be. $3^{\text {rd }}$ | put-MPL/-FPL | to sit |  |  |
| 'I hav | sit down, | have sit down |  |  |  |

b. passive and copular contexts

| io | so | ccamat-u/-a | ðe tutti | E | +RF |
| :---: | :---: | :---: | :---: | :---: | :---: |
| I | be. $1^{\text {st }}$ SG | called-MsG/FSG | by everyone |  |  |
| tu | Si | camat-u/-a | ðe tutti | E | -RF |
| you | be. $2^{\text {nd }}$ S | called-msG/FSG | by everyone |  |  |
| iss-u | $\varepsilon$ | ccamat-u | ðe tutti | E | +RF |
| he | be. 3 rd | called-MSG/FSG | by everyone |  |  |
| lor-o | $\varepsilon$ | ccamat-i | ðe tutti | E | +RF |
| they | be. 3 rd | called-mpl | by everyone |  |  |


| $\mathrm{b}^{\prime}$. so | kkondend-u/ kkondend-a | E | +RF |
| :---: | :---: | :---: | :---: |
| be. $1^{\text {st }} \mathrm{SG}$ | glad-msG/FsG |  |  |
| Si | kondend-u / kondend-a | E | +RF |
| be. $2^{\text {nd }}$ SG | glad-msG/FSG |  |  |
| $\varepsilon$ | kkondend-u | E | +RF |
| be. 3 rd | glad- msG |  |  |
| $\varepsilon$ | kkondend-i | E | +RF |
| be. 3 rd | glad-mpl |  |  |

Other varieties, for instance the one of Guardiaregia (Molise) in (4), admit both be and have in the $1^{\text {st }}$ singular and in the $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ plural. In the $3^{\text {rd }}$ singular the form $a$ of have occurs in active and $j \varepsilon$ of be in non-actives. In all paradigms, including passive and copular contexts, the $2^{\text {nd }}$ singular is lexicalized by si, i.e. the form of be, that triggers RF. It is of note that the $3^{\text {rd }}$ plural of be admits two possible realizations, i.e. so and sonna, the first of which triggers RF.
(4) a. active

| ru | singə/عjə | camat-ə | E/H |  |
| :---: | :---: | :---: | :---: | :---: |
| him | be/have. $1^{\text {st }}$ SG | called.infl |  |  |
| ru |  | ccamat-ə | E | +RF |
| him | be. $2^{\text {nd }}$ SG | called.infl |  |  |
| r | a | camat-ə | H | -RF |
| him | have. $3{ }^{\text {rd }}$ | called.infl |  |  |
| ru | semə/(av)emə | camat-ə | E/H |  |
| him | be/have. $1^{\text {st }} \mathrm{PL}$ | called.infl |  |  |
| ru | seta/ (av)eta | camat-ə | E/H |  |
| him | be/have. $2^{\text {nd }}$ PL | called.infl |  |  |
| ru | so-nnə /a-nnə | camat-ə/ru so ccamat-ə | E/H | (+RF) |
| him | be/have. $3^{\text {rd }}{ }^{\text {PL }}$ | called.infl |  |  |
| 'I hav | called him, you | have called him, etc.' |  |  |

$\left.\begin{array}{llll}\text { singə/Ejə } & \begin{array}{l}\text { durmut-ə } \\ \text { be/have.1stsG } \\ \text { si }\end{array} & \begin{array}{l}\text { slept.INFL }\end{array} & \mathrm{E} / \mathrm{H}\end{array}\right]$

| a'. non-active |  |  |  |
| :---: | :---: | :---: | :---: |
| singa/ ¢jə | mənut-ə | E/H |  |
| be/have. $1{ }^{\text {st }}$ SG | come-Infl |  |  |
| si | mmənut-ə | E | +RF |
| be. $2^{\text {nd }}$ SG | come-infl |  |  |
| j $\varepsilon$ | mmənut-ə | E | +RF |
| be. $3{ }^{\text {rd }}{ }_{\text {SG }}$ | come-infl |  |  |
| semə/emə | mənut-ə | E/H |  |
| be/have. $1^{\text {st }}$ PL | come-infl |  |  |
| setz/eta | mənut-ə | E/H |  |
| be/have. $2^{\text {nd }}$ PL | come-infl |  |  |
| so-nnə/ a-nnə | mənut-ə / sommənut-ə | E/H |  |
| be/have. $3{ }^{\text {rd }} \mathrm{pl}$ | come-Infl |  |  |
| 'I have come, you have come, etc.' |  |  |  |


| mə | sijgə/ejə | lavat-ə | E |  |
| :--- | :--- | :--- | :--- | :--- |
| me | be/have.1st sG | washed-INFL |  |  |
| tə | si | llavat-ə | E | +RF |
| ts | $\varepsilon$ | llavat-ə | E | +RF |
| tsə | semə/emə | lavat-ə | $\mathrm{E} / \mathrm{H}$ |  |
| və | setə/etə | lavat-ə | $\mathrm{E} / \mathrm{H}$ |  |
| tsə | so-nnə/annə | lavat-ə /tsə so llavatə | $\mathrm{E} / \mathrm{H}$ | (+RF) |
| 'I have washed myself, you have washed yourself, etc.' |  |  |  |  |

$\left.\begin{array}{lllll}\begin{array}{ll}\text { b. singə } \\ \text { be.1st } \text { SG }\end{array} & \begin{array}{l}\text { camat-ə } \\ \text { called-INFL }\end{array} & \text { da tuttə } & \text { E } & \text { by everyone }\end{array}\right)$
'I am called by everyone, you are called by everyone, etc.'

| b'.si | kkurt-ə | E | +RF |
| :---: | :---: | :---: | :---: |
| be. $2^{\text {nd }}$ SG | short-INFL |  |  |
| j $\varepsilon$ | kkurt-ə/kkort-a | E | +RF |
| be.3sG | short.m-INFL/short-F-SG |  |  |
| so | kkurt-ə/kkort-ə | E | +RF |
| be. 3 rdpl | short.M-INFL/short.F-INFL |  |  |
| 'you are | ort, (s)he is short, they are short' |  |  |

'you are short, (s)he is short, they are short'

An apparently specular distribution of auxiliaries (H H E H H H) characterizes the dialect of San Giorgio del Sannio in (5a, a').
a. active
addza camat-o/-a/-i/-e H
(him/her/ them)have. $1^{\text {st }} \mathrm{SG}$ called-MSG/FSG/MPL/FPL
'I have called him/ her/ them'

| m | $\varepsilon$ | camat-o | H | -RF |
| :---: | :---: | :---: | :---: | :---: |
| me | have. $2^{\text {nd }}$ SG | called-MSG |  |  |
| 'you have called me' |  |  |  |  |
| m | $\varepsilon$ | ccamat-o | E | +RF |
| m | be. $3{ }^{\text {rd }} \mathrm{SG}$ | called-MSG |  |  |
| '(s)he has called me' |  |  |  |  |


| add3a | rurmut-o <br> have. $1^{\text {st }}$ SG | H |  |
| :--- | :--- | :--- | :--- |
| slept-MSG <br> rurmut-o | H | -RF |  |
| have. $2^{\text {nd }}$ SG | slept-MSG <br> ddurmut-o | E | +RF |

be. $3^{\text {rd }}$ SG slept-msG
'I have slept, you have slept, etc.'

| a'. non active |  |  |  |
| :---: | :---: | :---: | :---: |
| addza | vinut-o | H |  |
| $\varepsilon$ | vinut-o | H | -RF |
| $\varepsilon$ | vvinut-o | E | +RF |
| 'I have, you have, (s)he has come' |  |  |  |

b. passive and copular contexts
so / si / $\varepsilon \quad$ ccamat-oa tuttə kwantə
' $\mathrm{I} \mathrm{am} /$ you are/ he is called by everyone'
$\mathrm{b}^{\prime}$. so/si/ $\varepsilon \quad \mathrm{tt}$ fuott-o
E $\quad+$ RF
'I am/you are/he is fat'

San Giorgio del Sannio

The $3^{\text {rd }}$ person form $\varepsilon$ triggers RF in transitives, unaccusative, copular sentences ( $5 \mathrm{a}, \mathrm{a}$ ', b). In these varieties, just as the Calabrian ones in (8)-(9) below, the $3^{\text {rd }}$ person OCl is lexicalized through the specialized $a$ - base of the auxiliary.

### 2.1 The pattern E E H/E H H H with morpho-phonologically driven alternation in $3^{\text {rd }}$ singular

Central Apulian dialects are characterized by the alternation between two auxiliary forms in the $3^{\text {rd }}$ singular on the basis of the initial segment of the following participle. In the dialect of Corato in (6), $e$ 'is' occurs before initial consonant and $a v(\partial)$ 'has' before initial vowel, in (6a"), irrespective of the eventive class of the verb. Differently from the dialects in (1), plural persons select the auxiliary have. In the passive and copular clauses only the forms of be occur, independently of the initial segment of the participle. In the system of Gravina in (7) the $1^{\text {st }}$ singular has the form $s s$ of be, optionally triggering RF, or ałfa (not a trigger of RF) of have; the $2^{\text {nd }}$ singular requires the form $a$ of have, that does not trigger RF. The $3^{\text {rd }}$ singular e triggers RF, as in ( $6 a, a^{\prime}$ ), while in passive and copular contexts it does not. ( $6 b^{\prime \prime}$ ) illustrates the paradigm of have in the deontic contexts, where the $3^{\text {rd }}$ singular person shows the form $a v$, i.e. the same form occurring in ( $6 a ")$, so supporting the identification of $a v$ with a form of have. In the system of Gravina the $3^{\text {rd }}$ singular person has the root vowel $e$ - in all contexts, so differentiating from the system of Corato, where in pre-vocalic contexts the form $a v$, ascribable to have, occurs. Finally, in Gravina dialect the $2^{\text {nd }}$ singular is lexicalized by the form $a$ of have.
(6) a. active

| $\mathrm{u} / \mathrm{l}-\mathrm{a}$ | so | ccama:t-ə | E | +RF |
| :---: | :---: | :---: | :---: | :---: |
| him/her | be. $1^{\text {st }}$ SG | called-Infl |  |  |
| $\mathrm{u} / \mathrm{l}-\mathrm{a}$ | sə | ccama:t-ə | E | +RF |
| him/her | be. $2^{\text {nd }}$ SG | called-infl |  |  |
| u/l | e | ccama:t-ə | E | +RF |
| him/her | be. 3 rds ${ }^{\text {r }}$ | called-Infl |  |  |
| u/l | amə | cama:t-ə | H |  |
| him/her | have. $1^{\text {st }} \mathrm{PL}$ | called-Infl |  |  |
| u/l-a | avita | cama:t-ə | H |  |
| him/her | have. $2^{\text {nd }}{ }_{\text {PL }}$ | called-Infl |  |  |
| u/l | au-nı | cama:t-ə | H |  |
| him/her | have - ${ }^{\text {rrd }}$ PL | called-Infl |  |  |
| 'I have cal | him, you h | called him, |  |  |


| so | ddərmu:t-ə | E | +RF |
| :---: | :---: | :---: | :---: |
| be. $1^{\text {st }}$ SG | slept-infl |  |  |
| so | ddərmu:t-ə | E | +RF |
| e | ddərmu:t-ə | E | +RF |
| amə | dərmu:t-ə | H |  |
| avitə | dərmu:t-ə | H |  |
| aunə | dərmu:t-ə | H |  |
| 'I have sle | ou have slep |  |  |

a'. non-active

| sə | mmənu:t-ə | E | + RF |
| :--- | :--- | :--- | :--- |
| be.1 $1^{\text {st SG }}$ | come-INFL |  |  |
| sə | mmənu:t-ə | E | +RF |
| e | mmənu:t-ə | E | +RF |
| amə | mənu:t- | H |  |
| avitə | mənu:t-ə | H |  |
| aunə | mənu:t- | H |  |

'I have come, you have come, etc.'

| mə | so | llava:t-ə | E | + RF |
| :--- | :--- | :--- | :--- | :--- |
| me | be. $1^{\text {st }}$ SG | washed-INFL |  |  |
| ta | fi | llava:t- | E | + RF |
| s | e | llava:t- | E | + RF |
| n | amə | lava:t-ə | H |  |
| v | avitə | lava:t-ə | H |  |
| s | aunə | lava:t-ə | H |  |

a". initial vowel

| u | sok | acca:t-o | E |
| :--- | :--- | :--- | :--- |
| him | be. $1^{\text {st } S G}$ | found |  |


| u | si(ndə) | acca:t-ə | E |
| :--- | :--- | :--- | :--- |
| u | av | acca:t-ə | H? |
| u | amə | acca:t-ə | H |
| u | avitə | acca:t-ə | H |
| u | aunə | acca:t-ə | H |

'I have found him, you have found him, etc.'

| sok | affənnu:t-ə | E |
| :---: | :---: | :---: |
| be. $1^{\text {st }} \mathrm{SG}$ | gone down -INFL |  |
| si(ndə) | a $\iint$ ¢nnu:t-ə | E |
| av | a $\iint$ ənnu:t-ə | H? |
| amə | a $\iint ə$ nnu:t-ə | H |
| avitə | affənnu:t-ə | H |
| aunə | mənu:t-ə | H |
| 'I have gone down, you have gone down, etc.' |  |  |


| mə | so | kassi:s-ə |  |
| :--- | :--- | :--- | :--- |
| me | be.1stsg | sit down | E |
| tə | si(ndə) | assi:s-ə | E |
| s | av | assi:s-ə | H? |
| n | amə | assi:s-ə | H |
| v | avitə | assi:s-ə | H |
| s | aunə | assi:s-ə | H |
| 'I have sit down, you have sit down, etc.' |  |  |  |

b. passive and copular contexts

| sokə | vist-ə | da tuttə | E |
| :--- | :--- | :--- | :--- |
| be.1stSG | seen-INFL | by everyone |  |
| sində | vist-ə | da tuttə | E |
| e | vist-ə | da tuttə | E |
| simə | vist-ə | da tuttə | E |
| sitə | vist-ə | da tuttə | E |
| səndə | vist-ə | da tuttə | E |

b'. so kkundend-ə/ sokə iltə E +RF
be. $1^{\text {st }}$ SG content/ be.1stsg tall
$\varepsilon \quad$ kkundendə / iltə E
be. $3{ }^{\text {rd }}$ SG content / tall

| b". u | aJJ | a | fa | H |
| :---: | :--- | :--- | :--- | :--- |
| it | have.1 ${ }^{\text {st }}$ SG | to | do |  |
| u | a | da | fa | H |
| u | av | a | fa | H |
| u | aun | a | fa | H |
| 'I have to do it, etc.' |  |  |  |  |

(7) a. active

| u | So | (c)caməit-ə | E | +/-RF |
| :---: | :---: | :---: | :---: | :---: |
| him | be. $1^{\text {st }}$ SG | called-infl |  |  |
| , | a | caməit-ə | H | -RF |
| him/her | be. $2^{\text {nd }}$ SG | called-infl |  |  |
| , | $\varepsilon$ | ccaməit-ə | E | +RF |
| him/ her | be. $3{ }^{\text {rd }}$ SG | called-INFL |  |  |
| 1 | amə | caməit-ə | H |  |
| him/her | have. $1^{\text {st }} \mathrm{PL}$ | called-INFL |  |  |
| , | avito | caməit-ə | H |  |
| him/her | have. $2^{\text {nd }} \mathrm{PL}$ | called-INFL |  |  |
| 1 | a-nnə/av-ənnə | caməit-ə | H |  |
| him/her | have-3 ${ }^{\text {rd }} \mathrm{PL}$ | called-infl |  |  |
| 'I have cal | d him, you have | called him, |  |  |


| so | (d)dərmout-ə | E | $+/-\mathrm{RF}$ |
| :--- | :---: | :--- | :---: |
| be. $1^{\text {st }}$ SG | slept-INFL |  |  |
| a | dərmout-ə | H | -RF |
| (j) $\varepsilon$ | ddərmout-ə | E | +RF |
| amə | dərmout-ə | H |  |
| avitə | dərmout-ə | H |  |
| a-nnə/av-ənnə <br> 'I have slept, you have slept, etc.' | dərmout-ə | H |  |

a'. non-active

| aŋə/sっ <br> have/be.1st SG | vənout-ə <br> come-INFL | E | $+/-\mathrm{RF}$ |
| :--- | :--- | :--- | :--- |
| a | vənout-ə |  |  |
| $(\mathrm{j}) \varepsilon$ | vvənout-ə | H | -RF |
| amə | vənout-ə | E | +RF |
| avitə | vənout-ə | H |  |
| annə/av-ənnə | vənout-ə | H |  |

'I have come, you have come, etc.'

| mə | a孔ə/sə | lavəit-ə | E | $+/-\mathrm{RF}$ |
| :--- | :--- | :--- | :--- | ---: |
| t | a | lavəit-ə | H | -RF |
| s | $\varepsilon$ | llavəit-ə | E | +RF |
| n | amə | lavəit-ə | H |  |
| v | avitə | lavəit-ə | H |  |
| s | a-nnə/av-ənnə | lavəit-ə | H |  |
| 'I have washed myself, you have washed yourself, etc.' |  |  |  |  |

a". initial vowel

| u | so | apirt- | E |
| :--- | :--- | :--- | :--- |
| it | be. $1^{\text {st } S G}$ | open.MSG <br> l | a |


| it | have. $2^{\text {nd }}$ SG | open.MSG |  |
| :--- | :--- | :--- | :--- |
| l | $\varepsilon \mathrm{V}$ | apirt- $\partial$ | $\mathrm{H} / \mathrm{E}$ |
| it | have. $3^{\text {rd }} \mathrm{SG}$ | open.MSG |  |
| 'I have open it, you have open it, etc.' |  |  |  |


| mə | sっ | asseis-ə | E |
| :--- | :--- | :--- | :--- |
| me | be.1 $1^{\text {st }}$ SG | sit down-INFL |  |
| t | a | asseis-ə | H |
| s | عV | asseis-ə | E |
| 'I have sit dow, you have sit down, etc.' |  |  |  |


| so | assout-ə | E |
| :--- | :--- | :--- |
| be. $1^{\text {st }}$ SG | gone out |  |
| a | assout-ə | H |
| (j) $\varepsilon v$ | assout-ə | $\mathrm{H} / \mathrm{E}$ |
| 'I have gone out, you have gone out, etc.' |  |  |

b. passive and copular occurrences


| b'. | so | ggruəssə | E |
| :--- | :--- | :--- | :--- |$\quad+$ +RF


| b". l | ałj | a | ff $\varepsilon$ |
| :--- | :--- | :--- | :--- |
| l | ad | a | f $\varepsilon$ |
| l | av | a | ff $\varepsilon$ |

Gravina

We may wonder what the status of the $3^{\text {rd }}$ person $e / \varepsilon$ is in these systems. A first issue is whether it is correctly identified with a form of be or need be treated as a different syntactic object. At least in a part of the relevant dialects, in copular contexts this form preferably presents an initial glide $j$. Since $j$ is admitted also in the $3^{\text {rd }}$ person of the auxiliary, and, moreover, not all
dialects have this alternant, for example Corato, where $e$ occurs in copular and other contexts, we keep assigning this $3^{\text {rd }}$ person form to $b e$. In Corato system, $e$ alternates with $a v$, that is quite rightly a form of have as shown by its occurrence in deontic modal structures, in (6b"). Consequently, we must conclude that $3^{\text {rd }}$ singular person admits both be and have.

A different distribution holds in the system of Gravina, where before participles with an initial vowel the form $\varepsilon v$ occurs, distinct from the $3^{\text {rd }}$ singular person of have, occurring in deontic structures as in ( 7 b "). This suggests that $\varepsilon / \varepsilon v$ are two alternants of the $3^{\text {rd }}$ person of $b e$. However, the form $\varepsilon v$ occurs only in auxiliary contexts and not in copular ones; in other words, $\varepsilon v$ is specialized for the auxiliary context. Obviously, this could suggest that $\varepsilon / \varepsilon v$ belongs to the paradigm of have. Since no phonological change of $a$ to $\varepsilon$ is working in this dialects, this solution would be based only on simplicity or uniformity reasons.

### 2.2 Partial overlapping between be and have

In some Northern (Pollino) Calabrian dialects, Morano in (8) and Saracena in (9), the auxiliary of actives incorporates the $3^{\text {rd }}$ person OCl by selecting an alternant with the root vowel $a$-, in ( $8 \mathrm{~b}^{\prime}$ ) and ( $9 \mathrm{~b}^{\prime}$ ), contrasting with the root vowel $\varepsilon$ - occurring in the other contexts, in ( $8 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}$ ) and ( $9 \mathrm{a}, \mathrm{b}, \mathrm{c}, \mathrm{d}$ ) (cf. Lausberg 1939, Manzini and Savoia 2005, Savoia and Manzini 2010). The incorporation of the OCl by the auxiliary generally entails also a small lengthening of the vowel. The $a$-forms lexicalize the $3^{\text {rd }}$ person object clitic, regardless of gender and number. If the clitic is independently lexicalized, the base $\varepsilon$ - occurs, as in the case of $1^{\text {st }}$ and $2^{\text {nd }}$ person OCls or in negative contexts, where the negation requires a separate realization also of the $3^{\text {rd }}$ person OCL, as in (8b). If we concentrate on the $3^{\text {rd }}$ singular, we note that it is $a(:)$ when it absorbs the object clitic so introducing the interpretation 'him/her/ it/them.have. $3^{\text {rd }}$, differently, it is $\varepsilon$; unaccusatives and reflexives accept the $a$-base ałfulałła in the $1^{\text {st }}$ singular. Unaccusatives and reflexives admit both be and have in the plural, as illustrated in (8c) and (9c). In Saracena, the alternation between be and have characterizes also the $2^{\text {nd }}$ singular: RF is triggered by the be forms, in (9c). The exponent $\varepsilon$ of $3^{\text {rd }}$ singular, coinciding with the $3^{\text {rd }}$ singular of $b e$, may be augmented by an element $j$-, which in copular and sentence initial contexts is nearly systematically present.
(8) a. active

| є孔и <br> have. $1^{\text {st }}$ SG | rurmut-u <br> slept | H |  |
| :---: | :---: | :---: | :---: |
| $\varepsilon$ | rurmut-u | H | -RF |
| have. $2^{\text {nd }}$ SG | slept |  |  |
| $\varepsilon$ | ddurmut-u | E | +RF |


| be. $3^{\text {rd }}{ }^{\text {SG }}$ | slept |  |
| :---: | :---: | :---: |
| عmu | rurmut-u | H |
| have. $1^{\text {st }}$ PL | slept |  |
| avitısi | rurmut-u | H |
| have. $2^{\text {nd }}{ }^{\text {PL }}$ | slept |  |
| $\varepsilon$-nu | rurmut-u | H |
| have. $3{ }^{\text {rd }}$ pL | slept |  |
| 'I have slept, you have slept, etc.' |  |  |

b. t عђј
you have. $1^{\text {st }}$ SG
'I have seen you' عJfu/ayfu
have. $1^{\text {st }}$ SG vistu a ffrat-ta H
seen to your brother
'I have seen your brother'
nu $11 \quad \varepsilon$
not him have. $2^{\text {nd }}$ g
'you did not see him'
$\begin{array}{lllll}\mathrm{t} & \varepsilon & \text { bbist-u } \quad \text { ERF }\end{array}$
you have. $3{ }^{\text {rd }}$ SG seen-MSG
'( $s$ )he has seen you'
t $\varepsilon$-mu vist-u H
you have.ipl seen-msG
'we have seen you'
m avi-təsə vist-u
me have- $2^{\text {pl }}$ seen-MSG
'you have seen me'
m $\begin{array}{llll}\text {-nu } & \text { vist-u }\end{array}$
me have-3pl seen-mSG
'I have seen you, tc.'
b'. a:झyu vist-u/a H
(him/her)have. $1^{\text {st }}$ SG seen-MSG/FSG
'I have seen him/ her'


## c. non-active

غझu vinut-u H
have. $1^{\text {st }}$ SG
'I have come' si
be. $2^{\text {nd }}$ SG
'you have come'
j $\varepsilon$
be. $3^{\text {rd }}$ sG
'(s)he has come' sumu/sitəsə
be. $1^{\text {st }} \mathrm{PL} / 2^{\text {nd }} \mathrm{PL}$
'we/ you have come'
su
be. $3^{\text {rd }}$ PL
'they have come'

| m | عஓ孔u | lave:t-u | H |
| :--- | :--- | :--- | :--- |
| me | have. $1^{\text {st }}$ SG | lashed-mSG |  |

me have. $1^{\text {st }} \mathrm{SG}$
'I have washed myself'

| t | $\varepsilon$ | lave:t-u | H | -RF |
| :---: | :---: | :---: | :---: | :---: |
| you | have. $2^{\text {nd }}$ SG | washed-MsG |  |  |
| 'you have washed yourself' |  |  |  |  |
| s | $\varepsilon$ | llave:t-u | E | +RF |
| Rifl | be. $3^{\text {rd }} \mathrm{SG}$ | washed-MsG |  |  |
| '(s)he has washed him/herself' |  |  |  |  |

d. passive and copular
idd-u je vvist-u a tutti E + RF
he-MSG be. $3^{\text {rd }}$ SG
seen-MSG by all
'he is seen by everyone'
si/je
be $2^{\text {nd }} S G / 3^{\text {rd }}$ SG
g'gavut-u
$\mathrm{E} \quad+\mathrm{RF}$
'you are/ he is tall'
tall-MSG
(9) a. active

єщə/ащə
have. $1^{\text {st }}$ SG
عi
hi
have. $2^{\text {nd }}$ SG
$\varepsilon$
be. $3{ }^{\text {rd }}$ SG
dərmut-ə H
slept
dərmut-ə $\quad \mathrm{H} \quad$-RF
slept
ddərmut-ə $\mathrm{E} \quad+\mathrm{RF}$
slept

| عmə | dərmut-ə | H |
| :---: | :---: | :---: |
| have. $1^{\text {st }} \mathrm{PL}$ | slept |  |
| addo | dərmut-ə | H |
| have. $2^{\text {nd }} \mathrm{PL}$ | slept |  |
| عnə/anə | dərmut-ə | H |
| have. $3{ }^{\text {rd }}$ PL | slept |  |
| 'I have slep | ept, etc.' |  |

b. t عэコ came:t-ə H
you have. l $^{\text {stsG }}$ SG clalled-INFL
'I have called you'
$\varepsilon / \mathrm{j} \varepsilon$ ccame:t-ə fratə-mə E +RF
be. $3^{\text {rd }}$ SG called-INFL brother-my
'(s)he has called my brother'
b'.а:झəə came:t-ə H
(him/her)have. $1^{\text {st } S G \quad \text { seem-INFL }}$
'(s)he has called him/ her/them'
c. non-active

$\begin{array}{llll}\mathrm{m} & \text { عјэə } & \text { lave:t-ə } & \mathrm{H}\end{array}$
me have. $1^{\text {st }}$ SG washed-INfl
'I have washed myself'
t ei lave:t-ə H
you have.2 ${ }^{\text {nd }}$ SG washed-INFL
'you have washed yourself'

| $s$ | $\varepsilon$ | llave:t-ə | ERF |
| :--- | :--- | :--- | :--- | :--- |

Rifl be. 3 rd SG washed-INFL
'(s)he has washed him/herself'

| n | ع:mə | lave:t-ə | H |  |
| :---: | :---: | :---: | :---: | :---: |
| us | have.1st PL | washed-INFL |  |  |
| 'we have washed ourselves' |  |  |  |  |
| v | addo | lave:t-ə | H |  |
| you | have. $2^{\text {nd }} \mathrm{PL}$ | washed-INFL |  |  |
| 'you have washed yourselves' |  |  |  |  |
| s | ع:nə | lave:t-ə | H |  |
| Rifl | have. $3^{\text {rd }} \mathrm{PL}$ | washed-INFL |  |  |
| 'they have washed themselves' |  |  |  |  |
| d. passive and copular contexts |  |  |  |  |
| sunjə | came:t-ə | a tutto | E |  |
| be. $1^{\text {st }}$ SG | called-Infl | by all |  |  |
| 'I am called by everyone' |  |  |  |  |
| si | ccame:t-ə | a tuttə | E | +RF |
| be. $2^{\text {nd }}$ SG | called-InFL | by all |  |  |
| 'you are called by everyone' |  |  |  |  |
| (j) $\varepsilon$ | ccame:t-ə | a tutto | E | +RF |
| be. $3^{\text {rd }}$ SG | called-INFL | by all |  |  |
| d'. sunnı | 'yavət-ə |  | E |  |
| be. $1^{\text {st }}$ SG | tall-INFL |  |  |  |
| si | g'gavətə |  | E | +RF |
|  | g'gavatə |  | E | +RF |
| 'I am tall, you are tall, etc.' |  |  |  |  |

Saracena
As we have seen, a crucial property of these dialects is the alternation in the lexical root vowel between $\varepsilon$ - and $a$-, making the nature of these alternants, specifically the one of the $3^{\text {rd }}$ singular morpheme $\varepsilon / a$, ambiguous We will return to this issue in section 4.4.

### 2.3 Enclisis on be

The greater part of Central and Southern Italian dialects places the clitic in pre-verbal position, except in the case of imperative or, possibly, infinitive (Manzini and Savoia 2005). Nevertheless, some Central dialects with alternation between be and have can present enclisis on the auxiliary, as in the dialect of $S$. Benedetto del Tronto ${ }^{4}$ (Marche) in (10) characterized by the

[^11]pattern E E H E E H and Secinaro (Abruzzo) in (11), with pattern E/H E E/H E/H E/H E/H. Enclisis, alternating with proclisis in (10a) and (11a), occurs with the E forms, while have is systematically associated to proclisis, in (10b) and (11b). In the copular contexts the monosyllabic E forms trigger RF, as in (10c) and (11c). In the other contexts, the data concerning San Benedetto del Tronto not only in the actives in (10a), but also in non-active forms like unaccusatives in (10a') and reflexives in (10a") seem to exclude RF except on object enclitics.

| (10) a. | so | llu | vifta / lu | so | vifto |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | be. $1^{\text {st }}$ SG | him | seen / him | be. $1^{\text {st }}$ SG | seen |
|  | 'I have seen him' |  |  |  |  |
|  | Ji | mm ə | viftə / mə | Si | vifta' |
|  | be. $2^{\text {nd }}$ SG | me | seen / me | be. $2{ }^{\text {nd }}$ SG | seen |
|  | 'you have seen me' |  |  |  |  |
|  | \emə | lu | viftə / lu | Jemə | vifto |
|  | be. $1^{\text {st }}$ PL | him | seen / him | be. $1^{\text {st }} \mathrm{pL}$ | seen |
|  | 'we have seen him' |  |  |  |  |
|  | Jeta | lu | vifto |  |  |
|  | be. $2^{\text {nd }} \mathrm{PL}$ him seen |  |  |  |  |
|  | 'you have seen him' |  |  |  |  |
| $\mathrm{a}^{\prime}$. | so |  | vənu:tə |  |  |
|  | be. $1^{\text {st }}$ SG |  | come |  |  |
|  | fi |  | vənu:tə |  |  |
|  | be. $2^{\text {nd }}$ SG |  | come |  |  |
|  | a |  | vənu:tə |  |  |
|  | have. $3^{\text {rd }}$ SG |  | come |  |  |
|  | 'I have come, you have come, etc.' |  |  |  |  |
| a". |  | mm ə | rlava |  |  |
|  | be. $1^{\text {st }}$ SG | me | wash |  |  |
|  |  | tta | rlava |  |  |
|  | be. $2^{\text {nd }}$ SG |  | wash |  |  |
|  | a s | a | rlava |  |  |
|  | CIS Refl | have. 3 | $3^{\text {rd }} \mathrm{SG} \quad$ wash |  |  |
|  | 'I washed n | myself, | you washed yo | urself, etc.' |  |

b. a 1 a VIftə / a m a vifto ClS him have. $3^{\text {rd }}$ seen / ClS me have. $3^{\text {rd }}$ seen
'(s)he/they has/have seen him/me'
c. so kkuntintə

Ji kkuntintə
j $\varepsilon$ kkuntintə

Jemə kuntintə
fetə kuntintə
j $\varepsilon$ kkuntintə
'I am glad, you are glad, etc.'
d. so
dərmi:tə
be. $1^{\text {st }}$ SG
slept
Ji dərmi:tə
be. $2^{\text {nd }}$ SG slept
a dərmi:tə
have. $3^{\text {rd }}$ sG slept
'I have slept, you have slept, etc.'
San Benedetto del Tronto
(11) a. so tto camata / to so ccamatə E +RF be. $1^{\text {st }} \mathrm{SG}$ him called / him be. $1^{\text {st }} \mathrm{sG}$ called 'I have called you'
la so ccamat-a
OCl-fsG be. $1^{\text {st }}$ SG called-FsG
'I have called her
Ji jə camatə / jə ji ccamatə E +RF be. $2^{\text {nd }}{ }^{\text {G }}$ him called $/$ him be. $2^{2 \mathrm{nd}} \mathrm{SG}_{\mathrm{G}}$ called 'you have called him'
sem jə camatə / jə semə camatə E be. $1^{1 s t}{ }^{\text {PL }}$ him called / him be. $1^{1{ }^{s t} p L}$ called
'we have called him'
a'. so mmənu:tə / ajə mənu:tə E +RF
be. $1^{\text {st }}$ SG come / have. $1^{\text {st } S G ~ c o m e ~}$
Ji mmənu:tə E +RF
be. $2^{\text {nd }}{ }_{\text {SG }}$ come
$\varepsilon$ mmənu:tə E +RF
be. $3{ }^{\text {rd }}{ }^{\text {SG }}$ come
a". mə so mmissə lo:kə E +RF
me be. $1^{\text {sts }}$ SG put.msG there
'I have put myself there'

| s mmissə lo:kə | $\varepsilon$ | $\mathrm{E} \quad+\mathrm{RF}$ |
| :--- | :--- | :--- | :--- |

Refl be. $3{ }^{\text {rd }}$ gG put there
'(s)he has put him/herself there'
b. m a camat-ə / l a camat-a H -RF me have. $3{ }^{\text {rd }} \mathrm{SG}$ called $/ \mathrm{OCl}$ have. $3{ }^{\text {rd } \mathrm{SG}}$ called-FSG
'(s)he has called me'

| i | a | camع:t-a <br> called.PL | H | -RF |
| :--- | :--- | :--- | :--- | :--- |
| OCl.pL | have. ${ }^{\text {rd }} \mathrm{SG}$ |  |  |  |



Secinaro
(11) illustrates a different distribution, because, besides on the enclitics, RF is triggered by the singular forms of be on the participle in active contexts in (11a) and in unaccusative and reflexives in (11a', a"). Unergatives match the overall pattern of transitives, as in (10d) and (11d).

## 3. Piedmontese dialects with be

Actually, the contrast between enclisis and proclisis depending on the auxiliary is well documented in Piedmontese dialects admitting be and have as auxiliaries (Manzini and Savoia 2005, II: 774). In these dialects, on a par with the dialects in (10)-(11), enclisis is allowed only with be, while have only accepts proclisis, as in the system of Fara Novarese in (12). Moreover, these varieties are characterized by the enclitic position on the participle, so that in the contexts with have the clitic is doubled in proclisis on the auxiliary and in enclisis on the participle. The data concerning be are presented in (12a) for transitives, (12b) for unaccusatives, (12b') for unergatives, (12c) for reflexives. (12d) exemplifies the passive, (12e) copular forms and (12f) the deontic/ necessity contexts.

| (12) a. i sum |  |  | tfa'ma-l(u)/-la/-i |
| :---: | :---: | :---: | :---: |
|  |  |  | called-him/her/them |
| a | t | ei | t fa'ma-lu |
| SCl | SCl | be. $2^{\text {nd }}$ SG | called-him |
| a | 1 | $\varepsilon$ | t fa'ma-lu/-mi |
| SCl | SCl | be. 3 rd ${ }^{\text {rd }}$ | called-him/me |
| i |  | suma | t $\int$ a'ma-lu/-ti |
| SCl |  | be. $1^{\text {st }}$ PL | called-him/you |
| i |  | si: | t $\int$ a'ma-mi |
| SCl |  | be. $2^{\text {nd }}$ PL | called-me |
| i |  | n | tfa'ma-lu/-mi |
| SCl |  | be. $3^{\text {rd }}$ PL | called-him/me |
| 'I hav | ve called | / her/ the | etc.' |

b.

|  | sum | ny | / nu-a |
| :---: | :---: | :---: | :---: |
| SCl | be. $1^{\text {st }}$ SG | come.msG/ come-FSG |  |
| a tei | ny/nu-a |  |  |
| $\varepsilon$ | ny/nu-a |  |  |
| i | suma | ny-i |  |
| SCl | be. $1^{\text {stpl }}$ | com |  |
| i | si: | ny-i |  |
| i | n | ny-i |  |

b'. i sum dru'met $\int$
SCl be. $1^{\text {st } \mathrm{SG}}$ slept
a tei dru'met S
$1 \varepsilon \quad$ dru'met $\{$
i suma dru'mets
i si: dru'met $\{$
i n dru'met 5
'I have slept, you have slept, etc.'
c. i sum la'va-mi

SCl be. $1^{\text {st }} \mathrm{SG}$ washed-me
a tei la'va-ti
$1 \varepsilon \quad$ la'va-si
i suma la'va-ni
i si: la'va-vi
i n la'va-si
'I have washed myself, you are washed yourself, etc.'
d. $1 \quad \varepsilon$ sempri tfa'ma da tyt $\int$

SCl be. $3^{\text {rd }} \mathrm{sG}$ always called by all
'he is always called by everyone'
e. i sum / atei/l $\varepsilon$ kun'te:nt/kun'tenta

SCl be. $1^{\text {st }} / 2^{\text {nd }} / 3^{\text {rd }}$ SG glad.msG/glad-FSG
i suma / isi: / in kun'te:ntf/kun'tenti
SCl be. $1^{\text {st }} / 2^{\text {nd }} / 3^{\text {rd }}$ pl glad.mpl/glad-Fpl
'I am glad, you are glad, etc.'
f. i sum / a tei/al $\varepsilon$ da'fe-lu

SCl be. $1^{\text {st }} / 2^{\text {nd }} / 3^{\text {rd }}$ SG to do-OCl-msG
'I have to do it, you have to do it, etc.'
(13a) and (13b) illustrate the double cliticization with have, while (13c) illustrates deontic forms with have, parallel to the ones in (12f). Finally, (13c') shows the occurrence of have with inherent objets.

| (13) a. | i <br> SCl <br> (at ei | 1/i <br> OCl.msg/pl <br> fa'ma-lu/-mi) | $\begin{aligned} & \varnothing \\ & \text { have. } 1^{\text {st }} \mathrm{SG} \end{aligned}$ | tfa'ma-lu/-i <br> called-OCl.msG/pL |
| :---: | :---: | :---: | :---: | :---: |
|  | a | $1 / \mathrm{m}$ | a | tfa'ma-lu/-la/-mi |
|  | SCl | $\mathrm{OCl} .3^{\text {rd }} / 1^{\text {st }} \mathrm{sG}$ | have. $3^{\text {rd }}$ SG | called- $\mathrm{OCl} .3{ }^{\text {rd }} \mathrm{MSG} / \mathrm{FSG} / 1^{\text {st }} \mathrm{SG}$ |
|  | 1 | t | uma | t fa'ma-ti |
|  | SCl | $\mathrm{OCl} .2{ }^{\text {nd }} \mathrm{SG}$ | have. $1^{\text {st }} \mathrm{PL}$ | called-OCl. $2^{\text {nd }}$ SG |
|  | i | m | i | tfa'ma-mi |
|  | SCl | $\mathrm{OCl} .1{ }^{\text {st }} \mathrm{SG}$ | have. $2^{\text {nd }}$ PL | called-OCl. $1^{\text {st }} \mathrm{SG}$ |
|  | i | m | 31 | tfa'ma-mi |
|  | SCl | OCl. ${ }^{\text {st }}$ SG | have. $3^{\text {rd }}$ PL | called-OCl. $1^{\text {st }} \mathrm{SG}$ |
|  | 'I hav | called him/th | , etc.' |  |

b.

| i | m | $\emptyset$ |
| :---: | :---: | :---: |
| SCl | $\mathrm{OCl} .1^{\text {st }} \mathrm{SG}$ | have. $1^{\text {st }} \mathrm{PL}$ |
| (at ei la'va-ti) |  |  |
| a | s | a |
| SCl | REFL | have. $3{ }^{\text {rd }}$ SG |
| i | n | uma |
| i | v | i |
| i | s | 37 |

la'va-mi
washed-OCl. $1^{\text {st }}$ SG
la'va-si
washed-Refl
la'va-ni
la'va-vi
la'va-si
c. i

| i | g | $\emptyset$ | da | f -lu |
| :--- | :--- | :--- | :--- | :--- |
| SCl | OCl.Loc | have. $1^{\text {st } S G}$ | Prep | do-OCl-MSG |
| ta | g | ai | da | fe-lu |
| SCl | OCl.Loc | have. $2^{\text {nd }}$ SG | Prep | do-OCl-MSG |
| a | g | a | da | fe-lu |
| SCl | OCl.Loc | have. $3^{\text {rd }}$ SG | Prep | do-OCl-MSG |

fe-lu
do-OCl-msg
fe-lu
do-OCl-msG
fe-lu
do-OCl-msG
'I have to do it/ you have to do it, etc.'
c'. i g fa:m
SCl OCl.Loc have. $1^{\text {st }}$ SG hunger
'I am hungry, etc.'

Let us first dwell on the different distribution of clitics according to the auxiliary. What shows up is that have requires a double insertion of the clitic, i.e. in the post-participial position, canonical in these varieties, and before the auxiliary, as in (13a,b). On the contrary, be permits only the post-participial occurrence of the clitic, as in (12a,b). A possible rationale underlying this distribution is that be is inserted in the high domain, where eventually it precedes the clitic, as in Central dialects in (10)-(11).

However the position of be seems to be higher than the one of have, that regularly follows the object clitic, in (10)-(11) and in (13). In Piedmontese dialect the reduplication of the clitic is only a sort of surface effect due to the fact that in these dialect clitics have a position inside the participial phrase, independently of how the matrix verbal phrase. As a conclusion, if we are on the right track, the proposal that be is inserted in a lower position in order to account for the occurrence of RF in actives is not maintainable or at least not clearly supported by the data.

## 4. Auxiliary and participle

A preliminary representation of the structures involving proclisis and enclisis respectively may help us investigate the morpho-syntactic nature of auxiliaries. Following some proposals of Manzini and Savoia (2005, 2015), Manzini et al. (2015), and, although in a different perspective, D'Alessandro and Roberts (2010), our analysis is inspired by the idea that the past participle is nothing but an aspectual (resultative/ stative) element with adjectival nature which gives rise to a clause including an argument. Following Manzini and Savoia (2017a,b), Savoia et al. forthcoming, the internal organization of noun includes a category-less lexical root $\sqrt{ }$ (Marantz 1997), that in keeping with Higginbotham (1985) is a predicate. The root merges with the inflectional elements endowed with interpretive content (gender, number, etc.), that restrict the properties associated to the argument $x$ open at the predicate, as suggested in (14) for Italian and Romance varieties. The inflectional morpheme, Infl, merges with Class, including the root and its gender specification.


Given the nominal nature of past participles in Romance varieties, including the ones we examine, it is natural to apply this analysis to their internal structure. So, resting on the discussion in Manzini et al. (2015) and the noun structure proposed in Savoia et al. (2017, 2018), Manzini and Savoia (2017), Baldi and Savoia (2018), Baldi and Franco (2018), we assume the structure in (15) for camat-a 'called' (Secinaro, in (11b)). The verbal root, requiring two arguments, indicated by the subscripts $x$ (IA) and $y$ (EA), merges with the Thematic Vowel (Class) element $-a$-, and the
root-TV complex merges with the aspectual element $-t$-, generally associated to the Italian type participles, giving rise to a verbal adjective closed by the inflectional exponent, here $-a$, ultimately satisfying the internal argument of the participle, as well as with nouns and adjectives. The crucial property of the past participle is to license only one argument, typically the internal theta role. Maybe, this could be connected to the stative/ resultative property of the participle implying as a natural target a propertybearing referent, usually the IA. The licensing of the external argument makes recourse to another licenser, i.e. the auxiliary/T.


The present model is based on a privative treatment of the morphological properties in lexical elements excluding manipulation or insertion of new material, by assuming that morphological terminals have interpretive lexical content. In the lexicalist model we pursue, Agree establishes an identity relation between two or more referential feature sets, subject to locality, interpreted as a single argument (Manzini and Savoia 2005, 2007, 2011). This is what Chomsky (2001) calls Minimal Search and Match and forms the core of Agree. An important difference from the canonical generative approach, is that we assume that all phi-feature sets are interpretable and valued. This means that Agree is not triggered by the need for a probe to interpret/value its features (Chomsky forthcoming, Chomsky et al. 2018). Rather it creates equivalence classes of phi-feature bundles lexicalizing the same argument, (Manzini and Savoia 2005, 2018, Savoia et al. forthcoming) and all lexical material is interpreted at the Conceptual-Intentional (C-I) interface.

Bearing in mind the preceding discussion, let us consider the auxiliary structures. Merging the participle in (15) with the vP structure of have gives rise to (16), for the sentence from Secinaro in (10b) la camat-a '(s)he has called her'. What we are suggesting is that have is associated to a complete argumental structure, as in (16).
(16)


The participle, as seen, agrees with the internal argument; in other words, the inflectional properties of the participles are in a chain relation with the clitic element $l$, so forming a single discontinuous argument saturating the internal theta-role of the verb. The other theta-role is licensed by the agreement on the auxiliary in T.

### 4.1 Auxiliary patterns and person split

A first generalization that we draw from the data listed in previous sections is that the interplay between be and have involves at least the person split and the type of event (active vs non active or passive/ copular). In the schema in (17), the sensitivity to the verbal class is indicated by + , if non-actives select $b e$, or - , if actives and non-actives share the same paradigm; passive and copular contexts are excluded. In (17) E-H denotes the alternation according to the verbal class, $\mathrm{E} / \mathrm{H}$ denotes the optional alternation and $\mathrm{E}+\mathrm{H}$ the alternation determined by morpho-phonological properties.

| (17) | $1^{\text {st }}$ SG | $2^{\text {nd }}$ SG | $3^{\text {rd }}$ SG | $1^{\text {st } \mathrm{PL}}$ | $2^{\text {nd }} \mathrm{PL}$ | $3^{\text {rd } P L}$ | active/non-active |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Sonnino | E | E | H | E | E | H | - |
| Torricella | E | E | H-E | E | E | H-E | + |
| Monte G. | E | E | H-E | E | E | H-E | + |
| G.regia | E/H | E | H-E | E | E | H-E | + |
| S.Giorgio S. | H | H | E | H | H | H | + |
| Corato | E | E | E+H? | H | H | H | - |
| Gravina | E | H | E+H? | H | H | H | - |
| Morano | H | H | E+H? | H/E | H/E | H/E | + |
| Saracena | H | H/E | E+H? | H/E | H/E | H/E | + |

This picture shows that plural, generally but not always, replicates the pattern of singular; contrary, Corato, Gravina, Morano and Saracena restrict the person split to the singular. The reduced sensitivity of the plural forms to the person differences has been noticed in literature and connected to the different referential status of plural in comparison with singular. The most salient property of plural persons is that they combine $1^{\text {st }} / 2^{\text {nd }}$ person deictic interpretation and $3^{\text {rd }}$ person interpretation, assigning plural an interpretation however based on the eventive structure, so making it closer to the one of $3^{\text {rd }}$ person.

Moreover, some morphemes are ambiguous between be and have. We have assigned them to be considering that they occur in copular contexts; however, in some cases even this clue is not clear. That is the case, for instance, of Gravina, where the alternant ev occurring before a vowel, (7a"), is precluded in copular contexts, ( $7 \mathrm{~b}^{\prime}$ ). In Morano and Saracena in (8) and (9) have takes the root vowel $\varepsilon$-, so assimilating to $b e$.

As to the syntax of $b e$, coming close to a traditional view (Manzini et al. 2015), we can deal with be as introducing a reduced argument structure, so that in the case of verbs with two arguments only one argument can be licensed and encoded by the agreement head T. In this respect, the conclusion of Manzini et al. (2015: 52) on the Greek and Albanian distribution of be/ have auxiliaries, is that
jam 'be' selects an open argument structure in its participial complement. Thus jam restricts the interpretation of the embedded participial clause to what is conventionally known as middle-passive voice [...] By contrast, kam 'have' selects a closed argument structure, in the sense that no free variables are instantiated within it [...] This in turn means that 'be', as the copula, will select more elementary structures than the transitive predicate 'have' - including open predicates (middle-passive voice, as here), but also in other languages, like Italian, elementary events (unaccusatives) as opposed to causative events (transitives and unergatives).

The gist of this proposal is that with be a theta-role is concealed (generally the EA). We are expressing this intuition in terms of the lexical nature of be and have, whereby while have is characterized by the argumental structure, be introduces no theta-role, as suggested in (18), for $l$-a so ccamat-a 'I have called her' of Secinaro in (10a).


D'Alessandro and Roberts (2010:53) distinguish be and have according to the head, T or v , that agrees with the external argument, whereby ' BE appears iff all the features of $v$ Agree with the external argument' and 'HAVE appears iff all the features of T Agree with the external argument'. The insertion of be or have is driven by the nature of relevant features: $\mathrm{v}_{\text {Aux }}$ Agrees only for person, so that it values the Person feature and case of $1{ }^{\text {st }} / 2^{\text {nd }}$ person external arguments, while $T$ values the Number feature. In this case $\mathrm{v}_{\text {Aux }}$ is realized as $b e$. It is realized as have when the external argument has no Person feature, i.e. it is of $3^{\text {rd }}$ person. In this case it is $T$ that values the Number feature and the Case feature. Not surprisingly, this distribution recalls the contrast between ergative and nominative systems, reducible to the contrast between systems in which v licenses the subject (ergative) and systems where it is T that agrees with and licenses the external argument as the subject. What we can guess is that ergativity hides the external argument, more precisely ergativity licenses it by means of a special case or a complement, or simply avoiding to realize it.

In our terms, be is associated to an elementary structure that admits that v licenses the external argument while the internal one is realized by the participle. have lexicalizes structures where T canonically agrees with the external argument. Finally, with the verbs that provide only the internal argument there is no question of this. Be and have are selected according to the referential properties of $1^{\text {st }} / 2^{\text {nd }}$ vs $3^{\text {rd }}$ person elements. More precisely, the person split only depends on the fact that in these dialects the referential contrast between $1^{\text {st }} / 2^{\text {nd }}$ and $3^{\text {rd }}$ person elements is made visible by the preference of the deictic elements for the lexicalization by means of $b e$. No principled reasons seem to prevent systems with all be, like the Piedmontese varieties in (12), or with all have, like many of Italian Southern dialects or Spanish.

### 4.2 Enclisis on be and other phenomena

The distribution of clitics in the dialect with enclisis on the auxiliary be evidences the fact that have requires proclisis, as in (10) and (11) and in Piedmontese variety of Fara in (12)-(13). It is natural to assume that the sequence OCl -have reflects the structure above proposed in (16), with the complication that Piedmontese dialects show the duplication of the OCl on the participle, as opposed to the Central dialects in (10). Let us consider first a case like the one of Secinaro in (11), with simplex enclisis on be, as in (19).


We will have to admit that merging of the internal argument in the domain of participle is possible, differently from Italian and many other Romance varieties, where only a full DP may occur within the domain of VP/ PrtP. In other words, in these grammars, the fact that be does not license any theta-role position makes it possible for the clitic to remain within the PrtP, where it is licensed.

In Piedmontese systems OCl is introduced in enclisis on the participle, as in (20). It is of note that in such varieties the low insertion of clitics is more generally attested and may include also lexical verbs (Manzini and Savoia 2005, Tortora 2002).


The conclusion that the clitic remains in a low position because the verbal head is unable to value the features of the clitic is argued by Roberts (2010). ${ }^{5}$

In Piedmontese varieties, enclisis on the participle involves also the transitive forms with the auxiliary have, with the result that OCl is doubled in the domain of have and in the domain of the participle, as in (21). In other words, although have licenses the high position of the clitic, the realization of this latter in the domain of the participle is yet possible and required.
${ }^{5}$ Specifically, Roberts (2010: 233-234) proposes that, similarly to the enclisis on infinitives, in the case of the systems where the clitic attaches 'to the past participle in compound tenses [...] the auxiliary lacks $\varphi$-features attracting the object in these varieties', and 'the verb moves over v to Part', as indicated in the structure in (i) for the Franco-Provençal example $D z$ ' i batia-la tot solet 'I-have built-it all alone':
(i) $\operatorname{Aux}\left[_{\text {PartP }}[\right.$ Part batia $\left.]\left[_{\mathrm{vP}}\left[_{\mathrm{v}}\left[\begin{array}{l}\text { la } \\ \mathrm{v}\end{array}\right]\right]\left[{ }_{\mathrm{VP}}(\mathrm{V})(\boldsymbol{\varphi})\right]\right]\right]$.


It is tempting to connect the request of copy of the clitic in the domain of v/auxiliary with the idea that in $\mathrm{SCl} / \mathrm{OCl}$ languages, SCl and OCl are the real heads of agreement respectively for the CP phase and for v phase (Savoia et al. forthcoming). Roberts (2010) suggests a similar conclusion as regards the object clitic in Romance languages, by dealing with OCls as bundles of phi-features on the edge of the v phase, as for instance in (22) (cf. Mavrogiorgos 2006).
(22) a. ...le voit
'he sees him/it'
b. $\left[_{\mathrm{v}^{*}} l e_{[i \varphi]}\left[{ }_{\mathrm{v}^{*}}\right.\right.$ voit $\left.\left.\left.{ }_{\mathrm{V}}\left[\mathrm{v}^{*} \mathrm{~V}, \mathrm{uV}, \mathrm{u} \varphi\right]\right]\right]\right]$
(Roberts 2010: 57, with adaptations)
Then, have behaves like other transitives requiring the externalization of the agreement with the IA on its v phase, differently, therefore, from be, that, as we have seen, is dispensed from this requirement.

It is of note that in many of the Piedmontese dialects with post-participial clitics the gender/ number inflection of the participle is in complementary distribution with the proclitc element. So, in the Fara system inflected participles are attested in unaccusatives in (12b) and in passive and stative contexts, as in (23a); in transitives with have they seem to exclude the post-participial double of the clitic, as in (23b) (Manzini and Savoia 2005, II: 586). Nevertheless, this restriction is not peremptory, as suggested by the coexistence of both gender/ number inflection and enclisis in some of these varieties, for instance in the system of Quarna Sotto (Manzini and Savoia 2005, II: 594) in (23c). In the latter, however, the doubling of the OCl on the auxiliary is missing, and the duplication of the IA involves only the participial inflection and the OCl . In other words, the two systems are not substantially different because also the one of Fara at the most selects two lexicalizations of IA.


| b. i l $\quad \varnothing$ | vist/vist-a |
| :--- | :--- | :--- |
| SCl OCl.sG have.1 ${ }^{\text {st }}$ SG | seen.MS/seen-FSG |
| 'I have seen him/ her' |  |
| i i $\quad \varnothing$ | vist/vist-i |
| SCl OCl.pl have. $1^{\text {st }}$ SG | seen.ms/seen-FPL |
| 'I have seen them' |  |

Fara Novarese
c. i u la'va-ууе / la'va:-уе /la've-ККe /la'va-i-вj SCl have. $1^{\text {st }}$ SG washed.msG-OCl.msG /.FsG-OCl.fsG/.mpl-OCl.mpl/-FSG-OCl.fsG 'I have washed him/ her/ them'

Quarna Sotto
Our conclusion is that the ban of the sequence inflection- $O C l$ is not due to a structural impossibility but can be tied to an interpretive restriction holding at the C-I system penalising the duplication of the same inflection in adjacent contexts.

Let us turn now to the contrast between be and have, whereby have introduces a proclitic duplicate of the enclitic object. The assumption that auxiliaries are the morphological exponents of functional heads is familiar in generative and functional approaches. For instance, Bentley and Eythorsson (2003: 447) deal with 'perfective auxiliaries as morpho-syntactic markers of tense and aspect'. Their idea is that the insertion of be or have is triggered by certain sub-set of the semantic features associated to the verbal classes. According to D'Alessandro and Roberts (2015:50) the realization of the auxiliary is 'a question of the spellout of features of the upper $\mathrm{v}_{\text {Aux }}$. This solution is easily treatable in terms of adjustment and vocabulary items insertion rules in DM framework.

The path we follow is different and takes on the idea that auxiliaries are not a special type of inflectional exponent but true verbal entries. Following Manzini and Savoia (2005), Manzini et al. (2016), be is associated with a structure where un argument is deleted or concealed; more precisely be is devoid of the internal theta role position. have is a transitive verb which requires a complete eventive structure to which an internal theta position is anchored. The insertion of have or be takes account of their lexical properties. So, have in (21) introduces the transitive structure licensing two argumental positions, whereas in the structures with be only one argument is licensed by $v$.

The structural and interpretive difference between be and have can help us understand the relation of $1^{\text {st/ }} / 2^{\text {nd }}$ persons with be in Central and Southern

Italian varieties. The nature of be as lacking eventive properties suggests that $1^{\text {st }}$ and $2^{\text {nd }}$ person elements are able to be inserted or, alternatively, need to be inserted by simple argument application without the support of a licensing predicative structure. Their deictic properties are sufficient to give rise to their interpretation as EPP elements of the sentence. $3^{\text {rd }}$ person elements, on the contrary, tend to be inserted in a structure that assigns them a morphosyntactic characterization of their role in the event. Naturally, while $1^{\text {st }}$ and $2^{\text {nd }}$ person correspond to real discourse participants, the label $3^{\text {rd }}$ person has no clear referential status (Benveniste 1966, D'Alessandro and Roberts 2010). In fact, $3^{\text {rd }}$ person specifies definiteness, typically through demonstratives, determiners and quantifiers.

Although the pattern with be in the $1^{\text {st }}$ and $2^{\text {nd }}$ person is the most attested type of split, we must take account of the fact that at least three factors of variation emerge:
(i) The $1^{\text {st }}$ singular in many varieties, including some of the ones being considered in this article, has or alternates have, cf (4), (8), (9) and the schema in (17).
(ii) In the Northern Calabrian dialects a distribution emerges in which it is the $3^{\text {rd }}$ singular that requires be and that seems to be the mirror image of the more known pattern E E H (cf. (17).
As to the first point (i), we must conclude that in some varieties the $1^{\text {st }}$ singular is associated to a smaller deictic import, differently from the $2^{\text {nd }}$ singular; in other words it may require to be inserted in a complete event structure. In the typological literature the behaviour of $1^{\text {st }}$ and $2^{\text {nd }}$ person in comparison with $3^{\text {rd }}$ person pronouns/ demonstratives and NPs is treated in terms of referential properties (animacy or definiteness) expressed by means of a hierarchy regulating the distribution of grammatical functions in case systems (Dixon 1994, Kiparsky 2001). ${ }^{6}$ Kiparsky (2001: 34) associates the referential hierarchy to the definiteness, as the property that favours the syntactic role of the nominal and pronominal elements.

### 4.3 Unexpected occurrences: be in the $3^{\text {rd }}$ and have in the $2^{\text {nd }}$

The occurrence of be in the $3^{\text {rd }}$ person brings into play different aspects of the contrast between be and have, specifically it strengthens the idea that
${ }^{6}$ The referential hierarchy in (i) (Dixon 1994: 85; Kiparsky 2001: 34)
(i) $1 \mathrm{P}>2 \mathrm{P}>3 \mathrm{P} /$ demonstratives $>$ proper nouns/ kin terms $>$ human $>$ animate $>$ inanimate accounts for the releation between nominal elements and grammatical functions, whereby 'a first person pronoun is more likely than any other NP constituent to be in A [subject of transitives] rather than in O [object of transitives] function. Next most likely as A is second person pronoun, then demonstratives and third person pronouns, followed by proper names' (Dixon 1994: 85).
the forms with be are simpler than the ones with have，contrary to the more canonical view whereby have is less marked option（D＇Alessandro and Rob－ erts 2010）．In the systems that insert be in the $3^{\text {rd }}$ person，as the Northern Calabrian ones（cf．（8）and（9）），we note that have is favoured in the paradigms． Only $3^{\text {rd }}$ person oscillates between have，if an OCl is interpreted，and a form apparently of $b e$ ，when a lexical object is inserted or the verb is intransitive． We only need to conclude that be is associated to a more elementary struc－ ture occurring in absence of the clitics．This，indeed，seems to hold also for the forms of the $1^{\text {st }} / 2^{\text {nd }}$ person that in these dialects insert $\varepsilon$－in the auxiliary have，as in（8a）and（9a），in turn lexicalizing a simpler structure．

In effect，systems with be in the $3^{\text {rd }}$ singular person are attested also in other types of paradigms．So，in some Molisan dialects a pattern ap－ pears of the type E／H E E E E H，as illustrated in $(24 a, b)$ for Monteroduni （Molise）．（24a＇）shows that have distinguishes an alternant $\varepsilon$ nnə from the alternant anna incorporating the OCl ，as in the Northern Calabrian dia－ lects in（8）and（9）．
（24）a．active

| $\mathrm{l}-\mathrm{a} / \mathrm{r}-\mathrm{u}$ | songə | camat－a／－a | E |  |
| :---: | :---: | :---: | :---: | :---: |
| her／him | be． $1^{\text {st }}$ SG | called－FSG／MSG |  |  |
| mə | si | camata | E | －RF |
| me | be． $2^{\text {nd }}$ SG | called－msg |  |  |
| 1／r | $\varepsilon$ | camat－a／camat－2 | E | －RF |
| her／him | be． 3 rds ${ }^{\text {r }}$ | called－FsG／MsG |  |  |
| r－u | semə | camat－ə | E |  |
| him | be． $1^{\text {st }} \mathrm{PL}$ | called－msG |  |  |
| mə | setə | camat－ə | E |  |
| me | be． $2^{\text {nd }} \mathrm{PL}$ | called－MSG |  |  |
| r／l | عnnə | camat－ə／camat－a | H |  |
| him／her | have． $3^{\text {rd }} \mathrm{PL}$ | called－MSG／FSG |  |  |
| ＇I have ca | ed her／him／ | me，etc．＇ |  |  |

a＇．aイKə cama：tə／－a H
（him／her）have． $1^{\text {st }}$ SG called－MSG／FSG
＇I have called him／her＇ annə camatə a ttuttə kwantə H （them）have． $3^{\text {rd }}$ pl called－INFL to all
＇they have called everyone＇
b．non－active and unergative

| sэŋgə／аイイə | mənutə／rummuitə | E／H |  |
| :---: | :---: | :---: | :---: |
| be． $1^{\text {st }} \mathrm{SG} /$ have． $1^{\text {st }}$ SG | come－INFL／slept－INFL |  |  |
| si | mənuta／ru＇muita | E | －RF |
| $\varepsilon$ | mənutə／rummuita | E | －RF |
| semə | mə＇nutə／rum＇muitə | E |  |


| setə | mənutə/rummuitə | E |  |
| :---: | :---: | :---: | :---: |
| annə | mənutə/rummuitə | E |  |
| 'I have come/lept, you have come/ slept, etc.' |  |  |  |
| mə songə/aイKə | lavat-ə | E/H |  |
| me be. $1^{\text {st }}$ SG/have. $1^{\text {st }}$ SG | washed-InFl/slept-INFL |  |  |
| to | si lavat-ə | E | -RF |
| iss-ə/ess-a t $\int$ ¢ | lavat-ə/ lavat-a | E | -RF |
| tfə semə | lavatə | E |  |
| və setə | lavat-ə | E |  |
| t $\int$ ¢nnə | lavat-ə | E |  |
| 'I have washed myself, you have washed yourself, etc.' |  |  |  |

c. copular and passive contexts
so(ngə) kundiəndə/kundend-a E
be. $1^{\text {st }}$ SG glad.MSG/glad-FSG
si kundiənd-ə E
$\varepsilon$ kundiənd-ə/kund $\varepsilon$ nd-a $\quad \mathrm{E}$
semə kundiənd-ə E
setə kundiənd-ə E
so kundiənd-ə
'I am glad, you are glad, etc.'
d. possessive contexts
aККə / t\&ygə/a / a / avemə / etə / annə/ tiənnə paura
have. $1^{\text {st }}$ SG have/ keep/ $2^{\text {nd }}$ SG $/ 3^{\text {rd }}$ SG/ $\mathrm{I}^{\text {st }}$ PL $/ 2^{\text {nd }}$ PL $/ 3^{\text {rd }}$ PL fear 'I am afraid, you are afraid, etc.'

Once more, in (24) the $3^{\text {rd }}$ singular person is lexicalized by be. If we maintain the idea that the $3^{\text {rd }}$ person is interpreted in relation to the event, the simpler explanation for the systems such as (24) is that there are grammars that simply extend be over the entire paradigm without sensitivity to person or presenting only residually the person specialization of the auxiliary (for other examples see Manzini and Savoia, II, 2005).

We connected the contrast between the lexicalization of $1^{\text {st }} / 2^{\text {nd }}$ persons and the one of $3^{\text {rd }}$ person with the idea that the deictic content of $1^{\text {st }}$ and $2^{\text {nd }}$ persons admits or requires to be not anchored to an agentive argumental structure, but to be interpreted as such through the reduced structure of $b e$. Taking account of the degree of animacy/ definiteness discussed above, the person split in the Central Italian dialects reflects the definiteness degree of possible subjects, to the effect that $1^{\text {st }} / 2^{\text {nd }}$ person are interpretable independently of the event structure of which they are participants.

At least two kinds of data call in question this generalization: dialects where the $1^{\text {st }}$ person admits or selects have, as in Guardiaregia and San Giorgio del Sannio in (17), and dialects that reverse the distribution of be and have assigning
be to the $3^{\text {rd }}$ person and have to the $2^{\text {nd }}$, as in the case of Corato and Gravina in (17). Our idea is that both $1^{\text {st }}$ and $2^{\text {nd }}$ person can be understood as not univocally defined inside the universe of discourse in the enunciation, even if sporadically. For instance, the typological literature documents the discourse in the enunciation, even if sporadically. Ineed, the typological literature documents the reversed hierarchical order btween $1^{\text {st }}$ and $2^{\text {nd }}$ person (DeLancey 1981; Dixon 1994).

The pattern E/H H E of Gravina and Corato in (6) and (7) raises further problems, in the sense that it overturns the apparently most robust generalization highlighted by the data, whereby $1^{\text {st }} / 2^{\text {nd }}$ persons preferably select $b e$, in contrast to $3^{\text {rd }}$ person, generally interpreted by have. We are induced to suppose that also the $2^{\text {nd }}$ person can be treated as a not univocally defined participants in the enunciation, with the result that a complete structural representation of the event is required (have). Nevertheless, in these varieties, the $3^{\text {rd }}$ person is associated with be, suggesting a partially different explanation. We may think that these varieties generalize have over the paradigm, as shown in (17), like many of Southern systems, in Apulia, Calabria and Sicily. be allows for the interpretation of the $3^{\text {rd }}$ person to be separated from the others simply by virtue of the fact that be has interpretive properties independent of the verbal/ eventive class. This could be traced back to its nature of, in some sense, basic auxiliary (see the discussion around (34)). This conclusion seems to be supported by the fact that in Corato in (6), in the $3^{\text {rd }}$ person the form $\varepsilon$ alternates with the form av (from have) before participles with an initial vowel. In other words, we find have in all persons, except in the case of $3{ }^{\text {rd }}$ person before participles with initial consonant: in this case, in the absence of a suitable form of have, the system makes recourse to a form of $b e$.

### 4.4 Coincidence between be and have and incorporation of the $3^{\text {rd }}$ person OCl

A clear case of coincidence between the forms of be and have is provided by the imperfect auxiliaries in the dialect of Fara Novarese in (11), where $b e$ and have show identical forms in the $2^{\text {nd }} e v-i$ and $3^{\text {rd }} e v-a$ singular and $3^{\text {rd }}$ plural $e v-u$. Since the pluperfect has systematically $b e$, as in (25a), the identity between these forms is recognizable both comparing the two transitive structures be-particple-OCl and OCl-have-participle-OClin (25a) and (25a'), and copular and possessive contexts, in ( $25 \mathrm{c}, \mathrm{c}^{\prime}$ ). Naturally, intransitive paradigms do not differentiate unaccusatives from unergatives.
(25) a. active

| i sev-a | tfa'ma-lu |
| :--- | :--- |
| SCl be.IMPF-1stSG | called-him |
| 'I had called him' |  |
| at ev-i | t fa'ma-lu |
| SCl be.IMPF-1stsG | called-him |
| 'you had called him' |  |


b. unaccusative and unergative

c. copular contexts
i sev-a kun'te:nt/ kun'tent-a
SCl be.IMPF-I ${ }^{\text {st } S G ~ g l a d . M S G /-F S G ~}$
'I was glad', etc.
a t ev-i kun'te:nt/ kun'tent-a
a 1 ev-a kun'te:nt/ kun'tent-a
i sev-u kun'te:nt $\int /$ kun'tent-i
SCl be.IMPF-I ${ }^{\text {st }}$ PL glad.mpl/-FPL
'we were glad', etc.
i sev-i kun'te:ntf/ kun'tent-i
i l ev-u kun'te:nt $\int /$ kun'tent-i
c'. i g ev-a / t ag ev-i / a g ev-a / i g ev-u / i g ev-i / ig ev-u fa:m SCl Loc have.Imprf. $1^{\text {st }}$ SG $/-2^{\text {nd }}$ SG $/ 3^{\text {rd }}$ SG $/ 1^{\text {st }}$ PL $/ 2^{\text {nd }}$ PL $/ 3^{\text {rd }}$ PL hunger 'I am hungry, you are hungry, etc.'

Considering that the identical forms occur in copular contexts, Manzini and Savoia (2005) conclude that they belong to the paradigm of be. Cennamo (2010) calls into question this proposal assuming that the coinciding forms, generally present also in many Southern Italian dialects, belong to have. The coincidence formal and functional of be and have can be retraced to late Latin, where have works as a copula of some kind. All things considered, we keep thinking that the solution whereby these identical forms realize be rather than have continues to be the most adequate. The system of Fara Novarese provides us with elements of proof: in this variety be is admitted in all paradigms, so that we can expect it occurs regardless of the eventive class; moreover, nothing prevents the OCls from positioning before be, as in $\left(25^{\prime}\right)$, on a par with many of the dialects examined. The crucial point is the occurrence of these ambiguous forms in the possessives in (25c'). A possibile explanation is that the locative clitic Loc $g$ is sufficient to lexicalize the possession relation between the possessor, the subject, and the other argument, the possessee. ${ }^{7}$

Finally, consider the alternation between the root vowel $\varepsilon$ - and the root vowel $a$ - in the dialects in (8), Morano, and (9), Saracensa, where $a$ - forms lexicalize the interpretation corresponding to the $3^{\text {rd }}$ person object clitics. It is of note that this phenomenon falls into a more general set of facts well attested in Southern Italian dialects where the $3^{\text {rd }}$ person OCls are not lexicalized on the auxiliary (Savoia and Manzini 2011). Savoia and Manzini (2010) conclude that in these dialect the auxiliary is in $C$ and, by virtue of its modal/ aspectual content, subsumes the interpretive properties of 3 rd person, that, as we have seen, is interpreted in relation to the event. We follow this idea with some modifications, specifically setting aside the cartographic characterization of the position of the auxiliary. These dialect dispose of two lexical alternants for have, one of which is able to introduce the definiteness properties sufficient for interpreting the IA of $3^{\text {rd }}$, as in (26).

[^12](26)


## 5. Phases and RF

Let us come back to the distribution of RF. The data in section 1 show that RF is triggered independently of the contrast between active and nonactive/ passive/ copular contexts by a subset of the forms of be. ${ }^{8}$ Thus, the forms that trigger RF are working in all cases, without distinguishing between the eventive properties of the sentence. Moreover, the triggering forms are not homogeneously distributed - e.g. the $2^{\text {nd }}$ person induces RF in (1) and (3) but not in (2). As a consequence, we are led to conclude that RF depends on a lexical property of these morphemes. The most natural solution is to assume that the vocalic nucleus is followed by an empty coda position, as in (27a), to which the phonological content of the initial consonant is associated. The outcome is a geminate, as in so vvifto fratutu 'I have seen your brother', in (3a) for Monte Giberto. A parallel solution can be applied in the case of the alternation $\varepsilon / \varepsilon v$ in Gravina in (7), by assuming that the lexical representation has an unassociated post-nuclear phonetic instruction (position) that is realized when an initial nucleus is able to take it as its onset, as in (27b).

[^13](27)a.

Let us address now status of RF as a crucial cue in order to diagnose the structural properties that distinguish active/ transitive from passive/ stative forms. As we have evidenced, our data do not uncover differences between active and non-active forms. However, some authors have made recourse to possible differences in the application of RF as revealing structural differences in the syntax of actives and passives.

D'Alessandro and Scheer (2015) observe that in the Abruzzo dialect of Arielli, characterized by the pattern EEHEEH in all verbal classes, $1^{\text {st }}$ and $2^{\text {nd }}$ persons trigger RF only in passive, whereas in active RF is missing. Moreover, not only unergatives but also unaccusatives behave like actives, lacking RF. The authors, based on the chomskyan distinction between strong and weak heads, where strong heads are 'potential targets for movement' (Chomsky 2001: 20; cf. Richards 2011), relate this distribution to the fact that active corresponds to a phasal vP, differently from unaccusative/ passive, treated as defective heads. Consequently, the complement VP of the head $v$ is transferred to interpretive systems, when the next phase C-T is merged and $v$ inherits the features from T. So v 'is endowed with a PIC at PF' (D'Alessandro e Scheer 2015: 612), as in (28); this prevents RF from applying between the inflected form of the auxiliary and the participle.


In unaccusative and passive $v$ is dealt with as a 'weak head', that is a defective functional element that does not head a phase. So, the entire complex T-v-VP is spelled out as a 'single chunk', without the phase boundary be-
tween $v$ and VP. Therefore, the rule of RF can operate between the auxiliary, treated as the lexicalization of syntactic features of $T$, and the participle. In this framework, the triggering of RF is explained in terms of the underlying syntactic structure rather than as due to the lexical properties of the relevant lexical elements, as the data seem to prompt to conclude.

Chomsky (2001) identifies phases with lexical subarrays computed at the SM and C-I interfaces by the operation of Transfer. The procedure is constrained by the Phase Impenetrability Condition (PIC) in (29). The idea
 complement YP of H is not accessible to operations at ZP (Richards 2011).

## PIC

The domain of H is not accessible to operations at ZP; only H and its edge are accessible to such operations Chomsky (2001: 14)

Chomsky (2001, 2007, 2013, forthcoming) assumes two phases, CP and vP. The CP phase implies inheritance of features from the phase head C to the lower head T. Indeed, the fact that the IA of the unaccusatives agrees with the finite verb in T and is assigned the Nominative seems to suggest that $v$ is unable to license its internal argument and assign it the case (Gallego 2010, D'Alessandro and Scheer 2015). Nevertheless, as noticed by Richards (2011), the notion of weak or defective phase was introduced in order to account for the agreement of the verb with a postposed subject in unaccusative contexts, T- $v$-subject.

Actually, this solution seems unmotivated in many cases (see the discussion in Richards 2011), and our data clearly calls it into question insofar as we expect that the unaccusatives behave like the passives and not like the actives, making RF possible. The data of the dialect of Arielli, on the contrary, exclude RF in unaccusatives. In addition, in the systems in (1), unaccusatives are different from passives in selecting the same pattern as actives with have in the $3^{\text {rd }}$ person. D'Alessandro and Scheer (2015: 613) explain this discrepancy by proposing a model in which the PIC effect can also be visible only in phonology, at the PF interface, i.e. to the SM interpretation:

This suggests that the feature that is connected to a PIC effect is voice, not transitivity. This PIC effect is visible only at PF, though not at syntax. In other words, we are facing a syntax-phonology mismatch: syntactically, unaccusatives appear to represent one single Spell-Out domain, but phonologically, they behave as if there were two. [...] there is a PIC effect in phonology, but not in syntax. Modular PIC takes this statement literally: Spell-Out does occur at vP, and a PIC is associated with this access point at PF. In syntax, however, the Spell-Out is vacuous; no PIC is associated with v , and hence everything below C represents one single computational domain.

Ledgeway (2018), in keeping with D'Alessandro and Scheer (2015), aims at applying their analysis to a set of data from Manzini and Savoia (2005),
including the copular contexts but however generally no passive structure. The distribution showed by these data highlights a clear asymmetry between active and stative-copular and only partially reintroduces the coincidence between active and unaccusative forms. In some of the dialects considered, i.e. the ones of Pàstena and Ruvo di Puglia, unaccusatives diverge from actives and admit RF just like stative contexts. Ledgeway observes that RF is sensitive to locality requirements defined in terms of phasal domains. Specifically, in the contexts triggering RF, vP is not a phase, as in stative/ passive and, variably, in unaccusatives and reflexives. His hypothesis is that in systems where RF is applied also in actives, for example in the dialect of Poggio Imperiale (Northern Apulia), the auxiliary remains low so determining the context for RF, 'finite V-movement is invariably very low such that all forms of be , whether auxiliary or copula, remain within $v$-VP and hence within the same phase as their participial or adjectival complement' (Ledgeway 2018: 290).

This proposal raises a more general question regarding the order between object clitic ( OCl ) and auxiliary. Ledgeway (2018: 291-292) ties the exclusion of RF in the actives forms to the phasal status of vP , whereas the occurrence of RF in copular contexts complies with the defective status of $v$. The application of RF to the object clitics in (11a,a") may be explained by assuming that both the auxiliary and the object clitic are adjacent inside the same high phasal domain CP. A problem is raised by the fact that also unaccusatives do not trigger RF, so showing the distribution studied for Arielli in D'Alessandro and Scheer (2015), according to which a phonological PIC effect depends on the voice features of $v$.

What we observe on this point is that a conflict could stand out between the recourse to a voice feature as a deterrent for RF and the strengthening of the initial consonant in enclitics. More precisely, if the voice feature of $v$ blocks RF, we could expect that it is also working in the case of non-actives, unaccusatives and reflexives, where, instead, RF is applied, as in (10a") and (30a) for unaccusatives.
(30) a. n tso tt $\int$ və venutə
not be. $1^{\text {st }} \mathrm{SG}$ LOC come
'I have not come there'
San Benedetto del Tronto

Secinaro
The data of Secinaro in (11) and (30b) depict a different distribution, whereby again we find a uniform behaviour of the be forms independently of
the eventive structure of the sentence. This could help us deal with the contrast between enclisis and proclis according to the auxiliary without a unmotivated structural representation of the difference between be and have. In fact, the assumption that the be forms, auxiliary or copula, remain low within $v$-VP domain (Ledgeway 2018: 290) in the systems where be triggers RF in actives, seems collide with the distribution of clitics. In other words, the enclitic position could reasonably be connected with a high position of the auxiliary, or, at least, this makes the hypothesized low position unjustified by the distributional evidence.

The complex of the data so far examined concerning the connection between voice and RF involves three structural properties:
i. strong vs defective head nature of $v$ : actives (transitives) vs unaccusatives/ passives
ii. PIC at PF in unaccusative contexts (D'Alessandro and Scheer 2015)
iii. low position of be triggering RF (Ledgeway 2018)

In particular, (ii) is complementary to (iii), insofar as we have to expect either a block of RF in (ii), or the application of PF in active contexts, both cases unpredictable on the basis of phase treatment. So, the recourse to other structural tools highlights the difficulty to connect the different patterns with an underlying uniform structural mechanism.

### 5.1 Phases, RF and agreement of the participle

In the table in (31) we synthesize the distribution of RF in the systems we examine: + indicates the presence of RF in the contexts with be. $(-)$ indicates the absence of RF in contexts with have. The absence of any value indicates that the relevant data are not available. It should be noted that in copular and passive contexts be is extended to all persons, so that in particular the $3^{\text {rd }}$ SG selects be also in dialects where in the other verbal forms the $3^{\text {rd }}$ SG of have occurs.

| (31) | Transitive | Unergative | Unaccusative | Reflexive | Copula | Passive |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 2 3}$ | $\mathbf{1 2 3}$ | $\mathbf{1 2 3}$ | $\mathbf{1 2 3}$ | $\mathbf{1 2 3}$ | $\mathbf{1 2 3}$ |

## (i)

| Sonnino $++(-)$ | $++(-)$ | $++(-)$ | $++(-)$ | +++ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Torricella P. $--(-)$ | $--(-)$ | --+ | --+ | -++ | -++ |
| Monte Giberto + (-) | $+-(-)$ | +-+ | +-+ | +-+ | +-+ |
| Guardiaregia (-) + (-) | $(-)+(-)$ | $(-)++$ | $(-)++$ | $(-)++$ | $(-)++$ |
| Monteroduni --- | --- | --- | -- | --- | --+ |
| S. GiorgiodelS. $(--)+$ | $(--)+$ | $(--)+$ | $(--)+$ | $(--)+$ | $(--)+$ |
| Secinaro + + + $+(-)$ | $++(-)$ | $++(-)$ | $++(-)$ | +++ |  |

(ii)

| Corato | +++ | +++ | +++ | +++ | $(--)-$ | $(--)-$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Gravina | $+/-(-)+$ | $+-(-)+$ | $+/-(-)+$ | $+-(-)+$ | +--+ | +--+ |

(iii)

Morano/Saracena - + + + + + + +
A special consideration is to be given to the $3^{\text {rd }}$ singular person in the dialects in (ii) and (iii). The forms in (ii) alternate with a form ending with $-v$ before vocalic initial; what is more, in Corato variety this pre-vocalic alternant presents the base $a$ - of have and, at the same time, the copular and passive $3^{\text {rd }}$ singular person does not trigger RF. In the group (iii) the $3^{\text {rd }}$ singular person form is systematically $\varepsilon$ in all contexts. However, in transitive contexts it changes to $a$ when incorporates the $3^{\text {rd }}$ person OCl , as described in the section 1.2. The question is that the forms of have in turn present this alternation between the base $\varepsilon$ - and $a$-in connection with the lexicalization of the $3^{\text {rd }}$ person OCl , as illustrated in (8a)-(9a). Contrary to the $3^{\text {rd }}$ singular form $\varepsilon / a$, that is substantially ambiguous between be and have, the other forms of the auxiliary are recognizable as forms of have insofar as they are excluded in passive and copular contexts.

The analysis of participle proposed in section 3 suggests a view of passive based on the agreement properties of the participle. In other words, in Romance varieties, including the systems examined, passive can be construed as a vP including a participle involving an agentive interpretation and selecting an internal argument (IA), where phi-features and tense properties are lexicalized by $b e$. We treat the finite verb (the auxiliary) as an exponent of T and the participle as an exponent of $v$. No phasal difference emerges between transitives and unaccusatives/ passives, with the result that a structure like (32) si ccamatz 'you have/ are called...' from Guardiaregia in (4a,b) corresponds both to passive and active (Savoia et al. 2018, forthcoming).


The external theta-role of call can be assigned the interpretation as the EPP of T , agreeing with the auxiliary in the transitive reading, or by means of the by complement, in the passive reading. In the latter case, EPP is satisfied by the internal argument of the verb. So, no PIC prevents RF from being realized, as indicated in (33), where the initial consonant of the participle provides the phonological content to the coda position following ss 'I am'.

(34) a. l-ə so camiət-ə

OCl-pl be. stsg $^{\text {st }}$ called.pl-INFL
'I have called them'
a'. l-ə so camæt-ə
$\mathrm{OCl}-\mathrm{Pl}$ be. $1^{\text {st } S G}$ called.sG-INFL
'I have called them'
a". semə camiət-ə frat-tə
be. ${ }^{\text {st }}$ PL called.pl-INFL brother-your
'we have called your brother'
b. semə manniət-ə
be. $1^{\text {st }}$ PL called.pl-INFL
'I have eaten'
c. lə semə camiət-ə

OCl-pl be. $1^{\text {st }} \mathrm{Pl}$ called.pl-Infl
'we have called them'

D'Alessandro and Roberts (2010) observe that the agreement of the participle with the EA contravenes the restriction whereby past participles exclude the agreement with the external argument (Belletti 2005). In fact, the agreement of the past participle has influenced and oriented the historical reconstruction of the formation of auxiliary systems in Romance, considering that Latin had only the auxiliary be, in passive forms and in deponents. La Fauci (1991) assigned the forms have+past participle a leading role in the transition from the alignment nominative-accusative to the alignment active-non-active in many Romance varieties, even if the modern languages have partially or completely obscured this reorganization (cf. Loporcaro 2010). The conceptual key is that participle makes it possible to encode the reference to the internal argument both when it is object and when it comes to be the subject (unaccusatives and passives). This alignment of the argumental structure would be based on the
nature of the past participle, that agrees with the middle subject or the object according to a pattern already working in Latin. In other words, the past participle would be characterized by an ergative type of agreement, generally attested in Romance varieties, eventually only in passive, as in Spanish. However, it should be recalled that in Latin the past participle can agree also with active subjects (EA), for example in deponent verbs.

What we see is that the agreement with the IA, that is the low positions in the referential hierarchy (cf. footnote 7), is tendentially favoured or, as in many Romance varieties, systematically selected. Nevertheless, the agreement with the other argument is not excluded by structural or principled reasons. The agreement with the EA in dialets of the kind of Secinaro and Torricella Peligna in (34) seems to connect with the fact that T agrees with the EA or IA independently of the type of eventive structure, as suggested in (35) for $i$ Si ccemet-a 'you have called him'. More precisely, as we saw in section 3 , be in $v$ excludes agreement with the IA and have does not discriminate between the internal or external theta role. In conclusion, in these dialects the morpho-syntactic alignment does not take account of the contrast ac-tive/non-active, but reflects the definiteness opposition between $1^{\text {st }} / 2^{\text {nd }}$ persons and $3^{\text {rd }}$ person elements/ DPs. The agreement of the participle is free to cover the internal or external theta roles in that the system does not impose any specific requirements on the functional nature of the participle. In (35) the metaphonic outcome of the thematic vowels registers the agreement with the external argument $y$, whereas frat-tz lexicalizes the IA. No phasal barrier intervenes that prevents T from searching the agreement features of the participle, giving so rise to this type of structure in which the participle can encode the reference both to the internal-theta position and the external one.


The agreement between subject and participle in transitives implies that also in transitives the entire complex T-v-VP is spelled out as a 'single chunk',
so casting aside or calling into question the distinction between strong and weak phases (see the discussion around (28)). This is substantially the option followed by D'Alessandro and Roberts (2010: 62-63) in treating the agreement between subject and participle in transitives for Arielli. Their idea is that number and person features are copied from $T$ to the auxiliary and from the auxiliary to participle by a mechanism which is 'not an Agree relation' but a type of features spreading. This implies that 'It is necessary to assume that feature-valuation and feature-inheritance take place before transfer, where the feature in question is specified for a given value'. It remains true that no phasal barrier is active and able to inhibit the relation between T and AspP(VP), suggesting that the transfer of AspP/VP is delayed to the next strong phase, i.e. CP, so extending the search space of the non phase head T and rendering VP accessible to T . The result is that however the strong/ weak distinction fails and the distribution of RF is no longer connectable with the contrast between weak and strong phase (Richards 2011).

The dialects as that of Arielli and, possibly, the one of San Benedetto del Tronto in (13) that admit RF only in passive or copular contexts, nevertheless need be accounted for. We could think that a local phono-syntactic constraint is involved, in the sense, for example, of Rizzi and Savoia (1993), Roberts (2005). These works converge on assuming that the relevant configuration is head-government. So, Roberts (2005: 77) concludes that in Welsh the Initial Consonant Mutation is triggered by a feature L(enition) associated to the head v , that weakens the initial consonant of the object, in a sequence like $\ldots\left[_{\mathrm{vP}}[L]\left[_{\mathrm{VP}} D P t_{r}.\right]\right]$. Manzini and Savoia (2016: 239) discussing propagation of $/ \mathrm{u} /$ in Southern Italian dialects propose that propagation in pho-no-syntactic contexts is triggered by a configuration where 'the trigger bears an argument-of relation to the target'. All in all, in the dialects above examined, RF is generally lexically governed, connecting to the lexical property of a subset of monosyllabic verbal forms. Some dialects introduce a restriction, excluding RF from actives and, mostly, unaccusatives as well. This could suggest that the sandhi between T and $\mathrm{v} / \mathrm{AspP}$ may be sensitive to the specifications associated to the edge of v ; more precisely, the EA position involved in the agreement of the auxiliary verb is able to block RF, considering that also be implies the agreement with the external argument in actives and unaccusatives. Passive and copular contexts, on the contrary, do not obey the requirement, but introduce structure only endowed with the internal role.

## 6. Conclusions

This article aimed at reviewing some of the main phenomena concerning the auxiliary perfective paradigms involving the alternation between be and have both in the Central and Southern Italian dialects and in the varieties of East Piedmont. The topics we have explored are the following:
(i) Auxiliary selection and the structural properties corresponding to have and be;
(ii) Distribution of clitics with have and be;
(iii) Morpho-syntactic nature of non-active/ passive (vs active);
(iv) The participle and its agreement;
(v) Person split;

Notion of phase and morpho-phonological processes of externalization.
Our purpose has been to investigate the micro-variation showed by these dialects and the complex interactions of different morpho-syntactic properties, seeking to report them to a set of structural or interpretive principles in the spirit of the recent assumptions of the biolinguistic framework.

The starting point of our analysis has been the characterization of the participle as a sort of aspectual adjective that passive exploits in order to exclude the EA as a possible subject. The participle is also examined in connection with the agreement mechanisms implemented by those dialects where participles are able to agree with the subject of transitives. In doing this we have relied on the hypothesis that be and have have lexical entries endowed with a lexical content encoding different syntactic organizations associated to the externalization of different person referents - person split. The position of OCl , in enclisis or proclisis, contribute to providing evidence in favour of the different syntactic and interpretive properties of the two auxiliaries. A crucial topic has to do with the hypothesis that externalization of the auxiliary-participle complex - specifically the application of RF between auxiliary and participle - could reflect differences in the phasal properties splitting actives from passive and copular contexts. In order to deepen this point, we have investigated the behaviour of RF in some of the varieties involving the person split, concluding that the more reasonable hypothesis is that RF is based on the lexical properties of the triggering forms.

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# A Syntactic Interpretation of the Applicative-Causative Syncretism 

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#### Abstract

: This paper deals with the applicative-causative syncretism, which is a pattern of morpheme polysemy attested in many different natural languages. We basically interpret the causative-applicative syncretism as based on a shared syntactic configuration. Specifically, we argue that the syncretic morpheme under investigation is the 'applicative' counterpart of an adpositional/case elementary relator (Manzini and Franco 2016; Franco and Manzini 2017a), attaching instrumental or benefactive obliques (High Applicatives, cf. Pylkkänen 2002, 2008) to the verbal spine. We follow Bellucci (2017), Manzini and Savoia (2018) in assuming that causees in causative constructions can be introduced as obliques, linked to the same structural position as High Appls. The causative reading of the sentence is driven by interpretive means (cf. Franco and Manzini 2017a). This readily explains the possibility of encoding causative and applicatives with the same lexical items.


Keywords: Applicative, Causative, Oblique, Syncretism, Instrumental

## 1. Introduction: the applicative-causative syncretism

This paper deals with the applicative-causative syncretism, which is a quite overlooked pattern of morpheme polysemy attested in various natural languages. The applicative is usually understood as "a construction in which a verb bears a specific morpheme which licenses an oblique, or non-core, argument that would not otherwise be considered a part of the verb's argument structure" (Jeong 2007: 2). Baker (1988), Bresnan and Moshi (1990) argue that the extra-arguments associated to applicative morphemes typically encode benefactive or instrumental participants.

Typologically, however, applicative constructions commonly licence other theta-roles, among which goal, locative, and source relations (Baker 1992; Peterson 2007, inter alia).

In current generative literature the terms "applicative" (Marantz 1993; Pylkkänen 2002, 2008; Cuervo 2003, 2010 inter alia) is also used to refer to oblique/indirect objects of the verb that precedes the theme/patient object in languages like English without an overt applicative marker. For instance, Marantz (1993) assumes that English double objects of the type of I gave Mary a letter actually instantiate applicative structures with a covert applicative morpheme.

In this work, we analyze the syntax of those languages which have morphological devices that change verbs into their causative forms and in which such causative morphemes happen to have the same lexical shape as an applicative introducing a non-core (oblique) argument. The applicative=causative syncretism is quite widespread from a cross-linguistic point of view, as documented in McDonnell (2013). Consider the data in (1) to (3), where the applicative=causative morpheme is highlighted in bold.
(1) Kinyarwanda (Jerro 2017: 753)
a. Habimana y-a-men-a Habimana 1.sbJ-PST-break-IPFV 'Habimana broke the cup'
b. Habimana y-a-men-esh-eje
Habimana 1.sbj-PST-break-CAUS-PFV
'Habimana made the child break the cup'
c. Habimana y-a-men-esh-eje
$\begin{array}{lcll}\text { c. } & \begin{array}{l}\text { Habimana } \\ \text { Habimana } \\ \text { Ha-a-men-esh-eje } \\ \text { 1.SBJ-PST-break-APPL-PFV }\end{array} & \text { igi-kombe } & \text { in-cup } \\ \text { 'Habimana broke the cup with a stick' } & & \text { 9-stick } \\ & \end{array}$
igi-kombe
7-cup
$\begin{array}{ll}\text { umw-ana } & \text { igi-kombe } \\ \text { 1-child } & \text { 7-cup }\end{array}$
iwak
fish
ómah-ku
house-ISG.Poss

| c'. aku | masak-aké | Karolina | jajan |
| :--- | :--- | :--- | :--- |
| ISG | cook-APPL | Karolina | cake |
| 'I baked |  |  |  |

(3) P’orhépecha (Capistrán Garza 2015:145ff)


The examples in (1) illustrates the causative=instrumental applicative syncretism in Kinyarwanda, a Bantu language spoken in Rwanda (Kimenyi 1980; Jerro 2017). In this language, the applicative morpheme - ish/-esh introduces both a causative and an instrumental applicative reading. The example in (1a) shows a canonical transitive sentence with an external and an internal argument, while the verb bearing the -ish/-esh morpheme in (1b) and (1c) introduces three participants. In (1b), the reading is causative: an agent causes the child to break the cup. Conversely, in (1c), we are faced with an instrumental reading: an agent directly acts on the cup, by using a stick in order to break it. As extensively illustrated in Jerro (2017), the causative=instrumental syncretism is very pervasive in Kinyarwanda. Jerro (2017: 753) argues that: "neither traditional analyses of causatives nor applicatives can naturally be extended to syncretic morphemes such as -ish since causativization is an operation that adds a new causer subject, while applicativization is an operation that adds a new object." The question is: do the features of the added participant ensure that the instrumental is a object? We will show that there are languages in which it is possible to assume an oblique status for the extraparticipant licensed by the applicative morpheme.

In Javanese (Austronesian), the applicative morpheme - $(n) i$ encodes a locative relation (2c). As illustrated in Hemmings (2013), this item is also used as a causative morpheme with verbs of an underlying transitive verbs, especially ingestive verbs such as "eat", "drink" and "smell", as in (2b). This suffix also functions as a causative with intransitive verbal roots, typically those denoting states or "inactive situations" (Shibatani and Pardeshi 2001). ${ }^{1}$ In addition, the suffix -aké is commonly used as a

[^14]causative marker with intransitive verbs that denote change of state like "open" and "melt", as shown in (2b'). The suffix - aké also encodes benefactive relations, as illustrated in ( $2 c^{\prime}$ ).

Finally, the examples in (3) illustrated the causative=instrumental applicative in P'orhépecha, a language isolate spoken in the North-Western region of Michoacán in Mexico. The suffix - ra (and its allomorphs, cf. Capistrán Garza 2015) introduces both a causative (3b) and an instrumental reading (3c). Note that the added participants, namely the causee in (3b) and the instrument in (3c), bear an oblique -ni inflection. This is crucial for assuming that the applied argument retain oblique status (cf. Section 3 and 5). We will mainly use P'orhépecha to illustrate our analysis of the causative=applicative syncretism.

In his typological survey, Peterson (2007) assumes that there are two kinds of applicative/causative syncretism ("isomorphism" in his terminology): benefactive/malefactive applicative/causative and comitative/instrumental applicative/causative. We have seen, with the examples from Javanese, that we may also find locative-applicative/causative syncretism. Peterson (2007) argues that there is a "dividing line" between benefactive applicatives and causatives, marked by the semantics of the verbal predicate involved: only intransitive (unaccusative) predicates would be turned into causatives by the "benefactive applicative". According to Petersen, transitive predicates cannot encode a causative reading when they bear a benefactive applicative marker. Peterson (2007: 133-134) says that "benefactive constructions are often based on a schema of giving, and because of this, benefactive constructions often require that there be associated with the event they depict the normal participants in a giving frame. In particular, there must be a giver, a recipient, and, crucially, there must be a gift to be transferred. Hence, an intransitive base event will not have enough participants to work in the construction, but a transitive base event will".

Actually, cross-linguistic data do not seem to support Peterson's claim. As shown in Sneddon (1996), the Indonesian benefactive-applicative morpheme - kan, illustrated in (4), can encode a causative meaning with a set of transitive verbal roots, as in (5).

| (i) | Javanese (Hemmings 2013: 168ff) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | a. | wòng | kaé | mati |
|  |  | man | dem | die |
|  | b. | 'that man died' |  |  |
|  |  | aku | matè-ni | wòng |
|  |  | 1 sg |  | man |
|  |  | 'I kill | hat man' |  |

(4) Indonesian (Sneddon 1996: 80)

| a. | pelayan | mengambil | segelas | air |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | waiter | take | a.glass.of | water |  |
|  | 'The waiter took a glass of water' |  |  |  |  |
| b. | pelayan | mengambil-kan | tamu segelas | air |  |
|  | waiter | take-Appl | guest | a.glass.of | water |
|  | 'The waiter brought the guest a glass of water' |  |  |  |  |

(5) Indonesian (Sneddon 1996: 74, 76)

| a. | wanita | itu | mencuci | pakaian | saya |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | woman | that | wash | clothes | ISG |
| 'That woman washes my clothes' |  |  |  |  |  |
| b. | saya | menc | n pakaian | wanita | itu |
|  | ISG | wash | clothes | woman | that |
| 'I have my clothes washed by that woman' |  |  |  |  |  |

Peterson proposes an externalist explanation also for the instrumental applicative=causative isomorphism. He claims that: "as long as a language allows causees to be inanimate, then the possibility of interpreting an inanimate causee as an instrument is available; this seems like a minor extension to make" (Peterson 2007: 135-136). We recognize that Peterson's intuition is on the right track in assuming that instruments are nothing else than inanimate causee-like arguments (cf. Franco and Manzini 2017a, and the discussion in Section 5). However, we will try to avoid shift of meaning and potential grammaticalization patterns in accounting for the syncretism between the causee role and the benefactive/instrumental/(locative) one in those languages that make use of verbal affixes to encode them. We will provide instead an explanation based on the idea that the construction involved may share the same syntax and that syntax drives those interpretations that are (structurally) allowed.

To our knowledge, there are no formal syntactic attempts trying to capture Caus=Appl. Recently, Jerro (2017) provides a semantic analysis of the syncretism between instrumental applicative morphology and causative morphology in Kinyarwanda assuming an operation that adds a novel layer (and the associated participant) into the causal chain denoted by the event. Specifically, Jerro's idea is that this new causal layer can be interpreted as either initial in the overall causal structure - deriving a causative reading - or intermediary - deriving an instrumental reading. Jerro leaves a precise syntactic implementation of his proposal for his future research. In this paper, we will show that the causal nature/interpretation of the morpheme adding a new participant to an event is actually possible given a very basic 'inclusion' relation instantiated by the applicative/causative morphology. Franco and Manzini (2017a) dubbed this loose relation "concomitance" with an event. We adhere to their view, assuming that a "concomitant argument" can be
variously interpreted as the causee, the instrument, the beneficiary of a given event, under the right syntactico-pragmatic conditions.

The rest of the paper is structured as follows. In Section 2 we provide a theoretical background for our proposal, assuming that the syntactic projections of predicates and functional features/categories is mediated by the lexicon, which organizes these contents in different language-specific manners. In Section 3, we introduce our interpretation of applicatives, arguing that they are not qualitatively different from oblique cases, adpositions or serial verbs: all these items are different lexical realizations of a relational 'inclusion' predicate, whose role is to add non-core participants to the verbal spine. In Section 4 we will sketch a possible syntactic template for causatives, based on the idea that causees may be encoded as oblique (external) arguments put forth in recent work by Bellucci (2017), Manzini (2017), Franco et al. (forthcoming). In Section 5 we formulate an analysis for the Appl=Caus syncretism, interpreting such phenomenon as relying on a shared syntactic configuration, based on data from P'orhépecha. The Conclusions follow.

## 2. Theoretical Background: syncretism beyond paradigms/categories

Our working hypothesis, stemming from Manzini and Savoia (2011), is that the map of functional categories should be redrawn, by considering that the functional lexicon is not precompiled in the universal (computational) component of syntax in a cartographic fashion (cf. Cinque and Rizzi 2010). Conversely, we assume that functional categories are drawn from the same conceptual inventory as lexical ones.

The main idea is that functional categories externalize properties and relations that are not qualitatively different from those realized by the substantive lexicon, only more elementary, and therefore typically partitioning the conceptual universe into much vaster classes than the exponents of (traditional) lexical categories (i.e. nouns, verbs, adjectives, cf. Baker 2003). Essentially, we take a view under which the lexicon precedes syntax, and projects it, in keeping with the minimalist postulate of Inclusiveness (Chomsky 1995; Manzini, Savoia 2011, 2018; Manzini 2017). Thus, the question how the items projected from the lexicon, including the "isomorphic" applicative and causative morphemes focus of the present study, interact with one another under syntactic Merge (effectively projecting syntactic structures) becomes crucial.

We take as our starting point the existence of a universal conceptual inventory; at least the categories of the conceptual system recruited by language must therefore be universal. While the underlying conceptual organization is universal, the linguistic lexicon cuts it in language-specific manners, accounting for the largest portion of language variation. Following Manzini and Savoia (2011, 2018), Manzini et al. (2015), Manzini and Franco (2016), Franco and Manzini (2017a, 2017b), among others, we take the position,
formalized by Distributed Morphology (DM) (Marantz 1997, 2007), that predicative contents are listed in the lexicon without any sort of categorization (as bare roots). Thus nouns, verbs, adjectives are defined by the merger of some a-categorial predicative content with a nominalizing, verbalizing or adjectivizing functional head. Despite this, we do not follow DM in assuming that functional categories form a separate, potentially universal lexicon, a sort of "Platonic ontology" of natural languages (see Manzini 2017; Manzini and Savoia 2018). On the contrary, we argue that externalization of predicative contents and externalization of functional features/categories pass through the same lexicon.

An empirical issue that crucially interacts with the organization of the lexicon is syncretism. DM basically says that syntax operates on abstract features, roughly corresponding to the descriptive categories of traditional grammar (Calabrese 1998, 2008). Opacization operations, which blur the syntactic (full) feature specification, give rise to syncretisms. Specifically, given a realizational conception of the lexicon of the type assumed by DM, certain abstract clusters of features may be realized by certain phonological strings - with syncretisms simply treated in terms of Underspecification and other morphological readjustments (i.e. Impoverishment, Fusion, Fission, see Noyer 1992; Halle 1997; Harley 2008, inter alia). A stronger position could in principle be assumed - namely that syncretisms correspond to natural classes and operate outside the paradigms of traditional categories (cf. Manzini and Franco 2016). ${ }^{2}$

To the extent that paradigms are the traditional layout of teaching and descriptive grammars, there is no doubt that they are capable of presenting an exhaustive picture of the entire (say) nominal or verbal declension of a language. Nevertheless, the theoretical framework adopted here predicts that paradigms exist nowhere in the competence of speaker-hearers; in other words linguistic data are organized in non-paradigmatic fashion: primitives are too fine grained and the combinatorial possibilities afforded by Universal Grammar too many to achieve a perfect match to descriptive (macro)classes.

In short, we adopt the junction of externalization processes and the syntactic module as our main domain of research and this paper is part of a series of works on and around the domain of (cross-categorial) syncretism (e.g. Manzini, Savoia 2018; Franco 2018, Franco et al. forhcoming, inter

[^15]alia), starting from the (radical) assumption that paradigms have no theoretical status, not even as derived constructs. So, we will use the term "syncretism" to refer to homophony/isomorphism outside of paradigms (as, for instance, in Francez and Koontz-Garboden 2016, 2017). An alternative label for the kinds of phenomena that we will address in our work could be "polyfunctionality". Actually, we are not interested in individuating functionalist grammaticalization paths (cf. e.g. Heine, Kuteva 2002), but in detecting an inventory of lexical primitives shaping morpho-syntactic derivations - as we will try to outline in what follows, targeting applicatives.

## 3. On the nature of Applicative heads: relations beyond categories

As we have highlighted in Section 1, applicatives are constructions employed to license an oblique/ non-core participant within a given sentence. Thus, it is fairly intuitive to link applicatives with other devices commonly employed, cross-linguistically, to introduce oblique arguments, namely cases and adpositions.

We adopt the intuition of Fillmore (1968), for whom oblique cases are the inflectional equivalent of adpositions and assume that applicatives are nothing else than adpositions or case morphemes attached (incorporated) to the main verb (cf. also Aikhenvald 2008). Basically, this is also the idea of Baker (1988), who claims that applicatives are the result of the incorporation of a prepositional head into the verb by head movement. ${ }^{3}$ According to Baker, applicatives reorganize the argument structure in such a way that the applied object is licensed as the direct object, while the direct object is turned into an oblique. Baker also assumes that applicatives are allowed for transitive verbs and are generally prohibited from appearing with intransitive predicates. This would follow from the fact that intransitives have no Case to assign, so the applied object would happen to be licensed with no case, violating the Case Filter (Chomsky 1981).

Actually, as we have seen in P'orhépecha in (3c) the applied object tsúntsu bears the oblique inflection -ni (cf. Section 5 for a full description of the -ni morpheme in P'orhépecha). Thus the idea of Baker that applied objects are always licensed as direct internal arguments cannot be maintained. Furthermore unaccusatives are free to licence applied objects in P’orhépecha, as illustrated in (6).

[^16](6) P’orhépecha (Capistrán Garza: 122, 124)

$\begin{array}{lll}\text { a. tsakápu } & \text { wekórhi-ku-s- } \varnothing \text {-ti } & \text { Xwánu-ni } \\ \text { stone } & \text { fall-APPL-PRF-PRS-3IND } & \text { Juan-obl }\end{array}$
'The stone fell on Juan/near Juan' $\quad$ Juan-obl
b. mésa-ni kweráta-ku-sïn- $\varnothing$-ti ma xantsíri
table-obl be.missing-APPL-HAB-PRS-3IND one leg/foot
'The table is missing a leg'
c. ú-ku-s- $\varnothing$-ti ma k'waníntikwa María-ni
do/make-APPL-PRF-PRS-3IND one shawl Maria-Obl
'S/he made Maria a shawl'
In P'orhépecha the applicative morpheme $k u$ (and its allomorph -chi) introduces participants with respect to whom a given event takes place. Thus, in (6a) the applied argument delimits the space/domain where the unaccusative event ('falling of the stone') is located and Juan is not a patient-like participant. The same logic applies to (6b), where an unaccusative predicate expressing incompleteness introduces the (un)possessor ('the table') as an oblique/applied argument. The example in (6c) shows that the applicative morpheme $-k u$ also (canonically) introduces beneficiaries: the item Mary, namely the participant for whose benefit the action takes place, is again encoded as an oblique.

Hence, it seems that Baker's original characterization of applicative arguments is not supported by the P'orhépecha data illustrated above. Nevertheless, we agree with Baker in assuming that applicatives are adpositional-like elements attached to the verbal spine. There is plenty of evidence that this is the correct characterization of applicatives on cross-linguistic grounds. For instance, Craig and Hale (1988) provide strong arguments in favour of an adpositional source for applicative markers in Amerindian languages. Moreover, as illustrated in Kimenyi (1980, cf. Peterson 2007; Jerro 2017) many applicative markers in Bantu languages are of manifestly adpositional nature. Consider the Kinyarwanda examples in (7), where the allative morpheme $m u$ can appear as a preposition (7a) or as a morpheme cliticized (applied) on the verb (7b).
(7) Kinyarwanda (Kimenyi 1980: 89, 94)


The same pattern holds in Oceanic languages. For example, Durie (1988) shows that in Mokilese, a Micronesian language spoken on Mwoakilloa, the instrumental morpheme $-k i$ can appear as an applicative affix on the verb in (8a), or as an adpositional (stand-alone) item in (8b).
(8) Mokilese (Durie 1988: 8)


Furthermore applicative items have the same shape as (serial) light verbs in many different languages (cf. Peterson 2007; Creissels 2009). For instance in Kwaza (Amazonian Isolate), a Sino-Tibetan language the benefactive applicative marker -wady is actually the verb for "give" in that language, as shown in (9b).
(9) Kwaza (van der Voort 2004:373)
a. Kudere-'wã mãmãñẽ-wady-da-ki.

Canderé-obl sing-Appl-ISG-DECL
'I sang for Canderé'
b. Wera-'wã haru'rai wady-wady-tapỹ-ra.

Vera-obl armadillo give-APPL-ISG-IMP
'Give the armadillo (meat) to Vera for me'
In Chickasaw, a Native American language spoken in Southeast Oklahoma, a serial verb form (labelled converbial form in the descriptive literature) of the verb ishi 'take', as in (10a), can be attached to the main verb, and the resulting structure is that of an instrumental applicative, as illustrated in (10b).
(10) Chickasaw (Munro 2000)
a. tali' ish-li-t
rock take-ISG.ACT-CONV
'Taking a rock, I hit him'
b. tali' isht-isso-li-tok
rock APPL-hit-ISG.ACT-PST
'I hit him with a rock'

Franco (2018), focussing on (light) serial verb meaning give and take commonly used as 'valency-increasing' devices (encoding benefactives, instrumentals, comitatives, goal datives, etc.) in Creole/Pidgin languages, argues that they are relational predicates employed to introduce oblique arguments, just as cases and adpositions. Given the cross-linguistic evidence provided above, nothing prevents a given language to use applicative morpheme for
this purpose: sometimes the different between an adposition and an applicative morpheme or a serial verb and an applicative morpheme is blurred, as highlighted above. We propese that the underlying syntax is nonetheless largely the same.

Oblique cases, adpositions, serial verbs and applicatives are different lexical realization of relational predicates whose role is to add non-core participants to a verbal predicate. Following a series of recent works by Manzini and Savoia (2011), Franco et al. (2015), Manzini et al. (2015), Manzini and Franco (2016), Franco and Manzini (2017a, 2017b), among others, we lay out an analysis of the syntax and interpretation of obliques (genitive of, dative to, instrumental with, etc.), based on the idea that these items are endowed with an elementary relational content (inclusion, part-whole) interacting with the internal organization of the predicate/event.

We provide an approach to categorial variation in (oblique) argument marking, trying to outline a unified morpho-syntactic component, by which so-called "cases", "adpositions" or "applicatives" do not configure a specialized lexicon of functional features/categories - on the contrary they help us gain some insight into the basic ontology of human languages, of which they pick up some of the most primitive relations (cf. Section 2). These elemental relations are expressed by different lexical means: case, adpositions, light verbs, applicatives.

We start from the encoding of dative items. As for dative to, the line of analysis of ditransitive verbs initiated by Kayne (1984) is defined by the hypothesis that predicates like give take as their complement a predication whose content is a possession headed by to. Following in part Kayne (1984), Pesetsky (1995), Beck and Johnson (2004), Harley (2002), among others we may argue that in (11) a possession relation holds between the dative (Jack) and the theme of the ditransitive verb (the book). We characterize the content of to in terms of the notion of "(zonal) inclusion", as proposed by Belvin and den Dikken (1997) for the verbal item have (cf. also Kim 2012). We associate this content to an elementary part/whole predication and notate it as $\subseteq$, so that (11a) is roughly rendered as in (11b). In (11b) the result of the causative event is that the book is (zonally) included by Jack (cf. Manzini and Franco 2016).
(11) a. I give the book to Jack
b. $\left[\mathrm{VP}\right.$ give $\left[_{\text {Predp }}\right.$ the book $\left[\left[_{\subseteq}\right.\right.$ to Jack] $\left.\left.]\right]\right]$

In the line of analysis illustrated in (11), the alternation between Dative Shift (as in I give Jack the book) and DP-to-DP structures is not encoded derivationally (as in e.g. Larson 1988), but as an alternation between two different base structures. It is possible to assume that the head of the predication postulated by Kayne for English double object constructions is an abstract
version of the verb "have". ${ }^{4}$ Franco and Manzini (2017a) argue that this abstract have head assumed for Dative Shift is the covert counterpart of the adposition 'with' (see Levinson 2011). Indeed the with preposition can be overtly seen in the English minimal pair in (12):
(12) a. I presented the picture to the museum
b. I presented the museum with the pictures

Thus, it is possible to assume for (12b) the representation in (13), paralleling the one in (11b). We notate the relation encoded by with as ( $\supseteq$ ), assuming that the possessum/inclusee is the complement of the adposition and the possessor/inclusor its external argument. Substantially, we face with a relation which is the "mirror image" of to datives where the possessor is the complement of $\subseteq$ and the possessum is its external argument.
(13) $\left[_{\mathrm{VP}}\right.$ present $\left[{ }_{\mathrm{PredP}}\right.$ the museum $[[\supseteq$ with $]$ the pictures $\left.\left.\left.]\right]\right]\right]$

We also propose that oblique case is simply the name given to elementary predicative content when lexicalized as an inflection on a noun. Furthermore, syncretism depends on shared content, namely $\subseteq / \supseteq$ in the instances discussed here.

Specifically, in this paper, we claim that applicatives act as $\subseteq / \supseteq$ relators, providing support for the model of grammatical relations just sketched. We will show that the applicative/causative syncretism is explained in this model.

In the next section, we introduce an analysis of the syntax of causatives, which we will help us to set up our analysis of applicatives. We will show that causatives rely on a process of obliquization of the causee. Given the oblique nature of causees, as well as of instrumentals, beneficiaries, etc. it is predictable that natural languages may choose to project the same lexical elements in the syntactic component to express these kinds of meanings.

## 4. Causatives and the obliquization of the causee

Recently, Bellucci (2017), Manzini (2017), Franco et al. (forthcoming) argue that causees in causative constructions can be analyzed as oblique agents, configuring a syncretism of goals and agents in Italian (and, potentially, elsewhere). Consider the data in (14).

[^17](14) Italian
a. Ho fatto pulire la stanza a/da Gianni
'I made Gianni clean the room'
b. Ho dato un libro a Gianni
'I gave Gianni a book'
c. Michele è stato ucciso da Gianni
'Michele has been killed by Gianni'
The example in (14a) shows that causees in Italian can be introduced indifferently by the adposition $a$ or by the adposition $d a$ (with a set of possible restrictions not taken into consideration here, cf. Folli and Harley 2007). The preposition $a$ is the common device to introduce goals/recipients, as shown in (14b). In (14c), we may see that the adposition $d a$ is linked to the expression of agents in passives.

It is possible to account for the data in (14) assuming that in causative constructions, a phrases can be construed as agents (quirky subjects), configuring a common lexicalization (a syncretism in our view, cf. Section 2) of goals and agents (see Franco et al. forthcoming).

Baker (1988) argues that causative constructions of the Italian type, as sketched in (14a) are derived by movement of the embedded VP to a position contiguous to the matrix causative verb, from where incorporation of V to the causative predicate can occur. Thus, we are faced with a "restructuring" (Rizzi 1978) of the arguments of the embedded sentence: according to Baker, a complex predicate like make-clean in (14a), implying the presence of a causer, a causee and a theme/patient aligns them in the same fashion as ditransitive predicates, namely nominative-accusativedative. However, ditransitive consistently interpret the dative as a goal. By contrast, goal interpretation does not characterize the causee (see Section 5, where we show, for instance, that the causee-instrumental syncretism spreads far beyond the realm of applicative, cf. also Torrego 2010). Crucially, a problematic aspect of Baker (1988) is that it leaves us without an account for the da encoded causee (the so called faire-par construction in the literature, starting from Kayne 1975), where an embedded active verb is coupled with an external argument expressed through what appears to be a by-phrase (Baker 1988: 487, fn. 38). ${ }^{5}$

[^18]To overcome these difficulties, here we propose that external arguments in complements of causative verbs simply undergo a process of "obliquization" (Bellucci 2017), as schematized in (15) - where the external argument is in its expected Spec, vP position and the vP is itself in situ - for sentence (14a).
(15) $\left[{ }_{\mathrm{VP}}\right.$ fatto $\ldots\left[_{\mathrm{VP}} \mathrm{V}\left[{ }_{\mathrm{VP}}\right.\right.$ pulire la stanza $][\subseteq \mathbf{a} / \mathbf{d a}$ Maria $\left.\left.\left.]\right]\right]\right]$

What we must explain is why the complement structure in (15), with the oblique alignment of the external arguments, could not be embedded under any other matrix predicate than the causative verb (or a restricted set of causative/direct perception predicates, cf. also Moreno and Franco 2018). We follow Franco et al. (forhcoming) in claiming that a matrix predicate with pure CAUSE content selects directly a vP - or alternatively an IP lacking agreement properties and an EPP position. In either instance, an embedded nominative subject is blocked, forcing obliquization, or existential closure of the external argument variable, as in (16) (see also Manzini 2018 on passives).
(16) Italian

| Ho | fatto | pulire | la |
| :--- | :--- | :--- | :--- |
| I.have | made | clean | the |

It is possible to wonder why, of all verbal predicates, it is causative ones that select this kind of embedding. Franco et al. (forhcoming) state that "causative constructions allow a hyper-complex predicate to be formed, expressing the direct causation (or perception) of a caused event. This must be at the root of their selection properties (as in other treatments it underlies VP-movement or V incorporation or complex predicate formation)." In some languages, as in Italian causativization allows movement of the embedded object to matrix subject position, as in (17). Crucially, the oblique introducing the embedded external argument is indifferently $a$ or $d a$.
(17) Italian
La stanza è stata fatta pulire
(a/da Maria)

On the basis of the analysis of causative structures sketched above, we subscribe with Franco et al. (forhcoming) analysis of the free alternation of a and $d a$ in (14), or (17), involving the use of the $a$ phrase as an oblique agent/ causer. This configures an example of shared lexicalization (i.e. syncretism) of goals and agents, which may be understood once we assume that they have the same general $\subseteq$ relator content. With this background in mind we
are ready to address the causative-applicative syncretism, trying to account for it in syntactic terms.

## 5. The causative-applicative syncretism: an analysis

We interpret the causative-applicative syncretism, assuming that the syncretic morpheme is the applicative counterpart of an adpositional/case relator $\subseteq$, which as we have seen for Italian in Section 4 is able to intruduce goals and causee/ agents among other roles (e.g. allative, locative, etc.) with the same lexical means. Consider the data from P'orhépecha in (3) repeated in (18) for ease of reference.
(18) P'orhépecha (Capistrán Garza 2015: 145ff)
$\begin{array}{lll}\text { a. Xwánu } & \text { xwá-s- } \varnothing \text {-ti } & \text { tsíri } \\ \text { Juan } & \text { bring-PRF-PRS-3IND } & \text { corn }\end{array}$
'Juan brought some corn'


The fact that causees and instrumentals (both encoded via the verbal affix $r a)$ in P'orhépecha are oblique participants is ensured by the fact that they usually bear the oblique -ni inflection. The direct arguments in (18) do not bear such inflection: they are left unmarked. It is important to notice that P'orhépecha is a language that has Differential Object Marking (DOM), subject to animacy, specificity, definiteness parameters. This explains why direct internal arguments can occur with the oblique -ni inflection. In the examples in (19) we illustrated the contrast between the presence or absence of the morpheme -ni with internal theme/patient arguments. In (19a-c) the morpheme -ni on the internal argument yields a definite reading, while the presence of this morpheme on inanimate indefinite internal arguments yields a specific interpretation, as in (19d).
(19) P’orhépecha (Capistrán Garza 2015: 31-32)

| a. | Chalío | pyá-s- $\varnothing$-ti | ganádu/ganádu-ni |
| :---: | :---: | :---: | :---: |
|  | Chalío | buy-Prf-PRS-3IND | cattle/cattle-OBL |
|  | 'Chalío bought some cattle/the cattle’ |  |  |
| b. | xuchá | arhá-s- $\varnothing$-ka | kurúcha/kurúcha-ni |
|  | IPL | ingest-PRF-PRS-I/2IND | fish/fish-obl |
|  | 'We ate fish/the fish' |  |  |
| c. | Páblu | eshé-s- $\varnothing$-ti | yurhíri/yurhíri-ni |
|  | Pablo | see-PRF-PRS-3IND | blood/blood-obl |
|  | 'Pablo s | /the blood' |  |

d. xí pyá-a-ka ma k'waníntikwa/k'waníntikwa-ni

ISG buy-FUT-I/2IND one shawl/shawl-obl
'I will buy a shawl (non-specific/a particular one)'
P'orhépecha does not have any distinction between DOM and dative marking: goal recipients are marked with the same $-n i$ inflection, as illustrated in (20).
(20) P’orhépecha (Capistrán Garza 2015: 68)
xí íntsku-s- $\varnothing$-ka itsî(-ni) maríkwa-ni
ISG give-PRF-PRS-I/2IND water-OBL
'I gave the girl some water/some of the water'
In ditransitive constructions, the goal argument must be case marked, whereas the theme/patients has the same DOM-like restrictions as the internal argument of mono-transitive structures. Thus, goals in double object constructions are marked by the -ni morpheme, even if they are inanimate/ indefinite, as illustrated in (21), where the theme is unmarked and the goal necessarily bears the item -ni.
(21) P’orhépecha (Capistrán Garza 2015: 69)


It is relevant to consider that, cross-linguistically, "oblique" dative adposition/case is the preferred externalization for DOM objects (Bossong 1985; Aissen 2003; Malchukov 2008; Manzini and Franco 2016; Manzini et al. forhcoming, among others). P'orhépecha is not an exception. We provide just one other example from Sardinian in (22a).
(22) Orroli (Sardinia, Manzini and Savoia 2005):
a. appu tserriau (a) un ommini/ su yani I.have called Dом a man the dog 'I have called a man/the dog'
b. $\quad{ }_{\mathrm{VP}} v\left[_{\mathrm{VP}}\right.$ tserriau $\left[{ }_{\mathrm{PP} \subseteq} \mathbf{a}\left[{ }_{\mathrm{DP}}\right.\right.$ un ommini $\left.\left.\left.]\right]\right]\right]$

According to Manzini and Franco (2016) the syncretism of dative and DOM, is based on the fact that the same lexical content $\subseteq$ (cf. Section 3) is instantiated in both contexts, as seen in structure (22b) for sentence (22a). As illustrated in (22b), object DPs highly ranked in animacy/definiteness/
specificity require for their embedding the same elementary oblique-introducing predicate $\subseteq$ required for goals/recipients (as well as for causees, as we have shown in Section 4). Indeed, we have seen that in (11b) above the arguments of $\subseteq$ are the two DPs, respectively Jack and the book, the former being in possession of the latter as the result of the event of giving. In (22b), the two arguments of $\subseteq$ (instantiated in Sardinian by the goal adposition $a$ ) is again its object DP (un ommini 'the man') - however it is not clear what its external argument might be.

Manzini and Franco (2016) follow the standard idea of Hale and Keyser (1993), Chomsky (1995), who assume that transitive predicates result from the incorporation of an elementary state/event into a transitivizing $v$ layer. Within such a framework, (22b) can be rendered as 'I cause the man to have a call', where 'him' is the possessor of the 'call' sub-event. Therefore the $\subseteq$ relation holds of a DP (the man) and of an elementary event 'the call' (see Torrego 2010; Pineda 2014 for different implementations of the same basic idea).

We can assume that the same state of affairs holds in P'orhépecha. For example we can give the representation in (23) for (19c).
$\left[_{V P} v\left[\left[_{V P}\right.\right.\right.$ eshé $\left[_{K P \subseteq}\left[\left[_{D P} \text { yurhíri }\right]_{K \subseteq}\right.\right.$ nil] $]$
We propose that, given the theoretical approach just sketched above, it is possible to assume that all the NPs bearing the inflection $-n i$ in P'orhépecha are oblique participants, requiring a relational predicate to be inserted into the verbal spine. ${ }^{6}$ The arguments of adpositions, as in (24a), and applicatives, as in ( $24 \mathrm{~b}, \mathrm{c}$ ), require the same $-n i$ inflection. ${ }^{7}$

[^19](24) P’orhépecha (Capistrán Garza 2015: 106ff)
a. María-eri kúchi wántiku-na-s- $\varnothing$-ti Chalío-ni ximpó

Maria-Gen pig kill-pass-prf-prs-3ind Chalío-obl postp
'Maria's pig was killed by Chalío'
b. imá acháati wántiku-p'i-ra-s- $\varnothing$-ti pistóla-ni
that man kill-INDF.OBJ-APPL-PRF-PRS-3IND gun-OBL
'That man killed (people) with a gun'
c. María-ni xanó-appl-s- $\varnothing$-ti ma karákata Maria-obl arrive-APPL-PRF-PRS-3IND one writings 'A letter arrived for Maria'

Following Franco and Manzini (2017a) we argue that adpositional/applicative items (in languages with or without inflectional obliques), provide restrictions of the basic contents such as $(\subseteq) /(\supseteq)$, as illustrated in (25). This is evident in the example in (24a), where at least two structural layers characterize the demoted agent Chalio-ni ximpó 'by Chalío'. The deepest layer is the oblique $-n i$ case inflection (a ( $\subseteq$ ) relator in present terms), simply introducing the additional argument/participant to the spine of the event. We can take the specific agentive relation to be introduced by the Postpostional layer, which can be taken to be an Axial Part (AxPart) shifted to a nonlocative domain (Svenonius 2006), or a category which is the non-locative counterpart of AxPart. The same reasoning is possible for instrumental (24b) and benefactive (24c) applicatives in P'orhépecha.

$$
\begin{equation*}
\ldots\left[{ } _ { \mathrm { PP } } \left[\mathrm{KP}_{\mathrm{K})}\left[{ }_{\mathrm{N}} \text { Chalío] -ni] ximpó }\right]\right.\right. \tag{25}
\end{equation*}
$$

Nothing prevents even further layers from specifying the reference of an oblique argument. For instance, in P'orhépecha the applicative meaning can be 'doubled' by adpostional/case inflection values. Indeed, instrumentals can be introduced as obliques via the postposition ximpó (26a), ${ }^{8}$ through the instrumental case $-m p u$ (26b), by the applicative/causative $-r a$ and (allomorphs), as already shown in (3b,c)=(18b,c) or by a combination of the applicative morpheme and case/adpositional devices, as in (26c, 26d).
(26) P'orhépecha (Capistran Garza 2015: 114ff)
$\begin{array}{llll}\text { a. xí } & \text { ichárhuta-ni ximpó } & \text { xwá-a-ka } & \text { p'atsímu } \\ \text { 1SG canoe-OBL POSP } & \text { bring-FUT-I/2IND } & \text { reed } \\ \text { 'I will bring reed in the canoe/by canoe' } & & \end{array}$
diagnostics of c-selection We can assume that in P'orhépecha adpositions (and applicatives) consistently mark their complements as obliques.
${ }^{8}$ Note that the adposition recruited to introduce instrumentals in P'orhépecha is the same introducing demoted agents (cf. (23)). This use of the same lexical item to intruduce agents and instruments is quite common cross-linguistically (cf. Palancar 2002).


The availability of different means/layers to encode obliques is very common crosslinguistically. Just consider the Italian pair in (27), where the same instrumental value can be expressed either by the adposition con or by the lexical string per mezzo di ('by means of').
(27) Italian
a. Ha avvertito la fidanzata con un telegramma
'S/He alerted the fiancée with a telegram'
b. Ha avvertito la fidanzata per mezzo di un telegramma
'S/He alerted the fiancée with a knife' (lit. '...for mean of a knife')

Now that we have provided evidence for the oblique status of the 'object' of applicative morphemes (at least in P'orhépecha), we can illustrate our analysis of the applicative=causative syncretism.

We follow Pylkkänen $(2002,2008)$ in assuming that there are two basic kinds of applicative arguments: a High Applicative which is introduced by a head attaching outside of VP and relating an individual to an event and a Low Applicative argument which is introduced by a head attaching below VP and relating two entities involved in a transfer of possession (i.e. "in a giving environment"). As for interpretation, in the Applicative literature (Pylkkänen 2008: 13), instrumentals and benefactives are assumed to be encoded as High Appls, as opposed to Low Appls like goal datives: High Appl heads appear in an intermediate position between VP and v and express a relation between the oblique argument in their Spec and the VP event. We follow the Appl literature in assuming that instruments/benefactives correspond to High Appls, generated in an intermediate layer between VP and vP. Note that in P'orhépecha instrumental and benefactive applicatives represent the layer most closely associated to the verbal root: no other suffixes can be inserted between them. ${ }^{9}$

[^20]Based on the discussion of instrumentals (and benefactive) in Franco and Manzini (2017a), we propose that these relations can be reduced to an inclusion predicate notated as ( $\supseteq$ ) (cf. the representation in (13)). This yields a simplified structure of the type in (28), where the instrumental $\operatorname{Appl}(\supseteq)$ takes as its two arguments the oblique DP instrument and the VP event. ${ }^{10}$
a. xíx wá-ra-s- $\varnothing$-ka-ni

ISG bring-APPL-PRF-PRS-1/2IND-ISG.SBJ
'I brought some water with a pot'
b.


In (28) the $(\supseteq)$ relation holds between 'a pot' and the event of 'water bringing', saying that such event includes 'a pot'. Following Alexiadou et al. (2015), Schäfer (2012), Franco and Manzini (2017a), we assume that instruments are naturally associated with transitive events. Nothing prevents however applicative arguments to be introduced by unaccusative predicates (e.g. as causers, locatives, etc.), as we have seen in (6a,b), but instruments are exclusively defined in the presence of an external argument introduced by vP (cf. also Bruening 2012).

Instruments are inanimate objects of $\operatorname{APPlP} / \mathrm{PP} / \mathrm{KP}(\supseteq)$ included in a caused event. The general interpretation of the structure in (28) is that the object of $\operatorname{Appl}(\supseteq)$ is a "concomitant" participant of the VP result state (cf. the discussion in Section 1). It basically says something like: "I caused brought

Appl=Caus. Note however that they are still the morphemes more tightly attached to the root and that no TMA markers can be inserted in between.
${ }^{10}$ An anonymous reviewer wanted us to adhere to the structure proposed in Franco and Manzini (2017), in which the instrumental DP is the sister of the relator ( $\supseteq$ ) and the VP event is its specifier. We have fulfilled her/his request. Nevertheless, we just point out that, standardly, applied instrumental participants are taken to be generated in Spec,ApplP (cf. Pylkkänen 2008) right above V. Thus, we can imagine an alternative structure in which the $(\supseteq)$ relation takes the VP event as its complement and the instrumental participant as its specifier. The same holds for causees, as illustrated in the structure in (31b). We leave this issue for future research of the topic.
water and this result includes a pot". Namely, the VP result event is in turn embedded under a causation predicate; in this precise context, it is interpreted with the inanimate oblique playing the role of 'instrument of' the external argument in Spec,vP (the initiator of the event, cf. Marantz 1984) (Franco and Manzini 2017a).

Given the characterization of instruments sketched above, it is possible to see how the same syntax as in (28) is able to introduce the causee of causative constructions. We have seen that High Appls are responsible for adding an extra participant to an event and that the P'orhépecha morphemes -ra (with the allomorphs -ta, and -tara) increase the valence of a predicate, given that they introduce an argument which is construed as bearing a causee or instrument role.

As we have show in Section 4, causatives in Italian are expressed by a matrix predicate with pure CAUSE content which selects directly a vP lacking a licensing slot for the expression of the causee as a direct argument (or an IP lacking agreement properties and an EPP position): Such impoverished environments crucially lack a structural case position for the external argument. ${ }^{11}$ Applicatives are precisely syntactic devices made available by Universal Grammar for the introduction of additional non-core arguments in the verbal spine, when structural positions are unavailable.

The distinction between causees and instrumentals may be blurred also in language introducing causees and instruments by means of adpositional devices. Just to give an example, in Hindi the causee usually surfaces as an instrumental (Ramchand 2011). Moreover consider the following Italian data.
(29) a. Il medico ha fatto guarire il paziente con le/*alle erbe 'The doctor made the patient recover with the herbs'
-> le erbe hanno guarito il paziente 'The herbs cured the patient'
b. Il medico ha fatto guarire il paziente allo/dallo/\#con lo specializzando 'The doctor made the trainee cure the patient'
-> 'lo specializzando ha guarito il paziente' 'the trainee cure the patient'
a'. Il principe ha fatto eliminare il rivale col veleno 'The prince has the rival eminated by the poison'
-> 'il veleno ha eliminato il rivale' 'The poison eliminated the rival'
b'. Il principe ha fatto eliminare il rivale al/dal/\#con lo scagnozzo 'The prince has the rival eliminated by the henchman'
-> 'lo scagnozzo ha eliminato il rivale' 'the henchman eliminated the rival'

[^21]In (29a, a'-b, b') the causative predicates can be assumed to have "inanimates causees" introduced by the (instrumental) adposition con. The fact that these participants can be interpreted as causees in such contexts is ensured by the fact that they can surface as the subjects of the base predicates from which causatives are derived, as illustrated in the examples in (28). Animate causees in the same environments are standardly externalized by the adposition a/da (cf. Section 4). If they are introduced by the con adposition the only possible reading is comitative, either subject or object oriented (cf. Yamada 2010). Thus, it is possible to assume that the instrumental marked inanimate causees in (29) are nothing else than Differentially Marked Causees, based on an animacy scale. In any event, the link between causees and instruments in ensured by the Italian data provided above.

Nothing prevents multiple adjuncts in minimalist syntax (Chomsky 1995), and both inanimate (instrument) and animate (canonical) causees can be present in the same sentence. Following Franco and Manzini (2017: 31) on the ergative instrumental syncretism, we assume that both the causee and the instrument are adjoined at the VP level. Consider the example in (30a) and the possible representation in (30b). ${ }^{12}$ The interpretation is that of a complex causal chain of the type: "the prince cause the henchmen to cause the poison to be involved in the killing of a rival".
(30) a. Il principe ha fatto eliminare il rivale col veleno al/dal/\#con lo scagnozzo 'The prince had the rival eliminated with poison by the henchman'
b.

${ }^{12}$ We abstract away from the issue of the orientation of the $\subseteq$ vs. $\supseteq$ relator, possibly instantiated by different lexical means in a given language (e.g. $a$ vs. con in Italian). For a detailed account, the interested reader may refer to Franco and Manzini (2017a), who assume that (inanimate) instruments are introduced by a $\subseteq$ relator. Here, following Manzini et al. (forhcoming), we take that a $\subseteq$ relator introduce the (animate) causee.

Hence, it is easy to see how it is possible to have applicative morphemes recruited to introduce causees and instrumental participants (more generally arguments linked to the high applicative projection). (High) applicatives are elementary relators linking an oblique argument to the event depicted by a VP. As we have seen in Section 3, they are one of the possible devices made available by Universal Grammar to increase the valence of a predicate. Crucially, as already documented in Cole (1983) the syncretism between instrumentals and causees is widespread beyond the realm of applicatives: instrumental adpositions and instrumental cases are often employed as the unmarked way to encode the causee in many different languages (e.g. Hungarian, Kannada, Hindi etc., just to mention some non-exotic examples).

Thus, for what specifically concerns the applicative-causative syncretism, we may simply assume that causees are inserted in the syntax as 'applied arguments' (just as instrumentals, beneficiaries or other roles linked to the High Appl projection). A possible representation is given in (31) for the P'orhépecha example in (18b). We assume that the structure is practically the same as in (28).

| a. | María | xwá-ra-s- $\varnothing$-ti | Xwánu-ni |
| :--- | :--- | :--- | :--- |
| Maria | bring-CAUS-PRF-PRS-3Íri |  |  |
| 'Maria made Juan bring some corn' | Juan-obl | corn |  |

b.


Following Franco and Manzini (2017a), the $(\supseteq$ ) relation between the applied (causee) argument and the VP event in (31) yields inclusion in an event/concomitance with it. The causee applicative $(\supseteq)$ is in turn embedded under a causation predicate (vP), just like the instrumental applicative. The causative reading is then inferred based on what the structure actually says, namely for (31): "Maria caused the inclusion of Xwánu (or Xwánu to be included) in the event of 'bringing corn". Thus, the applicative data illustrated in this paper strongly support Franco and Manzini (2017a)'s idea that $\subseteq / \supseteq$ are linked to vP or VP predicates as generic 'oblique' participants. Specifically,
we can assume that causees and instruments are distinguished depending on a rather elementary ontology including the ranking of the event oblique participants in the animacy hierarchy (here, evidently human vs. non-human, cf. also Peterson 2007).

## 6. Conclusion

This paper addressed the applicative-causative syncretism, which is an overlooked pattern of morpheme polysemy attested in many different natural languages. We interpreted the causative-applicative syncretism as based on a shared syntactic configuration. Specifically, we have argued that the syncretic morpheme under investigation is the applicative counterpart of an adpositional/case elementary relator (Manzini and Franco 2016; Franco and Manzini 2017a), attaching instrumental or benefactive obliques (High Applicatives, cf. Pylkkänen 2002, 2008) to the verbal spine. We follow Bellucci (2017), among others, in assuming that causees can be introduced as obliques, potentially linked to the same structural position as High Appls. The causative reading of the sentence is interpretively driven, while the syntax is basically the same as for the instrumental (cf. Franco and Manzini 2017a). This explains the possibility of encoding causatives and applicatives with the same lexical material.

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# Comparing Patterns of Adjectival Modification in Greek: A Diachronic Approach 

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#### Abstract

: This paper investigates the distribution of adjectives in Ancient Greek, with the aim of comparing it to Standard Modern Greek. We use a selection of texts from Classical Attic and New Testament koiné. In Ancient Greek, like in Standard Modern Greek, all types of adjectives are allowed in prenominal position, and there is no evidence of movement of the noun over prenominal adjectives. As far as postnominal adjectives are concerned, in Classical and New Testament Greek they are systematically articulated in definite DPs, in a structure similar to the so-called polydefinite construction, that is typical of Standard Modern Greek. There is little evidence, in the texts explored, of structures of the type Article Adjective Article Noun, which are instead very common in Standard Modern Greek, and have been assumed to result from fronting the constituent [Article+Adjective] from its postnominal position. Finally, in Ancient Greek, there are cases of postnominal articulated non-adjectival modifiers of the noun, which are impossible in Standard Modern Greek. The paper explores these patterns, with particular attention to the mechanisms underlying polydefiniteness.


Keywords: Adjectival Modification, Classical Greek, New Testament Greek, Polydefiniteness, PostnominallIPrenominal Adjectives, Standard Modern Greek

## 1. Introduction ${ }^{1}$

In this paper we attempt a preliminary description of the distribution of adjectives in Ancient Greek (henceforth AG) based on current theoreti-

[^22]cal assumptions about adjectival modification in Standard Modern Greek (henceforth SMG). Our survey is based on the systematic scrutiny of the following sources: ${ }^{2}$
(1) a. Classical Attic: Plato's Apology, Cratylus and Symposium (CG)
b. Hellenistic koiné: the four Gospels (NTG)

From the aforementioned texts, we selected all the nominal structures containing (at least) one adjective which modifies a visible head noun. Amongst them, we singled out the following ones: nominal structures found in argument position (i.e. subjects or direct complements of verbs), nominal structures found in the complement position of a prepositional phrase, nominal structures used as adverbials. We excluded those found in predicative position, vocatives and discontinuous structures (Devine and Stephens 2000). We kept apart cardinal numerals, $\varepsilon \tau \varepsilon \rho \circ \varsigma$, ä $\lambda \lambda$ o $\varsigma$ and $\mu$ óvoç. Finally, we didn't consider, in the present analysis, the distribution of universal, indefinite and negative quantifiers. ${ }^{3}$

The data are described in section 3, where we sketch an overview of the distribution of adjectives in our corpus, focusing in particular on:
(2) a. Prenominal adjectives. We provide a synopsis of the classes of adjectives found in prenominal position.
b. Postnominal adjectives. We show that (most of) the adjectives found in prenominal position are also found in postnominal position. In the latter case, in definite DPs, they are systematically preceded by a copy of the definite article, a phenomenon very similar to the so-called "polydefiniteness" in SMG.
${ }^{2}$ The discussion proposed in this paper is based uniquely on the data which we collected from a detailed inspection of the textual sources listed in (1). Thus, what we propose here is a description of the "grammar(s)" manifested by such texts (as if they were, ideally, the output of their authors' I-languages). Whether our conclusions can be extended to other texts composed by other authors in the same historical period, or belonging to other types of literary styles, is a matter of further empirical testing. It is important to mention, however, that out results have been compared to other available works on these topics. As far as CG is concerned, Bernasconi (2011), based on Demosthenes' Philippics 1-3 and Olinthiacs 1-3, Isocrates' Aegineticus and Against the Sophists, Lysias's On the murder of Eratosthenes and On the refusal of a pension, is of particular relevance for our purposes because the data were selected and explored according to criteria which largely match those adopted in the present paper: as a matter of fact, the results are fully consistent with ours. As far as the Hellenistic koiné is concerned, Manolessou (2000) discusses data which are largely comparable (and actually consistent) with ours, as will be shown further below. For a more detailed description of the criteria adopted for the choice of the textual sources, and of the problems raised by literary texts (and closed-corpora languages more generally), see Guardiano (2019).
${ }^{3}$ See also Manolessou (2000) for an overview of all these types of modifiers.

The major differences which emerge from a comparison with SMG are the following:
(3) a. Instances of articulated prenominal adjectives (of the type Art Adj Art $N$ ) are very rare in our corpus, while they are normal in SMG.
b. In AG, the article can (but does not have to) be "doubled" with postnominal modifiers other than adjectives (e.g., participles, genitives, prepositional phrases, adverbs), a possibility that is excluded in SMG.
c. In the polydefinite construction, the (postnominal) [Art+Adj] constituent can be preceded by a (non-articulated) modifier of the noun (a demonstrative or a pronominal genitive) that follows the noun itself. This possibility is very marginal in SMG, where the [Art+Adj] constituent must generally be adjacent to the head noun.

Our proposal is that the differences in (3a) and (3b) follow from phenomena which are not directly linked to the structure that generates polydefinite sequences. As far as (3c) is concerned, we show in section 4 that the analysis we adopt for polydefinite structures in SMG can also account for the AG patterns.

Our analysis takes as a point of departure our current knowledge of the syntax of adjectives in SMG, in particular the set of assumptions about the nature of prenominal and postnominal modification explored in Guardiano and Stavrou (2019), which is briefly summarized in section 2.

In previous works on other topics, Guardiano (2003, 2006, 2012a, $2016,2019)$ has provided data which suggest that the word order patterns involving articles, nouns and adjectives found in AG are consistent with those observed in SMG: yet, no specialized analysis has ever been pursued systematically for AG. In this paper, we suggest a very preliminary attempt.

## 2. Patterns of adjectival modification in Standard Modern Greek: our analysis

In this section, we provide a brief description of the theoretical background that we use as a base for our discussion of AG. We start from the analyses which account for the syntax of adjectives in SMG.

According to recent approaches to the syntax of adjectives (Alexiadou et al. 2007; Cinque 2010; Guardiano and Stavrou 2019, a.o.), there are two (sets of) merge positions available universally for adjectival modifiers. Direct modifiers are assumed to be merged in "a set of functional projections which are hierarchically structured" (Alexiadou et al. 2007: 311-312) and originally prenominal. Such positions are ordered according to a semantic hierarchy first proposed by Sproat and Shih (1991) and subsequently taken up by almost all the researchers working in the field of adjectival
modification, ${ }^{4}$ of which we present an instantiation in (4), from Alexiadou et al. (2007: 310, 37a).
(4) Quantification/Numeral > Quality/Speaker-oriented $>$ Size > Shape/Color > Provenance/Argument

The English example in (5) (Alexiadou et al. 2007: 310, 37b) is a typical illustration of such a hierarchy. ${ }^{5}$
(5) the three beautiful big white Persian cats

$$
\begin{array}{cccccc} 
& \text { D quantification quality size color } & \text { provenance } & N \\
{\left[_{\mathrm{DP}} \mathrm{D}\right.} & {[\mathrm{Num}} & {[\mathrm{AP} \text { (qual) }} & {[\mathrm{AP} \text { (size) }[\mathrm{AP}(\text { sh/col })} & {[\mathrm{AP}(\text { prov })} & \left.\left.\left.\left.\left.\left[_{\mathrm{NP}}[\mathrm{~N}]\right]\right]\right]+\right]\right]\right]^{6}
\end{array}
$$

The source where indirect modifiers ${ }^{7}$ are assumed to be generated is often referred to as a predicative-like structure: a reduced relative clause according to Kayne (1994), Alexiadou and Wilder (1998), Alexiadou (2001), Cinque (2010), a.o., or a small clause (Demonte 1999).

In SMG, every (type of) adjective can occur to the left of the noun ("in Greek all adjectives are prenominal", Alexiadou et al. 2007: 364). Prenominal adjectives are usually ordered ${ }^{8}$ according to the hierarchy in (4), as shown in (6). In this configuration, concord in phi-features, definiteness and case between the adjective and the noun is obtained through Spec-Head (Giusti 2008, 2009, 2011).
(6) $\left.\begin{array}{lllllll} & \text { i } & \text { tres } & \text { omorfes } & \text { megales } & \text { aspres } & \text { persikes } \\ \text { the } & \text { three } & \text { beautiful } & \text { big } & \text { white } & \text { Persian } & \text { gates } \\ & D & \text { quantification } & \text { quality } & \text { size } & \text { color } & \text { provenance }\end{array}\right] N$
${ }^{4}$ See the literature discussed in Scott (2002), Alexiadou et al. (2007), Cinque (2010).
${ }^{5}$ The pre-/post-nominal linearization of the adjectives generated in prenominal position has been assumed to be contingent on the movement of the head noun or of the NP (Grosu 1988; Valois 1991a, 1991b; Bernstein 1991, 1993; Crisma 1991, 1996; Cinque 1994, 1999, 2005, 2010; Giusti 1993, 2002; Longobardi 1994, a.o.); NP-movement may also be supplemented by remnant movement (Shlonsky 2004; Laenzlinger 2005, a.o.).
${ }^{6}$ Direct modifiers have been assumed to merge either as specifiers of dedicated functional projections (Cinque 2010), or as syntactic heads (Abney 1987; Delsing 1993; Androutsopoulou 1995, among several others).
${ }^{7}$ The term indirect modification was first introduced by Sproat and Shih (1991), who showed that adjectives can also modify indirectly a noun via a relative clause of which they are part.
${ }^{8}$ Permutability among adjectives is sometimes possible if a change in scope or focus is induced (Cinque 2010).

In SMG, many (though not all) adjectives can also appear postnominally. ${ }^{9}$ In definite DPs, postnominal adjectives must be preceded by a definite article that "doubles" the definite article preceding the noun: cf. (7a) vs. the ungrammaticality of (7b).
(7) a. to pedi to kalo
the child the good
'the good child'
b. *to pedi kalo

The phenomenon in (7a) was called "determiner (or definiteness) spread(ing)" by Androutsopoulou (1995), and the noun phrase where articulated adjectives appear is dubbed "polydefinite". ${ }^{10}$ The phenomenon is typical of every day, colloquial language; it is not attested in most written genres, where prenominal adjectives seem to be the rule. As will be pointed out below, polydefinite constructions are attested throughout the history of Greek (Manolessou 2000, Guardiano 2003, 2016), at least ever since a definite article in D was developed: indeed, "the presence of determiners within the noun phrase realizing D is a prerequisite for the presence of the multiple pattern" (Alexiadou 2014: 4).

One further type of polydefinite construction (the sequence Art Adj Art $N$ ) is exemplified in (8).
(8) to kalo to pedi the good the child
'the good child'
According to Manolessou (2000), in Medieval Greek the sequence Art $\operatorname{Adj} \operatorname{Art} N$ is typical of non-literary styles: "in more literary verse texts [...] [it] is either non-existent or rare, while in more popular texts it is much more frequent" (Manolessou 2000: 150).

The position of the adjective in this sequence has been analyzed as a consequence of fronting the constituent $[\mathrm{Art}+\mathrm{AP}]$ from its postnominal position to the left of D. Such a movement is usually associated to informational markedness (e.g., focus); thus, it is not surprising that it is absent from (or very rare in) written texts, where discourse markedness strategies are normally not employed. ${ }^{11}$

[^23]The analyses proposed for polydefiniteness so far are many and different. Here, we adopt Stavrou's $(2012,2013)$ proposal, extensively described in Guardiano and Stavrou (2019), where we refer for details and exemplification, as well as for an overview of other approaches to the phenomenon. For the purposes of the present study, we briefly summarize its major points.

Stavrou's approach assumes that, in SMG, postnominal adjectives are indirect modifiers, originated inside a clausal structure. In the spirit of Campos and Stavrou (2004), she assumes a DP-internal predicative structure the head of which mediates the predication relation. A simplified version of this structure is given in (9), and represented as a tree graph in Figure 1: the adjective originates as the complement of Pred, while the NP is in the specifier of PredP. ${ }^{12}$



Figure 1
The adjectival article is taken to be the spell-out of Pred. Pred carries all the relevant nominal features (gender, number, case, and a feature that we call "def") which are also carried by D. In SMG, the feature [+def] must always be spelled out: its default realization is the morpheme identified as the definite article. Pred agrees with D in [+def] (along with case, gender and number). The requirement for overt agreement between a noun and the
agree with this observation; in fact, one of the reasons for the choice of Plato's dialogues is precisely that they are more likely than other texts to contain patterns which reflect actual spoken language. As a matter of fact, as will be shown in more detail below (see especially example 17), our corpus contains only one actual instance of the sequence $\operatorname{Art} \operatorname{Adj} \operatorname{Art} N$.
${ }^{12}$ 'to vivlio to kalo', lit. 'the book the nice', can be paraphrased by a copulative clause, i.e. as 'the book is nice'. The same holds in an indefinite DP.
adjective(s) which modify it is a strong property of SMG: this type of concord ${ }^{13}$ is effected straightforwardly if the adjective is merged prenominally (Cinque 2010; Giusti 2008, 2009, 2011; see also Koopman 2006). On the contrary, if the adjective is merged postnominally, some mediator is required. Pred takes up precisely that function: it is a functional element that mediates concord in [+def], phi-features and case ${ }^{14}$ between noun and adjective (or between subject and predicate). It is important to stress here that, in our notation, the feature which we call [+def], besides definiteness, also encodes the referential interpretation of kind names and proper names (Longobardi's [2008] person); in fact, in SMG, the "definite" article is obligatory with proper and kind names. ${ }^{15}$

An important consequence of Stavrou's hypothesis is that the "definite" article on postnominal adjectives in the polydefinite construction has the purely formal role of being the spell-out of Pred. ${ }^{16}$

As mentioned above, the order Art $\operatorname{Adj} \operatorname{Art} N$ in (8) is assumed to follow from fronting the costituent [Art+AP] to the left of D. ${ }^{17}$ This movement is triggered by the feature [+contrast] (or [+focus], or both) with which the articulated adjective is endowed: in polydefinite DPs, the adjective receives emphatic pitch accent and is also pragmatically focal because it stands for the new information, whereas the denotation of the noun represents old or background knowledge. ${ }^{18}$

One final remark which is important for the purposes of our discussion concerns the possibility for more than one (postnominal) articulated
${ }^{13}$ Here we use the term concord following Giusti $(2008,2009,2011)$ who argues that concord is a consequence of the Spec-Head relation and is different from agreement if by that it is the agreement between verb and subject that is intended. For Giusti, agreement is a consequence of selection, while concord is a consequence of modification.
${ }^{14}$ Concerning case, an important part of this analysis is the assumption that, in SMG, the lexicalization of the feature [+def] has the further effect of realizing morphological case (whose morphological realization is a prominent feature in SMG) on Pred. In other words, [+def] and case are inextricable; that means that wherever there is a morpheme that spells out [+def] there will also be (morphological) case (Guardiano and Stavrou 2019).
${ }^{15}$ For a more thorough account of the functions of the definite article in SMG see also Roussou and Tsimpli (1994).
${ }^{16}$ This is also in line with those analyses that assign an expletive character to the adjectival article in polydefinite DPs (cf. Androutsopoulou 1995), while attributing definiteness to either a postulated DefP (Lekakou and Szendroi 2012), or a dedicated Iota Phrase (Kyriakaki 2011). As far as indefinite DPs are concerned, the structure is the same as in (9). Like in definite DPs, concord between adjective and noun is achieved through the relation of predication, mediated by Pred, though with Pred remaining silent, because it is not endowed with [+def] (Alexiadou and Wilder 1998; Stavrou 2012).
${ }^{17}$ Horrocks and Stavrou (1987), Stavrou and Horrocks (1989), Campos and Stavrou (2004), Guardiano and Stavrou (2014, 2019), Guardiano and Michelioudakis (2019), a.o.
${ }^{18}$ The assumption of having a left periphery in the DP constitutes a central part of the analysis of a number of studies of polydefiniteness and not only for Greek (cf. Ntelitheos 2004; Campos and Stavrou 2004; Giusti 2005, 2006; Cornilescu and Nicolae 2011, a.o.).
adjective to occur within one and the same DP. This is ungrammatical for most speakers of SMG, although some of them marginally accept multiple postnominal adjectives (Guardiano and Michelioudakis 2019: 323-325). Notice that these sequences are not compatible with (9), which is assumed to generate polydefinite DPs where the adjective is strictly adjacent to the head noun, and cannot be duplicated. The problem is discussed in Guardiano and Michelioudakis (2019: 327-329). According to their proposal, multiple modification can be accounted for "assuming a recursive structure" in SpecPredP; in Figure 2, we present a modified version of the structure they propose on p. 328 (example 11).


Figure 2
The fact that structures with two postnominal adjectives are very rare in SMG is likely to follow from the plausible assumption that recursive structures of the type proposed in Figure 2 are "harder to process, [which] arguably also explains why, for many speakers, [these] strings [...] are less preferred or even degraded and/or require an intonational break separating additional APs" (Guardiano and Michelioudakis 2019: 329).

According to Guardiano and Michelioudakis (2019), the structure in Figure 2 would also account for sequences where an articulated noun is followed by a demonstrative and an articulated adjective (Art N Dem Art Adj). ${ }^{19}$ This is based on Guardiano's (2012b, 2014, in prep) analysis of Greek demonstratives, according to which demonstrative items in Greek have the same

[^24]structural source as (postnominal) adjectives. Along these premises, the analysis of postnominal (polydefinite) adjectives proposed in (9) can be extended to demonstratives too. It must be noted, additionally, that, crosslinguistically, demonstratives are intrinsically (lexically) endowed with [+def]. Thus, the difference between an adjective and a demonstrative generated in (9) is that the latter contains [+def] and, as such, it is by itself able to spell out Pred, with no further need of the definite article (for an earlier formulation of this proposal see Horrocks and Stavrou 1987, Stavrou and Horrocks 1989). To sum up, demonstratives actually stand for the complex [Pred+AP] (Guardiano 2012b, 2014, in prep; Guardiano and Michelioudakis 2019). As a consequence, if the recursive structure in Figure 2 holds true of SMG, it can be assumed to also generate sequences $\operatorname{Art} N \operatorname{Dem} \operatorname{Art} A d j$, where the demonstrative replaces the [Pred +AP ] unit corresponding to 'to kokino': 'to amaksi afto to akrivo'.

In section 3, we explore the distribution of adjectives in AG, in order to check whether it is compatible with the analysis proposed for SMG.

## 3. Patterns of adjectival modification in Ancient Greek

### 3.1 Background information

The data presented in sections 3.2, 3.3 and 3.4 are organized on the basis of the following specifications:
(10) a. Nominal structures with a visible article have been set apart from nominal structures with no visible article (sections 3.2 and 3.3, respectively).
b. We restrict our analysis to nominal structures found in argument position (i.e. subjects or direct complements of a verb), in the complement of a prepositional phrase, or used as adverbials. Discontinuous structures, vocatives, adjectives and nominals found in predicative position were excluded.
c. Nominals modified by cardinal numerals, ét $\varepsilon \rho \circ \varsigma$, öd $\lambda \lambda$ o $̧$ and $\mu o ́ v o \varsigma$ are treated apart. ${ }^{20}$
d. Nominals modified by universal, negative and indefinite quantifiers ${ }^{21}$ have been excluded from the present survey.

### 3.2 DPs with a visible article

As far as the linearization of D , head noun $(\mathrm{N})$ and adjective (A) is concerned, six orders are possible in principle: ${ }^{22}$

[^25](11) a. D A N
b. D NA
c. A D N
d. NDA
e. NAD
f. A N D

Greek is uniformly head-initial: thus, the patterns (11e) and (11f), with the head D in phrase-final position, are unexpected. In fact, they are unattested in the corpus: the phrase-initial position of $\dot{o}, \dot{\eta}$, tò (which we assume to be merged in D ) is persistent across the history of the language (Guardiano 2016, 2019).

The pattern (11d) is very rare in the corpus. The 5 instances that we found are shown in (12). ${ }^{23}$
(12) N D A
a. John 14.27

'peace I leave with you, peace, my own one, I give to you'
b. Luke 15.22

'quickly bring a robe, the first one'
c. Apology 29 d 7-8
 борíav каì ìбұण́v
'most excellent man, who are a citizen of Athens, a city (that is) the greatest and the most famous one for wisdom and power'
d. Symposium 191 b 3-4

'if it might happen on a part of the whole of a woman'
e. Cratylus 397 e 8 - 9

'nor that he says a golden race was the first (race) of men to be born?'
(1908), Robertson (1919), Marouzeau (1922), Chantraine (1961), Humbert (1945), Dover (1960), Palm (1960), Brunel (1964), Meillet (1975), Rix (1976), Blass and Debrunner (1976) and, for more recent surveys, Adrados (1992), Brixhe (1993), Dik (1995, 2007), Horrocks (1997), Manolessou (2000), Guardiano (2003), Bakker (2009).
${ }^{23}$ This pattern is also discussed in Manolessou (2000: 147). She provides some examples and she comments (consistently with our observations) that "the head noun in these constructions is articleless exactly in these cases where the absence of the article would be justifiable for independent reasons".

As far as (12a) is concerned, as suggested by the translation, the sequence $N$ Art Adj arguably reflects two separate DPs: $\varepsilon i ̣ \not ŋ ́ v \eta v$, that has the structure [ ${ }_{\mathrm{DP}} \mathrm{D}[\mathrm{NP}]$ ], with an empty D (see section 3.3 for other examples of empty Ds in AG), and $\tau \eta ̀ v \varepsilon \dot{\varepsilon} \mu \eta ̀ v\left(\left[D_{D P} \mathrm{D}[\mathrm{AP}]\right]\right.$ ), which does not contain any visible noun ('my own one'). Similarly, the sequence in (12b) is compatible with two separate DPs: $\sigma \tau 0 \lambda \grave{\eta} v$, headed by an empty $\mathrm{D}\left(\left[{ }_{\mathrm{DP}} \mathrm{D}[\mathrm{NP}]\right]\right)$, and $\tau \grave{\eta} v \pi \rho \dot{\sigma} \tau \eta \nu$, with no visible $\mathrm{N}\left(\left[{ }_{\mathrm{DP}} \mathrm{D}[\mathrm{AP}]\right]\right)$.

Example (12c) contains two coordinated adjectives, both in the superlative, the second heading a prepositional phrase. The structure is a genitive of origin. As far as the connection between $\pi$ ó $\lambda \varepsilon \omega \varsigma$ and $\tau \tilde{\eta} \varsigma \mu \varepsilon \gamma$ íб $\tau \eta \varsigma \kappa \alpha i$ $\varepsilon v ̉ \delta o \kappa \iota \mu \omega \alpha \dot{\tau} \tau \eta \varsigma .$. is concerned, we assume a predicative structure headed by an omitted verb, in which $\pi o ́ \lambda \varepsilon \omega \varsigma$ and $\tau \tilde{\eta} \varsigma \mu \varepsilon \gamma i ́ \sigma \tau \eta \varsigma \kappa \alpha i ̀ \varepsilon v ̉ \delta о \kappa \mu \omega \tau \alpha ́ \tau \eta \varsigma \ldots$ are two separate DPs, the first containing a noun and no visible D , the second having no visible N and two coordinated APs. ${ }^{24}$

In (12d) the universal quantifier ő $\lambda \eta \varsigma^{25}$ occurs after an article, which in turn follows a noun not preceded by any visible D. ${ }^{26}$ The interpretation of this structure is controversial: Reale (2001) analyses it as if $\tau \tilde{\eta} \varsigma$ ö $\lambda \eta \varsigma$ were heading the genitive $\gamma 0 v \alpha \kappa$ кòs ('the whole of a woman'), which in turn linearly precedes its head: since Gen $N$ sequences were not ungrammatical in CG (Guardiano 2011), there are no real objections against this analysis. Under another analysis, $\tau \tilde{\eta} \varsigma$ ö $\lambda \eta \varsigma$ predicatively modifies $\gamma v v \alpha ı \kappa o ̀ s: ~ ' a ~ p a r t ~ o f ~$ a woman, the entire (one)'. In this latter case, the structure would be similar to (12a). ${ }^{27}$

Finally, in (12e), the sequence $\operatorname{Adj} N \operatorname{Art} \operatorname{Adj}$ is part of a more complex structure, where $\chi \rho v \sigma o \tilde{v} v \varepsilon$ र́vo $\varsigma$ and $\tau$ ò $\pi \rho \tilde{\omega} \tau 0 v$ are two separate constituents: $\chi \rho v \sigma o \tilde{v} \gamma \varepsilon \varepsilon^{v o s}$ is an indefinite DP (with no visible D, as usual in AG: Guardiano 2016, see also section 4) that consists of the head noun $\gamma \varepsilon$ vos modified by the prenominal adjective $\chi \rho v \sigma o \tilde{v} v$ (see section 3.3. below); in turn, it is the subject of the nominal predicate $\gamma \varepsilon v \varepsilon ́ \sigma \theta \alpha ı ~ \tau o ̀ ~ \pi \rho \tilde{\tau} \tau o v$, of which $\tau$ ò $\pi \rho \tilde{\tau} \tau 0 v$ is the predicative part.
${ }^{24}$ Notice that superlatives trigger the presence of their own definite article even in languages which do not display (other types of) polydefinite structures (e.g. French, cf. Kayne 2004). In our corpus, superlatives are also found in prenominal position, in "monadic" DPs,

${ }^{25}$ This item, as well as the other universal quantifier $\pi \tilde{\alpha} \varsigma$, has its own peculiar syntax: in particular, it can occur to the left of D with apparently minor consequences on the interpretation of the DP in terms of markedness.
${ }^{26}$ A very similar example, with $\pi \tilde{\alpha} \varsigma$, is found in Thuchidides (1.1): $\tau \varepsilon \kappa \mu \alpha \iota \rho о \mu \varepsilon v o \varsigma ~ o ̋ \tau \iota ~$
 moving towards it at the top of their whole military power').
${ }^{27}$ Similarities, in terms of syntax and interpretation, between universal quantifiers and superlatives have variously been pointed out, at least since Abney (1987).

The pattern (11c) is attested only in predicative structures, two examples of which are given in (13).
(13) $\mathrm{AD} \mathrm{N}^{28}$
a. Cratylus 426 c 5

'and the beginning (is) from kíquv - the noun (is) foreign - this is iéval'
b. Cratylus 427 c 4
ö $\tau \iota \mu \varepsilon \gamma \alpha ́ \lambda \alpha \alpha \alpha ̀ ~ \gamma \rho \alpha ́ \mu \mu \alpha \tau \alpha$
'because the letters (are) big'29
The absence of ADN sequences in argument position is not unexpected under two assumptions: (a) adjectives found in pre-D position do not originate in that position: their linearization to the left of D is a consequence of fronting from lower positions; (b) fronting seems to be possible only if the adjective has its own article (Crisma et al. 2017): only [Art+AP] constituents can undergo fronting.

Finally, as far as (11b) is concerned, the pattern DNA is likely to instantiate, in principle, two types of underlying structures: one where the adjective is merged prenominally and is crossed over by the noun (as in Romance; see Guardiano and Stavrou 2019 and the literature cited therein), and one where the adjective originates postnominally, in a structure of the type illustrated in (9), but with a covert realization of Pred.

The latter scenario would go against Stavrou's predictions, according to which Pred must be overt in order to realize concord in phi-features, [+def] and case. As a matter of fact, AG displays robust realization of [+def], phifeatures and case: thus, the realization of Pred is expected to be overt. If this is correct, it is unlikely that a pattern like (11b), if attested, can have a structural source like (9), where the adjective is merged postnominally and Pred, endowed with [+def], has no lexical realization.

28 (1) Symposium 206 d 8

'the passion for the beautiful becomes great' (lit. 'great the passion becomes about the beautiful')
(2) Symposium 212 a 3 ó $\rho \tilde{\omega} v \tau 1$ థ̣ óp $\alpha \tau$ òv $\tau$ ò $\kappa \alpha \lambda$ óv 'as he sees the beautiful that can be contemplated'
(3) Cratylus 418 c $9-\mathrm{d} 1$
 'for the light comes out of darkness to men who are glad and long for it'
${ }^{29}$ A similar structure is also found in Bernasconi (2011), Lys. 1.32: $\delta \Delta \pi \lambda \tilde{\eta} v \tau \eta ̀ v \beta \lambda \alpha ́ \beta \eta \nu$ ò $\varphi \varepsilon i ́ \lambda \varepsilon ı v$ ('render double the damage'). Concerning these structures, an anonymous reviewer points out that "school grammars would analyze the examples in (13) as instances of predication with the copula be absent: ' $\xi \varepsilon v i \kappa o ́ v ~ \delta \varepsilon ́ ~ \tau о и ́ v o \mu \alpha ~ \varepsilon \sigma \tau i v ', ~ ' \mu \varepsilon \gamma \alpha ́ \lambda \alpha ~ \tau \alpha ́ ~ \gamma \rho \alpha ́ \mu \mu \alpha \tau \alpha ~ \varepsilon ı \sigma i v ' ", ~$ an interpretation which is consistent with ours.

As far as the hypothesis that DNA sequences result from movement of the noun over an originally prenominal adjective is concerned, it must be remarked that AG shows no evidence of overt movement of the noun over its modifiers (e.g. structured genitives or prenominally merged adjectives: Guardiano 2011, Guardiano and Longobardi 2018). If our reasoning is on the right track, then the consequence is that DNA sequences are not expected in AG: as a matter of fact, no cases of (11b) have been found in our corpus. ${ }^{30}$

The pattern overwhelmingly attested in our corpus is (11a). It is important to observe, here, that all the types of adjectives which are assumed to universally merge in prenominal position (see (4) and (5)), including possessives, are found in prenominal position, both in CG and in the Gospels, as shown in (14), where we provide examples with adjectives belonging to all the classes listed in (4).
(14) D A N
a. Quantification
i. Symposium 173 a 5-6
 'when Agathon won his first tragedy'
ii. Mark 14.12
 'On the first day of unleavened bread'
iii. John 3.18
 'in the name of the only born Son of God'
iv. Apology 41 b $8-\mathrm{c} 1^{31}$ $\tau \grave{̀ v} \tau \mathrm{o} \lambda \lambda \grave{\eta} v \sigma \tau \rho \alpha \tau i \alpha v$ 'the great army'
${ }^{30}$ The order DNA is actually found only in structures where the adjective has a predicative function, as in the examples below:
(1) Symposium 290 b 6
 'and they had big notions' (lit. 'they had the notions big')
(2) Mark 3.3
 'and said to the man who had his hand withered'
(3) Symposium 209a4
 'of whom all the poets are begetters'
(4) Symposium 216 e 3
 'considers all these possessions as nothing worth'
${ }^{31}$ Apology 29 b 3-4
$\tau \omega ̃ v \pi 0 \lambda \lambda \tilde{\omega} v \dot{\alpha} v \theta \rho \dot{\sigma} \pi \omega v$
'from the other men'
v. Mark $12.37^{32}$
ó $\pi 0 \lambda$ v̀ऽ ő $\chi \lambda \mathrm{O} \varsigma$ 'the common people'
b. Quality ${ }^{33}$
i. Apology 22 d 6 oi $\alpha$ 人 $\gamma$ Өoì $\delta \eta \mu$ ıov $\rho \gamma$ oí 'the good artisans'
ii. John 2.10
 દ̇ $\lambda \alpha ́ \sigma \sigma \omega: ~ \sigma v ̀ ~ \tau \varepsilon \tau \eta ́ \rho \eta \kappa \alpha \varsigma ~ \tau o ̀ v ~ \kappa \alpha \lambda o ̀ v ~ o i ̃ v o v ~ \varepsilon ̌ \omega \varsigma ~ \alpha ́ \rho \tau \tau ~$ 'everyone serves the good wine first, and when the guests have drunk freely, then that which is worse. You have kept the good wine until now'
iii. Matthew 24.48
 'that evil servant'
c. Size/manner
i. Apology 40 d 8 đòv $\mu \varepsilon ́ \gamma \alpha \nu \beta \alpha \sigma \iota \lambda \varepsilon$ ќ $\alpha$ 'the great king'
ii. Cratylus 418 с 1 $\alpha i \quad \gamma v v \alpha i ̃ \kappa \varepsilon \varsigma, \alpha i ̃ \pi \varepsilon \rho \mu \alpha ́ \lambda 1 \sigma \tau \alpha \tau \eta ̀ v \dot{\alpha} \rho \chi \alpha i ́ \alpha v \varphi \omega v \eta ̀ v \sigma \dot{\zeta} \zeta \rho v \sigma \iota$ 'women, who preserve most the old form of speech'
iii. Luke 13.23
$\delta 1 \alpha ̀ \tau \eta ̃ \varsigma ~ \sigma \tau \varepsilon v \tilde{\eta} \varsigma ~ \theta u ́ \rho \alpha \varsigma$
'by the narrow door'
iv. Matthew 5.35

тoṽ $\mu \varepsilon \gamma \alpha ́ \lambda 0 v \beta \alpha \sigma \imath \lambda \varepsilon ́ \omega \varsigma$ 'of the great king'
d. Shapelcolor
i. Cratylus 398 a 4七ò $\chi \rho$ vooṽ $\gamma \varepsilon ́ v o \varsigma$ 'the golden race'
ii. John 19.5
 'the purple garnment'
${ }^{32}$ In the following example, $\pi \lambda \lambda \grave{v} \varsigma$ is found in postnominal position, with no determiner spreading. It is presumably predicative ('the multitude that had come to the feast that was big').

John 12.12

'on the next day the great multitude that had come to the feast'
${ }^{33}$ Symposium 186 c 7 -d 1
đòv $\kappa \alpha \lambda o ́ v \tau \varepsilon \kappa \alpha i ̀ ~ \alpha i ̈ \sigma \chi \rho o ̀ v ~ \varepsilon ̌ \rho \omega \tau \alpha ~$
'the good and the bad love'

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iii．Matthew 5.39
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＇on your right cheek＇
e．Argument／provenance
i．Symposium 189 d 5
\(\tau \grave{v}\) व̉v \(\theta \rho \omega \pi i v \eta v\) ตv́бıv
＇the human nature＇
ii．Apology 31d 7－8
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＇if I had undertaken to go into politics＇
iii．Symposium \(211 \mathrm{~d} 1-2\)
ŋ̆ Mav兀ıvıкウ̀ そévŋ
＇the Mantinean woman＇
iv．Luke 24.10
ŋ̀ M \(\alpha \gamma \delta \alpha \lambda \eta \nu \grave{~ M ~ M ~} \rho_{i ́ \alpha}^{\alpha}\)
＇Mary Magdalene＇
f．Possessives
i．Symposium 193 d 6
ó غ́qòs \(\lambda\) ó \({ }^{\prime}\) os
＇my discourse＇
ii．Symposium 215 d 3－4
\(\tau \omega ̃ v \sigma \tilde{v} \nu \lambda o ́ \gamma \omega v\)
＇of your discourses＇
iii．Mark 4.34
тoĩ̧ ióós \(\mu \alpha \theta \eta \tau \alpha i ̃ \varsigma\)
＇to his own disciples＇
iv．Matthew 7.3
\(\dot{\varepsilon} v \tau \underline{\sim} \sigma \tilde{0}\) ỏ \(\varphi \theta \alpha \lambda \mu \oplus ̃\)
＇in your eye＇
```

There are few instances of multiple modifiers of the noun in prenominal
 motion of the universe＇），where the head noun is modified by an adjective and a genitive，both prenominal．

These data are consistent with the assumption that，like in SMG，in AG adjectives are merged prenominally and are not crossed over by the noun．

The other pattern encountered in our corpus consists of sequences con－ taining a noun（N），its adjectival modifier（s）（A）and multiple articles．As men－ tioned above，two types of such sequences are possible in SMG，shown in（15）：
（15）a．Art N Art A
b．Art A Art N
As seen in section 2，the orders in（15）in SMG are generated from one and the same structure，the one in（9），where the adjective is merged post－
nominally: (15a) linearizes the actual underlying structure, while (15b) is obtained through fronting [Art+AP].

The sequence overwhelmingly attested in our corpus is (15a), ${ }^{34}$ of which we give examples in (16). As the examples show, there is no significant restriction concerning the kind of adjective that can be found in these constructions, as also observed in Manolessou (2000) and Guardiano (2003).
(16) Art N Art A
a. Quantification
i. John 2.1
$\tau \tilde{\eta} \eta \not \mu \varepsilon ́ \rho \alpha ~ \tau \tilde{n} \tau \rho i ́ \tau \eta$
'the third day'
ii. John 3.16

'that he gave his one and only Son'
b. Quality
i. Symposium 209 d 2

'all the other good poets'
ii. John 10.11
ó $\pi о \not \mu \eta ̀ v$ ó к $\alpha \lambda$ òs
'the good sheperd'
c. Size/manner
i. Symposium 183 d 8

'By 'wicked' we mean that popular lover'
ii. Mark 5.13
$\tau \grave{\alpha} \pi v \varepsilon v ́ \mu \alpha \tau \alpha \tau \alpha ̀ ~ \alpha ̉ \kappa \alpha ́ \theta \alpha \rho \tau \alpha$
'the unclean spirits'
iii. John 14.26

七ò $\pi v \varepsilon \tilde{0} \mu \alpha$ đò $\alpha \not \gamma 10 v$
'the Holy Spirit'
d. Shape/color

John 18.10

'the right ear'
${ }^{34}$ According to Adrados (1992), the polydefinite construction has been attested in AG since Aeschilus and Herodotus, namely, as soon as the definite article was grammaticalized as a D-item (Guardiano 2016, 2019).
e. Argument/provenance ${ }^{35}$
i. Symposium 191 d 3
$\tau \grave{v} v$ ழúбiv $\tau \grave{v} \alpha \dot{\alpha} v \theta \rho \omega \pi i ́ v \eta v$ 'the human nature'
ii. John 4.9

'the Samaritan woman'
f. Possessives
i. Apology 24 a 8
 'and that this is the prejudice against me'
ii. John 1.41
 'he first found his own brother, Simon'
iii. John 7.6

 'my time has not yet come, but your time is always ready'
There is only one instance of (15b), here reproduced in (17). The example contains an articulated noun modified by a possessive adjective occurring between the article and the noun; the whole structure is preceded by a second adjective that has its own article, and is in the complement of a preposition.
(17) Cratylus 398 b 7

'and in the old form of our language the two words are the same'
Manolessou (2000: 146) mentions two more cases similar to (17), both with the order Art Adj Art Adj $N$. She concludes that "it is possible to have two prenominal articles in CG only when there are two adjectives". No instances of this order are encountered in the Gospels (and in NTG in General, according to Manolessou 2000: 149).

Note also that, in the Gospels, a few types of non-adjectival modifiers, typically demonstratives and pronominal genitives (in one case a prepositional phrase, cf. 18c), can intervene between the $[A r t+N]$ and the $[A r t+A d j]$ constituent, as shown in (18).
a. Mark 12.43
 $\beta \alpha \lambda \lambda o ́ v \tau \omega v$ вis tò $\gamma \alpha \zeta$ ¢офи $\lambda \alpha ́ \kappa ı o v ~$
'most assuredly I tell you, this poor widow gave more than all those who are giving into the treasury'

[^26]b. i. Luke 20.13
 'my beloved son'
ii. Matthew 5.48
ó $\pi \alpha \tau \grave{\rho} \rho$ ט́ $\mu \tilde{\mu} v$ ó ov̉ ó́vios 'your father in haeven'
iii. Luke 22.50

тò oṽ̃ av̉兀oũ tò $\delta \varepsilon \xi$ เóv
'his right ear'
c. John 6.32
 'the true bread out of heaven'

An important property of AG which is absent in SMG is that DPs with multiple articles are possible with non-adjectival modifiers: prepositional phrases (19), genitives (20), adverbials (21), participles (22). In the majority of cases, the articulated modifier follows the noun; very few cases with the articulated modifier preceding the noun have been found in the corpus. ${ }^{36}$
(19) a. Apology 20 e 8 tòv $\theta \varepsilon o ̀ v ~ \tau o ̀ v ~ \varepsilon ̇ v ~ \Delta \varepsilon \lambda ~ p o i ̃ \varsigma ~$ 'the God in Delfi'
b. John 5.44
$\tau \eta ̀ v ~ \delta o ́ \xi \alpha \nu v ~ \tau \eta ̀ v ~ \pi \alpha \rho \alpha ̀ ~ \tau o u ̃ ~ \mu o ́ v o v ~ \theta \varepsilon o v ̃ ~$
'the glory that comes from the only God'
(20) a. Apology 40 d 4-5
 'the other nights and days of his life'
b. Mark 11.30

тò $\beta \dot{\alpha} \pi \tau \imath \sigma \mu \alpha$ tò ' $\mathrm{I} \omega \alpha ́ v o v$
'the baptism of John'
(21) a. Apology 40 c 8
 'from this place'
b. Symposium 176 e $7-8$ $\tau \alpha i ̃ s ~ \gamma v v \alpha ı \xi ̄ i ~ \tau \alpha i ̃ \varsigma ~ E ̌ v \delta o v$ 'to the women within'
${ }^{36}$ (1) Symposium 213 e 2
$\tau \grave{v}$ тov́tov $\tau \alpha v \tau \eta v i ̀ ~ \tau \grave{̀ v} \theta \alpha 0 \mu \alpha \sigma \tau \grave{v} v \kappa \varepsilon \varphi \alpha \lambda \eta ́ v$
'this impressive head of this man'
(2) Cratylus 411 c 1

'the internal affection within themselves'.
c. Cratylus 390 a 4-5

'the law-giver, whether he be here or in a foreign land'
d. Mark 6.11
 'the dust under your feet'
(22) a. Apology 27 a 3-4

'the others who hear'
b. Cratylus $411 \mathrm{~b} 4-5$ oi $\pi \alpha ́ v v \pi \alpha \lambda \alpha$ ıì $\alpha$ őv $\theta \rho \omega \pi$ ol oi $\tau 1 \theta \varepsilon ́ \mu \varepsilon v o l ~ \tau \alpha ̀ ~ o ̉ v o ́ \mu \alpha \tau \alpha$ 'the very ancient men who invented names'
c. Mark 3.22
oi $\gamma \rho \alpha \mu \mu \alpha \tau \varepsilon i ̃ \varsigma ~ o i ~ o ̉ ~ \alpha o ̀ ~ ’ I \varepsilon \rho о \sigma о \lambda ט ́ \mu \omega v ~ \kappa \alpha \tau \alpha \beta \alpha ́ v \tau \varepsilon \varsigma ~$
'the scribes who came down from Jerusalem'
There is an important difference between the examples in (16) and those in (19)-(22): the presence of the article is obligatory only with postnominal adjectives (in definite argument DPs), while it is not obligatory with other modifiers, as shown in (23).
a. i. Symposium 179 b 7

'about this statement to the Greeks'
ii. Luke 15 1-2
ó $\lambda$ ó $о$ оऽ $\pi \varepsilon \rho i ̀ ~ \alpha v ̉ \tau o v ̃ ~$
'the report about him'
b. i. Apology 18 a 2
$\tau o ̀ v \mu \dot{\varepsilon} v \tau \rho o ́ \pi \circ \nu \tau \eta ̃ \varsigma \lambda \varepsilon ́ \xi \varepsilon \omega \varsigma$ 'the manner of the speech'
ii. Matthew 2.20

'the life of the young child'
c. i. Apology 31 b 2-3

'and have been enduring the neglect of my concerns all these years'
ii. Mark 5.36
 'but Jesus, when he heard the message spoken'

There is one further group of sequences with multiple articles attested in our corpus, namely sequences with a proper name modified by a postnominal adjective, genitive or apposition: usually, such modifiers are introduced by an overt definite article, as shown in (24), while the proper name sometimes is introduced by its own article (24a), sometimes not
(24b). These facts are well-known: in AG, proper names do not need a visible article, in contrast to SMG, where the article is obligatory with all proper names in argument position. ${ }^{37}$ In other words, the difference between AG and SMG is that in AG the feature [+def] of $D$ does not need to be spelled out with proper names, while in SMG it must be always overtly realized in argument position. To sum up, in the examples listed in (24b), where the linear order is [PN Art modifier], the underlying structure is the same as that of (24a), namely [D PN Art modifier], with the difference that in (24b) the D preceding the proper name is empty (null expletive, Guardiano 2016, 2019). ${ }^{38}$
(24) a. i. Matthew 1.6
tòv $\Delta \alpha v \varepsilon i ̀$ đòv $\beta \alpha \sigma$ ı $\lambda \varepsilon ́ \alpha$ 'the king David'
ii. Matthew 1.16

'Joseph, Maria's husband'
iii. Mark 16.1

'Mary Magdalene, Mary the mother of james, and Salome'
b. i. Matthew 2.1

'in the days of Herod the king'
ii. Matthew 1.20

Mapíav tク̀v $\gamma$ vvaĩк $\alpha ́$ бov
'Mary, his wife'
iii. Mark 3.18

Sí $\mu \omega v \alpha$ тòv Kavavaĩov
'Simon from Cana'

[^27]As already mentioned, DPs where a noun is modified by a cardinal numeral, $\alpha \not \lambda \lambda 0 \varsigma$, $\check{\varepsilon} \tau \varepsilon \rho \circ \varsigma$ or $\mu$ óvos were not included in the overview proposed above. Indeed, crosslinguistically, numerals, other and only often display a "special" syntax, different - in one way or another - from that of other adjectives. We will give some examples of numerals in section 3.4. Here, we want to briefly illustrate the distribution of $\alpha \lambda \lambda 0 \varsigma$, $\varepsilon \tau \varepsilon \rho \circ \varsigma$ and $\mu o ́ v o \varsigma$. For lack of space, we cannot discuss any analysis here: we just want to stress that there are differences between the distribution of those particular modifiers and the adjectives.
$\alpha \ddot{\alpha} \lambda \mathrm{o}$ ̧ is overwhelmingly found in sequences of the type (11a) and (15a), as shown in (25). ${ }^{39}$
(25) a. Art $\alpha \lambda \lambda \operatorname{os} N$
i. Symposium 190 c 1-2
 'there at Zeus and the other gods debated what they should do'

[^28]ii. John 20.8
 'so then the other disciple who came first to the tomb also entered in'
b. Art N Art $\alpha \lambda \lambda \mathrm{os}$
i. Symposium 203 b 2

'the gods made a great feast'
ii. John 18.16
 'so the other disciple, who was known to the high priest, went out'
$\alpha \ddot{\alpha} \lambda \lambda o s$ is also found in sequences ( 15 b, Art $\alpha \not \lambda \lambda \mathrm{os}$ Art N). There are very few instances, though, in our corpus, of such structures. Moreover, in most cases, the structure displays ellipsis of the noun: some examples are given in (26). ${ }^{40}$
(26) a. i. Apology 22 d 7
$\tau \widetilde{\tilde{\alpha}} \lambda \lambda \alpha \tau \grave{\alpha} \mu \varepsilon \dot{\gamma} \gamma 1 \sigma \tau \alpha$
'the other most important matters'
ii. Cratylus 411 a 4
$\tau \tilde{\alpha} \lambda \lambda \alpha \tau \alpha ̀ ~ \tau o 1 \alpha v ̃ \tau \alpha \pi \alpha ́ v \tau \alpha$
'all the others of that sort ${ }^{31}$
b. i. Apology 27 a 3-4

'or shall I deceive him and the others who hear me?'
ii. Symposium 176 a 3
$\tau \alpha ̃ \lambda \lambda \alpha \tau \grave{\alpha}$ vо $\mu$ ц̧́ $\mu \varepsilon v \alpha$
'the other usual things'
c. Symposium 207 c 7

'all the others that have relation to love'
d. Cratylus 437 b 6-7
 'to all the other names of good significance'

As far as ět $\varepsilon \rho \circ \varsigma$ is concerned, in the corpus it is only found in prenominal position (27). ${ }^{42}$

[^29](27) a. Cratylus 402 d 8

тò ह̌t\&роv ővoua 'the other name'
b. Luke 4.43

'to the other cities'
$\mu$ óvos occurs in three different positions: in a pre-D position (28), to the left of the article (28a.ii/iii) but to the right of demonstratives (28a.i.); in a prenominal position, to the right of numerals (28b); in a postnominal position, only attested in the Gospels (28c). This distribution parallels that of floating quantifiers (Guardiano 2003).
(28) a. i. Cratylus 397 c $9-\mathrm{d} 1$ тov́tous $\mu$ óvous tov̀s $\theta$ عov̀s 'those gods only'
ii. Luke 5.22

بóvos ó $\theta \varepsilon$ ós
'God only'
iii. Luke 6.4

'the priests only'
b. Symposium 184 c 2

'so there is left just one other voluntary slavery'
c. i. Mark $9.8^{43}$

'they saw no one with them any more, except Jesus only'
ii. Luke 24.12
$\beta \lambda \varepsilon ́ \pi \varepsilon \imath ~ \tau \alpha ̀ ~ o ̀ \theta o ́ v ı \alpha ~ \mu o ́ v \alpha ~$
'he sees the linen cloths only'
iii. Luke $4.4^{44}$

'man shall not live by bread only'
Finally, it must be observed that there is a difference between CG and NTG with respect to the distribution of the patterns described in this section.
(1) a. Luke 9.56.

દi̧̧ غ̇ $\tau \dot{\varepsilon} \rho \alpha \nu \kappa \omega ́ \mu \eta \nu$
'to another village'
b. Matthew 12.45
 'seven other spirits more evil than he is'
${ }^{43}$ See also John 12.9 and, with a proper name and no article, Luke 9.36.
${ }^{44}$ See also Matthew 4.4.

In particular, in CG the predominant structure is (11a), while in the Gospels the polydefinite construction (15a) is much more frequent. This is summarized in Table 1 at the end of this section. We will see that the same tendency is observed in the distribution of adjectives in DPs with no visible articles (cf. Table 2 in section 3.3). The increase in frequency of postnominal adjectives in the Gospels, and more generally in NTG, has been explained as a consequence of contact with Semitic: in Semitic, adjectives are linearized postnominally as a rule, and they require a copy of the definite article in definite DPs (Fassi Fehri 1999, Shlonsky 2004). Moreover, Semitic languages, precisely like AG, do not require any visible D in non-definite DPs. In other words, in Semitic, DPs display the linear sequences [ NA A and [Art N Art A], which are also possible in Greek: this, according to some literature (cf. Manolessou 2000 for a summary), was probably a trigger for the increase in frequency of these two patterns in NTG. A different explanation has been suggested by Manolessou (2000, but see also Blass and Debrunner 1976), who proposes that the massive use of postnominal adjectives in NTG is the consequence of stylistic choices: in Greek, the polydefinite construction, and in general postnominal modification, is much more typical of the spoken language than of literary styles. It is thus found much more frequently in spoken registers, while the texts stylistically closer to literary genres tend to avoid it. Actually, in the history of the Greek literature, the distribution of postnominal adjectives is consistent with the stylistic nature of the texts: texts which are based on Classical models display prenominal modification as a rule, while in vernacular prose (since Hellenistic times, and more strongly in Medieval Greek) postnominal adjectives (and polydefinite structures) progressively increase in frequency.

|  | DAN | DNA $^{45}$ | ADN $^{46}$ | NDA $^{47}$ | NAD | AND | ArtNArtA | ArtAArtN |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apology | 26 | ${ }^{* 48}$ | $*$ | 1 | $*$ | $*$ | 2 | $*$ |
| Symposium | 51 | $*$ | $*$ | 1 | $*$ | $*$ | 10 | $*$ |
| Cratylus | 66 | $*$ | $*$ | 1 | $*$ | $*$ | 3 | $1^{49}$ |
| Mark | 3 | $*$ | $*$ | $*$ | $*$ | $*$ | 13 | $*$ |
| John | 18 | $*$ | $*$ | 1 | $*$ | $*$ | 42 | $*$ |
| Luke | 29 | $*$ | $*$ | 1 | $*$ | $*$ | 22 | $*$ |
| Matthew | 38 | $*$ | $*$ | $*$ | $*$ | $*$ | 18 | $*$ |

Table 1. Nominal structures with a visible article and (at least) one adjective modifying the head noun

[^30]
### 3.3 DPs with no visible article

In $A G$, a visible realization of $D$ is required in order for a nominal structure to have a definite reading in argument position, and in order for common a noun to be used as a kind name (Guardiano 2012, 2016, 2019): singular count nouns, mass nouns and plurals, when non-definite, can occur (and usually do occur) with no visible D, as shown in (29). In SMG, (indefinite) mass and plural nouns (can) occur determinerless, while singular count nouns (with exceptions, cf. Alexopoulou and Folli 2019) require a visible D in argument position.
(29) a. i. Symposium 203 b 5
 'there was no more wine'
ii. Apology 20 a 4

'I happened to run into a man who had given goods to the sophists'
b. i. John 4.7

モ̌px\& 'a woman of Samaria came to draw water'
ii. Mark 10.13
 'and they were carrying to him children so that he could touch them'

We assume here that the underlying structure of the noun phrases found in argument position in (29) contains an unpronounced D (Crisma 2015). If this assumption is on the right track, the implication is that, in AG, all nominal phrases found in argument position contain a D , which must be spelled out when endowed with the feature [+def] (with the exception of proper names, cf. Guardiano 2016) and can be left empty when not containing [+def]. Thus, we assume that all the nominal structures shown in this section are headed by a D which is not spelled out because it does not contain [+def]: actually, none of them has a definite reading nor is interpreted as a kind name.

As far as noun-adjective combinations are concerned, both the expected orders (AN and NA) are found in the corpus. Every type of adjective can appear in either position, as shown in (30) and (31), respectively.
(30) a. Quantification
i. Symposium 223 b $6^{50}$
$\pi i v \varepsilon ı v \pi \alpha ́ \mu \pi \circ \lambda \nu v$ oĩvov
'drink a vast amount of wine’

50 John 6.5

'a great multitude was coming to him'.
ii. John 1.18
$\mu$ коoүعvท̀s $\theta \varepsilon$ òs
'the one and only god'
b. Quality
i. Symposium 187 d 3-4

'a good craftsman is needed'
ii. Mark 14.6

'she has done a good work for me'
c. Sizelmanner
i. Cratylus 436 b $2-3^{51}$

'that there is a non-small risk of being deceived?'
ii. John $12.35^{52}$
$\mu$ ккрòv $\chi$ рóvov
'for a little time'
d. Shape/color

Cratylus 397e8-9

'nor that he says a golden race was the first (race) of men to be born?'
e. Argument/provenance
i. Cratylus 412 b 5-6

'to a Laconian man'
ii. Mark 15.17
$\pi \lambda \varepsilon ́ \xi \alpha v \tau \varepsilon \varsigma \alpha \dot{\alpha} \alpha \dot{\alpha} v \theta$ wov $\sigma \tau \varepsilon ́ \varphi \alpha v o v$
'weaving a crown of thorns'
f. Possessives
i. Symposium 188 e 2
oòv हैp $\quad$ бov
'your business'
ii. John 4.34
 'my food is to do the will of him who sent me'

51 Symposium 187 e 4
$\mu \varepsilon ́ \gamma \alpha$ ع̌ค $\gamma о v$
'great importance'
52 Apology 32 a 2
ò $\lambda$ í́yov $\chi \rho$ óvov
'for a little while'
(31) a. Quantification
i. Symposium 196 c $3-4^{53}$

'above his justice, he has a huge temperance'
ii. Mark 15.25

ต̈ $\rho \alpha \tau \rho i \tau \eta$
'third hour'
b. Quality
i. Apology 28 b 5

'and the actions of a good man or of a bad one'
ii. Mark 7.25

'her little daughter had an unclean spirit'
c. Size/manner
i. Symposium 194 a $6^{54}$
 'the audience has a big expectation'
ii. Mark $4.41^{55}$
$\kappa \alpha i ̀ ~ \varepsilon ̇ \varphi о \beta \dot{\eta} \theta \eta \sigma \alpha v$ ¢óßov $\mu \varepsilon ́ \gamma \alpha \nu$
'and they felt a great fear'
d. Shape/color
i. Apology 36 d 4-5
$\alpha \dot{\alpha} v \delta \rho i ̀ \pi \varepsilon ́ v \eta \tau \iota ~ \varepsilon u ̉ \varepsilon \rho \gamma \varepsilon ́ \tau \eta ~ \delta \varepsilon о \mu \varepsilon ́ v \varrho$
'for a man poor, benefactor and in need'
ii. Mark $16.5^{56}$
$\pi \varepsilon \rho \iota \beta \varepsilon \beta \lambda \eta \mu \varepsilon ́ v \circ \vee \sigma \tau \sigma \lambda \grave{v} \lambda \varepsilon \varepsilon \cup \kappa \eta ́ v$
'dressed in a white robe'
e. Argument/provenance
i. Symposium 211 e 2
甲 $\lambda$ vaрías $\theta \vee \eta \tau \eta ̃ \varsigma$
'not infected with the human fleshes and colors and many other mortal trash'

53 John 6.2

'a great multitude followed him'
54 Cratylus 435 b $7-8$

'when do you think it is possible to get similar names for each single number?'
${ }_{5}$ John 7.33
х $\rho$ óvov $\mu$ ккрòv
'for a little time'
${ }^{56}$ John 19.2

'and dressed him in a purple garnment'
ii. Mark 1.6
$\zeta \omega \downarrow \eta v \delta \varepsilon \rho \mu \alpha \tau i ́ \eta \eta v$ 'a leather belt'

The examples in (30) and (31) show that, in AG, almost all types of adjectives can be both pre- and postnominal: no significant restriction can be formulated on the basis of the data available.

There are very few cases in which a postnominal adjective is preceded by a genitive that immediately follows the noun, as in (32):

## (32) Mark 5.11


'there was there was on the mountainside a great herd of pigs feeding'
It must be finally noted, as far as a comparison between CG and NTG is concerned, that frequency in the occurrence of pre- and post-nominal adjectives displays the same tendency already observed in section 3.2 (Table 1): while prenominal adjectives tend to be more frequent in CG, the postnominal position is preferred in the Gospels. Our conclusion is that the two orders actually instantiate the patterns (11a, D A N) and ( $15 \mathrm{a}, \mathrm{D}$ N D A), respectively, the only difference being that D is not visibile.

|  | A N | N A |
| :---: | :---: | :---: |
| Apology | 44 | 10 |
| Symposium | 76 | 29 |
| Cratylus | 20 | 6 |
| Mark | 11 | 37 |
| John | 16 | 29 |
| Luke | 27 | 96 |
| Matthew | 35 | 96 |

Table 2. Nominal structures without a visible D and (at least) one adjective modifying the head noun

### 3.4. DPs containing a numeral

In our corpus, numerals are found in three different positions. If the DP has an article, the numeral shows up between the article and the noun (33). If the DP has no article, the numeral occurs either to the left (34) or to the right (35) of the noun, with no apparent differences in interpretation.
(33) a. Apology 32 b $2-4$
 $v \alpha \nu \mu \alpha \chi i \alpha s ~ \grave{\varepsilon} \beta о \nu \lambda \varepsilon v ́ \sigma \alpha \sigma \theta \varepsilon \dot{\alpha} \theta \rho o ́ o v s ~ к \rho i ́ v \varepsilon ı v ~$ 'when you wished to judge collectively, not severally, the ten generals who had failed to gather up the slain after the naval battle'
b. Mark 6.41
 'and taking the five loaves and the two fish'
(34) a. Apology 20 b 9
$\pi \varepsilon \in \tau \varepsilon \mu \nu \tilde{\omega} \nu$
'five minae'
b. Apology 40 e 4
 'and indeed all time seems to be no longer than one night'
c. Mark 12.42
 'and a poor widow came, and she cast in two small brass coins, which make a quadrans'
(35) a. Symposium 189 e $6-190$ a 1

каì $\pi \rho o ́ \sigma \omega \pi \alpha$ סú(o)
'and two faces'
b. Mark 12.42
 'and a poor widow came, and she cast in two small brass coins, which make a quadrans'
c. John 2.6

'now there were six water pots of stone'
Notice that, in our corpus, there is only one instance of a polydefinite DP with an articulated numeral: John 20.19, ' $\tau \tilde{\eta} \eta \eta \mu \varepsilon ́ \rho \alpha$ غ̇к ('on that day, the first day of the week'). This is actually consistent with what is observed in SMG, where numerals are very rare in polydefiniteness (Manolessou 2000: 155-156; Campos and Stavrou 2004).

## 4. An analysis

The data presented in sections 3.2 and 3.3 suggest a scenario for AG not substantially different from that proposed for SMG. Table 3 provides a summary of the facts which will be relevant for our analysis, and a comparison between AG and SMG.

|  | CG | NTG | SMG |
| :---: | :---: | :---: | :---: |
| Art Adj N | YES | YES | YES |
| Art N Art Adj | YES | YES | YES |
| Art Adj Art N | YES (rare) | NO | YES |
| Art N Art PP/Gen/Part | YES | YES | NO |
| Art PP/Gen/Part | YES | YES | NO |
| Art N PP/Gen/Part | YES | YES | YES |
| AN | YES | YES | YES |
| NA | YES | YES | YES |

Table 3. Distribution of nouns, adjectives and articles in AG and MG

In our corpus, all classes of adjectives are found in prenominal position. The data collected from DPs with a visible article (i.e. with an overt D) show that prenominal adjectives systematically appear to the right of D . This pattern is consistent with an underlying structure where adjectives are merged prenominally (36).

$$
\begin{equation*}
D \quad A P_{\text {[quannitication] }} A P_{\text {[quality] }]} A P_{\text {[sizelmanner] }} A P_{\text {[shapeccolor] }} A P_{\text {[argumentprovoenance] }} N \tag{36}
\end{equation*}
$$

If this is a correct generalization, we can further assume that even in those DPs where D is not realized overtly, prenominal adjectives are still merged in the position(s) shown in (36). ${ }^{57}$

As far as the polydefinite construction is concerned, the instances found in our corpus give rise to a number of conclusions. First of all, the presence of more than one definite article in one and the same DP is attested in all the texts of our corpus. Although in CG the dominant pattern is the "monadic" one, with the adjective in prenominal position, instances of DPs with postnominal adjectives and multiple articles are also found. These are much more frequent in the Gospels. In both varieties, the presence of multiple articles is obligatory with postnominal adjectives: no postnominal adjective has been found in monadic definite DPs. These constraints are identical to those observed in SMG. ${ }^{58}$ These observations, so far, show no incompatibility between the patterns with articulated postnominal adjectives attested in AG and the structure in (9).

Yet, there are differences between AG and SMG.
The first difference is that, in AG, there are very few instances of constructions where the articulated adjective linearly precedes the articulated noun (Art $\operatorname{Adj} \operatorname{Art} N$ ). As shown in section 2, this pattern is possible in SMG, and is actually quite common in spoken registers. It is obtained, as claimed in section 2, through fronting [Art+AP] from its postnominal position to the left of $D$. As also mentioned above, polydefiniteness in general seems to be more typical of informal/colloquial styles than of (literary) written ones. Actually, tracking down the diachronic evolution of the construction, Manolessou (2000: 148-153) observes that polydefiniteness has been progressively specialized as a "colloquial" phenomenon, which is frequently found in vernacular texts and

[^31]almost absent in those inspired by (traditional) literary styles. If the phenomenon is typical of spoken registers, it comes as no surprise that there are very few attestations of it in CG, from which only (literary) texts are available. As far as the absence of the "reverse" construction in NTG is concerned, Manolessou (2000) maintains that this could be a consequence of the influence of the Semitic model, where adjectives are postnominal as a rule; note also that, as shown in Guardiano (2003, 2011), prenominal modification in general seems to be very rare in the Hellenistic koiné: genitives, for instance, are overwhelmingly postnominal, while they are massively prenominal in CG. To conclude, we believe reasonable to assume that the absence (or rarity) of reverse polydefinite constructions in our corpus is due to stylistic reasons rather than to actual syntactic constraints which block fronting: there seems not to be any structural reason for fronting to be unavailable in AG (cf. also Crisma et al. 2017). These observations are consistent with the hypothesis that sequences with multiple articles and postnominal adjectives in AG are instances of polydefinite structures, compatible with (9).

The second peculiarity of AG when compared to SMG is that, in NTG, demonstratives (18a), pronominal genitives (18b) and (in one case) prepositional phrases (18c) are found between the noun and a postnominal (articulated) adjective. As far as sequences with a demonstrative intervening between an articulated noun and an articulated postnominal adjective (Art N Dem Art Adj) are concerned, we mentioned in section 2 that, in SMG, they are assumed to originate in the same (recursive) structure that is supposed to produce multiple postnominal articulated adjectives (shown in Figure 2). We have also mentioned that this structure is very rare in SMG, presumably due to the fact that it is (assumed to be) hard to process: thus, the absence, in our corpus, of multiple postnominal adjectives is not unexpected. On the other hand, the same structure does not rule out the possibility that a postnominal demonstrative can cooccur with a postnominal articulated adjective.

Regarding the presence of genitives between the noun and the postnominal adjective, it must be noted that, in both CG and NTG, postnominal genitives are possible but they emerge from two different underlying structures. In CG (Guardiano 2011, Guardiano and Longobardi 2018), they are instances of inflected "free" genitives (Longobardi and Silvestri 2013), which are usually postnominal and do not need to be adjacent to the head noun. In NTG, genitives are only postnominal, must be adjacent to the head noun, and are never iterated, precisely like in SMG. Thus, they seem to correspond (Guardiano 2011, Guardiano and Longobardi 2018) to "low structural" genitives (GenO in Longobardi and Silvestri's 2013 terms), like those of SMG. This latter type is universally generated prenominally (Longobardi 2001): thus, in both SMG and NTG, the linear order $N G e n O$ is obtained from movement of the noun to the left of GenO. One might suppose that, when moving to the left of GenO, the noun (phrase) raises from SpecPredP, either stranding
the rest of the constituent（thus obtaining the order Art N GenO Art Adj）or pied－piping the whole PredP（and producing the sequence Art NArt Adj Ge－ $n O)$ ．Notice，however，that，in our corpus，instances of genitives intervening between the noun and the articulated adjective are only pronominal，which might point to a process of syntactic cliticization．

To sum up，none of the peculiarities of AG observed above actually falsifies the hypothesis that the patterns Art NArt A found in AG are cases of polydefinite－ ness，namely instantiations of the structure（9）proposed for SMG in section 2.

We now turn to the sequences with multiple articles and non－adjecti－ val modifiers（examples 19－22）．We claim that such sequences，despite them looking identical to polydefinite structures，are not generated from（9）：they rather derive from a different construction，involving two separate DPs．It must be remarked，first，that the definite article in AG has the property of functioning as a（ $3^{\text {rd }}$ person）pronoun：in particular，it can be used with no （visible）head noun，as for instance when accompanying the particles $\mu \varepsilon ́ v, \delta \dot{\varepsilon}$ （37a）or a prepositional phrase（37b），a genitive（37c），an adverb（37d）．This property has become lost in SMG．
（37）a．i．Cratylus 383 b 3
ó סغ̀ ó ó $о \lambda$ оүєĩ
＇and he agrees＇
ii．Matthew 12.3

＇and he told them＇
b．i．Symposium 173 b 3

＇being one of the chief among Socrates＇lovers at that time＇
ii．Matthew 12.4
тoĩร $\mu \varepsilon \tau^{\prime} \alpha$ v̉兀oṽ
＇for those with him＇
c．i．Symposium 174 c 3
غ̇лì тク̀v 七oṽ $\alpha \mu \varepsilon i ́ v o v o s ~$
＇to the one of the better＇
ii．Matthew 8.33

＇and the things of those who were possessed with demons＇
d．Symposium 173 b 3

＇being one of the chief among Socrates＇lovers at that time＇
We propose that the articulated PPs，genitives，participles and adverbs found in（19）－（22）are instances of the same structure shown in（37），name－ ly they are DPs headed by a＂pronominal＂article．In other words，we claim that the sequences $\operatorname{Art} N \operatorname{Art} P P / G e n / P a r t / A d v$ in（19）－（22）linearize，in fact，
two separate (juxtaposed) DPs ([ $\left[_{\text {DP1 }} \mathrm{D}[\mathrm{NP}]\right]\left[_{\mathrm{DP} 2} \mathrm{D}[\mathrm{PP} / \mathrm{GenP} / \ldots .].\right]$ ), where the second DP (DP2) does not contain any overt noun and is headed by a pronominal item, homophonous with the article. An obvious prediction of this assumption is that, as $\dot{o}, \dot{\eta}$, $\tau$ ò loses its pronominal function, patterns like those shown in (37) become ungrammatical; as a consequence, sequences like (19)-(22), where a DP containing an overt noun is modified by a DP headed by pronominal $\mathrm{o}, \dot{\eta}, \tau$ ò followed by a non-adjectival modifier, become unavailable too. This is precisely what has happened in SMG: the item $\mathrm{o}, \eta$, to does not display any pronominal property and, as a consequence, nonadjectival modifiers headed by a "pronominal" article are ungrammatical. ${ }^{59}$ We refrain from proceeding to a more detailed analysis of such sequences in AG (attested also in Mediaeval Greek, where they were quite frequent, Horrocks 1997) and we leave the issue to further research. ${ }^{60}$

Finally, the last remark concerns the NA orders found in DPs which do not contain any article. According to Stavrou's (2012) analysis, in SMG, nondefinite DPs containing a postnominal adjective are instances of (9), where the adjective is merged as the complement of Pred. Yet, in a DP where D is not endowed with a [+def] feature, Pred does not contain any [+def] feature either. As a consequence, no visible realization of D , as well as of Pred, is required: this gives rise to a linear sequence where no visible item appears before the noun or between the noun and the adjective. We assume that, in AG, the NA sequences derive in exactly the same way, and have a deep strucrure of the same type as (9), with an empty D and an empty Pred. ${ }^{61}$

[^32]
## 5. Conclusion

This paper is a very first attempt to describe the distribution of adjectival modifiers in AG using a formal analysis already proposed for SMG. We suggested that the patterns of adjectival modification observed in AG can actually be accounted for by means of the same theoretical apparatus developed for SMG.

In particular, the varieties of AG in our corpus exhibit prenominally merged adjectives which are not crossed over by the noun, like in SMG. Additionally, postnominal adjectives must be articulated in definite DPs, again like in SMG. Thus, we propose that polydefinite patterns with postnominal adjectives in AG can be assigned the same structure as the one assumed for SMG, i.e. the structure in (9).

The overall conclusion is that the syntax of adjectival modifiers has been diachronically stable in the language.

On the other hand, there are differences between AG and SMG. These can be accounted for in terms of two separate explanations, one related to the very nature of the (written) documents available, the other related to an independent property of the item $\dot{\mathrm{o}}, \dot{\eta}$, tò ( $0, \eta, \tau \mathrm{o}$ in SMG), which is available in AG and has become unavailable in SMG, namely the possibility of it function as a pronoun.

One apparent difference between AG and SMG is that polydefinite sequences Art Adj Art $N$ are very rare in AG, while they are quite common in (spoken) SMG. This is likely to be due to the fact, which is well-known from the literature, that such sequences are marked in terms of discourseoriented strategies; thus, they are expected to be hardly found in written texts, which usually do not employ such strategies. However, we did find one such instance in Plato, and the literature mentions a few more such cases: thus, it seems that the possibility of fronting the [Art+Adj] complex is not ruled out in AG. Our hypothesis is that there is no syntactic reason which might produce the ungrammaticality of $\operatorname{Art} \operatorname{Adj} \operatorname{Art} N$ sequences in AG: their scarcity in the corpus is probably just a contingency, primarily motivated by stylistic concerns.

Finally, linear sequences where a noun preceded by a definite article is modified by a non-adjectival item accompanied by its own article (Art NArt Modifier [Genitive/PP/AdvP ...]), which admittedly look very similar to polydefinite DPs, are not, according to our proposal, instances of actual polydefinite structures (9). Our claim is that these sequences contain two separate DPs, one headed by an article ( $\dot{\mathrm{o}}, \dot{\eta}, \tau \grave{o}$ ) that takes an overt NP as its complement ( $\left[{ }_{\mathrm{DP}} \mathrm{D}[\mathrm{NP}]\right]$ ), the other headed by a pronoun homophonous to the article ( $\dot{\mathrm{o}}, \dot{\eta}, \tau o ̀)$, which takes as a complement a genitive, a PP, an adverb etc. ( $\left[_{D P} \mathrm{D}[\mathrm{PP} / \mathrm{GenP} / \ldots]\right]$ ). These structures are possible thanks to the pronominal nature of $\dot{o}, \dot{\eta}$, tò, which was available in AG but is no longer accessible
in SMG. When the pronominal function of $\dot{o}, \dot{\eta}$, tò was lost, structures like (19)-(22) became unavailable too, as they actually are in SMG.

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# The Beginning of the Syllable in Albanian 

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#### Abstract

: Looking at the syllable as a phonological description unit, we can highlight some basic features that characterize the segments that are part of it. The beginning of the syllable boundary is seen as a possible component of the syllable which shows some of the features associated with the way the units, which build it, are organized, and this is considered as the strongest consonantal position. Speakers of a language are able to identify possible consonant phonotactic combinations that may emerge at the beginning of the syllables and they assert that not every consonant sequence can form lasting onsets. The word-initial clusters in Albanian are various which depend not only on the number of elements, but also on the possibilities of their combination, and sometimes they are regulated by phonological constraints. What is to be noted is that, with regard to the ability to emerge in an onset position, there are no restrictions on the consonants of the Albanian language which can all occupy this position, either as a component or as a branched component. The Albanian language does not show any visible limitations not only in the number of elements that emerge at the beginning of the syllable, but also in their possible combinations to create such syllabic structures.


Keywords: Albanian, Consonant groups, Onset, Phonotactics, Syllable, Syllable boundary

## 1. Introduction

Looking at the syllable as a phonological description unit, we can highlight some basic features that characterize the segments that are part of it.

The beginning of a syllable is seen as a possible component of the syllable which shows some features related to the way (i.e. organization of the units in which units are built) and is considered as the strongest consonantal position. Speakers of a language are able to identify possible phonotactic combinations of consonants that may occur at the beginning of the syllables and may also assert that not every consonant sequence can form long-lasting onsets.

The initial structures in Albanian are amazingly various which depend not only on the number of elements but also on the possibilities of their combination. What we should point out is that with regard to the ability to emerge in the onset position, there are no restrictions on the consonants of the Albanian language which can all occupy this position either as a oneconsonant onset syllable or as a branched component (in two or more segments). Albanian language does not show any visible limitations both in the number of elements that emerge at the beginning of the syllable and in their possible combinations to create such syllabic structures. In Albanian language, all consonants can emerge in the initial position of a syllable.

When we talk about the beginning of a syllable, let us consider that the consonants or groups of consonants in the onset position emerge at the beginning of the word as well as in its body.

Among the syllable models, the first case is related to the typical CVC syllable, which can be represented either by a two-or three-consonant scheme.

Concerning the possible selections of consonant segments that may occur at the beginning of the syllable, let's observe the structure of some of the most important combinations, distinguishing the onsets at the beginning of the word and in its body, as well, which consist of one, two, three or four segments.
(1) $\mathrm{kam}[\mathrm{kam}]$
(2) sti-në [stinə]
have
bu-kur[bu-kur]
la-star [la-star]
nice
sprout
fa-qe [fa-ce]
trë-nda-fil[trəndafil]
(3)

| mbledh [mbl collect shkri-j [Jkri] melt |
| :---: |
|  |  |
|  |  |
|  |  |

(4) çmbreh [t.fmbreh] unyoke zmbraps [3mbraps] repel( $v$ ) shndrit [Jndrit] shine(v)

Figure 1.


Figure 2.





The simplest sequences are the ones of the first type, mostly in simple syllables, or in two or more syllable words which has simple structures for each of the elements (composed of only one segment).

However, we cannot say that only figure (1) predominates in Albanian language, as the use of the segments with two or three consonants is frequent, which is noticed by the different groups that are created and the positions in which they emerge, both at the beginning of the word and in its body. For example, in the word [brengə] (grief), we have a complex structure of the onset that appears both in the initial position and inside of the word, thus obtaining two compound schemes of the beginning of the syllable, as follows:

Figure 5.


In addition to the onsets with the binary branching, we have also observed structures with three or four consonants, missing structures in several other languages, such as Italian, English (Kaye, Lowenstan, Vergnaud 1990: 204) or Spanish (Harris 1983: 14), in which the three-segment onsets are isolated cases with the status of so-called structures $/ \mathrm{sCC} /$, or, in other words, syllables which have the consonant " $s$ " combined with two other consonant segments, e.g. It. /stranol (i çuditshëm) [tfudit'〕əm]/'strange' or Eng. 'spring' [pranverə] etc. This kind of behavior makes the phoneme " $s$ " very special as it is related to some specifications of its use not only in the three-consonant groups but
also in the variety of combinations of simple onsets, thus creating groups of two consonants such as:
$s m$-, $s n-$, $s l, s p$-, $s t$, $s k-$. (A. Spencer 1996: 85)
The status of sC (cluster) structures in Albanian depends on the combination of $s+C$ structures.

The presence of the $s+C$ in the body of the word has two types of reflexes in Albanian. First of all, when words in Albanian start with these groups, the $s+C$ structures are inseparable, for example:
[la-star]-[sti-nə], [da-sma]-[smi-rə], [mu-skul]-[sku-tə], otherwise the s+C structures are separable between the two main syllabic components, the onset and the relevant coda.

But, in the Albanian language, the consonant " $s$ " does not seem to have any particular status within the structures at the beginning of the word, either at its end. Yet, many of its positions remain to be seen.

As we will see below, these sequences can be either part of the root of the word or part of a word formation whose positioning is certainly made in accordance with the phonological features of the linguistic system. A typical case is that of the word formation prefixes, $s-/ z-, s h[\delta] / z h[3]-, \epsilon[t]]-$, whose placement at the beginning of words is based on the phonological oppositions that the phonemes within the system can create in accordance with the principle of the voiced or voiceless ( $s$ - and $s h-[\delta]$ are used before the silent consonants whereas $z$ - and $z h$-[3] before the voiced ones), and the affricate $c ̧[t]]$ - is used before the sonorant and vowels.

The liquids in Albanian do not serve as syllabic-nucleus structures as it occurs in some languages. In standard Albanian, only vowels can serve as the nucleus of the syllable. (R. Memushaj 2014: 146)

Albanian is part of the languages in which each grapheme is given with a special phoneme. Since the graphs/graphemes have the same value regardless of the positions they originate, most of the words are read the same way they are written (Memushaj 2014: 210).

The phonetic transcription of the Albanian vowels, as we will see below, is provided through the symbols of simple oral vowels. Unlike the basic vowel system, the vocal system of the Albanian language has only three degrees of openness (close(d) [i, y, u] close(d)-mid [ $\varepsilon, \partial, o]$ and open [a]) and three rows of formation (front $[i, y, e]$, central [ $\partial$ ] and back [u,o,y].


For this reason, the phonetic symbols of the vowels in the transcription of the following examples will be given through such sounds. (Buchholz, Fiedler 1987: 28; R. Memushaj 2014: 39).

### 1.1 CC-initial clusters

The structure of the syllable in Albanian language is open to phonotactic combinations, thus allowing the formation of a number of consonant groups, which emerge either as the initial structures of the syllables or as structures in the body of a word.

There are no universal phonological rules regarding the possibilities of combining the consonant segments in this position; each language develops specific principles by adhering to its phonological structure. However, some general principles, such as the principle of sonority or the limitations related to the physiological and acoustic nature of sounds, should not be excluded, since not every sound union can create onsets, limitations which are imposed by the phonological system of the language.

The sonority hierarchy suggests that sounds with higher sonority stay closer to the vocal nucleus, while lower sonority sounds are positioned at the edges of the syllable. But it is noticed that the application of this principle is not so categorical because in the combinations of the consonant segments there are selections that overcome some of the phonotactic rules of the language and are related to higher levels including genuine phonological processes (examples of assimilation) as well as the construction of a number of structures of lexical phonology \{such as the selection of the prefixes and suffixes and their correct positioning, suffixes of the first or second level, e.g. [i pa-pər-cakt-(ø)-uar] 'undefined'\}.

Let's look at the possible combinations of the segments at the beginning of the syllables in the Albanian language. Regarding the likelihood of consonant sounds to join in the formation of this component of the syllable, some possible combinations are clearly noticed:

### 1.1.1 Occlusive + Occlusive

The groups of consonants formed from such segments are not numerous and largely emerge at the beginning of the second syllables (or in the body of the word) and are mainly double combinations. They are:

| In the beginning of the word |  | In the body of the word |  |  |
| :--- | :---: | :--- | ---: | ---: |
| tk tkurr[tkur] $\quad$ (shrink) | -tk- pe- tku [pe-tku] | (gown) |  |  |

Table 1

The binary features that define these sound groups are:
[- syllabic]
[- sonorant]
[ $\pm$ coronal]

### 1.1.2 Fricative + fricative

These are sound combinations that have a lower usage density. They are seen more in the body of the word and partly in the initial position:

| In the beginning of the word | In the body of the word |
| :--- | :--- |

Table 2

### 1.1.3 Occlusive + fricative

These groups are not numerous in number and are mainly found in initial position.

| In the beginning of the word |  |  | In the body of the word |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ks- | ksi-stër[ksi-stər] | (dough) | -ks | o-ksi-gjen[o-ksi-gjen] | (oxygen) |
| gdh[gð]- | gdhend[gðend] | (sculpt) |  |  |  |
| kth [kө]- | kthe-tër [k ke -trr] | (claws) | -kth [k ${ }^{\text {d }}$ | an-kthi [an-kөi] | (anxiety) |
| kth [k ${ }^{\text {] }}$ - | kthi-në [kөi-nə] | (scullery) | -ps- | ka-pso-llë [ka-pso-łə] | (fuse) |
|  | pso-nis[pso-nis] | (buy) |  |  |  |

Table 3
The binary features that define these segment combinations are:
[-syllabic]
[-sonorant]
[ $\pm$ coronal]

### 1.1.4 Fricative + occlusive

The combination of these segments is most frequently observed and presents a greater variety. While approaching such segments, we can discuss
whether the theory of sonority can be implemented or not, along with the possible "violations" the theory can occur. Possible groups are:

| In the beginning of the word |  | In the body of the word |  |
| :---: | :---: | :---: | :---: |
| ft- ftoj[ftoj] | (invite) | -ft- na-ftë [na-ftr] | (oil) |
| fq- fqinj[fcin] | (neighbor) | -sk- bi-sko-të [bi-sko-tə] | (biscuit) |
| sk- skua-dër[skua-dər] | (squad) | di-sku-tim [di-sku-tim] | (discussion) |
| sp- spec[spzts] | (pepper) |  |  |
| sq- sqep [scep] | (beak) | -st- bi-stu-ri [bi-stu-ri] | (scalpel) |
| st- sta-cion[sta-tsion] | (station) | la-star [la-star] | (sprout) |
| sti-në [sti-nə] | (season) | -shk- ba- shko [ba-fko] | (unite) |
| shk- shkë-ndi-jë [tJkə-ndi-jə] | (spark) | ndë-shko [ndə-Jko] | (punish) |
| shp- shpi-në[ $[$ pi-nə] | (back) | -shp- pë-shpë-rit [pə-fpə-rit] | (whispers) |
| shpend [ $\int$ pend] | (poultry) | -shq- u-shqej [u- $\int$ čj] | (feed) |
| shq- shqep [ $\int$ cre] | (skein) | -sht- la-shtë [la-fto] | (ancient) |
| sht- shtë-pi [ $\int$ tə-pi] | (house) | dë-shtoj [də-Jtoj] | (fails) |
| shth- shthur [ $ز$ \%ur] | (untwist) |  |  |
| vd- vde-kje [vd $\varepsilon$-kjz] | (death) |  |  |
| zb- zbardh [zbarð] | (whiten) | -vd- la-vdi [la-vdi] | (glory) |
| zg- zgalem [zga-lım] | (petrel) | -zhd- go-zhdë [go-dza] | (nail) |
| zhd- zhduk [djduk] | (disappear) | va-zhdë [va-dзa] | (furrow) |
| zhg- zhgun [dsgun] | (woolen gown) | -zhg- vë- zhgo [va-ḑo] | (observe) |
| zgj- zgju-a [zfu-a] | (hive) |  |  |

Table 4
Presenting the above mentioned groups, we face some essential features:

First, all the occlusive-fricative groups are closed so that none of them can be expanded by adding a third element.

Secondly, the principle of sonority is applied only to some of these groups, and precisely to the groups of the occlusive-fricative sounds. Generally speaking, in initial syllables of the word as well as in the onsets formed by consonant groups but not in the initial syllables, the principle of sonority is not applied.

Thus, in the linear rankings of the sounds there is a noticeable change in the degree of sonority since, especially in the fricative-occlusive groups, this principle is not applied. Only in the occlusive-fricative combinations ( gdh , $k t h)$ this principle is concertized.

In determining the syllabic boundaries, a widely accepted criterion is followed, according to which, the groups consisting of two voiced consonants form syllables with the subsequent vowel when words of language begin with these groups. (A. Spencer 1996: 94).

### 1.1.5 Sonorant (nasals) + occlusive

The combinations among the sonorant consonants and voiced (clusters) ones (whether occlusive or fricative) form the dominant groups of the onset in Albanian. Combinations may be voiced + sonorant, or vice versa.

In this group, most of it consists of unions between nasal and occlusive consonants. The building of such beginnings is a deviation from the principle of sonority because these groups in the Albanian language are not separated during pronunciation. In most cases they are noticed in the internal structures of words. They are:

| In the beginning of the word |  |  | In the body of the word |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| mb | mbaj [mbaj] | (keep) | -mb | kë-mbë [kə-mbə] | (leg) |
| mp | mpij [mpij] | (numb) | -mp | ka-mpi[ka-mpi] | (camp) |
| nd | ndaj [ndaj] | (seperate) | -nd- | ve-ndi [ve-ndi] | (place) |
| ng | ngar-ke-së [ngar-ke-sə] | (cargo) |  | pra-nga[pra-nga] | (cuffs) |
| ng | ngja-lë [nıa-lə] | (eel) | -ngj | më-ngjes [mə-nJes] | (morning) |
| nx | nxë-nës [ncza-nəs] | (pupil) | -nx- | ve-le-nxa[ve-le-ṅza] | (rugs) |

Table 5
The binary features of the sonorant + occlusive groups are as follows: [-syllabic]
[ $\pm$ sonorant]
[ $\pm$ coronal]

### 1.1.6 Occlusive + sonorant

| In the beginning of the word |  |  | In the body of the word |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| bj- | bje-shkë [bje-Jkə] | (mountains) | -bj- | o-bjek-ti[o-bjek-ti] | (object) |
| bl- | ble-të [ble-tə] | (bee) | -br- | li-bri [li-bri] | (book) |
| bll- | bllok [błok] | (block) | -bl- | pu-bli-ku [pu-bli-ku] | (public) |
| br- | bre-nda [bre-nda] | (within) | -cj- | për-cjell [pər-tsjel] | (convey(v) |
| cj- | cjap [tsjap] | (goat) | -dr- | a -dre-sa[a-dre-sa] | (address) |
| çj- | çjerr [ t jırı] | (scratch) | -kr- | a-krep [a-krep] | (scorpion) |
| çl- | çliroj[tyli-roj] | (release) | -gl- | ve-gla [ve-gla] | (tools) |
| çm- | çmoj [tfmoj] | (apprize) | -gr- | a-gru-me [a-gru-m ] | (citrus) |
| çn- | çnde-roj[tfnd $\varepsilon$-roj] | (dishonor) | -pl- | di-plo-mat[di-plo-mat] | (diplomat) |
| çnj- | çnje-rë-zor[t $\dagger$ ¢-rə-zor] | (inhuman) | -pr- | ka-proll [ka-proł] | (deer) |
| çr- | çre-gji-stroj[tfre-ji-stroj] | (deregister) | -tj- | a-tje [a-tje] | (there) |
| dj- | dja-lë [dja-la] | (boy) |  | ve-tjak [ve-tjak] | (own) |
|  | dra-më [dra-mə] | (drama) | -tr- | pa-triot [pa-triot] | (patriot) |
| dhj- | dhja-më [ðja-mə] | (fat) |  |  |  |


| kr- | kresh-nik [kref-nik] | (highlander) <br> kl- | kla-së [kla-sə] |
| :--- | :--- | :--- | :--- |
| kll- | klla-pi $[\mathrm{kła}$-pi] | (classroom) |  |
| kth- | kthe-së [k $\theta \varepsilon$-sə] | (delirium) | (turn) |
| gl- | glob [glob] | (globe) |  |
| gll- | gllënj-kë [głən-kə] | (sip) |  |
| gr- | gra-ckë [ grats-kə] | (deadfall) |  |
| pj- | pje-së [pje-sə] | (part) |  |
| pl- | pla-kë [pla-kə] | (old woman) |  |
| pll- | plla-kë [pła-kə] | (slab) |  |
| pr- | pra-në [pra-nə] | (nearby) |  |
| tj- | tjerr [tjer] | (spin) |  |
| tk- | tkurr [tkur] | (shrink) |  |
| tr- | tro-ndis [tro-ndis] | (shock) |  |

Table 6

As it can be seen from the above presentation, the combinations of sonorant + occlusive groups and vice versa, constitute a considerable number of onsets in Albanian. These groups are noticed mostly in the initial syllable structure and less frequent in the body of the word, or at the beginning of the second syllables.

Between the two groups, the initial and in-the-body-of-the-word group, there is a kind of asymmetry, since some of the initial onsets are not used in internal position.

The problems associated with the identification of the syllable components and the boundaries between them, obviously affect the sonorant + occlusive groups. This is because almost all the syllables containing these consonant groups do not apply the principle of sonority. Each of the structures first contains the sonorant consonant and then the occlusive one, thus, disrupting the hierarchy of the sound sonority, since the occlusive, being less sonorant, and stands near the vocal nucleus.

As far as the division of the words into syllables in these formations, the boundaries between the assumed coda of the first syllable and the beginning of the second syllable are very relative. In addition to the nasal-occlusive consonant groups, ( $n d, n g, n g j\left[\mathrm{n}_{\mathrm{f}}\right], n k, n x h\left[\mathrm{n}_{\boldsymbol{\prime}}\right], m b, m p$ etc.) which is phonologically inseparable in Albanian, and in any position, they emerge into a single starting structure. Other liquid + occlusive groups do not have the same status and the division of words into syllables of such groups in the VCCV structures is somewhat free, i.e. it is not excluded from various combinations, whether VC-CV or V-CCV.

But such a division poses a problem with the defining of the consonant groups that we have presented as the onsets since we will no longer have a
consonant startup group if there passes a syllabic boundary to divide it. The first consonant of the group, the sonorant, will be taken as part of the last component of the first syllable, its coda, and the beginning of the second syllable will be simple and not branched. However, it should be emphasized that in many languages the starting structures (onsets) are more numerous and in some of them the existence of the coda as the last component of the syllable is questionable and that the combinations of the coda sounds are more limited than the beginning ones.

This "differentiation" of the syllable components is closely related to the concept of the peak of the syllable which seems to give priority to the beginnings of the syllable versus the occlusive one (A. Spencer 1996: 93). In this regard, let's take the example of the definition of the syllable components in a given word, e.g. "tel" (wire), distinguishing three stages separated from one another:

1- Nucleus Formation (N)
2- Onset Formation (O)
3- Coda Formation (C).
And they are presented in the following schemes:


At first, we identify the nucleus (a), a vowel in the Albanian language, which represents the peak of the syllable.

Then, (b), we identify the onset as a right-sided component of the rhyme, which requires us to mark the nucleus as its central component. At the same time, we can determine that a broad formation consisting of an onset followed by a structure as a rhyme is nothing else but a syllable.

Finally, we need to identify the coherent end, as a constituent element of rhyme, marking it as the syllable coda.

In such a mono-syllabic structure, the process of identifying the syllable components is not a problem. The difficulties are related to the exact definition of these two or more syllable structures, (returning to the above problem), especially when one of the components is built from two consonant segments. Let's bring the example of the word gonxhe [gondse] (bud), more precisely, of the possible ways of dividing this word in syllables:


Obviously, from the three ways, the first one should be taken as the most accurate. The reason for such a claim is related to the internal features of the phonological system of the language. The definition of the syllable boundary when the group consists of two consonants is related to a general rule of the phonetic division of the word in syllables in the Albanian language (A. Dodi 2004: 134). The VCCV structures, in most cases the consonant group goes with the following vowel, thus gaining open syllables that make up the most common pattern of syllables in Albanian. These groups consist mainly of the combination of voiced-sonorant, or occlusive-fricative consonants.

Along with the formation of the two consonant groups observed above, in the Albanian language there are also combinations of fricatives and sonorant as follows:

### 1.1.7 Fricatives-sonorant

| In the beginning of the | orld | In the body of the world |  |  |
| :---: | :---: | :---: | :---: | :---: |
| dhr- dhrim [ठrim] | (a very old woman) | -dhr- | ku-dhra [ku-dra] | (anvil) |
| dhj- dhjamë [ðjamə] | (fat) |  | mi-dhje [mi-ðje] | (mussel) |
| fj- ffa-lë[fa-lo] | (word) |  | shpi-fie [Jpi-fic] | (slander) |
| fl- fletë [flc-to] | (foils) |  | çi-flig [tfi-flig] | (hacienda) |
| fll- fllu-skë [fłu-skə] | (bubble) |  | re-fren [re-fren] | (chorus) |
| fr- fre-skët [fre-ska] | (fresh) |  | do-sje [do-sjz] | (folder) |


| sj- | sjell [sjet] | (bring) | -sm- | da-smë [da-smə] (wedding) |
| :---: | :---: | :---: | :---: | :---: |
| sm- | smirë [smirr] | (envying) |  |  |
| shm- | shmang [Jmang] | (avoid) |  |  |
| shl- | shly-ej [Sly-ej] | (liquidate) |  |  |
| thj- | thjesht [ $\theta \mathrm{j} \varepsilon \mathrm{ft}]$ | (simply) |  |  |
| vj- | (i) vje-tër[vje-trr] | (old) |  |  |
| vl- | vle-rë [vl¢-rə] | (value) |  |  |
| vr- | vri-më [vri-mə] | (hole) |  | lë-vro [lə-vro] (cultivate) |
| zj- | zjarr [zjar] | (fire) |  |  |
| zm- | zmadhoj [zma-ðoj] | (zoom) | -zm- | ka-zmë [ka-zmə] (mattock) |

Table 7
Consonant groups composed of a voiced (which can either be occlusive or fricative) and a sonorant, as seen, make up the bulk of the double onsets in the Albanian language.
The binary features of these groups are as follows:
[-syllabic]
[ $\pm$ sonorant]
[ $\pm$ coronal]
[ $\pm$ continuant]

### 1.1.8 Sonorant + Sonorant

The last binary combination of the consonants emerging as the onset is the case when two sonorants come together. In general, we can only talk about onsets for a part of them because not all of these groups form onsets in the Albanian language. The sonorant segments in the body of the word, considerably, are divided between the two distant components of the syllable, such as:
'laj-mi' (news), 'baj-rak', 'lej-lek' (stork), 'ar-më’ [ar-mə](gun) etc.; but, according to A. Dodi, when the sonorant j, m, l," appear" as the second element of the group, the whole group goes with the following vowel, i.e. it does not split".(A. Dodi, J. Gjinari 1983: 118)

Since Dodi's rule does not stand, this also appears from the examples he brings for illustration, which although they have $\mathrm{j}, \mathrm{m}$ or l as a second element, he still divides them, eg.
'laj-mi' (news), 'for-ma' (shape), 'gaj-le' (no worry) etc. So, the rule we have followed so far is worth practicing.

Noticeably in these sonorant groups, there are rare cases when these groups serve as onsets, but the symmetry is complete. The same groups emerge as initial structure onsets as well as the onsets in the body of the word.

| In the beginning of the word |  |  | In the body of the word |
| :---: | :---: | :---: | :---: |
| rrj- | rrjedh [rjeð] | (flow) | -rrj- bje-rrje [bje-rje] (wastage) |
| mj- | mjel[mjel] | (milking) | -mj- pa-mje [pa-mje] (view) |
| ml- | mlysh[mlyf] | (pickerel) |  |
| mll- | mllef [mł\&f] | (rancor) |  |
| mr- | mriz [mriz] | (a shadowy |  |

Table 8

### 1.1.9 Features of the two-segmented onsets

From the analysis of the consonant groups in the onset position we notice that their use occurs in all positions, some of them emerge in an initial position whereas some at the beginning of the second (or even third) syllable of the words. From features' observations of the two-segmented onsets, it turns out that not all the combinations are possible. This is related to the segmental composition of these groups. Thus, occlusive +occlusive, fricative + fricative and sonorant + sonorant combinations are less common, since not every union of these segments can form a two-segmented onset.

Regarding the placement of syllable boundaries between elements of noninitial structured onsets, Albanian phoneticians do not follow the same criteria. Therefore, in A. Dodi's "Phonetics and Phonology" (A. Dodi 2004: 135), as noted above, some of the consonant groups in the body of the word are taken as onsets even though they are not really such. Dodi does not even give any criteria to support this division. There are no words in Albanian that begin with the onsets that this author accepts; regarding the sonority, the ordering of their sounds contradicts this principle, as closer to the nucleus lies a less voiced sound.

The elements that enter into the initial structure of the syllable, necessarily contain [+ consonant] and [-syllabic] features. What other binary characteristics should the consonants of each pair have?

Considering all the double combinations of the consonant segments of the beginning of the syllable, the distinctive features of the sounds that form part of this structure are the followings (R. Memushaj 2016: 102-104)
[-syllabic], where the onset segments are only consonant, and as such can never emerge as the climax/peak of the syllable;
[ $\pm$ sonorant], where the first element of the onset may be a sonorant or even a voiced consonant according to the combinations noted above.
[ $\pm$ continuant], where the long lasting sounds can be the sonorant and the fricatives. The occlusive are unrecognized by this feature. Depending on the combinations of these segments, the feature may be positive or negative.
[ $\pm$ coronal], where the sounds are articulated with the tip or the blade of the tongue. This feature characterizes a certain sound class, so the dental,
alveolar, palato-alveolar and retroflex segments are [+ coronal]. From this feature, the labial, palatal and velar are excluded.

As for the [ $\pm$ voiced] feature, it depends on the [ $\pm$ sonorant] feature: if both group consonants are [-sonorant], both will be either [-voiced] or [+voiced], i.e. they must be either voiced or silent. We can say that for the voiced consonants this feature cannot have different values.

The binary features for each of the two consonant components of the syllable onsets in the Albanian language are:


### 1.2 CCC-initial clusters

An important place in the onsets of the Albanian language also includes the groups composed of three consonants. They come as combinations of different segments either in the initial structure position, or in the body of the word. The 'selected' segments for the creation of these units are mainly the voiced ones (occlusive or fricatives) and the sonorant ones. As we will see in the inventory of these groups, we do not have a group of three voiced consonants; we always notice the presence of a sonorant, in an initial, central or final position, where a [-sonorant] consonant cannot emerge.

The three-consonant onsets encountered in Albanian at the beginning and in the body of the word are these:


| ndr- | ndri- ço [ndri-t $\int 0$ ] ndreq [ndrec] | (shine) <br> (fix) | -ndr- | ku-ndroj [ku-ndroj] | (contemplate) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $n \times j-$ | nxjerr [nczjer] | (exhale) |  |  |  |
| ngr- | ngri- tës [ngri-təs] | (hoist) |  |  |  |
| skr- | skru-pull [skru-puł] | (scruple) | -ngr- | ko-ngres [ko-ngres] | (congress) |
| skll- | skllav [skłav] | (slave) |  |  |  |
| str- | stru-kturë[stru-ktu-rə] | (structure) |  |  |  |
| spr- | spraps [spraps] | (back off) | -str- | pa-stroj [pa-stroj] | (cleanse) |
| shfl- | shfle-to[ $\int$ fle-to] | (browse) |  |  |  |
| shfr- | shfry-j[ $\int f$ ryj | (grumble) |  |  |  |
| shkr- | shkri j[ $\left.\int \mathrm{krij}\right]$ | (melt) |  |  |  |
| shnd- | shndërro[ [ nd --ro] | (convert) | -shkr- | për-shkruaj [pər-fkruaj] | (describe) |
| shpl- | shpleks [ $\int$ pleks] | (unravel) |  |  |  |
| shpr- | shpreh[Jpreh] | (express) |  |  |  |
| shtj- | shtje-lloj [Jtje-łoj] | (explicate) |  |  |  |
| shtr- | shtroj [ $\int$ troj] | (lay) | -shtj- | kë-shtje-lla [kə-ftje-ła] | (castle) |
| skr- | skru-pull [skru-puł] | (scruple) | -shtr- | vë-shtroj [vว-ftroj] | (look) |
| zbr- | zbres [zbres] | (subtract) |  |  |  |
| zdr- | zdrukth [zdruk $\theta$ ] | (plane) |  |  |  |
| zgr- | zgrip [zgrip] | (the brink) | -zdr- | la-zdro [la-zdro] | (caress) |
| zvj- | zvjer-dhje [zvjer-dhje] | (weaning) |  |  |  |
| zhdr- | (i) zhdrej-të [ḑdrej-tə] | (oblique) |  |  |  |

Table 9
The three-element onsets, as noted in the above examples, do not appear as isolated cases in Albanian; on the contrary, they occupy an important place in this syllable structure, being quite frequent, especially in the initial structure syllables of the words.

Identifying three-segment onsets in the body of the word when these are part of the four consonant groups is much more difficult. To determine in which of these groups we have onsets, we must apply the following rule: "The first consonant of the four consonant groups goes with the vowel before it".

However helpful this rule might be in identifying the bulk of the triple onsets still are not inclusive. Thus, while $a b$-strakt [ab-strakt], ek-stra-va-gant [ek-stra-va-gant] etc. are divided in accordance with the rule, the implementation of this rule in the four consonant groups which start with mb , nd, ng e ngj, would separate the nasal one from the following voiced one, for example, e pashmangshme [pafmangfme] (inevitable) would be divided as "e pa-shmang-shme" [e pa-fmang-fme]. This not only contradicts the nature of the Albanian language but also the other rule which says that a group of consonants in the body of speech may be onset, if words in Albanian start with it (R. Memushaj 2014: 148)

The principle of the sonority of sounds is applied in the second or third syllable of the words, while the initial structure syllables are excluded from
this principle and bear a free choice of the combination of the segments. Considering this fact, it is very natural to divide consonant groups into the body of words, because in all cases the first element is a sonorant one (followed by a voiced one) and as such it should stay closer to the vocal nucleus, being attached to the final component of the preceding syllable, to the coda.

Thus, the division of consonant groups into the body of the word would be in accordance with the application of the degree of the sound sonority, e.g. 'par-tner' (partner), 'kon-kret' (concrete), since /t/ and /k/ have a lower level of sonority than $/ \mathrm{r} /$ and $/ \mathrm{n} /$ and we should stay away from the peak of the sonority so that the first segment of the group becomes part of the coda of the first syllable. The same happens with other words although the ratio of the sonorant and the voiced ones can be shifted (the above groups have such structures:
-sonorant + sonorant + voiced,
-sonorant + voiced + sonorant,
-sonorant + voiced + voiced.
It should be noted that in other languages (in Italian and English for e.g.) similar three-segment initials are found and they appear as isolated uses and are related to the particular status of the phoneme which is the only consonant that can precede a bi-consonant beginning composed of a voiced + a sonorant but having some conditions:
-First, the phoneme $/ \mathrm{s} /$ should always be found at the beginning of the consonant group emerging as an onset component; then, the /sCCs/ groups are mainly found in the initial position and rarely in the second syllable of words. In Albanian, this phoneme does not have such a specific status as in other languages. The only formations of consonant groups, which have this segment as their element, position it in the middle of the group and in most cases the group is divided.

The most controversial case in the Albanian language is the case of a fricative, which often appears in the initial position, with the status of the prefix, and in the body of the word, too. The groups that have this segment appear not only in the initial position (such as 'shfle-toj' [ffle-toj] (turn the page), 'shndë-rroj'[ [Jndə-roj] (to transform), but also in the body of the word (such as ‘kë-shtje-llë’ [kə-ftje-łə] (castle), ‘vë-shtroj’[və-ftroj] (stare) etc.)

However, it is noted that in some of the three element groups, whether initials or in the body of the word, the principle of the consonant order according to the degree of sonority is not respected, which in some cases can be explained by the fact that the first element of the group is a prefix, such as in case of: 'shpleks' [Jpleks], 'shfryj'[Jfryj], 'shfletoj' [ffletoj], 'ndriçoj'[ndritfoj], 'ngre' [ngre], 'mplak' [mplak] tc., while in other cases we may be satisfied with the claim that the sibilant consonants /s/ and /sh/ are behaving more differently than others.

In the initial use of the consonant groups, it is noted that they are genuinely part of the branched onset structures in the Albanian language and they are excluded from the implementation of the hierarchy of sonority.

So let's bring some examples of these 'free' formation units by distinguishing possible ways of combining them:

1. Sonorant +occlusive + sonorant $m b l, s j, m p l$, $n d r$, ndj, ngr etc;
2. Affricative + occlusive + sonorant $s c l$, str, melt, shfl, shpl etc.

Observing the checklist of the three-initial groups, it turns out that the first element of the group may be a voiced or silent consonant, or an occlusive or affricative consonant. But in the second and third position, a random consonant cannot emerge as it can be seen more clearly in the following scheme:


| $[-$ syllabic $]$ | $[-$ syllabic $]$ | $[-$ syllabic $]$ |
| :--- | :--- | :--- |
| $[ \pm$ sonorant $]$ | $[-$ sonorant $]$ | $[+$ sonorant $]$ |
| $[ \pm$ continuant $]$ | $[ \pm$ continuant $]$ | $[+$ continuant $]$ |

From this we see that in the three element groups there are no restrictions on the first element of the group, which may be sonorant or voiced or occlusive or affricative. For the second and third element there are limitations.

Thus, a voiced consonant can only emerge as a second element of the group, whereas a consonant segment with the characteristics of + sonorant, + continuant, i.e. a fricative sonorant or vibrant consonant can emerge as a third element. An exception to this rule is just the çnd-group 'çnderoj’[t]nderoj] (dishonor), where the second element of the onset is [+ sonorant], while the third [-sonorant, -continuant]. This can be explained by the fact that this group is secondary and is created by the union of the prefix $c ̧[t]]$ - with the onset nd.

### 1.3 CCCC groups of onset structures

The last consonant formation in the onset structure is composed of four segments. Though being more specific and fewer in numbers, they make the beginning of syllable in Albanian very diverse in terms of the number of consonant segments and their combinatorial possibilities.

| çmbl- | çmbledh [t.mblıð] | (scatter) | çndr | çndryshk [tfndryfk] | (renew) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| çmbr- | çmbreh [tfmbreh] | (unyoke) | shndr | shndrit [ fndrit ] | (shine) |
| çmpr- | çmpreh [tfmpreh] | (blunt) | zmbr | zmbraps[zmbraps] | (repel(v) |

Table 10
The four-segment onsets can be seen as exceptional cases, as they all occur in words derived from prefixes, which means that a fourth element, which belongs to another morph/morpheme, joins the three-segment onset of the root morpheme. The prefixes $\left.\operatorname{sh}\left[\int\right]-/<̧[t]\right]$ - and $z$ - are to be added as the fourth consonant element.


From this scheme, it appears that there are no restrictions on the first and third consonants of the group, which may be voiced, or sonorant, occlusive or fricative. But there are restrictions on the second and fourth consonant segments: the third consonant can be neither fricative nor vibrant, it can only be voiced or sonorant occlusive; and the fourth element can be nothing but a sound [+ sonorant] and [+ continuant], i.e. the ending segment of the four group onset (CCCC groups of onsets) should be a sonorant affricative. The initial complex structures are an important feature of the phonological system of the Albanian language. Although a part of them are created as a result of morphological processes, the way in which segments are structured is of interest.

This is related to the segmental composition of these groups, which include all classes of consonant segments, though not with the same densities of use. Thus, combinations of the voiced of the same class $(\mathrm{O}+\mathrm{O}$ or $\mathrm{F}+\mathrm{F})$ are rare compared to the combinations between voiced and sonorant, or the combination between voiced consonants which have different ways of formation $(\mathrm{O}+\mathrm{F}$ or $\mathrm{F}+\mathrm{O})$.

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# Morphological and Syntactic (non-)finiteness. A Comparison between English and Balkan Languages 

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#### Abstract

: In English, finiteness has an extremely limited realization in morphology and is almost exclusively defined in syntax. In particular, there are two main morphological forms, the stem and the stem followed by the -ed ending, which function as finite or as non-finite (infinitive, participle) depending on the syntactic context. We propose that the main split of English is aspectual and tense and mood specifications are derived by the syntactico-semantic context. Importantly, there is no necessary connection between the form that non-finite complementation takes in English and the reduced inflectional paradigm of the language. Geg Albanian and Romanian are richly inflected languages. Yet the short infinitive of Romanian coincides with the verb stem; the Geg Albanian verb stem externalizes the infinitive (paskajore) and participle. Therefore in Balkan languages as well, non-finiteness is defined by syntactic context. Specific attention is paid to the role of the subject and of prepositional introducers in disambiguating the relevant verb forms.


Keywords: Infinitive, Inflection, Participle, Preposition, Subject, Tense/ moodlaspect

## 1. Introduction

English is characterized by the almost total absence of verbal inflection. The verbal forms for a verb like open are given in (1). The formations in (1a) are in the present, while those in (1b) are in the past. Leaving aside the $3^{\text {rd }}$ person singular, present tense, which takes the affix $-s$, the verb has exactly the same form in all the other persons and numbers. It is basically uninflected. In (1b), the verb takes the affix -ed (opened) in all persons and in both numbers.
(1) a. I/you open, he/she/it opens, we/you/they open
b. I/you/he/she/it/we/you they opened

What is more, open, along with the finite forms in (1a), also corresponds to the infinitive. The complement clauses in English (2a-b) are treated as infinitival, given that the embedded verbs have no morphological indication for $3^{\text {rd }}$ person (cf. *John tried/ought to opens the door). On the contrary, they are (obligatorily) introduced by the element $t 0$, which is standardly treated as an infinitival marker (Chomsky 1981). The embedded subject in (2) is obligatorily null and its reference is controlled by the matrix subject.
(2) a. John tried (*Bill) to open the door.
b. John ought (*Bill) to open the door.

The imperative (3a) and the subjunctive (3c), which is a relic form and not really productive, also correspond to the form open. The form opened, apart from being the past tense, also corresponds to the perfect/passive/adjectival participle (4).
(3) a. Open it!
b. I request that he open it.
(4) a. I have opened it.
b. It was opened.
c. an opened box

One obvious question that arises is whether the lexicon has four different entries for open and two different ones for opened, or whether there are just two entries open - opened. If the former is the case, then we should allow for a high degree of homonymy in the lexicon. If the latter, we would have to account for the different functions that each of these forms has. In morphological terms, verbal inflection in English shows a very high degree of syncretism (Pinker 1999: 30-33). In terms of the standard morphological framework for generative grammar, namely Distributed Morphology (DM, Halle and Marantz 1993), one might propose that underlying syntactic forms are fully specified; however, massive syncretism results from the underspecification of the lexicon, or the application of Impoverishment rules (or both).

As is well-known, the DM account relies on Late Insertion of lexical exponents. Under projection of the syntax from the lexicon (Chomsky 1995), the question of syncretism takes a different shape, essentially that of disambiguation by the syntax or the interpretive interface (Kayne 2010). The comparison with Balkan languages, including in particular Eastern Romance (Romanian) and Albanian, is relevant in this respect because it shows that
poverty of inflectional morphology in the system is not necessary to trigger the use of bare verb stems in particular as non-finite forms of the verb (infinitives, participles). Both Eastern Romance and Albanian are inflectionally rich. Romanian is more or less comparable to other null subject Romance languages; Albanian adds inflections for Voice (Manzini et al. 2016) on top of everything else. Yet the Romanian 'short infinitive' is a verb stem. So is the paskajore 'infinitive' of Geg Albanian, also used as the perfect participle; in Geg Albanian furthermore both the present and the simple past $3^{\text {rd }}$ person singular may be instantiated by verb stems. Note that Geg Albanian does have participial inflections, which are only used in adjectival environments. Note also that Romanian has shed the -re inflection which was present in Latin and still survives in another Eastern Romance language, Aromanian. Therefore external causes seem irrelevant to the instantiation of non-finite forms (and partially also finite forms) by means of a verb stem.

In section 2 we discuss English, concluding that the distinction between the stem form and the -ed form is aspectual and that finiteness is a syntactic construal. In section 3 we discuss the representation of the subject, which represents an important factor in the syntactic definition of (non-)finiteness. In sections 4 and 5, we consider Balkan languages. Section 4, on Romanian, allows us to advance a proposal as to the prepositional element that is seen to introduce (inflected and non-inflected) infinitives in Romance and in Germanic. In section 5, we consider the verb stems of Geg Albanian in their participial, infinitival (paskajore) and finite construals. Again we assume that their nature as verb stems makes them compatible with a restricted set of enrichments (modal, temporal, aspectual), subject to the syntactic context.

## 2. (Non-)finiteness in English

As briefly outlined in the introductory section, the question arises what (non-)finiteness amounts to in languages like English, where inflectional morphology is almost entirely absent. The basic assumption would have to be that (non-)finiteness in English is syntactically defined.

Eide (2016) considers data from English and Norwegian and distinguishes between morphological ( $\mu$-)finiteness and syntactic finiteness. According to her analysis, English does not have $\mu$-finiteness and the two verbal forms in (5) correspond to two entries in the lexicon specified simply for $\pm$ past. ${ }^{1}$ This implies that their different readings would have to be derived syntactically.

| a. | +past: | opened |
| :--- | :--- | :--- |
| b. | (preterite/participle) |  |
|  | open | (present/infinitive) |

[^33]As is well-known, some English verbs distinguish between the two +past forms, since they have one form for the preterite and another one for the participle, as shown in (6).
(6) a. go - went - gone
b. speak - spoke - spoken
c. see-saw - seen

According to Eide (2016: 159-161), these forms are quite often mixed in the speech of native speakers, as in the examples in (7).
(7) a. woulda came ('would have come'), coulda went ('could have gone')
b. I seen it ('I saw it'), she done it ('she did it')

This kind of mixing, Eide argues, shows the absence of the $\mu$-finiteness feature in English. To the extent that the distinction between the preterite (finite) and the participle (non-finite) holds for some verbs, it has to be defined lexically and restricted to a limited class of verbs (learned forms). As the mixing of these forms shows, this distinction tends to become obsolete.

Adopting this approach, there is a single form opened. If we assume that the form open is essentially the stem, which excludes the past reference, we should define the way this form is compatible with both finite and non-finite interpretations. The same holds for the form opened, which being +past, is compatible with a finite reading, while as a participle it gets a non-finite reading. The issue that arises then concerns finiteness at the syntactic and interpretive level.

### 2.1 The form [-past]

Let us start with the form open. As a present tense, it is the same in all persons, apart from $3^{\text {rd }}$ person singular which takes the ending $-s$, namely opens. In all the other persons, it is the syntactic subject that disambiguates it.

## (8) \{I, you, we, they\} open

Following Chomsky (1995), the syntactic category Tense has uninterpretable $\varphi$-features, whose interpretation is determined by the corresponding interpretable features of the pronoun in subject position, as in (9). In (9), Inflection is not realized as a separate morpheme since verbal inflection is absent in English. The realization of the phi-features and their specification is derived by the merge of the pronoun (or a DP in general) with the head T ; this configuration gives rise to a spec-head (Subject-T) agreement relation
(see also Ackema 2002; Roberts and Roussou 2003). In what follows we use I (Inflection) instead of T, as the relevant head, as in Chomsky (1986).

This approach is compatible with the fact that there is no evidence for V-to-I movement in English (Pollock 1989) and a null subject is not possible in main finite clauses. Effectively, finiteness in (9) is determined by the presence of the subject. At the same time, finiteness concerns the temporal reference of the clause as well, coinciding with the utterance/speech time (for an overview see Nikolaeva 2007; Eide 2016). We assume that this particularly elementary tense specification can be provided by a (default) enrichment at the Conceptual-Intentional (C-I) interface.

Let us next consider the same form (i.e., the verbal stem) as a non-finite verb in (10). In this structure, the same form occurs along with the marker to, which traditionally in generative grammar is analyzed as an element of the non-finite (infinitival) Inflection. So what turns the verbal form into a non-finite one is essentially the syntactic environment it occurs in.
(10) (John tried) [to open/*open the door ]

It's worth pointing out that the same stem can be construed as an infinitive even when the marker to is absent, as in (11). The sentence in (11a) has a modal verb which functions as an auxiliary and realizes the I head. Modal verbs in English can only be used as auxiliaries and not as main verbs (see Roberts 1993). In example (11b), the so-called bare infinitive is selected by a perception verb such as see. Despite the absence of to, the verbal form is interpreted as a non-finite one and occurs in the complement position of the main verb.
(11) a. John must/should/could open the door.
b. I saw John open the door.

Apart from the above distribution in complement position, the verbal stem can also occur in a main clause, where it does not depend on some other element, as in example (12). That this is a non-finite form is supported by the fact that the presence of opens gives rise to ungrammaticality, although the subject is $3^{\text {rd }}$ person singular. The above sentence is not a declarative but an exclamative, which expresses the speaker's attitude towards the content of the proposition. Thus it has a modal reading.
(12) a. John open/*opens the door?! Never!
b. Him/*he open the door?! Never!

Another property of this construction is that its subject is in the accusative and not in the nominative, as (12b) illustrates. This shows that there is a correlation between the morphosyntactic realization of the subject and the notion of finiteness. In any case, the subject in main modal clauses can be syntactically realized, despite the fact that it shows restrictions regarding case or person specifications.

So, what we observe is that the same stem occurs in different syntactic environments, some of which are characterized as finite, as is the case with matrix declaratives, or as non-finite, or as modal. Modal occurrences also include the 'subjunctive' (13a) which is not productive in English, as has been replaced by an overt modal (a periphrastic construction) (13b). The main verb in (13a) does not inflect (i.e. *leaves).
(13) a. I request that he leave.
b. I request that he should leave.

In the context of modal uses, we should also include the imperative, as in (14). Once again, despite the optional presence of a $3^{\text {rd }}$ person subject, the verb remains uninflected, as in (14b).
(14) a. Open the door!
b. Someone open the door!

To summarize the discussion so far, the form open ([-past]) can be construed as a finite or non-finite, or correspond to mood distinctions (subjunctive, imperative). As a finite form, it has (independent) time reference or modality. As a non-finite form it has bound or dependent temporal reference (see Landau 2004) when it occurs in a complement clause, or it expresses modality in a main clause, as in (12). Again, one may surmise that the relevant modal readings are available at the C-I interface. Thus imperatives are read as either possibilities or necessities (von Fintel and Iatridou 2017), i.e. as either of the two basic modals. As for subjunctives, Giorgi (2009) suggests that they are best construed as the absence of 'something', namely of the independent T and Speaker-anchoring that characterizes main clauses (and possibly indicative embedded clauses).

### 2.2 The form [+past]

Let us now turn to the form opened, which according to Eide's (2016) account is [+past]. For discussion's sake, we will ignore the morphological distinction that arises within some verbs between past tense and participle. As (15) shows, the same verbal form ( $\mathrm{V}+e d$ ) shows in all persons in both num-
bers. As we saw in relation to the form open in (8), what makes this sentence finite is the presence of the subject, whereby the DP defines the (abstract) phi-features of the I head with respect to person and number.
(15) \{I, you, he, she, it, we, they\} opened

The same form becomes 'non-finite' when it is introduced by an auxiliary verb like have or be, as in (16).
(16) a. I have opened the door.
b. The door was opened (by the locksmith).
c. The door has been opened (by the locksmith).

What is interesting in (16) is that although the main verb remains the same, i.e. opened, the readings it gives rise to change according to the auxiliary used. So the presence of have gives rise to the perfect (present or past) tense, while the presence of be changes the voice from active to passive. The example in (16c) shows a combination of both in the present perfect passive. More precisely, have retains voice (active in (16a), passive in (16c)), while be changes it (from active to passive). In descriptive grammars, the form opened in (16a) is referred to as 'past participle', while in (16b) (and (16c)) as 'passive participle'. Stowell (2008) uses the term p-participle to refer to both cases.

While the form of the participle remains the same in both constructions, the valency of the predicate (its argument structure) is affected, depending on the auxiliary (see Collins 2005). In particular, the verb opened remains transitive when selected by have, but becomes intransitive when selected by $b e$. In the latter case, its internal argument is promoted to the subject position (satisfying the EPP), while the external argument is either non-externalized, corresponding to an existentially bound variable, or externalized as an oblique, namely as the $b y$-phrase. If we assume that the verbal form is the same in both cases (Hoekstra 1984), then the attested differences in argument structure will have to be attributed to auxiliary selection. A basic difference between the two auxiliaries is that have as a main verb of possession is transitive, while be is unaccusative (on copula be, see Moro 1997). Being transitive, have has an external and an internal argument (17a), while be being unaccusative has no external argument, but only an internal argument (17b).
(17) a. I have a car.
b. I am a doctor.

According to Manzini and Savoia (2007, 2011), the participial form in these constructions matches its argument structure to that of the selecting
auxiliary. Their analysis is partly based on Kayne's (1993) account, which assigns a bi-clausal structure to Aux-V constructions. The embedded clause may have a reduced or a full structure. Going back to the auxiliary verbs, have has an external argument (the subject) and an internal one, that is, the complement defined by the non-finite verbal form. Within that complement, the verb retains its argument structure. Its external argument though is bound by the matrix subject, as in control constructions (see (18a)). On the other hand, be has only an internal argument, which is the complement defined by the non-finite verbal form. The internal argument of the embedded verb is demoted and its internal argument is raised to the subject position of the matrix (auxiliary) clause. Its argument structure then matches that of its selecting auxiliary. The external argument of the embedded verb is either an existentially bound variable or is realized as a by-phrase, as in (18b).
(18) a. I have [(PRO) opened the door]
b. The door was [the door [opened the door\} (by the locksmith)]

Denoting the embedded subject as PRO (18a) is purely conventional and serves the purpose of showing that the subject of have and that of opened are one and the same entity. The representation in (18b) is the classical configuration assigned to passives and raising (from internal argument to the subject position and from there to the matrix subject position).

At this point it's worth pointing out that if the complement of have changes to another non-finite form, i.e., the infinitive $t o+\mathrm{V}$, then the sentence is no longer a present perfect, but switches from a temporal to a modal reading, as in (19). This is also a control configuration, as is the case with most to-complements. The reading assigned to have is that of obligation.
(19) I have [(PRO) to open the door]

Sentence (19) supports the view that have is a two-place predicate whose interpretation (possessive, auxiliary, modal) also depends on its complement.

As for the +/-past distinction, we can see that the different functions and readings of the verbal forms also depend on the syntactic context they occur in. In particular, we observe the following: the form opened can be characterized as [+past] when it functions as a preterite (finite) or in combination with have (perfect). On the other hand, the +past reading seems excluded when this form functions as a passive participle. Instead, the preterite interpretation is determined by the tense of the auxiliary be, as in (20).
(20) The door is/was/has been opened.

This shows that what is known as the participle, that is the verbal form in its non-finite uses, cannot be always specified as [+past]. To put it differently, assuming that the form ending in -ed is +past, as shown by its presence in the preterite or perfect tenses, seems to exclude its non-past uses. At this point the following options arise: to assume that there are indeed two different forms (past vs passive participle) or that somehow the +past specification is suspended in the passive construction, or that this form is not specified for tense in any case.

According to Stowell (2008), the temporal reference of the participle is determined by the element it depends on and hence by the syntactic environment it occurs in. It seems that in Stowell's terms, the last of the options mentioned above is to be favored, namely that the participle is not specified for tense: it has semantic properties that give rise to a past shifting when combined with a semantic feature in the relevant syntactic context; this accounts for the perfect tense with have. Stowell considers additional cases, like those in (21).
(21) a. The tenant evicted by Karen is taking my class.
b. The tenant who was evicted by Karen is taking my class.
c. If evicted by Karen, a tenant should take swimming lessons.

The example in (21a) contains a reduced relative clause, namely the tenant evicted by Karen, shown in its full form in (21b), namely the tenant who was evicted. The question is how the past reference arises in (21a) given that there is a passive voice reading and no past tense auxiliary to combine with the participle. In Stowell's account, this has to do with the fact that the absence of another verb (an auxiliary) precludes the association of the participial form with the utterance time and assigns to it the past reference (shifting) presumably by implication. He argues that this is confirmed by the example in (21c) where the participle has a future reading, since it is part of the conditional (if) construction with a modal in the apodosis.

Before we reach our own conclusions, let us briefly consider the socalled adjectival participle, as in (22a-b); in (22a'-b') we set out their Greek translations. The adjectival participle in English corresponds to two different forms in Greek: the (active) verbal adjectives ending in -tos and the (passive) verbal participles ending in -menos (for Greek see Anagnostopoulou and Samioti 2013).
(22) a. a closed door
a'. mia klisti porta
b. a chased dog
b. enas kinijimenos skylos

The basic property of these participles is that they modify a noun, and belong to the nominal projection; thus they are not related to the I head which defines the clause as part of the verbal projection.

The main question that adjectival participles raise is how they differ from verbal participles, especially when they function as predicates (for an early distinction between adjectival and verbal participles, see Wasow 1977), as in (23). Traditionally, the passive (verbal) participle describes an event, while the adjectival participle (nominal) describes a state or a result (see also Levin and Rappaport 1986).
(23) The door is/was closed.

We will not discuss the (syntactic and semantic) differences between the two cases. What is of interest here is that from the morphological point of view, there is one form with either function. Therefore the different functions are disambiguated syntactically and/or at the C-I interface.

### 2.3 Some preliminary conclusions: tense or aspect?

Summarizing the discussion so far, there are two morphological forms in English which can be categorized as [+/-past]. The [-past] form corresponds to finite and non-finite (infinitives) uses, as well as non-indicative mood interpretations (subjunctive, imperative). On the other hand, the [+past] form corresponds to the preterite (finite) but also to the participle. In the latter case, the temporal characterization does not seem to be accurate with respect to the semantic properties of the form.

If we follow the reasoning that English is highly syncretic and that there are indeed just two forms, the next step we should take is to view their distribution from a new perspective. In this respect we suggest that the distinctive property is not [+/-past], that is tense, but [+/-perfective], that is aspect. Such an approach can cover the distribution of the two forms and solve the problem that arises with the -ed form (Stowell 2008). As a perfective form, it is compatible with a past tense reference in finite declaratives. On the other hand, it is compatible with the denotation of a state or result when it takes the distribution of a 'participle', as in these instances the temporal reference is provided by the auxiliary verb. In this way, participial contexts instantiate the basic (aspectual) denotation of the -ed form and the problem shifts from the participle to the past (preterite) and the expression of finiteness. When we consider the bare stem form, what we have characterized as [-past] so far could similarly be argued to be [-perfective]. The latter can correspond to present tense, to the infinitive (when it is dependent and usually introduced by to, or when it is bare under a modal auxiliary), and can be supplied to carry
modality. In the context of the present discussion, we can also clarify the issue of strong verb paradigms in (normative) Standard English, with their distinction between finite past and participle forms. In present terms, those varieties of English simply preserve a distinction between [+past], embedded in finite contexts and [+perfective], embedded as a participial expression where Tense is contributed by the matrix auxiliary.

A further elaboration of our general approach will be provided in section 5, when we will turn to (Geg) Albanian. The highly inflected nature of this language means that both agreement and tense/mood/aspect are explicitly encoded by verbal inflections. Despite very different external circumstances, the verb stem in Albanian corresponds to the (non-adjectival) participle and the infinitive, as well as (depending on verbal inflection class) to the $3^{\text {rd }}$ person singular of the perfective past (in the middle-passive voice) or to the $2^{\text {nd }} / 3^{\text {rd }}$ person singular of the present. ${ }^{2}$ This also goes to show that attempts at explaining the English pattern on external grounds (a repair to the loss of inflectional endings) would be severely misguided.

For the time being, we leave open the discussion of the role of the element to in infinitival structures. As mentioned earlier, to is taken to realize non-finite I. A different approach is outlined by Roberts and Roussou (2003), though, which take it to be a C element originating from a preposition. Under this line of reasoning, the implication is that there is no marker of nonfiniteness associated with I in English. We will get back to this issue once we consider similar constructions in Romance (section 4) and Albanian (section 5). Before we proceed, however, we complete our discussion of English, addressing the role of the subject in determining finiteness.

## 3. The role of the subject

In this section, we consider what makes a verbal form finite, in the absence of the relevant morphological distinction (absence of $\mu$-finiteness). In particular, the question is what sort of role syntax plays in the definition of (non-)finiteness. As we saw in the preceding section, a verbal form can be construed as finite or non-finite depending on the syntactic environment it occurs in. More precisely, in main (matrix) clauses it has a finite property, further depending on the clause type, while in subordinate (complement or adverbial) clauses this construal depends on other properties, such as the presence of the marker $t o$, for example.

The features that the form acquires potentially affect the realization (and interpretation in relevant cases) of the syntactic subject and vice versa

[^34]the features of the subject define those of the verbal form. Let us consider the examples in (24). In the sentence in (24a), the form open is understood as finite and the subject is obligatorily realized. If they is omitted, a different meaning is derived, namely that of an imperative (Open the door!), with the implicit subject understood as second person (singular or plural). On the other hand, in the sentence in (24b), the form open is understood as non-finite, as it is the complement of the marker $t o$. This syntactic context excludes the overt realization of the subject, which is necessarily a PRO (*They tried John/him to open the door).
(24) a. They open the door.
b. They tried to open the door.

Following the idea that syntax and morphology build on the same set of categorial features (see Halle and Marantz 1993, Manzini and Savoia 2007), the possible scenarios are as follows:
(i) morphological and syntactic expression $\rightarrow$ morphemes correspond to syntactic heads
(ii) lack (partial or total) of morphological expression $\rightarrow$ syntax takes over completely

Case (i) holds for the Romance languages, Albanian, and Greek, at least in most instances: the Inflection head in syntax has a morphological exponent, namely the verbal inflection. Case (ii) holds for English: absence of a morphological exponent.

Let us start from the first type of language, e.g. Greek (25a). Verbal inflection in Greek provides information on tense and agreement (phi-features). In particular, agreement provides information on the subject with respect to person and number in all tenses (+/-past). This allows for the subject to be omitted, since its features are provided and identified via the inflectional affix attached to the verbal stem. If we accept that inflection has a syntactic correspondent I, then the inflectional affix is also syntactically expressed as in (25). ${ }^{3}$ Thus the subject is always expressed in the syntax, and in this way the Extended Projection Principle in the sense of Chomsky (1982) is automatically satisfied.
(25) a. \{egho, esi, aftos, emis, esis, afti\} anigh-o/(j)-is/(j)-i/-ume/(j)-ete/-un

I, you, he, we, you(plural), they open-I/-you/-he/-we/-you(plural)/-they b. $\left[_{[\mathrm{IP}} \mathrm{DP}_{[\varphi]} \quad\left[\mathrm{I}_{[\varphi]} \quad\left[_{\mathrm{vP} / \mathrm{VP}} \mathrm{V}(\mathrm{DP})\right]\right]\right]$
${ }^{3}$ In (9) we use T instead of I, simply following approaches based on Chomsky (1995). Using Inflection (I) allows us to give a better correlation with morphology, but nothing else hinges on that.

Whether the null subject is syntactically expressed as an empty category, namely pro (Rizzi 1982, 1986) or is elided under agreement with the inflectional affix (Roberts 2010), or is not at all expressed in syntax but only as the affix in I (Manzini and Savoia 2007) is a theoretical issue which will not concern us here. These three options are illustrated in (26). What interests us at present is that in languages like Greek, the consistent presence of inflectional morphology defines finiteness with respect to tense and agreement (subject). So finiteness is defined both morphologically and syntactically.
(26) a


$$
\begin{array}{ll}
{\left[\mathrm{I}_{[\varphi p}\right.} & \left.\left.\left[_{\mathrm{VPPVP}} \mathrm{~V}(\mathrm{DP})\right]\right]\right] \\
{\left[\mathrm{I}_{[\varphi]}\right.} & \left.\left.\left[_{\mathrm{VPPVP}} \mathrm{~V}(\mathrm{DP})\right]\right]\right] \\
{\left[{ }_{\mathrm{I}}\left[\mathrm{~V}-\mathrm{affix} \mathrm{x}_{[\varphi p]}\right]\right.} & \left.\left.\left[_{\mathrm{vP} / \mathrm{VP}} \mathrm{~V}(\mathrm{DP})\right]\right]\right]
\end{array}
$$

Let us now consider English, where inflection is not realized via some affix. In main clauses, the temporal reference is directly associated with the verbal form. If it is the stem (open), the temporal reference will be [-past]. In the presence of the ending -ed (opened), the verb acquires a [+past] temporal reference, at least on the basis of Eide's (2016) analysis; adopting our conclusions in the last section, the difference is actually aspectual and past is a default temporal value associated with the perfective. Independently of tense/aspect, the realization of the subject is obligatory. As we saw in section 2, the overt subject essentially defines the phi-features of Inflection. Finiteness, in terms of tense and agreement, is defined on the basis of the syntactic context, essentially the obligatory presence of the subject.

$$
\begin{equation*}
\left.\left[\mathrm{I}_{[\varphi p]}\left[{ }_{\mathrm{VP} / \mathrm{VP}} \mathrm{~V}(\mathrm{DP})\right]\right]\right] \tag{27}
\end{equation*}
$$

The case of the imperative is rather different, since temporal reference is substituted by modality. In this context, the subject can be absent. It's worth mentioning that the implicit subject in this construction is the hearer/addressee, which can be either $2^{\text {nd }}$ or $3^{\text {rd }}$ person, as in (12) (see Zanuttini 2008). The pair of sentences in (28) shows one more interesting contrast. Negation not requires the presence of the auxiliary do in (28a). However, as we can see, in the declarative sentence in (28a) the subject precedes the auxiliary don't, while in the imperative in (28b), the subject can be absent, or be present in which case it follows the negated auxiliary. This could be interpreted as a construction where the negated auxiliary is in a position above I, namely C, triggering subject-auxiliary inversion, as is the case in questions (Do you open the door, when it's windy?). In this context, imperatives involve one additional head in the left periphery, which may be overtly realized as in (28b) (see for example Zanuttini 2008).
(28) a. You don't open the door, when it's windy.
b. Don't (you) open the door, when it's windy!

Let us next consider how the realization of the subject is affected when the verb occurs in embedded contexts (subordinate clauses). We already saw that when the -ed form occurs along with an auxiliary verb (perfect tenses or passive voice) the subject is controlled by or raised to the subject of the main clause. These structures are attested with the 'infinitival' complements as well, as in the examples in (29). (29a) is a control configuration with a null subject realized as PRO in syntax and bound by the matrix DP subject. So the DP John functions as the subject of both the matrix and the complement clause (via PRO) and is associated with two arguments, or more precisely is the argument shared by two predicates. (29b) is a raising construction: the main verb seems has no external argument, so the DP John is the argument of the embedded verb only but functions as the subject of both clauses. Finally, in (29c), the subject is overtly realized but with accusative case. This is due to selection by the verb expect, which allows for the subject of the complement clause to also function as the object of the matrix predicate (Exceptional Case Marking).
(29) a. John tried [PRO to open the door]
b. John seems [John to hate wine]
c. Mary expects [John/him to open the door]

In the context of the present discussion what interests us is that if the verbal form open is selected by the marker to, the syntactic structure is interpreted as infinitive and the subject is then licensed by the matrix I, as in (29a) and (29b), or by the matrix verb (v) as in (29c).

Summarizing so far, the defective morphology in the verbal system of English poses the question of how the notion of finiteness is to be defined. Given the limited morphological distinction, finiteness is almost exclusively defined in syntax. In particular, as we saw in section 2, English has two main morphological distinctions that correspond to the stem and the stem with the -ed ending, e.g., open - opened. According to Eide (2016) these two forms are characterized as [-past] and [+past] respectively. In the present paper we saw that this distinction probably has to be reviewed as one corresponding to aspect, that is a distinction between [-perfective] for the bare form (stem) and [+perfective] for the stem+ed respectively. Independently of which is the optimal approach, the issue that remains is that the characterization of these two forms as finite or non-finite is provided syntactically. We further saw the contribution of the subject in this definition, particularly in those cases where the sentence is characterized as finite. Alternatively, the realization of the subject is affected when the sentence is non-finite.

In what follows we turn to Eastern Romance and Albanian and consider non-finite forms that occur in complementation. Although these grammars mark finiteness inflectionally ( $\mu$-finiteness), they nevertheless show striking similarities with English when it comes to non-finite forms. The similarities involve two aspects: the verbal form which is a bare stem and the availability of a preposition that introduces these forms in complementation.

## 4. Non-finite complementation in Eastern Romance: Prepositional 'complementizers'

We begin our discussion of Balkan languages by briefly reviewing Romanian and Aromanian. Aromanian partakes in the Balkan phenomenon of control and raising into finite 'subjunctive' sentences, that is sentences that involve a fully inflected verbal form introduced by a 'subjunctive' particle. Yet, it has an inflected infinitive with the common Romance -re ending. By contrast, Romanian has a so-called "short infinitive", coinciding with the verb stem as in English, though its occurrences are more restricted than those of the English infinitive.

The so-called short infinitive of Romanian is an invariable verb form corresponding to the verb root followed by the thematic vowel (i.e. the verb stem) - without the morphological -re ending of the Romance infinitive. As succinctly stated by Dobrovie-Sorin (1994: 82) "the short infinitive takes on two different forms: it can be preceded by the Prts $a$, or can lack it, be 'bare'". Examples of bare infinitives include those in (30). We follow Dobrovie-Sorin (1994: 82) in assuming that the Romanian examples in (30) involve auxiliary verbs that take CP complements - even though for Hill (2013: 566) bare infinitive structures are monoclausal, along the lines of Cinque (2006).

| a. | Copiii <br> children-DEF | nu- <br> not- | not | him | vor |
| :--- | :--- | :--- | :--- | :--- | :--- |

Short infinitives preceded by $a$ are exemplified in (31). Dobrovie-Sorin (1994: 91) treats the preposition $a$ in a way akin to the subjunctive Prt să. In other words $a$ is generated under C and its I-like properties derive from incorporation between C and I.
(31) Am inceput a citi "Cei trei muscchetari"
I.have started to read "The Three musketeers"
'I began to read The three musketeers'

Early Romanian had a larger repertory of infinitival structures, since it also admitted of so-called long infinitives, i.e. infinitives which maintain the -re inflection. Long infinitives were preceded by $a$; furthermore the de preposition could precede $a$, as in (32). The examples below are from Hill (2013: 562):
(32) Iar turcii ... au lăsat pre moscali de-a-i mai gonire and Turks-def have quit dom Russians-def of-to-them more chase 'And the Turks ... quit chasing the Russians'

Hill follows the cartographic framework of Rizzi (1997: 563) and therefore identifies the prepositional complementizers $a$ and $d e$ with Fin. In Early Romanian where the two co-occur it is assumed that the Fin position splits into two, with the higher Fin taken by de and the lower Fin taken by $a$. It should be mentioned that infinitivals had an altogether wider distribution in Early Romanian, progressively eroded by the subjunctive.

In Standard Romanian, -re (long) infinitives in fact survive, but only as nominalizations, for instance in (33) (from Pană Dindelegan 2013).

| (33)consecințele plecarii <br> consequences-DEF  | leaving-ObL.DEF | imediate | a lui Ion |
| :--- | :--- | :--- | :--- |
| immediate | of him Ion |  |  |

Interestingly, Aromanian has kept the long infinitive in its sentential construal. In externalist terms, then, Aromanian appears to be more conservative than Romanian; this is particularly notable, in that Aromanian is spoken in contact with languages (Albanian, Greek) that have fully undergone the shift to infinitival-less languages. The examples of infinitives in (34), from Manzini and Savoia (2018a), display control by an antecedent, or so-called arbitrary control (i.e. generic closure of the control variable), except for causative embeddings, for instance (34e). Control environments include complements of aspectual, modal and attitude verbs, as in (34a-c), as well as infinitival relatives, as in (34d). In all instances, the long infinitive is preceded by the Preposition $t i / d i$, with a meaning close to English 'for'.

|  | mbari | ti | mokari |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | I.stopped | for | eat-INF |  |  |
|  | 'I stopped eating' |  |  |  |  |
| b. | n | عrasefti | di/ ti | vədعri |  |
|  | to.me | it.likes | for | see-INF |  |
| 'I like seeing him' |  |  |  |  |  |
| c. | ma | ts | dzek | di | fətseri |
|  | Progr | to.you | I.say | for | do-inf |
|  | 'I am tellin | to do it' |  |  |  |


Aromanian, Libofshë

Two types of questions are raised by this complex of data. One has to do with the fact that non-finite sentential embedding does not just involve the dedicated infinitive form, as in Aromanian - but can be carried out by bare stems, as in Romanian. This is the question already discussed in relation to English in section 2; we will further investigate it in relation to a richly inflected language, when we consider the Geg Albanian so-called infinitive (paskajore) in section 5. ${ }^{4}$

The second question has to do with the nature of the P introducers of non-finite sentences. As discussed in relation to standard Romanian, the prepositional introducers of Eastern Romance (and of Romance quite generally) are generally assimilated to complementizers; specifically, in a cartographic perspective, they are low complementizers, i.e. Fin. If on simplicity grounds we reject the conclusion that elements like Aromanian ti/di bear the double categorization P and C (or Fin), then we are faced with the question why non-finite complements in the Romance languages are embedded by prepositions.

Before we address this question, it is important to go back to English 'infinitival' to. The standard view is that to is an I element, marking nonfiniteness, in the absence of an infinitival marker on the verb. However,

[^35]the status of $t o$ as an infinitival marker under I has been challenged by Roberts and Roussou (2003: 97-110) who argue that $t o$ in these structures has grammaticalized from a preposition to an element that occupies the lower C position, akin to that of 'subjunctive' particles in the Balkan languages. Their evidence is based on the similarities between to and the 'subjunctive' particles. For example, they both introduce control complements, they give rise to a modal reading in matrix clauses, and they follow the subject when that is overtly realized (cf. I believe him to be smart). This view is quite consistent with the approach put forward by Hill (2013). In the context of the Romanian data presented above, English makes a perfect match if it is treated as an element of the P/C categorial status that introduces a complement clause.

Let us now go back to the question that we raised, namely why nonfinite complements in Romance (but also in English) are embedded by prepositions. In order to answer this question, we must briefly refer to proposals in the literature to the effect that that sentences in English, che sentences in Italian etc. are (free) relatives, where that in English or che in Italian is the relative pronoun (the demonstrative pronoun or wh-pronoun respectively), see Arsenijevic (2009), Kayne (2010), Manzini and Savoia (2011). In other words sentential embedding (in Germanic, Romance) involves a nominalization of sorts. Manzini and Savoia (2018a, b) argue that what they call the Agree Resistance Theorem is ultimately responsible for this state of affairs. In standard minimalist theory, embedding of a DP in one of the core argument positions of the sentence involves an Agree operation. If so, it stands to reason that sentential embedding is impossible, given the impossibility of associating $\varphi$-features with sentences. The treatment of sentential complements as (free) relatives is a way of nominalizing sentential content, so as to allow for its merger as complement or a subject of a verb.

Next, we note that the standard minimalist case licencing via Agree (with $v$, I) only applies to direct cases. Embedding under an oblique case or preposition does not involve an Agree mechanism, but rather the deployment of an elementary predicate, namely the preposition or equivalently the oblique case inflection. In turn, the $P$ elements that we have seen to introduce infinitival and participial clauses in Eastern Romance are all exponents of the two fundamental oblique relations, namely $a$ 'to' and di/de 'of'. It is reasonable to conclude that in the Romance languages one way to get around the impossibility of licencing sentential constituents via Agree is to turn infinitival sentences into oblique arguments, by introducing them with prepositions, as schematized in (35) for sentence (34a) above.
... mbari $\quad{ }_{\mathrm{pp}} \mathrm{di} \quad[\mathrm{IP}$ ladzeri libru] $]$

This proposal raises a certain number of issues which Manzini and Savoia (2018a, b) discuss. Here we note only that the relativization and obliquization strategies that are used to circumvent Agree Resistance fly in the face of Stowell's (1981) Case resistance, since they amount to saying that sentences are either nominalized and assigned direct case or assigned oblique case. The clash is particularly direct with respect to what we claim to be prepositional embedding in Romance, since one of the crucial pieces of evidence provided by Stowell is the impossibility for finite sentential complements to be embedded under prepositions - which in his terms depends precisely on Case Resistance. However, the Romance languages show that embedding of finite sentence under oblique case/Prepositions, even those selected by the verb, is not excluded in principle, as in Italian (36).
(36) a
a. Ho provveduto alle loro necessità
I.have provided to their needs
'I provided to their needs'
b. Ho provveduto a che tutti ne fossero informati I.have provided to that all of.it were informed 'I saw to it, that all were informed of it'

Eastern Romance also shows that there is no necessary mutual exclusion between P introducers and finite complements. Indeed in Early Romanian the de preposition could also precede finite complements, as in (37), besides heading "possessives, complements of origin, 'by' phrases, complements of location" (Hill 2013: 559).

|  | au | poruncitŭ | de au | făcut | un sicreiu |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | has | ordered | of have | made | a coffin |
|  | 'He has ordered them to make a coffin' |  |  |  |  |
|  | să tîmplasă | de | nu | ştiè | nemic |
|  | mp happened | of | not | he.knew | nothing |
|  | 'It happened th | he did n | know a |  |  |

In short, it seems to us that there are no obvious grounds for dismissing the idea that prepositions introducing non-finite sentences in Romance are anything other than the genitive, dative, etc. case markers that also appear in front of DPs. In the present account, the bases for such a construct are posed by the Agree Resistance principle, which can be circumvented either by nominalizing complement sentences - or else by rendering them obliques.

In deciding whether to proceed in the direction just sketched, we also consider what the available alternatives are. The leading alternative is that elements such de/di, a lexicalize C positions, perhaps Fin in an articulated left periphery of the type proposed by Rizzi (1997). This amounts to saying that
these elements systematically belong to two categories, namely C and P . The question then is why this is so. Asking why certain lexical elements can be merged as both P and C amounts to seeking what properties P and C may have in common, a discussion also raised by Kayne (2000) in observing the affinity between these two categories. In other words, one must eventually explain why P properties translate into Fin status. Introducing the notion of grammaticalization, as in Roberts and Roussou (2003), doesn't necessarily help, unless typological-functionalist approaches are correct in saying that internal explanations cease to hold whenever historical processes intervene. The line we take here is that, though of course variation and change are unpredictable, the internal reasons of grammatical competence always intervene in shaping them.

## 5. The Geg Albanian participle and infinitive

In contexts where the Romance or Germanic languages insert an infinitive and other Balkan languages have the subjunctive, Geg Albanian also has the option of lexicalizing the syntactic construct traditionally described as paskajore (Joseph 1983, Demiraj 1985). The class of elements that can introduce the paskajore includes me 'with' in (38a), pa 'without' in (38b) and the progressive $t u(i)$ in (38c). These introducers can be identified with prepositions; indeed $m \varepsilon$ and $p a$ also introduce DPs. As for the Prt $t u(i)$, yielding a gerund interpretation, it must be connected with the preposition $t u$, tek 'at' (Demiraj 1985). ${ }^{5}$
(38)

|  | ka | $\mathrm{f}^{\prime} 1 \mathrm{l}$ | $\mathrm{m} \varepsilon$ | hãyər |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | he.has | finished | with | eat |  |
|  | 'I finished eating' |  |  |  |  |
| b. | dola | pa | u | la: |  |
|  | I.went.out | without | MP | wash |  |
| 'I went out without washing myself' |  |  |  |  |  |
| c. | jam | tu $\varepsilon$ | $\mathrm{la} / \mathrm{t} \mathrm{fu} / \mathrm{mlu} / \mathrm{ve}: \int$ |  |  |
|  | I.am | at him/her was |  | wash/wake.up/cover/dress |  |
|  | 'I am wash | waking up | ering/ | him/h |  |
| d. | t | kam | pa | tui |  |
|  | you | I.have | seen | at | pass.by |

'I saw you passing by'
Geg Albanian, Shkodër

[^36]At the same time, the invariable verbal form which combines with the prepositions $m \varepsilon / p a / t u$ also appears in combination with the auxiliaries $k a m$ ' I have' and jam 'I am', in contexts which in English require a participle. Specifically, it forms the present perfect active together with kam, as in (39a), while with jam it forms the present perfect middle-passive, as in (39b). In essence, embedding under either auxiliary yields a (present) perfect; $b e$ triggers a passive reading, have an active reading.

| a. | $\varepsilon$ | kan | mlu |
| :--- | :--- | :--- | :--- |
|  | him $/$ her | they.have | covered |

Geg Albanian, Shkodër

The examples in (38) bring up an important theme discussed in section 2 in relation to English, namely the ability of the verb stem to be construed as infinitival depending in essence on the context of embedding. The examples in (39) bring up another important theme of the discussion of English, namely the fact that the participle can in turn correspond to a non specialized verb form, here again the verb stem. Despite the fact that Albanian has an extremely rich repertory of finite verb inflections, the non-finite forms are even more morphologically impoverished than those of English. We are then faced with a different version of the issue we discussed at length in section 2 , namely whether we want to say that a single form of the verb is involved and if so, what the morphosyntactic and interpretive properties are that allow it work the way it does.

### 5.1 The paskajore 'infinitive'

The discussion of English in section 2 ended with the proposal that the differentiation between verb stems and -ed forms is aspectual, essentially contrasting [+perfective] and [-perfective] forms. Even an elementary characterization along these lines seems too rich for the verb stems of Geg Albanian. Specifically, the examples in (38)-(39) show that both perfective and progressive readings are available for the verb stem depending on the syntactic context. The conclusion that the relevant forms are verb stems morphologically is motivated in detail by Manzini and Savoia (2007, 2018a).

We begin by considering the structures traditionally known as paskajore 'infinitive' which most closely parallel English and Romanian, considered before. The paskajore occurs in subject control contexts with modals as in (40a), and with aspectuals as in (40b), in object control contexts as in
(40c), as well as in arbitrary control contexts, as in (40d), and in embedded wh-questions as in (40e). It also lexicalizes complements of causative verbs, as in (40f), where no control is involved but rather an accusative embedded subject. Note that the modal negation mas precedes $m \varepsilon$, though $m \varepsilon$ precedes object clitics.
(40)


The paskajore, like English infinitives, also occurs in adverbial control sentences such as purpose sentences in (41a-c) and temporal adjuncts in (41d).


Geg Albanian, Shkodër

The embedded sentences in (40)-(41) show that $m \varepsilon$ can be introduced by the finite complementizers, namely $t f i$, as in (40c'), (41b) or $s \varepsilon$, as in (40e), (41d). A second noteworthy set of facts is that in (41) $m \varepsilon$ can be preceded by other prepositions such as par in (41c) or para (se) in (41d).

Unlike the English infinitive, the paskajore supports nominative lexical subjects. Specifically a lexical subject can insert between the complementizer and the paskajore, as illustrated in (43a-b); the other possible position for the subject is postverbal, as in (43c-d). The example in (43e) seems to configure a different possibility yet, namely that of a pro construal of the paskajore's subject. Reference is understood to be to the object of the main clause ('you'), but the hypothetical 'if' clause is attached too high for the matrix object to c-command it and therefore its null subject, controlling it in the technical sense of the term (predication or logophoric binding for Landau 2015). A similar issue arises with the occurrence of the paskajore in matrix sentences, with modal meaning (optative, etc.), as in (42).

```
m\varepsilon a:rð
with come
'If he came!'
```


'If you don't come, I am not waiting for you'
Geg Albanian, Shkodër
Let us focus first on the element that generally introduces the paska$j o r e$, namely $m \varepsilon$. This also introduces noun phrases, taking the meaning of the preposition 'with'. An argument in favour of the conclusion that this coincidence is not mere homophony comes from the fact that the negative counterpart of $m \varepsilon$, i.e. $p a$ 'without', can also introduce the invariable participle/infinitive, cf. (38). Recall that the Romance languages attest the use of di/de 'of' and $a$ 'to' as sentential introducers, namely the prepositional counterparts of the two basic oblique cases, genitive and dative (on case
markedness hierarchies see Blake 2001, Caha 2009). Unsurprisingly, me 'with' is the prepositional exponent of another fundamental oblique, namely instrumental. In fact, Levinson (2009), Franco and Manzini (2017) observe that the preposition 'with' in a sentence like the girl with the hat essentially introduces the reverse relation with respect to the preposition 'of' as in the hat of the girl (cf. also I sprayed paint on the wall/ I sprayed the wall with paint).

Given the analysis of oblique sentential embedding introduced in section 4 for Eastern Romance, we obtain a structure like (44) for example (40c). In the examples in (40)-(43), the evidence points to the complement of the Preposition $m \varepsilon$ being an IP, since the modal negation mas and wh-phrases are external to it.


The preposition $m \varepsilon$ can be preceded by a $t \int i$ or $s \varepsilon$ complementizer. Furthermore, it is also possible to combine the paskajore with a further prepositional introducer. We know from much recent literature that what are conventionally known as PPs have complex internal structures (Svenonius 2006) where the lowest layer is represented by the prepositions that we have been discussing throughout, roughly corresponding to the fundamental oblique cases - while higher levels denote more complex relators, specifically spatial relators or AxPart (Axial Parts). The embedding of $m \varepsilon$ under purposive par in this sense instantiates an independently known type of structure, as in (45). If the complex PP was spatial, we could confidently use the label AxP for par, which has the spatial meaning of 'through' in Albanian, as in Latin/Italian per, besides the causative/benefactive meaning 'for'. Given the lack of spatial meaning we simple use the PP label, pending further research.

cf. (41c)

A further descriptive issue is raised by $w h$-elements and the negation, which are merged higher than $m \varepsilon$ though lower than complementizers. The fact that the wh-phrase is found above $m \varepsilon$, as is the negation, would seem to imply that these elements are adjoined to PP, as in (46).


Let us then turn to matters pertaining to the internal structure of the paskajore. On the basis of the discussion of English, we assume that the presence of PRO controlled subjects (or traces in raising) is the normal state of affairs with non-finite predicates. As illustrated in (43), however, a lexical subject in the nominative case may appear above $m \varepsilon$ and below an eventual complementizer, or in the lower predicative domain of the embedded sentence, surfacing postverbally. This raises questions about the licensing of nominative case, given Chomsky's (2001) approach to direct cases in terms of $\varphi$-features agreement with $v$ (accusative) and with I (nominative). Unless we resort to the idea that nominative is the default case (Belletti 1990), the licensing of nominative case in (43) seems to be oblivious to the absence of $\varphi$-features on the verb.

In fact, we tentatively propose that the presence of $\varphi$-features may be relevant in some languages that do not admit nominative subjects in non-finite sentences like English (see the discussion in section 3). In other
languages, agreement in a more abstract property, say D , returns a more realistic picture of the availability of nominative case. For instance in the Romance languages, lexical subjects are overtly visible in many varieties in non-obligatory control infinitivals (Mensching 2000; Manzini and Savoia 2005). Notice that the idea that null case is necessary for the definition of PRO (Chomsky 1995) is consistently rejected by more recent literature (Landau 2004, 2015 a.o.).

Manzini and Savoia (2007) take examples like (43e) to show that the paskajore also allows null subject pro construals, followed by Manzini and Savoia (2018a) without much discussion. In reality the evidence is compatible with much less drastic assumptions. We know that even English allows so-called arbitrary readings of PRO, i.e. generic (near universal) readings in non-obligatory control environments like (47a). In the same environments it also allows individual readings, apparently depending on contextual restrictions, as in (47b). In the absence of evidence to the contrary, we assume that something similar is involved in the individual reading of (43e) or (42).
(47) a. Attacking the boss is a risky career move
b. Insulting the boss during the meeting was the wrong career move for Mary

In the next section, we consider the bare verb stem occurring in participial contexts, both progressive and perfect. We argue that the perfective (resultative, stative, nominal-like) reading is basic and the progressive reading is syntactically determined. Similarly, the minimally specified basic nature of the verb stem is compatible with enrichment by modal operators, yielding the kind of irrealis interpretations associated with infinitives in English as well.

### 5.2 Participial (and finite) construals

Let us consider the examples in (39b), where the verb stem is embedded under the be auxiliary yielding a perfect passive reading. In discussing English in section 2 we simply referred to the demotion of the external argument (realized as an existentially bound variable or an oblique $b y$-phrase). Delving somewhat deeper into the analysis, we assume that perfect participle structures are reduced, in so far as they do not involve the Voice layer which supports the attachment of a DP external argument (in the sense of Harley 2013, Legate 2014). The external argument nevertheless may surface, but as an oblique, as in (48a). Short passive is also possible. In this instance, the external argument slot remains unsaturated; this is read as an open variable at the C-I interface and is interpreted by existential closure, as in (48b). The subject of the be matrix verb is provided by raising of the object, which is the only goal available for the T probe (see also Manzini et al. 2016).
(48) a. jan $\quad\left[\left[_{\mathrm{up}}\right.\right.$ mlu DP] [ ${ }_{\mathrm{pp}} \mathrm{prei}$ ams $\left.]\right]$
b. jan $\quad\left[\exists \mathrm{x}, \mathrm{x}\left[_{\mathrm{vP}} \mathrm{mlu}\right.\right.$ DP $\left.]\right]$

The passive structures in (48) need now to be compared to active perfects. The ideal outcome would be that perfect active sentences have the same structure as in (48), lacking a Voice layer capable of hosting an external argument. What varies is just the presence of the auxiliary have rather than $b e$. The idea is that the fact that have has an external argument, forces the control reading for the variable corresponding to the external argument of the embedded participle/verb stem (or to the sole argument of intransitives). This yields a control configuration, along the lines of (49).

$$
\begin{equation*}
\text { DP kan } \quad[\mathrm{x}=\mathrm{PRO} \quad[\mathrm{vP} \tag{49}
\end{equation*}
$$

At the same time, the verb form found in (48)-(49) is compatible also with the progressive reading, in combination with the Preposition $t u$ 'at'. Pronominal clitics occur between the $t u$ introducer and the verb it embeds, suggesting that the participial structure embedded by $t u$ is a sentence, as sketched in (50) for example (38c). Further corroboration as to the sentential status of the $t u$ complement comes from the fact that it can also embed the modal negation mas, as in (51), associated with the modal C area of the sentence.

$$
\begin{array}{llll}
\mathrm{L}_{\mathrm{IP}} \text { jam } & \ldots & {\left[_{\mathrm{PP}}\right. \text { tu }} & \mathrm{C}_{\mathrm{IP}} \varepsilon \text { mlu } \\
\ldots & & & \text { tu mas }  \tag{51}\\
\ldots & \varepsilon & \text { ba } \\
\ldots & \text { at not } & \text { it } & \text { do }
\end{array}
$$

Geg Albanian, Shkodër

How is the progressive interpretation of (50) compatible with the perfective interpretation of (48)-(49)? In the words of Manzini and Savoia (2007) "the bare stem is not so much lexicalizing these meanings, but rather proves compatible with them due to the very elementarity of its morphology". At the same time we want to avoid characterizing the verb stem of Geg Albanian in purely negative terms, as a default. Rather we propose that the verb stems of Geg Albanian have a stative, property-like interpretation, producing a "nominal version of the ... predicate" (Manzini and Savoia 2007). Various types of embedding are available for such a form. The simplest one, requiring no extra assumption, is the embedding just seen in (48)-(49); the participle reading is a resultative reading, which accrues to the verb stem in virtue of its stative/nominal-like nature. The same stative/nominal-like nature is compatible with (irrealis) modality, hence with infinitival readings, as in section 5.1.

In turn, the progressive interpretation involves the building of sentential structure pivoting around the prepositional introducer $t u$ 'at'. In the typological literature, progressives are known to often involve locative constructions. As Higginbotham (2009:54) points out, the historical origin of the English progressive is a locative construction: "...the relic of the preposition is still heard, of course, in those English speakers who say John is a'crossing (of) the street". Manzini et al. (2017) consider the matter in connection with Apulian and Sicilian varieties where the progressive is constructed by the verb stare 'stay' followed by the $a$ 'at/to' dative/locative preposition and by a finite form of the verb. They assume that the dative/locative preposition instantiates a relation whose content is part/whole or inclusion (notated $\subseteq$ ). In other words, in a sentence like I gave the book to Peter, to introduces a relation between its object 'Peter' and the theme of the verb the book such that Peter includes the book, i.e. possesses it. Locative is a specialization of the part-whole relation, which involves instances where the internal argument of $(\subseteq)$ is a location (i.e. ' $x$ included by $y$, y location') or is otherwise locatively restricted.

Manzini et al. (2017) further observe that a locative syntax is fairly naturally mapped to Landman's (1992) Part-of Proposal for the progressive, namely that "Mary is crossing the street is true iff some actual event realizes sufficiently much of the type of events of Mary's crossing the street". For instance, the sentence in (52a) is true "iff some event is realized in $w$ in the past and that event stands in the PROG relation to the type of events of Mary building a house", as indicated in (52b), where PROG is the relation between events and types (sets) of events mentioned in the Part-Whole Proposal.
(52) a. Mary was building a house
b. $\exists \mathrm{e} \cdot[\mathrm{t}(\mathrm{e})$ < now \&

PROG(e', $\lambda \mathrm{e} . \exists \mathrm{y}$ [house(y) \& Build(e) \& Agent(e)=Mary \& Theme(e)=y ])]
(Landman 1992)
An important point of the logical syntax of the progressive in (52) concerns the nature of PROG. In Landman's terms, "E, the set of events, is ordered by ... a relation of 'part-of". For instance "if an event is a complete accomplishment event (Mary's building of a house), the result (the house being built) is part of that event". Importantly for present purposes, this is true in exactly the same sense in which "Hanny's hand at a certain interval is part of Hanny at that (or a larger) interval."

In the Geg Albanian progressive structure in (50), the responsibility for introducing a relation between the event introduced by the main verb and the event type introduced by the embedded sentence falls to the $t u$ Preposition, for which we independently postulate $\subseteq$ part-whole content. Assuming that the $\subseteq$ part/whole relation may hold of event pairs, saying that one event
is part of, or a stage of, a set of events/an event type, we obtain the semantics required by Landman's PROG.

Next, an operation of $\lambda$-abstraction at the C-I interface, which turns the embedded clause/predicate/event into an event type (set), is necessary in order to map the syntax in (50) to a semantics like (52b). This is the kind of enrichment that can reasonably be expected to take place at the interface. At the same time the verb stems of Geg Albanian do not really take on a progressive interpretation. Rather, the progressive interpretation is contributed in (50) by the embedding context, specifically by the part/whole locative preposition $t u$ - while $\lambda$-abstraction leads the verb stem to receive a type interpretation. Thus the verb stem has again essentially the stative, nominal-like semantics of other participial uses, denoting in this instance an event type.

Finally, as in English, in Geg Albanian verb stems turn up in finite environments. Verb stems ending in vowel occur as the $3^{\text {rd }}$ person singular of the middle-passive perfective past, as in (53a), where the $u$ clitic like the si/se clitic of Romance, externalizes the middle-passive voice. Consonantal verb stems involving long stressed vowels of the type of ve: $\int$ occur as the $2 \mathrm{P} / 3 \mathrm{P}$ person of the present indicative, as in (53b) (see Manzini et al. 2016).

| a. | u | mlu |
| :--- | :--- | :--- |
|  | MP | cover |
|  | 'He covered himself' |  |
| b. | $\varepsilon$ | ve: |
|  | him/her dress.2sG/3sG |  |
|  |  | 'You dress him/her'/'S/he dresses him/her' |

Geg Albanian, Shkodër

As already assumed for English, present (time of event=time of utterance) may be available as a default contextual enrichment in (53b). Furthermore, Past may be available as a contextual enrichment depending on the perfective, i.e. stative/resultative nature of the verb stem. We assume that $3^{\text {rd }}$ person singular interpretation is available in the absence of $\varphi$-features specifications again as a default enrichment. The fact that Hearer in (53b) is treated like $3^{\text {rd }}$ person evokes a split in the person hierarchy 1 P vs $2 \mathrm{P} / 3 \mathrm{P}$.

The comparison between English and Albanian illustrates the point that syncretisms in the verbal paradigm cannot be brushed aside as a response to a loss of inflectional paradigms, since Geg Albanian has very rich inflections (for persons, tense, mood, aspect and voice). More to the point, Geg varieties possess a specialized participle, but this only occurs in adjectival contexts of the type in (54). Morphologically, stems ending in vowel combine with an - $m$ suffix, for $m l u$ :- $m$ 'covered' in (54a), la-m 'washed' in (54b). Stems ending in consonant take -un, for instance $v e \int-u n$ 'dressed'. These combine with the normal morphology of adjectives, i.e. a preposed Linker (Lkr) and a suffixal agreement.

| a. | jam | i | mlu:-m/ | $\varepsilon$ mlu-m- $\varepsilon$ |
| :--- | :--- | :--- | :--- | :--- |$\quad$ (preis ams)

b. i kam kmif-at $\varepsilon / \mathrm{t}$ lam- $\varepsilon$ them I.have shirt-PL.DEF LKR washed- F 'I have the shirts washed'

Geg Albanian, Shkodër
The occurrence of verb stems shown in Geg Albanian in perfect/passive contexts is therefore definitely not due to the lack of inflectional resources.

In short, in Geg Albanian the minimally specified nature of verb stems (nominal-like states/results) is compatible with its perfect/passive interpretation, with the enrichment by modal operators, yielding the kind of interpretations associated with the infinitive (control/raising) in other languages. It can also denote an event-type, which is the real nature of its presence in the progressive construction, according to the discussion in this section. There is no need to postulate underlyingly different forms homophonous with one another or syncretically realized as the result of Late Insertion in the DM sense of the term. Rather the verb stem is treated as being multiple ambiguous, depending on the syntactic context.

### 5.3 Back to the P element in English

In discussing English in the first part of this article, we initially adopted the standard approach to to as an exponent of the I category in English. This assumption was called into question in connection with our discussion of Romanian. In particular, Roberts and Roussou (2003) argue that 'infinitival' to instantiates categorial reanalysis, from P to C .

In the history of English, to as a preposition was used to introduce a nominalized (dative) verbal form, ending in -ne (Callaway 1913, and Lightfoot 1979 in the early generative framework, among others) as a purpose clause in Old English (see Los 1999 for a slightly different view on the nominal status of the infinitive). Part of the change to later stages of the language involves an expansion of this distribution from adjunct (purpose) clauses to complement clauses. The details of this historical development do not concern us here. Suffice it to say that, according to Roberts and Roussou (2003), changes in the infinitival paradigm, along with changes in the realization of subjunctives, gave rise to non-finite complements introduced by to. As they argue, to was reanalyzed to a (lower) C head associated with modality. They also point out that this reanalysis is consistent with the close link that seems to exist between prepositions and complementizers, also attested in Romance languages.

In discussing Eastern Romance, we suggested that a grammaticalization perspective based on the categorial change from P to C is essentially descriptive. Vice versa, better insights may be gained by maintaining that elements such as $a$ 'to' keep their prepositional/oblique case status. Based on our conclusions on Romance we assigned a prepositional categorization to the element $m e$ 'with' introducing the paskajore (infinitive) in Geg Albanian. In Geg Albanian as well, nothing much is gained from adopting a grammaticalization view. On the contrary, by keeping the P categorization, we tentatively suggested that the same explanation as to the presence of an oblique case marker can be put forth as in Romance.

The view that to is a preposition introducing a non-finite clause may then be entertained for English as well. The comparison is particularly close with the paskajore of Geg Albanian, even more than with Romance. Thus for instance, the prepositional introducer follows the negation in both Geg Albanian and in English. Furthermore, as is the case with other prepositional complements, English to can be embedded under another preposition, namely for as in (55a) (a development that is attested in Middle English). The structure of this sentence can easily conform to the schemata provided above in section 5.1 for Geg Albanian. Finally, to as a locative or dative preposition embeds a nominal, as in (55b-c).
(55) a. I prefer for John/him to leave.
b. John went to the movies.
c. John gave the book to Mary.

Assuming that to is the same in all cases in (55), as argued for the corresponding elements in Albanian and Eastern Romance above, is consistent with the approach suggested so far about the role of prepositions as clauseintroducers in non-finite contexts in particular.

In short, the similarities between English, on the one hand, and Albanian/Eastern Romance, on the other, include both the availability of bare stems as non-finite forms and the use of a preposition (not necessarily reanalyzed to I/C) for the embedding of these forms.

## 6. Conclusions

In this article, we have examined in detail the behavior of verb forms which coincide with verb stems - or in any event do not display any person endings. English has residual inflectional morphology and it may be thought that the presence of such forms simply reflects the external pressures that have shaped the language. Yet verb stems realizing the $3^{\text {rd }}$ person singular of the present/preterite as well as participial/infinitival structures are attested in richly inflected languages such as Albanian. The characterization we arrived
at for English is that these forms are aspectual. For Geg Albanian (and possibly for Romanian) we propose that verb stems are simply a stative/resultative, property-denoting (i.e. nominal) form of the verb. Thus we exclude mere homophony as an explanation - and we also exclude that underlyingly different forms of the verb are syncretically realized via morphological readjustments in a DM-like fashion (see the brief remarks in section 1). Rather, we consider that aspectual, modal and temporal interpretations are made possible by complex forms of embedding, building on the elementary semantics of the verb form, along the lines of Table 1.

| Language | Lexical content | Syntactic context |
| :--- | :--- | :--- |
| English | verb stem $=[$ imperfective $]$ | present (except 3 <br> rd <br> imperative, infinitive |
|  | ed $=$ [perfective] (regular verbs) | simple past, perfect participle, <br> passive participle |
| Romanian | verb stem $=[$ stative/nominal] | infinitive |
| Geg <br> Albanian | verb stem $=[$ stative/nominal] | 2nd/3rd person singular present, <br> infinitive, progressive |
|  | verb stem $=[$ stative/nominal $]$ <br> $>$ [perfective] | 3rd person singular preterite (middle <br> passive), perfect/passive participle |

Table 1. Summary of languages, lexical forms and syntactic values
A parallel line of investigation concerned the contextual setting that helps us disambiguate the relevant verb forms. In this connection, we suggested that adopting the idea that some process of grammaticalization turns prepositions into complementizers (Romance) or inflections (English) does not help much in understanding their role. Vice versa, we suggested maintaining their P categorization and oblique case marker status, at least in Romance and Albanian, with extensions to English as well.

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# Some Initial Remarks on Non-Prepositional Genitives in the Apulian Variety of San Marco in Lamis 

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#### Abstract

: This work aims at an initial description of prepositionless genitives in the Romance variety of San Marco in Lamis, spoken in the Southern Italian region of Apulia. The construction will be compared with other Romance, Semitic, Albanian, and Iranian varieties whereby the expression of possession is connected to the presence of $D$ elements, or to morphology stemming from them. The paper deals, in particular, with the behaviour of the construction with elements such as definite and indefinite articles, demonstratives, proper names, and with how pre-nominal adjectival modification of genitives and post-nominal adjectival modification of heads can only occur in the prepositional kind of the construction. This is also the case with demonstratives preceding heads and genitives in the form raised nominals. It will be seen that genitives are only interpreted as such when they are non-raised, i.e. when they are articled. The pre-genitival article is thus understood to be a pivotal element in the interpretation of the second DP as genitival.


Keywords: Apulian, D Elements, Prepositionless Genitives, Proper Names

## 0. Outline of the present work

In this work we analyse an Apulian variety of Southern Italy spoken in the hinterland of the Gargano promontory, namely the type of San Marco in Lamis. We focus on a construction which is quite common throughout the Dialects of Southern Italy: non-prepositional genitives. Our aim is to draw a first sketch of the construction, with the intent of describing the contexts where P lacks. Additional data on non-genitival do-constructions indicate
that even though genitival constructions are the prototypical context where P may lack, they are indeed not an isolated instance of such a phenomenon, as shown by the Qualitative Binominal Constructions (as discussed in Den Dikken 2006, but see also Kayne 1994) found in this language, and comparatives. Our second objective is to observe the contribution of the pre-genitival article to the construction. The paper is structured as follows: part 1 presents the primary data for the construction and deals with definiteness features and determiners occurring in the construction, adjectival modification of heads and genitives, genitives in the form of raised Ns, coordination and isolation of the genitive DP, with a note on prepositionless comparatives, Qualitative Binominal Constructions, and container/contained constructions. It will be seen that morphologically unmarked genitives of the Apulian variety considered here are possible only with non-raised genitive nominals, i.e. they are interpreted as genitives only when articled. Part 2 deals with the correlation of determiners and the realization of possession relations in Semitic, Iranian languages, and Chinese. Part 3 focuses on Romance morphologically unmarked genitival constructions, such as the ones we find in Old French, Old Italian, and Old Sicilian, and their syntactic treatments, with a comparison with the Apulian data. Finally, part 4 concludes.

## 1. The data

### 1.1 Core elements: prepositions, determiners, and proper names

One of the first examples of a non-prepositional genitive in the dialects of Southern Italy quoted in the literature was Calabrian, going back to Rohlfs (1966 [1949]), which describes the phenomenon in the Calabrian dialect of Morano ascribing it to preposition absorption. More recent studies on Calabrian varieties like Silvestri (2012; 2016) challenge instead an account on the lack of the preposition on phonetic grounds such as the one Rohlfs puts forward. Simply put, a non-prepositional genitive is a genitival construction whose argument is not introduced by a preposition. Generally speaking, since we are moving within the realm of Romance languages, genitive prepositions are elements deriving from Latin de resulting in various forms. For instance, in Neapolitan this resulted in the preposition $e$ when in its isolated form. If combined with definite articles, it yields $r$-a ('of-the.F.SG.'); $r$-e ('of.the.F.PL.'); $r$-o ('of. the.M.SG.'); $r$ - $i$ ('of.the.M.PL.') where the vocalic exponent corresponds to the definite article, while $r$-(>d-) corresponds to the prepositional element. In those cases where such prepositions do not introduce the possessor we speak of non-prepositional genitives. In the variety analyzed here de took the form of $d z$ ('of') when isolated; combined with definite articles it yielded $d z$-lla ('of. the.F.SG.'); dz-llu ('of.the.M.SG.'), dz-lli ('of.the.PL.').

As for the present variety, the first and probably most evident constraint concerns the definiteness features of both the head and the genitive DP:

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a. la koda lu kanə the tail the dog 'the tail of the dog'
b. *la koda nu kanə the tail a dog '*the tail of a dog'
c. la koda də nu kanə the tail of a dog 'the tail of a dog'
d. *na rota la makəna a wheel the car
'*a wheel of the car'
e. na rota dəlla makəna
a wheel of.the car
'a wheel of the car'
```

It is easy to spot a resemblance with the definiteness feature requirement of Semitic Construct State nominals (Borer 1988; Dobrovie-Sorin 2000; Danon 2007; Borer 2012; Shlonsky 2012, among others) and especially its Hebrew type, except for the fact that in this Romance variety, the head of the genitival complex is not articleless - with the exception of those instances in which the head is in the vocative case.
(2) ah, servə li padrunə
oh servants the masters
'oh, servants of the masters'
As the Southern Italian under consideration does with da, Hebrew resorts to the lexicalization of the preposition sel in the case of indefinite Ns (examples from Danon 2008: 902): ${ }^{1}$

[^37](3) a. tmunat ha-yeled picture the-boy 'the picture of the boy'
b. tmuna šel ha-yeled picture of the-boy 'a picture of the boy'

Furthermore, in the variety of San Marco in Lamis, proper names as genitive arguments are allowed only when introduced by a preposition.

> a. *lu ratrattə Lelina
> the portrait Lelina
> '*Lelina's photo'
> b. lu ratrattə də Lelina
> the portrait of Lelina
> 'Lelina's photo'

One of the hypotheses being made in the literature on proper names is that they rise from N to D (Longobardi 1994). The obligatory lexicalization of the preposition in front of arguments which are proper names is directly correlated to the lack of an overt definite article. The fact that the preposition is needed where a definite article is not present suggests that the definite article preceding the genitive might be a pivotal element in the interpretation of the latter as a possessor.

An exception to (4) involves a group of proper names which do not seem to undergo N to D raising, i.e. la partita la Juventus 'Juventus match', lu koncerta li Metallica 'Metallica's concert'. Apart from being an exception when it comes to the lexicalization of the prepositional element, these examples show that the construction is quite productive, and used by young speakers as well, as the nouns entering in the construction show, which include modern referents, i.e.: la crack lu jokz 'the code to crack the videogame'. With regards to other Dialects of Southern Italy, Silvestri (2016) reports instead on prepositionless genitives in the Calabrian variety of Verbicaro, which are perceived as archaic.

Going back to the Apulian construction, a first feature allowing its realization is, as previously said, definiteness. Yet definiteness alone is not enough. It is clear that it is a combination of features we are dealing with. Consider the following data from the type of San Marco in Lamis:

> a. la rota la makəna
> the wheel the car
> 'the wheel of the car'
> b. *na rota la makəna
> a wheel the car
> 'a wheel of the car'
c. na rota dəlla makəna
a wheel of.the car
'a wheel of the car'
d. l onna li pedə the nails the feet
'the feet's toenails'
e. li tsuntsə lu balləkettə the icicles the balcony 'the icicles on (of) the balcony'

First, both the head and the argument noun can be singular and plural. So, no constraint is placed on number features. Indefinite nouns, as stated, are not allowed in the construction. Definite nouns, on the other hand, are allowed, provided that the determiner they are preceded by is not a demonstrative, neither a distal (6b), nor a proximal one (6d):
(6) a. kwedda rota dəlla makəna that wheel of.the car 'that wheel of the car'
b. *kwedda rota la makəna
that wheel the car
'*that wheel of the car'
c. kwesta rota dolla makəna
this wheel of.the car 'this wheel of the car'
d. *kwesta rota la makəna this wheel the car '*this wheel of the car'

Both demonstratives and definite articles are generally definite elements, but as (6) shows, a definiteness feature is not enough to allow a non-prepositional genitive. The nouns in the construction require a definite article to head them.

While it is quite rare for the Apulian variety considered here to employ deverbal nouns, they can still function as heads of the construction ( $7 \mathrm{~b}, \mathrm{c}$ ):
(7) a. la bbotta lu stomməkə
the blow the stomach
'the blow to the stomach' (a state of shock and perturbation)
b. lu skavamentə la muntanna
the digging the mountain 'the digging of the mountain'
c. lu spustamentr lu mobbola the moving the piece.of.furniture 'the repositioning of the wardrobe'

### 1.2 Container vs. part-whole

Consider now the data in (8). In (8a) the preposition may not appear. However, the same nouns that in (8a) appear within a non-prepositional genitival complex, in ( $8 \mathrm{~b}, \mathrm{~d}$ ) must occur with a preposition. This distinction shows that the two examples must correspond to different types of genitival modification. A cup of coffee may refer either to a quantity of drinkable coffee inside the cup, or to the cup that contains it. In order to distinguish between the two, we embedded the genitival complex in the argumental slot of verbs that take contained or container as their object. Speakers judged as ungrammatical sentences with clean when the genitival complex did not include a preposition (8b, d), whereas drink yields a different pattern(8a):
a. 'vivətə la tatstsa lu
drink. ${ }^{\text {Cl.2sg the cup the }}$ the
'drink the cup of coffee' coffee

The preposition can occur in any type of genitival complex. It is its lack, that is constrained. For the time being, however, I will limit myself to simply describing such a distinction and leave the contrast in (8) as an open question.

### 1.3 Modification, head-argument adjacency, coordination of the genitive noun, and constituent isolation

When it comes to adjectival modifiers, with the exception of a handful of cases like bona/bsna ('good.m.sg.'/'good.f.fs.'), bella/bella ('beautiful.m.s g.'/'beautiful.f.sg.'), and brutta/brutta ('ugly.m.sg.'/'ugly.f.sg.'), which can be pre-nominal, as it is common through the Dialects of Southern Italy, the rest obeys a strict post-nominal restriction, including adjectives expressing size (rossa/rossa-'big', and maninna/manenna -'small'; Standard Contemporary Italian, instead, also includes such adjectives among those allowed to occur in pre-nominal position).

This premise on the positioning of adjectives is necessary in order to understand some core features of the construction considered here. In particular, the main point concerns modification of the head.

In prepositionless genitives, post-nominal adjectival modification of the head noun often triggers the realization of a second type of genitival construction. Consider Semitic, specifically Hebrew again, for example, with data from Dobrovie-Sorin (2000: 195):
(9) a. beyt ha-iš house the-man 'the man's house'
b. ha-bayit ha-gadol *(šel) ha-iš the-house the-big ${ }^{*}$ (of) the-man 'the big man's house'

Hebrew Construct State nominals introduce the possessor with a definite article but also require the head and its argument to be adjacent. Once the head is followed by a modifying adjective, the argument must be preceded by a preposition (šel).

In the Apulian variety of San Marco in Lamis, modifiers interposed between the head and the argument of prepositionless genitives yield the realization of the preposition $d z$, as in (10a). Post-nominal adjectives might only follow the argument (10c):
(10) a. lu libbra nova dallu prossora the book new of.the professor 'the new book of (assigned by) the professor'
b. *lu libbra nove lu prassora the book new the professor '*the new book of (assigned by) the professor'
c. lu libbra lu prossora nova the book the professor new 'the book of (assigned by) the new professor'

Alternatively, the head can undergo adjectival modification, provided that the adjective modifying the head belongs to the set of pre-nominal ones, so as not to break the adjacency between the head and the argument. Witness (11):

> a. l atu figgia lu rre the other son the king 'the other son of the king'
> b. *lu figgia l atu re the son the other king '*the son of the other king'
> c. lu figgia doll atu rre the son of.the other king 'the son of the other king'

Heads in Italian $\mathrm{N}+\mathrm{N}$ genitival compounds like casa Rossi also tend to resist modifiers interposed between the head and the argument (12a), like Construct State nominals. This was noted in Longobardi (2001) which shows that the adjective can modify the head, but only when occurring on the right of the genitival complex (Longobardi 2001: 572):

> a. *casa nuova $\begin{gathered}\text { Rossi } \\ \text { house new.f }\end{gathered} \begin{aligned} & \text { Rossi }\end{aligned}$ '*the new house of the Rossis' b. casa Rossi nuova house Rossi new.f 'the new house of the Rossis'

Like the Italian examples in (12), in the variety of San Marco in Lamis adjectives might appear to the right of the genitival complex, but unlike in Italian (12b), they do not modify the head, but rather the genitive. This is exemplified in (13) by gender features appearing on the modifying adjective. On the other hand, adjectival modifiers appearing after the genitive noun of Hebrew Construct State nominals might be understood as modifying either the head noun or the genitive, as reported in Borer (1988). Adjacency requirements between the head and the genitive noun led to a proposal put forward in Siloni (2003) where genitive case is checked at PF in prosodic terms.
a. *la ponta rotta lu $\quad$ dita
the.f tip.f broken.f the.m
'*the broken tip of the finger'

Modification is also what determines the choice of the genitival construction to be employed in Romanian. In this language two kinds of genitives might be distinguished. The first involves an N-D N-D string, with genitive case marked on the enclitic definite article of the genitive, e.g. vecinului in (14). The second involves the al series of linker elements ( $a$, in the feminine singular) preceding the genitive, cf. ( $14 \mathrm{~b}, \mathrm{c}$ ). So unlike in prepositionless genitives, both in al and non-al genitives case is morphologically expressed. Examples are from Dobrovie-Sorin et al. (2013: 314):
a. casa vecinului house(f)-the neighbor-the.gen 'the neighbor's house'
b. casa a vecinului house(f)-the LKR.fsg neighbor-the.gen 'the neighbor's house'


Incidentally, Romanian non-al genitives are not compatible with demonstratives as in (15d-e) (remember (6)), and rely on linker elements whenever the head is introduced by a demonstrative (Dobrovie-Sorin 2000: 185):
a. casa vecin-ului
house neighbor-the.gen
'the neighbor's house'
b. o casa a vecin-ului
a house LKR neighbor-the.gen
'a house of the neighbor's'
c. ${ }^{*}$ o casa vecin-ului
a house neighbor-the.gen
'*a house of the neighbor's'
d. acest obicei al vecin-ului this habit LKR neighbor-the.gen 'this habit of the neighbor's/of a neighbor's'
e. *acest obicei vecin-ului this habit neighbor-the.gen 'this habit of the neighbor's/of a neighbor's'

Dobrovie-Sorin (2000) considers genitives to occupy the SpecDP position - which is rightwards-oriented. Thus in (16), fata vecin-ului, 'the neighbor's daughter' the head noun, fata, is thought by Dobrovie-Sorin to be hosted by D alongside the definite article, with the genitive occupying the SpecDP position. Genitive case is assigned only if N carries a definite article (and not a demonstrative), so it follows that the definite article is necessary, in her view, to assign case.


For (17), acest obicei al vein-ului 'this habit of the neighbor' an al genitive, she envisages a structure in which D is occupied by a demonstrative or an indefinite article. The argument is thus generated as an adjunct to DP , comprising the linker $a l$ :


The adjunction is justified by Dobrovie Sorin also on the grounds that al genitives can appear in isolation. What she calls purely synthetic (al-less) genitives, on the other hand, cannot (see also Cornilescu 1995: 18):
a. carte-a baiat-ului book-the boy-the.gen
'the boy's book'
b. carte-a cui?
book-the whose
'whose book?'
c. a baiat-ului

LKR boy-the.gen
'of the boy's'
Genitival arguments of the type of San Marco in Lamis are always prepositional whenever they occur in isolation: ${ }^{2}$
a. la muggiera lu figgiə
the wife the son
'the son's wife'
b. la muggiera də ki? the wife of who 'whose wife?'
${ }^{2}$ Silvestri (2012: 566) contains examples on prepositionless genitives from Verbicaro Calabrian which show, instead, that in the Calabrian variety she discusses the isolation of the prepositionless genitival complex is perfectly admissible:
(i)
a. a kasa i kujə?
the house of who
'whose house?'
b. u sinnəkə
the mayor
'the Mayor's'
c. *lu figgiə
the son
'*his son's'

Non-prepositional genitival arguments are only allowed when they are pronounced along with their head. Failure to do so will trigger a non-oblique interpretation of the DP, either as nominative or accusative.

Prepositionless genitives cannot undergo coordination. The coordinated possessor must thus be preceded by a preposition (20b), suggesting once more the strict adjacency requirements of the construction:
a. ${ }^{*}$ onna li manə e li peda
the nails the hands and the feet
' *the nails of the fingers and the toes'
b. I onna li manə e dolli pedə
the nails the hand and of.the feet
'the nails of the fingers and of the toes'

### 1.4 Lack of $P$ in non-genitival constructions: comparatives and Qualitative Binominal Noun Phrases

In the preceding section, we have seen that genitives not introduced by a preposition may never occur in isolation. In fact, this turns out to be possible in one case only, which concerns possessives. In the variety of San Marco in Lamis, possessives are always articled, when occurring with the noun $(21, a)$, after a copular expression (21 a, b, c), and when in isolation ( $21, \mathrm{~d}$ ):
a. $\mathrm{j} \varepsilon$ la karta mia
is the letter my 'it's my letter'
b. la karta je *(la) mia the letter is *(the) my 'the letter is mine'
c. $\mathrm{j} \varepsilon \quad *(\mathrm{la}) \quad \mathrm{mia}$
is *(the) my
'it's mine'
d. ${ }^{*}$ (la) mia the my 'mine'

Consider next the following examples involving comparatives and superlatives.
(22) a. la makəna $\begin{array}{lllll}\text { 'je } & \text { k'kiu } & \text { rossa } & \text { la mia } \\ \text { the } & \begin{array}{l}\text { car }\end{array} & \text { is } & \text { more } & \text { big }\end{array}$ 'the car is bigger than mine'
b. 'j $\varepsilon$ la k'kiu rossa li sorə is the more big the sisters 'she is the eldest among her sisters'

As we said earlier this variety does have the possibility of using a preposition. The example in (22) can also be uttered with the preposition do. The lack of the preposition in (22) is as not constrained as in the cases of prepositionless genitives reviewed so far, but it is relatively free and occurs with possessives (22a) and articled nouns (22b) alike. Clearly this is a different phenomenon from possessors. However, we also find that a lack of the preposition occurs in a number of non-genitival contexts where the preposition do can also be used. In particular, in comparison constructions where a noun can be compared against a set comprising one (22a) or several elements (22b) through a preposition relating the two.

Constructions such as Qualitative Binominal Noun Phrases (Den Dikken 2006; Kayne 1994) are yet another instance in which the preposition might not occur. Den Dikken (2006) proposes an account of Qualitative Binominal Noun Phrases in which they are derived from a copular construction whereby the predicate inverts with its subject. Thus, a sentence like a jewel of a village is thought to be deriving from the village is a jewel. The predicate, jewel, inverts its position with the subject, village. The preposition preceding the subject in the final linear order is then realized as a syntactic aid to the inversion of the predicate. In this sense, the preposition of is seen as a nominal copula. In the variety of San Marco in Lamis, binominal noun phrases occur as in (23):
(23) a. mo mmo 1 e vistə allu scemə lu medəkə now now CL I.have seen to.the idiot the doctor 'I've just seen that idiot of a doctor'
b. la kaspəta la bulletta the freaking the bill 'that freaking thing of a bill'

Clearly what lacks in (23 a-b) is the preposition, the very element that in Den Dikken's predicate inversion is realized as an inversion-aiding 'device'. Den Dikken's proposal cannot be applied to (23), given the absence of the preposition, unless the inversion-aiding preposition is characterized as an empty element.

## 2. On determiners and genitival modification

Here we shall recapitulate some relevant findings in linguistic research on possession and its correlation with determiners, including both demonstratives and definite articles.

Starting with Afroasiatic, Pennacchietti (1968) shows how genitive morphological marking in Semitic is ultimately ascribable to $\partial / z$ determiners. In Neo-Syriac possession is in fact expressed with the genitive enclitic marking - $t$ on the possessee and proclitic marking on the possessor (Pennacchietti 1968:32):
(24) brūn-i-t d-alāhā
son- i-DEM DEM-god
'God's son'

He also notes how in the Jewish Neo-Aramaic of Persian Azerbaijan $i-d$ also came to introduce restrictive relatives, ktab-i-d b-idew, 'the book that (was) in his hand.' The same applies to Modern Hebrew, where the preposition šel ('of') contains the same D base, which also gave rise to relative pronouns, and possessives (Pennacchietti 1968: 10-11). This pattern is not restricted to Afroasiatic but is also present in the Dravidian family, with Telegu and Classical Tamil genitive case morphology being linked to D elements (Caldwell 2013 [1856]).

In Balkan languages such as Aromanian and Albanian (and in varieties of the latter) possessive constructions make use of an element known as linker (Den Dikken and Singhapreecha 2004, Manzini et al. 2014, Franco et al. 2015, among others) in linguistic literature. The morphological make up of linker elements often includes a D base, coincides with it, or it is an allomorph of it. Here we can see an example from the Arbëresh variety of Vena di Maida, spoken in the Italian region of Calabria, with data from Franco et al. (2015: 280):

| bift-i | i | mat $\int \varepsilon$-sə |
| :--- | :--- | :--- |
| tail-NOM.M.def | LKR.M | cat-OBL.F.def |
| 'the tail of the cat' |  |  |

The linker $i$ in (25) agrees in gender with the head noun bijt-, 'tail', and this can be seen from definite morphology - $i$ attached to 'tail', identical to the linker, which is therefore a D element, ${ }^{3}$ as generally in Balkan linkers, including those found in Eastern Romance varieties such as Aromanian (Manzini et al. 2014: 248): ${ }^{4}$

[^38]| a. libr-a | o | fit $\int$ |
| :---: | :---: | :---: |
| book-the | LKR |  |
| 'the boy's | ook' |  |
| b. libr-a | al-i | fet-i |
| book-the | LKR | girl-the |
| the girl's | ok' |  |

Unlike the Albanian linker in (25), the Aromanian linker (26) agrees with the genitive, rather than with the head, and does so in case and $\varphi$-features.

Indo-Iranian linkers, in languages such as Farsi and Kurdish, agree with the head noun when morphological agreement is present (as in Kurdish). Still in Kurdish (Kurmanji) the ezafe morpheme which is employed in genitival contexts can also have an anaphoric function, akin to that of a determiner (in Meillet 1931 it is also hypothesized that the ezafe morpheme might be traced back to hya, the Old Persian demonstrative pronoun). This is exemplified in (27) for Kurmanji Kurdish (Mackenzie 1961: 163; Manzini et al. 2014: 240):
a. yê Soro $/ \mathrm{min} / \mathrm{te}$ EZ.m. of Soros /me/you 'the one of Soros/of mine/of yours'
b. yê dwê... yê sêye EZ.m. second... EZ.M. third 'the second one... the third one'

On the basis of such data (and data on patterning with Romance clitic pronouns), in the latter work the Iranian ezafe too is considered to be a D element and part of a construction denoting inclusion of the possessee within the possessor in a part-whole type of relation.

Let us now consider a couple of examples of the Chinese linker de from Simpson (2002: 12)

$$
\begin{align*}
& \text { a. wo zuotian }  \tag{28}\\
& \text { I mai } \\
& \text { I de } \\
& \text { I nesterday bei-ben shu } \\
& \text { 'the book I bought yesterday' }
\end{align*}
$$

As (28) shows, de appears after a pre-nominal relative clause (28a) and after a possessor (28b). Basing himself on cross-linguistic evidence on modifying phrases appearing with their own determiners (such as Balkan and Hebrew pre-genitival and adjectival linkers), Simpson suggests that such a linker might actually be a definite determiner. More precisely, he states that
the linker is actually an element that is similar to the Romanian enclitic article, in that in possessive constructions the possessor is in a pre-de position (the same happens for relative clauses), the same position in which Romanian lexicalizes the noun with respect to its definite article. He then proposes the following structure for de constructions (ibidem):

| a. [wo | zuotian | mai] $]_{i}$-de | nei-ben <br> that-CL | $\begin{gathered} {\left[\begin{array}{c\|} \text { Sp } \\ \text { shu }\left[\mathrm{t}_{\mathrm{i}}\right] \\ \text { book } \end{array}\right]} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | yesterday | buy LKR |  |  |
| 'the book I bought yesterday' |  |  |  |  |
| b. [wo ${ }_{\mathrm{i}}$ de $\mathrm{t}_{\text {d }}$ nei-ben-shu |  |  |  |  |
| I | LKR th | CL-book |  |  |  |
| 'that book of mine' |  |  |  |  |

Diachronically, de can be traced back to the Classical Chinese determiner zhi, which Simpson describes as an element having a parallel distribution to that of Modern Chinese de, except that it could also be used as a demonstrative (Modern Chinese de is reported instead as an element having lost such deictic function), as in (30) from Simpson (2002: 17):
zhi er chong you he
these two worm again what
know
'what do these two worms know?'

Simpson thus suggests that the nature of determiners themselves might allow them to instantiate syntactic variables permitting a number of elements (whether adjectival or genitival, but this also extends to relative clauses) to enter in a modifying relation with a nominal. The hypothesis is also based on crosslinguistic data showing that a further determiner is often needed only in cases where a modifying element appears. This includes, as we said, adjectival and genitival linker constructions of the types previously discussed, but also Hungarian data he considers from Szabolcsi (1994) in (30) and English ones in (31) with relative clauses (30, b) and possessor phrases ( $30 \mathrm{c}-\mathrm{d}, 31 \mathrm{a}-\mathrm{b}$ ) (Simpson 2002: 15, 19):
a. ${ }^{*}$ valemennyi level
the each letter
'*each letter'
b. a [tol-ed kapott] valemennyi level the from- 2 sg received each letter 'the letter I/we received from you'
c. *az minden allitas-om the every book '*my every book'
d. az [en] minden allitas-om the I every book 'my every book'

The observation made for Hungarian is that the definite article might additionally co-occur with an element quantifying a noun only if the noun is further restricted by a modifying element. This is shown in (30 a, b) for relative clauses and in ( 30 c , d) for possession. In ( $30 \mathrm{a}, \mathrm{b}$ ) we can see that the phrase-initial definite article appears only if a relative clause is present between the article and the quantifier. ( $30 \mathrm{c}, \mathrm{d}$ ) are the possessive counterparts. $A z$ might appear only if a possessor phrase is present as well, which like in ( $30 \mathrm{a}, \mathrm{b}$ ) for the relative clause, is again interposed between the definite article $a z$ 'the', and the quantifier minden 'every'. In a parallel fashion, except for the position of the modifier, in English a definite article must co-occur with a quantifier only if the noun is modified by a possessor phrase (ibidem: 19):

```
a. *the every whim
b. the every whim [of Margaret Tatcher]
```

3. Forerunners of modern Romance non-prepositional genitives

### 3.1 Old French, Old Sicilian and Old Italian

To the best of my knowledge, we have no texts attesting early uses of Apulian prepositionless genitives of the type of San Marco in Lamis, but we can look at other old Romance varieties employing such constructions found in works such as Jensen (2012 [1990]) and Delfitto and Paradisi (2009). In the latter work prepositionless genitives of Southern Italy are actually seen as a surviving instance of juxtaposed genitives of the Medieval Romance varieties they discuss.

Old French is a notable case. In Old French, in fact, possession could be expressed through the juxtaposition of two nouns, with genitives often being proper names. The genitive followed his head, as in (32) (data from Jensen 2012 [1990]: 19):
(32) a. le cheval Kex the horse Keu 'Keu's horse'
b. el lit Kex in.the bed Keu 'in Keu's bed'

Hence a first difference between the Apulian type of San Marco in Lamis and Old French is the possibility for proper names to appear as genitives in the relevant construction, contrary to what we have seen in (4). Jensen (2012) states in fact that the construction was mostly characterized by proper names, kinship terms, and
high rank referents. It thus was a construction mostly dedicated to highly ranked referents, even though it was employed to express general ownership, too.

Proper nouns, which are articleless, were the ones mostly occurring in the construction, but articled ones were allowed too, as in (33) from Jensen (ibidem: 19):
(33) dou pouoir l'Anemi gité
from.the power the enemy freed 'freed from the power of the enemy'

Thus we also find instances nearly identical to those of the Apulian prepositionless genitives we discuss here, as in la corz lo roi, 'the King's court'. The construction was "used widely with nouns denotating human beings provided that the reference is to specific individuals and not to a class or category of people" (ibidem). So the nouns entering in the construction had to be [+specific] and [+human]. The Apulian construction does not place any constraint on the [human] features of the two nouns even though it is dedicated to specific ones. Sometimes in Old French the order possessee-possessor would be reversed, yielding a genitival construction of the type selonc la Dieu benivolance, 'according to God's benevolence'; a la rei curt, 'to the King's court' (ibidem: 20), like the Old Italian la Dio mercé 'God's mercy'.

Prepositional genitives of the $a$ type were instead usual with plural or generic possessors, se por le pechié as gens ne fust 'if it wasn't for people's sins'; ja mes n'entrera puis hui en chamber a dame n'a pucele'never again from today will somebody enter a lady or a maiden's room' (ibidem). Prepositional genitives were thus dedicated to non-specific nouns, and to nouns headed by indefinite articles, and this extended to both the head and the argument noun (ibidem: 25):

> a. la maison a une veve femme the house to a widow woman 'the house of a widow'
> b. une maison a un hermite trova a house to a hermit found 'he came upon the house of a hermit'

In (34), we see how Old French follows the pattern of the Apulian and Romanian data in the preceding sections.

Arteaga (1995) argues that the emergence of obligatory subject personal pronouns during the Middle French period and the disappearance of the juxtaposition genitive are linked to the loss of an Agr head, so that genitive case could not be assigned without an overt marker. This is suggested in Arteaga (1995: 87), whose syntactic representation of the construction is reported in (35):5

[^39]

As in general in the dialects of Southern Italy, we find that the Apulian variety of San Marco in Lamis is a pro-drop language. But prepositionless genitives still do not carry any genitival marker.

Other proposals suggesting null heads include Simonenko (2010: 9), where a treatment of genitival arguments as Kase projections occupying the complement position is envisaged, proposing a structure in which Kase is a silent head, occupied by the preposition in case of prepositional genitives. Given that modifiers must be human and specific, she considers the K head to be endowed with such features as well:
isolation as further support for the theory that the language had an AGR head, discharging case to the complement noun to its right.
(36)

(37)


A definiteness feature is considered necessary in order to assign case in Old French juxtaposed genitives by Delfitto and Paradisi (2009) as well. They propose an analysis à la Kayne in which the Agr head inherits its definiteness features from the possessor via spec-head agreement, as in Delfitto and Paradisi (2009: 60):
(38) la $\left[_{D / P P}\right.$ niece $_{j}\left[\left[A G R / K_{k}^{\circ}{ }_{k}-D^{\circ}\right]\left[_{I P}\right.\right.$ le duc $\left[e_{k}[e]_{j} \ldots\right.$

In their theory the incorporation of Agr into D is triggered through a +human feature which syntactically activates AGR $/ K^{\circ}$. In doing this, the authors are trying to account for the fact that the construction restricts modifiers to human referents.

Old French prepositionless genitives have also been shown not to be iterable (like Old Italian ones).

The Apulian construction of San Marco in Lamis does allow iteration. Despite the fact that it obeys a several number of constraints on its realization like other types of prepositionless genitives do, the one on multiple occurrences does not seem to be one of them:

> la kasa lu figgiə lu skarparə the house the son the cobbler 'the house of the cobbler's son'

As we said earlier we have no data on this variety from around the period of Old French, on when it emerged in this precise variety, regarding whether it obeyed similar constraints to those of Old French, or whether they changed over time. The first written records appear towards the end of the $19^{\text {th }}$ century. On the other hand, Old Italian and Old Sicilian records containing a prepositionless genitive go back to at least the $14^{\text {th }}$ century. Possessors were in the form of proper names (unlike this Apulian variety, which does not allow them), and both the head and the argument had to be definite, as in the following examples quoted in Delfitto and Paradisi (2009: 63) from $14^{\text {th }}$ century Old Tuscan (40) and from $14^{\text {th }}$ century Old Sicilian (41):
(40) dale rede Bertino d'Aiuolo
from.the heirs Bertino d'Aiuolo
'from Bertino d'Aiuolo's heirs'
la morti
the Dyonisiu tyranpnu
'the death of the tyrant Dyonisius'

Finally, Delfitto and Paradisi see the construction as the one breaking the ground for Contemporary Italian $\mathrm{N}+\mathrm{N}$ compounds.

The syntactic treatments of prepositionless genitives seen until now either include an empty Kase position for assigning genitive case, or incorporation of Agr into D, following the insight that definiteness is a common feature of this genitival construction. As definiteness does not seem to suffice in order to license it (remember the +human feature of Old French, for example), some scholars have tried to map further features on the K head.

Syntactic treatments of morphologically unmarked genitives generally try to answer the question about what, exactly, is the syntactic cue that allows speakers to interpret the argument as genitival even though it has no such a marking. As we said, when it comes to Old French some scholars considered the cue to be an Agr head whose disappearance is caused by
the end of pro-drop subjects and of juxtaposed genitives (Arteaga 1995). Further research showed instead the lack of such a link (Delfitto and Paradisi 2009; Simonenko 2010), either because free and juxtaposed genitives coexisted, or because corpus studies showed that around the time juxtaposed genitives disappeared, $25 \%$ of the matrix clauses used in the dataset still had null subjects (Simonenko 2010: 5). Similarly, the Apulian variety under analysis here is a pro-drop language, has no morphological case, but allows morphologically unmarked genitives anyway.

Let us consider again that in Sammarchese the head of the construction might also be articleless as with vocatives, and heads as proper names (the latter pattern is also found in the Calabrian construction analyzed in Silvestri 2012). With this in mind and data such as (4), this means that it is possible to have a case of the type $\left[_{D P} \pm\right.$ raised] [ ${ }_{D P}$-raised] but not of the type ${ }^{*}\left[_{D P} \pm\right.$ raised] [ ${ }_{D P}+$ raised]. *la madra Fabio or *Anna Fabio are not possible sentences. Genitival constructions which in Italian are [ ${ }_{D P}+$ raised] $\left[_{D P}+\right.$ raised] like casa Rossi are instead [ ${ }_{D P}$-raised][ ${ }_{D P}$-raised] in Sammarchese, la kasa li Sarratella, 'the house of the Serritellis' (speakers might employ the Italian $\left[_{D P}+\right.$ raised $]\left[_{D P}+\right.$ raised $]$, but this pertains code mixing with Italian): the complex is interpreted as genitival only if the genitive DP is articled. We shall not draw a precise parallel with the cases we discussed in $\$ 2$ (remember genitive case in Afro-Asiatic, and Chinese, Balkan, and Indo-Iranian linkers), however given the role of the definite article which precedes the genitive in the interpretation of the latter as genitival, we conjecture that the pre-genitival article might be an obligatory element whose occurrence is necessary to allow the second DP to be interpreted as a genitive/possessor. In short, the inclusion relation is instantiated only when genitive nouns are headed by overt definite articles.

## 4. Conclusions

In the present work we have drawn a first sketch of prepositionless genitives in the Apulian variety of San Marco in Lamis. They have been compared with Modern Romance varieties (Romanian, Aromanian) and with Hebrew. Comparison with Old Romance varieties (Old French, Old Italian, and Old Sicilian) prepositionless genitives resulted in some similar patterns, but also in some discrepant ones, even though they all exhibit a constraint on the definiteness of the nouns entering the complex. In particular, for this Apulian variety we discussed a ban on heads followed by post-nominal adjectives, and on genitive nouns in the form of proper names (unlike Old French, Old Italian, and Old Sicilian, where genitives were mostly proper names). Post-nominal adjectives have been shown to be sitting only to the right of the genitival complex, never intervening between the head and the argument, and to be agreeing with the argument, rather than with the head.

The construction has shown to be iterable, and its arguments disallowed from appearing in isolation. Arguments may function as either subjects, or objects. Given its necessary presence, the article preceding the argument is understood as the element allowing the argument to be interpreted as the possessor in the inclusion relation. The following table recapitulates the patterns and the constraints which characterize the Apulian construction analyzed until now.

|  | YES | NO |
| :--- | :--- | :--- |
| Indefinite heads |  | x |
| Indefinite genitives | x |  |
| Demonstratives preceding <br> the head | x |  |
| Intervening material <br> between the head and the <br> argument | x |  |
| Adjectival modification of <br> heads | x (iff pre-nominal adjec- <br> tive. Adjectives following <br> the complex modify the <br> argument) |  |
| Adjectival modification of <br> genitives | x | x |
| Genitives as proper names | x | x |
| Iteration | x (iff vocative, or proper |  |
| Heads as deverbal nouns | x |  |
| Genitives as subjects | x | x |
| Coordination of genitives | x | x |
| Isolation of genitives | Articleless heads |  |
| Complex referring to <br> container | Binominal constructions x |  |
| Comparatives |  |  |

Table 1. Lack of P pattern

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# Microvariation and Microparameters. Some Quantitative Remarks 

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#### Abstract

: This paper deals with the distribution of subject clitics in northern Italian dialects. Building on quantitative data, I argue that the observed microvariation cannot derive (only) from external linguistic factors such as contact, areal diffusion, sociolinguistic dynamics, etc. Rather, a principled feature-based analysis is needed in order to account for certain patterns of defectivity and syncretism that, although typologically rare, occur systematically in northern dialects.


Keywords: clitics, gaps, syncretism, dialects, microvariation, Italo-Romance

## 1. Introduction

As illustrated in Table 1, paradigms of subject clitics in central Romance dialects are often defective and exhibit systematic patterns of syncretism:

|  | Olivone | Corte | Grumello | Fornero | Piverone | Calasetta | Tayac |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 p | $a$ |  | (a) | $i$ | $i$ |  |  |
| 2 p | $t u$ | $t e$ | (a) $t a$ | $t i$ | $a t$ | $t i$ | $t e c$ |
| $3 \mathrm{p} \mathrm{(m/f)}$ | $u / r a$ | $l / l a$ | $a l /(a)$ | al/la | allla | $u / a$ | $e w$ |
| 4 p | $a$ |  | $a n$ | $i$ | $i$ |  |  |
| 5 p | $a$ |  | (a) | $i$ | $i$ |  | vusaw |
| $6 \mathrm{p}(\mathrm{m} / \mathrm{f})$ | $i$ | $i / l e$ | (a) $i$ | $i$ | $a$ |  | $z i$ |

Table 1. Paradigms of subject clitics in Italo and Gallo-Romance dialects

Gaps and syncretisms are sensitive to person distinctions. Previous studies revealed some robust trends in the form of implicational statements, which lend themselves to an analysis in terms of feature geometries and microparameters (Heap 2002; Manzini and Savoia 2005, 72ff; Benincà and Poletto 2005; Oliviéri 2011; Calabrese 2011).

However, before adopting microparametric or feature-based explanations, it is worth examining and - if possible - discarding alternative hypotheses. Among alternative hypotheses, one might contend that crosslinguistic variation across a set of closely related languages is always amenable to external explanations. Let us assume that some innovative speakers began to use an idiosyncratic variant $\mathrm{V}_{1}$, which spread across social strata and nearby speaking communities until it gave rise to further subvariants $\mathrm{V}_{2 \mathrm{a} / 2 \mathrm{~b} / \mathrm{etc} \text {. }}$ and so on. In this way, paradigms of SCls gradually shifted from one type to another, yielding prima facie hierarchical arrays. In other words, by studying genealogically-related languages, one always 'runs the risk [to] discover shared innovations that have purely historical explanations, rather than properties that are shared because of the same parameter setting.' (Haspelmath 2008, fn 8).

The paper aims to address the above hypothesis on the basis of statistical evidence based on a dataset of 187 dialects reported in Manzini and Savoia 2005. To address the null hypothesis (i.e. 'purely historical explanations'), I will show that the geolinguistic distribution of variants does not support an account entirely based on external/historical factors.

The conclusion of the present study is in line with the premises of Longobardi and Guardiano's 2009 Parametric Comparative Method (PCM), which has been applied to the analysis of syntactic microvariation in Greek and (southern) Italian dialects (Guardiano et al. 2016). Although the methodology and the spirit of the present study are germane to the PCM, the goal of this work is much less ambitious. Longobardi and Guardiano argue that, by adopting a parametric approach, syntactic comparison is as reliable as the comparative method of historical linguistics: the clusters of languages generated by the PCM correspond to the linguistic families and groups reconstructed by means of non-syntactic comparative evidence. Then, by validating the PCM, Longobardi and Guardiano show that linguistic classifications must rely upon abstract syntactic parameters rather than superficial similarities.

The PCM approach, however, cannot be easily extended to the analysis of subject clitic systems. Since subject clitics are attested in a homogeneous linguistic area, the results of our quantitative analysis cannot be tested against a genealogical clustering. Hence, whereas the comparative method provides a benchmark to evaluate Longobardi and Guardiano's parameters, no independent evidence allows us to validate feature-geometric analyses such as Heap 2002; Benincà and Poletto 2005; Oliviéri 2011; Calabrese 2011. For this reason, the article departs from the PCM and follows a bottom-up approach to
microvariation in which higher grade accounts (e.g. feature geometries, microparameters) are supported indirectly by dismissing lower grade hypotheses (e.g. contact, analogy, etc.).

The structure of the paper is as follows: section 2 deals with the nature of subject clitics in northern Italian dialects and wonders about the relationship between subject clitics and the Null Subject Parameter (NSP); section 3 overviews the distribution of gaps and patterns of syncretism in Manzini and Savoia's 2005 sample; section 4 elaborates on the correlation between linguistic and geographical distance.

## 2. Subject clitics and the Null Subject Parameter

Subject clitics occur in Gallo-, Italo- and Rhaeto-Romance varieties. The null subject parameter cuts across the area of subject clitics: northern Italian dialects exhibit subject clitics, cf. (1c), but, unlike French, they are characterised by the canonical properties of null subject languages: they are not subject to the so-called that-trace effect, cf. (2c), and allow free inversion as in (3c). For these reasons, clitics in northern Italian dialects have been often analysed as agreement markers, rather than fully-fledged pronouns (Rizzi 1986; Brandi and Cordin 1989).
(1) a. parla italiano. (It.)
speak.3SG Italian
b. *(Il) parle italien. (Fr) 3SG.NOM $=$ speak.3SG Italian
c. ${ }^{*}$ (El) parla italian (Ver.) 3SG= speak.3SG Italian 'He speaks Italian'
(2) a. Chi hai detto che ha scritto questo libro? (It.) who have.you said that has written this book
b. *Qui as-tu dit qu' a écrit ce livre? (Fr.) who have=you said that has written this book
c. Ci ghe-to dito che l'a scrito sto libro? (Ver.) who have=you said that he=has written this book 'Who did you say wrote this book?'
(3) a. È arrivato is arrived

Gianni. (It.)
John
b. *Il
est
arrivé
Jean. (Fr.)
he=
c. L'è he $=\quad$ be.3SG
arrive.PST.PTCP John.
'John has arrived'

Furthermore, in many northern Italian dialects subject clitics form a defective paradigm, as shown in (4). ${ }^{1}$ Besides northern Italy, defective patterns have been found in some northern Occitan dialects (Kaiser, Oliviéri, Palasis 2013) and in Franco-Provençal dialects.
(4) Mi

Ti
Lu
Nialtri
Vialtri
Lori

$$
\begin{array}{ll}
\text { _ magno } & \text { 'I eat' (Ver.) } \\
\text { te magni } & \text { 'You eat' } \\
\text { el magna } & \text { 'He eats' } \\
\text { - magnémo etc. } \\
\text { - magnì } & \\
i \text { i magna }
\end{array}
$$

The above dichotomy between clitic subject pronouns of the French type and subject-agreement clitic markers of the Italo-Romance type is supported by further evidence: in northern Italian dialects, but not in French, subject clitics can double a non-dislocated subject, follow negation, and cannot be dropped under coordination:
(5) a. Nessuno gli ha detto nulla. (Flo.) none 3 SG $=$ have.3SG say.PST.PTCP nothing
b. *Personne il n' a rien dit. (Fr.) none 3 SG.NOM $=$ NEG $=$ have.3SG nothing say.PST.PTCP 'Nobody has said anything'
(6) a. Un tu compri mai mele. (Flo.)

NEG 2SG= buy.2SG never apples
b. $\quad \mathrm{Tu}$ 2SG.NOM $=$
'You never buy apples'
(7) a. La
canta e la
la balla (Flo.)
3SG.F sing.3SG and $3 \mathrm{SG}=$ dance.3SG
b. Elle chante et danse. (Fr.)

3SG.F.NOM $=$ sing.3SG and dance.3SG
'She sings and dances'

In fact, Poletto (2000) shows that northern Italian dialects, although behaving like null-subject languages, do not always allow doubling (in particular with operator-like subjects), do not always display the order ne-

[^40]gation > clitic, and, under certain circumstances, allow the omission of certain clitic forms in coordinated structures. At the same time, corpus studies have shown that in French varieties such as colloquial metropoli$\tan$ French as well as Quebec, Ontario, and Swiss varieties of French (see Culbertson 2010; Palasis 2015 and references therein), subject clitics and NP/DP subjects (including strong pronouns) co-occur even if the latter are not dislocated.

Further problems for the claim that Italo-Romance subject clitics are agreement markers come from the analysis of varieties in which subject clitics seem to occur optionally. In Paduan, for instance, third person subject clitics do not always occur (Benincà 1994). First, subject clitics are ungrammatical whenever the subject is postverbal:

| (8) | *El | riva | to |
| :--- | :--- | :--- | :--- |
| $\mathrm{He}=$ | arrives | your= | fradèo. (Pad.) |
|  | 'Your brother is coming' |  |  |

With preverbal subjects, the clitic occurs if and only if the subject is left-dislocated (Benincà and Poletto 2004):
a. Mario
(l) compra
Mario
(he=) buys

| na | casa. (Pad.) |
| :--- | :--- |
| a | house |

'Mario is going to buy a house'
b. Mario, na casa, no *(l) la compra.
Mario, a house, not (he=) it= buys
'Mario is not going to buy a house'

The analysis of subject clitics as agreement elements is at odds with the complementary distribution between subject clitics and non-dislocated subjects. If clitics were agreement elements, they should always occur regardless of the position of the doubled subject.

Another problem for the hypothesis that subject clitics are agreement heads comes from the presence of expletive subject clitics in impersonal clauses. For instance, the dialect of Monno in (10a) displays the non-agreeing/expletive clitic $e l$ with weather verbs and other impersonal predicates, whereas in the dialect of Trieste in (10b) no clitic formative occurs in impersonal clauses.

```
a. El
    3.MSG=
    plof. (Monno)
    rain.3
    'It is raining'
b. Piovi. (Trieste)
    rain. }
    'It is raining'
```

Since both Monnese and Triestino are null subject languages, then one wonders about the nature of the element $e l$ in (10a), which occurs in the same contexts in which non-null subject languages normally require expletives. Expletives are normally regarded as placeholders, i.e., dummy elements having the same status of phrasal subjects. However, if Italo-Romance subject clitics were agreement markers, how could they satisfy any syntactic requirement related to the subject position?

Second, if subject clitics were agreement markers, they would occur in all impersonal constructions as well as in prototypical subject-less contexts such as imperatives, contra evidence. Renzi and Vanelli (1983) observed that expletive clitics do not always occur in all impersonal environments: they are more readily found with weather verbs and, to a lesser extent, with existentials and in impersonal si constructions. Some dialects require an expletive clitic to occur with the modal verb expressing impersonal necessity ('it is necessary to'), but - to the best of my knowledge - this happens if and only if the expletive clitic occurs in the remaining impersonal contexts. Hence, the distribution of expletive clitics in impersonal environments follows an implicational scale, illustrated in Table 2:

| Variety | Weather <br> verb | Existential <br> construction | Raising <br> construction | Arbitrary <br> construction | Impersonal <br> necessity |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Carcare | U ciov | U j-è | U smija... | U s diz | U bsogna |
| Cesena | E piov | U j-è | E per... | U s dis | Ø bsogna |
| Monno | El plof | El g'e | El par | $\varnothing$ s dis | Ø gna |
| Rocca P. | El piof | L'è | Ø omea | Ø se dis | Ø moza |
| Aldeno | El piove | Ø gh'e | Ø par | Ø se dis | Ø bisogna |
|  | 'it rains'' | 'there is...' | 'it seems that...' | 'one says' | 'it is needed...' |

Table 2. Expletive clitics in impersonal environments (from Pescarini 2014 with minor modifications)

The above data challenge the idea that subject clitics are agreement heads, but alternative accounts of expletive clitics are even more problematic for the analysis of northern Italo-Romance as null subject systems. In fact, if northern Italian pronouns were considered fully-fledged expletives, they would challenge Gilligan's 1987 correlations in (11). The correlations in (11) resulted from testing Rizzi's early formulation of the Null Subject Parameter against a sample of one hundred languages. According to Gilligan's survey, only the following one-way implications hold true cross-linguistically and, crucially, three out of four generalisations predicts that null subject languages should exhibit null expletives:
(11) a. Free Inversion $\rightarrow$ expletive null subjects
b. Free Inversion $\rightarrow$ allow complementiser-trace violations
c. Referential null subjects $\rightarrow$ expletive null subjects
d. Allow complementiser-trace violations $\rightarrow$ expletive null subjects

In the light of (11), one does not expect to find overt expletives in languages allowing free inversion or that-trace violations. Again, the characterisation of northern Italian dialects as null subject languages leads us to the conclusion that subject clitics are not expletive pronouns, but, at the same time, the distribution illustrated in Table 2 is at odds with the hypothesis that ItaloRomance clitics are agreement markers.

Under a sub-parametrisation of the Null Subject Parameter, one might perhaps argue that northern Italian dialects are a particular kind of partial Null Subject Languages (Holmberg 2005) in which the presence of overt subjects is dependent on Person. Besides person-driven gaps, one might argue that also the microvariation with respect to expletive clitics - see Table 2 - follows from the partial NSL status of northern Italo-Romance dialects. In the light of this hypothesis, however, northern Italian dialects would be expected to exhibit other properties of partial pro-drop languages, which Holmberg 2005 summarises as follows:
(a) Subject prodrop may be restricted to some persons/verb forms and is sensitive to differences of clause type, main/embedded configuration, and register;
(b) Subject pro-drop is dependent on agreement, but the subject-verb agreement system is deficient in one way or other;
(c) When subject pro-drop is dependent on an antecedent (a 'controller'), the controller needs to be strictly local;
(d) There is a null third person singular inclusive generic pronoun;

In particular, northern Italian dialects are expected to resemble a partial NSL such as Brazilian Portuguese. For the sake of completeness, the distribution of null subjects in European and Brazilian Portuguese is illustrated in Table 3 (from Martins and Nunes 2018). BP differs from EP in the acceptability of null subjects, which are allowed with $1^{\text {st }}$ person plural subjects, whereas they are forbidden with $2^{\text {nd }}$ and $3^{\text {rd }}$ singular subjects and with the inclusive impersonal a gente. Like northern Italian dialects, BP is not subject to the that-trace effect, although it is gradually losing 'free' inversion with transitive and unergative verbs (Barbosa, Duarte, Kato 2005 a.o.). Unlike northern Italian dialects, BP never exhibit expletives.

|  | EP | BP |
| :--- | :--- | :--- |
| nós 'we' | OK | OK |
| vocês 'you' | OK | $? ?$ |
| eles 'they' | OK | ?? |
| elas 'they' | OK | ?? |
| eu 'I' | OK | ?? |
| você 'you' | OK | $*$ |
| ele 'he' | OK | $*$ |
| ela 'she' | OK | $*$ |
| a gente 'we' | * | $*$ |

Table 3. Distribution of null subjects in European and
Brazilian Portuguese (from Martins and Nunes 2018)
The similarities between BP, northern Italian dialects, and other partial NSLs are quite elusive, but the key factor at play in partial systems is the representation of person features and the relationship between pro-drop and agreement (cf. Holmberg's 2005 statement in (b): 'Subject pro-drop is dependent on agreement'). In this respect, two conceptions of agreement have been advocated: a more 'morphological' view, in which the presence of subject pronouns is linked to the overt marking of verb inflection, and a more 'abstract' view, in which the presence/absence of subject clitic forms results from abstract constraints such as hierarchies of features. In the latter analysis, the externalisation of subject clitics depends on feature geometries or analogous solutions (e.g. filters) allowing/disallowing the spell-out of certain bundles of agreement features (Heap 2002; Benincà and Poletto 2005; Calabrese 2011; Oliviéri 2011).

To summarise, this section has reviewed previous proposals concerning the nature of subject clitics in northern Italian dialects. Subject clitics have been analysed as agreement markers as they can co-occur with nondislocated subjects and, although northern Italo-Romance dialects are null subject languages, they necessarily occur in finite clauses. Under other respects, however, subject clitics do not behave like agreement markers: no dialect allows subject clitics in prototypical subject-less contexts such as imperative clauses, whereas some dialects have expletive subject clitics in certain, but not all, impersonal environments. The comparison with partial null subject languages may provide a better account of the syntax of subject clitics in northern Italian dialects, but the syntactic diagnostics observed in Germanic languages and Brazilian Portuguese are not convergent. Eventually, the comparison with partial pro-drop systems leads us to wonder about the nature of person-given gaps that characterise partial NSLs.

## 2. Gaps and syncretism

Paradigms of subject clitics are often defective. Certain persons of the paradigm are not expressed by a subject clitic or, if the clitic form is present, it is either optional or syncretic. For instance, in the Franco-Provencal dialect of Fenis (Laure Ermacora, p.c.) the $1^{\text {st }}, 4^{\text {th }}$ and $5^{\text {th }}$ person clitics, which in the dialect of Verona in (4) were missing, are optional (in positive declarative clauses). In the Swiss dialect of Gruyère (De Crousaz and Shlonsky 2003), the optional persons are the $1^{\text {st }}$, the $3^{\text {rd }}$ and the $6^{\text {th }}$. Furthermore, in Gruyère the optional clitics are syncretic as they are expressed by the vocalic exponent $i$.
(12) a. (dze) 'péko $\tilde{\Lambda}$ 'poma (Fenis, Franco-provençal; Laure Ermacora p.c.)
'I eat an apple'
b. tu 'pékè 'poma 'you.sg eat an apple’
c. im 'pékè $\tilde{\Lambda}$ 'poma 'he/she eats an apple'
d. (nJ) pi'kèn $\tilde{\Lambda}$ 'poma
'we eat an apple'
e. (vo) pi'kodè $\tilde{\Lambda}$ 'poma
'you.pl eat an apple'
f. iu 'pékoun $\tilde{\Lambda}$ 'poma
'they eat an apple'
(13) a. $\quad \mathrm{Me}$ (i) medzo dou fre. (Gruyère, Switerland; De Crousaz and Shlonsky 2003) 'I am eating cheese'
b. Tè te medzè dou pan.
'You are eating bread'
c. li (i) medzè chin ti lé dzoa.
'He eats that every day'
d. Nono medzin rintyé la demindze.
'We eat only on Sundays'
e. Vo vo medzidè avu no.
'You (pl.) are eating with us'
f. Là (i) medzon to cholè.
'They are eating all alone.
Building on similar data, previous studies revealed some robust trends in the form of implicational statements. Renzi e Vanelli 1983 analysed a sample of 30 dialects and put forth a set of Greenberg-style generalisations, e.g.
(14) a. If a variety has at least one subject clitic, it is 2 sg .
b. If a variety has two subject clitics, they are 2 sg and 3 sg .
c. If a variety has three subject clitics, they are $2 \mathrm{sg}, 3 \mathrm{sg}, 3 \mathrm{pl}$

The above statements can be represented by means of a chain of implications, although no single chain can account for all the patterns found so far:
a. $2>3>6>5>4>1$
(Renzi and Vanelli 1983)
b. $2>3>6>1>4 / 5$
c. $2>6>3>4>1>5$
(Cabredo Hofherr 2004; Calabrese 2011)
(Heap 2000)

Heap 2002, Oliviéri 2011, Calabrese 2011 among others tried to formulate higher grade generalizations by deriving Person distinction from bundles of abstract features. In fact, the organisation of clitic inventories follows more or less robust trends, rather than categorical principles. As for the presence/absence of singular clitics, for instance, data from Manzini and Savoia (2005, $\$ 2.3$ ) revealed that a group of dialects of Trentino have the $3^{\text {rd }}$ person clitic, but no $1^{\text {st }}$ and $2^{\text {nd }}$ person clitic (contra Renzi and Vanelli's first generalisation in (14). However, the $2^{\text {nd }}$ person clitics is never missing if the $1^{\text {st }}$ person clitic is present: as shown in the following histogram, a system with the $1^{\text {st }}$ person and without the $2^{\text {nd }}$ person clitic is not attested in the almost 370 dialects of Manzini and Savoia's and ASIt dataset. ${ }^{2}$


Figure 1. Presence $(1,2)$ vs Absence ( $\varnothing$ ) of $1^{\text {st }}$ and $2^{\text {nd }}$ person subject clitics in northern Italian dialects. Key: $\varnothing$, $\varnothing$ : both first person singular and second person singular are missing; $\varnothing, 2$ : the first person singular is missing; $1, \varnothing$ : the second person singular is missing; 1,2 : both clitics are attested.
Sample: 182 northern Italian dialects; Dataset: ASIt database (retrieved in July 2018). Source: Loporcaro and Pescarini 2019

Since implications are often contradicted by counterexamples, it is worth approaching the problem from a quantitative point of view in which categorical

[^41]statements are turned into probabilistic generalisations. In order to weigh the generalisations on the distribution of subject clitics, I have analysed the absence vs presence of subject clitics in the sample of 187 northern Italian and Rhaeto-Romance dialects reported in Manzini and Savoia 2005. For each dialect, I surveyed the presence of subject clitics in declarative clauses. The results are summarised in Appendix 1 (for the sake of clarity, a partial screenshot of the matrix is reported in Figure 2). The first column of the Working table reports the 187 datapoints surveyed by Manzini and Savoia 2005; columns 2-7 show the presence/absence ${ }^{3}$ (' 1 ' vs ' 0 ') of subject clitic forms for each Person (recall that ' 1 ' means that the clitic is either optional or mandatory). Besides personal pronouns, the table reports the presence $v s$ absence of expletive subject clitics with weather verbs (column 8).

| Datapoint | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ | $\mathbf{e x p l}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Olivone | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Semione | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Quarna sopra | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Moncalvo | 0 | 1 | 1 | 0 | 1 | 1 | 1 |
| Valmacca | 1 | 1 | 1 | 0 | 0 | 1 | 1 |
| Breme | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Castellinaldo | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Inveruno | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Carnago | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Martignana di Po | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Casorezzo | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Arconate | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Solbiate Arno | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Càdero | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| San Benedetto Po | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Saguedo | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Stienta | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

Figure 2. Working table (see Appendix 1)
I used the R Package 'rworldmap' (South 2011) to plot the results on six geographical maps, one for each Person (key: red points mean that the dialect exhibits no clitic form). $3^{\text {rd }}$ Person and, to a lesser extent, $6^{\text {th }}$ person clitics are almost always present, although, as mentioned in $\$ 2$, in many eastern

[^42]dialects the occurrence of $3^{\text {rd }}$ person clitics is subject to further conditions, yielding the impression that the presence of the clitic is optional:


Figure 3. Presence/absence of third person (left) and sixth person clitics (right)
$4^{\text {th }}$ and $5^{\text {th }}$ person clitics are often missing, in particular in northeastern dialects. As for the $4^{\text {th }}$ person, it is worth noting that in many Lombard dialects the $4^{\text {th }}$ person results from the reanalysis of an impersonal periphrasis formed by the clitic $o m$ < номо followed by the verb at the third person. Although these dialects do not have a proper $4^{\text {th }}$ person clitics, they have been reported in green in the following map; the presence of the om < номо formative is reported in column 9 of Appendix 1.


Figure 4. Presence/absence of fourth person (left) and fifth person clitics (right)
As shown in the following maps, the $1^{\text {st }}$ person is frequently missing (like the $4^{\text {th }}$ and the $5^{\text {th }}$ ), whereas the $2^{\text {nd }}$ person is almost always mandatory:


Figure 5. Presence/absence of first person (left) and second person clitics (right)
The above maps confirm - at large - previous impressionistic generalisations. However, to assess linguistic generalisations, we need to turn our empirical generalisations into probabilistic measurements. I first calculated the correlation between the presence/absence of clitics across persons. The following table reports the correlation indexes calculated on the basis of the data from Appendix 1 (Manzini and Savoia's 2005187 dialects). Each cell of the table reports the degree of correlation for each pair of personal pronouns. Two personal pronouns correlate positively if, for each dialect and each pair of persons, clitics are either present or missing.

| 2P | 3 P | 4P | 5P | 6P | EXP |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0,24 | 0,15 | 0,61 | 0,68 | 0,15 | 0,44 | 1P |
|  | 0,28 | 0,39 | 0,39 | 0,33 | -0,06 | 2P |
|  |  | 0,45 | 0,51 | 0,86 | 0,37 | 3P |
|  |  |  | 0,76 | 0,50 | 0,49 | 4P |
|  |  |  |  | 0,57 | 0,44 | 5P |
|  |  |  |  |  | 0,44 | 6P |

Figure 6. Correlation between persons: gaps
(sample: 187 dialects from Manzini and Savoia 2005, cf. Appendix 1)
The presence of the expletive clitics with meteorological verbs does not correlate with the presence of any personal pronoun and, from now on, expletive clitics will not be examined anymore. The degree of correlation between personal forms is represented in the following radar plot: each vertex of the hexagon represents a person (1P, 2P, etc.) and each coloured line represents the degree of correlation between one Person and the other five; the closest the line is to the vertex, the highest the correlation:


Figure 7. Radar plot of the correlation matrix in Figure 6
The $4^{\text {th }}$ and $5^{\text {th }}$ person exhibit a high degree of correlation; hence, the shape of the two lines is very similar. The same holds for the $3^{\text {rd }}$ and $6^{\text {th }}$ person, which almost overlap.



Figure 8. Radar plots of the Fourth/Fifth Person (left) and Third/Sixth Person (right)

Conversely, the $2^{\text {nd }}$ Person exhibits a very low degree of correlation with any other clitic. The $1^{\text {st }}$ Person has a very puzzling interaction as it correlates with the $4^{\text {th }}$ and $5^{\text {th }}$ Person. The correlation $1^{\text {st }} / 4^{\text {th }}$ is expected given that the $4^{\text {th }}$ person denotes a set containing the speaker, but the pattern formed by the $1^{\text {st }} / 4^{\text {th }} / 5^{\text {th }}$ person is typologically rare and it cannot be derived from a nondisjunctive set of person features.



Figure 9. Radar plots of the First Person (left) and Second Person (right)
The specificity of the $1^{\text {st }} / 4^{\text {th }} / 5^{\text {th }}$ cluster is further confirmed by patterns of syncretism, i.e. identity of exponence. The following histogram shows the incidence of various patterns of syncretism in Manzini and Savoia's sample of 187 dialects. The bars show the diffusion (number of dialects) of each pattern of syncretism, e.g. the first bar means that the pattern '145', in which the $1^{\text {st }}, 4^{\text {th }}$, and $5^{\text {th }}$ Person are syncretic, is attested in 50 dialects of Manzini and Savoia's sample. Some dialects exhibit two syncretic exponents, e.g. the bar labelled ' $145 \& 36$ ' represents the number of dialects having one exponent for the $1^{\text {st }}, 4^{\text {th }}$, and $5^{\text {th }}$ Person and another exponent for the $3^{\text {rd }}$ and $6^{\text {th }}$ person. In tabulating the data about syncretism, several factors have been examined: for instance, $3^{\text {rd }}$ and $6^{\text {th }}$ person forms have been considered syncretic iff the masculine and the feminine forms are syncretic; in the case of dialects allowing the co-occurrence of multiple formatives I considered the resulting complex form as a single clitic; I assumed no principled distinction between syncretism and homophony.


Figure 10. Incidence of various patterns of syncretism. Dataset: Manzini and Savoia 2005
The possible patterns of syncretism are rather constrained: $80 \%$ of the dialects show a syncretic exponent for the $1^{\text {st }}$ and $4^{\text {th }}$ Person, whereas a remarkable $67 \%$ of the dialects have a single syncretic exponent for the $1^{\text {st }} / 4^{\text {th }} / 5^{\text {th }}$ cluster. The $6^{\text {th }}$ person is involved in several patterns of syncretism, whereas the $3^{\text {rd }}$ person is syncretic only with the $6^{\text {th }}$ person. Lastly, the $2^{\text {nd }}$ person is involved in only 2 (very complex) patterns of syncretism, which confirms the impression that the $2^{\text {nd }}$ person clitic has no interaction with the rest of the system.

To sum up, the crosslinguistic distribution of gaps and syncretism follows very robust trends. Some of the above trends are quite predictable: for instance, the $1^{\text {st }}$ and $4^{\text {th }}$ person tend to pattern alike in many linguistic systems of the world, arguably because of the pivotal role of the feature [speaker]. Other patterns, however, are typologically uncommon: for instance, most (Italo)Romance dialects exhibit a robust subsystem of subject clitic elements formed by the $1^{\text {st }} / 4^{\text {th }} / 5^{\text {th }}$ person. This cluster cannot be defined by a non-disjunctive set of person features and is typologically rare.

## 4. The correlation between linguistic and geographical distance

The fact that the 145 pattern is so widespread does not necessarily support internal explanations. In fact, 'which language spreads in a spread zone is a matter of historical accident, and this historical accident can distort the statistical distribution of linguistic types in an area' (Nichols 1992: 23). For instance, Figures 3-5 show that gaps are more frequent in north-eastern than in north-western dialects, which may indicate that the diffusion of gaps is - in part - an areal phenomenon.

It is then fair to assume that the distribution of gaps and syncretism is due to both internal and external factors. In this respect, subject clitics are an interesting case study as they exhibit an extreme degree of variability although they are attested in a densely populated area and, diachronically, emerged in a relatively short diachronic span (from the 16th c. onwards). Hence, demic diffusion can-
not account for the complex geographic distribution of patterns of syncretism and gaps. At the same time, however, the array of pronominal forms discussed so-far does not provide conclusive evidence for feature-based models. As previously mentioned, linguistic systems may be shaped by external forces - 'cultural traditions' in Evans and Levinson's 2009 terms - that must be disentangled from biological constraints. For instance, how can we understand whether the 145 pattern results from biolinguistic constraints or is a cultural 'artefact'?

In order to answer the above question, we need a methodology to demonstrate that the systematic tendencies observed so far are not 'a matter of historical accident'. If so, we would predict a certain degree of correlation between linguistic and geographic distance: one might suppose that a given pattern emerged in a single dialect, for unknown reasons, and then spread to the surrounding area through language contact and sociolinguistic dynamics. Historically, the basin of the river Po and the surrounding mountains have always been a well-interconnected area, where people and goods circulated rather freely despite the geopolitical fragmentation. Given this socio-historical scenario, one would expect linguistic innovations to spread homogeneously in contiguous areas regardless of biolinguistic constraints on the make-up of pronominal inventories.

Alternatively, one may hypothesize that patterns of gaps and syncretism (e.g. the 145 pattern) are due to a biolinguistic constraint preventing or hindering the externalization of certain clitic forms. Then one would expect to find the same pattern scattered in non-contiguous dialects (Poletto's 2013 leopard spots), regardless of socio-historical factors.

In the remainder of the present section, I focus on the data contained in Appendix 1 (see Figure 11) to verify whether the microvariation displayed by clitic systems correlates or not with geographic distance.

| Datapoint | 1 | 2 | 2 | 3 |  | 4 | 5 |  | 6 | expl | 4=HOMO | SCL GAPS: \# exponents | SCL gap | CL GAPS: \# ps | SCL SYN: presence |  | SCI SYN: patterns |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Olivone |  |  | 1 |  | 1 | 1 |  | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Semione |  | 1 | 1 |  | 1 | 1 |  | 1 | 1 | 1 |  | 0 |  | 0 |  |  | 145 |
| Quarna sopra |  | 1 | 1 |  | 1 | 1 |  | 1 | 1 | 1 |  | 0 |  | 0 |  |  | 145 |
| Moncalvo |  | 0 | 1 |  | 1 | 0 |  | 1 | 1 | 1 |  | 0 | 4 | 2 |  | 0 |  |
| Valmacca |  | 1 | 1 |  | 1 | 0 |  | 0 | 1 | 1 |  | 0 | 4 | 2 |  | 0 |  |
| Breme |  | 1 | 1 |  | 1 | 1 |  | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Castellinaldo |  | 1 | 1 | - | 1 | 1 |  | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Inveruno |  | 1 | 1 |  | 1 | 1 |  | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Carnago |  | 1 | 1 |  | 1 | 1 |  | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Martignana di Po |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Casorezzo |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Arconate |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |
| Solbiate Arno |  |  | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |  | " | 6 | 0 |  |  | 145 |
| Càdero |  | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 | 1 |  | 0 | 6 | 0 |  |  | 145 |

Figure 11. Working table (upper part; see Appendix 1)

From the above table, I obtained a 'code' for each datapoint. The code is divided into two parts: the first six figures after the letter $G(a p s)$ represent gaps, whereas the figures after the letter $S$ (yncretism) show whether the dialect has syncretic exponents and, if so, which Persons of the paradigms are involved in the syncretic pattern. For instance, a dialect with the code ' $G 023456545$ ' is a dialect in which the $1^{\text {st }}$ person clitic is missing, while the $4^{\text {th }}$ and $5^{\text {th }}$ person are syncretic. The table containing the 'codes' of each variety is reported in Appendix 2 (Figure 12 shows the upper part of the table).

| 1 |  | 2 | 3 |
| :---: | :--- | :--- | :--- |
| 1 | Datapoint | gaps+syncretism | gaps |
| 2 | Olivone | G123456S145 | 123456 |
| 3 | Semione | G123456S145 | 123456 |
| 4 | Quarna sopra | G123456S145 | 123456 |
| 5 | Moncalvo | G023056S | 023056 |
| 6 | Valmacca | G123006S | 123006 |
| 7 | Breme | G123456S145 | 123456 |
| 8 | Castellinaldo | G123456S145 | 123456 |
| 9 | Inveruno | G123456S145 | 123456 |
| 10 | Carnago | G123456S145 | 123456 |
| 11 | Martignana di Po | G123456S145 | 123456 |
| 12 | Casorezzo | G123456S145 | 123456 |
| 13 | Arconate | G123456S145 | 123456 |
| 14 | Solbiate Arno | G123456S145 | 123456 |
| 15 | Càdero | G123456S145 | 123456 |
| 16 | San Benedetto Po | G123456S145 | 123456 |
| 17 | Saguedo | G123456S145 | 123456 |
| 18 | Stienta | G123456S145 | 123456 |
| 19 | Revere | G123456S145 | 123456 |
|  |  |  |  |

Figure 12. Table with codes (Appendix 2)
Having a 'code' for each dialect, I calculated the linguistic distance between each pair of datapoints. The linguistic distance is calculated as the edit distance (or Levenshtein distance) between the two codes, i.e. the minimum number of operations (e.g. removal, insertion, or substitution of a character) to transform one string into the other. For instance, the edit distance between the dialect of Quarna sopra (G123456S) and Moncalvo (G023056S) amounts to 5 because two characters are substituted in the first part of the code and three are deleted from the second part.

Since edit distances are calculated pairwise, the result is a 187 x 187 symmetric matrix (187 is the number of datapoints), which is reported in Appendix 3; Figure 13 focuses on of the upper-left corner of the matrix:


Figure 13. Section of the matrix of linguistic distances (see Appendix 3)
Having a matrix of the linguistic distances, I used the R package Geosphere (Hijmans 2017) to calculate the geographical distances between the same 187 datapoints of Manzini and Savoia's sample. The geographical distance is calculated on the basis of geographic coordinates and is therefore a geodesic distance, i.e. distance as the crow flies.


Figure 14. Matrix of geographical distances (particular, see Appendix 4)
Then, I used the R package 'vegan' (Oksanen et al. 2018) to calculate the correlation between the two matrixes: the matrix of linguistic distances and
the matrix of geographic distances (Mantel test). The result of the Mantel statistic is an index of 0.05931 (significance: 0.014 ), which means that there is no correlation between linguistic and geographical distances with respect to the inventories of subject clitics. Given such a low degree of correlation, it is fair to conclude that the robust tendencies found since Renzi and Vanelli's 1983 work cannot be accounted for under a pure geolinguistic explanation.

## 5. Discussion and conclusion

This article focused on the make-up of paradigms of subject clitics in northern Italian dialects. Subject clitics are a solid test bed to develop a methodology in order to evaluate internal vs external hypotheses on the emergence of linguistic variation.

Disentangling biological constraints from 'cultural' effects (lato sensu) is an aspect of linguistic research that, in my opinion, is still underdeveloped. Following Evans and Levinson 2009, it is fair to assume that '[s]triking similarities across languages [...] have their origin in two sources: historical common origin or mutual influence, on the one hand, and on the other, from convergent selective pressures on what systems can evolve.' Hence, '[ t$]$ he dual role of biological and cultural-historical attractors underlines the need for a coevolutionary model of human language, where there is interaction between entities of completely different orders - biological constraints and culturalhistorical traditions.' At present, however, we have no sound methodology to disentangle biological constraints from cultural-historical factors, in particular in the realm of microvariation, i.e. the study of genealogically-related languages. By studying genealogically-related languages, one always 'runs the risk [to] discover shared innovations that have purely historical explanations, rather than properties that are shared because of the same parameter setting.' (Haspelmath 2008: fn 8).

This objection has never been recast on the basis of empirical evidence because qualitative analyses do not provide any solid argument to reject the null hypothesis that microvariation is essentially chaotic. The null hypothesis is programmatically neglected by syntacticians, who prefer to support stronger hypotheses until falsification. This strategy is rewarding until the stronger hypotheses are reasonably falsifiable, but the increasing complexity of parametric models is hindering our capacity to analyse the enormous amount of empirical evidence we gathered.

For instance, in the last decades many data on subject clitics have been collected and, on the basis of these data, some solid tendencies have been found. These tendencies however yielded an unresolved tension between explanatory and descriptive adequacy. According to Manzini and Savoia (2005, I, 120) the data on gaps show that the Null Subject Parameter 'cannot be defined for the entire language, but must be applied to the individual forms
of the paradigm' (translation in Roberts 2014:178). Whereas Roberts 2014 argues against this radical microparametric approach, which would 'mak[e] the number of possible grammatical systems hyperastronomical'. Feature hierarchies might provide an intermediate explanation, by constraining the way in which (subject) agreement features are externalized across languages, but we need a methodology in order to assess the proposed models and tackle the following questions:

1) To what extent are the above empirical generalisations solid? Since no generalisation is exceptionless, it is worth knowing whether a given statement is true in $99 \%$ or $5 \%$ of the cases. In other words, we need to turn from categorical statements to probabilistic generalisations.
2) To what extent do the observed patterns result from random or ex-tra-linguistic factors?
In this article, I provided (preliminary) statistical evidence to address the above questions. I confirmed that certain persons of the paradigm - in particular, the 145 cluster - exhibit the same behavior with respect to gaps and syncretism. Since this cluster is not a natural class found in other linguistic groups/families, one wonders about whether the above pattern results from a biolinguistic constraint or, alternatively, from random historical evolutions. To find out, I focused on the correlation between linguistic and geographical distance. I used a dialectometric approach to calculate pairwise linguistic distances regarding the structure of paradigms of subject clitics. Then I calculated the correlation between linguistic and geographical distances, which is surprisingly low. This means that the external explanation by itself cannot account for the observed cross-linguistic trends in the evolution of pronominal systems and some internal (biolinguistic?) constraints must be hypothesized along the lines of Heap 2002; Benincà and Poletto 2005; Oliviéri 2011; Calabrese 2011.

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# Reduplication as a Strategy for -ever Free Relatives: Semantic and Syntactic Observations* 

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#### Abstract

: Italo-Romance varieties display a typologically rare strategy to realize the unconditional (or free-choice) free relative clauses, i.e. the reduplication of the verb complex. The semantic entailment of unconditionality is not conveyed through the lexicalization of a morpheme corresponding to -ever. Also, the modal force of the semantic operator does not match the selection of the subjunctive morphology, which is not available in most Italian dialects. The ItaloRomance varieties of our sample resort to structural reduplication as the only strategy to express the unconditionality requirement of this type of free relative clauses. In this contribution, I compare unconditionals across Italian dialects and other Romance varieties on the basis of their morphosyntactic properties. In the analysis of the reduplication structure I link the derivation of unconditional free relatives with the semantic and syntactic aspects of free-choice indefinite pronouns. I finally propose a unifying formal account of two types of reduplication configurations, both corresponding to unconditional free relatives, both available across Italo-Romance.


Keywords: Italian Dialects, Free-choice Pronouns, Syntactic Reduplication, Unconditional Relative Clauses

## 1. Introduction

Among free relative clauses (FRs, henceforth), i.e. headless (Caponigro and Pearl 2008; Caponigro and Fălăuș 2017) or light-headed (Citko 2004)

* The first observations stemming from this piece of research were presented in November 2015 at the 'Bucharest Romance Syntactic Workshop': I am grateful to the scholars in the audience who then made insightful remarks. This version of the paper has benefitted from the comments and suggestions of two anonymous reviewers thanks to which a previous version has surely improved. Needless to say, all mistakes and oversights the reader is going to find are my only responsibility.
embedded non-interrogative wh-clauses, wh-ever FRs are distinguished on the basis of their quantificational force. Much debate has been carried on about the semantic entailments of the morpheme -ever and the definiteness of the wh-ever clause (Bresnan and Grimshaw 1978; Dayal 1997; Grosu and Landman 1998; Tredinnick 2005). On the one hand, -ever appears to be similar to universally quantified expressions when referring to a plurality of individuals. Syntactic tests prove that it behaves like universals (Larson 1987). In particular, -ever licenses NPIs ( $1 \mathrm{a}, \mathrm{b}$ ) and can be modified by almost-like modifiers (almost, just, about, practically; 1c).
(1) a. There's a lot of garlic in whatever Arlo has ever cooked.
b. Bill grabbed whatever object was anywhere near him.
c. Bill grabbed practically whatever was on the desk. (Tredinnick 2005: 34)

On the other hand, the universal quantificational force is distinct form the definite reading attributed to -ever FRs under some specific analyses (Larson 1987; Jacobson 1995; Dayal 1995, 1997; Iatridou and Valrokosta 1998; Giannakidou and Cheng 2006, a.o.). More specifically, FRs have been analyzed as either universal ( $2 \mathrm{a}-\mathrm{b}$ ) or definite ( $2 \mathrm{c}-\mathrm{d}$ ), whereby the difference in the interpretation is typically triggered by singular vs non-singular entity of a given domain and correlates with the presence or absence of -ever (Jacobson 1995; van Riemsdijk 2000, 2005: 358-359):
(2) a. I will eat whatever the waiter will put on my plate (+universal)
b. I will eat everything that the waiter will put on my plate
c. I ate what the waiter put on my plate (+definite, $\pm$ universal)
d. I ate the thing that the waiter put on my plate

The contrast between (2a) and (2c) is the key of the opposition between plain FRs and -ever FRs: in (2c) the set of maximal entities denoting what the waiter puts on the speaker's plate may be limited to a single entity, whereas in (2a) -ever forces to interpret this set as composed by all entities that the waiter puts on the plate. The result is that (2c) is equivalent to a definite and (2a) to a universal interpretation.

Another interpretation is proposed by Quer and Vicente (2009), whereby the operator ever within FRs does not act as ordinary universal, as it contains a variable over worlds on top of the usual variable over individuals. In this view, -ever FRs acquire an indefinite interpretation, therefore adopting the quantificational force of the operator that binds their variables and allowing a free-choice reading. In this sense, -ever FR s match a quasi-universal reading which arises when a universal modal operator binds the world variable (Quer 1999; Giannakidou 2001; Giannakidou and Quer 2013). The specific modality of -ever FRs makes them unconditional clausal modification struc-
tures (see also Kratzer 1986; Rawlins 2008), whereby unconditionality corresponds to structures in which the proposition expressed by the consequence (or apodosis; 'Maria will be happy' in (3)) is true in every possible world: ${ }^{1}$
(3) a. Quienquiera que venga a Bucarest, Maria estará contenta whoever that comes.SBJ to Bucharest Maria be.FUT.3SG happy 'Whoever comes to Bucharest, Maria will be happy' (Castilian Spanish)
b. Chiunque venga a Bucarest, Maria sarà contenta whoever comes.SBJ to Bucharest Maria be.FUT.3SG happy 'Whoever comes to Bucharest, Maria will be happy' (standard Italian)

This paper is centered on the structural correlates of -ever FRs of the unconditional types (hereafter, unconditionals). I assume that the operator ever expresses a type of modality which enforces universal quantification over epistemic alternatives to the evaluation of worlds. Following Quer and Vicente's (2009) account, I argue that ever endows FRs with properties typically associated with universal quantifiers. However, the resulting structure delivers a quasi-universal interpretation (Giannakidou 2001: 707) in which the universal modal operator binds the world variable. More specifically, the operator ever exhausts the values that can be assigned to its variable within a single world. In -ever FRs a value is checked in each alternative (i.e. the context domain introduced by 'or' in (4)), whereas considering all values in a single alternative is not possible. In particular, given that antecedents (or protases) of unconditionals denote sets of disjoint alternatives with a \{world,individual\} variable pair (Rawlins 2008, 2013), variables receive a different value in each alternative (4). Therefore, ever defines a maximal set of mutually exclusive alternatives that are also undifferentiated, hence triggering the free choice among them (Farkas 2013: 221; Caponigro and Fălăuș 2017: 26):
(4)

$$
\llbracket \text { whoever comes to Bucharest } \rrbracket=\left\{\begin{array}{c}
x_{1} \text { comes to Bucharest in } w_{1} \\
\text { or } x_{2} \text { comes to Bucharest in } w_{2} \\
\text { or } x_{3} \text { comes to Bucharest in } w_{3} \\
\text { or ... } \\
\text { or } x_{n} \text { comes to Bucharest in } w_{n}
\end{array}\right\}
$$

[^43]Arguably, the quantificational structure is headed by a silent conditional operator (COND). Given a protasis, that acts as a restrictor, and a consequent (or apodosis) which is the nucleus, COND operator composes protasis and apodosis, creating a set of disjoint conditional statements (see Haspelmath and König 1998:565 for a different formulation):
«[[COND antecedent] consequent $] \rrbracket$

$$
=\left\{\begin{array}{r}
x_{1} \text { comes to Bucharest in } w_{1} \rightarrow M . \text { will be happy in } w_{1} \\
\text { or } x_{2} \text { comes to Bucharest in } w_{2} \rightarrow M . \text { will be happy in } w_{2} \\
\text { or } x_{3} \text { comes to Bucharest in } w_{3} \rightarrow M . \text { will be happy in } w_{3} \\
\text { or } \ldots \\
\text { or } x_{n} \text { comes to Bucharest in } w_{n} \rightarrow M . \text { will be happy in } w_{n}
\end{array}\right\}
$$

Licit unconditional antecedents correspond to FRs with free-choice interpretation expressed by ever. Thus, it matches the semantic equivalent of (5). Illicit unconditional antecedents, i.e. FRs displaying no ever morpheme, would deliver different semantic entailments.

Based on syntactic properties, FRs are pluricategorial constructions. ${ }^{2}$ Namely, the relative operator (or the whole FR, according to Bresnan and Grimshaw (1978)) can correspond to a determiner phrase ( $6 \mathrm{a}, \mathrm{b}$ ), an adverb phrase (6c), a prepositional phrase (6d) or an adjectival phrase (6e):
(6) a. Please, return whatever you have taken from the office.
b. I'll sing whichever songs you want.
c. I'll write however carefully you want me to write.
d. They're about to arrive in whatever village they'd mentioned.
e. However high that wall is, she's going to climb it.

As for the distribution, multiple wh-ever-clauses can occur (van Riemsdijk 2006):
(7) You always criticize whatever book of whichever author I buy.

In Romance languages unconditional FRs (8a, 9a) may show an identical syntactic distribution as plain FRs, i.e. verb argument ( $8 \mathrm{~b}, 9 \mathrm{~b}$ ) or adverb:

[^44](8) a. El detective interrogará a quienquiera que esté presente the detective interrogate.FUT.3SG to whomever that be.PRT.3SG present
b. El detective interrogará a quien que esté presente the detective interrogate.FUT.3SG to whom that be.PRT.3SG present 'The detective will interrogate whomever was present' (Castilian Spanish)
(9) a. Detectivul va audia pe oricine a fost prezent. detective.DEF AUX examine.INF to whomever has been present
b. Detectivul va audia pe cine a fost prezent. detective.DEF AUX examine.INF to whom has been present 'The detective will interrogate whomever was present' (Romanian)

The same distributional parallel is not found in central and southern Italian dialects, where the two types of FRs exhibit a different syntactic distribution (10) and are realized through different strategies. The unconditional FRs are left-dislocated and optionally linked to the main clause through a binding pronoun. Also, crucially, the only possible structural realization of unconditionals is through the reduplication of the verb complex (10c):3
a. U privətə vo parlà cu ccu ha cantatə alla missa the priest wants talk.INF with who has sung to.the mass 'The priest wants to talk to whom has sung at the mass'
b. *U privətə vo parlà cu ccu ha cantatə cantatə alla missa the priest wants talk.INF with who has sung sung to.the mass
c. Cu ha cantatə cantatə alla missa, u privetə ci vo parlà who has sung sung to.the mass the priest to.them=wants talk.INF 'Whoever has sung at the mass, the priest wants to talk to them'
(S. Maria del Cedro, Cosenza)
${ }^{3}$ One of the reviewers asks whether this pattern of V reduplication also conveys a specific aspectual value, i.e. iterative and/or habitual, given that cross-linguistically V reduplication is linked to the imperfective aspect. S/He also wonders if the reduplication structure, as the one in (10c), could also be linked to expressiveness. Based on the evidence discussed in this contribution, the reduplication structure represented in (20a,b) and assessed throughout the paper only corresponds to -ever RFs. Yet, some of the Italo-Romance varieties considered here exhibit other reduplication patterns (Silvestri in prep.) that clearly correlate either with an expressive stance or an imperfective aspectual value, e.g.:
i. Marija parla pparla (expressive value: the speaker thinks that Maria talks too much) Maria talks talks 'Maria talks a lot/too much'
ii. Marija parlədə e pparlədə (aspectual value: Maria talks continuously) Maria talks and talks
'Maria repeatedly talks / What usually Maria does is talking' (S. Maria del Cedro, Cosenza; Silvestri in prep.)

Yet, neither (i) nor (ii) convey an unconditional reading or display a wh element to introduce the clause. Therefore, there are distinct $V$ reduplication patterns across ItaloRomance which correspond to as many aspects of the grammar.

In what follows I am going to take into consideration the morphosyntactic properties of the unconditional FRs occurring in the left-dislocated position (10c), i.e. preceding the matrix clause. After a brief descriptive account of this type of unconditionals across Romance (\$2), I shall focus more closely on the empirical evidence from Italo-Romance (\$3) on which I build a semantically motivated structural analysis (\$4).

## 2. Unconditional free relatives in Romance

Romance languages avail themselves of several different strategies to structurally convey the unconditional FRs (Haspelmath and König 1998: 604-619). Other than the lexicalization of a morpheme corresponding to ever $(\$ 2.1)$, following (Latin, Spanish, Portuguese, French, standard Italian) or preceding (Romanian) the wh pronoun, Romance unconditionals can be marked by reduplication of the wh pronoun (Latin), or not marked with a whbased morphology (French).

In this section, I will describe the semantic and structural properties of uncoditionals in Italo-Romance varieties as opposed to the rest of Romance.

### 2.1 The morphosyntax unconditional relative clauses with the morpheme ever

In standard Romance varieties, when lexicalised, the ever operator is realized either as a grammaticalized morpheme ultimately deriving from Latin present or subjunctive forms of the verbs VELLE / QUAERĔRE / ESSE (11) or through the diachronic outcome of the Latin pronoun formations involving CUNQUĔ (< UMQUAM ‘ever') (12). ${ }^{4,5}$
${ }^{4}$ The ever morpheme in of Latin, i.e. CUNQUĚ, shows an additive particle (i.e. QUĚ; Haspelmath and König 1998:609). This finds a comparative match in the formations of indefiniteness markers in other Indo-European languages, such as Serbo-Croatian, Hittite, Kannada (Haspelmath 1997: 1578), where an additive particle (and, also) attaches to a wh element.
${ }^{5}$ The Romance series of wh-ever pronouns is a new formation, as Latin displayed other two free-choice series of pronouns, both formed with a verb-derived morpheme, i.e. the series formed with vis and the series formed with libet. Crucially, Latin also exhibited reduplicated pronouns (e.g. quisquis 'whoever', quidquid'whatever, whichever'; Haspelmath 1997:179-182; Haspelmath and König 1998:605, 615). In this contribution I limit myself to provide only a few relatively straightforward etymological notes on Romance wh-ever elements. Their diachronic development from Latin to modern Romance would be definitely instrumental for shading lights on the factors that trigger the large amount of variation concerning their morpho-syntactic and semantic-pragmatic properties. Yet, a proper diachronic investigation of this series of pronouns based on their semantic-pragmatic entailments, some of them being now lost, is far beyond the focus of this paper.
(11) a. Quem quer que o disse é un caluniador. who ever that it=said.3SG is a slanderer 'Whoever said it, is a slanderer' (European Portuguese; Dunn 1930: 322)
b. Quienquiera que hubiese gritado, .. ${ }^{6}$ whoever that have.3SG.IMP.SUBJ scream.PST.PRT 'Whoever had screamed, ...'
c. Había decidido seguirla adondequiera que fuese had.1SG decided follow=her wherever that go.3SG.PST.SUBJ 'I had decided to follow her wherever she went' (Castilian Spanish)
d. Aniràn a cercarlo onsevulla que s' hagi amagat go.3PL.FUT to look.for=him wherever that self=has hidden 'They will look for him wherever he's hidden' (Catalan; Fabra 1969 apud Hirschbuhler and Rivero 1981: 608)
e. Spună el orice, nu-l ascult say.SUBJ he anything not=CL.ACC.3SG listen.IND.PRES.1SG 'Whatever he may say, I won't listen to him' (Romanian; Dindelegan 2013: 31)
f. Qualsiasi cosa tu decida di fare, whichever thing you decide.1SG.SUBJ.PRS to do.INF tua madre deve essere informata. your mother has. to be.INF informed 'Whatever you will decide to do, your mother has to be notified'
(standard Italian)
(12) a. Quiconque n'a pas de tempérament personnel n'a pas de talent. whoever not has NEG some temperament personal not has NEG some talent 'Whoever does not have personal temperament, does not have any talent'
(French)
b. Qualunque film io proponga, Paolo non è mai soddisfatto. whichever film suggest.1SG.SUBJ.PRS Paolo not is never content 'Whichever film I suggest, you are never happy' (standard Italian)

Each series of whever pronouns in Romance varieties may not employ the same morphological strategy (Table 1). Also, both historical sources of the morpheme corresponding to ever may be available in the same language, as in Italian 'qualsiasi' (11f) and 'qualunque' (12c).'

[^45]|  | standard <br> Italian | Castilian <br> Spanish $^{\text {s,9 }}$ | Catalan | European <br> Portuguese | French | Romanian |
| :--- | :---: | :---: | :--- | :--- | :--- | :--- |
| who-ever | chiunque | quienquiera / <br> quienesquiera | quisvulla / <br> quisvulga <br> (que) | quem <br> quer | quiconque <br> [+subj] / <br> (qui que <br> [+obj]) | oricine, <br> orişicine |
| what-ever | qualunque <br> /qualsiasi <br> cosa |  | qualsevol <br> (que) | qualquer <br> (coisa) | (quoi qui <br> [+subj] / <br> quoi que <br> [+obj]) | orice, <br> orişice |
| when-ever | (in qualsiasi <br> momento) | cuandoquiera |  |  | oricând, <br> orişicând |  |
| wher-ever | (d)ovun- <br> que | dondequiera/ <br> (a)doquiera/ | onsevulla <br> (que) | oriunde, <br> orişiunde |  |  |
| which-ever | qualunque | cualquiera/ <br> cualesquiera | qualsevol <br> (que) | qualquer <br> que (seja) | orice, <br> orişice |  |
| how-ever | ((in) <br> qualunque/ <br> qualsiasi <br> modo) | comoquiera <br> (cuantoquiera) |  | oricum, <br> orişicum |  |  |

Table 1. wh-ever pronouns in Romance free relatives
The empirical evidence also suggests that if ever is overtly realized though a morpheme on the wh pronoun, the subjunctive is selected either obligatorily (Castilian Spanish, Catalan, standard Italian; see also Haspelmath and König 1998: 609) or optionally along with the indicative (European Portuguese, French, Romanian) (see (13) and Table 2):
${ }^{8}$ As also pointed out by one of the anonymous reviewers, the use of the FRs headed by wh-ever elements in Castilian Spanish, with the exception of cualquier(a) 'whoever' (NGLE $\$ 20.4, \$ 22.12$ ), is more frequent in a formal register (NGLE $\$ 44.1 \mathrm{z}$ ). In Castilian Spanish the most common option of expressing FRs is the employment of plain FRs introduced by wh pronouns with the selection of the subjunctive (over the indicative), therefore conveying the indefinite and unconditional reading:
i. Quien te haya dicho eso miente who you=OBJ has.SUBJ.3SG said.PPT this lies 'Whoever has told you this is lying'
(Castilian Spanish, NGLE \$15.9j)
${ }^{9}$ In Spanish the same morphological formation of the other whever elements can be observed for siquiera 'at least, not even' which, however, is not an element heading FRs and functions as a negative adverb (NGLE $\$ 40.8 \mathrm{f}$ ) or a conjunction in $i f$-clauses, also in insubordinate if-clauses (NGLE 47.3ñ), and in concessive subordinates (NGLE $\$ 47.16 \mathrm{j}$ ).
(13) a. Qualquer coisa que te irrita, não te preocupes. whichever thing that you.OBJ bother3SG.IND not you.OBJ=worry.2SG.SUBJ.PRS 'Whatever bothers you, do not worry" (European Portuguese)
b. Quiconque parlait de clemence, était un révolutionnaire whoever speak.3SG.IND.IMPF of mercy was.IMPF a rebel 'Whoever used to speak of mercy was a rebel' (French)
c. ( ̂ì răspunde oricărui coleg îl intreabă to.him answers whomever.DAT.MSG colleague to.him asks 'He answers any colleague who asks him' (Romanian; Dindelegan 2013: 156)

|  | nonreduplication unconditional FRs |  |
| :---: | :---: | :---: |
|  | morpheme ever | subjunctive |
| E. Portuguese | + | $+/-$ |
| Castilian Spanish | + | + |
| Catalan | + | + |
| French | + | $+/-$ |
| st. Italian | + | + |
| Romanian | + | - |

Table 2. Unconditional free relatives and selection of subjunctive

### 2.2 Reduplication structures as an alternative

Some standard Romance varieties display reduplication structures alternatively to FRs introduced by wh-ever pronouns, whilst conveying identical semantic entailments. In such structures the operator ever does not correspond to a morpheme. The unconditional (or free-choice) reading is conveyed through a peculiar construction formed by two adjacent phrasal elements, ${ }^{10}$ generally involving two identical verb forms (cf. Brazilian Portuguese, where the two verbs can morphologically differ only for tense (14a), but not for person and mood). One of the two clauses is headed by the wh pronoun and can either precede or follow the other clause. Reduplication structures in standard Romance varieties are not fully productive. If a variety shows both the reduplication strategy as well as the morphological pronoun formation to realize unconditionals, the former is perceived as less formal, or even colloquial, as in (15a) and (16b) versus (15b). Additionally, they are often pragmatically marked and restricted to a formulaic context (16):

[^46]| a. Venha | quem vier, | eu vou embora |
| :--- | :--- | :--- |
| come.3SG.SUBJ.PRS who come.3SG.SUBJ.FUT I go away |  |  |
| 'Whoever comes, I'm still leaving' |  |  |

b. Seja quem for, eu vou embora be.SUBJ.PRES who be.SUBJ.FUT I go away 'Whoever it is, I'm still leaving' (Brazialian Portuguese; Quer and Vicente 2009: 12)
(15) a. Se ponga la ropa que se ponga, siempre está elegante. self= put.3SG.SUBJ the cloth that self=put always is elegant
b. Cualquiera que sea la ropa que se ponga,... whichever that be.3SG.SUBJ the cloth that self= put.3SG.SUBJ 'Whichever clothess/hewears,s/he isalways elegant' (Castilian Spanish;NGLE:\$47.16c)

When realized through reduplication structures, the unconditional FRs in standard Romance varieties generally involve a third person subject. They also show a strict adjacency of the two verb complexes, not allowing the intervention of subject or object full DPs or adverbs in between them. ${ }^{11}$ Crucially, the mood is set on subjunctive which contributes to express the specific modality of this type of FRs, which other than indifference or ignorance, i.e. two general entailments of unconditionals, also convey a concessive stance.

## 3. Reduplication as the only strategy in Italian dialects

Central and southern Italian dialects as well as Sardinian witness an idiosyncrasy between form and meaning concerning unconditionals: namely, FRs license the unconditional entailment and yet a specific form, such as the wh-ever pronouns in Table 1, is largely or totally unavailable. In order to express the unconditionals, these varieties avail themselves with the on-

[^47]ly structural strategy of reduplication to realize ever FRs (Haspelmath and Köning 1998: 615; Gulli 2009; D’Onghia 2019), being the morphological pronominal formation (almost) completely absent in their grammar (17). ${ }^{12,13}$
(17) a. Lua en en i freghi, en contenti d'esse giti. where are.3PL are.3PL the kids are.3PL happy of be.INF gone.MPL 'Wherever the kids go, they're always happy to be there' (Sant'Egidio, Perugia)
b. Quiddək- ha dittə ha dittə, non mə nə 'ncarəcə chjù. what that has said has said, not me of.it care more 'Whatever $s /$ he said, I don't care anymore' (S. Maria del Cedro, Cosenza)
c. Ca quannu arrivi arrivi, mi truovi pronto. CA when arrive.2SG arrive.2SG me=find. 2 SG ready 'No matter when you arrive, I'll be ready'
d. Anca andada andada Vito, wherever goes goes Vito cumbinada sempre guaiusu cun is atrus pipiusu makes always troubles with the other.PL kids 'Wherever Vito goes, he gets into troubles with the other kids'
(Campidanese; Sinnai, Cagliari)
In some of the varieties where the reduplication is the largely preferred option, ever FRs may also be realized with wh pronouns with ever morpheme, i.e. freechoice indefinite pronouns (18), as an alternative to the reduplication structure. The use of these pronouns in such varieties does not rule out the reduplication of the verb complex (19):

[^48](18) a. Adunca va Marija, pur Rita c' ha dda ji. wherever goes Maria, also Rita there has to go 'Wherever Maria goes, Rita has to go too' (S. Maria del Cedro, Cosenza)
b. Cunca parlava, u prívitə durmiva. whoever speak.3SG.IMPF the priest sleep.3SG.IMPF
'No matter who was speaking, the priest kept sleeping' (Buonvicino, Cosenza)
(19) a. Lu Petru, addhunca vae vae, litica cu l’addhi piccinni. the.MSG Pietro wherever goes goes argues with the other kids 'Wherever Pietro goes, he always argues with the other kids' (Carpignano S., Lecce)
b. Cunca vidəsə vidəsə, no dicennə nentə. whomever see.2SG.IND see.2SG.IND NEG say.GER nothing 'Whomever you see, do not say anything' (Verbicaro, Cosenza)

In the relevant varieties, the reduplication structure corresponding to unconditional FRs displays two strictly adjacent verb complexes (i.e. VP1 and VP2). The linear order is fixed in that the wh element always precedes the first VP. ${ }^{14}$ The rest of the elements of the clause, such as verb arguments and modifiers (i.e. modal, temporal and spatial adverbs), follow the entire reduplication structure (21). The unmarked linear order is provided in (20a) and the specifics of the reduplication structure in (20b):
(20) a
a. $\left[_{\mathrm{FR}}[\mathrm{Recduplication}](\mathrm{DObj})(\mathrm{IObj})(\mathrm{Subj})\left(\mathrm{Adv}^{*}\right)\left[\begin{array}{l}\text { matrix clause }\end{array} \ldots\right]\right.$
b. Reduplication $=[w h$-pronoun VP1 (and) VP2 ]

| a. Chéllə | ca | rićə | rićə | Marì | rumanə |
| :--- | :--- | :--- | :--- | :--- | :--- |
| what | that | says | says | Maria.SUBJ | tomorrow |
| a |  | Luca | nun | ćə | nəmbortə <br> to |
|  | Luca | not | to.him | of.it interests |  | 'Whatever Maria says tomorrow, Luca is no longer interested in it' (Neapolitan)

b. Quannə da da i libbrə allə quatrarə Maria, rəcimillə when give.2SG give.2SG the books to.the kids Maria tell=to.me=it 'Whenever Maria gives the books to the kids, let me know' (Orsomarso, Cosenza)

If the subject if topicalized or focalized, it can be left-dislocated and preceding the whole FR clause:
(22) Lu Mariu, cu cue parla parla, no sape ce dice.
the.MSG Mario with whom speaks speaks not knows what says
'With whomever Mario speaks, he never really knows what he's saying'
(Carpignano S., Lecce)

[^49]The functional elements of the VP, i.e. the clitics and the auxiliary of compound verb forms, can be silent in VP2. Therefore, only the lexical component of VP2 must be spelled out. More specifically, if either the DO or the IO or both are doubled through a clitic pronoun, the resulting structure can be reduplicated entirely into VP2, i.e. inclusive of the clitics, or only the lexical verb can:
(23) $\left[\left[_{\mathrm{FR}}\right.\right.$ wh $[\mathrm{IOcl} \operatorname{DOcl} \mathrm{V}]_{\mathrm{VP} 1}[(\mathrm{IOcl})(\mathrm{DO} \mathrm{cl}) \mathrm{V}]_{\mathrm{VP} 2}(\mathrm{DO})(\mathrm{IO})($ Subj) $) \ldots$
(24) a. Quannə n’u daj (n’u) daj u libbranuj... when to.us=it=give.2SG.IND.PRS to.us=it=give.2SG.IND.PRS the.MSG book to us . . . 'Whenever you give us the book, ...'
b. Cu n'haa datə (dd'haa) datə u ragalə a Frankə,... who to.him=it=has given to.him=it=has given the present to Franco 'Whoever gave Franco the present, ...' (Orsomarso, Cosenza)

As the morphology of (present) subjunctive is mostly unavailable in central and southern Italian dialects, not surprisingly the two VPs of the unconditionals exhibit indicative mood.

### 3.1 Restructuring verbs

Complex clauses such as those with restructuring verbs represent no exception to the strategy of reduplication. In southern and central Italian dialects a restructuring verb might take an infinitival or a finite complement (Ledgeway 1998), depending on the internal syntactic variation of each variety. FRs with matrix verbs that take a canonical infinitival complement show consistent patterns of reduplication across Italian dialects in that the functional component of VP1 can be left unpronounced in VP2:
(25) a. A cu vo parlà (vo) parlà, a nua non no 'nteressa. to whom want.2SG talk.INF want.2SG talk.INF to us not us=interests 'Whomever you want to talk to, we don't care'
b. Quantə ddə vulitə da’ (ddəvulitə) da', ppə mija va buənə how much to.him want.2PL give.INF to.him give.INF for me goes well 'However much you want to give him, it will be fine with me'
(S. Maria del Cedro, Cosenza)

As for those dialects in which the restructuring verbs take MODOclauses, we can observe a similar reduplication structure:
(26) a. Chidhru chi voi $u$ mangiu voi $u$ mangiu, mangiatillu that which want to eat want to eat eat=you=it 'Whatever you want to eat, eat it' (southern Calabrese; Gulli 2009: 7)
b. Ci vole cu legga vole cu legga la lettera... who wants CU read.3SG.SUBJ.PRS wants CU read.3SG.SUBJ.PRS the letter. . . 'Whoever wants to read the letter, ...'
(Carpignano S., Lecce)
This evidence proves further the phrasal nature of the reduplication structure.

### 3.2 Reduplications structures across Romance for unconditional FRs

In Romance the unconditional FRs are conveyed either through the lexicalization of the corresponding -ever morpheme, embedded in the wh element, or through the reduplication of the VP. The same variety may display both strategies which equally represent an unconditional FR. The systems that avail themselves of subjunctive morphology employ it jointly with the wh-ever pronoun. The concurrent selection of the subjunctive mood contributes to turn plain FRs (27a) into unconditionals (27b):
(27) a. Giudicherà questo esposto chi conosce quella legge. judge.3SG.FUT this.MSG petition who knows that.FSG law 'Who knows that law will judge this petition'
b. Giudicherà questo esposto chiunque conosca quella legge. judge.3SG.FUT this.MSG petition whoever know.3SG.SUBJ that.FSG law 'Whoever knows that law will judge this petition'
(standard Italian)

|  | nonreduplication <br> unconditional FRs |  | reduplication unconditional FRs |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | lexicalised <br> ever | SUBJ | $\left\{\mathrm{VP}_{1}-\mathrm{Wh}-\mathrm{VP}_{2}\right\}$ | $\left\{\mathrm{Wh}^{2}-\mathrm{VP}_{1}-\right.$ <br> $\left.\mathrm{VP}_{2}\right\}$ | SUBJ |
|  | + | $+/-$ | $?$ | - | $?$ |
|  | + | + | + | - | + |
| Catalan | + | + | + | - | + |
| French | + | $+/-$ | + | - | $+/-$ |
| st. Italian | + | + | + | - | + |
| Romanian | + | + | - | + | 0 |
| Italian dialects <br> Type 1 | - | 0 | + | + |  |
| Italian dialects <br> Type 2 | - | 0 | + | + | + |
| Sardinian <br> (Campidanese) | - | 0 | - | + | + |

Table 3. Forms of unconditional FRs series across Romance
It emerges that across Romance the reduplication structure whereby the wh element precedes both VP1 and VP2 is exclusively attested in Ital-
ian dialects (Type 1 in Table 3) and in Sardinian. Crucially, the availability of Type 1 correlates with the lack of both morphological formation for the ever operator and the impossibility of the consequent selection of subjunctive morphology. Italo-Romance also displays the structure in which the $w h$ element precedes the VP2 (Type 2 in Table 3):
(28) a. Pensino quel che pensino, per me Paolo è innocente. think.3PL.SUBJ what that think.3PL.SUBJ for me Paolo is innocent 'No matter what they think, Paolo is innocent for me' (standard Italian) b. Rəcissə chéllə ca rəcissə, non ćə sta chjù tiəmbə pə cagnà say.3SG.SUBJ what that say.3SG.SUBJ not there=stay more time forchange.INF 'No matter what $s /$ he says, there is no more time to change' (Neapolitan)
c. Vinissa quannə vinissa, nua simə qua. come.PRS.SUBJ.3SG when come.PRS.SUBJ.3SG we be.1PL here 'No matter when $s /$ he arrives, we'll be here' (S. Maria del Cedro, Cosenza)

In Type 2 reduplicated unconditionals the subjunctive must be selected. More specifically, standard Italian employs present subjunctive (28a), whereas Italian dialects use the imperfective subjunctive morphology that is often the only relic form of subjunctive attested in those systems (28b,c).

Given this structure, we can conclude that the lack of the lexicalization of the ever morpheme does not necessarily correlate with the absence of subjunctive. Crucially, it does correlate with a reduplication structure. In other words, if in Romance ever is not lexicalized, the unconditional semantic entailment of FRs has to be obtained through a reduplication strategy, that can give rise to two distinct structures: (a) Type 1, i.e. the one in which the wh element precedes both VP1 and VP2 and the indicative is selected (29a) and (b) Type 2, i.e. the one in which the wh element precedes VP2 and the subjunctive is selected for both VP1 and VP2 (29b).
(29) a. Type $1=\left[{ }_{\mathrm{FR}}\right.$ wh $\left.V P 1_{\text {indic }} \mathrm{VP2}_{\text {indic }}\right]$
b. Type $2=\left[{ }_{\mathrm{FR}} \mathrm{VP} 1_{\text {subjv }}\right.$ wh VP2 $\left.2_{\text {subjiv }}\right]$

Both structures may be found in the same Italo-Romance variety ( $30 \mathrm{a}-\mathrm{d}$ ), whereas all other Romance varieties of our sample only allow Type 2 ( $30 \mathrm{e}, \mathrm{f}$ ):

d. Vənissa quannə vənissa, ...
come. 3SG.PRS.SUBJ when come.3SG.PRS.SUBJ
'No matter when s/he arrives, ...' (Type 2, S. Maria del Cedro)
e. *La ropa que se ponga se ponga,...
the.FSG cloth.FSG that.REL self=put.3SG.SUBJ self=put.3SG.SUBJ
(Type 1, Castilian Spanish)
f. Se ponga la ropa que se ponga,...
self=put.3SG.SUBJ the.FSG cloth.FSG that.REL self=put.3SG.SUBJ
'Which ever piece of cloth s/he wears, ...' (Type 2, Castilian Spanish)
It is the case that Type 2 is less frequent among central and southern Italian dialects, some systems allowing both structures whereas other systems ruling out Type 2. A typological implication emerges from this picture: if an Italian dialect displays only one type of reduplication strategy to structurally realize unconditionals, this is Type 1.
(31) Type $1>$ Type 2

Therefore, wherever Type 2 is attested, Type 1 is arguably very likely to be found too.

In what follows I will show that these two types of reduplication structure are sensibly different in their morphosyntactic nature. Yet, structural correlations exist between the two, on the basis of which a possible unifying theoretical account can be proposed.

## 4. Free-choice pronouns and unconditional FRs

In this section I will establish a semantic and structural connection between free-choice pronouns and unconditional FRs in Romance. More specifically, I will show that the reduplication structure of the unconditional FRs exhibited in the Italo-Romance varieties of our sample reflects the template of the formation of the free-choice pronouns, that are built through the reduplication of the verb 'to be'.

### 4.1 Freechoice pronouns and the role of reduplication

In Romance the head of unconditional relative clauses (32 a-d) may also function as freechoice determiner (32b) or freechoice indefinite pronoun (32c) as well as an adverbial element (32e):
(32) a.

| Cualquiera | que | piense | ecológicamente, |  |
| :--- | :--- | :--- | :--- | :--- |
| whoever | that.REL | think.3SG.SUBJ ecologically |  |  |
| es | bienvenido | en | nuestra | organización |
| is | welcome | in | our | organization |

'Whoever thinks in an ecologic way is welcome in our organization'
b. Por favor, consulte cualquier libro sobre Picasso. for favor consult.2SG.IMP any book on Picasso 'Please, consult any book about Picasso'
c. Cualquiera puede jugar acá. anybody can.3SG.IND play.INF here 'Anybody can play here'
(Castilian Spanish)
d. Ovunque tu stia pensando di andare, fermati! wherever you stay.2SG.SUBJ think.GER of go.INF stop.IMP=you 'Wherever you're thinking of going, stop here!'
e. Questa voce si spargerà ovunque. this.FSG voice self=spread.INF anywhere
'This rumor will spread anywhere' (standard Italian)
Not surprisingly, most central and southern Italian dialects lack the morphological formation of ever morpheme in the wh-ever pronominal and adverbial items as well. These varieties resort to a reduplication strategy involving the verb 'to be' (33), as in the examples in (34):

```
[pP wh V Vev 施 ...]
```



A semantic observation of this type of construction suggests that the verb 'to be' is used to process a predication over the existence of an individual. In (34a) the XP quala lwibbra jè jè 'any book' is arguably the result of an unconditional predication on the identity ${ }^{15}$ of the exiting individual ( $\mathrm{X}=b o o k$ ) that the subject can freely choose (35a). The book that the subject can choose is any book that exists ( $35 \mathrm{~b}, \mathrm{c}$ ):
(35) a. (You can take) which X is(=identity) any/every X that is(=existence)
b. operator $=\mathrm{Q}-\operatorname{ever}(y)$

[^50]Given the unconditionality of the identification of the individual X over all individuals that exist, the specific identification does not matter. This leads to the unconditionality of the relative (or free-choice meaning). Arguably, the structure in (35a) can be analysed on the basis of the semantic entailments of unconditional relative clause. More specifically, the first part of the structure, i.e. [which X is(=identity)], functions as a protasis that denotes sets of disjoint alternatives with a variable pair of \{world,individual\}. In order words, the very identity of the individual X, i.e. the variable, receives a different value in each context domain. The second part of the structure, i.e. [X that is(=existence)], works as an apodosis which predicates over the very existence of the individuals. This semantic assessment confirms the unconditionality entailment of $w h$-ever pronouns: the value of the identity is assigned to its variable within a single world and checked in each disjoint alternatives that represent the given context domain. Based on these observations, we can assume that the structural origin of free-choice indefinite pronouns ${ }^{16}$ is a (bi)clause-like structure involving a copula (36) and a verb of existence, respectively:

## [ X is [ X (that) exists ] ]

We can assume a structure where the specifier is the referential argument and the complement the predicative argument. The copula can be merged in a VP above PredP ((37a). See Mikkelsen 2005:167). Compare (36) with (37):

$$
\begin{align*}
& \text { a. } \quad\left[_ { \text { PredP } } \mathrm { XP } _ { \text { RRF } } \text { (COPULA) } \left[_{\text {Pred }} \text { Pred XP } \text { pred }\right.\right. \text { ] } \tag{37}
\end{align*}
$$

In the relevant Italian dialects of our sample, the structure in (37b) is now fully grammaticalized into a pronoun. As a result of the desemantization process, the semantic entailments are not trasparent. Also, the pronouns do not allow verb agreement with other persons, tenses or moods:

| a. *Jamə cu <br> goes   | simə <br> who | are.1PL | are.1PL |
| :--- | :--- | :--- | :--- | :--- | :--- |

${ }^{16}$ I henceforth use '(free-choice) pronouns' as a comprehensive term for grammatical/ functional element that therefore also includes '(free-choice) determiners.'

To summarize, central and southern Italian dialects resort to a reduplication strategy to realize free-choice indefinite pronouns. The resulting structure involves the reduplication of the verb 'to be', which is semantically motivated by the predication on the existence of an individual whose identification is not relevant as she/he/it is equal to any existing individual in all possible words. This interpretation matches the semantic nature of the Qever (y) operator as it endows the free-choice pronouns with properties typically associated with (quasi)-universal quantifiers.

Syntactically, the reduplication configuration (35a) is built on a clausetype structure $(36,37)$ in which the first XP is a copular structure that establishes the equivalence of the entity X with the individual predicated in the second XP (and whose identity is not to be determined).

In the following session, I will show that the structural properties of the free-choice indefinite pronouns in the Italian dialects of our sample provide the template for the wh-ever pronouns and the whole reduplicated configuration of the FRs to be built.

### 4.2 The structure of reduplicated unconditional FRs

In analyzing the structure of the unconditional FRs of the type discussed in $\$ 3$ and $\$ 3.1$ (and exemplified here in (39)), some specific syntactic properties have to be considered. One of these is the position of the subject, which linearly occurs clause-finally (the object is always postverbal, following namely both verbs of the reduplication structure): ${ }^{17}$
(39) Qualə libbrə ha pigghiatə ha pigghiatə Marija, ...
which book has taken has taken Maria
'Whichever book Maria has taken, ...' (Buonvicino, Cosenza)
(40) $\left[_{\mathrm{CP}}\right.$ wh $\left[_{\mathrm{VP} 1} \mathrm{~V}\right]\left[_{\mathrm{VP} 2} \mathrm{~V}\right]$ DO Subj $]$

The resulting unmarked word order is VOS, a linear positioning that reveals the placement of the reduplicated VP in the structure. ${ }^{18}$ I assume that, before the VP undergoes reduplication, the subject moves to the lower left periphery, i.e. to [Spec,TopP] (41a). This operation is motivated by the semantic

[^51]of the discourse structure. The subject of the clause as well as the clause itself convey some old/given/known information by the discourse participants: (39) is the comment or the response of the speaker to a possible known situation in which Maria has taken some book. The VP is fronted to the same lower portion of the left periphery and raised to a higher-up topic position (41b). Finally, the structure of the specific FR in (39) is given by the wh extraction of the object and its placement in the outer specifier of TopP (41c).

(41) a. $\quad\left[_{\text {CP }}\left[\begin{array}{l}\text { Topp }\end{array}\right.\right.$ subject $\left[\right.$ Top Top $^{\text {VP }}$ subject verb object $\left.]\right]$
b. $\quad\left[_{\mathrm{CP}}\left[_{\text {TopP }}\left[_{\mathrm{VP}}\right.\right.\right.$ verb object $]\left[\right.$ Top', Top $\left[_{\text {TopP }}\right.$ subject $\left[_{\text {Top }}\right.$, Top $\left[{ }_{V P}\right]$

Still, the resulting CP in (41c) does not yet reflect the structure of the unconditional FRs. Namely, it corresponds to a plain FR, i.e. an embedded non-interrogative wh-clause, of the type in (42):
(42) U pruvəssurə vo [u libbrə/quiddə ca ha pigghiatə Marija] $]_{\mathrm{FR}}$ the professor wants the book what that has taken Maria 'The professor what the book that/what Maria has taken' (Buonvicino, Cosenza)

What is missing in (41c) is the $\mathrm{Q}-\operatorname{ever}(y)$ operator (or COND in (5)) that modifies completely the semantic stance of the sentence. I assume that in an unconditional FR like (39), the operator has scope on the object before it is extracted and moved to the left periphery of the clause (43a). The operator lends unconditionality to the direct object DP. In the Italo-Romance varieties of our sample, this results in a free-choice indefinite pronoun ( $\$ 4.1$ ) that is ultimately analysed as the grammaticalization of a biclause-type structure (36)-(37), which is to be assumed to have modified the object DP (43b) of the unconditional clause before the grammaticalization process is completed. As there is no evidence that the PredP (43a) exhibits a complex structure in correspondence of the object DP, I assume that PredP only hosts an empty XP. In extracting the object and fronting it to the left periphery of the clause, the PredP is moved along the DP as Q -ever $(y)$ must be structurally realized, given the fact that it never lexicalizes into a morpheme (43c). ${ }^{19}$ The structural
${ }^{19}$ My analysis does not hinge upon adopting one of the two competing views regarding the position of the $w h$-phrase: one view, i.e. the Comp Account (Groos and van Riemsdijk 1981; Grosu 1996, a.o.) assumes that the the wh-phrase is in [Spec, CP] and the head is occupied by an empty pronominal element, whereas the other view, i.e. the Head Account (Bresnan and Grimshaw 1978; Larson 1987; Iatridou et al. 2001, a.o.) the $w h$-phrase is in the head position and the [Spec, CP] is either non-projected or empty.
realization of the Q -ever $(y)$ operator occurs through filling up the empty XP position that the fronted DP brings along.
(43) a. $\left[{ }_{\mathrm{CP}}\left[_{\text {Topp }}\right.\right.$ subject $\left[{ }_{\text {Top }}, \operatorname{Top}\left[{ }_{\mathrm{VP}}\right.\right.$ subject verb $(\mathrm{Q}$-ever $\left.\left.\left.) \mathrm{N}_{\text {obj }}\right]\right]\right]$


Arguably, the structural realization of the $\mathrm{Q} \operatorname{ever}(y)$ operator occurs through filling up the empty XP position that the fronted DP brings along. The VP is then moved to that position. The copy left lower is not erased or erased partially (44a), i.e. its functional elements may be left unuttered (44b). ${ }^{20,21}$
b. Qualə libbrə ha pigghiatə (ha) pigghiatə Marija, i' non singə cuntentə. which book has taken has taken Maria I not am happy 'Whichever book Maria takes, I am not happy' (Buonvicino, Cosenza)

This structural account of the reduplication builds on the assumption that the movement of an item leaves a copy behind, to be eventually deleted (Chomsky 1995). In the case of the unconditional FRs, the copy left behind is identical to the original element and cannot be deleted as a whole, as the $\mathrm{Q}-\operatorname{ever}(y)$ operator has to be structurally yielded in order for the relative clause to be interpreted as an unconditional. The two reduplicated verb complexes stand in specific relationship (both semantically and syntactically), determined by the very connective element that relates them, i.e. the sematic operator $\mathrm{Q}-\operatorname{ever}(y)$ at work. ${ }^{22}$

It is crucial to point out that the resulting structure is reminiscent of the (bi)clausal structure assumed for the free-choice indefinite pronouns. In
${ }^{20}$ For a different hypothesis of the structural reduplication derivation see Gulli (2009:36).
${ }^{21}$ In the spirit of the Distributed Morphology framework (Halle and Marantz 1993), once can say that in Italo-Romance varieties the Quasi-Universal feature of Q-ever ( $y$ ) has a precise positive instruction to PF, i.e. to pronounce what would normally remain silent. Deletion (or failure of (late) lexical insertion) is cheaper than non-deletion. Yet, nondeletion overrides deletion just in case a feature has special instruction. In Italian dialects this special instruction is obligatory for the derivation not to crash and, rather, results in unconditional FRs.
${ }^{22}$ Following Koopman $(1984,2000)$, one can argue that, of the two VPs, just one is selected from the numeration and it is reduplicated derivationally, via syntactic movement (contra Nunes 1995 according to whom cases of reduplication require selecting the same term twice from the lexicon in order for the two terms to form a chain).
some varieties, the reduplicated verbs are joint by a connector (mostly 'and'; D'Onghia 2019), a clue into an ongoing grammaticalization process.

## 5. The role of mood in the reduplication structure

The type of unconditional FR analyzed in $\$ 4.2$ is the most widespread among central and southern Italian dialects (Type 1; 45a). The lack of the morphological formation for the morpheme ever correlates with the lack of present subjunctive morphology. Yet, another type is given (Type 2; 45b), where the whelement precedes the VP2. See examples of Type 2 in (46).
$\begin{aligned} & \text { a. } \text { Type } 1=\left[\mathrm{wh}-\mathrm{VP} 1_{\text {indic }} \mathrm{VP2} 2_{\text {indic }}\right] \\ & \text { b. } \text { Type } 2=[\mathrm{VP1} \\ & \text { wh } \mathrm{VP} 2\end{aligned}$
(46) a. Rəcissə chéllə ca racissə, un è verə. say.3SG.SUBJ.IMPF that.DEM that.REL say.3SG.SUBJ.IMPF not is true 'No matter what $s /$ he says, it is not true' (Neapolitan)
b. Vinissa quannə vinissa, nua simə qua. come.3SG.SUBJ.IMPF when come.3SG.SUBJ.IMPF we are here 'No matter when $s$ /he arrives, we'll be here' (S. Maria del Cedro)

Italian dialects display the only subjunctive morphology available, i.e. imperfective subjunctive. The derivation of Type 2 unconditional FRs (46) differs from the derivation of Type 1 unconditionals as the verb moves to an IP field (47b) where can get subjunctive morphology that corresponds to the concessive stance expressed by Type 2 unconditionals: ${ }^{23}$


Once the verb expresses overtly the irrealis feature of the concessive modality, it moves further upwards to a higher-up Topic position (48a). At this point the derivation of Type 2 unconditionals overlaps with the derivation of Type 1 , in that the object becomes the wh element and occupies a Topic position. It carries the PredP=XP requested by the Q ever $(y)$ which

[^52]is filled up by the verb when it is copied there and its copy left behind is not erased (48b).


Still, the concessive stance is not yet integrated in the structure of the unconditional FR. In order to obtain the concessive pragmaticsemantic entailment, the verb moves further upwards into the Force layer, i.e. the head of the CP that expresses illocutionary force (Rizzi 1997):
(49)


At the end of this operation the closer copy of the verb can be erased as the structural realization of $\mathrm{Q}-\operatorname{ever}(\mathrm{y})$ was successful.

To sum up, the lack of lexicalization, i.e. the ultimate utterance act or spellout, of Q -ever $(y)$ operator, i.e. an element which is extremely relevant semantically, is the counterpart of the peculiar syntactic structure assessed here. ${ }^{24}$ The reduplication is a very rudimentary way to realize semantically relevant elements at the phonetic level (see also Silvestri in prep.).

## 6. Conclusions

The evidence analyzed in this paper proves that unconditional free relatives across central and southern Italian dialects are built through a reduplication configuration. This strategy, which is the only structural option for the Italian dialects discussed here to express unconditionals, is characterized by the lack of the lexicalization of the ever morpheme. I proposed a semantically motivated structural account, whereby the reduplication structure of unconditional free relatives takes on the reduplication structure at the origin of the free-choice pronouns. The latter offers a template to the system, on which the unconditional relative clauses are ultimately built. Also, unconditionals do not exhibit subjunctive mood in the most common reduplication structure available.

Yet, Romance varieties, including some Italian dialects, may also display a different reduplication strategy that does involve subjunctive mood.

[^53]Building on the interpretation of different roles of subjunctive, I proposed a unifying account for these two types of reduplication structures. More specifically, I argue that the subjunctive mood is selected in unconditionals to express the modality value over the quantificational force of the QuasiUniversal feature of Q -ever $(y)$ operator. This mood selection is not available in most Italo-Romance varieties which resort to a structural reduplication of the VP to convey the same semantic entailment, i.e. unconditionality (or free-choice). Still, subjunctive mood occurs in the less frequent reduplication structure attested in Italo-Romance where conveys a different stance, i.e. the concessive force.

From a typological point of view, I showed that the reduplication strategy is not that rare for unconditional free relatives (cf. Citko 2004: 119; Kandybowicz 2008), given the number of ItaloRomance varieties showing it (pace Haspelmath and König 1998: 615).

Finally, I envisage that the analysis I put forward here can serve as a solid starting point for the assessment of another type of syntactic reduplication, i.e. the nominal reduplication within DPs, largely attested in Italo-Romance (Silvestri in prep.) and beyond, and triggered by similar semantic entailments to the ones holding for unconditional free relatives.

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# Linguistic-functional Analysis of the Biblical Hebrew Lexemes 'atarâ, keter and nezer 

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#### Abstract

: The article examines three Biblical Hebrew Lexemes. It exerts the method of semantic and structural analysis based on Eugenio Coseriu postulates. First it defines and explains the method used, then it realizes a distributional analysis and a classematic analysis of each lexeme. The second and the third phase proceed according to the functional language with the direct examination of each single occurrence. In the end it summarizes the achieved results. The structural analysis applied to the study of this three lexemes has allowed to develop some theories about the concept of kingship in the Biblical Hebrew and its development through functional languages.


Keywords: Distributional Analysis, Classematic Analysis, Structural Analysis, Functional Languages

## 1. Introduction

This essay concerns the semantic analysis of the three Lexemes 'attarâ, keter and nezer adopted for the word 'crown' in the Biblical Hebrew. The analysis follows Eugenio Coseriu's method, based on semantic and structural analysis (Coseriu 1971). ${ }^{1}$

For this semantic research, there should be used linguistic structure that would be unitary from the geographic, chronological, social and stylistic point of view. The functional language is syntopic, synchronic, synstratic and synphasic and it is the ideal method to conduct this kind of research.
${ }^{1}$ This methodology is applied at the University of Florence, chair of Hebrew language and literature under the guidance of the professor Ida Zatelli and is inspired by the principles of semantic and structural analysis of Eugenio Coseriu.

As Ida Zatelli said (2004: 134), "the subdivision through functional languages is already a first interpretative phase, giving us, in fact, a chronological and synchronic grid that permits organizing and identifying significant data that otherwise would be lost and scattered without criteria".

The basic problem is connected to the biblical language as a whole: it covers a long period of time (one thousand years) and it maintains a unitary nature (Zatelli 1978: 11). It is not possible to note substantial dialectal and geographical distinctions in Biblical Hebrew ${ }^{2}$ and as we have little information regarding social and cultural difference (synstratic unit).

The functional languages adopted for this research are those identified by Ida Zatelli in The Study of Ancient Hebrew Lexicon. Application of the concepts of lexical field and functional language (2004: 129-159). ${ }^{3}$

For the first step of my research I've distributed every lexeme into functional languages. This distributional analysis comes with morphological, syntagmatic and syntactic analysis for every functional language. Lastly, I've conducted a classematic analysis for each lexeme. Since there aren't lexeme for comparison, it was not possible to make a paradigmatic analysis.

## 2. Distributional Analysis of the Lexemes

## 2.1 'AṬARÂ: distributional analysis

The noun occurs in Biblical Hebrew 23 times, of which 3 times in the plural (Zc 6, 11; 6, 14; Jb 31, 36).
2 Samuel (1), Isaiah (4), Jeremiah (1), Zechariah (2), Psalms (1), Proverbs (5), Lamentations (1), Ezekiel (3), Esther (1), 1 Chronicles (1), Song of Salomon (1), Job (2)
It occurs in the following Functional Languages: EBH 1, EBH 2, EBH 4, LBH 1, LBH 2, and LBH 3
${ }^{2}$ Judg 12, 6 is an exception

 boleth'; and he said 'Sibboleth'; for he could not frame to pronounce it right; then they laid hold on him, and slew him at the fords of the Jordan; and there fell at that time of 'efrayim forty-two thousand'.
${ }^{3}$ Ida Zatelli identifies the following functional languages: ABH (Archaic Biblical Hebrew), EBH 1(Early Biblical Hebrew, Historical-Narrative Language), EBH 2 (Early Biblical Hebrew, Poetical Language), EBH 3 (Early Biblical Hebrew, Language of Hosea), EBH 4 (Early Biblical Hebrew, Juridical-Cultic Language), LBH 1 (Late Biblical Hebrew, Historical-Narrative Language), LBH 2 (Late Biblical Hebrew, Poetical Language), LBH 3 (Late Biblical Hebrew, Language of Job).

### 2.1.1 EBH 1

The Lexeme occurs only 1 time: 2 Sam 12, 30
'atarâ is nomen regens of the noun:

- 2 Sam 12, 30
'ataarâ is object of the verb:
- 0/1 2 Sam 12, 30

Prepositional Phrase:
'aṭarâ holds the preposition לעַמב

- 2 Sam 12,30


### 2.1.2 EBH 2

The Lexeme occurs 14 times: Is 28, 1; 28, 3; 28, 5; 62, 3; Jr 13, 18; Zc 6, 11; 6, 14; Ps 21, 4; Prv 4, 9; 12, 4; 14, 24; 16, 31; 17, 6; Lm 5, 16 'aṭara is nomen regens of the noun:

- תוּאג3 Is 28, 1; 28, 3
- ירֵּכּׁu Is 28, 1; 28, 3
- ירְYְ Is 28,5
- תרֶשֶּתְּת Is 62, 3; Jr 13, 18 (with suffix); Prv 4, 9; 16, 31
- To Ps 21, 4

- $\quad$ Prvon 14, 24
- $\quad$ - $\quad$ Prv 17, 6
- 

'aṭarâ is subject of the verb:

- $\quad$ niqtal Is 28, 3
- $0 / 1$ Jr 13, 18
- O/1 Zc 6, 14
- $0 / 1$ Lm 5, 16
'atarâ is object of the verb:
- $0 / 1$ Zc 6, 11
- תיש 0/1 Ps 21,4
- qittel Prv 4, 9

Nominal sentences:
(1) Prv 12, 4

"st-hyl tret b'lb.
'a worthy wife is a crown for her husband'
(2) Prv 14, 24
 trt hkmym 'šrm
'the crown of the sage is their riches'
(3) Prv 16, 31

הבָישֵּ תרֶאֶפְּתִּת תרֶטֶעִ
'trt to'rtbśybh
'a hoary head is a crown of glory'
(4) Prv 17, 6

םינִ רָ ינִבְּ םינִקִזְ תרֶטֶעְ
'trt zqnym bny
'a crown of the old man are sons' sons'
Prepositional Phrase:
'aṭarâ is governed by 7 :

- 0/1 Is 28, 5
'aṭarâ is in parallelism with the following lexemes:
- $\quad$ ץ
(5) Is 28,1

'trt g'wt škry 'efraym wṣys nbl ṣby tp t 'rtw
'proud crown of the drunkards of ' efrayim and flower drooped its splendid beauty'
- ת תרַיפְצְ? lspyrt
(6) Is 28,5

yhyh Yhwh ṣb'wt ṣbyw lspyrt tp'rh
'The Lord will be a splendid crown and a beautiful diadem'
- 

(7) Is 62, 3

whyyt 'rt tp'rt byd-Yhwh wṣnyp mlwkh bkp-'lhyk
'and you will be a crown of splendor in the hand of the Lord and a royal turban ${ }^{4}$ in the hand of your God'

- ת ת lwyt
(8) $\operatorname{Prv} 4,9$

ttn lr'sk lwyt-hnn 'tret tp'rt tmgnk
'she will set on your head a crown of grace and she will present you a garland of splendor'
-     - 

(9) $\operatorname{Prv} 17,6$

${ }^{4}$ The Lexeme ssnyp is translated as 'turban' also in the other occurrences in which appear (Zc 3, 5; Jb 29, 14).
'trt zqnym bny bnym wtp'rt bnym 'bwtm
'Grandchild are the crown of the elders, and the glory of sons are their fathers'

### 2.1.3 EBH 4

The Lexeme occurs 3 times, of which 1 determinate by an article: Ezk 16, 12; 21, 31; 23, 42
'ataarâ is nomen regens of the noun:

- תרֶאֶקְּת Ezk 16, 12; 23, 42
'aṭarâ compare come oggetto del verbo:
- 0/1 Ezk 16, 12; 23, 42
- םור hiqțil Ezk 21, 31

Prepositional Phrase:
'atarâ holds the preposition 2 :



'atarâ is in parallelism with the following lexeme:

- ת תֶֶנְצְּרִּ $h m s n p t$
(10) Ezk 21, 31

hsyr hmsnpt whrym hitrbz't
'take off the turban and lift up the crown'
Coordinate structure:
(11) Ezk 16, 12
 w'tn nzm 'l-'pk w'gylym 'l-'znyk witrt tp'rt br'sk
'I put a ring in your nose, earrings on your ears, and a beautiful crown upon your head'
(12) Ezk 23, 42

wytnw smydym 'l-ydyhn witrt t prt 'l-r'syhn
'they put bracelets on their wrists and beautiful crowns on their heads'


### 2.1.4 LBH 1

The Lexeme occurs twice: Est 8, 15; 1 Chr 20, 2 'aṭarâ occurs with the adjective:

- לוֹדָּ Est 8, 15
'aṭarâ is nomen regens of the noun:
- בדָָּ Est 8, 15
- 2 Cr 20, 2
'aṭarâ is object of the verb:
- חקל 0/1 2 Chr 20, 2

Coordinate structure:
(13) Es 8, 15

blbwš mlkwt tklt whwr witrt zhb gdwlh wtkrk bwṣ w'rgmn
'with a royal garment purple and white, with a large gold crown and a purple robe of fine linen'

### 2.1.5 LBH 2

The Lexeme occurs only 1 time: Ct 3, 11
Prepositional Phrase:
'atarâ is governed by $\underset{T}{T}$ :

- הרָטָעֲדָד


### 2.1.6 LBH 3

The Lexeme occurs twice: Jb 19, 9; 31, 36
'atarâ is nomen regens of the noun:

- שִׁאׁר Jb 19, 9
'aṭarâ is object of the verb:
- רוס hiqtil Jb 19, 9
- דנע 0/1 Jb 31, 36
'aṭarâ is in parallelism with the following lexeme:
- דוֹבְכ kbwd
(14) Jb 19, 9

kbwdy m'ly hpšyt wysr 'trt r'šwy
'He has stripped me of my honor and removed the crown from my head'


### 2.2 KETER: Distributional Analysis

The Lexeme occurs 3 times in Biblical Hebrew (Est 1, 11; 2, 17; 6, 8).
Esther (3)
It occurs only in the following Functional Language: LBH 1

### 2.2.1 LBH 1

Keter is nomen regens of the noun:

- תוּכְלְٍ Est 1, 11; 2, 17; 6, 8

Keter is subject of the verb:

- $\quad$ niqtal Est 6, 8

Keter is object of the verb:

- 0/1 Est 2, 17

Prepositional Phrase:
Keter is governed by $\underset{\exists}{7}$ :

- No verb: Est 1, 11


### 2.3 NEZER: distributional analysis

The Lexeme occurs 25 times in Biblical Hebrew and it is possible to distinguish two meanings: the first one is connected to 'Nazirite' ( 14 occurrences in total: Nu 6, 4; 6, 5; 6, 7; 6, 8; 6, 9; 6, 12 (x2); 6, 13; 6, 18(x2); 6, $19 ; 6,21(\mathrm{x} 2) ; \mathrm{Jr} 7,29)$, the second one is connected to a 'crown' (11 times in total). Obviously, for this article, I will consider only occurrences with the meaning of 'crown'.
Exodus (2), Levitic (2), 2 Samuel (1), 2 King (1), Zechariah (1), Psalms (2), Proverbs (1), 2 Chronicles (1)
It occurs in the following Functional Languages: EBH 1, EBH 2, EBH 4 and LBH 1

### 2.3.1 EBH 1

The Lexeme occurs 3 times, of which 1 determinate by an article: Ex 39, 30; 2 Sam 1, 10; 2 Kings 11, 12

Nezer is nomen regens of the noun:

- שדֶקּהַ Ex 39, 30

Nezer is nomen rectum of the noun:

- Yיצִ Ex 39, 30

Nezer is object of the verb:

- $0 / 12$ Kings 11, 12
- $0 / 12$ Sm 1, 10

Prepositional Phrase:
Nezer holds the preposition לעַ:

- וירָע 2 Kings 11, 12

Coordinate structure:
(15) 2 Kings 11, 12

't-hnzr w't-h'dwt
'the crown and the insigna"
Nezer is in parallelism with the following lexeme:

(16) 2 Sam 1, 10

w'qh hnzr 's' 'l-r'šw w'ṣ'dh 'sr 'l-zr'w
'And I took the crown that was on his head and the band on his arm'

### 2.3.2 EBH 2

The Lexeme occurs 4 times: Zc 9, 16; Ps 89, 40; 132, 18; Prv 27, 24
Nezer is nomen rectum of the noun:

- ינבְאַ Zc 9, 16

Nezer occurs with pronominal suffix twice:

- iוֹחִנ Ps 89, 40; 132, 18

The pronominal suffix refers to:

- $\quad$ Dāwid (Sal 89, 40; 132, 18)

Nezer is subject of the verb:

- $0 / 1$ Ps 132, 18

Nezer is object of the verb:

- ללח qittel Ps 89, 40

Nezer is in parallelism with the following lexeme:

- תירְ תryt
(17) Ps 89,40

וֹחִנִ צֶרָאָל תָּלְלִִַּ ָּדֶּרְעַ תירִבְּ התָּרְאַנֵ
n'rth bryt 'bdk ḥllt l'rṣ nzrw
'You have abhorred the covenant of your servant; you have profaned his crown even to the ground'

- תשֶׁבּ bšt
(18) Ps 132, 18 队

'wybyw' lbyš w'lyw ysyṣ nzrw
'His enemies will I clothe with shame; but upon himself shall his crown shin'
- 

(19) Prv 27, 24

וֹזְ רזֶנֵ־םאִוְ ןסֶחֹ םלָוֹעלְ אל יכִּ
ky l' l'wlm ḥsn w'm-nzr ldiwr
'For wealth is not forever, nor does a crown endure generation after generation'

### 2.3.3 EBH 4

The Lexeme occurs 3 times: Ex 29, 6; Lv 8, 9; 21, 12
Nezer is nomen regens of the noun:

- שֶדֶקֹה Ex 29, 6; Lv 8, 9
- ן ןֶֶשׂ Lv 21, 12

Nezer is object of the verb:

- 0/1 Es 29, 6

Nominal Sentence:
(20) Lv 21, 12

ky nzr šmn mšht' 'lhyw 'lyw
'for the consecration of the anointing oil of his God is upon him' Prepositional Phrase:
Nezer holds the preposition לעַ:

- תֶֶנָצְּדִּהַ־לעַּ Ex 29,6
- וירָע Lv 21, 12


### 2.3.4 LBH 1

The Lexeme occurs only 1 time, determined by article: 2 Chr 23, 11
Nezer is object of the verb:

- 0/1 2 Chr 23, 11

Prepositional Phrase:
Nezer holds the preposition לעַ:

- 2 Chr 23, 11

Coordinate structure:
(21) 2 Chr 23, 11

't-hnzr w't-h'dwt
'the crown and the insigna'

|  | EBH 1 | EBH 2 | EBH 4 | LBH 1 | LBH 2 | LBH 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 'atarâ | 1 | 14 | 3 | 2 | 1 | 2 |
| keter |  |  |  | 3 |  |  |
| nezer | 3 | 4 | 3 | 1 |  |  |

Table 1. Summary table of the number of occurrences in every Functional Language

## 3. Classematic Analysis

Lexicon is organized in classes, paradigms and lexical fields. Zatelli provides a clear definition of the term "class": "the class is the gathering of lexemes that are determined by affinity and share a semantic feature (seme) showing this through their lexical and grammatical distribution" (2005: 135). Lexemes that belong to the same class "behave" in a similar way in terms of grammar and lexicon. The semantic feature that defines a class is called a "classeme" (Coseriu 1971: 305). It is not possible to define different kinds of "dimension" of the lexical field. Principally the dimension of the lexical field for lexemes is "dimension of kingship".

## 3.1 'AṬARA.: classematic analysis

### 3.1.1 EBH 1

The Lexeme refers to mlkm (2 Sam 12, 30).
Class persons:
2 Sam 12, 30
The lexeme occurs only in the class "persons".
The Lexeme is nomen regens of alkm. It is the crown of the king of the city of Rabâ, owned by king Dāwid. The phrase 'take the crown from his head'
 refer to the 'defeat of the enemy'. The crown subdued to the defeated king is
 a clue of the subordinate role of the defeated king regarding the winning king.

### 3.1.2 EBH 2

The lexeme refers to škry 'efrayim (Is 28, 1; 28, 3), to $l^{l s^{\prime} r}$ ' $m w$ (Is 28, 5), metaphorically to Yarûsālāim (Is 62, 3), to mlk wghyrh (Jr 13, 18), to Yehošua‘ bn Yehoṣadaq (Zc 6, 11; 6, 14), to mlk (Ps 21, 4), to generic people (Prv 4, 9), to $b^{\prime} l h$ (Prv 12, 4), to hcmym (Prv 14, 24), to an aged person (Prv 16, 31; 17, 6), to people of Yiśrä́el (Lm 5, 16).
Class persons:
Is 28,$1 ; 28,3$; Jr 13, 18; Ps 21, 4; Zc 6, 11; 6, 14
Class acts and human behaviors:
Is 62, 3 ; $\operatorname{Prv} 4,9 ; 12,4 ; 14,24 ; 16,31 ; 17,6 ; \operatorname{Lm} 5,16$
Class acts and divine behaviors:
Is 28,5
The lexeme occurs 7 times in the class "persons", of which 4 times refers to a ruler, 1 times refers to a queen and twice refers to a priest. In the class
"acts and human behaviors" it occurs 7 times and in the class "acts and divine behaviors" occurs only 1 time. In Is 62, 3 there is a figure of speech and the lexeme is used as a simile: the city of Yarûsāaläim is described as a crown. Arguably the text refers to the Yiśráa él monarchy, so I suggest that this passage belongs in the class "acts and human behaviors".
(22) Is 28, 1; 28, 3

םיַַפְּאֶ ירֵכּּשִׁ תוּאגֵּ תרֶטֶעֶ
'trt g'wt škry 'prym
'the proud crown of the drunkards of 'efrayim',
This phrase Ga) probably refers to the royal household (Kellerman 1984: 632). According to Blenkinsopp this passage is direct against Samaria and its rulers (Blenkinsopp 2000: 387). It seems to be confirmed by the reference to 'efrayim, directly connected with the former northern kingdom (Kaiser 1974: 239). The parallelism between תוּאגֶּ תרֶטֶעְ trt g'wt an
 and kingship (Is 28, 1); this hypothesis finds a confirmation in Is 28, 3 in which 'trtg'wt škry 'prym 'the proud crown of the drunkards of 'efrayim' is stomped.

In this functional language the lexeme occurs in plural form twice ( $\mathrm{Zc} 6,11^{5} ; 6,14^{6}$ ). However some dissimilarity comes to the light when comparing these two passages: in Zc 6, 11 only one individual will receive the 'atarôt; in Zc 6, 14 the lexeme is in plural form but the verb from which it is governed is in a singular form. Driver asserts that the individual whom the text refers should be Zarubäbbel (Driver 1912: 185). Petersen claims that there is a discord between Zc 6, 11 and the oracle of Zc 4, 6-10 which stresses the importance of Zarubäbbel (Petersen 1984: 275), but he assumes that despite of the mention of the high priest, Zarubäbbel has a status higher than that of the high priest (Petersen 1984: 276). According to Meyers and Meyers the noun is in plural form because it refers to more than one crown, made in silver and gold- so both Yahôšua‘ $b n-Y a h o ̣ s a ̄ d a ̄ q$ and Zarubābbel wore crowns (Meyers and Meyers 1987: 350). I agree with this latter proposal because as shown in Zc 6, 13 a khn

[^54]has his own kissê. The oracle of Zc 6, 10-15 mentions two powers: religious authority and kingship, both equally relevant since it is not possible to detect from the text the predominance of one over the other one.

In some passages of Proverbs the lexeme is used to extol positive qualities ( $\operatorname{Pr} 12,4 ; 14,24 ; 17,6)$. It is a metaphor: the 'crown' is not a simple item intended for kings, but a symbol of 'honor', 'pride', 'glory' and 'splendor', as in Prv 17, 6 where there is a parallelism between תֶשֶׁ 'trt


The loss of crown is always negative ( $\mathrm{Jr} 13,18 ; \mathrm{Lm} 5,16$ ). In the former case, the verb is דרי $y r d$, in the latter, it is לפנ npl. In both passage the loss of הרדטָע is directly connected with the loss of honor and rank.

### 3.1.3 EBH 4

The lexeme refers to Yarûūālāim personified (Ezk 16, 12), to nśy' Yiśrāàe $l$ (Ezk 21, 30), $m r b$ ' $d m$ (Ezk 23, 42).
Class persons:
Ezk 21, 30; Ezk 23, 42
Classe acts and divine behaviors:
Ezk 16, 12
The lexeme occurs twice in the class "persons" and 1 time in the class "acts and divine behaviors".

In this functional language it is possible to find the topos of Yhwh that assign a הרְטָ העש (Ezk 16, 12); the recipient of the crown is the city of Yarûsāāāim,
 'gylym 'earring', so הרָטְ is probably part of a jewelry dowry.
 as here, the lexeme could refer to a piece of a set of adornment. In both passages the lexeme is part of genitival relationship: in this functional language
 individual, not directly connected with the royal power.

In Ezk 21, 31 the lexeme is in parallelism with תֶ ֶֶנְצִּלֹה hmsnpt'turban'. ${ }^{7}$ The verb is (binyan biqtil) and the phrase 'lift up the crown' has a negative sense and probably hints to a loss of kingship (Salvesen 1998: 11).
${ }^{7}$ hmṣnt even occurs in parallelism with $n z r$, in the functional language EBH 4. Probably is a term related to worship.

### 3.1.4 LBH 1

The lexeme refers to Mārdŏkay (Est 8, 15), to mlkm (1 Chr 20, 2) Class persons:
1 Chr 20, 2; Est 8, 15
The lexeme occurs twice in the class "persons", of which 1 time refers to a ruler and 1 time refers to a high-rank individuals.

In Est 8, 15 the lexeme is nomen regens of ברָה בhbb. It is a complex coordinate structure with רוּחון תלֶכְת תוּכְלְטַ שׁוּבלְּב blbwš mlkwt tklt whwr
 a garment used by high-ranked individual, not necessarily a king because the one who wears this robe is Märdŏkay when he presents himself to the presence of king 'ahašwerôš; so we assume that the lexeme is not distinctive for kingship.

### 3.1.5 LBH 2

The lexeme refers to Šalomô (Ct 3, 11)
Class persons:
Ct 3, 11
The lexeme occurs only in the class "persons". In this passage Šalomô receives a הרָטָ השט from his mother, in the day of his wedding (Salvesen 1998: 110). In this case is clear that it is a context not connected with kingship, rather a context related to ceremonial rite and festivity not connected with the worship of divinity (Salvesen 1998: 111). It is logical to assume that the act of placing a הרְטְ in the head of the brides was a popular custom. Therefore, in this passage, the lexeme probably refers to a 'garland' and not a proper crown.

### 3.1.6 LBH 3

The lexeme refers to 'ywb (Jb 19, 9; 31, 36)
Class persons:
Jb 19, 9; 31, 36
The lexeme occurs both times in the class "persons" and refers to high-ranking individual. Even in this functional language the topos of the fallen of הרָטְעט (Jb 19, 9) is present; the lexeme is in parallelism with דוֹב ט kbwd and הרָטְעְ. It is used in a figurative sense and refers to honor and rank. In Jb 31, 36 the lexeme is in plural form and Salvesen translate with 'garland' (Salvesen 1998: 109).

|  | CLASSEME |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DIVINE ACTS <br> FUNCTIONAL <br> AND BEHAVIORS | HUMAN ACTS AND <br> BEHAVIORS |  |  |  |  |
|  |  |  | PERSONS |  |  |  |

Table 2. Classematic analysis of 'atarâ: summary table
In the class "acts and divine behaviors" the lexeme occurs twice; in the class "acts and human behaviors" the lexeme occurs 7 times. In the class "persons" it occurs 15 times, of which 7 times refers to rules, 1 time referring to a queen, 1 time referring to a prince, twice referring to a priest and 4 times referring to high-ranking individuals.

### 3.2 KETER: classematic analysis

### 3.2.1 LBH 1

The lexeme refers to Wašti hmlkh (Est 1, 11), to 'ester (Est 2, 17), to sws (Est 6, 8).
Class persons:
Est 1, 11; Est 2, 17
Class animals:
Est 6, 8
The lexeme occurs twice in the class "persons" and 1 time in the class "animals". In every occurrences the lexeme is nomen regens of $m l k w t(k t r m l k w t)$. The lexeme occurs always in a genitival relationship תוּכְלַַ רֶֶּכ keter malkwt. The fact that keter occurs only in LBH 1 suggests that it was an item associated with Persian royal court (Salvesen 1998: 71).

In none of these passages does this lexeme refers to king, which leads to suppose that keter is not used for the crown of a king. Certainly, from the context it is clear that keter refers to something worn on the head by a high ranking individual.

I include the lexeme in Est $6,8^{8}$ in the class "animals".
(23) Est 6, 8

וֹשׁארְִּּ תוּכְלְٍ רתֶֶֶּּ ותַּנִ רֹשֶׁאַוַ
w's'r ntn ktr mlkwt br'sw
"that carry a crown on his head"
The phrase (2) could refers to sws or hmlk.
In my opinion, it is a subordinate clause depending on $w s w$, so it is the horse who wore keter mlkwt. In other passages of LBH 1, this headdress, keter $m l k w t$, is never worn by a king rather by two queens so it is not directly connected with kingship. It could symbolize royal favor or denote something belonging to the king (Salvesen 1998: 71) as confirmed by the phrase (3).
(24) Est 6, 8

wsws'sr rkb 'lyw hmlk
"and a horse the king has ridden"
There are many different types of royal headdress depicted in Assyrian art: in some reliefs the horse belonging to the king is depicted with an ornamental headdress, a head band or a turban, placed on its head (Paton 1908: 249). It is likely that a similar custom exists even in Persia, as shown by Xerses' relief at Persepolis (Moore 1971: 65).

|  |  |
| :--- | :---: |
| FUNCTIONAL |  |
| LANGUAGE | CLASSEME |
|  | PERSONS |
| LBH 1 | 2 |

Table 3. Classematic analysis of keter: summary table

yby'w lbwš mlkwt 'šr lbš-bw hmlk wsws 'šr rkb 'lyw hmlk w'š ntn ktr mlkwt br'sw
"let them bring a royal garment which the king has worn and the horse on which the king has ridden, and on whose head a royal crown has been placed".

In the class "persons" occurs twice and refers to queen of Yiśrāāel. In the class "animals" the lexeme occurs only 1 time.

### 3.3 NEZER: classematic analysis

### 3.3.1 EBH 1

The lexeme refers to 'ahăron (Ex 39, 30), to Ša'ul (1 Sam 1, 10), to Yố'āš (2 Kings 11, 12). Class persons:
Ex 39, 30; 1 Sam 1, 10; 2 Kings 11, 12
The lexeme always occurs in the class "persons"; it refers twice to a king of Yiśs $\bar{a} \bar{e} l$, and refers 1 time to priest 'ahăron. In the latter occurrence the lexeme is nomen regens of hqdš (nzr hqds').

In this functional language there is a first hint of religious purport of רֶנֶ determinate as שֶֶׁקּהַה חֶנ־־ת 't nzr hqdśand the whole phrase is held by noun Yִי The passage refers to 'ahăron and describes the garments worn by the high priest (Ex 39, 30).
 Both bracelet and crown are worn by Ša'ul at the time of his death, so we can assume that they are accessory worn by the head of a community.

The lexeme is conjunct of תוּדעֵ הָת־אֶ w't-h'dwt (2 Kings 11, 12) and both
 't-hnz w't-h'dwt is king $Y \hat{o} ’ \bar{a} \bar{s}$. In this passage the lexeme means a headdress connected with the kingship.

We should note that the lexeme is absent in narrative context relating other rulers of Yis' $\begin{gathered}a \\ e \\ e\end{gathered}$.

### 3.3.2 EBH 2

The lexeme refers to ' $b d k$, that refers in turn to $D \bar{a} w i d$ (Ps 89,$40 ; 132$, 18), to a generic individual ( $\operatorname{Prv} 27,24$ ), to people of Yiśrā̄el ( $\mathrm{Zc} 9,16$ )

Class persons:
Ps 89,$40 ; 132,18$
Class acts and human behaviors:
Zc 9, 16; Prv 27, 24
The lexeme occurs twice in the class "persons", and refers to king Dāwid. In Ps 89, 40 the lexeme is in parallelism with תירְִּ $\operatorname{ת}$ bryt and the passage alludes to the deal between Yhwh and Dāwid in which the divinity has ensured the king an endless bloodline. The phrase inl inlt l'rṣ nzrw 'You
have profaned his crown even to the ground' is metaphoric. The lexeme nezer means royal status and the end of royal dynasty.

### 3.3.3 EBH 4

The lexeme refers to 'ahăron (Ex 29,6; Lv 8, 9), to a priest (Lv 21, 12) Class persons:
Ex 29, 6; Lv 8, 9; 21, 12
The lexeme occurs in the class "persons" all 3 times; when refers to 'ahăron the lexeme occurs always as nomen regens of hdqš (nzr hqdš).
In Lv 21, 12 the lexeme means 'consecration', not 'crown'. It appears to refer to the anointing of priests, so it is a religious-cultic dimension, not a kingship dimension.

 hmṣnt (Ex 29, 6). This passage seems to refer to the anointing of 'ahăron as the high priest. The lexeme is nomen regens of שֶׁקֹקֹ hqdš even in Lv 8, 9 and, like in other passages, 'ahăron is the one who shall wear the 'sacred crown'. It is relevant to point out that when the lexeme refers to the headgear of the
 $h q d s$ always occurs. Probably this expression relates to a high priest's kind of headgear. I suggest that this assumption could be applicable also for the functional language EBH 1, not only for EBH 4.

### 3.3.4 LBH 1

The lexeme refers to $Y \hat{o}{ }^{\prime} \bar{a} \bar{s} \check{s}$ (2 Chr 23, 11).
Class persons:
2 Chr 23, 11
The lexeme occurs in the class "persons" and refers to the king of Yisráāel.

|  | CLASSEME |  |
| :--- | :---: | :---: |
|  | PERSONS |  |
|  | Rulers | Priest |
| EBH 1 | 2 | 1 |
| EBH 2 | 2 |  |
| EBH 4 |  | 3 |
| LBH 1 | 1 |  |

Table 4. Classematic analysis of nezer: summary table

In the class "persons" occurs 9 times, of which 5 times refers to rulers and 4 times refers to priest; in the class "acts and human behaviors" it occurs twice.

## 4. Conclusion

|  | Persons | human acts and <br> behaviors | divine acts and <br> behaviors | Animals |
| :--- | :--- | :--- | :--- | :--- |
| EBH 1 | 'atarâ, nezer |  |  |  |
| EBH 2 | 'aṭarâ, nezer | 'aṭarâ,nezer | 'aṭarâ |  |
| EBH 4 | 'aṭarâ, nezer | 'aṭarâ, nezer | 'aṭarâ |  |
| LBH 1 | 'atarâ, nezer, <br> keter |  |  | keter |
| LBH 2 | 'atarâa |  |  |  |
| LBH 3 | 'atarâa |  |  |  |

Table 5. Summary table of classes and functional languages
The lexeme nezer is a headdress typical of royalty, if worn by a king, or religious power, if worn by an high priest. In the latter case the genitival rela-
 This kind of headgear can't be worn by someone who does not have a religious or royal power.

The lexeme keter only occurs in LBH 1 in Ester book. Since this kind of headgear is worn by two queen but not by a king, it is possible to assume that this lexeme is not strictly related to kingship, but to high-ranking status.

The lexeme 'atarâ mainly occurs in EBH 2, though its occurrences are widespread in the other functional languages. It is often used in a metaphorical way and the context where it appears is not always related to kingship. The lexeme may be used to refer to a generic headdress, a crown or a garland depending by the circumstances.

It is important to point out that these three lexemes never refer to a divinity. The deity never worn a crown, although may hold the authority to enthrone and crown a king. Thereafter nezer, keter and 'atarâ are typical of human king-
ship. 'attarâ even occurs in everyday life context, while regarding nezer and keter it is possible to note that in all the occurrences in which they appear, the social importance of the person to whom these lexemes refer seems to be highlighted.

In conclusion we can assert that these lexemes, whit the exception for keter, appear mostly in the Early Biblical Hebrew and decrease in the Late Biblical Hebrew.

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## Glottodidattica

## Language Teaching

# L'apprendimento linguistico tra parametri e transfer 

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#### Abstract

: This article investigates the relation between L1 and L2 in the light of the transfer phenomena. More precisely a revision of the UG notion and parameter is proposed on the basis of the mentalist model proposed within the bio-linguistic program in some recent works by Chomsky. The idea being discussed here is that parameterization is a phenomenon associated with the externalization of linguistic expressions in terms of lexical and morpho-syntactic properties, on the basis of the basic properties of language. The notion of language coincides with a specialized cognitive capability, i.e. the combinatory mechanism (Merge), whereas its application implies the interaction with the external interpretive systems, namely sensory-motor and conceptual-intentional systems. As a consequence, transfer, as depending on the morpho-lexical organization of languages, is a mechanism that does not call into question the cognitive nature of language. On the contrary, we have to look at transfer as the natural solution for the acquisition of L2.


Keywords: L1 and L2 acquisition, parameter, transfer, $U G$

Le differenze morfo-sintattiche e lessicali tra le lingue rappresentano lo spazio teorico e metodologico nel quale si inserisce l'apprendimento di L2. La variazione tra le lingue può essere ricondotta a un insieme di principi e categorie fondamentali e universali, su cui si costruiscono la conoscenza di L1 e quella di L2. Tradizionalmente, è la nozione di parametro che spiega il rapporto tra facoltà di linguaggio (Grammatica Universale, GU) invariante e differenziazione linguistica, nel senso che i parametri corrispondono a modi diversi nelle lingue di lessicalizzare primitivi semantici e strutturali del linguaggio. Nello specifico, questa nozione spiega anche la relazione tra L1 e L2. Tuttavia, come nota White (2003), la teoria della GU e del parameter setting non è una vera teoria della transizione in direzione dell'acquisizione di L1 o L2; la transizione mette in gioco, nel caso di L2, la capacità di riconoscere un parametro e di modificarlo oppure l'effetto di filtraggio che la
grammatica di L1 può esercitare su L2, inibendo o facilitando la percezione e il riconoscimento delle proprietà di L2.

Questo articolo esamina il rapporto tra L1 e L2, e alcuni aspetti del transfer. In particolare, propone una revisione delle nozioni di GU e di parametro nella prospettiva glottodidattica, sulla base del modello mentalista definito nel programma biolinguistico in alcuni recenti lavori di Chomsky (Chomsky 2005, 2016; Berwick e Chomsky 2016). L'idea discussa è che la parametrizzazione, cioè la fissazione di proprietà morfosintattiche, è un fenomeno di superficie rispetto alla "Proprietà Basica" del linguaggio:

Proprietà Basica: (1) un Sistema computazionale interno che costruisce espressioni gerarchicamente strutturate con interpretazioni sistematiche alle interfacce con due altri sistemi interni, cioè (2) un Sistema senso-motorio per l'esternalizzazione come produzione e analisi e (3) un sistema concettuale per l'inferenza, l'interpretazione, la pianificazione, e l'organizzazione dell'azione - informalmente chiamato "pensiero". (Berwick e Chomsky 2016: 11) ${ }^{1}$

Le frasi generate dal Sistema computazionale sono soggette al processo di esternalizzazione, "che converte gli oggetti sintattici interni in entità accessibili al sistema senso-motorio (morfologia e fonologia)" (Berwick e Chomsky 2016: 82). È quindi il processo di esternalizzazione che dà luogo ai fenomeni di variazione e differenziazione linguistica, in quanto a partire da un nucleo computazionale universale le lingue hanno mezzi morfologici e fonologici diversi per rendere accessibili le frasi. Ci possiamo aspettare che un parlante applichi la morfologia e la fonologia di una lingua (ad esempio, quella nativa) nel processo di esternalizzazione di L2, se manca della necessaria padronanza di L2. In questo senso, il transfer è un fenomeno collegato al trasferimento degli ‘oggetti' sintattici interni all'interfaccia senso-motoria, che non mette in discussione la natura cognitiva della lingua e che, al contrario, ci dobbiamo attendere come soluzione naturale all'acquisizione di L2.

## 1. Forme di relativismo naturalistico

I paradigmi anti-mentalisti correlano le espressioni linguistiche a fattori extralinguistici - tipicamente il contesto comunicativo - in base a una prospettiva che risale almeno agli approcci comportamentisti (Bloomfield 1933, 1942; Skinner 1957), per i quali l'apprendimento di una lingua - sia L1 che L2 - non è distinto dall'apprendimento in genere. L'apprendimento linguistico è ricondotto a un meccanismo privo di un livello specializzato

[^55]di elaborazione di natura psicologica o mentale (cf. Chomsky 2000 sul contrasto tra naturalismo e mentalismo). Ciò vale anche per gli approcci non propriamente comportamentisti, come il costruzionismo piagetiano (Piaget 1968 [1923], 1969 [1952], 1980) che vede l'apprendimento, anche linguistico, come il risultato del processo tramite il quale il bambino fa esperienza e percepisce il mondo esterno (cf. Piattelli-Palmarini 1980). Così, la "usagebased theoretical perspective" proposta da Tomasello $(2006,2008)$ come modello dell'acquisizione del linguaggio assume che il linguaggio è raggiunto per mezzo di una procedura di generalizzazione che utilizza "concreti pezzi di lingua", cioè costrutti/espressioni linguistiche, che "comprende molteplici elementi linguistici usati insieme per una funzione comunicativa relativamente coerente" (Tomasello 2006: 258). In questa prospettiva, la proprietà fondamentale del linguaggio è la sua natura simbolica, che poggia sulla capacità umana di capire le intenzioni comunicative, di avere una 'teoria della mente' dell'interlocutore. Tomasello (2003) riconduce questo meccanismo ad abilità cognitive che emergono nell'ontogenesi umana intorno ai 9-12 mesi, come il prestare attivamente attenzione a persone, oggetti, comportamenti e l'imitare i comportamenti intenzionali degli altri. Sono insomma alcune procedure come l'imitazione e l'a nalogia che, sospinte dall'attenzione, determinerebbero il formarsi delle strutture linguistiche.

L'ipotesi che la pragmatica guidi la correlazione (mapping) tra sintassi e semantica è sostenuta da alcuni autori sulla base dei numerosi fenomeni nei quali l'interpretazione completa o integra l'informazione sintattica. Ne deriva una concezione del linguaggio che riconduce le costruzioni morfo-sintattiche a principi di ordine funzionale. Di conseguenza, non vi sono veri universali, se non quelli extralinguistici, a cui gli enunciati ricorrono per ogni singola lingua, come sintetizzato da Croft (2005: 309):
[...] virtualmente tutte le strutture grammaticali formali sono specifiche di ogni lingua e specifiche per ogni costruzione. Questo non vuol dire che le categorie e le costruzioni sono casuali. Ci sono universali soggiacenti alla diversità grammaticale delle lingue del mondo. Ma gli universali sono funzionali, cioè, semantici/ pragmatici/discorso-funzionali.

In alte parole, non vi sarebbero generalizzazioni o regolarità prevedibili tra le diverse lingue e nemmeno all'interno di una stessa lingua. Un esempio spesso riportato è quello contro le "relazioni sintattiche", per cuil le "molte pretese relazioni sintattiche sono in effetti semantiche" (Croft 2005: 289). In approcci che escludono o rendono marginale l'esistenza di una specifica facoltà cognitiva associata al linguaggio, i fattori extralinguistici della comunicazione e della cultura di una comunità hanno un ruolo decisivo nel determinare le caratteristiche delle lingue. Le espressioni linguistiche sono contemporaneamente ciò che viene associato alla situazione e ciò che permette di individuare
la situazione. Nello stesso tempo, restano fuori dalla portata della spiegazione alcune proprietà specifiche delle lingue naturali, come sintassi, categorie morfosintattiche e semantiche, fonologia, organizzazione del lessico, ecc.

Una posizione estrema sul rapporto tra dispositivi pragmatici e comunicativi e lingua è proposta in Everett (2005) in merito alla particolare semplicità strutturale e lessicale della lingua amazzonica Pirahā. La mancanza dell'incassamento di frasi e complementi, il lessico numerico, quantificazionale, temporale ridotto e l'inventario essenziale di pronomi sarebbero in rapporto con la cultura elementare di questo gruppo, priva di miti e di finzione, di espressioni artistiche, di memoria collettiva o individuale che superi le due generazioni, e dotata di un sistema di parentela molto semplice. Secondo Everett (2005) le proprietà morfosintattiche e lessicali della lingua Pirahã rifletterebbero il fatto che i Pirahã non hanno la possibilità di "discutere di cose al di là dell'esperienza immediata". Nevins, Pesetsky e Rodrigues (2007) replicano affermando che le proprietà trattate da Everett come lacune corrispondono a normali strutture grammaticali, ampiamente attestate nelle lingue conosciute; in secondo luogo l'ipotesi di una corrispondenza verificabile tra i tratti grammaticali in esame e specifiche proprietà culturali sarebbe infondata. La prova principale è l'esistenza di somiglianze e corrispondenze con sistemi grammaticali diversi parlati da popolazioni di cultura diversa.

È noto che la connessione tra rappresentazione del mondo reale e strutture linguistiche è molto debole, anche se forse rintracciabile in fenomeni per cui la singola lingua rende disponibile il lessico al pensiero (Levinson 2003). Come ricorda Sapir (1921: 216, 217):

Il contenuto latente di tutte le lingue è lo stesso. La scienza intuitiva dell'esperienza [...] La cultura può essere definita come: ciò che una società fa e pensa. La lingua è un particolare come del pensiero. [...] è facile dimostrare che lingua e cultura non sono apparentate intrinsecamente. Esistono lingue del tutto diverse che partecipano ad una stessa cultura, esistono lingue intimamente apparentate anche con una sola lingua che appartengono a tipi di cultura distinti [...]. (Sapir 1921: 180)

In conclusione, tutte le lingue rappresentano altrettante attuazioni di uno stesso programma geneticamente guidato. Non a caso è possibile individuare le proprietà universali condivise da tutte le lingue naturali che definiscono la facoltà di linguaggio (Pinker e Jackendoff 2013). Non vi sono quindi lingue più perfette di altre, né sembra possibile individuare in alcuna lingua una forma linguistica primitiva. L'organizzazione lessicale e morfologica delle lingue può modellare in modi diversi la rappresentazione delle proprietà del mondo esterno, influenzando la sensibilità dei parlanti nei confronti di distinzioni concettuali preesistenti. Dehaene, Izard, Pica e Spelke (2006), in uno studio sui primitivi concettuali della geometria in un gruppo isolato
di indigeni dell'Amazzonia, la cui lingua ha un lessico ridotto per i concetti aritmetici, geometrici o spaziali, osservano che

La conoscenza geometrica può essere arricchita in maniera sostanziale da invenzioni culturali tali come mappe, strumenti matematici o i termini geometrici della lingua. Al di sotto di questa frangia di variabilità culturale, comunque, la comprensione spontanea di concetti geometrici e di mappe da parte di questa remota comunità umana fornisce evidenza che il nucleo delle conoscenze geometriche, come l'aritmetica di base, è un costituente universale della mente umana. (Dehaene, Izard, Pica, Spelke 2006: 384)

Possiamo pensare che vi sia un livello di concettualizzazione del mondo esterno su cui si innestano le forme linguistiche e che in questo spazio si determini la variazione morfosintattica e lessicale. Quest'ultima non implica differenze nella facoltà di linguaggio né nell'organizzazione cognitiva generale, ma rivela l'uguaglianza della dotazione iniziale.

## 2. La lingua nella testa

L’essenza del linguaggio è quella di strumento del pensiero (Chomsky 2016). Una lingua è un sistema di conoscenza raggiunto e rappresentato internamente nella mente/cervello del parlante, che Chomsky $(1986,1988)$ definisce Lingua-I(nterna). L’essere umano sviluppa la Lingua-I in virtù della sua dotazione cognitiva, e in particolare di una facoltà specializzata della sua mente, la facoltà di linguaggio, che può essere concepita come un insieme di istruzioni e di proprietà che circoscrivono la classe delle lingue possibili. Anche se nell'indagine pedagogica e glottodidattica il mentalismo chomskyano è presentato nella vulgata concettuale degli anni Settanta-Ottanta, nella quale la nozione di Grammatica Universale detta in maniera univoca la forma delle lingue possibili e il legame con gli aspetti pragmatici non trova spazio, è più utile tener conto della cornice concettuale successiva. Infatti i lavori che seguono la proposta minimalista e che definiscono il cosiddetto programma biolinguistico (Hauser et al. 2002; Chomsky 2005; Berwick e Chomsky 2011) forniscono una chiave di lettura e una base concettuale adeguate a rendere conto dell'interazione tra lingua, comunicazione e apprendimento. La Lingua-I è un sistema cognitivo così definito in (Chomsky 2016: 29):

Qualsiasi lingua fornisce una gamma illimitata di espressioni strutturate, che ricevono interpretazione alle due interfacce, senso-motoria per l'esternalizzazione e concettuale-intenzionale per i processi mentali. (Ibidem)

L'interpretazione comprende l'articolazione e la percezione/riconoscimento dei suoni e, secondariamente, dei simboli grafici (sistema Senso-motorio SM) e il sistema Concettuale-Intenzionale (C-I). I due sistemi esterni sono capaci-
tà cognitive necessarie "per padroneggiare una qualsiasi lingua". La proprietà elementare che dà luogo alle espressioni linguistiche e alla loro organizzazione gerarchica è l'operazione che combina due oggetti (sintattici) in un nuovo oggetto, l'operazione di Merge (Chomsky 2016).

La variazione tra lingue non è arbitraria, ma riflette i limiti imposti dalla nostra facoltà di linguaggio, e dipende essenzialmente dalla maniera in cui gli elementi lessicali di una lingua introducono le categorie concettuali su cui opera la computazione sintattica:

La Lingua-I consiste di una procedura computazionale e un lessico. [...] C'è ragione di credere che il sistema computazionale è invariante, virtualmente. [...] la variazione linguistica appare risiedere nel lessico. [...] Il collegamento di concetto e suono può essere acquisito sulla base di prove minime, così la variazione qui non è sorprendete. [...] la variazione può essere limitata ad aspetti formali della lingua il caso dei nomi, la flessione verbale, e così via. (Chomsky 2000: 120)

La variazione risiede quindi nel trasferimento (esternalizzazione) delle strutture generate dal meccanismo sintattico ai sistemi interpretativi, in particolare al sistema SM, associando ai significati gli elementi lessicali della lingua specifica (Berwick e Chomsky 2011).

La progressiva revisione chomskyana identifica il linguaggio con una struttura cognitiva biologicamente determinata, che comprende categorie concettuali universali che concorrono a fissare il lessico delle diverse lingue, incluse le categorie grammaticali (Chomsky 2000, 2002). Gli elementi lessicali saranno cioè acquisiti dal bambino esposto agli enunciati della sua lingua nativa sulla base di 'schemi concettuali' che sono parte dello stadio iniziale della facoltà di linguaggio. Così,
$i$ concetti di natura locativa e agentiva, di movimento, etc. entrano ampiamente nella struttura lessicale, spesso in modi del tutto astratti. Inoltre, nozioni come agente, ricevente, strumento, evento, intenzione e altri sono elementi pervasivi della struttura lessicale, con le loro specifiche proprietà e interrelazioni [...]. (Chomsky 2000: 62)

A differenza di quanto assunto o implicato da altre teorie e da molti approcci didattici, nei sistemi linguistici, le parole e le frasi non denotano individui, oggetti, eventi del mondo reale se non in forza delle condizioni pragmatiche in cui ricorrono:
[...] perfino i concetti più elementari del linguaggio umano non sono in relazione con oggetti indipendenti dalla mente secondo una qualche relazione referenziale tra simboli e caratteristiche fisiche identificabili del mondo esterno, come sembra essere universale nei sistemi di comunicazione animale. Piuttosto, sono creazioni dei "poteri conoscitivi" che ci forniscono di mezzi ricchi per riferirci al mondo esterno da precise prospettive, ma sono individuati da operazioni mentali che non possono
essere ridotte a una "particolare natura che appartiene" alla cosa di cui stiamo parlando [...]. (Chomsky 2004: 6)

In altri termini, le lingue non sono nomenclature, ma utilizzano l'indeterminatezza del significato come dispositivo chiave dell'interpretazione. Se gli elementi linguistici sono "operazioni mentali", cioè una sorta di istruzioni per l'uso non direttamente collegate al mondo esterno, un approccio semplicistico al rapporto tra lingua e messaggio appare insostenibile. Di conseguenza, le ipotesi sul rapporto tra lingua e cultura/pensiero risultano drasticamente ridimensionate. Questa conclusione si accorda con il reale processo di significazione, per cui l'idea ingenua che il significato delle parole sia definito in maniera univoca si scontra con il fatto che le parole e le frasi delle lingue hanno per natura un significato almeno parzialmente indeterminato, la cui interpretazione richiede il contesto extralinguistico (Jackendoff 1993). La comunicazione include la vaghezza, intesa come la produzione di "effetti cognitivi" non necessariamente decidibili e identificabili in maniera univoca (Sperber e Wilson 1996: 91, 260).

Siamo arrivati al problema della reciproca comprensione linguistica tra parlanti, cioè di che cosa significa "parlare la stessa lingua". La questione, ovviamente, è generale, e riguarda sia L1 e la sua acquisizione, sia la possibilità stessa di apprendere in senso proprio una L2. Naturalmente, gli approcci comportamentisti danno una risposta apparente, nel senso che l'apprendimento è frutto della ripetizione di espressioni prodotte da altri parlanti, suggerendo quindi un riconoscimento reciproco, anche se tutto da spiegare. Assumere la facoltà di linguaggio spiega gli aspetti essenziali dello sviluppo linguistico, ma restano alcuni interrogativi riguardo alla condivisione della stessa lingua e alla comprensibilità degli atti di comunicazione.

L’esistenza di un "linguaggio pubblico comune" in gruppi di parlanti che si capiscono tra di loro è una situazione derivata dal fatto che la LinguaI (o le Lingue-I) di ciascuno di essi è ampiamente o parzialmente simile a quella di ciascun altro. La reciproca comprensione tra parlanti, che, come si dice normalmente, parlano la stessa lingua, è assimilata da Chomsky al fatto che gli interlocutori stabiliscono una relazione di congruenza tra i loro enunciati, nel senso che ciascun interlocutore, nell'ascoltare l'altro, "assume qualche apparato di modificazioni che egli/ella deve calcolare" (Chomsky 2000: 30). La comprensione degli enunciati prodotti da un interlocutore è quindi un processo inferenziale, di approssimazione a strutture linguistiche basate su una stessa operazione combinatoria (Merge), che l'ascoltatore raggiunge elaborando i dati in entrata che, per ipotesi, assume identici a quelli che lui produrrebbe. L'unica struttura realmente condivisa è, perciò, la facoltà di linguaggio, intesa come l'insieme delle dotazioni basiche iniziali di ogni essere umano su cui si costruisce la propria lingua interna. Questa conclusione stabilisce un ordine e una prospettiva inusuali per la nozione di apprendimento,
inteso quindi prima di tutto come applicazione di strutture mentali innate in condizioni di comunicazione. Le componenti pragmatiche e i mezzi espressivi che le traducono in azioni hanno una radice genetica sviluppata spontaneamente durante il processo di acquisizione del bambino, che, nuovamente subisce le restrizioni dell'ambiente socio-culturale in cui vive (Baldi 2013; Baldi e Savoia 2017, 2018).

In particolare, se la comprensione è basata sul riconoscere una stessa operazione sintattica, ci possiamo aspettare ampi margini di differenza, vaghezza e mancata interpretazione delle produzioni di altri parlanti. Questo ci sembra un argomento particolarmente delicato, in quanto abbraccia la nozione stessa di insegnamento e apprendimento di L2. I sociolinguisti (Romaine 2000a; 2000b) e in generale gli studi sul bilinguismo ricordano che la maggior parte delle persone nasce e vive in ambienti bilingui. Naturalmente, le componenti emotive, socio-culturali e identitarie influenzano l'atteggiamento verso le diverse lingue che il parlante ha interiorizzato (Baker 2001), e, più specificamente, il parlante bilingue può avere una diversa padronanza delle due (o più) varietà linguistiche. Il grado di conoscenza di una varietà linguistica ne influenza l'utilizzo in base alle circostanze e, nello stesso tempo, la conoscenza di L2 non è necessariamente uniforme in tutte le sue componenti (lessico, morfosintassi, fonetica) (Romaine 2000a; Bee Chin e Wigglesworth 2001). In questo quadro, l'apprendimento di L2 risulta un fenomeno molto diverso rispetto a quello spesso rappresentato nelle interpretazioni di taglio pedagogico e metodologico in termini di rapporto tra L1 e L2. La conoscenza di più lingue è una condizione cognitiva usuale, e probabilmente imprescindibile della conoscenza linguistica, visto che almeno varianti stilistiche e di registro sono compresenti in qualsiasi parlante. Tuttavia, le lingue che un parlante padroneggia non sono conosciute in maniera uniforme, nel senso che ciascuna lingua corrisponde a usi, domini e motivazioni diverse (Romaine 2000a, 2000b; Bee Chin e Wigglesworth 2001). Di conseguenza è una idealizzazione la pretesa di fissare il grado di completezza della competenza di una lingua.

Le osservazioni precedenti ci inducono a riprendere brevemente lo schema acquisizione $v s$ apprendimento. Negli approcci glottodidattici si distingue usualmente tra acquisizione e apprendimento (Krashen e Terrell 1983; Krashen 1985; cf. Balboni 2006), dove l'acquisizione designa il processo di sviluppo della prima lingua (L1) su base spontanea e, come è usualmente asserito, inconscia. L'apprendimento sarebbe un processo secondario, consapevole, che sviluppa la conoscenza di un sistema linguistico (L2). L’età ha un ruolo decisivo per la capacità di sviluppare il tipo e il grado di competenza in una lingua (Jackendoff 1993, 2002), a cui possono corrispondere aree neurali parzialmente diverse. Se L2 viene acquisita prima degli otto anni, le parole di classe chiusa sono associate alle stesse strutture neurali di L1, mentre un'esposizione tardiva dà luogo a un’organizzazione cerebrale di L2 parzialmente diversa da quella di L1 (Fabbro 1999, 2004). L'esposizione prolungata
avvicina la competenza di L2, almeno dal punto di vista comportamentale, a quella di L1. Infine, le ricerche sull'apprendimento mostrano che avere più anni può indurre un miglior apprendimento iniziale, anche se gli adulti comunque rallentano mentre i bambini raggiungono un più alto grado di competenza (Cook 2008).

D'altra parte, è vero che l'acquisizione della prima lingua si protrae oltre il periodo più ristretto nel quale il bambino sfrutta le capacità cognitive legate alla memoria procedurale, con la conseguenza che anche L1 sfrutta strutture neurali associate a processi non impliciti. Inoltre, L2 può comunque ricorrere alle strutture specializzate per il linguaggio, come nei casi di L2 precoce. In ogni caso, il ricorso alla facoltà di linguaggio, cioè della struttura cognitiva che ci permette di sviluppare la conoscenza linguistica, sarà sempre disponibile anche nell'acquisizione di L2, come appare anche dal fatto che il formarsi di L2 è un processo soggetto a restrizioni non dissimili da quelle che valgono per L1. Lo sviluppo di L2 - per quanto possa coinvolgere strutture cerebrali parzialmente diverse da quelle di L1, per lo meno nell'apprendimento tardivo - riflette requisiti e un'organizzazione della conoscenza linguistica basati sulle stesse proprietà delle lingue materne, quali la combinazione sintattica, la ricorsività e il lessico, accanto alle condizioni pragmatiche. Questo suggerisce che la demarcazione tra acquisizione e apprendimento riguarda aspetti riguardanti l'interazione tra linguaggio e sistemi esterni, piuttosto che la sua organizzazione interna.

## 3. Da L1 a L2: la Grammatica Universale

In letteratura alla nozione di Lingua-I si oppone quella di LinguaE(sterna) (Chomsky 1986, 1995, 2000), per riferirsi a un "corpus di dati" - o come preferisce dire Chomsky (2016), a una concezione "debole" di lingua. Mentre la Lingua-I ha uno statuto scientifico chiaro, designando gli oggetti definiti dalla procedura computazione del linguaggio, Lingua-E ne è priva. La possiamo pensare come una maniera di specificare gli enunciati legata a variabili individuali, situazionali e sociali non falsificabili. Tuttavia, riferirsi alla lingua intesa come un insieme di pratiche enunciative associate a contesti e intenzioni è alla base di molti dei metodi di insegnamento di tipo comunicativo e funzionalista, nei quali la L2 è fatta coincidere con il suo uso. In realtà, è proprio la lingua-E, cioè enunciati prodotti in rapporto a situazioni e intenzioni, che rappresenta l'input per l'acquisizione del bambino e per l'apprendimento, guidato o spontaneo, di L2 nell'adulto. È interessante chiederci perciò se Lingua-E e Lingua-I sono incompatibili e così diverse. In che senso, inoltre, la dotazione innata - GU - interagisce con gli enunciati prodotti dai parlanti nel processo di acquisizione/apprendimento?

Spesso la nozione di Grammatica Universale è identificata con quella di dispositivo di acquisizione della lingua (LAD). In realtà, il LAD può inclu-
dere anche proprietà non strettamente linguistiche, dalla memoria all'attenzione, a procedure di segmentazione e analisi (White 2003; Cook e Newson 2007). In altre parole, la GU non è esplicitamente un modello del processo di acquisizione. Tuttavia, fin dalle prime formulazioni del modello innatista, la facoltà di linguaggio e l'insieme dei suoi principi (GU) sono stati visti come dispositivi che interagiscono con l'esposizione del bambino (e dell'adulto) ai dati primari, imponendo dei limiti alle grammatiche possibili.

La tradizionale nozione di parametro implica il ricorso a scelte tra soluzioni strutturali diverse che, almeno a partire dagli anni Ottanta, sono state viste come parte della GU, insieme ai principi invarianti del linguaggio. La linguistica educativa li ha utilizzati come chiave interpretativa delle fasi dell'acquisizione di L1 e dell'apprendimento di L2, alla base, sostanzialmente, delle interlingue e, in generale, delle lingue secondarie. La questione dell'accesso alla GU nel processo d'acquisizione di L2 è stata molto discussa in riferimento al modello parametrico. Infatti la facoltà di linguaggio può essere concepita come uno stato della mente/cervello del bambino dal quale inizia l'acquisizione, cioè la formazione della conoscenza della lingua particolare. Lo stato iniziale contiene le proprietà elementari generali delle lingue naturali, il formato di lingua possibile. Lacquisizione determina lo sviluppo di successivi stati che implementano possibili scelte (parametri) e un lessico, fino a raggiungere la conoscenza linguistica corrispondente a una Lingua-I particolare. La Lingua-Interna rappresenta lo stato stabile, che quindi coincide idealmente con lo stato iniziale fissato su un determinato lessico e su determinati principi e proprietà strutturali (Cook, Newson 2007).

Nel caso di L2, l'accesso allo stato iniziale di L1 non è più possibile, visto che il parlante ha già fissato i parametri della GU sulla propria lingua. Di conseguenza, lo sviluppo di L2 parte dallo stato stabile di L1 e dalle istruzioni in esso contenute per raggiungere un qualche livello di conoscenza di L2. In questo quadro teorico, il compito del parlante è quello di sviluppare una lingua ricavando istruzioni relative alle proprietà della GU dallo stato stabile di L1 o basandosi solo su L1. Sono gli enunciati effettivamente ascoltati a fornire le prove positive, o le prove negative indirette, cioè la presenza o la mancanza di enunciati di un certo tipo. D'altra parte, è difficile capire come possa realizzarsi l'apprendimento di L2 se questo processo non potesse attingere le proprietà della facoltà di linguaggio. Se assumiamo che la GU non è altro che lo stato iniziale che verrà modificato dall'esposizione a L 1 , dovremo necessariamente prevedere un certo grado di interferenza di L1 su L2, come mostrano i fenomeni di transfer osservati in letteratura. Ci possiamo perciò aspettare che l'apprendente ricorra alla sua conoscenza linguistica nel processo di sviluppo di L2 (Cook 2008).

Il compito dell'apprendente - bambino o adulto - è, in ultima analisi, acquisire i dispositivi di esternalizzazione corrispondenti a quelli di L2 nativa,
cioè un particolare insieme di elementi lessicali e funzionali, e di proprietà relative all'ordine superficiale, sulla base dell'evidenza fornita dagli enunciati in L1 o L2. Ci possiamo aspettare perciò che i dispositivi morfo-sintattici, lessicali e fonologici di L1 influenzino L2 (Cook e Newson 2007; Cook 2008; White 2003). Seguendo Chomsky (2005), possiamo pensare la GU come l'insieme di principi che viene imposto sui dati primari a cui il bambino è esposto nel processo di acquisizione di L1 e che definiscono il formato di lingua possibile:
[...] il nucleo teorico del linguaggio - Grammatica Universale (GU) - deve fornire, in primo luogo, un inventario strutturato di voci lessicali possibili correlate o forse identiche ai concetti che sono gli elementi dei "poteri conoscitivi", talvolta ora visti come un "linguaggio del pensiero" [...]; e, secondariamente, mezzi per costruire a partire da questi elementi lessicali la varietà infinita di strutture interne che entrano nel pensiero, nell'interpretazione, nella pianificazione e negli altri atti mentali umani, e che sono qualche volta messe in azione includendo l'esternalizzazione [...]. (Chomsky 2005: 4)

La Proprietà Basica delle lingue naturali, le categorie semantiche universali, il lessico del linguaggio del pensiero, e il meccanismo che genera le frasi sono presenti nel bambino fin dall'inizio dello sviluppo di L1. Infatti, i bambini molto piccoli capiscono espressioni molto più complesse di quelle che sono in grado di dire, suggerendo l'effetto di restrizioni estranee alla facoltà di linguaggio, come limitazioni nella memoria e nell'attenzione (Chomsky 2005). In altre parole la GU è immediatamente disponibile al bambino, come ci possiamo attendere per una proprietà geneticamente fissata.

## 4. Transfer e $G U$

Rivediamo, a questo punto, come il ripensamento della natura della GU in termini di Proprietà Basica invariante modifica le ipotesi sull'apprendimento di L2, all'interno di quello che Chomsky chiama "paradigma biolinguistico". Le opzioni parametriche sono rilette come modi differenti di lessicalizzare lo spazio semantico del linguaggio tramite il lessico; il processo di esternalizzazzione interagisce con i fattori dell'esperienza esterna e con i principi non specificamente linguistici, portando a fenomeni di variazione, come suggerito in (1).
(1) Proprietà Basica [Merge] + categorie concettuali
differenze linguistiche $=$ esternalizzazione/morfologia e lessico $\rightarrow$ sistema
SM/sistema C-I
Come abbiano visto, le proprietà basiche/GU restano comunque accessibili, se è tramite queste che le persone si capiscono, anche parlando la stessa L1. Il ricorso al meccanismo di combinazione permette alle persone di riconoscere e interpretare le espressioni linguistiche emesse da altri parlanti. In
presenza di lessicalizzazioni uniformi si parla la stessa lingua. Possiamo pensare che quindi sia comunque disponibile, sia per l'acquisizione di L1, per l'uso di L1 e per l'acquisizione di L2. È una proprietà mentale degli esseri umani. In conclusione, se l'apprendente non acquisisce le specifiche proprietà veicolate e esternalizzate dal lessico di L2, a parte il ricorso alle proprietà basiche della facoltà di linguaggio, potrà fare affidamento sui corrispondenti elementi della sua prima lingua. Vi sono prove evidenti e ben note della rilevanza della Proprietà Basica nel processo di acquisizione di L2. Nel caso delle lingue di apprendimento, cioè L2 acquisite da adulti in maniera spontanea, e delle lingue miste e in generale nei fenomeni di code-mixing, il meccanismo combinatorio si preserva indipendentemente dall'esternalizzazione morfo-lessicale, rendendo possibili espressioni leggibili ai sistemi SM e C-I (vedi la discussione in Baldi e Savoia 2017, 2018).

Consideriamo brevemente il parametro del soggetto nella prospettiva di L2. La domanda classica è come fa il parlante a trattare la lingua che acquisisce come lingua a soggetto nullo o a soggetto obbligatorio. L’apprendente può applicare la regola che emerge nelle produzioni dell'adulto, per cui in inglese il soggetto ricorrerà sempre, mentre in italiano o in spagnolo questo non avviene. Resta vero che la scoperta di un eventuale principio sottostante non è evidente né usualmente a portata di una riflessione consapevole da parte dell'apprendente. Al rapporto tra soggetto e verbo la letteratura ha associato anche altri fenomeni sintattici: la posizione post-verbale del soggetto stesso e l'estrazione del soggetto interrogativo dalla frase incassata. Le lingue che escludono il soggetto nullo escludono anche gli altri due costrutti, come illustrato in (2) dal confronto tra italiano, inglese e francese.
(2) a. (loro) parlano
b. hanno parlato gli autori
c. chi pensi che parlino?
a'. *(they) are speaking 'stanno parlando'
b'. *have spoken they 'hanno parlato loro'
c'. *who do you think that speaks? 'chi pensi che parli?'
a". *(ils) parlent 'parlano'
b". *ont parlé les enfants 'hanno parlato dei bambini'
c". *qui pense-tu que est venu? 'chi pensi che sia venuto?'
Potremmo pensare che la distribuzione del soggetto nullo $v s$ obbligatorio rifletta una differenza nella flessione nominale del verbo, per cui lingue come l'italiano, a soggetto nullo o pro-drop, possono fare a meno di un soggetto lessicale espresso in quanto dotate di flessione verbale distinta per persona e numero, che quindi rende sempre interpretabile il soggetto. Lingue come l'inglese, il tedesco, il francese e molte altre, dette a soggetto obbligatorio/non
pro-drop, in quanto totalmente o parzialmente prive di una lessicalizzazione distinta della persona, richiedono che un soggetto lessicale o pronominale sia comunque realizzato per ottenere una frase ben formata, cioè interpretabile. ${ }^{2}$ Così, in inglese, una frase come are reading a book di per sé si associa sia alla 2 ps che a tutte le persone plurali; came da solo si riferisce a tutte le persone. Questa spiegazione non è comunque soddisfacente. Infatti lingue come il cinese o il giapponese ammettono frasi senza il soggetto espresso (Huang 1984) anche se il verbo manca di flessione di accordo (persona, genere e numero) col soggetto. E, viceversa, vi sono lingue con flessione di accordo che richiedono il soggetto espresso.

Il parametro del soggetto nullo (pro-drop) è stato indagato sia in merito all'acquisizione di L1 che in merito a quella di L2 (Cook e Newson 2007; Cook 2008). Le ricerche di Hyams $(1986,1992)$ sull'acquisizione dell'inglese come L1 hanno mostrato che nelle prime produzioni i bambini trattano l'inglese come una lingua pro-drop, producendo frasi come (3):
(3) read bear book
'leggo il libro dell'orso'. (Cook e Newson 2007: 211)
Lo stesso fenomeno è stato osservato per i bambini che acquisiscono il tedesco come L1 (White 2003). Questo suggerisce che la GU non contempla una scelta tra pro-drop o non pro-drop, ma si affida alle prove positive offerte dalla sintassi delle frasi adulte.

Per quanto riguarda l'apprendimento di L2, Cook (2008) ricorda che alcune ricerche sull'apprendimento dell'inglese da parte di ispanofoni e francofoni mostrano che gli ispanofoni hanno una maggiore tolleranza per frasi inglesi prive di soggetto rispetto ai parlanti con L1 francese. D'altra parte, parlanti inglesi che apprendono lo spagnolo non mostrano particolari difficoltà a omettere il soggetto. Quindi, la prova positiva, cioè l'occorrenza di determinate strutture, è decisiva nel fissare il tipo di sintassi. D'altra parte, la mancanza di prova negativa, come appunto nel caso dell'inglese appreso da ispanofoni, lascia libera l'applicazione di GU, come ci possiamo aspettare se è il processo di esternalizzazione che guida l'apprendimento di dispositivi morfo-sintattici delle specifiche lingue. A simili conclusioni portano anche altri fenomeni di apprendimento di L2, come nel caso dell'elemento interrogativo del cinese mandarino. Nelle interrogative di lingue come l'italiano e l'inglese, oltre al riordino tra soggetto e verbo, troviamo la posizione alta dell'elemento interrogativo, che lessicalizza la forza illocutiva, come in (4a, $4 a^{\prime}$ ). In cinese questo non è richiesto, e l'elemento interrogativo rimane in

[^56]posizione argomentale, alla destra del verbo, come in (4b). Saranno sufficienti le proprietà lessicali degli elementi interrogativi a attivare il tipo di domanda. In italiano e in inglese, gli elementi interrogativi sono dotati di proprietà lessicali specializzate caratterizzabili come [+Interrogativo]; al contrario, in lingue dove l'elemento interrogativo resta in posizione bassa, come in (4b) per il cinese, dovremo ammettere che ha proprietà diverse.
(4)
\[

$$
\begin{array}{ll}
\text { a. } & \text { che cosa farai? } \\
\text { a. } & \text { what will you do? } \\
\text { 'che cosa farai?' } \\
\text { b. } \quad \text { nǐ míngtiān zuò shénme } \\
\text { tu domani fare che cosa? }
\end{array}
$$
\]

c.


A differenza degli interrogativi italiani o inglesi, quelli cinesi ricorrono anche come quantificatori indefiniti (Li 1992, Lin 2014), implicando quindi differenti proprietà lessicali e sintattiche che spiegano la diversa distribuzione dei due tipi interrogativi. La forza illocutiva è la stessa, ma lingue come l'italiano e l'inglese la esprimono con elementi specializzati che segnalano la portata dell'interrogazione, mentre il cinese utilizza quantificatori che restano nella posizione argomentale. I dati disponibili sull'apprendimento di italiano L2 da parte di madrelingua cinese non mostrano particolari difficoltà per quanto riguarda la posizione alta degli elementi interrogativi italiani. Questa può essere vista come una conferma del fatto che gli interrogativi cinesi e italiani hanno proprietà lessicali diverse che non interagiscono nel processo di apprendimento. In sostanza, ci possiamo aspettare che la prova esterna sia sufficiente a fissare l'esternalizzazione dell'elemento interrogativo.

## 5. Conclusioni

La discussione proposta in questo articolo ha evidenziato come il ruolo del transfer non è in contraddizione con l'ipotesi della GU in quanto proprietà specializzata del linguaggio, alla base dello sviluppo e del funzionamento della conoscenza linguistica. Per quanto gli approcci tradizionali abbiano individuato nell'errore e nell'analisi contrastiva tra L1 e L2 i principali inibitori di un soddisfacente apprendimento di L2, la letteratura successiva ha attribuito al transfer e alle interlingue un ruolo attivo e dirimente nella costruzione di L2. Questa conclusione trova un importante fondamento teori-
co nella revisione del quadro mentalista proposta nei termini del programma biolinguistico formulato da Chomsky e altri autori in questi ultimi anni. Le nozioni di GU/facoltà di linguaggio e di lingua sono state definite come proprietà conoscitive in rapporto con il processo di esternalizzazione. La nozione di linguaggio è venuta a coincidere con una capacità cognitiva ristretta, il meccanismo combinatorio, mentre la sua applicazione implica la relazione con i sistemi esterni, percettivo/motorio e concettuale/intenzionale. In questa prospettiva, i processi interpretativi entrano in gioco sia nell'acquisizione che nell'utilizzo della lingua. A maggior ragione, il ricorso a L1 nell'apprendimento di L2 risulta inevitabile nella misura in cui le proprietà basiche del linguaggio presenti in L1 sono condivise in L2, e la conoscenza di L1 fornisce le strutture di partenza per L2.

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# The Importance of the Transfer in Italian-Spanish Learning 

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#### Abstract

: This article analyzes the differences and similarities between Italian and Spanish and attempts to identify the most problematic areas. The mistakes appear where they are not expected and it is interesting to investigate the reasons for this. Most of these errors are due to the transfer phenomena which interest all levels of analysis, from lexicon to morphosyntax passing through phonology but in different ways. The continuity does not necessarily facilitate learning, particularly when many elements intervene such as the context, the type of learning and the learner's motivation. The linguistic transfer is a transfer of the habits that have been consolidated in their native language in the L2, it is also one of the most active mechanisms in the learning of a similar language. Contrastive Analysis is useful, not for a purely predictive purpose as it was in the past, because excluding the use of the L1 from didactics is not sufficient to prevent possible interference. The learner must have the possibility to access their linguistic heritage and activate the comparison. The transfer appears no more as a passive process over the learner but as an active process, or rather as a cognitive and communicative strategy.


Keywords: Contrastive Analysis, Interlanguage, Mother Language and Second Language, Transfer

It is known that Italian and Spanish are two very similar linguistic systems and this is a dangerous affinity. The apparent simplicity is the biggest difficulty that can be found in the learning of these languages. Furthermore, these languages are the ones that are the easiest easy to learn wrongly meaning that it is common for learners to have errors; moreover, they are the most difficult to master competently. Italian and Spanish seem reciprocally understandable, as the structure of their words are similar and sometimes almost equal, or identical. The perception of closeness can sometimes be a source
of mistakes that are caused by the transposition of sounds, forms and structures belonging to Spanish and Italian. These are the effects of the linguistic transfer, which consists of the linguistic transfer of the habits that have been consolidated in their native language in the L2, which can sometimes promote the learning of the Second Language, but more frequently disturb it. Generally, the interference tends to occur when the learner recognizes some similarity between the L1 and the L2 and thus formulates assumptions about the function of the L2 that are based on this similarity.

This article analyzes the differences and similarities between the two languages, identifying the most problematic areas and attempts to understand the causes. Most errors are produced in phonetics, syntax, and lexicon, while morphology tends to be spared. Some phenomena arouse curiosity because they are produced in seemingly harmless areas of the L2, where the correspondence with the L1 is almost perfect. The importance of the type of learning chosen is emphasized, in the case of spontaneous learning as it is more likely to rely on their knowledge than if a guided learning production is more controlled. It is important to highlight the error from the beginning to reflect the learner who will tend to choose words that are more distant from Italian. Equally fundamental are the motivation and social context of the learner, linked to communicative functions, which can favour or hold back the learning. The transfer is seen as an active process, in particular as a cognitive-type strategy, when the L1 is used not only as a source of hypothesis on the L2, but also as a communicative type.

## 1. The concept of Transfer

The transfer is one of the most relevant issues in the debate on learning and studying and specifically where similar languages are concerned. Kellerman and Sharwood-Smith (1986) propose a broader definition of transfer than the traditional one: Cross linguistic influence or rather "interlingual influence".

The first definitions of the concept are related to Structuralism and Contrastive Analysis (CA) which believed that the mother language (ML) influenced the learning of a second language (SL). The Behaviorists thought that every learning was conditioned by the previous ones meaning that the learner tends to transfer in the new language the structures of their native language (Lado 1957).

With the development of the innatistic theories; instead, the CA is attacked and consequently the theory of the transfer is discredited (James 1980). For many years this thought was neglected and continues to consider transfer as an inconsistent concept. It was easy to attack considering that the CA had focused on interference as a linguistic product and it wanted to find out where the negative action would have occurred, even though it admitted the existence of a positive transfer. The novelty that in the Eighties puts
everything at risk is the change of perspective: it began to be considered as a "process", or as a set of strategies for learning and production.

The transfer is not a transfer of linguistic habits, as it was in the past, but a group of cognitive mechanisms that intervene in each aspect of language: pronunciation, morphosyntax, vocabulary, etc. On the basis of this, the CA should be able to understand that interlinguistic contrasts can potentially create more barriers than remove them (Odlin 1989: 30). There is a fundamental need to highlight that it is not true; indeed, the differences are more problematic than the similarities are. This is due to the fact that the learning difficulties are not always directly proportional to the differences between the languages. In addition, the transfer does not only occur between the ML and the SL, but from any other linguistic knowledge to the new language. This aspect is very important given that there is usually only the opportunity to study Spanish after having already learned other languages, such as English and French.

The acquisition sequences are one of the most accredited criticisms of the transfer; it would be the same in the L1 as in the L2. Zobl (1980) believes that the L1 can probably inhibit as well as accelerate the passage, since interlinguistic convergence promotes the development of Interlanguage while differences would delay it, facilitating the fossilization. Trying to identify the linguistic characteristics of the L1 that create difficulties in the L2, together with the concept of "markedness" is fundamental, and understood in terms of complexity, low frequency, low productivity, less semantic transparency, or the estrangement from the basic structures of a language. Eckaman (1977) affirms that there are some predictable aspects; for example, the more marked the differences are linguistically between the L2 and the L1 the greater the difficulties may be. Instead, when the linguistic aspects of the L2 are different from the L1, but not noticeably; nonetheless there are fewer complexities. These could be valid and diverging explanations for many learning issues and for the mistakes that are made by learner's, however, there are some other doubts that need to be clarified such as the possibility to transfer marked structures where the concept of transferability can facilitate learning.

The perceived distance is understood as the hypothesis formulated concerning the typological proximity between the L1 and the L2, which is experienced by learners, and it is one of the main mechanisms that activates the transfer even if the typological similarities do not guarantee the positive transfer. In order to predict the hypothetical effects of contact between the L 1 and the L2, the notion of distance must be integrated with the concept of "transferability", based on the learner's perception of the structures of the L1. As Kellerman (1983) suggests, the degree of transferability of a linguistic element is inversely proportional to the degree of markedness in a psycholinguistic sense.

The transferability, within certain limits, is determined by the L1 independently of the L2, but some structures are so specific to the L1 that these
may be neutral, therefore transferable. In others words, some particularly marked forms can be transferred to a close language, while other poorly marked structures may be non-transferable in a language that is very distant from the L1. The hypothesis of closeness allows native Italian speakers to transfer into Spanish even the most marked forms, so theoretically these are not loanwords. These processes are not constant in the course of learning; they evolve concurrently with numerous factors, such as the level of the learner's performance and their metalinguistic awareness. Kellerman (1983) maintains that beginners tend to transfer even the marked forms in the L2, based on the interlinguistic similarities. Intermediate-level students are more aware of the actual differences between the two languages and they are disappointed by their mistakes, and would subsequently tend to be more cautious. However, at the advanced stages of learning, learners would again be inclined to transfer.

This procedure is called U-shaped and it is clearly observable in Italianspeaking language learners, who approach the new language with confidence, thanks to the similarities, and reach the first results in a short time. It is followed by a critical phase during which they distance themselves from the problematic L2 and try to avoid the transfer, but the habit to resort to it will return, also for marked structures. The tendency to mix the two languages is quite common even at the most advanced levels (Bizzoni and De Fina 1992).

Recently, Selinker and Lakshmanan (1992) have shown that the transfer is one of the main causes of fossilization. This is also based on the reality of similar languages learners: often, the rapid initial progress is followed by fossilization and, unfortunately, the negative effects of the transfer are extremely difficult to eradicate. Considering the similarities between the two languages, the fossilization of interference does not inhibit communication decisively and the learner prefers to remain at the level attained.

In sum, in the specific case of learning similar languages it is necessary to underline the importance of the initial knowledge, the resources and of the use of different learning strategies based on the comparison between the L1 and L2. Furthermore, the variability of the distance perception determines oscillations between the moving towards and away from the language, as well as the rapid evolution during the first phases which is followed by a consequent tendency of braking.

## 2. Italian-Spanish: language comparison

The language habits associated with the L1 interfere with the learning of the L2 and they are therefore considered responsible for the quality of the production of the L2. Such use of behaviors already learned in the past are automatic and subconscious and can be distinguished as being either positive
or negative. Positive transfer occurs in cases where the structure to be learned does not differ from that one already acquired in the L1; hence, the executions are correct because it is only necessary to transfer the known behavior to the new situation. Instead, the negative transference gives rise to improper executions, because the behavior to which the learner is accustomed differs from that which is to be acquires. Of course, there are incorrect executions not deriving from the language habits of the L 1 and therefore not treatable in terms of transference (Baldi and Savoia 2018).

The relationship between the transfer and the other processes involved in the acquisition of the L2 has only been clarified partially. In fact, there are also present different mechanisms and the individual variations make any prediction uncertain. In didactics, it is necessary to take into account the most conspicuous manifestations and the most elusive effects, namely the avoidance or the overproduction of certain structures. Thanks to the discoveries made by the sociolinguists and the cognitive sciences, the transfer no longer appears only as a passive phenomenon, undergone by the learner, but also as an active process, otherwise as a cognitive-type strategy, when the L1 is used as a source of hypothesis on the L2, or as a communicative type (Santos Gargallo 1993: 147).

The transfer manifests itself in all aspects of the language, even though it may be in a different way, where they combine themselves with other mechanisms linked to the acquisition sequences and the linguistic universals. In the phonetic and phonological field, the influence of the L1 is more evident than in other areas. In fact, the comparison of Italian and Spanish phonological systems does not find any particular difficulties, but the phonetic differences can cause persistent interferences that clearly identify the learner's ML. While in French the phenomenon of nasalization multiplies the number of vocalic sounds as there are 16 phonemes, while Italian presents has seven and Spanish has only five phonemes. Given that the distinctive opposition between the two degrees of openness of $/ \mathrm{e} /$ and $/ \mathrm{o} /$, present in the Tuscan variant of Italian, has little functional performance and tends to disappear in the standard language, it could be argued that on a phonological level the vocalic systems of the two Languages coincides. However, not all pronunciation difficulties depend on the L1; among the new sounds for the learner, some of these are more difficult than others. Spanish does not contain many phonemes that do not exist in Italian, but phonetically there are numerous new concepts, and they are often sounds that are unknown in the main European languages, as they are not present; although the Italian native speaker as a learner could know these, as they exist in Italian. As in the case of fricatives variants of the voiced phonemes $/ \mathrm{b} \mathrm{dg} /$ and the distinction between open and closed variants of /e/ and /o/ exists in both Spanish and Italian, but with different distributions. Other obstacles come from the different correspondence between pronunciation and spelling, as well as the specific interference of the

Italian regional variants, an element that has to be into account considering the peculiar Italian linguistic configuration (Barone 1993: 79).

The consonant sounds are a similar, but more articulated and there is a substantial affinity on a phonological level, among the few phonemes excluded from the Spanish there are the unvoiced fricative $/ \mathrm{x} /$ and the unvoiced interdental $/ \theta /$, and the numerous phonetic contrasts that create persistent interferences at a productive level as well as the acquisitive difficulties. Conversely to the vocalic system, the French consonants show less novelty than the Spanish ones, among the major difficulties that could be encountered with the phoneme voiced fricative alveopalatal/3/, which exists in the Tuscan Italian. Hence, it can be deduced that if for an Italian the Spanish appears less distant than the French, it is due to the absence of "abnormal" vocalic phonemes, such as the anterior labial vowels, the nasal vowels, the indistinct vowels, which instead exist in French (Mazzotta 1984: 174). Thanks to this affinity, many Spanish words are recognizable to an Italian and the distance perceived at this level of contact is minimal, the L2 appears like a subsystem of the L1 rather than an autonomous system.

With regard to morphosyntax, it is more difficult to distinguish the transfer effects to those related to learning in general, the studies which tried to deny the evidence of the transfer concentrated on this subject. Some scholars believe that the transfer of inflectional morphemes, such as prefixes, suffix, etc., from the L1 to L2, are rare and irrelevant (Klein 1986: 27) while others affirm that the pronounced formal similarities make it possible (Odlin 1989: 85). The word order is very flexible in both languages, the similarities between their negative and interrogative constructions should allow a positive transfer, contrary to other areas of the syntax where the Italians experience difficulties due to specific constructions of Spanish, as the auxiliary forms and the verbal periphrases are complex. Influences from other second languages may also be detected, and from this perspective, Spanish offers native Italian speakers' numerous advantages from the initial contact, considering that the word order in the sentences is similar, it is not necessary to apply particular rules for the negative form or for the interrogative one. Therefore, simple demand-response interactions do not require acquisitive efforts, the only difference is the graphical signs of the question. It is rare that with a few elements learned the learner is able to construct a certain number of sentences, in any learning situation and with any method of study, it does not occur with any other language. However, this initial confidence is followed by a phase of discouragement in which progress is slower and interference is fossilized. The frustration depends not only on the deceptive affinity, but largely derives from the comparison with the structural difficulties of the Spanish, for example the use of Ser and Estar, the choice between the indicative and the gerund and the numerous verbal periphrases. The approach to these structural contrasts increases the
sensation of distance; the errors do not depend on the affinity between the two systems but by divergences.

The student's mind, which is now discouraged by the differences, it is vital to consider the influences that other languages, which are previously learned, can have on the learner. A significant example concerns the system of denial, which has a great parallelism between Italian and Spanish, and many differences between these two languages and French or English. In addition to the type of prevailing negation (Neg. + verb), Italian and Spanish share an intermediate position between the so-called negation perméable and the negation impernéable, for example the phrase No ha venido nadie and Nadie ha Venido in Italian becomes non è venuto nessuno and Nessuno è venuto. Positive transfer is expected from Italian to Spanish, but many students often have the conviction that "two dining affirm", tend to suppress one even in Spanish, pronouncing sentence such as: * Tengo ni frío ni calor, * Nadie Sabe Algo (Calvi 1982a: 17).

As far as lexicon is concerned, the beneficial effect of interlinguistic similarities is known, but the fact that lexical relationships involve negative interference in cases where formal similarities correspond to semantic or a different frequency in the use of similar words must not be underestimated. A key concept regarding the "false friends", or words that are formally close but dissimilar in meaning, can be found in some special dictionaries and also some manuals which contain a more or less full list. For the beginner students it is nice to discovere that in Spanish the word burro means "donkey" whereas burro in Italian means "butter", and that aceite means "oil" in Spanish and "vinegar" in Italian. But not all the false friends constitute an obstacle to learning, in some cases in fact the same word belongs to completely different contexts in the two languages so, once you pass the first approach, they are easily recognizable. However, the same cannot be said of terms which are similar also at the level of meaning because it creates a dense network of relations between the two languages that could create confusion at every level of learning, including bilingualism. These are some examples:

- Synononymousness or quasi-equivalence of signifier and meanings: the two languages share a large number of words that give the impression of an easy compression from initial contact. This favoursthe idea of closeness that will fail at the first production attempts. One example is the word profesor that for an Italian native speaker will tend to become * professor and the word farmacia that is pronounced as in Italian, omitting the emphasis on the "I".
- Equivalence or strong formal similarity, with differences in meaning: which cause the first instances of disappointment in the learner because
the illusion of an easy comprehension is disproved by the facts, for example the adjective embarazada would be too easy to translate with the Italian imbarazzata ("embarrassed") while the real meaning in Italian is "pregnant".
- Lexematicaffinity and morphological differences: this difference relates to verbs with prefixes or suffixes. An Italian native speaker tends to transfer the suffixes when conjugating verbs in Spanish, because of the perception of affinity, in fact, it is common to add the " o " instead of "a" in the endings of the Imperfect indicative (* Amabo, if not * amavo, instead of Amaba).
- Complete divergence: In addition to the problematic cases listed above, however, there are also others that underline the actual distance between the two languages, thus allowing the learner to pay more attention. A sentence such as «a la izquierda de la alfombra hay una butaca de terciopelo» ("to the left of the carpet there is a velvet armchair») does not allow one to imagine the meaning leaning on Italian, to be able to translate this it is necessary to know the new language (Calvi 1995: 87).

As it has already been observed, the perception of proximity and transfer condition the learning process of Spanish by Italian native speakers in each of the phases and in every linguistic sector, or more generally the acquisition of affinity languages. Therefore, the problem related to transfer are the psycholinguistic aspects of the acquisition of second languages more relevant for the teaching of Spanish to Italian speakers and Transfer means a diversified process and not only a negative mechanism that causes production errors known as interference of the LM.

Considering the ways in which the Spanish is perceived by the learners who are Italian native speakers, it emerges that the feeling of familiarity experienced initially does not remain constant over time and it does not apply equally to all aspects of the language. Proceeding in the study, the beginners abandons the initial illusion of being able to learner without any effort: the affinities have deceptive implications and the structural differences are higher than expected. The sense of distance strengthens, but the diversification are often subtle, and hidden by the similarity.

## 3. Types of learning

The type of learning chosen represents a decisive element, in case of spontaneous learning, there is more of an inclination to confide in one's knowledge and then fall into this kind of traps. Conversely, if it is a guided learning, although there is still a tendency to make these errors, the production is more controlled and highlighting errors from the initial phases pushes
the learner to the reflection and therefore he tries to be suspicious of what "it seems so easy". The learner will end up to choose words more distant from the Italian so as to not create confusion, for example between the Comenzar and Empezar verbs (begin) the choice will fall on the second one because it is different from the Italian Cominciare. Obviously, not even here can be excluded influences different than those related to L1, for example the wrong use of the verb Jugar in the English significance of playing (to play means both playing a guitar and playing football but not in Italian).

Undoubtedly, the aspect of discourse is the most delicate in terms of contrastive analysis, considering the difficult interaction of structural and pragmatic factors. This kind of comparison is particularly useful, in fact it has been observed that the violation of certain norms during the conversation in a particular language can be more prejudicial for the communicative purposes than grammatical errors or pronunciation (Odlin 1989: 48). The obvious cultural affinities between Italy and Spain reduce the serious misunderstandings, in the majority of cases, the positive transfer of discursive strategies favors the communicative exchange. In addition to the aspects already discussed, the SL learning involves a series of pragmatic and cultural factors and the methodology adopted by the teacher is decisive because a rigidly structuralist approach delays the direct contact with the Target language. In contrast, the so-called traditional methods promote cultural aspects, even though literary ones have precedence. On the basis of communicative approaches, however, there is a more social concept of culture, which includes the pragmatic implications of linguistic acts. However, despite the emergence of these methodologies, the acquisition of adequate communicative competence is still hampered by other factors such as a proper contrastive focus on the pragmatic regularity typical, which is of the languages in question (Ciliberti 1991: 45). It could be interesting to extend the CA from the phrase to the structure of discourse and to the sociocultural levels.

The possibility that an Italian native speaker acquiring a satisfactory communicative competence in Spanish and a rather large vision of the Spanish or Hispanic-American cultural reality, depends on the type of courses, in addition to the teacher's commitment and opportunities to have contact with native speakers or to stay in the Spanish-speaking countries. In any case, the learner will store various pieces of information of a pragmatic and cultural nature and come to formulate hypotheses of confrontation between their own culture and the foreign one. Especially in the first contacts with the Spanish language/culture, the student tends to perceive and interpret the new reality based on his conceptual type (Widdowson 1983) and the feeling of closeness can be stronger at the cultural level than at the linguistic one. The Italians perceive in the Hispanic world an affinity with their own and the whole is accentuated by the ease with which they manage to communi-
cate with the natives, contrary to other countries. Once again, there is the risk that the perception of closeness, true or presumed, prevents the recognition of differences, thereby reinforcing the weight of cultural stereotypes.

The subject of the Diaphasic variants, or the adoption of styles and registers adapted to the contextual variants, are particularly difficult for an Italian native speaker, and they are rarely addressed in the didactic activities. Mastering an SL which Eugenio Coseriu (1988: 180) defines as "Saber Expresivo" and understood as the ability to adopt the expressive style most suited to the communicative situation, is a task that requires prolonged exposure to the language. In this case the difficulties of Spanish for an Italian native speaker are certainly not less than those in any other SL. Many researchers agree that the entire linguistic experience of learning intervenes in the formation of Interlanguage, so if the learner knows more than one language, their approach to learning a third or a fourth one can be influenced. A multilingual education facilitates the formation of linguistic-cognitive strategies enriched by the comparison between the different systems (Titone 1981:359), but the psychological consequences of knowing many languages are not entirely clear because, in addition to the doubts about the acquisitive processes there are also the individual variants. The idea of closeness explains, at least in part, the greater or lesser transferability of the different elements of the student's linguistic heritage: the didactic experience together with some research confirm that in the italophones Spanish the interferences of the French are greater than those of other SLs; English is less transferable and German is most definitely not (Calvi 1982a). Even at a cognitive level, nothing prevents thinking that the learner uses the both L1 and any other linguistic knowledge as a starting point in formulating assumptions about the new language.

There are many extralinguistic factors, linked to individual variations (personality, age and attitudes of the speakers) or social (interactive contexts, prestige of the different linguistic codes) as well as the context of learning, which intervene in the transfer activation (Odlin 1989). The specific case of Spanish teaching in Italy, in institutional environments, means there is some decisive constant which for learning purposes have to be emphasized, such as the choice of Spanish as a second or third language, placing it in a subordinate position in relation to other languages. The choice can be dictated by the "ease" of the language, the personal taste, the pleasantness of the sounds and the sympathy of the speakers. All this accentuates the action of the transfer, both as recognition of affinities and as a barrier of interference. Exploiting the linguistic relationship can be an "economic" learning strategy for Italian native speakers, who are satisfied with the initial results and with the level achieved without feeling the need to improve it.

The other type of learning is the spontaneous one linked to the interaction with native speakers, this offers a privileged field to study the strategies
that elaborates the person to interact with the linguistic and cultural reality in which it is immersed. In the case of similar languages, the use of the transfer of structures or lexes of the L1 in the L2 is considered a highly productive strategy from a communicative point of view: the more the learner succeeds in developing hypotheses on the L2, the faster and cheaper the learning process will be. Interlinguistic similarities help the processes of understanding messages in the L2, it will be sufficient to elaborate a simple system of rules to communicate with the native speakers. The level of performance depends on different individual and social factors, but the immersion in the reality of the foreign country can facilitate the result. The use of these strategies cannot be accepted on a didactic level considering that the exposure to the language is not sufficient and, consequently, the passage between the various stages of the Interlanguage is slower and moreover, the transfer involves the negative implication of the Interference that the teaching must undertake to restrict.

Thanks to the studies of Meo Zilio (1993a: 559), it emerges that the contact resistance follows a descending order: phonemes-semantemi-mor-phemes-syntagmas, and that the phonetics and graphics formal similarity is the most decisive criterion. The phenomena of hybridisation involve the phonetic, morphosyntactic, lexical and stylistic plan, at the same time. They are inversely proportional to the degree of awareness of the L1 and directly proportional to the pressure of the L2. On a lexical level all the different forms of contamination are recorded: loans, casts, false etymology and hybrids. In other words, in countries where immigrants are a homogeneous group tending to preserve their identity with respect to the local environment, the L1 does not undergo any significant variations, even accepting influences from the L2. If the awareness of belonging to a well-defined group is lacking, the phenomena of contamination takes field, and if the similarities between the two linguistic systems are strong, there is the risk that the speaker could mix them. It could be concluded that in the reception of Spanish linguistic-cultural reality by Italian native speakers distance and closeness are combined, generating reactions of sympathy: "the new culture is not so equal to its own to be boring, nor so distant from discourage any effort made to approach to" (Calvi, 1995: 95).

In summary, although it is impossible to draw a precise map of interlinguistic influences on discourse, it is justified to think that the transfer of discursive structures interacts with the action of other subsets, in particular with the Syntax and Semantics (Odlin 1989). In conclusion, the active use of the transfer as a communicative strategy is particularly relevant in the contexts of spontaneous acquisition. In institutionalized teaching it is necessary to control the acquisitive process in order to avoid the fossilization of interlanguages particularly contaminated by L1, but it is useful to reinforce the cognitive strategies activated by the Learner in a spontaneous way.

## 4. Examples of interference errors in English L2 learning in Spanish-speaking speakers

Clearly, the first impact with the Spanish phonic chain causes an immediate sensation of familiarity, thanks to the substantial coincidence of the vocalic systems, although in theory the Italian vocalic phonemes in a tonic position are seven against the Spanish five. Consonantism is also similar, but the question appears to be a little more complex. First of all, the Spanish consonantic phonemes are less than the Italian ones (18 versus 21), there are also some phonemes that exist in Italian and not in Spanish such as the two alveolar affricates $/ \mathrm{ts} /$ and $/ \mathrm{dz} /$, and the voiced palatal affricate $/ \mathrm{ds} /$.

These gaps create numerous errors that derive from the difficulty of articulating non-existent sounds in Spanish. It is precisely in the phonetic facts that the influence of the native language is more tangible, and the phenomenon of the most widespread interference. It happens for two reasons: firstly, because the phonological aspects of two languages, even though they are different, always have areas of partial overlap in which true or presumed similarities can be apparent; secondly because, even in the case of similar languages, there will always be elements of divergence that are able to mislead the learners.

However, the negative transfer action is not limited to the different sounds between the L1 and the L2, but it often affects shared fono. The difficulty, therefore, would lie in the greater complexity of the system of affricates in Italian compared to Spanish, a complexity that generates errors of confusion before that interference, as often happens when moving from a simple system to a more articulated one. Similar errors are also found in the transcription of the phonic sequences, which often reveal a low or partial assimilation of the phonetic and graphematic system of an L2. Languages are made up of habits and rules that may constitute a hindrance where the learner extends them beyond their scope, or he applies them with the same criteria with which he would employs them in the L1.

A useful example to support this theory is that presented by Andrea De Benedetti (2006), based on his personal experience as a teacher of Italian at the University of Granada, about how to teach the language to different types of students. The data collected refer in particular to students of two faculties: Translation and interpretation and letters and philosophy. Some examples of errors made by Spanish speakers who study Italian are:

- The use of the graphic accent on paroxytocons and proparoxyitons: ex. prática, linguística, philología, etc.
- The graphic decomposition of derivatives of -che: ex. per che, giàche, cosiche, etc.;
- The improper use of articles and adjectives: ex. Il specchio, un studio, etc.;
- The graphic decomposition of some compounds: ex. cio $\dot{e}$, sopra tutto, etc.;
- The omission of initial "e" before " $s$ " (hypercorretism): ex. scluso, sisprime, all'sterno, etc.;
- The addition of initial " $h$ " or at the body of word: ex. hygiene, hipotesi, technologie (in this case there is maybe an interference of another L2, probably the French), etc.;
- The realization of impossible phonetic sequences in Italian: ex. accantto, vincci, calzzone, etc.;
- The reduction of infrequent consonant links such as -ct, -pt, -nst, $-\mathrm{nm},-\mathrm{mn},-\mathrm{ns}$ : ex. prodocto, roptura, instituto, alumni, mensaggi, inmaturo, etc.;
- The disortography in the transcription of geminate consonants: ex. necessarie, imagine, ufici, proffessori, problemma, datto, etc.;
- The disortography in the transcription of vowels, most of which seem to be more related to reasons of lexical and phonetic interference: ex. maraviglioso, patientia, megliore, popularità, enviato, reconoscere, circulare, etc. (De Benedetti 2006: 210).

If the learning of the sound of an L2 is significantly affected by the assimilated and consolidated habits in one's native language, the morphology seems to be an area less subject to transfer episodes, and not only between distant languages. Morphology is the identity of a language and therefore represents the area in which the distance between two languages Is most felt, especially among those that in all other respects are quite similar. Some examples related to the transfer are:

- The dissolution of articulated prepositions: ex. a la, in la, su la, etc.
- The failure to appear the suffix -isc in the third conjugation verbs: ex. si proibe, quando fine la lezione?, etc.;
- The use of the ending in -a for the first person of the imperfect: ex. io andava, io dormiva, etc.;
- The use of the thematic vowel "a" instead of "e" for the future and the conditional simple in the first conjugation verbs: ex. cominciarò, amarò, cominciarei, etc.;
- The use of the verb piacere in the first person of the conditional simple and composed: ex. mi piacerei andare al cinema, mi sarei piaciuto mangiare un gelato, etc.;
- The use of the auxiliary avere in compound times: ex. ho andato, si hanno approfittato, etc.;
- The use of the perfect simple essere for the verb andare: ex. l'anno scorso fu in vacanza in Italia;
- The plural declination of the indeterminative un/una: ex. avrei bisogno di uni consigli, etc.;
- The use of suo in place of loro as possessive of third person plural: ex. Marco e Lidia sono venuti con i suoi figli;
- The use of ogni and qualche at the plural: ex. ogni persone, qualche volte, etc.;
- The use of qualcuno as an indefinite adjective: ex. qualcune sveglie, qualcuno computer, etc. (De Benedetti 2006: 212).

It is interesting to dwell on some of these phenomena because some of which have also a lexical interference, such as the use of the perfect simple to be for the verb andare. The agreement of the verb piacere with the first person of the simple and composed conditional is particular relevant. It is a quite curious fact, because the Spanish equivalent gustar presents the same type of Italian construction, in which the logical subject ("I") is in the dative case, while the complement plays the role of the grammatical subject. Therefore, it is a construction, which is different from that envisaged in English for the verb "to like", in which the logical and grammatical subject coincide (1):
(1) a. Mi piace il gelato
b. Me gusta el Helado
c. I like ice cream. (De Benedetti 2006: 212)

In Spanish, the first and third persons of the conditional are the same in all three conjugations, presenting the same ending in - ía which is applied to the verb root: therefore, the first and third persons of gustar are also equal, and for Hispanophones this alters the perception of their own language, persuading them that the verb gustar functions as to like and that its subject is actually a first person, thus, they will produce an incorrect form in Italian.

A similar phenomenon is also produced in the case of the error concerning the agreement of ogni and qualche with plural nouns. Even in this circumstance the Spanish reason according to logic and not according to grammar, combining a morphologically singular indefinite to a plural noun, and this in spite of the Spanish counterpart (cada) requires the agreement to the singular exactly like ogni. However, as it is known, the affinities between Italian and Spanish do not concern only the common romance origin, but it also belong to the same family from a typological point of view. In fact, in both languages there is the relative stability of the SVO sequence (Subject-Verb-object).

Compared to Spanish, however, Italian seems to allow greater flexibility in this scheme, especially in speech, where there are a lot of marked constructions, and where the intonation can compensate for the total or partial alteration of the order natural. In addition, the Italian has a different mobility of adverbs and focalizes. To this is the fact that the Spanish speakers
tend to place some adverbs as già, (non) mai and (non) ancora at the beginning or at the end of the sentence instead of between the auxiliary and the participle as in Italian.

As to the reciprocal order in the clitic clusters the reversal distribution between accusative and dative clitics shows up in Italian and Spanish should be reported: in Spanish, the reflexive pronoun precedes the indirect one, whereas in Italian the opposite happens, this may cause confusion.

In general, however, the transfer at a syntactic level is widely linked to some elements of the consecution temporum, certain verbal reactions, the national and/or legal restrictions imposed by certain verbs, and especially the presence or not of the article in some specific cases. Concerning the redundant use of the subject pronoun, the frequency of the phenomenon is not justified by the Italian norm, which, like Spanish, is a pro-drop language and delegates to the morphology of the verb the identification of the person. In this case it is not an interference, but an error common to all the acquisition sequences of the Italian: the subject pronoun, in fact, is present in the early stages of learning with substitute function compared to a verbal morphology still absent or imperfect.

Another remark concerns the errors in the use of the article, mistakes that do not fully belong to the syntax, but the combination of words. As Muñiz (1982) observes, article zero in Italian prefers hyper-determined expressions such as days of the week, or certain phrases such as a casa or a scuola, whose references are clearly identifiable without needing the article as an additional label of specificity. In Spanish, however, the article zero is less widespread and in Italian this determines, in most cases, an over-use of the article.

Turning to the frequently asked question: "is learning similar languages easier?" It can be said that the common belonging of L1 and L2 to a linguistic type (morphological or syntactic) certainly favours the learning of some grammatical categories. Italian and Spanish derive both from Latin and this justifies the significant amount of romance vocabulary that there is in common. This implies that the two languages do not only have a similar ways of constructing words and phrases or of expressing the same grammatical categories, but also a lexical material that is very similar if not even identical. Once established what we mean by similar languages, we can therefore observe that the Hispanic speaker is facilitated in learning because they start from a more advanced level than speakers with a different L1. The Hispanophone avoids the pre-basic variety phase and starts at the basic and the postbasic one due to the possibility of establishing strong connection between the native language and the one they want to learn (Schmid 1994).

The traditional point of view born at the end of the years ' 50 with the work of Robert Lado (1957) is that of the Contrastive Analysis. According to him, it was possible to predict the difficulties of learning by comparing the grammars of the L1 and the L2 and identifying the critical areas, those
in which the differences were more considerable. This hypothesis did not hold because where there were difficulties anticipated in the learning in reality these were not always present. The problem of the L1role in learning is, in fact, much more complex than the Contrastive Analysis affirms and it includes factors of psychological, social and linguistic order.

First of all, it may be argued that the basic mechanisms of the interference are presided over by a single activity that acts below the speaker awareness, which Weinreich (1974) defines as the ability of the bilingual individual to establish interlinguistic identifications. This capability allows the boundaries of languages to be bypassed and for connections between them to be established on the basis of perceived affinities between forms and contents. This is possible because it is possible to identify the two meanings of the words in English and in Italian, thus uniting the two forms. It is equally possible that the identification also occurs on the basis of the form. Considering that when discussing languages, when a new one is learned, there is an attempt to hark back to the previous linguistic knowledge, searching to find similarities in the lexicon or in the grammar. This activity of identification pushes towards a unification of the linguistic systems or towards a reduction of the cognitive load, as Weinreich (1974) would argue. An opposing view of the cause of interference, leads one to think of a nother one that is completely different and maintains that the two linguistic systems should be kept separate.

The mechanisms that descend from this identification activity and which can be attributed to the recognition of a congruence between the L1 and the $\mathrm{L} 2(\mathrm{~L} 1=\mathrm{L} 2)$ are the ones which mean there may be more or less regular correspondence between the L1 and the L2 (L1 $\rightarrow \mathrm{L} 2$ ) (Schmid 1994).

According to the first process, the congruence one, the speaker would perceive the L2 structures as similar to those of its own language, with the consequence of transferring elements of this one in the L2. There may be some real Spanish-language pieces used as if they were Italians in the form as in the case of identification $/ \mathrm{v} /$ with $[\beta]$ in "laßorare" at the place of lavorare; and in the meaning, as in the case of preposition "a" that transfers the Spanish function on the basis of the form.

The mechanism of correspondence tries to economize the cost of learning by constructing some rules of correspondence, that allow for the translation translate, or rather the transformation of Spanish constructions into Italian. This mechanism is particularly used in the case of neighbouring systems as in situations of geographical contiguity between one dialect and another one. Weinreich (1974:5) affirms that there is one in particular, which is frequently present among genetically linked systems, which could enunciate with an automatic conversion formula and as long as these conversions are regular, they diminish the distance between the various dialects and simplify the problem of bilingualism, but if they are irregular they can be misleading.

The main difference between the two mechanisms is that in the congruence the speaker interprets the L2 as if it were the L1, thus cancelling the differences between the two languages, while in the case of correspondence the L2 is understood as distinct from the L1 and is then connected with the last one through matching rules. The effects that congruence and correspondence processes cause in the language that undergoes them are mainly of three types: the loss of traits without substitution, the introduction of new traits in the grammar of the L2 and the substitution of pieces of the L2 because of interference (Thomason 2001).

Being mostly homogeneous languages, it is not easy to find the traits radically unknown to the two languages or able to produce striking deviations following the contact. It is more probable that when considering the historical and typological contiguity between the two systems, the three effects are established as a kind of continuum, and as three similar and not distinctly separate categories.

In summary, it has been observed that among Spanish-speaking students who are studying Italian there is transfer that is a clear and indisputable phenomenon, which manifests itself in a more evident way in the errors of interference. Most of these are produced in phonetics, syntax and lexicon, while the morphology is generally spared, because it is the principal depositary of the distinctive characters of a language. For this reason, the morphological errors are due to factors related to the Interlanguage and to the acquisition sequences.

Moreover, some phenomenons are interesting because they are produced in seemingly innocuous areas of the L2, where the correspondence with the L1 is almost perfect. This calls into question the perception that the Hispanophones have of their own language: an often erroneous perception and "logically" acceptable, as in the case of the agreement of the verb piacere with the first person of the conditional.

The case of over-use of the determiner article, extended even where in Italian we use the article-zero, or for words hyper-determined as the days of the week. It would seem to reveal a discrepancy not only linguistically but, in a certain sense, a semantic-anthropological one between Italian and Spanish, which manifests itself in the form of errors that are not always predictable or easy to explain.

## 5. Conclusion

From what has been said it can be deduced that transfer is one of the most active mechanisms in the learning of a similar language. The perception of little distance between the two idioms facilitates the transfer of lexemes and structures from the L1 to the L2. The Contrastive Analysis reacquires strength in a glottodidactic perspective but this does not mean restoring the

CA as it was in the fifties, or for a purely predictive purpose. Excluding the use of the L1 from didactics is not sufficient to prevent possible interference. The learner must have the possibility to access their linguistic heritage and activate the comparison, but we need caution in strengthening the spontaneous strategies of active transfer, because they favour the hybridization and fossilization phenomenon, especially when the interlinguistic similarity is more pronounced. The transfer appears no more as a passive process over the learner but as an active process, or rather as a cognitive and communicative strategy.

It is opportune to adopt a contrastive approach as support in learning, given that only an appropriate metalinguistic reflection helps to exploit the positive aspects of the transfer and allows us to limit its negative effects, namely the interferences. The Contrastive Analysis for teaching is based on the systematic comparison between the L1 and the L2 and it tries to identify the areas of greatest difficulty. It plays an irreplaceable function and it should consider all the linguistic aspects, from phonetics to morphosyntax to vocabulary and speech. This goal is still far from being achieved in the case of Italian and Spanish, even putting together the partial works available, the aspects that still need to be clarified are substantial. There is a need for an ensemble work able to examine the teaching/learning process in an effective way.

Trying to answer the question if there are constraints to the interference of one language on another, it may be argued that the interference manifests itself at all levels of the language (phonology, morphology, syntax and semantics). It acts according to a research process of similar aspects that is divided into the two congruency mechanisms $(\mathrm{L} 1=\mathrm{L} 2)$ and correspondence (L1 $\rightarrow$ L2). Furthermore, the interference can have three major types of effects on the language that undergoes the interference: the loss, introduction and substitution of linguistic traits.

In conclusion, it is believed that the social context in which immigrants find themselves is the first cause to determine the intensity and vastness of the interference process between two languages. It is vital not to forget that the central role is always played by the speakers, by what they want and what they can do in their social environment. The Hispanophones will reach a level of Italian knowledge more quickly that satisfies the communicative functions necessary using the similarity between the two languages, as a learning resource. However, their comprehensibility and their communicative fluidity act as a limitation in the learning of a less Hispanic variety, closer to Italian. Obviously, this interrupts the braking action, because there are no more the sociolinguistic conditions that created that variety of Hispanic Italian.

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# Reflections on the Study of Italian as an L2 within the Context of Chinese Universities. A Comment on Italian Language Learning in Chinese Universities 

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#### Abstract

: The following research aims at investigating the teaching and learning of Italian language in Chinese universities. Starting with the difficulties that Chinese-speaking students face when learning Italian verbal morphology, it will focus on the influence of their mother tongue on the acquisition process. Their apparent difficulty in reaching a good knowledge of Italian language will be investigated in relation to the typological distance between the two languages and their morphosyntactic properties. It will highlight how the interaction of two strongly different language systems influences L2 acquisition (Bettoni 2001, Giacalone Ramat 2003; Banfi 2003). A diagnostic evaluation will show the sources of difficulties in the learning of Italian verbal morphology and it will highlight how it is necessary, in a learn-ing context traditionally focused on grammar and translation, to pay more attention to pragmatic competence and communication.


Keywords: Chinese learners, Chinese universities, Interlingua, L2 Italian, Verbal morphology

## 1. Introduction

The number of Chinese students who come to Italy to pursue higher education is increasing every year. Given that the minimum language ability level required for admission to university courses corresponds in most cases to the B2 level of the Common European Framework of Reference for

Lan-guages (CEFR), ${ }^{1}$ Chinese and Italian institutions are promoting new Ital-ian language courses to assist students in their language studies. However, these students encounter considerable difficulties in achieving this goal and, as shown by research carried out thus far (Banfi 2003; Giacaleone Ramat 2003; Arcodia 2008; Della Putta 2008; Andorno 2010), sinophone learners have particular difficulty in learning Italian.

To understand the causes of difficulty in learning Italian as an L2 from a Chinese L1, many hypotheses have been formulated and several studies have been conducted in Italy, on learners in both guided and unguided contexts. However, there has been no research focused on the teaching methods used by Chinese institutions, which have offered Italian language courses of various levels for decades, nor on the learning contexts of those who study Italian in Chinese universities. Starting from these premises, we intend to present the Chinese university environment, language course delivery methods, and teaching methodologies to assess whether the difficulties encountered by Italian language students in China are the same that they encounter when they attend an Italian language course in Italy. More specifically, this contribution presents the preliminary results of the annual project of Reaserch Institute for Foreign Language and Culture of Foreign Languages (Project number 2018WGYYWH04) titlled "Study on the influence of mother tongue transfer on second language italian acquisition.

This research focuses on the nature and type of major difficulties encountered by learners and intends to assess whether the slowness of learning Italian can be attributed to the mother tongue. To do this, it was decided to perform a diagnostic analysis of the errors committed by a sample of students undergoing their second, third, and fourth year of study at Chinese universities. Starting thusly from the observation of data, it will be possible to reconstruct the learning process.

The results obtained will shed light on the learning processes of Chinese students learning Italian as an L2, and will offer teachers valuable support in terms of awareness of the processes involved in learning. After presenting the context of the research experiment $(\$ 2)$, the informants and the collected data will be presented $(\$ 3)$ and some conclusions will be drawn $(\$ 4)$.

[^57]
## 2. The Learning Context and Informant Subjects

The present research focuses on the study of Italian language in the Chinese university context. Data were collected in three Chinese universities. This is a learning context little understood in Italy and exhibits significant differences with Italian learning contexts. For a complete analysis, it is therefore necessary to frame the study of Italian in the Chinese university context, albeit in broad terms.

According to the Chinese university system, the course of Italian language lasts for 4 years and includes compulsory attendance verified by the instructor's roll-call at the beginning or at the end of each lesson. Al-though there are not national regulations to outline the extent to which each individual university must organize their courses and provide a number of lessons per week, the norm for weekly guided learning is divided as follows:

- 1st year: 16 hours, of which 10 hours are with a Chinese professor and 6 hours are with an Italian professor or lecturer;
- 2nd year: 14 hours, of which 10 hours are with a Chinese professor and 4 hours are with an Italian professor or lecturer;
- 3rd year: 10 hours, of which 6 hours are with a Chinese professor and 4 hours are with an Italian professor or lecturer;
- 4th year: 6 hours with a Chinese professor.

The training involves two different teachers who, although working in close harmony, have different tasks: the Chinese teacher is in charge of explaining the grammar in Chinese; the Italian teacher, who speaks only Italian during lessons, is responsible for delivering courses in oral conversation and written production.

As for the teaching methods employed by the two teachers, this topic is complex and is linked to long-standing Chinese scholastic traditions, and also to the period of openness and outside influence that China is currently experiencing: on one side there is the Chinese teacher's method, based on the explicit explanation of grammar followed by the systematic execution of grammatical-translation exercises; on the other hand, the Italian teacher is not obliged to follow a prescriptive manual, but can freely organize lessons based on the level and interests of the class. The Italian teacher therefore has the opportunity to motivate the students, to help them develop linguisticcommunicative competence, as well as to introduce general themes on Italian culture.

We can see that while the Italian teacher has the freedom to choose his or her own teaching method, the Chinese teacher must adhere to a scholastic tradition influenced by Confucianism, which prescribes a method based in rote memorization and repetition.

The communicative teaching approach, the aim of which is to develop students' linguistic-communicative competence (Hymes 1966) through the students' progressive and autonomous discovery of the linguistic structures of the L2 (inductive glottodidactic method), at present has not been fully accepted in China, where the most widespread operating model consists of four phases: reception, repetition, revision, and reproduction. ${ }^{2}$ Learning is essentially based on reception: the student collects linguistic information without clear indication of its usefulness or pragmatic purpose; those are factors considered irrelevant to the purposes of language study. The information is then learned through repetition. Once the students have received and memorized the information, they are ready for the revision or analysis phase, and mechanical reproduction (De Marco, Mascherpa 2011). It follows that for Chinese students, the most important language skills are reading and writing. Although the classroom time with the Chinese teacher are then accompanied by time with the Italian teacher, the high number of students per class (on average thirty) and the relatively few hours dedicated to conversation demonstrate that less importance is given to the development of skills in communication and pragmatic competence. This is perhaps one of the reasons why Chinese students, despite understanding the rules of Italian grammar, cannot apply them effectively when they are in contact with native speakers; they do not know how to use the studied language to communicate.

It is not just the teaching method, but the entire Chinese educational model which substantially differs from the Italian model. Firstly, it should be emphasized that Chinese students are not passive or unwilling to answer questions, which is a criticism often addressed to Chinese learners who study in Italian institutions (Favaro 2003). Instead, Chinese learners simply participate in the study program in ways that find their roots in Confucianism. Chinese culture is characterized by "collectivism" that tends to prefer the common good over the individual good. As a result, individuality is seen as a synonymous with selfishness. The relationship between students is characterized by reciprocal aid, and during oral production activities, no student will try to take the initiative and speak up before their peers.

In addition, Chinese students pay close attention to the superior-subordinate relationship: according to Confucian thought, people belonging to the highest rank (ancestors, relatives, professors) should not be questioned.

This affects the teaching methods used in schools, and this is why during lessons no questions are asked: ideally, the professor explains clearly and

[^58]exhaustively. Therefore, when they do not understand, students tend to look for answers first through consultation of books or on the Internet and then by requesting help from their peers (Consalvo 2012). This attitude, which is sometimes seen by Italian people as passivity, is in reality a form of respect for the authority. In fact, the teacher is seen as a supremely competent person, an authority to listen to and respect (Tang and Absalom 1998).

A clarification about the university environment in China must be made: even if during the lesson, the teacher assumes a cold, detached and authoritative attitude, once the lesson is finished he or she assumes the typical attitude of a parent or an older brother/sister. Students and pro-fessors live in campuses equipped with basic markets, multimedia classrooms and open libraries, characterized by a peaceful atmosphere and monitored 24 hours a day by numerous collaborators. The relationships created between those who live inside the campus which is effectively a city within a city, are comparable to those of a "big family". The students are young (17-21 years old) and often live far from home. As a result, teachers become a point of reference from both a personal and professional point of view.

The data were collected between December 2017 and January 2018, i.e. at the end of the first semester of the academic year, at three Chinese universities: Zhejiang Yuexiu Foreign Languages University in Shaoxing, a city in southern China; Huaqiao Foreign Languages University of Jilin based in Changchun, northeast China; and Tianjin Foreign Languages University, northern China. The sample of informants is composed of 45 students ( 15 in the second year, 15 in the third year and 15 in the fourth year) who study Italian as their first curricular language.

## 3. Research Design and Data Analysis

Data were collected from three Chinese universities in December 2017, i.e. at the end of the first semester of the academic year. The corpus consists of 45 oral recordings and 45 written compositions related to the verbal morphology of Italian. Although research on language learning is usually concentrated only on the analysis of oral production, in this contribution it was decided to additionally present data collected from written productions, for several reasons: firstly, for Chinese learners, the conventions of writ-ten Italian such as the alphabet, word spacing, punctuation and the use of capital letters represent significant obstacles, and thus can demonstrate the achievement of a certain level of linguistic competence; secondly, Chinese students are accustomed to a teaching context in which great importance is given to written production, while oral production is virtually neglected. It was thought that the lack of confidence in producing spoken language (among other things in a purely Chinese context) could potentially misrepresent students' actual knowledge of the language. A further reason can be found in the words of Banfi (2003:183):
[Errors] within any text written by an L2 learner "precipitate" on the page - and are evidenced by the intrinsic force proper to graphical fixation - phenomena which, carefully analyzed, can be considered as valuable "spies" that illuminate non-marginal aspects of how a learner "perceives" the L2 system and how it "reproduces" it by fixing it on the written page.

Because language learning is a process that involves the linguistic development of a learner over time, the variable of time is among the main factors in learning an L2 (Cook 1986). We therefore opted for a "pseudo -longitudinal" research format (Gass and Selinker 2008: 56), i.e. we chose to divide the informants into three groups based on their level of studies and, consequently, on the time of exposure to the Italian language (second year, third year, and fourth year), to submit the same test to the students and to observe the linguistic productions of each group. In this way, the acquisition sequence could be obtained as if it were observed for three years longitudinally. It was decided to analyse only the data of the students attending the second, third and fourth year of the study course because at the start of the experiment the first year students had only been studying Italian for 3 months and the data collected were not assessable in regard to the objective of this research.

The analysis was carried out with a view to interlingua, taking into consideration the linguistic system developed by the student up to the current moment of study. The method of analysis used is a formal-functional-reconstructive method: the system was reconstructed by focusing on the quantity of forms expressed by a function and on the quantity of functions expressed by a form, always keeping in mind the use of the corresponding functions and structures in the L1. It was not limited, therefore, to observe the elements of the text from the point of view of the forms, but we also tried to reconstruct its function in the text and evaluate them from the perspective of the interlingua possessed by the student at the time of the oral or written production they were.

Interlingua is not a stable linguistic system but evolves through a continuous process of gradual elaboration and proceeds (at least in part) in common stages. This type of analysis is independent from the comparison with the target language and aims to reconstruct the learning process of students starting from the statements produced at each stage of the process. After the analysis of the mistakes made in the written and oral production in the selection and inflection of a given verb, conclusions were drawn to assess whether the mother tongue actually plays a major role in the development of morphosyntactic competence of Italian as an L2. In particular, attention was paid to the systematic nature of a specific type of error within the group of learners, i.e. a classification of the errors made most frequently by the students was performed. This classification suggested which aspects were particularly difficult to assimilate.

We recall here that the main causes of systematic errors are the interference of the mother tongue or another known language (interlingual errors) and the development of incorrect hypotheses about the rules of the second language (intra-linguistic or evolutionary errors). Previous studies have shown that in the case of languages that are typologically distant, such as Chinese and Italian, interference "appears more like a slowdown in the acquisition of TL categories that are absent in ML, than like the acquisition of TL of models or elements of ML" (Chini 2005). Moreover, as Limonta recalls, the interference of the L1 on the L2 is particularly strong, especially at the initial stages: "the known insensitivity of sinophones regarding specific phonological traits of our language and some morphological categories typical of inflected languages such as Italian is the main cause of typical errors found in their productions" (2009: 39).

## 4. The Influence of Chinese as an L1 and Chinese Teaching Methods on the Learning of Italian as an L2

The data obtained from the experiment allowed the formulation of various considerations. First of all, a pronounced disparity emerged between oral and written production: all students, regardless of the language level reached, showed great difficulty in expressing themselves orally, thus confirming the initial hypothesis, i.e. that the teaching method used in China should likely be modified to allow students to develop linguistic-communicative competence and not only grammatical competence.

Secondly, from the results collected, it emerged that there are systematic errors that occur in the various stages of interlingua. It is curious that errors were recorded in all three groups of students investigated, the percentage decreases as the level increases. It is true that fourth-year students showed an ability to construct complex sentences, but at the syntactic-morphological level there were errors that remained in the linguistic productions of the learners, which sometimes made it difficult to understand whether a student had actually been studying Italian for one year or three years. Furthermore, it was noted that the choice of tense and verbal mood as well as the morphology associated with them are difficult to consolidate in speech produced by Chinese learners. It could be said that these results confirm previous Italian studies (Valentini 2004; Andorno 2010) in which there was a general slowness in learning Italian morphosyntax by Chinese learners.

Below are the non-target productions made by the students:

- errors in the agreement between person, number, and gender of the subject and the verb;
- over-extension of the present indicative forms to the past tense;
- errors in the use of the present perfect:
-     - in the selection, or complete omission, of the auxiliary
-     - in the selection between the use of the present perfect and the imperfect
-     - in the conjugation of the past participle (but not in its gender agreement with the subject)
- errors in the correct construction of the present perfect;
- errors in the choice of the tense to be used in the indicative, conditional, and subjunctive moods
- errors of agreement between principal and subordinate clause(s).

Let us inspect some errors in detail.
In written and oral compositions, students in all years showed difficulty in subject-verb agreement: while telling a story of past experiences, most of students forgot about gender agreement by referring to them-selves as male:
(1) Sono Be.iSG
andato <eh>
gone. M
andata a Taiwan
gone.F to Taiwan

In the formation of the present perfect, the participle often did not agree in number with the subject and the auxiliary:
2) a. Durante la festa, la gente tornano a casa, fa una visita ai parenti...

During the party, people. ${ }_{\text {SG }}$ return.$_{3 \mathrm{PL}}$ to home, make. ${ }_{3 S \mathrm{G}}$ a visit to relatives...
b. Molte persone ha partecipato al matrimonio

Many people. ${ }_{\mathrm{PL}}$ have ${ }_{3 S G}$ participated at the marriage
c. $\backslash \mathrm{CHN} \backslash$ Poi siamo andato a casa della sposa Then be. ${ }_{\text {IPL }}$ gone. ${ }_{\text {SG }}$ to the bride's house

Students often forgot the auxiliary before the past participle:
(3) a. ...mangiato con la mia famiglia, guardato la TV...
...eaten with my family, watched TV ...
b. $\backslash \mathrm{CHN} \backslash$...fatto con lo zucchero e il resto cose non so
...made with sugar and the rest things I do not know
c. Al liceo io studiato bistory

In high school I studied history
As for the use of the conditional and the subjunctive, students had difficulty using them in agreement with other tenses:
(4) a. $\backslash \mathrm{CHN} \backslash$ Se fossi ricco, comprassi una casa If be rich, buy. ${ }_{\text {subjv }}$ a house
b. Se ho molti soldi... farei qualcosa per ripagare la società If have ${ }_{- \text {PRS. ISG }}$ a lot of money... do -Cond. 1 IGG something to repay society
c. Quando ho visto i risultati su internet ho pensato che sia uno scherzo When have. ${ }_{\text {ISG }}$ seen the results on internet have. ${ }_{\text {ISG }}$ thought that be. ${ }_{\text {sUbJV }}$ a joke

One of the most frequent errors recorded was the use of the present tense instead of the past, even in advanced students. For example, in answering a question about a woman's working conditions in the past and present, fourthyear students formulated the following phrases:
(5) a. \CHN\: "Nel passato una donna deve fare tante cose...tipo...fare come un casalinga a c...ogni giorno devono lavare i...vestiti, pulire la casa, allattare i bambini e...comunque tante cose."

- In the past, a woman has to do a lot of things ... like ... to do like a housewife a c ... every day they have to wash ... clothes, clean the house, feed the children and ... anyway many things'
b. $\backslash \mathrm{CHN} \backslash:$ : ...loro hanno i stipendi alti e non devono trovare un appoggio e... loro possono vivere una vita liberamente. Ma nel passato le donne devono seguire i pensieri de...de di suo ma-marito, della sua famiglia eccetera."
"...they have high salaries and do not have to find an abode and ... they can live a life freely. But in the past, women must follow the thoughts of ...of her husband, her family, and so on."
c. $\backslash \mathrm{CHN} \backslash$ "...nel passato la donna non può...non poteva uscire a lavorare ed il suo percorso di vita è dedicata-è dedicato dagli altri e non poteva raggiungere il suo valore di vita. Ma oggi per una donna è possibile...rice-ricevere l'istruzione egua-e... uscire a trovare un lavoro."
"...in the past the woman cannot ... could not go out to work and her life path is dedicated. ${ }_{F}$ - is dedicated. ${ }_{M}$ by others and could not reach her worth of life. But today it is possible for a woman to ... receive-the education egua-and ... go out to find a job."

With regard to the use of the present perfect, research has shown that most students, even after three years of study, still have problems in discriminating the use of the present perfect and the imperfect, because they have difficulty distinguishing the "perfective" aspect of verbs (for which the present perfect is used) from the "durative" aspect (for which the imperfect is used). While answering questions that involved the use of the past tense, students of the third and fourth year formulated the following sentences:
(6) a. $\backslash \mathrm{CHN} \backslash$ (about the previous Spring Festival) "...e poi ho cenato con tutta la famiglia. Dopo cena guardavamo lo spettacolo dalla TV insieme".
"...and then I had dinner ${ }_{\text {PFV }}$ with the whole family. After dinner we watched. IPFV the show on TV together".
b. $\backslash C H N \backslash$ (about the previous Spring Festival) "Prima di mangiare, tutta la famiglia adorava gli antenati per pregare la fortuna. E poi abbiamo fatto una cena ricca".
"Before eating, the whole family adored.IPFV their ancestors to pray for their fortune. And then we have done.PFV a rich dinner".
c. $\backslash C H N \backslash$ (about the matriculation exam) "Ho fatto l'esame di maturità tre anni fa. L’esame durava tre giorni."
"I have done. ${ }_{\text {PFV }}$ my high school exam three years ago. The exam lasted.IPFV three days".
d. $\backslash C H N \backslash$ (about the matriculation exam) "ogni giorno ho ripassato."
"every day I have reviewed. ${ }_{\text {pFV }}$ ".
e. $\backslash \mathrm{CHN} \backslash$ (about a wedding in which the student participated) "Poi sono andato a casa di mia sorella e aspettavamo. Lo sposo arriva..."
"Then I have gone.PFV to my sister's house and we waited.IPFV. The groom arrives..."

The results have all confirmed those of previous studies: the learning of Italian, and verbal phrases in particular, is especially difficult because of the typological differences between the two languages. The Chinese student who speaks or writes in Italian must focus attention on a series of linguistic phenomena absent in their own language. These include systematic changes in morphemes of words that functions as verbs, verbal mood, various tens-es, etc. These aspects are difficult for the Chinese student to understand and implement.

In fact, the Chinese language does not provide for the modification of words and expresses, through free morphemes, the functional values that in Italian are entrusted to the morphology; the Chinese verb, moreover, puts the accent almost exclusively on the aspect (perfective and continuous), but not on the mood or tense. The Chinese speaker is therefore not used to thinking about the time in which an action took place, much less to express it through morphological changes.

A further difficulty derives from the phenomena of agreement, namely the presence in Italian of rules of agreement between different moods and tenses.

## 5. Conclusions

Although in recent years enormous progress has been made in China in the teaching of foreign languages, and despite the well-established presence of foreign professors in all universities to support Chinese professors in teaching a second language, the excessive importance given to the study of grammar should perhaps be reduced by promoting, instead, the development of lingui-stic-communicative competence, a trend already fully established in Europe.

Furthermore, the prevailing focus on the study of grammar does not guarantee that students do not make mistakes of the morphological-syntactic type, especially while speaking. The most frequent errors result from grammatical structures that differ considerably between the two languages. It is noted, in fact, that there is a general slowing down of learning and a particular difficulty in using the correct, fully inflected verb forms. This is evident even in learners who have been studying the language for several years.

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## Psicolinguistica

## Psycholinguistics

# On Subject Pronouns in Finnish-Italian Bilinguals: Effects of Cross-linguistic Influence on Discourse-pragmatics Competence* 

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#### Abstract

: The distribution of overt pronouns has been the focus of much interest in the last decades as it is considered a typical phenomenon of the syntax-discourse/pragmatics interface, a locus of variability in different kinds of language acquisition (bilingual, L2 advanced learners, SLI) and it has been investigated in null and non-null subject language. In the present paper we discuss the distribution of null and overt pronouns in bilingual language acquisition in Finnish (a partial null subject language) and Italian (a null subject language). Data has been collected through a storytelling task in Finnish and Italian. Results show some optionality in the use of pronominal forms but unexpectedly little overuse of overt pronouns is attested in the null subject language.


Keywords: Bilingualism, Cross-linguistic Influence, Null and Overt Pronouns

## 1. Subject pronouns in acquisition: Finnish and Italian

The mastering of syntactic and discourse-pragmatic properties related to the distribution of null and overt pronominal forms has been the focus of much interest in the last few decades in different types of language acquisition.

[^59]Previous studies on Finnish monolingual acquisition have focused on the very first stages of acquisition (between ages 1 and 4) and data have been collected in longitudinal studies on spontaneous speech. The studies on Finnish L1 acquisition have started quite recently, the first works date to the '70s. These pioneering works generally investigated child language development in a nonsystematic and diary-form way with impressionistic data from 1-2 children (see for example Bowerman 1973; Räisänen 1975; Kauppinen 1977; Itkonen 1977). Toivainen (1980) was the first to report data from 25 children in a study conducted in a systematic way. To date, previous studies on Finnish child acquisition have mainly focused on the acquisition of its rich nominal morphology and on phonological distinctions (Toivainen 1980; Niemi and Niemi 1985; Lieko 1994; Laalo 1997, 1998). Also the verbal domain has been investigated, in particular by Toivainen $(1980)$, and Laalo $(1998,2011)$. In Laalo (1998) it is reported that the first verb forms to emerge are $2^{\text {nd }}$ person imperative and $3^{\text {rd }}$ person indicative. From Toivainen (1980) we know that Finnish children produce third person verbs as early as $1 ; 11-2 ; 2 .{ }^{1}$ Notice also that the conjugation of $3{ }^{\text {rd }}$ person is close to the basic form of the verb(infinitive) and it is thus "semantically the most neutral form that is selected for its universal use" (Toivainen 1980: 44). However, in all these works very little mention is made of the emergence and production of subject pronouns in early stages of language development. From a check of the transcriptions ${ }^{2}$ of 15 children in the study of Toivainen (1980) we observe that by the age of $2 ; 4-2 ; 5$ children use the $1^{\text {st }}, 2^{\text {nd }}$, and $3^{\text {rd }}$ person singular pronouns minä ' ' ', sinä 'you', se 'it/s/he'. Unfortunately, due to the transcription method there adopted, we don't know whether children used the long form typical of standard Finnish, considered a partial null subject language, or the shortened one typical of colloquial Finnish, that can be assimilated to the non null subject language type(see section 3 for an overview of the Finnish pronouns).

As for Italian, we know that the first subject pronouns to emerge are $1^{\text {st }}$ and $2^{\text {nd }}$ person pronouns and successively, only from age $2 ; 7,3^{\text {rd }}$ person pronouns ${ }^{3}$ (Pizzuto and Caselli 1992; Antelmi 1997). From the extensive study

[^60]on 386 monolingual Italian children by Caselli, Casadio and Bates (1999) it results that $3^{\text {rd }}$ person subject pronouns occur later and at a much lower rate with respect to first and second person pronouns. Pinto's (2012)longitudinal study discusses null and overt pronouns in the speech of one child from age 1;7 to 2;7 (Martina, CHILDES corpus). The author reports the emergence of the first pronouns, which are $1^{\text {st }}$ and $2^{\text {nd }}$ person pronouns, at age $1 ; 8-1 ; 9$. In Italian, similarly to Finnish, the first verb forms to emerge are $2^{\text {nd }}$ person imperative and $3^{\text {rd }}$ person indicative.

From this overview we can observe that in both Finnish and Italian the order of emergence of verb forms is the same in both languages and by age 2;5 at the latest both in Italian and in Finnish personal pronouns are attested for $1^{\text {st }}, 2^{\text {nd }}$ and $3^{\text {rd }}$ singular. We assume along the lines of current literature that by the age of 5-6 the grammar has reached its maturation and all the relevant syntactic rules are settled. This is relevant in light of the fact that the participants to our study have received a balanced input (that is, equally good in terms of quantity and quality) in both languages until schooling. Thus, the acquisition of subject pronouns should have been completed before the environmental language, Italian, started turning into the dominant language. The present study reports data from an elicitation task administered to Italian-Finnish bilingual children ( $\mathrm{n}=7$, age span 5;7-11) in Italian and Finnish. At the age of testing both L1s of the bilingual children are expected to have correctly set the relevant syntactic and pragmatic principles regarding the distribution of null and overt subject pronouns.

The paper is organized as follows: in section 2 the main previous studies on the distribution of null and overt subject pronouns are outlined. In section 3 and 4 the peculiarities of Italian and Finnish, respectively, as regards subject pronouns are sketched. Section 5 focuses on the study and presents the methodology, the participants and the results. Section 6 is devoted to the discussion. In section 7 the main conclusions are drawn.

## 2. Subjects pronouns in bilingual language development: previous studies

The acquisition of two or more languages is a widely investigated area of research. Bilingual and L2 language acquisition as well as L1 attrition have proved to be a good ground for investigating the acquisition of the subtle properties at the so-called syntax-discourse interface.

Narrowing down on bilingual acquisition, it is well-known that children are able to differentiate their two grammars from early on (De Houwer 1990; Paradis and Genesee 1996; Meisel 2001, a.o.) but cross-linguistic influence from one language to another can still occur showing instability and optionality. In particular, several studies in the last decades have focused on the phenomena related to the so-called syntax-discourse/pragmatics interface, which has revealed to be an area of vulnerability (Serratrice et al. 2004;

Pinto 2006; Hacohen and Schaeffer 2007, a.o.). An influential assumption in bilingual language acquisition has been put forth by Platzack (1999) following whom the C domain is the more vulnerable domain in various types of language acquisition (L1, L2, SLI, aphasics) as it is the interface level connecting internal grammar and other cognitive systems (e.g. syntax and discourse/pragmatics). This formulation has been further refined in Hulk and Müller (2000), Müller and Hulk (2001) who investigated cross-linguistic influence in Romance-Germanic bilingual children and suggested that it is in the vulnerable CP domain that the two languages may interact, and thus cross-linguistic influence may emerge. In addition, the authors claimed that a nother necessary condition for cross-linguistic influence to take place is overlap at the surface level of the given phenomenon: language $A$ has a syntactic construction which allows more than one syntactic analysis and language B contains evidence for one of these two possible analysis. Thus, for the authors cross-linguistic influence is due to language internal influence and not to e.g. language dominance.

Along the same lines of reasoning another relevant proposal on which much work on L2, bilingual and attrited speakers has been grounded is the Interface Hypothesis (Sorace 2005; Sorace and Filiaci 2006 and related works) first formulated to explain persistent optionality in near-native L2 learners. Following the first version of it, it is not in mastering narrow syntax that instability emerges but rather in mastering properties which imply the interaction of syntax with other cognitive or extra-linguistic factors. Successively, the strong version of the Interface Hypothesis has been revisited in light of a less strictly defined bipartition (White 2011; Sorace 2011, 2012; Montrul 2011, and Montrul and Ionin 2012 on heritage speakers) in favour of a proposal of a complex interplay of several linguistic, non-linguistic and computational factors.

An outstanding finding that emerges from previous studies on null/ overt subject pronouns in bilingual language acquisition is the general overuse of overt pronouns in contexts of referent maintenance and no-topic shift whereas monolinguals prefer a null form which is the pragmatically more adequate form. For example, Serratrice et al. (2004) observe that in the production of an English-Italian bilingual child, overt subject pronouns are used quantitatively more than in monolingual production. Serratrice (2007) reports the same finding even in case the two languages are both null subject languages. A more extensive study is that of Sorace et al. (2009) who for the first time compared results from bilingual speakers of a non null subject and a null subject language (English-Italian) with results from bilingual speakers of two null subject languages (Spanish-Italian). The authors administered an acceptability task on null/overt pronouns and found a robust tendency of over-acceptance of overt subject pronouns in no-topic shift contexts independently of the language combination. This leads Sorace et al. (2009) to
suggest that it cannot be only cross-linguistic influence that has a role in the divergent acceptability of overt subject pronouns by monolinguals and bilinguals. The authors suggest that the results can be interpreted in light of the more limited processing resources available to bilingual speakers.

The main purpose of this study is to investigate the acquisition of syn-tactic-pragmatic competence, that we have seen to be a possible locus of variability, in Finnish-Italian bilingual children through an elicitation task on the distribution of null/overt subject pronouns. Previous research has focused on null and non-null subject languages hence the combination of a partial null subject language (Finnish, see Holmberg 2005; Holmberg et al. 2009; Holmberg and Sheehan 2010) and a null subject language (Italian) brings novel data and might be revealing for the discussion on crosslinguistic influence and the role of the contact (dominant) language in bilingual acquisition at the syntax-pragmatics interface. In addition, the results coming from this study maybe discussed under the Underspecification Hypothesis (UH) for which cross-linguistic influence, if present, is attested unidirectionally from the non null subject language to the null subject language (see e.g. Serratrice et al. 2004). If the data support the UH we should find cross-linguistic influence from Finnish to Italian and thus a higher rate of overt pronouns in Italian.

## 3. An overview on subject pronouns in Italian

Italian is a null subject language with a basic SVO order and a rich verbal morphology that specifies person and number features. In null subject languages a null pronoun is preferred whenever possible (Avoid Pronoun Principle, Chomsky 1981), that is in topic continuity contexts when it refers to a "known entity" that has already been introduced in the discourse or is known because it is "shared knowledge" and thus "less informative" (see also Carminati 2002). It follows that a null subject pronoun is interpreted as the unmarked, unstressed form whereas an overt pronoun is generally used in focus or topic shift contexts and is "more informative". In studies on L2 acquisition and bilingualism, as reportedby Sorace et al. (2009), it is only with overt pronouns that a greater variability is shown in the assignment of the antecedent referent whereas with null pronouns such variability does not occur and they strictly obey the above mentioned principles.

The null subject nature of the language directly correlates with the possibility of instantiating VS order (Rizzi 1982, 1986; Burzio 1986 and subsequent works). This kind of inversion is also referred to as free inversion (Belletti 2001, 2004). However, this kind of inversion does not occur freely but is strictly related to discourse factors and in particular to a specific kind of focus, new information focus: in fact, a postverbal subject is interpreted as new information, as in (1), drawn from the contexts of the tasks.
(1) a. Chi è entrato?
who is entered
'Who has entered?'
b. è entrato Paperino
is entered Donald Duck
'Donald Duck has entered'

Only preverbal subjects can be null (as proposed in Cardinaletti 1997 and subsequent literature) as only weak pronouns can appear in preverbal position (in the sense of Cardinaletti and Starke 1999). Summing up, in null subject languages such as Italian, the alternation of overt and null pronominal subjects and of postverbal subjects is strictly related to the discourse-pragmatic information provided from the discourse context.

## 4. An overview on subject pronouns in standard and colloquial Finnish

Finnish, as mentioned earlier, is a partial null subject language in the classification proposed by Holmberg et al. (2009), see also Holmberg and Sheehan (2010). Finnish has a basic SVO order, a rich verbal morphology and no grammatical gender. Null subjects are allowed for first and second person but not for third, except under some specific circumstances. ${ }^{4}$ Overt subject pronouns for first and second person are used in a similar way to e.g. null subject languages such as Italian and they are generally interpreted as stressed/contrastive focus. In contrast, third person pronouns (singular and plural)are similar to overt pronouns in non null subject languages such as English and cannot be omitted in main clauses. As a consequence of not having a null referential subject similar to that observed in null subject languages, postverbal new information subjects of the type observed for Italian are not allowed (Dal Pozzo 2012).

However, this is not the whole story. In fact, two sets of pronouns can be detected as Finnish can be broadly divided in two different varieties, standard and colloquial Finnish. Colloquial Finnish ${ }^{5}$ differs from standard Finnish in some phonological, morphological, syntactic and lexical aspects (see Karlsson 2008 for a comprehensive description). For the time being we will present the

[^61]characteristics which are relevant for the present study. In standard Finnish there are eight personal pronouns, as third person singular and plural have a double form for [+human] and [-human] referents. In colloquial Finnish six subject pronouns are commonly used as the [-human] third person pronouns are generally used for all third person referents, regardless of the [+/human] feature. ${ }^{6}$ Table 1 summarizes the differences between standard and colloquial Finnish for personal pronouns and verb forms.

|  | Standard Finnish | Colloquial <br> Finnish |  |
| :--- | :--- | :--- | :--- |
| subject pronouns |  |  |  |
|  | (minä) | mä | I-NOM |
|  | (sinä) | sä | you-NOM |
|  | hän/se | se | s/he-NOM |
|  | (me) | me | we-NOM |
|  | (te) | te | you-NOM |
|  | (he) | ne | they-NOM |
| morphology |  |  |  |
|  | (minä) menen | mä meen | I go-PRES1sg |
|  | hän menee | se menee | sea meet <br> (me) menemme go-PRES3sg <br> 's/he goes' |
|  | me mennään | we go-PASSIVE.PRES <br> (te) menette | te meette | | you go-PRES2pl |
| :--- |

Colloquial Finnish is characterized by shortenings and assimilations. Shorter pronominal forms and a poorer verbal morphology are generally accepted. In particular, the third person singular and plural forms of finite

[^62]verbs adopt the same third person singular ending. Recall that this also is the verb form that is widely used in child directed speech and that is considered the most neutral one, close to the infinitive. In addition, the impersonal passive form $-V V n$ is used for first person plural. Colloquial Finnish has practically lost the partial null subject status in favour of a non null subject status and, when pronominal, the subject is generally a reduced overt pronoun. This general tendency is evident not only at the clausal level but also in the nominal clause. In fact, possessive pronouns behave in a similar way to subject pronouns. On the one hand, in standard Finnish a possessive pronoun in genitive can be omitted for first and second person but not for third, showing a perfect parallelism with clausal subject pronouns. The possessum always bear a possessive suffix. On the other hand, in colloquial Finnish possessive pronouns are expressed in a reduced form and possessive suffixes are omitted, similarly to clausal pronominal subjects (Dal Pozzo 2007).In addition, a nother characteristic of colloquial Finnish is that in some (especially western) varieties of colloquial Finnish, but not in the standard one, subjects can be doubled (Holmberg and Nikanne 2006).
(2) a. Se on Jari lopettanut tupakoinnin.
se-3sgbe-PRES3sg Jari quit-PRTC smoking
'Jari has quit smoking'
b. Ne sai kaikki lapset samat oireet.
ne-3pl get-PAST3sg all children same symptoms
'All the children got the same symptoms'
(adapted from Holmberg and Nikanne 2006: 1)

If doubling occurs, it is always the [+/- human] third person pronoun se/ne'it/they' that functions as a doubling pronoun. They agree in number but not in person with the lexical subject. When in third person, the verb is typically in the singular form, as also exemplified in Table 1.

To conclude this overview, the division of labor between standard and colloquial Finnish is not so neat and stable but rather colloquial Finnish is undergoing changes. We expect that the participants to our study have been exposed to both varieties of Finnish (and to both settings for null/overt subject pronouns) but that colloquial Finnish might be predominant. This might have as a consequence the fact that Finnish is for the participants a non null subject language rather than a partial null subject language. Unfortunately, this could not be better controlled and a more detailed discussion is left for future research.

## 5. The Study

### 5.1 Methodology and predictions

In this study, we investigate the distribution of null and overt subject pronouns in Finnish and Italian of Finnish-Italian school-aged bilingual children. As we have seen, an overuse of overt subject pronouns is attested in bilingual production, independently of the language combination. Hence, the prediction is that also bilingual speakers of a partial null subject language and of a null subject language will overuse overt subject pronouns in the null subject language.

A storytelling task was adopted to collect data. The task consisted in the telling of three short stories in Finnish and three different short stories in Italian. The material is part of the storytelling task used in Hendriks et al. (2014) to investigate referential choice in Dutch. Some additional scenes were included. The stories were different in Finnish and in Italian. To all the children the Finnish part was administered first in reason of the weaker status of Finnish at the time of testing. The Italian part was administered at least two weeks after the Finnish one. Each story has six pages which were presented one-by-one on a laptop screen to the participant. Participants were tested separately and recorded. Participants were asked to tell what is going on in each scene. Each story has two characters of the same gender. The first two pages showed only the first character, in the third page a second character entered in the story and in the fourth and fifth pages the second character was performing an action. The last picture showed again the first character only. In telling what each character did in each scene, the participant chose freely how to refer to the character in topic continuity or topic shift contexts. Each participant was recorded and the recordings were transcribed. Each utterance containing one and only one referring expression was listed. The contexts were further classified in [+topic shift], when the target subject was interpreted as new information and referring to other than the subject of the previous clause, and [-topic shift] when the target subject was interpreted as old information and co-referent with the subject of the previous clause. Recall that in contexts of [+topic shift] full DPs are appropriate in both languages, in Italian also strong pronouns are possible (e.g. the third person overt pronoun luillei 'he/she'). In [-topic shift] contexts a weak form (e.g. a null pronoun) is preferred in Italian and a third person pronoun se/bän is preferred in Finnish. Hence, the study aims at eliciting the pragmatically appropriate element (pro, overt pronoun, DP) in the [- topics shift] and [+topic shift] contexts.

### 5.2 Participants

The participants to this study are seven Finnish-Italian bilingual children living in Tuscany, Italy (age span 5;7-11, mean age at time of testing
8.6, SD 2.2). The parents provided information on the linguistic background of the children through a biographic questionnaire. The questions included information about the participants' place and date of birth,age of onset of bilingualism, contexts of (minority) language use, frequency of contact with Finnish native speakers or Finnish-speaking contexts (relatives, baby-sitter, friends, hobbies, etc.), language use with siblings, frequency and language of pre-school/nursery/school. In addition, there were also questions about the parents' age, place of birth, L1 and language used to communicate with the other parent and with the child, and if they consider important to sustain bilingualism at home. It emerges that the participants have a quite homogeneous linguistic background. All the children except one (but she moved to Italy at 1 month) were born in Italy from a Finnish mother and an Italian father. The families report to have all adopted the one face-one language method to sustain the bilingual language acquisition of their children even though some of the mothers report to also use occasionally Italian to communicate at present with the children. The parents report to speak Italian to communicate between them. All the children have one sibling with whom they speak both Italian and Finnish. Children also have regular contacts with relatives and friends living in Finland either by visits or phone/skype and they travel to the country for holidays. In addition, all the children participate to the Finnish school that takes place every other Saturday during the school year. All the children have gone to an Italian kindergarten from 12-15 months at earliest and then to an Italian primary school. At early stages of life (0-1) the participants lived in an environment of simultaneous bilingualism, in terms of quantity of input, that switched at the beginning of pre-school/nursery in favour of the environmental language, Italian. As a matter of fact,although the willingness of the families and the positive attitude towards bilingualism, at the age of testing the children are dominant in Italian due to the strong Italian-speaking environment in which the quantity and quality of linguistic input is higher with respect to the minority heritage language, Finnish. Language dominance in production is also evident, for example, from ungrammatical (but intelligible) utterances that emerged across participants from the transcription of the data in Finnish but not in Italian, which were all grammatically correct. In the next section, results are presented on the storytelling task in both Finnish and Italian.

In addition, two control groups of adult native speakers were included, one for Italian ( $\mathrm{n}=6$ ) and one for Finnish ( $\mathrm{n}=3$ ).

### 5.3 Results

Seven Finnish-Italian bilingual children participated to the storytelling task both in Finnish (3 stories, 6 scenes each) and in Italian (3 stories, 6
scenes each). The contexts were classified in [ttopic shift], which included the scenes where a new referent is introduced, and [-topic shift], which included the scenes in which the character introduced in the scene before performs an action. Examples are given in (3)-(4) for both languages.(3)a and (4)a refer to the first scene and (3)b and (4)b to the second one.


Image 1. Scenes 1-2 from Story 1 (Finnish)
(3)
a. Ballerina ottaa vettä ballerina takes water
b. Sitten se kastelee kukkia then she waters the flowers
[new referent, +topic shift]
[old, -topic shift]


Image 2. Scenes 1-2 from Story 1 (Italian)
(4) a. Un indiano vede una mela sull'albero. [new referent, +topic shift]
b. pro prova a prenderla salendo su un sasso. [old, -topic shift]

In the transcription process each listed utterance contains only one referring expression. Referring expressions were coded in $D P$, overt pronoun, and null pronoun and they were counted for [+topic shift] and [-topic shift] contexts. We first present the results for the Italian task and then for the Finnish one.

As for the Italian version of the task, a total of 148 utterances containing a referring expression were transcribed for the bilingual group. In [-topic shift] contexts ( 76 utterances) a null pronoun would be the most appropriate referring expression, as we also see from the example above in (4). In [+topic shift] contexts ( 72 utterances) a full DP is expected. Overt pronouns would be appropriate only in [+topic shift] contexts. As for the Italian control group a total of 142 utterances were transcribed, 65 [+topic shift], 77 [-topic shift]. Graph (1) provide the overall results for the bilingual participants and Graph (2) for the monolingual Italian group.


Graph 1. Bilinguals' overall results (Italian)


Graph 2. Italian control group: Overall results
As we can see, the bilinguals do not differ almost at all from the monolingual control group. In fact, both groups perform at above chance level and the rate of non-target like patterns is very low. This will be discussed in more detail in the next section.

Let us now turn to the task administered in Finnish. The counted discourse contexts were in total 155 of which 77 [+topic shift] and 78 [-topic shift]. In Finnish, a DP would be the pragmatically most appropriate choice in [+topic shift] contexts and a third person overt pronoun in the [-topic shift] contexts. In Graph 3 the overall results are provided for the bilingual group and in Graph 4 for the Finnish monolingual control group.


Graph 3. Bilinguals' overall results: Finnish


Graph 4. Finnish L1 control group: overall results

The bilingual participants to the study correctly use a DP at above chance level in [+topic shift] contexts even if at a lower rate than the monolingual controls. In both groups, DPs are used at some rate also in [-topic shift] contexts. Overt pronouns is where the two groups diverge more: overt subject pronouns are correctly used in [-topic shift contexts] however, bilinguals, but not monolinguals, produce overt pronouns also in [+topic shift] contexts ( $15.4 \%, 12 / 78$ ). Null pronouns are attested in [-topic shift] contexts, that should be impossible along the lines of the overview on Finnish in section 4 . From a closer look to the sentences in which they are used it emerges that the two groups use null subjects in different syntactic contexts: the monolingual group use the null pronouns in coordinated clauses, which is a
grammatical option in both standard and colloquial Finnish, while the bilingual group show instances of ungrammatical null subjects (cf. section 4). A closer look to non-target like patterns is now at place.

### 5.3.1 Non-target productions

The overall rate of inappropriate referential expressions is $18.9 \%$ (27/143) for Finnish and $8.1 \%(12 / 148)$ for Italian. Non-target productions were classified in:

- inappropriate use of a DP in [-topic shift] contexts;
- inappropriate use of an overt pronoun in [+topic shift] contexts in Finnish and in [-topic shift] contexts in Italian;
- inappropriate use of a null pronoun in Finnish (independently of context) and in [+topic shift] contexts in Italian.

We report in graph (5) and in the table below the main results on nontarget like productions for Italian and Finnish.


Graph 5. Non-target productions in Finnish and Italian

|  | DP | ov_pron | null_pron |
| :--- | :--- | :--- | :--- |
| FIN | $29.6 \%(8 / 27)$ | $29.9 \%(7 / 27)$ | $44.4 \%(12 / 27)$ |
| ITA | $42.8 \%(6 / 12)$ | $21.4 \%(1 / 12)$ | $35.7 \%(5 / 12)$ |

As we can observe from the graph above, the highest rates of non-target productions are with a null pronoun in Finnish and a DP in Italian. This means that bilinguals inappropriately used a null pronoun in Finnish (across contexts) and a DP in Italian (in [-topic shift] contexts). The independent samples t-test on non-target productions in Finnish and Italian reported a statistically significant effect $t(301)=2.03, p=.043$. Thus, in the Finnish ver-
sion of the task bilinguals' productions show a greater variability and nontarget productions are produced significantly more than in the Italian version.

Table (2) below provides the detailed description of the non-target like patterns divided for contexts for Finnish. Here, for null pronoun only ungrammatical structures were counted (i.e. null pronouns in coordinated clauses were coded as grammatical).

| $[-T S]$ | DP | ov_pron | null_pron | TOT. |
| :--- | :--- | :--- | :--- | :--- |
|  | $8 / 27$ | 0 | $11 / 27$ | $19 / 27$ |
| $[+T S]$ | DP | ov_pron | null_pron | TOT. |
|  | 0 | $7 / 27$ | $1 / 27$ | $8 / 27$ |

Table 2. Finnish: Non-target patterns across contexts
The highest rate of deviant forms occurs with a null pronoun which is used instead of an overt pronoun or a DP $(44.4 \%, 12 / 27)$. As a matter of fact, in Finnish third person null pronouns are always ungrammatical both in standard and colloquial Finnish, and both in [ttopic shift] and in [-topic shift] contexts. An example is given in (5), in brackets the grammatically correct form.
a. Täällä on tyttö
[topic: tyttö 'the girl']
(tässä on tyttö)
here is girl
'There is a girl'
b. * haluu pistää vettä kukkasille. [-topic shift: se] (se/hän haluaa pistää vettä kukkasille)
wants put water flowers-to
'She wants to give some water to the flowers'
Interestingly, null pronouns are used overwhelmingly in [-topic shift] contexts (cf. Table 2) that is exactly when the null pronoun option is the preferred form in Italian. Another non-target pattern production is the use of an overt pronoun in [+topic shift] contexts when a DP would be the adequate choice ( $29.9 \%, 7 / 27$ ), see example (6). Both of these non-target patterns seemat a first sight to be an effect of cross-linguistic influence from the (dominant) Italian to Finnish.

[^63](6) a. Se anna yks kukka toi tytölle [topic: the nurse]
(se antaa yhden kukan tuolle tytölle)
it give one flower that girl-to
'She gives a flower to that girl'
b. \# ja se laittaa hiuksista [+topic shift: the girl] (ja se laittaa sen hiuksiin)
and she puts it hair-in
'and she puts it in the hair'
(Ch4: 10;5)
The third type of no-target production is the use of a DP in [-topic shift] contexts when an overt pronoun would be more appropriate ( $29.6 \%, 8 / 27$ ), see example (7).However, this kind of production can be considered as a "willingness to describe" the picture rather than "to tell a story".
(7) a. Kokki pistää kakku uuniin
[topic: the cook]
(kokki pistää kakun uuniin)
cook puts cake oven-in
'The cook puts the cake in the oven'
b. \# Kokki ottaa kakku
[-topic shift: se]
(kokki ottaa kakun)
cook takes cake
'The cook takes the cake from the oven'
(Ch6: 10;4)
As seen above, in the Italian version of the task the deviant forms where significantly less than in Finnish and numerically very low (only 12 out of 148 utterances, 8.1\%). Table 3 below reports the non-target patterns divided for discourse contexts.

| $[-\mathrm{TS}]$ | DP | ov_pron | null_pron | TOT. |
| :--- | :--- | :--- | :--- | :--- |
|  | 6 | 1 | 0 | 7 |
| $[+\mathrm{TS}]$ | DP | ov_pron | null_pron | TOT. |
|  | 0 | 0 | 5 | 5 |

Table 3. Italian: Non-target patterns for contexts
The most salient non target pattern is the non-target use of a $\mathrm{DP}(6 / 12)$ in [-topic shift] contexts. Even though a null pronoun would be more appropriate, it might be the case however that the child is just repeating the topic because he is in front of a new scene, and all these scenes have two characters. We can consider the use of a DP in [-topic shift] contexts a task effect given by the willingness to describe the single picture rather than to tell a story, as was the case for Finnish.
(8) a. e pro incontra una strega [topic: la principessa 'the princess'] and she meets a witch
b. \#e la principessa da il gelato alla strega [-topic shift: pro] and the princess gives the icecream to the witch

Also few non-target null pronouns are attested $(35.7 \%, 5 / 12)$ in [+topic shift] contexts. In these cases, a full DP would have been the most appropriate option. Also this can be interpreted as a task effect due to the fact that the child is seeing the character which becomes therefore familiar enough to not necessitate to be introduced as "new information".
(9) a. la strega lo prende e lo assaggia [topic: la strega 'the witch']
b. \#pro prende un altro euro [ttopic shift: la principessa 'the princess']

Differently from previous results in our data overt pronouns are never overused in Italian, independently of context.

## 6. Discussion

The aim of this study was to investigate the distribution of null and overt pronouns in bilingual speakers of a null subject and of a partial null subject language. Following the Under specification Hypothesis we would have expected a general overuse of overt subject pronouns in the null subject language. Under the Under specification Hypothesis the bilingual children when faced with a choice that requires the coordination of sophisticated pragmatic knowledge with two syntactic alternatives (Serratrice et al. 2004: 188) could optionally select, in Italian, the pragmatically unconstrained option available in Finnish (that is, an overt pronoun). On the contrary, this never happens and our results differ from previous studies such as Serratrice et al. (2004) and Sorace and Serratrice (2009) in that we do not observe any overuse of overt subject pronouns in Italian, the null subject language. On the contrary, there seems to be a cross-linguistic influence the other way round, from Italian to Finnish which results in the non-target use of null subjects, an ungrammatical option in Finnish. This is reinforced by another non-target production in Finnish: overt pronouns are also used in [+topic shift] contexts when a DP would be the pragmatically adequate option. Both patterns would be perfectly acceptable in Italian in these contexts. A possible explanation can come from the role of extra-linguistic factors such as differences in the role of the quantity and quality of input and thus in the relation between the two languages in terms of dominance at the time of testing. Finnish in fact is the language to which the participants are less exposed considering both the amount of time and the quality of the input with respect to the Italian stimuli. Hence, a less efficient processing can be expected for the minority language (cf. Sorace and Serratrice 2009), and is effectively attested when subtle properties at the syntax-discourse/pragmatics are involved.

A second interesting result is that the distribution of null and overt subjects is always constrained by discourse pragmatics, also in non-target productions. As a matter of fact, in Finnish null subjects are only used in [-topic shift] contexts when they are interpreted as old information and they are never used in [+topic shift] contexts to express new information. In Italian the small number of null pronouns in [+topic shift] contexts is marginal (5/12). Overall, the results are along the lines of Serratrice et al. (2004) in that null arguments are associated with uninformativeness even though in Finnish they are used to some extent in a non-target way.

A last complementary result is that the results from the Italian task do not show significant differences from the monolingual control group. The result is interesting because it confirms that at this age the discourse-pragmatic competence necessary for the correct distribution of overt pronominal subjects is already at place and adult-like.

## 7. Concluding remarks

This study aimed a investigating the distribution of null and overt subject pronouns in Finnish-Italian bilingual children after the critical period for the instantiation of the C domain. Data was presented on the choice of referring expressions for the subject of the clause in contexts of topic continuity and topic shift, which are contexts that crucially differ in Finnish and Italian as for the available options due to the different nature of the two languages with respect to the "null subject parameter": in topic maintenance contexts a null pronoun is preferred in Italian whereas a third person pronoun is expected in Finnish, and in topic shift contexts a DP (or an overt pronoun for Italian) is the pragmatically appropriate option.

Overall, from the production of the null/overt referential expression in the task, it emerges that this group of bilingual children have a good pragmatic competence in both languages but crucially it is not equal. On the one hand, in Italian bilinguals and monolinguals do not diverge significantly. On the other hand, in Finnish a greater optionality emerges as for the use of null and overt pronouns. In particular, ungrammatical null subject pronouns in [-topic shift] contexts are attested and overt pronouns are also used in [+topic shift] contexts instead of a DP.

The discrepancy between the two languages can be considered evidence for the dominance of Italian, the majority language, on Finnish, the minority language. Different from previous studies we do not find an overuse of overt subject pronouns in Italian, the null subject language. Hence, the present data do not provide support for the Underspecification Hypothesis as no influence can be observed from Finnish (PNSL in the standard variety and NNSL in the colloquial variety) to Italian (NSL), rather we observed the contrary.

Due to the small sample of participants and in light of the different results from previous literature, further research might be needed to have a better understanding of the matter.

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# Echolalia as a Communicative Strategy: A Kleefstra-syndrome Case Study 

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#### Abstract

: Echolalia - immediate or delayed - is the stereotyped and mechanical repetition of words and phrases produced by others. Experts used to view echolalia as a defect to eliminate; however, current research has shown that often imitation may serve a purpose for children with linguistic deficits. This study's goal is to assess whether echolalia has communicative value; such purpose is achieved through the analysis of spontaneous speech and delayed echoes uttered by a 13- years-old boy officially diagnosed with Kleefstra Syndrome. Since there are no linguistic studies yet regarding this syndrome, this study may shed new light on a specific linguistic strategy that people with this syndrome might use. Based on the functional categories described by Prizant (1983), we analyzed the echolalic speech produced by this teen with the aim of demonstrating the pragmatic value behind those repetitions.


Keywords: Communication, Delayed Echolalia, Immediate echolalia, Kleefstra-syndrome

## 1. Introduction

Echolalia (from the greek $\grave{\eta} \chi \dot{\omega}$ "eco" and $\lambda \alpha \lambda 1 \alpha$ "speech") can be generally described as the mechanical repetition of words and phrases spoken by others. However, controversies around the phenomenon have led to different descriptions and approaches to echolalia and its role. The core of the dispute about the function of imitation in language development has been
the behaviorist-nativist opposition. Whilst in Skinner's view (1957) imitation and reinforcement were crucial to imprint language on a child's tabula rasa, in Chomsky's (1957) theory, imitation cannot be the unique connection between the complexity of language structures and the poverty of the stimulus available to children.

Nowadays, it seems quite clear that imitation has a role at the very beginning of language acquisition but what seems also clear is that there is hardly a child imitating a sentence which is semantically and syntactically too complex. Thus, children don't use elements that are completely absent from their spontaneous speech (among others Ervin-Tripp 1964; Lenneberg 1967; Kemp and Dale 1973; Tager-Flusberg and Calkins 1990; Lidz and Gleitman 2004; ). To imitate only what is understandable could be a useful technique for mapping certain aspects of language to the cognitive system and for acquiring that specific structure (Bloom et al. 1974). On the other hand, there are studies that considered imitation as not progressive in terms of children's acquisition (Slobin 1968) and as something that should be corrected.

Along the footsteps of this debate, this paper will consider the pragmatic value of echolalic productions uttered by a 13 years-old boy with a diagnose of Kleefstra Syndrome. We will analyze those echolalic speeches according to the functional categories of echolalia that have been proposed by Prizant and Duchan (1981) and Prizant (1983). This study doesn't intend to contribute to the description of echolalia's functional categories; the aim of the present investigation is rather to bring new data - collected in a semi-spontaneous situation - that seem to support the theory that proposes the communicative values that echolalia can fulfill.

### 1.1 Types of Echolalia

Before addressing the debate, we should make some distinctions regarding echolalia. First of all, echolalia can either be "immediate", when the repetition occurs immediately after or few turns later than the original utterance, or it can be "delayed" if a long time passes between the imitated words and its echo (Prizant 1983). It seems that the former can be related with short-term echoic memory whereas the latter can be related with longterm memory (Fay 1983). To recognize a delayed echo is particularly complex since it is not always possible to detect the original imitated speech and there is therefore a need to know and remember the personal biography of the individual. For this reason, researchers tend to focus on morphological, syntactical and prosodic patterns in the speech of the imitator and the differences that it is possible to detect between usual linguistic abilities and the hypothetical echoes. Delayed echoes are often sentences that can appear as not coherent in the particular context of output, they may have odd prosodic traits and appear multiple times without any change.

Echolalia can also be "mitigated", if words or sentences are adapted to the context before repeating them (e.g. using the correct pronouns, changing the verb agreement), otherwise it can be "verbatim" when words are reproduced exactly as heard. A well-known phenomenon, which is related to verbatim echolalia, is pronoun reversal, which primarily consists in the use of the pronoun $I$ meaning you, and vice versa. Since sentences are repeated without adapting the initial words to the context, pronouns, which are not fixed in reference, are employed erroneously. One of the first descriptions of this phenomenon in the literature can be found in Kanner (1943: 4) who, describing a child with Autism Spectrum Disorders (ASD), wrote:

He always seemed to be parroting what he had heard said to him at one time or another. He used the personal pronouns for the persons he was quoting, even imitating the intonation. When he wanted his mother to pull his shoe off, he said: "Pull off your shoe". When he wanted a bath, he said "Do you want a bath?" [...] He seemed unable to generalize, to transfer an expression to another similar object or situation.

Since then, many studies focused on echolalia and related manifestations, targeting mainly ASD children (Fay 1969; Prizant and Duchan 1981; Prizant 1983; Prizant and Rydell 1984; Local and Wootton 1995; Stribling et al. 2007; Sterponi and Shankey 2014) and considering echolalia as a communicative failure that has to be eliminated or reduced (for a review Neely et al. 2016).

In typically developing children, it has been demonstrated that echolalia peaks at around 30 months of age, and then decreases (Lovaas 1981). On the other hand, if echolalia doesn't decrease, it can be a symptom of a disorder. This paper focuses on the latter case, pathological echolalia. The goal is to demonstrate that imitation sometime can serve a purpose and that in eliminating it, there is the risk of limiting communication too.

A related phenomena - less studied - is the case of auto-echolalia, also known as 'palilalia", in which the person repeats words and sentences initially produced by himself/herself. This behavior may be considered a form of vocal stereotypy or else it may serve as self-stimulation (Karmali et al. 2005).

### 1.2 Categories for the analysis of echolalia

Many studies defined particular functions that echolalia can fulfill; particularly Prizant and Duchan (1981) and Prizant (1983) were the first who sytematically - through a meticulous analysis of 1009 videotapes of four ASD children's spontaneous interactions and paralinguistic behaviors - outlined both interactive and non-interactive functions of immediate (Table 1) and delayed echolalia (Table 2). Those functions will be used in this paper in order to analyze echolalic exchanges.

Interactive functions

1. Turn taking

Utterances used as turn fillers in an alternating verbal exchange.

Utterances labeling objects, actions, or 2. Declarative location (accompanied by demonstrative gestures).

Utterances used to indicate affirmation of prior utterance.
3. Yes answer

Utterances used to request objects or others' actions.

## Non-Interactive functions

1. Non-focused

Utterances used to request objects or others' actions.

Utterances used as a processing aid,
2. Rehearsal followed by utterance or action indicating comprehension of echoed utterance.

Utterances that serve to regulate one's
3. Self-regulatory own actions. Produced in synchrony with motor activity.

Table 1. Functional categories of immediate echolalia (from Prizant 1983: 67)

## Interactive functions

1. Turn taking

Utterances used as turn fillers in an alternating verbal exchange.
2. Verbal completion

Utterances that complete familiar verbal routines initiated by others.

| 3. Providing information | Utterances offering new informa- <br> tion not apparent from the situational <br> context. |
| :--- | :--- |
| 4. Labeling | Utterances labeling objects or actions <br> in the environment. |
| 5. Protest | Utterances protesting actions of May be used to prohibit others' <br> actions. |
| 6. Request | Utterances used to request objects. <br> self or to establish/maintain interaction. |
| 8. Affirmation | Utterances used to indicate affirma- <br> tion of previous utterance. |
| 9. Directive | Utterances that serve to regulate one's <br> own actions. Produced in synchrony <br> with motor activity. |

Non-Interactive functions

Utterances produced with no appa-

1. Non-focused rent communicative intent or relevance to the situational context. May be self-stimulatory.

Utterances with no apparent commu-
2.Situation Association
3. Self-directive
$\qquad$

Utterances produced with low volume
4. Rehearsal
followed by louder interactive production. Appears to be practice for subsequent production.

Utterances labeling objects or ac-
5. Label (non-interactive)
tions in environment with no apparent communicative intent. May be a form of practice for learning language.

Table 2. Some functional categories of delayed echolalia (from Prizant 1983: 68)
Through Discourse Analysis techniques, other studies tried to confirm the communicative role of echolalia in ASD but also in other diseases, such as Alzheimer (Cruz 2010). The analysis of imitative behaviors and the comparison between pathologic echolalia and imitation in typical language acquisition, led to the conclusion that echolalia can be an active process (Bloom et al. 1974) because children can select what they want to imitate and with whom they want to repeat a particular statement; these decisions can conceal a desire of interaction.

An interesting study on 18 ASD children, made by McEvoy et al. (1988), demonstrated that with higher language abilities the amount of
echolalic speech decreases but the frequency of imitations does not. Researchers explained these data suggesting that children with a higher language level are more ready to respond to verbal stimuli and, since they speak more, the percentage of their echolalia - compared to the total of verbal emissions - is lower. By contrast, if a child has poor language skills and is not talkative, his/her entire verbal repertoire may be echolalic. This study's results confirm the idea that echolalia may be helpful in terms of acquisition of social skills and in interacting with others. Similarly, Stribling et al. (2007), video-recording and transcribing 6 hours of an ASD girl's speech, described echolalia as essential for interaction when a person has poor lexicon and language abilities.

### 1.3 The present study

The goal of this study is to analyze the echolalic speech of a 13 yearsold boy diagnosed with Kleefstra Syndrome, a recently described and very rare disorder, to find out whether echolalic speech may be communicatively useful and/or serve specific purposes. We will use the functional categories presented above (Prizant and Duchan 1981; Prizant 1983) in order to properly understand how specific acts of echolalia may be used to share information with certain interlocutors. This analysis also aims to shed light over a syndrome that has never been studied with respect to linguistic and communicative skills.

## 2. Methodology

### 2.1 Data corpus

The data set considered in this paper derives from recordings of the spontaneous speech of a 13-year-old boy (at the time of the recordings), that we are going to name Jack, an invented name. Jack was diagnosed with Kleefstra Syndrome by a neuropsychiatrist. ${ }^{1}$ Kleefstra Syndrome is a rare genetic disorder and it derives by mutations/deletions of the gene called EHMT1 (Euchromatin Histone Methyl Transferase 1; Kleefstra et al. 2010). Kleefstra syndrome involves low muscles tone, including the tongue muscle. For this reason speech comprehension might be affected (see GeneReviews ${ }^{\ominus}$, Last Update: March 21, 2019, Accessed on May 23, 2019). In a survey carried out in 2018 on 179 cases (<https://www.kleefstrasyndrome.org/wp/wp-content/uploads/2018/08/

[^64]Kleefstra-Syndrome-Survey-Report-2018.pdf> [06/2019]), it has been found that, on one hand, the $29 \%$ of people with such syndrome (with an age range from 12 months up to 38 years old) are non-verbal and do not communicate with other methods while, on the other hand, the $16 \%$ of them produce full sentences. The $14 \%$ of them produce sentences of just 1 or 2 words. The others use other methods to communicate (e.g., sign language, picture exchange communication system, augmentative and alternative communication).

Jack presented many linguistic and cognitive deficits. His IQ and VIQ are below the mean intelligence levels of age-matched peers: Jack rarely produces entire sentences and he utters single words instead. Moreover, muscles problems led to the production of distorted sounds, often unintelligible. Those communication challenges have led us to choose the recording of verbal interactions during school lessons and familiar routines, in particular with two teachers that are used to speak every day with Jack and that could help in the analysis of his speech. The recorded data have been transcribed and teachers' help has been essential in decoding the speech. Parents formally signed a consent form in which they agreed to participate in the study.

### 2.2 Material and procedure

The experimenter spent two entire days at the school attended by Jack, recording the whole time spent together with three different teachers. The boy did not notice the recording machine so that the communication could be spontaneous. A total of four hours of recordings have been transcribed and analyzed with the help of one teacher, in order to evaluate the different functions of echolalic behavior.

## 3. Results

Transcription of different type of echolalic speech will be reported and analyzed. We considered both the echolalic production and the turns before and - if useful - after it. Echolalic utterances will be transcribed in bold. Since the original recordings are in Italian, glosses will be provided when useful, following the Leipzig Glossing Rules (Lehmann 1982; Croft 2003). When glosses aren't useful, translation will be provided. The first letter of the names will be used to distinguish speakers: J stands for 'Jack', A stands for 'Antonella', one of the teachers, K stands for 'Katiuscia', another teacher, and, finally, G stands for 'Greta', the experimenter. Comments will be given inside square brackets.

### 3.1 Immediate Echolalia

The example in (1) is a clear case of immediate echolalia. Jack reproduces the same verb uttered in the turn before by the teacher (i.e., to laugh), maintaining the verb in the second person singular form, even if probably referring to himself. The functions might be the 'Yes answer', that is 'to indicate affirmation of prior utterance'. This is also a case of auto-echolalia.
(1) J: [laughs]

| A: ridi? | Ridi | pagliaccio | [singing] |
| :--- | :--- | :--- | :--- | :--- |
|  | laugh-2SG | laugh-2SG clown' |  |
|  | 'Do you laugh? You, clown, laugh' |  |  |

## J : ridi ridi ridi ridi

laugh-2SG
'You laugh'
The example in (2) is also a case of immediate echolalia. Jack reproduces the question uttered by the teacher. In this case, however, the function seems to be the 'rehearsal', that is something used non-interactively as a processing aid. Jack previously answered to this question, saying 'three minutes' so he probably got confused when the teacher asked again the same question.
(2) A: Numana... quanto ci mi mette ad Numana... how much CL.LOC CL.REFL take-3SG to andare a Numana? go-INF to Numana
'Numana, how long does it take to go to Numana?'
J: tre minuti
'three minutes'
A: quanto? Quanto?
'How long? How long?'
J: quanto?
'How long?'
A: Cinque ore?
'Five hours?'
The example in (3) seems a case of echolalia in which there are no communicative intentions, indeed Jack answers a very simple question 'Am I a female or a male?' wrongly, probably simply repeating the last word of the
sentence in the previous turn. However, we can think that Jack is trying to maintain "Turn taking".
(3)

```
A: chi sono io?
    who be.1SG I
    'who am I?'
J: Antonella
    'Antonella'
A: sono una donna o iSG un uomo?
be.1SG a-F female or a-M male
'Am I a female or a male?'
J: uomo
    'male'
A: come un uomo?
    how a-M male
    'what? A male?'
```

In the example in (4) Jack and the teacher are doing some schoolwork in which the boy has to listen to a description and to point at the correct picture. We can perceive Jack's difficulty in answering the question, indeed he pointed at the wrong picture several times. When he has to answer some questions, he repeats twice what he has just heard in the turn before, that is the verb "punge" (sting). In this example, it seems that Jack is using this strategy in order to keep up the conversation, so with a "Turn taking" function.
(4) A: ascolta Jack, dim- mi una cosa qual è listen-2SG Jack tell-2SG me a thing... which is-3SG quell' animale tra questi che punge... that animal among these that sting-3SG 'Jack, listen, tell me something. Which is the animal that stings, among these?'
[Jack points to the wrong picture producing a sound]
A: che punge
that sting-3SG
'The one that stings'
[Jack points to the wrong picture producing a sound]
A: che punge, che morsica...
that sting-3SG, that bite-3SG
'The one that stings, that bites'
[Jack points to the wrong picture producing a sound]

```
A: cos' è è questo?
    'What is this?'
J: punge
    sting-3SG
    '(It) stings'
A: un serpente... e cos' è questa qua?
    a snake ... and what is-3SG this one
    'A snake. And what is this one?'
J: [laughs] lingua
    'Tongue'
A: e cosa fa la lingua?
    'What does the tongue do?'
J: punge
    sting-3SG
    '(It) stings'
```

In the example in (5), again we may think that Jack had some difficulty in answering a request. In this case he both repeats something that he has heard before ("piove") and he produces auto-echolalia. In this case we can observe both the echolalic behavior with a function of "Turn taking" and the auto-echolalic behavior with the function of "Rehearsal".

| G: Com' | è | fuori | Jack? Piove? |
| :--- | :--- | :--- | :--- |
| How | is-3SG | outside | Jack? Rain-3SG |
|  | 'How is the weather outside, Jack? Is it raining?' |  |  |

J: $\quad \begin{aligned} & \text { Sì } \\ & \text { 'Yes' }\end{aligned}$
G: Hai l' ombrello?
Have-2SG the umbrella
'Do you have the umbrella?'
J: $\quad \begin{aligned} & \text { Sì } \\ & \text { 'Yes' }\end{aligned}$
G: Piove tanto. Hai visto cosa fa Katiuscia?
Rain-3SG a lot. Have-2SG seen what do-3SG Katiuscia?
È al telefono. Come si risponde al telefono?

Be-3SG at the mobile. How pickupat the mobile 'It's raining a lot. Have you seen what Katiuscia is doing? (She) is speaking on the mobile. How do you pick up the mobile?'

J: \begin{tabular}{llll}

Piove \& piove \& | piove |
| :--- |
| Rain-3SG |
| It rains | \& rain-3SG

\end{tabular}

### 3.2 Delayed Echolalia

As may be seen in Prizant (1983: 65) and Prizant and Rydell (1984), studying and analyzing delayed echo can be really challenging due to the fact that delayed echoes are "temporally removed from the present" (Sterponi and Shankey 2014: 287) and this aspect might make their analyses more arbitrary. For this reason, there are few studies that focus on delayed echoes and their communicative/pragmatic functions.

We should take into consideration that there are some cues which are useful when we analyze delayed echoes.

1. Subjects that rely on delayed echoes, tend to repeat the same exact words and sentences many times, often maintaining also their intonation. We will use this cue, also thanks to people that work with Jack every day and that can reconstruct the history of specific expressions.
2. Delayed echoes are often syntactically and morphologically different from the rest of the spontaneous production (Prizant1983: 65).
3. Syntactic and pragmatic errors might occur when particular words are repeated without considering their context of reproduction; for example, when proper names are reproduced, or if personal pronouns are repeated without taking into account the altered situation (pronoun reversal errors). This is what occurs with Jack's pronominal production: as we will see, he always refers to himself saying his name or with the pronoun "you" and to the interlocutor with his/ her name or with the pronoun "I".
4. It has been noticed that communicative delayed echoes are often "differentiated according to ownership" and specific delayed echoes might be reproduced solely with the person that originally produced that sentence (Sterponi and Shankey 2014: 287).
5. Cues such auto-echolalia are often an evidence of the presence of a delayed echo.

In (6) we have two examples of delayed echoes. There is a first example of pronoun reversal: Jack didn't want to work at the PC and when the teacher put his hand on the keyboard he refused to write saying "Io".

Teachers are used to his pronoun reversal errors and in this first case they explained to me that 'allora io sono io' ('I it's me'). In our entire recordings we counted 62 occurrences of pronoun reversal in which the first-person singular pronoun $I$ is used to refer to the speaker. In this case the delayed echo has a "Directive" function, since it is used to direct the teacher's action.

The second example of delayed echo is 'piano piano' (quietly) which is also a case of auto-echolalia. Also in this case the teacher explained to me that he said 'quietly because he has pain in his ears'. Every time they sit at the PC to write sentences on a specific program that reads aloud what they type, Jack says 'piano piano' in order to request to turn down the volume of the PC because he suffers with listening to loud sounds. Again, then, this is a case of "Directive" function, since it is used to direct the teacher's action.
(6) A: allora facciamo vedere come lavoriamo con Jack [...]
then make-1PL see-INF how work-1PL with Jack
'Let us show how we work with Jack'
[The teacher puts Jack's hands on the keyboard]
J: [laughs] io
'I'
A: [explaining to me] io... allora io sono io e Jack è Jack I ... well I be-1SG I and Jack be-3SG Jack 'I... well I it's me, and Jack is Jack'
[...]
A: [...] facciamo solo vedere a Greta come faccio io [...] make-1PL just see-INF to Greta how do-1SG I
'Let us simply show to Greta what I do'
J: piano piano
'Quietly quietly'
A: sì piano piano perché lui ha male alle orecchie yes quietly quietly because he have-3SG pain at the ears 'Yes, quietly quietly because he has pain in his ears'

In (7) we have a case of delayed echolalia in which Jack uses a strategy, in all likelihood, to avoid using pronouns. Indeed, in order to refer to himself he used his name, with a function of "Protest", that is to prohibit the teacher's action of going to the printer machine to take the sheet. In our recordings we ran across 14 occurrences of pronoun avoidance, in which Jack uttered his name in order to refer to himself.
(7) A: allora prima stampiamo... prendo io.
so first print-1PL take-1SG I
So, first of all we print. I take (the paper)'
J: Jack, no Jack
Jack, no Jack'
In (8) we have two other delayed echoes. In the first one, Jack said 'per favore' (please) that, apparently, might not seem an echo but it occurred 14 times during our recordings, always to request something: 4 times he used 'per favore' to ask for water and 9 times to ask for food. For this reason, it has a "Request" function and it is uttered with formulaic value.

Then, again, we find a pronoun reversal error. The teacher explained to me that they have a sort of ritual for the snack time in which when Jack has to eat biscuits, the teacher opens the box and gives one biscuits at a time to Jack, who says buoni 'tasty' mimicking the yummy sign with a finger on his cheek. In this occasion, indeed, Jack gave the close box to the teacher saying ' $I$ ' and then 'tasty' in order to perform a "Request" act, asking to open the biscuits' box.
(8) [when J. eats biscuits the teacher has to put them inside a box]

## J: per favore

'Please'
A: sì
'Yes'
J: io io ... buoni [giving a closed box of biscuits to the teacher]
'I, I, tasty'
The example in (9) shows more clearly how Jack makes errors when referring to the speaker. We can see pronoun reversal errors in which Jack says $I$ instead of you, in one case also saying clearly 'I Antonella' that is the firstperson singular pronoun together with the name of the addressee. At the same time, we can see the pronoun avoidance error, in which he produced twice the name 'Antonella'. These are all cases of "Request".

[^65]```
    'Yes'
A: chi la cerca?
    who CL search-3SG
    'Who should search for it?'
J: io Antonella
    'I, Antonella'
A: allora... la cerca Antonella... la cerca Jack?
    so CL search-3SG Antonella CL search-3SG Jack
    'So is it Antonella who should search for it? Is it Jack?'
J: io
    'I'
A: chi è io?
    who be-3SG I
    'Who is I?'
J: Antonella
    'Antonella'
```

The exchange in (10) is an example of pronoun reversal but different from the ones seen above. In this case Jack refers to himself with the secondperson singular pronoun you. This occurred three times in our recordings. In this particular case, Jack wants to eat biscuits and this kind of echolalia has a simple function of "Turn taking".
(10) G: chi è che mangia i Ritz, io o tu?
who be-3SG that eat-3SG the Ritz, I or you
'Who is eating the crackers? Is it me or is it you?'
J: tu [taking the box]
'You'
The conversation in (11) presents many interesting cases of delayed echo in which the communicative value is clear. We were asking Jack to describe what he had done the day before. He said 'music music music' which is something apparently odd in this circumstance, since we were speaking about him going to the bakery to order a sandwich. Thanks to the teacher we reconstructed that he was particularly happy because inside the bakery there was some music and he danced and sang. Indeed, some turns after he repeated again 'music music music', which is also a case of auto-echolalia, and then 'music, Jack dances, Jack laughs' in which he speaks about himself in the third person, with also the verb with agreement in the third person sin-
gular (i.e. 'balla' and 'ride'). In this example, we can see that the function of echolalia is of "Providing informations" since he is trying to communicate to me what happened and what made him happy.

Similarly, another case of delayed auto-echolalia with a "Providing Information" function, is the the answer to the teacher's question 'What was the name of the sandwich?'; Jack's answer is, again, apparently inappropriate since he uttered 'wine wine wine'. With the teacher we reconstructed the day and she immediately remembered that something unusual happened (once a week, in the same day, they always go to buy a sandwich): while they were returning to school she found a colleague that gave her a bottle of wine as a gift and they went all together to the colleague's car to collect it. This change of program probably surprised Jack and he tried to communicate this.

```
(11) A: racconta alla Greta cosa abbiamo fatto ieri
    tell-2SG to Greta what have-1PL done yesterday
    'Tell to Greta what we did yesterday'
    J: panificio ... pane
    'Bakery, bread'
A: panificio
    'Bakery'
J: musica musica musica
    'Music, music, music'
A: piano racconta le cose in ordine, racconta cosa abbiamo fatto
    slowly tell-2SG the things with order, tell-2SG what have-1PL done
    prima
    before
    'Slow down, tell things orderly, tell what we did before'
J: pane
    'Bread'
A: pane
    'Bread'
J: musica musica musica
    'Music, music, music'
A: ascolti?
    listen-2SG
    `Are you listening?'
J: sì
    'Yes'
```

```
A: piano, prima siamo andati al panificio.
    slowly, before have gone-1PL to the bakery
    Quando siamo entrati cosa c'era?
    when have entered-1PL what be-3SG
    'Slow down, first we've been to the baker. When we entered, what was there?'
J: musica, Jack balla, Jack ride
    music Jack dance-3SG Jack laugh-3SG
    'Music, Jack dances, Jack laughs'
A: Jack balla e Jack ride, e poi cosa abbiamo fatto?
    Jack dance-3SG and Jack laugh-3SG and then what have done-1PL
    tu hai dato i soldi...
    you gave-2SG the money
    'Jack dances, Jack laughs, and then what did we do?' You gave the money to...'
J: sì ... mmm [mimicking "yummy"]
    'Yes, mmm'
A: mmm che buono il panino... comesi chiamava questo
    mmm how delicious the sandwich how CL.REFL called-3SG that
    panino?
    Sandwich
    'mmm, the sandwich was delicious! What was the name of the sandwich?'
J: vino vino vino
    'Wine, wine, wine'
A: vino?
    'Wine?'
J: sì
    'Yes'
```

The examples in (12), (13) and (14) are clear examples of delayed echos with the function of "Verbal completion" and they have a strong communicative value. In (12) Jack is drinking water. When he drinks too fast he always chokes. For this reason, a particular teacher, Katiuscia, takes the bottle away saying "breathe!" every time. Jack, just with her, often repeats this rule, as in (12). It's a sort of ventriloquization that is used communicatively to create a playful situation. Similarly, in (13) Jack repeated the rule that Katiuscia always tells him, which is to put the hand in front of the mouth when coughing. In (14) Jack did not repeat a rule but a joke that he always makes with the teacher: when Jack stains the teacher's shirt, she always says that he has
to take it to the laundry. What is interesting in such exchanges is that Jack knows that they can occur with Katiuscia only.
(12) [after drinking water]

J: [laugh] respira
breathe-3SG
'Breathe!'
(13) [Jack cough]

J: mano
'Hand'
K: la mano davanti
alla bocca quando tossisci
the hand in front the mouth when cough-2SG
'put the hand on your mouth when you cough'
J: mano
'Hand'
(14) K: e dopo quando sporchi la maglia a Katiuscia cosa dici?
and after when dirty-2SG the shirt of Katiuscia what say-2SG 'What do you say when you get Katiuscia's shirt dirty?'

J: pulitura
'Laundering'
In (15) there is another classical verbal routine that Jack performs to communicate. In this case, the teacher and Jack were playing a game in which the teacher showed a picture to Jack and he had to say the name of what was depicted. The picture represented a sea landscape and immediately Jack said 'three minutes' and then 'Numana'. This combination of words 'Numana''three minutes' occurs every time that something related to the sea enters into a conversation. 'Numana' is the location where they always go on holiday. 'Three minutes' is probably related to something he had heard while going to Numana. This kind of echo can have a "Labeling" function.
(15) A: allora dim- mi cosa c' è in questa immagine
so tell-2SG me what there be-3SG in this picture
'so, tell me what you see in this picture'
J: mare
'sea'
A: mare
'sea'
J: tre minuti'three minutes'
A: Dove vai in tre minuti?where go-2SG in three minutes'where do you go in three minutes?'
J: Numana
'Numana'
A: Numana ... Numana.. cos' è Numana?
Numana Numana what be-3SG Numana'Numana, Numana, what is Numana?'
J: mare

In (16) we find again Jack producing the auto-echo 'music music music' but, in this case, the function is "Calling": we were simply walking around and he probably wanted to call for our attention. The teacher said that this is something that often happens and that Jack loves the song Inno alla gioia. For this reason, we can presume that Inno alla gioia is an echo too, but we don't have enough information to analyze it.
(16) J: musica musica musica
'music music music'
A: musica? [A. began to sing] 'music?'

J: [laugh]
A: ascolta, di' alla Greta cos'è questa canzone listen-2SG tell-2SG to Greta what be-3SG this song 'listen, tell Greta the title of this song'

J: inno alla gioia
'Ode to joy'
A: inno?
'Ode?'
J: gioia
'Joy'

A: inno alla gioia
'Ode to joy'
The example in (17) is interesting because the turn 'Today is Monday' is syntactically complex for Jack, who never produces a complete sentence but tend to produce single words instead. For this reason, this turn is probably an echo of the exercise Jack and the teacher do when they report what Jack did during the day on the PC, and it has a function of "Turn taking".

| A: martedì ... | dove vai? |
| :---: | :---: |
| Tuesday ... | where go-2SG |
| 'Where do y | go on Tuesday? To?' |
| J: ${ }_{\text {c }}^{\text {piscina }}$ ( ${ }^{\text {a }}$ |  |
|  |  |
| A: piscina |  |
| 'Pool' |  |
| G: ah piscina |  |
| 'Ah pool' |  |
| J: oggi è lunedì |  |
| 'Today is M |  |

## 4. Discussion

In the past years, the phenomenon of echolalia has been scarcely investigated, either because it has often been considered a mere words repetition without any communicative value, or because, as we have seen, it can be really tough to recognize and analyze an echolalic speech, particularly when we have to consider delayed echoes. The scientific literature has mainly focused on how to eliminate echolalia (e.g., Palyo et al. 1979; Schreibman and Carr 1978), since it has been considered something that might slow down the natural processing and acquisition of language.

The single-case study proposed here had the goal of focusing the attention on how echolalia can be an instrument that population with linguistic and cognitive deficits might use in order to communicate with others. We analyzed two different type of echolalic production uttered by a boy diagnosed with Kleefstra syndrome: immediate echolalia and delayed echolalia. Despite the fact that our corpus presented few examples of immediate echolalia, we were able to recognize how it can be used to answer questions, to express difficulties in answering questions, to maintain the turns in a conversation and, thus, to keep the exchange with the speaker. Some echoes had no clear
communicative functions but, still, they were probably useful to calm down and to regulate the person's behavior.

When considering delayed echoes - both self-echoes and other-echoes - many different communicative functions are clear and it appears evident that such borrowed words are fundamental to keep the communication going with the surrounding environment. We have seen cases in which words were apparently uttered out of the blue, with no immediate clear connections with the conversation. This was actually a way to communicate that something happened, a way of giving new information, of telling something. We have also analyzed delayed echoes that are part of a ritual or that are uttered with specific interlocutors only, recognizing that the value of that echo is not simply that of uttering something but that of producing those words with a person that can understand them. Delayed echoes are used to label objects, to ask for something, to prevent other people's action, to play, to make jokes, to give new information, to interact and, again, to maintain turns in a conversation. Something that has been considered merely pathological has a clear pragmatic value.

In conclusion, we don't want to suggest that all cases of echolalic speech are communicative in nature and that it is always the case that echolalia should be maintained. Each single case should be analyzed and considered: when it's clear that cognitive and linguistic deficits render other forms of communication impossible, echolalia may serve a communicational purpose. It is a powerful instrument when it is inserted in an environment in which it is absorbed and supported. Professionals should consider availing themselves of the help of linguists for the creation of intervention programs, in order to fully understand the communicative context of echolalic productions and to evaluate the best way of working with them.

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Pragmatica e sociolinguistica
Pragmatics and Sociolinguistics

# Corporate Storytelling as an Effective Communication Tool 

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#### Abstract

: This paper proposes to highlight the effectiveness of storytelling as a powerful and persuasive communication tool in the corporate context. This peculiar kind of communicative approach allows the creation of a symbolic universe potentially shared by the public, with which not only can it recognize itself, but with which it can actually interact. The fundamental theories of narration and their evolution are taken into consideration, as well as the evolution of the consumer into prosumer and the sociological and economic consequences emerged. In the present paper we will discuss two case studies: Wind: Papà - an example of a short film with a strong emotional impact on the audience and a revolutionary message - and Léon Vivien: Facebook 1914 - a masterful example of how narrative content can be exploited using different mediums and the potential of social networks.


Keywords: Communication, Internet, Narrative, Prosumer, Social Media, Storytelling

## 1. The Digital Revolution

Internet-based technologies have changed the way in which human beings live. The so called Fourth Industrial Revolution affected humans' everyday lives and dramatically changed their behaviours in real life and furthermore in communications. The internet has revolutionized the computer and communications world like nothing before. The invention of the telegraph, telephone, radio, and computer, set the stage for this unprecedented integration of capabilities. The internet is at once a world-wide broadcasting medium,
a mechanism for information dissemination, and a medium for interaction and collaboration between individuals and their computers without regard for geographic location.

The astonishing success of social media platforms such as Facebook and Twitter (and Instagram) led us to this discussion and to the aims of this paper. According to the 2019 edition of the annual report of We Are Social, more than 360 billion people came online for the first time during 2018, at an average of more than one million new users each day. About 57 percent of the world's population is now connected to the internet. In addition to this global phenomenon, in Italy there has been a major increase of $27 \%$ in internet users in just one year. According to a survey on Eurostat's website, a casual internet user is defined as someone who has used the internet within the last three months, while a regular internet user is defined as someone who has used the internet at least once a week within the reference period of the survey. Out of the population of 59.25 in Italy, 54.8 million people are internet users. Internet Penetration is the relationship between the number of Internet users in each country and its demographic data. In Italy Internet Penetration in 2019 is at $92 \%$.

The infinite potential acquired by most of mankind through this new media has established new rules in communication, politics, economics and marketing. We live in a narrative dimension. From the car to the bedroom, from cell phones to television reality shows, our daily life is constantly wrapped in a narrative network that filters perceptions, stimulates thoughts, evokes emotions, excites senses, and determines multisensory responses.

The First Industrial Revolution used water and steam power to mechanize production. The Second used electric power to create mass production. The Third used electronics and information technology to automate production. Now a Fourth Industrial Revolution is building on the Third, the digital revolution that has been evolving since the middle of the last century. It is characterized by a fusion of technologies that is blurring the lines between the physical, digital, and biological spheres. The possibilities of billions of people connected by mobile devices, with unprecedented processing power, storage capacity, and access to knowledge, are unlimited. (Schwab 2015: 1)

Storytelling has now reached the highest level of pervasion ever in human existence; both work and private life are part of a narrative continuum. The historical moment in which we live, from the invention of the World Wide Web (conventionally attributed to the English computer scientist Tim Berners-Lee in 1991) to today, is very peculiar from the sociological and economic point of view. The technologies we created to be "always connected" to a virtual world that becomes more and more real have brought major changes to the social, and above all, economic dynamics in the post-modern era. We live in a new symbolic economy which contributes to the expansion
of the immaterial, where the virtual dimension is becoming the reality and the medium becomes the message. This passage from Carmagnola (2002) is illuminating for the purposes of our discussion:

It is, therefore, a system where the economic and the symbolic reproduce each other, where the imagery of the commodity derives from the imagery of customs, and where customary innovations are enhanced by passing through the production system. The media diffusion of lifestyles and languages constantly reconstitutes new features of the value chain, it becomes production passing through figuration and narrativization. The evolution of the economy of the sign in fictional economics is thus presented as a multipolar grid in which the traditional industrial research of efficiency is complementary to the capacity for imaginary reproduction. In all this, the media, in turn, are much more than a simple mechanism of dissemination and transmission of images and end up becoming one of the forms of deployed social and productive intelligence. (Carmagnola 2002: 140)

## 2. Narrative as a way of thinking

The attention to narration and its forms can be documented starting from the illustrious precedent of Greek culture and through the whole history of poetry, literary criticism, and entertainment. The suggestions, in this sense, are very numerous and drawn from different fields: anyone who has dealt with science and art has had to face the theme of narration. In the perspective of more formal analysis, the temporal and reference limits certainly shrink, but this does not simplify our work.

Among the most significant names included, one cannot fail to mention Vladimir Propp, linguist and folklore enthusiast, who meticulously analysed what he saw as the underlying structure of Russian folktales; formalists such as Mikhail Bakhtin who continued to develop narrative analysis; ethnological scholars like Levi-Strauss along with the US linguist Noam Chomsky, who examined the invariable structure of the universal human mind; literature theorists such as Genette, Bremond, Todorov and Segre; linguists like Greimas and Uspensky; sociologists, like Goffman, and more recently, semiologists like Chatman and Eco. Thanks to these multidisciplinary investigations it is now possible to talk about storytelling.

There has been a significant amount of interest and speculation about the nature of the narrative since the mid-1960s. This may well be a function of our information society, where communication and the means of communication have become increasingly important to individuals and organizations. Furthermore, cross-cultural studies (Levi-Strauss 1972; Chafe 1980) suggest that narrative is an elementary and persistent form of human expression regardless of ethnic origin, primary language, and enculturation. This ubiquity is famously described by Barthes as follows:

The narratives of the world are numberless. The narrative is first and foremost a prodigious variety of genres, themselves distributed amongst different substances as though any material were fit to receive man's stories. Able to be carried by articulated language, spoken or written, fixed or moving images, gestures, and the ordered mixture of all these substances; narrative is present in myth, legend, fable, tale, novella, epic, history, tragedy, drama, comedy, mime, painting, stained glass windows, cinema, comics, news items, and conversation. Moreover, under this almost infinite diversity of forms, narrative is present in every age, in every place, in every society; it begins with the very history of mankind and there never has been a people without narrative. All classes, all human groups, have their narratives, enjoyment of which is very often shared by men with different, even opposing, cultural backgrounds. Caring nothing for the division between good and bad literature, narrative is international, transhistorical, transcultural: it is simply there, like life itself. (Barthes 1977: 79)

Narratives began to be systematically investigated with a very ambitious intent: to identify the minimal units of any narrative and to find a universal grammar of the story. This first phase encompassed the development of a series of essential tools for classifying the position of the narrator in a story, evaluating the relationship between the time of the narrated story and the time of the discourse that narrates it, identifying the point of view through which the story is told. All these authors have somehow contributed to the narratological field, highlighting that "every human culture has deep, almost archetypal narrative structures, which recur in the construction of everyday life" (Fontana 2009: 19). This concept represents the conclusion of much of literature in different fields, so much that anthropology seems to merge with semiotics, linguistics with philosophy, psychology with literature, almost raising the narrative principle as the foundation of the whole human essence.

The term narratology was coined by the philosopher Tzvetan Todorov in 1969 to indicate the study of narrative structures. According to many scholars it is a heterogeneous discipline which draws on different areas of knowledge. What we are most interested in is getting to the primary nature of storytelling, understanding how to best use the word and how to make our story effective. The power of the word is immense and trying to exploit its potential by drawing on theory, putting into practice algorithms and alchemies that make our stories effective and persuasive, is the goal of this research.

## 3. The Narrative Turn

Starting from the 90s, the study of narrative practices has embarked on a new, more fertile road thanks to the cross-contributions of cognitivism, neuroscience, and studies of artificial intelligence. Cognitivists have realized that our mind, starting from childhood, is based on the chrono-causal connection of episodes. Essentially, we learn to correlate events as causes and ef-
fects or to make one internal state the engine of an external fact. At the same time, neuroscientists began to photograph with neuro-imaging techniques such as TMS (Transcranial Magnetic Stimulation) or PET (Positron Emission Tomography) the way in which, when we observe something, we tend to classify it through the comparison with a stereotypical model, derived from similar experiences recorded in the memory. Each new experience is evaluated based on its conformity or difference with respect to a previous scheme. In this new perspective, narrative is a gym: we use it as training to interpret the world according to agreed expectations.

We can speak of an epistemological turning point in post-classical narratology thanks to the decisive contribution of cognitivism and neuroscience (Bamberg 2007). The beginning of this new course can be placed in 2002, the year of the publication of Story Logic by David Herman (Herman 2002). In Herman's work for the first time the neurocognitive sciences enter an area that had previously been the field of literary scholars and linguists. As has been shown by scholars working in the field of Artificial Intelligence, the human mind, in order to integrate partial information into broader conceptual frameworks, accesses an archive of situational and contextual knowledge, recorded in the memory. Such studies, include those by Marvin Minsky (1963 and 1986), Roger C. Schank and Robert P. Abelson (1977) and David E. Rumelhart (1980). They tried to replace the concept of context with more explicit and detailed constructs: frames (or schemata) and scripts. The frames aim to reproduce the mechanisms of human knowledge and expectations regarding standard events and situations. The frames basically concern situations like seeing a room or making a promise, while the scripts involve sequences of actions such as playing a football game, going to a birthday party, or eating in a restaurant.

Beginning with Guy Cook (1994), schema theory has been adopted as a means of literary analysis; the scholar proposed a change of focus in literary theory, from a limited analysis to the textual structure, leading to an analysis that takes into consideration the interaction between the text and the cognitive structures of the reader. Frames are prototypical structures. Scripts are prototypical sequences. Both are present in the reader's mind, and function as models through which he adapts the text to his usual ways of thinking. Thus, according to Monika Fludernik (1996, 2009), readers narrate what they read, or rather narrativity is not simply something present or absent in the texts, but rather something recognized by the readers or sometimes projected by them within the texts. Fludernik, taking up the concept of naturalization introduced by Jonathan Culler (1975), uses the term narrativization to describe a reading strategy that naturalizes it through the use of narrative schemata: in the process of narrativization, readers commit themselves to read texts as narrative, that is, as manifesting a human experience; the narrativization then serves to reintegrate the new with the known and the famil-
iar, operating on the basis of a higher-level verisimilitude, which introduces a plurality of frames of reference. When readers are struggling with realistic texts, the process of narrativization is quite automatic, but when confronted with difficult or even potentially illegible texts, they consciously seek strategies to recover them as narratives.

## 4. Narrative Communication

Scholars such as Seymour Chatman and Umberto Eco examined content in the context of narrative communication. They investigated the roles of the author and the reader within the text itself. Their contribution to narratological theories is enormous. In fact, they analyzed narrative as communication and tried to understand how the transmission of meaning occurs between subject and recipient, author and reader, company and customer; focusing on the various dynamics that occur. In his Story and Discourse: Narrative Structure in Fiction and Film (1980) Chatman summarizes narrative communication as follows:


Table 1. The narrative-communication model (Chatman 1978, 158)
This scheme highlights the fundamental roles within narrative communication. At the beginning and at the end of the scheme we find concepts such as real author and real reader, while in the center we find the figures placed within the text. The implied author is "the principle that invented the narrator along with the rest of the narrative" (Chatman 1987: 157). He is essentially the constructor of the text. At the other end, the implied reader is the presupposed reader; in the middle, narrator and narratee: the narrator is the one who speaks in the text and is different from the real author, while the narratee is "an expedient with which the implicit author informs the real reader on how to play the implicit reader".

Chatman improved the diagram several times within his book by adding elements or making clarifications. What we need to remember is that this scheme of interaction between reader and author according to its various degrees, is a scheme that will also be examined by Eco in his search for
a theory of interpretation. In one of his most important books: Six Walks in Narrative Woods (1994), the so-called Norton Lectures held at Harvard University in 1992 which summarized some of his thought already presented in well-known books like Lector in Fabula and Opera Aperta (1979). He considers the forest as a metaphor for narrative text. Paying homage to the postmodern writer Jorge Luis Borges and his famous novel El jardin de senderos que se bifurcan, Eco writes: "A text is a garden with forking paths. Even when in a forest there are marked paths, everyone can trace his own path deciding to go to the right or left of a certain tree that he meets. In a narrative text the reader is forced at any time to make a choice" (Eco 1994: 3).

The philosopher somehow completes the framework developed by Chatman, warning us about the potential of the reader/recipient writing:

Every text, after all, is a lazy machine asking the reader to do some of its work. What a problem it would be if a text were to say everything the receiver is to understand - it would never end. (Eco 1994: 3)

He does not limit himself to completing the picture but enlarges it by emphasizing the scope of the model. We are talking not only about literary works but about any statement based on narration to convey meaning. This means that this reasoning can be safely applied to many forms: advertising, radio, and cinema. The reason is simple: in narrative communication a sort of dialogue is established between subject and recipient, which is inserted at the level of the text: "Whenever the speaker is about to end a sentence, we as readers or listeners make a bet (albeit unconsciously): we predict his or her choice, or anxiously wonder what choice will be made" (Eco 1994: 6). Obviously, the dynamics are variable according to the different forms considered. In oral discourse, dialogue is built on an exchange that requires direct feedback, while in a literary text or text for cinema this occurs indirectly through the relationship between author and model reader.

These concepts introduced by Eco refer in some ways to Chatman's author and implicit reader: while the model reader is the reader-type that the text foresees as a collaborator and tries to create, the model author is the typical author, the one who is created in the empirical reader's mind. For our research is now crucial to analyze the ways in which the message (conveyed in narrative form) reaches the recipient. This assumption is fundamental for a company, a brand or an individual who decides to rely on narrative communication to achieve a certain purpose. It is no coincidence that the interpretative process of the text is often at the center of Chatman's studies. In his analysis he comes to some important results which are summarized below:

- The text is a lazy machine that requires the effort of the interpreter to produce meaning. (We remember that interpreting means ac-
cording to Eco and traditional semiotics, translating a sign into another expression)
- To understand the concept of text, it is necessary to take into consideration the starting code (see in this regard the work of Roman Jakobson) and the Encyclopedia, or the recorded set of all interpretations, conceivable objectively as a library of libraries.
- The latter is a regulatory hypothesis in reading the text with respect to interpretation, deriving from the virtual library of each, and variable according to the culture, education and previous readings.
- The text leaves the reader the interpretative initiative. That is, it is issued so that someone updates it and brings its meaning to light and it is at this level that the figures of model author, model reader and Chatman's scheme are inserted.

Starting from these ideas, Eco describes the process of interpretation as follows: "The model reader of a story is not the empirical reader. The empirical reader is you, me, anyone, when we read a text. Empirical readers can read in many ways, and there is no law that tells them how to read, because they often use the text as a container for their own passions, which may come from outside the text or which the text may arouse by chance" (Eco 1994: 8). The model reader, on the other hand, manifests itself on an interpretative level as the author of the game, as he signs a pact with him by letting himself be transported through the text.

Real broadcasters and recipients work according to textual strategies, implementing textual cooperation on multiple levels within narrative communication. In this cooperative process, the reader must use the knowledge in his Encyclopedia and implement common or intertextual scripts. Some narrative techniques such as delay, suspense, and slowdown, encourage what Eco calls inferential walks which are performed outside the narrative forest and encouraged by the author himself. For the reading we must always refer to a possible world existing behind the text, due to its reconstruction of meaning.

A few years earlier, Eco addressed these issues in Opera aperta (1962). Through his reflection on narration and interpretation, he wanted us to reflect on the relationship between text and viewer and on the interpretative possibilities where the latter is involved. This is why when he speaks of an open work and by openness, Eco intends "the programmed predisposition of a particularly free cooperation, in the attempt (however) to direct the initiative of the interpreter according to certain possible interpretative tendencies that the work does not impose but in some way it prepares, making them more probable" (Eco 1962, 12). During the process of interpretation, the reader has a certain level of freedom that is manifested by opening the text itself
to walks outside. This freedom can be limited within the text according to the textual strategy inserted by the author himself. We will therefore have open texts and closed texts depending on the constraints used. The theme is certainly very complex, but in the context of Corporate Communication it does not lose value. On the contrary, it helps us to broaden our horizons. In fact, it is very useful to understand the importance of the reader and his constant freedom in interpreting the text whether it be a literary work, an article, or an advertising spot.

From this point of view the author's work is very similar to the initial work of the communicator in identifying its stakeholders. Organizations must track down their audience in order to communicate properly in the same way as the author has their model reader in mind. Eco's theorization goes even further when it comes to combine narrative and cognitive psychology studies. Inside his Norton Lectures, Eco introduces the concept of frames and knowledge of reality conceived through narrative schemes stating that "[...] we understand a sentence because we are used to thinking of an elementary story to which the statement refers, even when we are talking about individuals or natural genres" (Eco 1994, 161). It speaks of frames, referring to recent discoveries in the field of artificial intelligence, "[...] as schemes of action like entering a restaurant, going to the station to catch a train, or opening an umbrella" (Eco 1994, 162).

And he goes on:
[...] a psychologist like Jerome Bruner assumes that even our normal way of accounting for everyday experience takes the form of a story, and the same happens with History as historia rerum gestarum. [...] Our perceptive stories work because we trust a previous story. We would not fully perceive a tree if we did not know (because others have told us) that it is the result of slow growth, and it has not sprung up from morning to evening: this certainty is also part of our "understanding" that that tree it is a tree, and not a flower. (Eco 1994: 161)

## 5. Consumer vs Prosumer

The most difficult challenge that companies face today is to capture the attention of consumers. It is therefore essential to set up communication strategies that convey effective and credible messages capable of affecting consumers and positively influencing their attitude towards products. Considering the current market scenario, which is increasingly saturated and unstable, doing this becomes increasingly difficult. In fact, according to research carried out by the Mc Studio communication agency, about $79 \%$ of people do not read a text word by word but look at general content. About $82 \%$ of consumers ignore advertising if it is considered intrusive. Therefore, companies need to
develop new ways of communication in order to survive in the market, bearing in mind the profound change that has affected both the consumer and the entire society. An increasing number of brands use storytelling as a communication technique which has in many cases proved to be the key to attract and retain consumers. Before going on to examine the need to include storytelling among integrated marketing communication tools and why it represents an effective tool to reach consumers, it is essential to observe the new distinctive features of contemporary society and consumers.

The term prosumer is generally attributed to Alvin Toffler (1980) who devoted considerable attention to it in his work, The Third Wave. Toffler argued that prosumption was predominant in pre-industrial societies; what he called the "first wave". It was followed by a "second wave" of marketization that drove "a wedge into society that separated these two functions, thereby giving birth to what we now call producers and consumers" (Toffler 1980: 265). Thus, the primordial economic form is neither production nor consumption, but rather it is prosumption. However, in Toffler's view, contemporary society is moving away from the aberrant separation of production and consumption and towards a "third wave" that, in part, signals their reintegration in "the rise of the prosumer" (Toffler 1980: 266).

Technological revolution brought about by the internet and digital technologies is one of the main features of the contemporary era. It has profoundly changed the way companies communicate. In particular, the transition from traditional to digital media and the rise of the so-called 2.0 technologies have allowed the consumer to no longer be just a passive receiver of corporate communication. The consumer can establish a direct dialogue with organizations, politicians, and authorities by implementing continuous feedback and response mechanisms. New technologies represent a real reversal of perspective in terms of the relationship between the company and the customer (Fabris 2003: 130). The relationship between consumers and companies is no longer monodirectional but is instead characterized by interactivity, conceived as the possibility for users or consumers to influence the other components of the system (other users, means, and contents) and to be mutually influenced by the same (Pastore 2008: 434).

Characteristics of digital technologies such as multimedia, cross-media, and dynamism have given the consumer greater decision-making power. He can utilize different types of content and expressive codes on multiple devices, plus he can himself be a content creator. This, on the other hand, can generate the problem of information overload occurring when the amount of information available exceeds the individual's ability to process and store it efficiently. According to an estimate made by Martin Hilbert, a fellow at the University of Southern California, the percentage of information present in the digital world has increased from $25 \%$ in 2000 to $98 \%$ in 2013. In fact, consumers are constantly assaulted by numerous messages from many brands
on multiple devices. As a consequence, they have become more adept at filtering information and focusing only on that relevant to them. In fact, according to research conducted by Microsoft, the average attention span of consumers has decreased from twelve to eight seconds from 2000 to today, though the ability to do more things simultaneously, the so-called multitasking, has improved.

Another fundamental aspect to be considered is the radical change of the concept of consumption from the modern to the post-modern era. Previously, consumption was not considered as an autonomous dimension but always as an appendix of production. Nowadays it has instead taken on a brand-new meaning: "The value of a good is also and perhaps above all a semantic value through which we express ourselves and with which we communicate with other" (Fabris 2008: 68). Consumption has become a language through which the individual constantly communicates the distinctive traits of their identity, including their values, beliefs, and social status. As a result, products are purchased today more for the symbols they represent than their technical characteristics.

Furthermore, according to Fontana, consumption has become pure narration: "cars, cell phones, clothes, furniture, creams, companies, individuals, territories ... everything is accompanied by a narrative framework that justifies and promotes its existence" (Fontana 2010: 77) and he goes even further stating that objects have become narratives that are factually bought into: "non-places that are themselves targeted narratives, staging set up artfully to excite us, excite us and push us to social recognition through purchase" (Fontana 2010: 79). The transition from an economy of goods and services to an economy of experiences is closely linked to this last aspect. A progressive dematerialization of physical objects is taking place as consumer attention is increasingly shifting towards what the object represents abstractly and not as it is physically. For this reason, the real economic offer is represented by experiences and no longer by material products or even by services. Unlike a service, an experience can be defined as "a series of memorable events that a company stages in a theatrical play to engage him in a personal way" (Pine and Gilmour 1998: 2).

According to Pine and Gilmore (1998), experiences represent the fourth stage of the economic offer - after commodities, goods and services - and they were born as a response to the standardization and industrialization of services, as a way to differentiate themselves from the competition. Companies have created experiences in order to escape from competition based on prices and to be able to offer added value to consumers trying to obtain higher profit margins. The planning of exciting and engaging experiences, therefore, guarantees a real competitive advantage to those companies that manage to put them into practice. The success of products such as gift boxes, including stays, dinners, or wellness programs, is an example of the growth
of experiences as an economic offer. According to research by the National Retail Federation conducted by Prosper Insight \& Analytics, about 52\% of consumers prefer an experience as a gift, a percentage that rises to $57 \%$ in the age group between 18 and 24. The importance of experiences is also confirmed by another Oracle survey conducted by Harris Interactive, according to which about $86 \%$ of customers would pay more for a better consumer experience and $89 \%$ of them switch to a competitor in the case of a mediocre experience. ${ }^{1}$

Finally, it is essential to consider the role of emotions in the purchasing decision-making process. The era of the homo oeconomicus, when the consumer was a rational being who based his decisions on a meditated analysis of costs and benefits, is now gone. Numerous neuromarketing studies, on the other hand, have shown how emotions guide most decisions and behaviors of human beings. According to Baba Shiv, professor of marketing at the Stanford Graduate School of Business, about 95\% of the decisions that we take daily are not rational but dictated by emotions (Brown 2015: 83). Emotions can be defined as mental states that arise as reactions to stimuli from the external environment and play a fundamental role in many processes of the human mind: they influence the information processing; they push towards the implementation of behaviours oriented to specific objectives; they act as intermediaries in responding to attractive requests; and finally they are also useful for measuring the effects of marketing stimuli and consumer well-being (Bagozzi and Gobinanth 1999: 202). Considering this context, therefore, it is possible to understand the importance of using new forms of communication capable of breaking through the barrier of filters that consumers use every day to avoid the continuous flow of information. At the same time new communication technologies can enhance the symbolic aspects of consumption, arouse strong emotions, and create an engaging experience for the consumer.

## 6. Storytelling is Story-Selling

As far as storytelling is concerned, most of the scholars who have dedicated themselves to it, have defined it as "the art of telling stories". However, following the approach of Fontana, this definition represents a not fully correct translation of the term storytelling which does not have a valid equivalent in Italian. According to the author, in fact, the term "story" should not be translated into "storie" but with the Italian "racconto" which in turn can be assimilated to the terms "representation" and "simulation": "for this rea-

[^66]son, storytelling means creating text, visual, and audio representations: of a brand, product or service, to excite or better relate to an audience". Ultimately, therefore, the author defines storytelling as "communicating through stories". Also significant is the definition given by the NSN - National Storytelling Network, the US organization that deals with the promotion and dissemination of storytelling: "Storytelling is the interactive art of using words and actions to reveal the elements and images of a story while encouraging the listener's imagination".

Another important definition is given by the Storytelling Observatory, a cultural association that aims to stimulate the research and study of narrative sciences in Italy: storytelling is "the way of thinking and communicating of the human being, present in every area where there is interaction between people." In this case, storytelling is defined not only a way to communicate with other people but also a means by which man organizes thought. This definition is also confirmed by the authors Lee and Shin (2014: 6): "storytelling is a fundamental way for humans to perceive the world and a device for emotional utterance regarding the world as people see it."

Therefore, storytelling is a technique that belongs to the discipline of narrative and literal studies that can be defined as the act of narrating or communicating a message through stories using the principles of rhetoric. Progressively this technique has been adopted also in other areas always with the function of conveying a message but to achieve objectives of a different nature. Today, in fact, storytelling is successfully used in the economic and pedagogical sciences as well as in political communication: it is a form of discourse that is imposed in all sectors of society and transcends political, cultural or professional boundaries.

As it is also specified by the Storytelling Observatory, "it is a specific discipline of the Narrative Sciences, with different operative declinations: from marketing to medicine, from politics to the world of consumption" and as also stated by Lynn Smith, journalist of the Los Angeles Times, in her article Not the Same Old Story (2001):

Historians, lawyers, physicians, economists, and psychologists have all rediscovered the power of stories to frame reality, and storytelling has come to rival logic as a way to understand legal cases, geography, illness or war. ${ }^{2}$

It has therefore been proven that storytelling can be a useful tool to achieve goals even outside the literary field. Today storytelling is successfully used also in the economic and pedagogical sciences as well as in political communication.

[^67]After defining what is meant by storytelling, it is essential to analyze the reasons why today it represents one of the most widely used communication tools in different fields and with different approaches. As previously analysed, it is a form of communication that has always existed, it represented the main way in which the human being gave meaning to the external world and transmitted information to future generations. Storytelling has always been an effective communication tool and its recent success is due to the rediscovery of its persuasive and communicative power. It is possible to identify three clusters of reasons that explain the effectiveness of the stories:

1. The way of thinking of the human being through narrative schemes and his physiological need to believe in something;
2. The phenomenon of neural coupling which consists in a cerebral alignment of the brains of those involved in the story and takes place during the story;
3. The ability of stories to arouse emotions and create an emotional connection with the audience.

The first element that determines the effectiveness of storytelling is linked to the peculiar way of humans of thinking and interpreting the surrounding reality. As evidenced by psychologist Jerome Bruner humans do not use logical and scientific argument to organize their own experience but uses the narrative form that represents a general convention to give meaning to reality:

For many historical reasons, including the practical power inherent in the use of logic, mathematics, and empirical science, we have concentrated on the child's growth as "little scientist", "little logician", "little mathematician" [...] we do not achieve our mastery of social reality by growing up as "little scientists", "little logicians" or "little mathematicians" [...] we organize our experience and our memory of human happenings mainly in the form of narrative. (Bruner 1991: 4)

This thought is also shared by the authors Woodside, Sood, and Miller (2008). According to them, the human being thinks in a natural way with narrative and non-argumentative patterns. According to Mike Turner (1996), the story is a basic principle of the human mind through which every human being organizes his experiences, his knowledge, and his thoughts. Consequently, storytelling is effective first of all because it is a mechanism already present in the human mind. Humans elaborate stories and use them daily to explain the reality they live: "we are therefore in the presence of a foun-
dational instinct, as Sharazade already knew that he was able to suspend his death sentence by enchanting the sultan with his narrations." Gottschall (2012) states that it is even a genetic component of human DNA and that if it were not so, evolution would surely have eliminated it.

Precisely because the stories are part of our nature and represent the way we organize our thoughts; we are also willing to listen to them and believe the message they want to convey.

According to Fontana (2009), narratives are successful because whenever a story is told, a self-delusion mechanism that derives from the natural propensity of the human being to believe in something is activated in the human mind. Listening to a story begins, in fact, when a process is triggered which leads to setting aside one's critical faculties, which would be able to grasp even the smallest incongruity in history, and fall into a "state of conscience altered with respect to the norm, which leads us to identify ourselves completely with the object of the narration and with whom it is telling, causing us to suspend our disbelief." This state of consciousness is called the listening narrative trance which consists of an extremely engaging experience that drives man to abandon himself totally to the pleasure of listening and which derives from his innate need to believe.

The stories, therefore, have a strong communicative power, because man has a physiological need to believe. The satisfaction of this need takes place through the narrative listening trance that consists in lowering the mental defences and in the total abandonment towards what is told. The words of the English poet and philosopher Samuel Taylor Coleridge, reported by Jonathan Gottschall in his book The Storytelling Animal, clearly explain this concept. In fact, he argued that the "willing suspension of disbelief" is fundamental to enjoying any story, stating that "in order to enjoy myself, I have to silence my inner skeptic."

However, the narrative trance of listening does not take over as soon as the story begins, rather there are some stages that lead the listener / reader to gradually abandon himself to narrative pleasure. They are seven and are valid for any type of story, whether it is a political discourse or a brand narrative:

1. Contact: it represents the moment in which for the first time one comes into contact with narration through the five senses;
2. Familiarity: after the first contact, it is the moment in which one begins to develop trust and confidence with the narrative object;
3. Immersion: it represents the moment in which the narration totally envelops the audience to which it is addressed, which can be considered "immersed" in the story;
4. Identification: it is the moment, considered the most important, in which the identification of the audience takes place with the elements of the story that relate to memory and personal experience;
5. Emergence: it is the moment in which the narration ends, and the audience emerges from the trance in which it fell during the story;
6. Distancing: it represents the moment, after the end of the story, during which the details of the same are forgotten but the memories that the experience as a whole has left behind are not forgotten;
7. Transformation: any story has an impact on whoever receives it. It can be large and involve a radical or tiny transformation and last for a very short time compared to the end of the story. The transformation can consist in adopting a new behaviour, a new point of view or even a different mood.

## 7. Neural Coupling and Mirror Neuron System

Some neuroscience research has shown that it is possible to evaluate the effectiveness of storytelling from a biological and cerebral point of view. In a recent study, Uri Hasson (Hasson 2016), a neuroscientist at Princeton University, recorded the brain activity of a subject narrating a tale from real life and other subjects who listened to the narrative of this story. The analysis was carried out using the fmRI - functional Magnetic Resonance Imaging - which scanned and recorded the mental activity of the subjects involved in the study. The results showed that during the story, the brains of the speaker and listeners reasoned according to shared and temporally aligned patterns: a phenomenon called neural coupling. The brains performed the same type of activity demonstrating a cerebral alignment both when the story was told and when the story was listened to thus delineating the following pattern:

1. It was widespread and did not only concern the auditory cortices but also the linguistic and extralinguistic areas of the brain;
2. It occurred both between the brain of the speaker and those of the listeners and between the brains of the listeners themselves;
3. It emerged only when verbal communication took place between the interlocutors.

Furthermore, researchers conducted the same analysis in another language. The listeners could not understand the story and "coupling" between
the brains was quantitatively irrelevant: this means that the process of neural coupling depends not only on auditory stimulation but, above all, on the possibility for the listener to understand and process the information communicated to them. Furthermore, the neural coupling process facilitates the elaboration, assimilation, and memorization of the story. The listeners compared the story to their own personal experiences, connected it to their own memories, and transformed it through their own ideas. In this regard, Woodside's theory appears to be relevant. According to his theory a story is effective because it contains a series of "indexes" that allow the recipients of the story to make comparisons with previous experiences and therefore to remember them more easily. They can be decisions, places, conclusions, actions, and attitudes and are described as points of contact that are established between those who tell and those who listen and those who cause an awareness and an emotional connection among them. Other research carried out in the field of neuroscience has shown that, when analytical data is received, only the parts of the brain dedicated to linguistic understanding are activated. When a story is communicated the brain is activated in the same way whether we are listening to or reading a story or whether we are living a real experience. ${ }^{3}$

Consequently, this particular characteristic of the brain means that the human being remembers more from storytelling than from reading data or simple facts. The brain, in fact, makes a minimal distinction between a lived experience and a story. The neural coupling process also explains in part the phenomenon of the narrative listening trance previously described: the mental connection that is established between the interlocutors of a story favours the abandonment and the lowering of critical defences on the part of the listener, leading them to totally immerse themselves in the story. In conclusion, therefore, this research shows that storytelling is effective because it favours the creation of a bond, a mental alignment between the subjects involved in the story which makes the story easy to assimilate and remember.

## 8. Building Emotional Connections

In recent years, we have witnessed an increase in consumption of "hedonistic" products more aesthetically cured and pleasant than those of the past. This trend is directly connected to the experiential aspect of marketing. Since the 1980s, marketing studies have attributed increasing centrality to sensory and emotional performances in the consumption experience. In

[^68]purchasing processes, in fact, the association between emotions and brands is the primary objective of many companies' marketing campaigns, and this involves a considerable economic investment. Unlike traditional marketing, Marketing 2.0 and 3.0 attribute a primary role to the customer experience and consequently to the emotions aroused during this phase.

It is possible to influence consumer preferences through emotions. Highlighting the perception of certain feelings or thoughts, we create a need that must be satisfied through the purchasing experience. In this way a bond is created and it can generate an emotional dependency between the brand and the consumer. Emotional branding is therefore a fresh, current, highly competitive concept based on the choice of a sign, a colour to use, words to conquer and emotions to communicate. In the melting pot of the digital age, emotional branding becomes essential to succeed especially since passive targets have turned into active stakeholders. Concerning the experiential aspect of the purchase process, Shaw and Ivens (2005) propose the following definition:

The customer experience is the interaction between an organization and its customers. It is a blend of the organization's physical performance, the senses stimulated, and the emotions evoked. Each is intuitively measured against customer expectations across all periods of contact. (Schmitt 2003: 8)

Schmitt distinguishes five types of experience (sensory, emotional, cognitive, behavioural, and relational), called strategic experiential modules (Sem) that marketing can create for customers through special practical tools such as communications, visual and verbal identity, product presence, co-branding, spatial environments, web sites and electronic media. Finally, when examining the effectiveness of storytelling as a communication tool, the role of emotions must also be taken into consideration. Besides the natural propensity of humans to think and remember through stories, and the neural coupling phenomenon, stories are effective because they generate emotions. The main objective of a story is precisely to generate an emotional reaction in its recipients and create an emotional connection with them: "whether a break-room anecdote or the storyteller is hoping to evoke emotions in the audience". Some research (Kirwin 2005; Hsu 2008) showed that during the exposure to a story our brain starts producing two hormones: oxytocin and cortisol. Cortisol is related to the ability to focus attention on something important and it is directly related to the level of anxiety. Oxytocin is involved in creating social bonds, empathy, and trust. The combination of these two hormones involves the creation of an emotional connection between the listeners and the storyteller. It is therefore essential for companies to take this aspect into account in order to make it into the mind of the consumer and keep it faithful to the brand. In the current market scenario, in fact, only those brands that manage to create
an emotional connection with their customers survive. In this case, storytelling takes the form of a tool to establish this important connection: "the world's best and most enduring brands are what we like to call storytelling brands" (Papatados 2006: 382).

## 9. Case Studies

After dealing with the narratological theories, and crossing the boundaries of communication and analysing the theoretical tools that contribute to the creation of successful storytelling, we finally arrive at practical examples. The question behind this empirical research is: what are the ingredients of the best corporate narratives? And is it possible to identify a common base for effective storytelling projects? We analysed two case studies: an Italian and a French case. The reason for this choice depended mainly on three factors: the enormous immediate success after their diffusion; they have been inspirational for many authors and following cases and they both have a strong emotional impact on the public.

The first case dates back to 2014, while the second case dates back to 2013. These are two recent cases have quickly become classics in the sector, as they gave us the opportunity to understand better the level of narrativization in communication today. On the other hand this analysis indicates the path taken by big brands and the agencies that work for them. The narrative complexity of the cases is different in terms of narrative design. We will start with the simpler one.

### 9.1 Wind: "più vicini, più valore alle parole"

The first case examined is a short film published in 2014 on the occasion of the fourth instalment of the institutional campaign of Wind, a leading telecommunications company in Italy. The advertising was edited entirely by the agency, Ogilvy \& Mather, Italy. The short film was directed by Giuseppe Capotondi, and the producer was Mercurio Cinematografica. The intended audience for this film is Italian. An Italian brand commissioned the work to an international agency that has been rooted in our country for half acentury. It was intended for a purely Italian public (at least initially). Before moving on to the analysis of the spot and the back-engineering of the case, it is necessary to introduce some information and considerations on the agency that created it and on the company that commissioned it.

On August 25, 2014, the first short film by Wind was released on the web, directed by the famous advertising director, Giuseppe Capotondi with chief creative officers, Giuseppe Mastromatteo and Paolo Iabichino, creative clients director, Giordano Curreri (art director), Marco Geranzani (copywriter) and Silvia Sgarbi. The Production company was Mercurio Cinemato-
grafica, and post production was edited by Corte 11 (video) and Top Digital (audio). The telecommunications company announced the release of the short film on their official website with this release:

After talking about transparency, clarity, and simplicity, Wind realizes his fourth institutional episode, to tell the most important value on which the brand is based: proximity. To really talk to each other it is sometimes necessary to meet face to face, one in front of the other. Wind launches this message with a real piece of cinema, a moving and delicate short film that invites everyone to stay closer and communicate more with the heart because sometimes a meeting is better than any mail or phone call. Because technology is powerful, but not omnipotent. On the other hand, the theme is universal and highly topical: in recent years there has been a lively debate on the consequences of increasingly pervasive technology in people's lives and affections. With this campaign, we want to be closer to people and to the truth of their feelings than ever. Thus, in the film, it happens that the protagonist decides to travel to talk to his father who has not seen for some time. If you are thinking of really talking to someone you care about, look at this little piece of cinema.

The short film shot by Giuseppe Capotondi, a famous video clip author for internationally renowned artists, is in effect a small piece of cinema. The video, which lasts about 4 minutes, was filmed for the fourth institutional campaign of Wind, and was published on the official website of the Wind group in August 2014. It was a great success not only among the social media audience but also among traditional media. Wind chose to release the video for the web alone. This was a new dynamic compared to the usual 30 -second spot or other more conventional campaign modes. On the website of the communication agency, Ogilvy \& Mather, we read that a version for television was shot later and that it was shown at the cinema. The commercial won numerous awards as a short film at the Eurobest and the Epica Awards: Special Prize as Best Institutional Campaign of the year, a gold medal in the Viral/Mobile Marketing category and a silver medal in Brand Content/Entertainment at the 2015 NC Awards.

The video speaks of closeness and does so using delicate tones and shades. The soundtrack is a piece by The Cinematic Orchestra entitled How to Build a Home and fits in perfectly with the mood of the video and the message of the campaign. The reference soundtrack plays an important role in the construction of tension within the spot. In the spot you can hear, from the beginning, a series of long chords, played by a piano and mixed with the sounds of nature. The abundant pauses used as "breaths" prepare for an ever-increasing crescendo, where an arpeggio on the chords and the entry of the voice excel on the scene. Following a long pause. The strings reproduce the main chords and the piano, with regular sounds and recreates the impression of a falling drops of water. The emotional expectation increases, the piano arpeggio starts again, the sound of the drops disappears, and the strings grow until they completely dominate the piano.

The protagonist of the film is trying to contact his father. In fact throughout the ad, he tries to contact him through three different ways: a phone call, a text message, and an email. The word we read on the device screens is always the same: 'dad'. ${ }^{4}$ The protagonist is a man who relives his relationship with his father through memories of the past; memories that echo everyday actions, alternating with vain attempts to get back in touch with his father. The young man is not satisfied and seeks a more authentic contact with his father. He longs for the physical closeness that characterized his childhood and adolescence. After the third unsuccessful attempt he decides to leave and takes a plane and heads for his childhood home, arrives there, and finds his father. This is the synopsis of the commercial, but the details that contributed to its success deserve a more detailed discussion. The spot is based on contrasts: proximity and distance, past and present, rural landscapes and urban landscapes, the desire to leave the protagonist as a young man and the desire to return to the adult protagonist. The flashbacks of life spent in the birthplace of his parents alternate with scenes of current life in a distant city. The detail of the foreign city are made explicit in one of the first shots, when the figure of the protagonist walking among the fields as a child alternates with the scene of the adult protagonist who wanders the streets of London (the film includes a shot of a typical red, London double-decker bus). This incipit in medias res allows the reader to immediately deduce the nostalgic mood of the whole affair and, thanks to the immediate recognition of the red double-decker bus, the distance between the protagonists is emphasized geographically and physically.

The flashbacks portray moments of lightheartedness between the two: the games in the middle of the cornfields; the father saying good night to his son; the two playing on bicycles. There are also moments of tension between the two as the child grows and becomes the typical rebellious adolescent impatient with parental authority.

The son decides to remedy this physical distance (which also corresponds to an emotional distance that modern technologies cannot fill), and takes a plane, returning to his father's house. The director lingers on a detail that takes up the theme of contrast, dear to this type of narration: the camera frames the gate at home for a long time and within a few seconds the images of the teenager's hasty escape alternate quickly with those of the return to home longed for by the adult son. The element of strong continuity between the two dimensions is given by the gate (the element which has remained the same) and by the almost identical clothes worn in both situations. The desire to feel a caress or a hug or hear the warm nuances of a familiar voice cannot be transmitted through an email, a text message, or a phone call. Sometimes

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4 \text { "Papà". }
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more is needed. We need a greater effort rewarded by an equally greater satisfaction, that of meeting and getting closer. The final shots portray the two at sea, many years before and after. The choice of the sea is not random, of course. The sea is a powerful and beautiful symbol. The symbolic meaning of the sea is very broad. The sea represents, first of all, the unconscious and (in a wider and Jungian perspective also the collective Unconscious), that is a reservoir of energies in which all our impulses, and the impulses of those that surround us flow together. This is why the sea always has an enormous significance. The sea is also a symbol and source of life. Besides this, the fact that the protagonists find themselves immersed in the sea, half-naked also indicates a return to their origins, and to the essential. The lack of clothes lowers every barrier between people, the superstructures give way, and it is natural in every way.

The importance in the context of storytelling of this "little piece of cinema" is remarkable, and it is possible to draw useful ideas from this for narratives in general. In this case, telling the story is more important than selling a product. The story told is not that of the brand, but that of its readers. For this reason, we create a level of empathy in the reader thanks to a careful and very detailed study of the public (or target, to use a term dear to marketing) that allow us to talk about stereotypical stories. The core story is built on the need of readers. As mentioned earlier in this work, empathy emerge in the reader using the narratives' conflict systems (based on adversity, challenges, and conflicts). This type of narration is completely missing in a certain type of canonical communication.

On this occasion, Wind and the communication agency in charge of the work consciously chose not to make any reference to the brand or to the product during the entire spot. Only at the end does the Wind brand logo appear with an effective sentence that bears the message's content. What emerges from this type of narrative is that apparently the brand decides to take a step behind and to tell a story, not just try to sell the product.

The message that this short film conveys is innovative. A telecommunications company that transmits a message that focuses on the value of proximity and the real plan to the detriment of technology and the media is undoubtedly innovative and upstream. As stated by Wind in the statement released following the launch of the commercial: "technology is powerful but not omnipotent." The protagonist's choice is functional to the narrative discourse; a man who represents the cluster of population born in a pre-digital era and who therefore knows the difference in value between now and the previous decades. The message is addressed above all to that slice of readers who exploit the benefits of smartphones and modern technologies, but who have known the world and built their wealth of experiences and emotions in a different context. The numbers indicate that the construction of this narrative and the communication campaign associated with it work. The cam-
paign has achieved more than two million views on the internet, including about 40,000 shares on Facebook, and has won countless awards. It led to the creation of a film and TV program that was presented in primetime on Canale 5 and Rai 1 on March 20, 2015 on the occasion of Father's Day preceded by a special wish from the then CEO of Wind Maximo Ibarra.

### 9.2 Léon Vivien. Facebook 1914

The second case study analysed for its peculiarity and for the great success achieved in a very short time is that of "Lèon Vivien, Facebook 1914" dating back to 2013. It is a French case, commissioned by a agency, DDB Paris, a French division of the international agency. From the point of view of storytelling design, it is a somewhat more complex case than the first example. In the first case, the spot spread in video format via the web, while in the second, a social network was used as the main medium. The team behind Léon Vivien's campaign was composed of Alexandre Herve, Vice President \& Executive Creative Director; Jean-Francois Bouchet, Copywriter; Emmanuel Courteau Art Director; Marion Meyer and Jean-Christophe Graebling, Community Manager. DDB stands for Doyle Dane Bernbach and is one of the most important advertising agencies in the world. It was founded in 1949 in New York, by James Edwin Doyle, Maxwell Dane, and William Bernbach. Since 1986 it has been part of the multinational Omnicom Group Inc and has offices all over the world. In 2005, the city of Meaux acquired an exceptional collection of over 50,000 objects related to the Great War and decided to build a museum to enhance its history. The museum of the Great War has a rich and diversified collection that includes technical and military plans, complete uniforms of most of the fighting countries, weapons and artillery, heavy machinery, objects of daily life used at the front, and in the domestic environment, in addition to many documents and a wide range of works of art. The richness and the size of the Museum makes it among the first of its kind. The Museum's clientele is rather specialized. It is based exclusively on a scholastic public or rather ágée. About a year and a half after its inauguration (in 2011), the museum's managers and the DDB communication agency took the situation in hand. In fact, they realized that they had no contact medium within their customers and worked well below the real potential of the museum. Well aware of being in possession of an enormous narrative heritage made up of correspondence, photographs, and other objects representing people who lived about a century before, they decided to try a different strategy. They created and developed a Facebook page that represented the name and history of one of the museum's characters: Léon Vivien. The slogan accompanying the video's opening shot is: Imagine that Facebook had existed in 1914. What would we have seen?

Leon Vivién' story was chosen among all the stories in the Museum. A 29 years old teacher had to leave to fight at the front leaving his young preg-
nant wife named Madeleine at home. On the Facebook page, presented in all respects as a profile, states, posts, screen shots of some fictitious comments created $a d$ hoc by Lèon's relatives interacting with him are inserted. The comments, mostly, are excerpts taken from the correspondence between Lèon and his family. The campaign experiment lasted about twelve months. The first post was published on June 28th 1914, the date on which the archduke, Franz Ferdinand, was assassinated in Sarajevo, thus creating the cause of the WWI. Since that day, the posts published by Léon portray a worried man who takes care of his affections in view of his imminent departure. Lèon's best friend is killed at the front in October of the same year. The pain of losing his friend is documented punctually on the FB page, as would be the case for any other young person registered on the social network. All posts are dated 1914 or 1915 and, scrolling through the chronology, it is not possible to trace the real data, except through the comments of the fans of the page. After about five months of military training, on April 10, 1915, Leon left for the front. There are about ten characters revolving around the figure of Léon documented on the Facebook page including his wife, in-laws, and close friends. With an average of five posts a day, his updates are extremely realistic: the young man writes to his loved ones before going to fight and during the war, while he remembers the anecdotes of the past as a teacher. Although the character is not real, the creative experts of the Musée de la Grande Guerre in Paris did a masterful job of digitizing the documentation in their possession, under the supervision of the historian Jean-Pierre Verney. Thousands of users have been swept by history, writing thousands of comments and asking for more details about what happened. The direction of the Musée de la Grande Guerre makes this point very clear: the answers to the story of Léon (and many others like him) are found inside the museum.

The thing that immediately stands out is the accuracy with which the material is inserted and updated in a media context like that of Facebook. The richness of the contents, the precision with which they are uploaded to the social network, and the credibility with which the page is presented, contributed to its success. Engagement was very high, with the page becoming viral. In addition to concern for the fate of the protagonist and empathy towards the couple, waiting for their first child, there is more. Elements of daily life at the front are documented in first person by Léon. The photos that were previously exhibited in a display case of the museum are animated by the words of those who experienced it in all its drama and crudeness. The everyday life at the front reached so many people thanks to the empathy and interest that Léon's personal stories have aroused on the social network. Through the Facebook profile, page fans can share Léon's thoughts and moods: terror in the face of death, the transience of life, comrades who fall under enemy blows, the suffering which ensued when burying comrades who lost their lives due to a noisy card game. The sensitive soul of Léon and
his reflections move and share a different kind of audience, not specialized or scholastic, but a wider readership. Faced with the bombing and rubble of a war home, Léon's soul melts and he gets to share his feelings by writing:

I can't help thinking about the people who lived in this house. Children were born here; their cries and their voices filled this house; their laughter echoed within the walls. No one will now climb those stairs to reassure them and cuddle them at the end of the day. ${ }^{5}$

The page grew exponentially, and the case became internationally famous. Hundreds of posts revolve around the life of the protagonist, and a single question that keeps the followers of the page in suspense: will Léon be able to return home to his loved ones? Will he meet his son? After about ten months from the start of the campaign, a post was published that none of the fans wanted to read: Léon passed away. The reactions of the followers of the page were immediate and heated. The death of the elementary school teacher is lived for the second time a hundred years after the real one occurred at the front. This second death was mediatic: it involved people from all over the world and touched many hearts.

The case became something more than an advertising campaign, it became a means to bring awareness to new generations. Many aspects of this case are significant from a storytelling perspective and for the aim of this paper. Every brand, like every individual, has a narrative capital to recognize and value. Corporate Storytelling must look for a point of contact with new audiences and readers according to their media consumption habits. Any story can be declined and re-updated on multiple media as Umberto Eco has previously stated. The amazing results achieved by this campaign lead us to think that this may be a good choice in terms of Corporate Storytelling and Social Media Marketing. Léon Vivien's Facebook page grew by about 50,000 fans in only the first two weeks. And more than nine million people around the world have heard of this story thanks to the spread on the web. The museum had an increase in visits of around $45 \%$ over six months after the page went live. These empirical data are very important because they indicate the success of an online campaign that ended up reaching the goal and transposing its success even off-line. In real life about $45 \%$ more people have physically visited the Great War Museum. Furthermore, the video shot for the campaign was broadcasted by the Superintendency National in French Studies and Léon's story and his Facebook profile have also been turned into a traditional book.

[^69]
## 10. Conclusion

From the present work and the analysis of the case studies it can be seen how storytelling has an increasingly pervasive role within organization's communication strategies. The digital and cultural revolution brought about by social media has led to a consequential transformation in the role of the consumer. The most far-sighted and prudent companies have included within their teams, experts in social media marketing and social media content who, using and creating new specific tools, are able to monitor consumers feedback in real time according to the actions taken by companies and their advertising campaigns. Due to the speed and media diffusion of certain medial contents, companies must find new and disruptive ways of expression. One of these is represented by Corporate Storytelling, a natural transformation of the ancient methods of transmission of human culture. Arousing empathy and emotions as in the case studies analySed, are the predominant methods of reaching audiences. The interest in the dynamics related to narration and to their ancestral efficacy has found an increasingly large space in recent years. The economy of the symbolic has taken hold and has shown that classical management methods are now obsolete for the management of the internal and external communication processes of the company. Storytelling is therefore able to combine corporate communication according to the criteria of the emotional branding, creating a symbolic universe that represents the brands.

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# The Italian-English "Cocktail" on Italian Social Networks* 

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#### Abstract

: The article deals with anglicisms (integral or partially adapted) in the language of social network users in Italy. Such anglicisms are divided into computer technicalities, pseudotechnicisms linked to the various social networking platforms, luxury loans and terms that lie somewhere between technicality and jargon; the motivation to their use goes from a real necessity to the reinforcement of a sense of belonging to a community, when not simply to give greater expressivity to the text. Some examples taken from social networks of the ongoing debate on anglicisms are analyzed and, in conclusion, the topic of the general distrust of Italians for anglicisms is discussed.


Keywords: Anglicisms, Computer-Mediated Communication, Social Networking, Sociolinguistics

## 1. The use of English in Italy

The tradition of borrowing words from English, so-called prestiti linguistici, ${ }^{1}$ has a long history in Italian, dating back centuries. ${ }^{2}$ Nowadays, there are areas of the language in which this phenomenon seems particularly relevant:

* The research presented here was originally prepared for the XXI AISLII conference in Philadelphia in 2013, and has been revised and updated for publication.

1 "Si ha prestito linguistico quando la nostra lingua utilizza e finisce per assumere un tratto linguistico che esisteva precedentemente in un'altra lingua e che non esisteva nella nostra" ('We have a linguistic loan when our language uses and ends up assuming a linguistic trait that previously existed in another language and did not exist in our language'; Dardano, Trifone 1995: 638 [all translations are made by the author]). Mario Alinei prefers to call them acquisizioni 'acquisitions' or regali 'gifts', "che come tali di solito arricchiscono e non impoveriscono la lingua che li riceve" ('that as such usually enrich and do not impoverish the language that receives them'; Alinei 2009); Antonio Zoppetti (2017: 29) defines them voci importate 'imported words'.
${ }^{2}$ For a short history of anglicisms in Italian (and their reception) see Fanfani (2010) and Grochowska (2012).
for instance in business, many English terms have become part of a seemingly unavoidable (but not universally accepted) jargon (see Antonelli 2009): business plan, forecast, how to, know how, management, mission, reason why, etc. Sabatini (2016) lists some other very common anglicisms in use in the field of marketing and politics such as location, performance, competitor, default, welfare, spread, spending review, range, fund raising, election day, open day, reception, exit strategy, follow-up, endorsement. We have further examples in politics (devolution, jobs act, question time, stepchild adoption) and wellness (fitness, kettlebell, running, spinning, step, squat, workout, etc.). Some call this language itanglese. ${ }^{3}$

English is also very popular in the fashion industry, with both technical terms and rather unnecessary foreignisms (prestiti di lusso ${ }^{4}$ ) such as clutch, front row, jumpsuit, glam, leggings (not so far ago these were called fuseaux, borrowing a French word), low budget, outfit, smart jacket, total black, etc. Music is likewise rich in anglicisms, with several definitions that cannot be easily translated such as jingle, live, lounge music, mixer, mood, vibe, etc.

Another field rich of English words is that of information technology, a fact far from surprising: it happens often that the terminology of a discipline enters a language together with the discipline itself (see Marri 1994). So in Italian we have browser, hard disk, mouse, pen drive, tablet, etc. The relevance and depth of this penetration is testified by the amount of English terms mainly verbs - partially adapted to Italian morphology that can be considered, at this point, traditional in computer science, like backuppare from to backup, bustrappare from to bootstrap, crackare or craccare from to crack, formattare from to format, uploadare from to upload, but hackerare (and not the apparently more predictable hackare) from to hack, or, rather, from hacker: we will be back to this a nomaly later on.

The concentration of anglicisms in specific fields might give the impression that the use of English words in Italian is very pervasive: articles in newspapers show that many people think that this is ruining the Italian language, and therefore ask for a stricter national language policy (see Scorranese 2014; Russo Spena 2018 talks about the invasion of anglicisms).

If we consult the GRADIT (De Mauro 1999-2000), which is one of the richest contemporary Italian monolingual dictionaries, of its 260.709 monorematic entries 9.389 are marked "esotismi" i.e. foreignisms; of these, 6.123 are English: although this number represents the majority of foreignisms, it is only the $2,34 \%$ of the vocabulary. The last edition of the GRADIT dates

[^70]back to 2007, and the situation is surely changed in more than a decade, but certainly not that much (see also Antonelli 2005).

## 2. English in computer-mediated communication

The use of English is one of the many known and thoroughly studied characteristics of computer-mediated communication (CMC) in Italy since the beginning in the early Nineties - with BBSs (Bulletin Board Systems), newsgroups and IRC, Internet Relay Chat - together with dialects, emoticons, enhanced punctuation, etc. (see Tavosanis 2011; Gheno 2012a, 2012b, 2012c, 2017). So, in Italian we can find twenty years of traditional English definitions pertaining to CMC such as ban, crosspost, fake, flame, flamewar, flooding, killfile, lag, lurker, mailbombing, newbie, nickname, post, quote, reply, screenshot, spam, spoiler, subject, tag, tagline, thread, topic, troll, etc., used "pure" as they are, as well as sometimes "italianized" through morphological adaptations that might cause some stir in linguistically more sensitive persons: bannare, crosspostare, feic ('fake'), flammare, floddare (and not floodare), laggare, loggarsi and sloggarsi ('to log on and off a service'), lurkare, niubbi/niubbo, nickneim, postare, quotare, scrinsciottare ('to take a screenshot'), spammare, taggare, trollare, and spoilerare. In this last case, the verb is built from the noun spoiler, not from the verb to spoil; other examples of this kind of behavior are hackerare (from the noun hacker) and stalkerare (from the noun stalker). This is most certainly due to the fact that the nouns are well established in the Italian context, whereas the knowledge of the underlying verbs is not equally widespread. Thus, the speakers' instinctive choice was to derive the Italian verb from the noun instead of using the English verb as a base (see Gheno 2016; Paoli 2017).

The new dinamics in the circulation of information that came from the massification of the Internet and social media have brought along other loans: blasting and blastare, debunking as well as the verb debunkare, fact checking, fake news (some Italians are mistakenly using *fake new as its singular form), influencer, shitstorm, etc.

## 3. Social networking in Italy

Social networking has become widespread after years of resistance to CMC: other forms of online communication (BBSs, newsgroups, chatlines, forums, blogs) have never acquired such a huge popularity. In 2008, Italy was still dubbed as a bastion of digital indifference (Fitzpatrick 2008) in an article published by The Guardian, for the seemingly general low interest towards online communication.

The current statistics are quite different: We Are Social's Global Digital Report 2019 shows a total of 54.8 mil users (penetration: 92\%); according
to We Are Social's data, three Italians out of five use one or more social platform: Italians not only go online, but use intensely social media.

## 4. English on Italian SNSs

When analizing the Italian SNSs, linguists can find traces of every layer of English usage mentioned until now: the general, often not completely necessary English, the IT English, the CMC English. There is also a newer English vocabulary that refers to the specific communication channels, used as they are or with some morphological adaptations, similar to those already seen. Here is a list of some of the most common anglicisms used in connection with a specific service; in some instances, I provided the Italian word(s) that might be used instead of the English one.

- Blogging platforms: blogger, bloggarelrebloggare, blogstar, foodblog, outfit blog, taggare (un post);
- Facebook: addarelfriendare ('aggiungere', 'amicare'), blockare, detaggare/staggare, followareldefollowarelunfolloware ('smettere di seguire'), bidelhidare/haidare ('nascondere'), like, likarellaicare ('mettere mi piace', "mipiaciare" [this verb does not exist officially, but is used in informal contexts online]), pokare, quotare ('menzionare'), subbarefunsubbare ('sottoscrivere'), sharare ('condividere'), taggare ('in una fotografia'), unfriendare ('togliere [dagli amici]');
- Tumblr: tumblrarelritumblrare;
- Twitter: defolloware/unfolloware, followare, follower (some translate it 'seguitore', which is missing the almost "religious" connotation of 'seguace', instead of the even easier 'iscritto' or 'sottoscrittore'), hashtaggare, retwittare/ritwittare, trending topic, twittweet, twittare/ twitterareltuittare (some use 'cinguettare', but mostly in semi-serious contexts), twitterzombie, twitstartwitterstar.
- Other, miscellaneous definitions that can be found on SNSs and similars are socialnè and socialino, both for social network; the semiserious italianization of the names of the various SNSs, such as $I s$ tagra (Instagram), Feisbu (Facebook), Frenfi (Friendfeed, a social network that was closed in 2015), Tuitte (Twitter), Tàmble o Tumblero (Tumblr); some names, again, have generated also verbs connected to them, like tumbl(e)rare or ritumbl(e)rare, instagrammare for 'taking a picture and putting it on Instagram', regrammare ('reshare an image from another Instagram account through an app called Regram'), shazammare ('recognize a song using Shazam') as well as whatsappare ('communicate through Whatsapp').

In several cases, the Italian translation of a specific verb would take up much more space (as for taggare, which could be something like 'indicare o nominare le persone che compaiono in una data fotografia').

Some English words or derivates might be considered "inelegant" from a strictly linguistic point of view, but they are not completely unnecessary in a certain context. In other cases, the choice of an English word instead of the Italian correspondent is not driven by linguistic efficiency, but is mainly due to stylistic reasons. In some instances, the English word with the exact same meaning of the Italian one is perceived as more specific: quotare (from to quote) means, in Italian, 'citare', but the English equivalent feels more "precise" for the context of CMC. Same goes for blockare instead of 'bloccare': bloccare is 'to block', in all its meanings; for an Italian who uses SNSs, blockare is the action of blocking somebody on a SNS, so to prevent him/her from contacting or interacting with us.

## 5. Acronyms and their derivations

On Italian SNSs, we find occurrences of "traditional" English acronyms as well as newer ones: AFAIK 'as far as I know', AKA 'also known as', ASAP 'as soon as possible', BOFH 'bad operator from hell', BSOD 'blue screen of death', BTW 'by the way', CUL8R 'see you later', FAQ 'frequently asked questions', FYI 'for your information', IMHO/IMO/IMVHO/IYHO 'in my/your (very) humble opinion', LMAO 'laughing my ass off', LOL 'laughing out loud', OP 'original poster', OT 'off topic', PITA 'pain in the ass', RL 'real life', ROTFL 'rolling on the floor laughing', RTFM 'read the fucking manual', etc.

Among the newer ones, there is a widespread use of FTW ('for the win's), LMGTFY ('let me Google that for you') and OM(F)G ('oh my [fucking] god') - a series of posters for the launch of the second season of the very popular American TV series Gossip Girl in 2008 might have helped in spreading this acronym (Marsi 2008), which is still used online after more than a decade - and WTF ('what the fuck?'); these last two are probably used also as a form of self-censorship, to avoid the explicit use of curse words.

Other acronyms, as the already mentioned LOL and ROTFL, are so widely in use that we find the verbs lollare or rotflare for 'to laugh'. The meaning, or the origins, though, are not always clear to everybody, especially to the younger generations.

[^71]The use of acronyms has decreased in the last years, probably due to the fact that access to social media has become so common that it is not considered a privilege anymore, thus lessening the importance of using a dedicated jargon for online interactions. Besides, the fact that the majority of users connects from mobile devices, mainly cellphones, which are usually equipped with tools for predictive text input or for autocorrection, have encouraged the use of a more standardized language in writing (see Gheno 2018).

## 6. English for... fun

As already highlighted, English is used also for plain expressiveness. Sometimes the use of a foreign language (English for the most) reflects the personal linguistic competences of the user, although this is not always the case. Mostly people just love to mix languages for no other reason than fun. Some will thus rely on English with cases of voluntary code switching, like in this example, taken from a discussion on the now defunct Friendfeed:
(1) [flames ready to go] Il flame sui poveraccy che si lamentano sul socialino di tasse, stipendi bassi e tagli ingiusti l'abbiamo già fatto? ${ }^{7}$

Even if not English speakers, most users will drop an English word or utterance here and there, in a sort of code-mixing, mainly for fun. In this case, English is neither technical nor necessary: the main goal is not clarity or semantic precision, but linguistic divertissement.

In an almost exclusively textual communicative situation as this, language serves (or rather: served) as a social glue. But all the characteristics we have already listed are not enough: there are changes all the time, and users want to find new ways of "impressing" the others, verbally speaking. People also want to have fun, so they take English and play with it, distorting it, for example giving a playful phonetic transcription (by Italian parameters) of the original word. Of course, those who play with English rely on a common encyclopaedia, so the words used are seldom complicated, and are usually part of a basic English knowledge. We find instances of attenscionuorismo ('something that is done to attract attention, being an attention whore'), denghiu ('thank you'), donuorri ('don't worry'), ghèttati una laif('get a life'), laicare ('to like'), lovvare ('to love'), pliz ('please'), roghenroa ('rock and roll'). This way of distorting English is not new and is not limited to the context of social media: a chain of very popular gyms in Rome is called, for instance,

[^72]Dabliu, and the name is nothing else than the English pronunciation of the letter $W$ "phonetically transcribed" in Italian.

In the following examples, taken from the SNS Friendfeed, we also read commiuniti for community and sceimonme for shame on me.
(2) a. la commiuniti già mormora ${ }^{8}$
b. Ho messo come avviso messaggio il cinguettio di un uccello. Il mio salotto si affaccia su un cortile pieno di uccelli. \#sceimonme ${ }^{9}$

The two messages below create the word attenscionuorismi for attentionwhorisms and endorsare for to endorse. In both cases, Italian suffixes are used to create linguistic cross-overs.
(3) a. neanche un commento. Mah, non è più il socialino di un tempo ${ }^{10}$
b. attenscionuorismi persi come lacrime nella pioggia ${ }^{11}$
c. poi non pretendo che mi si prenda sul serio, ho failato al livello di endorsare giannino 6 minuti prima che uscisse la roba del master, quindi fate voi ${ }^{12}$

And here is an example from Guia Soncini's Twitter feed, ${ }^{13}$ which contains the word rituit for retweet and anfollouano as a derivative of anfollouare for to unfollow:
(4) tre file ordinate: quelli che al terzo rituit di complimenti nascondono i rt, quelli che silenziano del tutto, quelli che anfollouano. ${ }^{14}$

The linguistic game goes so far that non-existent English words are created, such as puccyness, which roughly stands for 'cuteness', or OALDare, from OALD, that is an Italian variation of old, meaning something that has been already posted several times so is not a novelty even if the poster thinks so. In the example below, where a user asks for the meaning of OALD, another user answers with a Spanish word (viejo 'old'). This is a typical example of the apparent multilinguism of this type of online interactions.

8 'the commiuniti already murmurs'.
${ }^{9}$ 'I put the chirping of a bird as a warning message. My living room overlooks a courtyard full of birds. \#sceimonme'.
${ }^{10}$ 'not even a comment. Well, it's not the socialino it was in the past anymore'.
${ }_{11}$ 'attenscionuorismi lost as tears in the rain'.
${ }^{12}$ 'then I don't pretend to be taken seriously, I failed at the level of endorsing Giannino 6 minutes before the stuff of the master came out, so now it's up to you'.
${ }^{13}$ Guia Soncini (guiasoncini.com) is an Italian writer and journalist. Her Twitter feed can be found at @lasoncini.
${ }^{14}$ 'three ordered rows: those that at the third retweet of compliments hide the rts, those that silence completely, those who unfollow'.
(ma OALD che vuol dire in contesto fifi?)
(Viejo)
(OALD = vecchio, già visto)
(ah ecco grazie) ${ }^{15}$

## 7. Two special cases: professional poker and MMORPGs

There are specific fields in which adapted (or, for somebody, corrupt?) English is almost unavoidable for the user to be recognized as part of the "tribe". Here is an excerpt from the post of a professional poker gamer, Michela Antolini, nicknamed Micia:
(6) apro da utg ['under the gun'] con AJ [...]. quello che non ci sta ASSOLUTA MENTE ([...] se mi fossi giocata l'all in contro di lui sarei morta) è la giocata successiva. Il chipleader che è molto aggressivo apre da cut off. [...]. io mando tutto con KQs e il tizio lì col cappuccio FOLDA AK da big blind. mossa as surda. va bene che io posso pushare anche con AA o KK [...]. il chipleader apre TUTTO, io lo so, quindi è standard per me pushare [...] quello che deve fare è repusharmi lui. ${ }^{16}$

Would it have been possible to formulate the same thoughts in Italian? Of course, but it would have been much less immediate for an insider. For a poker professional, Micia's phrases are completely understandable. We find ourselves on the debatable thin red line between technical and tribal jargon: her fellow players easily understand what she is talking about; any outsider, though, missing the technicalities of professional poker play, would probably fail in understanding Micia's communication, probably blaming it on the use of English or semi-English words and acronyms. In this case, though, the real problem is not maily the use of a foreign language, but the specificity and the technical nature of the lexicon: the message might remain unclear even if the player chose exclusively Italian words.

English and pseudo-English are very commonly used in massive multiplayer online roleplaying games or MMORPGs, such as World of Warcraft. When asked about the language used in this context, a young university student compiled, in 2013, this list of anglo-Italian verbs commonly in use

[^73]among players during the game. ${ }^{17}$ I have added the English derivation between square brackets; for further references see Francalanci 2018.

- Castare [to cast] - to cast a spell (which takes a few seconds to load);
- cheattare [to cheat] - to use any type of cheat;
- Crittare - to inflict a critical hit, or perform a particularly strong attack (which does not depend on the player, but on statistics of his equipment and probability regulated by the game);
- Droprare [to drop] - referring to objects that a npe [non playing character drops after being killed;
- farmare [to farm $]$ - methodically performing an action that allows you to get something specific;
- leechare [to leech $]$ - indicates the action of joining a group of players without actively participating in the game;
- leftare [to leave. When a player leaves a fight, the phrase "x has left the fight" appears on the screen. Thus, this action is defined as lefft - abandoning a battle;
- manaburnare [to burn the mana] - to badly organize mana;
- missare [to miss] - to miss the target;
- poweruppare [to power $u p$ ] - to use points in the game to improve an aspect of the game (e.g. buy a more powerful weapon, or unlock a new skill);
- Questare [to quest] - to level up through "quests", or the secondary missions of the game;
- Raidare [to raid] - to face a raid;
- stunnare [to stun] - to stun another player, who cannot move for a certain number of seconds;
- whispare [to whisper (missing a syllable!!] - write to a player through "whisper", or private chat.

Can these be considered examples of real technical jargons? And how much of the English used in these contexts is necessary, or is it just a way, again, of being part of a group? We can argue, in a sense, that we are not dealing with "real" technical jargons, but with community markers: those who are members of these specific communities recognize each others (in a computer-mediated interaction) thanks to the language used. The pseudoanglicisms are the way members of the "tribe" check whether they are dealing with a fellow member. There is an unmistakable element of self-indulgence in using these words that make them more of a tribal jargon, a way of feel-

[^74]ing part of a close-knit community. These terms are not, in fact, used only for clarity and precision, but also, plainly, for fun (or for making fun of the outsiders, in which case their use tends toward cryptolalia) (see Gualdo 2009; Gheno 2017: 33).

## 8. Good or bad? Ongoing discussions

The presence and relevance of English in Italian has been the subject of controversy for decades. Castellani's Morbus Anglicus (1987) is an example of one of the quite common attitudes in Italy toward the use of anglicisms. Antonelli (2014) notes that, although it is unarguable that in the last years more English words have entered Italian than before, the pervasiveness of English is more an impression than a real issue.

This feeling of being invaded by English words, in fact, could be compared to that perceived temperature that we often hear about in the summer news. As the meteorologists explained to us, at an objective temperature (measured by the thermometer) corresponds - on hot summer days - a higher perceived temperature, because it is conditioned by the considerable humidity. What happens for anglicisms is not very different: an objective presence contained in physiological percentages is perceived as a worrying invasion because it is amplified by the mass media. ${ }^{18}$

So, in a sense, Italy's linguistic situation does not show signs of succumbing to English, or any other language, for now. De Mauro, in an interview given to Picchiorri and published on the Treccani website in 2008, argues also that 'the abuse of technicalities and little-known words (exotic or not) belongs to the culturally low variety of speakers, to those that in Naples we call half-socks. ${ }^{19}$ Elsewhere, he also states the well-known fact that learning another language (or other languages) does not mean forgetting one's mother language, au contrai$r e$ : a better knowledge of every linguistic system used by a person ensures that the usage of each of them gets better and better (De Mauro 2018: 108-111). In other words, those who use too many anglicisms appear to be those who have general problems moving through the linguistic spectrum(s).

[^75]In any case, discussions on the use of English words, as well as on their possible translations, are quite common on SNSs themselves. This example is again from Friendfeed (every dot is a distinct comment).
(7) La saggezza di mia suocera. "Ma che vuol dire 'streaming'?" "È un termine gergale che in questo caso in pratica vuol dire 'In diretta'" "E perché non dite 'In diretta' "?

- già, perché non diciamo "in diretta"?:)
- Perché non significa "in diretta", pure i film si vedono in streaming ma non sono in diretta.
- È più "trasmesso in remoto e visualizzato in tempo reale" per distinguere rispetto a "salvato localmente", direi.
- Comunque mia suocera si riferiva all'uso di streaming che si sente adesso in politica: la direzione del PD in streaming, le riunioni m 5 s in streaming etc. Qui si intende "in diretta".
- Concordo che si potrebbe agevolmente sostituire con "diretta (via) web/ internet" e la gente capirebbe meglio.
- Ma sai che non sono d'accordo? Anche fosse in differita, il concetto base è "trasmessa", imho. Non conta sapere se in diretta o meno.
- [...]+1, a tua suocera dai la chiosa "in diretta su Internet"
- +1 [...] (nonostante a mia anglofobia).
- Va beh, allora per tenere conto dell'obiezione di [...], basterebbe dire "trasmessa via internet". Non è una questione di anglofilia o fobia, è che a sapere che vuol dire streaming sarà l'un percento della popolazione al massimo.
- "scorrente", ché a me il Duce e il Vate fanno un baffo "in diretta streaming" l'ho sentito non so quante volte
- "in diretta" mi fa pensare a una trasmissione broadcast. "streaming" mi fa pensare a qualcosa di più interattivo, sicuramente unicast.
- manfatti non vuol dire in diretta, vuol dire "ascolting mentre scariching"20

20 'The wisdom of my mother-in-law. "But what does streaming mean?" "It is a slang term that in this case in practice means Live" "And why don't you say Live?"

- right, why don't we say "live"? :)
- Because it does not mean "live", even the films are seen in streaming but are not live.
- It is more "transmitted remotely and displayed in real time" to distinguish from "locally saved", I would say.
- However my mother-in-law was referring to the use of streaming that is now heard in politics: the direction of the PD in streaming, the m 5 s meetings in streaming etc. Here we mean "live".
- I agree that we could easily replace "direct (via) web / internet" and people would understand better.
- But do you know that I do not agree? Even if it were deferred, the basic concept is "transmitted", imho. It doesn't matter whether it's live or not.
- $\quad[\ldots]+1$, give your mother-in-law the gloss "live on the Internet"
- +1 [...] (despite my anglophobia).

Another, more recent example comes from Facebook, from a well-established group of grammar lovers (when not grammar-nazis), La lingua batte - Radio3. ${ }^{21}$
(8) Ciao bella gente, vorrei sottoporvi qualcosa se avete un minuto da buttare lì: un cruccio linguistico, un acuto fastidio di resa e traduzione eventuale... il termine è "mainstream" e desidero ardentemente, non da oggi, trovare l'ideale versione italiana, quella parola cioè che ne sostituisca in toto i significati e le implicazioni. Cosa mi suggerite?

- in voga?
- È complicato... "Convenzionale" è forse la traduzione corretta ma molto meno d'impatto. "Popolare" ormai è un termine pericoloso. "Di moda" a volte rende meglio, credo, dipende dai contesti.
- La parte complicata è riuscire a rendere sia il significato sia il "giudizio" che si dà usandolo, e in questo senso non trovo un'unica parola corrispondente.
- Il pensiero dominante; la corrente prevalente, il sentire comune.
- [...]
- Corrente principale, quella di ampio contenuto, che non può essere imbrigliata in un unico genere. Sintetizzare la parola pare difficile, ma questo dipende dalla connotazione della nostra lingua: Ecco perché ci sono termini inglesi che è meglio lasciare così.
- Sì [...], ne sono consapevole, però in questo caso mi urta particolarmente non avere un chiaro equivalente italiano, proprio perché parliamo di un termine con un forte connotato astratto e di uso piuttosto intellettualistico, se mi passi il termine, proprio per questo amerei averne uno di schietto conio nostrano, o quantomeno una perifrasi fissa che copra decentemente tutto il campo semantico...
- [...]
- Andazzo.
- Non copre a sufficienza il significato di cosa dominante in determinato ambito, ha troppe connotazioni negative.
- Tradizionale.
- Fiacco, troppo concentrato sul passato, troppo sfasato rispetto al senso della parola inglese.
- No, in molti contesti è la traduzione esatta.
- Ordinario.
- Okay, then taking into account the objection of [...], it would be enough to say "transmitted via the internet". It is not a question of anglophilia or phobia, it is that one percent of the population at the most knows the meaning of streaming.
- "flowing", because the Duce [Mussolini] and the Vate [Gabriele D'Annunzio] got nothing on me.
- I have heard "live streaming" I don't know how many times
- "live" makes me think of a broadcast transmission. "Streaming" makes me think of something more interactive, certainly unicast.
- but in fact does not mean live, it means "listening while dowloading".
${ }^{21}$ See <www.facebook.com/groups/266491950145853/>.
- Qualsiasi cosa può essere ordinaria e la musica pop, per quanto mi piaccia assai poco, non è semplicemente ordinaria è "mainstream"
- Ordinario vuol dire comune, consueto. E questo vuol dire mainstream, qualcosa che resta nel flusso principale senza emergere per altre qualità. E comunque se mainstream funziona meglio, meglio mainstream. Che fra l'altro è più mainstream.
- [...]
- "Ad ampio spettro di ricezione per la tipologia di pubblico cui è rivolta". Meglio mainstream $\hat{\epsilon}^{22}$
${ }^{22}$ 'Hello beautiful people, I would like to submit something to you if you have a minute to throw away: a linguistic concern, a sharp annoyance for a surrender and a possible translation ... the term is "mainstream" and I ardently desire, not today, to find the ideal Italian version, that is the word that fully replaces its meanings and implications. What do you suggest?
- cool?
- It's complicated ... "Conventional" is perhaps the correct translation but much less impactful. "Popular" is now a dangerous term. "Fashion" sometimes makes it better, I think, depends on the contexts.
- The complicated part is being able to covey both the meaning and the "judgment" given by using it, and in this sense I don't find a single corresponding word.
- The dominant thought; the prevailing current, the common feeling.
- [...]
- Main current, that of wide content, which cannot be harnessed in a single kind. To summarize the word seems difficult, but this depends on the connotation of our language: This is why there are English terms that it is better to leave untouched.
- Yes [...], I am aware of it, but in this case it strikes me particularly not having a clear Italian equivalent, precisely because we are talking about a term with a strong abstract connotation and a rather intellectualistic use, if you allow me the term, just for this reason I would like to have one totally national term, or at least a fixed perifrase that covers the entire semantic field decently ...
- [...]
- bad habit.
- It does not sufficiently cover the meaning of the dominant thing in a certain area, it has too many negative connotations.
- Traditional.
- Weak, too concentrated on the past, too out of phase with the meaning of the English word.
- No, in many contexts it is the exact translation.
- Ordinary.
- Anything can be ordinary and pop music, as much as I like it very little, is not just ordinary it is "mainstream"
- Ordinary means common, usual. And this means mainstream, something that remains in the main stream without emerging for other qualities. And anyway if mainstream works better, better mainstream. Which by the way is more mainstream.
- [...]

In recent years, Italy has seen several campaigns against the use (or abuse) of anglicisms, met by a lot of favor from the general public, such as \#dilloinitaliano, a petition started by Testa in 2015 with the endorsement of the president of the Accademia della Crusca, which gained significant attention from the media. The are also several publications that suggest Italian translations for a variety English terms (see Zoppetti 2018). In other words, Italians are somehow more and more worried about the pervasivity of English in their language, with frequent uproars against new anglicisms entering usage.

## 9. The problem, though, might not be English...

On an everyday level, it seems that everybody is discussing, offline and especially online, about anglicisms. In reality, English is certainly not taking over Italian, mostly because the majority of Italians do not go beyond a superficial level of English knowledge: it is what experts call globish, ${ }^{23}$ made of not more than 1.500 words.

Let us also remind ourselves that recent statistics show that one Italian in two does not read even one book a year (see Mosca 2013, but these data show up year after year, see Il Messaggero 2018); and according to De Mauro, one third of Italians can be considered semiliterate, while only around $20 \%$ shows the competences and skills necessary to fully participate in today's information society (see De Mauro quoted in Simili 2012). So the problem is not the eventual death of Italian caused by English, but a general lack of linguistic competences, which makes our everyday oral and written language poorer, and us lazier in searching for the perfect lexical solution. This is, by the way, a problem that Calvino (1988) already highlighted in his Six memos for the Next Millennium [Lezioni Americane], especially in the lesson Exactitude:

It seems to me that language is always used in a random, approximate, careless manner, and this distresses me unbearably. [...] It sometimes seems to me that a pestilence has struck the human race in its most distinctive faculty -that is, the use of words. It is a plague afflicting language, revealing itself as a loss of cognition and immediacy, an automatism that tends to level out all expression into the most generic, anonymous, and abstract formulas, to dilute meanings, to blunt the edge of expressiveness, extinguishing the spark that shoots out from the collision of words and new circumstances.

- "With a broad spectrum of reception for the type of audience to which it is addressed". Better to use mainstream © $\theta$ '.
${ }^{23}$ For information on globish, see <www.globish.com>.

It is not very distant from what Baron (2008) writes in a much more recent essay, where she defines the rather sad concept of linguistic whateverism:

A convergence of forces is engendering a new attitude toward both speech and writing. We might dub this attitude "linguistic whateverism". Its primary manifestation is a marked indifference to the need for consistency in linguistic usage. At issue is not whether to say who or whom [...] but whether it really matters which form you use. This challenge to the fundamental principle of language as rule-governed behavior is less a display of linguistic defiance than a natural reflection of changing educational policies, shifts in social agendas, a move in academia toward philosophical relativism, and a commitment to life on the clock.

As these two, quite distant examples show, in the end the problem is never the language, but its speakers. And probably the best way to avoid the use of unnecessary anglicisms without rejecting them in toto is to follow Sabatini's simple advice: be sure of the meaning of the word you want to use; be sure you know how to spell it correctly as well as how to pronounce it; make sure that your interlocutor understands it. If these conditions are not fulfilled, it generally means that you are going to make a bad impression, or you are lazy to search for the right Italian word, or you are looking down on your interlocutor (Sabatini 2016: Invito 8).

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# Arrègulas: Oral Poetry and Minority Language Standardisation* 

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#### Abstract

: Arregulas is a proposal for the standardisation of Campidanese Sardinian approved by the Province of Cagliari, in 2009. It began as a reaction to the promotion by the Autonomous Region of Sardinia of one Logudorese-based standard language (Limba Sarda Comuna) to be used across the whole of Sardinia. What is peculiar about Arrègulas is that it is modelled after the koiné language employed by cantadoris, who are extemporaneous poets with a strong following in the Campidanese area. This koiné can be described as a form of Southern Campidanese deprived of its most marked features. The Arrègulas proposal gives this oral language a standard orthography with a comparatively straightforward phoneme-grapheme correspondence. All things considered, the standard has potential for a higher degree of acceptability with respect to Limba Sarda Comuna in the Campidanese area, both among proficient native speakers and among the many heritage speakers of Sardinian.


Keywords: Arrègulas, minority language education, oral poetry, Sardinian, Standard Campidanese

## 1. Introduction

A standardization effort of a minority language is met with all the obstacles and challenges intrinsic to standardization in itself, plus the extra difficulties that come with dealing with so vulnerable a thing as a minority language. In Europe, many if not most minority languages, in spite of enjoy-

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ing official protection, are currently regarded as endangered (Salminen 2007). With one possible exception (on Catalan, see Newman et al. 2008, among others), standardization attempts have not been especially successful and, in some cases, might even have proved detrimental (Lane 2011). In what follows, I will present an example of a standardization proposal for a minority language that shows some promise: the Arrègulas for Campidanese Sardinian. Regardless of the extent to which this standard language will manage to establish itself beyond the scope of its official uses, its development lends itself to a discussion of what makes a standard language acceptable and meaningful to its prospective users in a minority language community.


## 2. Sardinian

Sardinian is the development of Vulgar Latin as spoken on the island of Sardinia. It is an officially recognized minority language (Law 482/1999). It is often regarded as the most conservative Romance language. However, besides a number of archaic features (e.g., the absence of the palatalization of velar plosives before front vowels in central and northern areas), Sardinian also includes various innovative features (cf. Virdis 2013, among others). Two main dialectal groups can be identified: Logudorese - in the central and northern areas - and Campidanese - in the south. They both display a certain amount of internal variation. Between the two, a transitional area can be identified that displays features shared with both Logudorese and Campidanese, as well as original developments of its own (Blasco Ferrer 1988; Loporcaro 2009: 159; Pisano 2016; Lai, forthcoming).

Several historical changes contributed to the remarkable internal differentiation of Sardinian. The most important ones involve the vocalic and consonant systems. As for the vowel system, a remarkable difference is posttonic vowels. In Campidanese, the final open-mid vowels $/ \varepsilon /$ and $/ \rho /$ were raised to the close vowels $/ \mathrm{i} /$ and $/ \mathrm{u} /$, respectively. This change is dated to the $11^{\text {th }}$ Century and originated from Cagliari (Wagner 1941: 36-37; Loporcaro 2015: 56). This feature constitutes one of the main isoglosses that distinguish Campidanese from Logudorese (cf. Virdis 1988: 908; 2013: 165). We can observe a wide range of variation in the consonant systems: different cluster evolutions, metathesis, assimilations, deletion of liquids, insertion of epenthetic, paragogic and prosthetic vowels as well as syncope have all contributed to the internal differentiation of Sardinian since the Middle Ages. In addition to these historical developments, some active phonological rules distinguish dialects from one another (cf. Lai, forthcoming).

## 3. Language planning in Sardinia

In the 1990s and the 2000s, a vivacious debate unfolded in Sardinia about the role of Sardinian in society, in school, and in the regional administration.

In those years it was widely acknowledged, albeit belatedly, that Sardinian was an endangered language and that Sardinian young people were at best heritage speakers of the language, and their dominant language was Italian. Some linguists had already pointed out that the stable diglossic situation that involved Italian and Sardinian for a few decades had by then evolved into an unstable diglossia in which Sardinian would progressively lose ground in favour of Italian (Rindler Schjerve 1993: 272, 2017: 38).

A sharp interruption of parental transmission of Sardinian had occurred in the cities already in the 1960 s , and in villages and rural communities starting in the 1980s (ibidem; Rindler Schjerve 2017: 38-41). Little did it help that Sardinian was recognized among the historical minority languages of Italy by the Italian Republic in 1999 (Law 482/1999 Norme in materia di tutela delle minoranze linguistiche storiche 'Law for the safeguard of historical minority languages'), ${ }^{1}$ after the Autonomous Region of Sardinia itself had approved a bill for the safeguard and promotion of the language (Regional Law 26/1997). Language shift progressed unabated, and finally UNESCO came to list Sardinian as "definitely endangered" (Salminen 2007: 239, 257; Moseley 2010).

The Autonomous Region chose to launch an ambitious programme of language planning for the adoption of Sardinian in the administration and the school system. ${ }^{2}$ The first step was the development of one Logudoresebased standard for general adoption across the whole of Sardinia. In 2001 a regional committee presented a proposal, dubbed Limba Sarda Unificada 'Unified Sardinian Language'. ${ }^{3}$ The Limba Sarda Unificada (hereafter, LSU) would be met with strong opposition both among the general public and among the academic community, not to mention many linguists specializing in Sardinian (cf. Tufi 2013: 150). The Region eventually dropped the proposal entirely. The most hotly contested aspect of the proposal was that it was exclusively based on Logudorese. Campidanese, the variety spoken in the south of the island (which is also the most populous area) was disregarded altogether. A few years later, in 2006, the Autonomous Region of Sardinia adopted a new standard, called Limba Sarda Comuna ('Common Sardinian Language', hereafter, LSC). Despite explicit reassurances that LSC was the result of careful mediation among the main Sardinian varieties (LSC 2006:

[^76]5-6, 13-14), it would soon become apparent that it was firmly grounded in Logudorese, with few marginal concessions to Campidanese (cf. Calaresu 2008; Blasco Ferrer 2011; Mastino et al. 2011; Lőrinczi 2013; Tufi 2013; Porcu 2014; Lai 2017, 2018a, 2018b). ${ }^{4}$

## 4. Arrègulas: a Campidanese response

The persistence of the regional administration in extending a Logudor-ese-based standard language to the Campidanese-speaking area not only alienated the general public but resulted in a clash in the administration itself. In 2010, in defiance of the Autonomous Region of Sardinia, the Province of Cagliari unanimously adopted a Campidanese-based standard for official purposes, informally named Arrègulas 'Rules' after the document that details it (cf. Resolution n. 17 by the Province of Cagliari, 17.03.2010). The full title is Arrègulas po ortografia, fonètica, morfologia e fueddàriu de sa norma campidanesa de sa lingua sarda I Regole per ortografia, fonetica, morfologia e vocabolario della norma campidanese della lingua sarda 'Rules for the orthography, phonetics, morphology and vocabulary of the Campidanese standard for the Sardinian language'. The work was published in 2009 under the auspices of the Province of Cagliari. From then on, the standard was regularly used, among other things, in adult language courses aimed at heritage Sardinian speakers held in Cagliari by the non-governmental organization Lingua Bia.

Let us now look at the document itself. On the inside cover of the Arrègulas, the scientific committee is listed in full. ${ }^{5}$ Unlike the documentation for the two standard proposals by the Region of Sardinia, which was published exclusively in Italian, Arrègulas was published with a parallel Sardinian-Italian text. The opening page of Arrègulas is noteworthy for its reference to another variety, i.e., Logudorese. The authors write that their Campidanese standard is meant for official use by the Autonomous Region "beside the other variety of the Sardinian language, that is, Logudorese" (tr. mine), (Arrègulas 2009: 18; Marzo 2017: 58). They further clarify that by Logudorese they mean the Common Logudorese used by poets in the Logudorese speaking area. The authors of Arrègulas, thus, implicitly embrace the side of two standard Sardinian languages, which was vocally contested by supporters of LSC on political and ideological grounds (Corongiu 2013, among others). Section 1

[^77]of the document details the reasons behind the proposal of a Campidanese standard as an alternative to the official regional standard orthography. At the end of the section, the authors quote many samples of published poetry and prose in Campidanese in support of the claim that the existing literary tradition already shares a common core of standard features. Section 2 introduces Campidanese as such. The authors list both official documents in Medieval Campidanese and literary works (prose, poetry and theatre) published in Campidanese since the $16^{\text {th }}$ century. ${ }^{6}$ The same section also mentions the tradition of extemporaneous oral poetry, still alive in the south of the island. As will be shown below, the language of these poets played a central role in the development of the standard described in the Arrègulas. A section is devoted to referencing works on Sardinian linguistics. Sections 3 to 5 present the orthographic norms. Sections 6 to 16 present the morphology and syntax of the standard variety and the developers present arguments in support of their choices. Among other things, the section includes a list of verbs (both regular and irregular), divided into three inflectional classes, on the model of traditional language grammars. Section 17 discusses neologisms.

## 5. Summary of Campidanese phonology

The Arrègulas standard is modeled after Southern Campidanese, with the important exception of a few phonological rules. This section presents the vowel and consonant inventories of Southern Campidanese, before moving to the actual Arregulas proposal. What follows is reduced and adapted from Lai (forthcoming), to which I refer the reader for further details and a comparison with Logudorese.

### 5.1 Vowel system of Campidanese

Campidanese has a seven-vowel system, as depicted in Table (1) below:
Table 1. The seven-vowel system of Campidanese

|  | Front | Central | Back |
| :--- | :--- | :--- | :--- |
| Close | i |  | u |
| Close-mid | e |  | o |
| Open-mid | $\varepsilon$ |  | 0 |
| Open |  | a |  |

However, in word-final position only $/ \mathrm{i}, \mathrm{a}, \mathrm{u} /$ are found, because of a historical change (a final vowel raising) that affected mid vowels in that posi-

[^78]tion. Final vowel raising together with metaphony contributed to differentiate the Campidanese vowel system from the Logudorese one. Campidanese Sardinian metaphony raised stressed open-mid vowels $/ \varepsilon /$ and $/ \rho /$ to close-mid vowels [e] and [o], respectively, when followed by the close vowels /i/ and /u/. Final vowel raising changed final open-mid vowels $/ \varepsilon /$ and $/ \rho /$ to close vowels [i] and [u], respectively. ${ }^{7}$ As a result, today a small number of minimal pairs exists opposing $[\varepsilon]$ to [e] and [0] to [o]: e.g. /oru/ (< ORU(M)) 'edge, rim' vs. / oru/ 'gold' (< It. oro), /beni/ (< VĒNI) 'come ${ }_{\text {2sG.Imp }}$ ' vs. /beni/ (< BĚNE) 'well', thus justifying the inclusion of both close-mid and open-mid vowels in the phonological inventory of Campidanese. By contrast, Logudorese has a fivevowel system ( $/ \mathrm{i}, \varepsilon, \mathrm{a}, \supset, \mathrm{u} /$ ), any of which can occur in word-final position. ${ }^{8}$

### 5.2 Consonant system of Southern Campidanese

Table 2 presents the consonant inventory of Southern Campidanese (adapted from Lai forthcoming). ${ }^{9}$ Note that the parentheses around some

[^79]|  | 'edge' | 'gold' |
| :--- | :--- | :--- |
| Underlying forms | /oru/ | 'ors/ |
| 1. Metaphony | oru | - |
| 2. Final vowel raising | - | oru |
| Surface forms | ['oru] | ['oru] |

For this reason, these authors maintain that a five-vowel system (i.e., $/ \mathrm{i} \varepsilon$ a $\rho \mathrm{u} /$ ) is adequate for Campidanese. For discussion of these aspects, I refer the interested reader to Loporcaro (2015: 56; Lai forthcoming).
${ }^{8}$ The Logudorese forms corresponding to the Campidanese words mentioned above are respectively: ['oru] (< ORU(M)) 'edge, rim', ['oro] 'gold' (< It. oro), ['beni] (< VĒNI) 'co$\mathrm{me}_{\text {2SG.IMP }}$ ', ['ben $\varepsilon$ ] (< BĚNE) 'well'.
${ }^{9}$ I departed from Lai (forthcoming) in the treatment of what the literature on Sardinian traditionally calls voiced fricatives, i.e., $[\beta],[\chi]$ and $[\gamma]$. Due to editorial policy, Lai (ibidem) classifies those sounds as spirant approximants and writes them as [ $\beta$ ], [ $\underset{\tau}{ }$ ] and [ $\mathrm{\chi}$ ], omitting them from the IPA chart. Here, it seemed easier to classify them as fricatives and include them in the respective slots of the chart.
segments are motivated by the fact that these segments are only observed in loanwords. Note that the consonant inventories of the most peripheral areas of the Campidanese domain (Sulcis, Ogliastra, Lower Barbagia) are partially different (Virdis 1978: 13-15; 2013).
$\left.\begin{array}{|l|r|r|r|r|r|r|r|r|r|}\hline & \text { Bilabial } & \begin{array}{l}\text { Labio- } \\ \text { dental }\end{array} & \text { Dental } & \text { Alveolar } & \begin{array}{l}\text { Post- } \\ \text { alveolar }\end{array} & \text { Retroflex } & \text { Palatal } & \text { Velar } \\ \hline \text { Plosive } & \mathrm{p} & \mathrm{b} & & & \mathrm{t} & \mathrm{d} & & & \mathrm{d}\end{array}\right)$

Table 2. Consonant inventory of Campidanese Sardinian
Campidanese has three voiceless plosives, i.e., /p, t, k/. In intervocalic position, across word boundaries, $/ \mathrm{p} /$, $/ \mathrm{t} /$, and $/ \mathrm{k} /$ in intervocalic position are realized as $[\beta]$, $[\gamma]$ and $[\gamma]$, respectively (e.g., /ssa pala/ $\rightarrow[$ sa' $\beta$ ala] 'the shoulder'). However, in the south, intervocalic /t/ is realized not as [ $\varnothing$ ] but as an alveolar tap, e.g., /ssa taula/ $\rightarrow$ [sa'raula], 'board, plank'. The intervocalic voiced plosives / $\mathrm{b}, \mathrm{d}, \mathrm{g} /$ are deleted across word boundaries, but only in some areas of the Campidanese domain, especially in Northern Campidanese (e.g., /ssu dinari/ $\rightarrow$ [sui'nari] 'the money'). In Southern Campidanese, this phonological rule does not apply (e.g., /ssu dinari/ $\rightarrow$ [su di'nari] 'the money') (Wagner 1941: 136; Virdis 1978: 45; Lai 2009, 2011). All these weakening processes are known in the literature as lenition processes.

The voiced retroflex plosive /d/ is present in all Sardinian varieties as the outcome of Latin geminate lateral. There are phonological reasons to believe that it always occurs as a geminate (cf. Lai 2015b).

In Southern Campidanese, the post-alveolar affricate $/ \mathrm{t} /$ also undergoes lenition. Its lenited counterpart is [3], while in Northern Campidanese it is [d3]. The phonological contest for this weakening rule is the same as the plosive case (intervocalic position across word boundaries). The alveolar affricate /ts/ is available in Southern Campidanese as the outcome of Vulgar Latin [kj] and [tj], e.g., ['prattsa] (< Platéa(m)) 'square' (Virdis 1978: 64). ${ }^{10}$ In South-

[^80]ern Campidanese, the voiced affricate /dz/ is found only in loanwords, e.g., [bid'dzarru] 'irritable ${ }_{\text {m.SG }}$ ' (< It. bizzarro); (ibidem: 82).

The fricatives /f/ and /s/ respectively alternate with [v] and [z] in intervocalic position, e.g., /ssu fillu/ $\rightarrow$ [su'villu] 'the son', /ssu sali/ $\rightarrow$ [su'zali] 'the salt'. In final coda position, $/ s /$ can be realized as $[s]$, $[\mathrm{r}]$ or $[J]$, depending on the variety and the consonant that follows (Wagner 1941: 302-309). In some southern areas $/ \mathrm{s} /$ undergoes a complete assimilation to the following consonant, e.g. /is manus/ $\rightarrow$ [im'manuz(u)] 'the hands' (Wagner 1941: 302-304; Virdis 1978: 39). The voiceless postalveolar fricative / / / is a phoneme, resulting from the palatalization of Latin velar plosives before front vowels (e.g. ['pifji] (< PISCE(м)) 'fish'); [ [Ji'ðai] (< EXCITĀRE) 'wake somebody up ${ }_{\text {INF }}$ ') (Wagner 1941: 286; Virdis 1978: 61, 73). / // does not have lenited counterparts.

Both nasals $/ \mathrm{m} /$ and $/ \mathrm{n} /$ are phonemes. In some Southern Campidanese varieties we find an active phonological rule that applies to intervocalic $/ \mathrm{n} /$ (Virdis 1978: 53, 81):/n/ is deleted and the preceding vowel is nasalized, e.g. $/ k a n i / \rightarrow$ ['kãi] (< CANE(M)) 'dog', /luna/ $\rightarrow$ ['lũa] (< LUNA(M)) 'moon' (Wagner 1941: 109-113; Virdis 1978 [ibidem]: 41, 53; Bolognesi 1998: 26; Molinu 2003). In Campidanese few items are found including the palatal nasal /n/, all of them are loanwords.

A phoneme that undergoes a series of different phonological rules depending on the variety is the lateral alveolar approximant $/ 1 /$. In some varieties, intervocalic /l/ is deleted, while in others it is affected by various processes that changes it into [w], [ $\beta$ ], [gw], [ b$],[\mathrm{p}],[\mathrm{L}]$ or [Ø] (Wagner 1941: 200-212; Virdis 1978: 55-58; Contini 1987: 355-356; Molinu 2009; Lai forthcoming).

The alveolar trill occurs as a phoneme, as well as one of the possible realizations of $/ s /$ in Northern Campidanese. It occurs both in coda and in intervocalic position. In some Southern varieties, /r/ is deleted in intervocalic position, e.g. /su frori/ $\rightarrow$ [su'vroi] 'the flower', (Wagner 1941: 214).

## 6. The language of cantadoris

Among other influences in the development of Arrègulas, the authors explicitly single out the tradition of improvised poetry tradition by cantadoris (lit. 'singers, bards'). In Sardinia, no less than four traditions are attested. The tradition practiced in the south of the island is called mutetu 'composition'. The main form is called mutetu longu 'long composition' or cantada 'cantata'. It is performed by two or more poets that compete against the backdrop of a two-voice male chorus. A typical performance can be up to three and a half hours long, during which the poets take turns in improvising mutetus. As a form, the mutetu longu is obtained by rearranging a stanza made out of two sections, very different in nature. A poet first improvises an opening section of varying length (typically, eight lines) on a range of traditional topics, then
concludes with a couplet that sets the theme of the whole competition. The poet then produces a series of eight or more quatrains in which lines from the opening section and from the couplet itself are rearranged both in terms of reciprocal order and word-order to ensure a certain rhyme scheme. The following poet's couplet will have to reprise the theme set by the first couplet, while his opening section will be improvised anew. ${ }^{11}$ Here is one actual example of a complete mutetu longu by the poet Efis Loni, who improvised it in 1920, as (freely) translated and annotated by Zedda (2009: 18-19):12

## Opening section:

Ses istraciau e sucidu
Bivendi a sa spensierada
No arreposas in nisciunu logu
Sempiri brillu de a mengianu
Una giorronada in su sartu
Sciu ca no fais prusu
Fatzat soli o siat proendi
No portas butinus in peis

## Quatrains:

Ses istraciau e sucidu
Seis in duus a manu pigada Andendi in fatu a uпи ogu lucidu Bivendi a sa spensierada

Bivendi a sa spensierada Andendi in fatu a unu lucidu ogu Seis in duus a manu pigada No arreposas in nisciunu logu

No arreposas in nisciunu logu
Seis in duus a pigada manu Andendi in fatu a unu lucidu ogu
Sempiri brillu de a mengianu

Opening section:
On the dirty ground you lie
So far from the sacred steeple
A decent bed you cannot find
Sober days you've seen but few
To idleness you took an oath
Work to you is a stormy sea
In all weather the world you face
As a poor and shoeless man

## Quatrains:

On the dirty ground you lie
Oh well, I can see two people Who chase both behind a fly
So far from the sacred steeple
So far from the sacred steeple
Who chase both a fly behind
Oh well, I can see two people
A decent bed you cannot find
A decent bed you cannot find Well, I can see people two
Who chase both a fly behind
Sober days you've seen but few

[^81]Sempiri brillu de a mengianu A un ogu lucidu andendi in fatu Seis in duus a pigada manu
Una giorronada in su sartu

Una giorronada in su sartu A manu piada seis in duus $A$ un ogu lucidu andendi in fatu Sciu ca no fais prus

Sciu ca no fais prus
In fatu a un ogu lucidu andendi
A manu pigada seis in duus
Fatzat soli o siat proendi
Fatzat soli o siat proendi In duus a manu pigada seis
In fatu a un ogu lucidu andendi
No portas butinus in peis
No portas butinus in peis Andendi in fatu a un ogu lucidu In duus a manu pigada seis
Seis in duus a manu pigada

Sober days you've seen but few Who behind a fly chase both
Well, I can see people two
To idleness you took an oath

To idleness you took an oath
Well, two people I can see Who behind a fly chase both
Work to you is a stormy sea
Work to you is a stormy sea Who behind a fly both chase Well, two people I can see
In all weather the world you face
In all weather the world you face
Well, two people see I can
Who behind a fly both chase
As a poor and shoeless man
As a poor and shoeless man
Who chase both behind a fly
Well, two people see I can
Oh well, I can see two people

For clarity, the lines obtained from the couplet are italicized, while the words in bold are meant to highlight the rhyme scheme. ${ }^{13}$

Linguistically, one interesting aspect of Sardinian improvised poetry is that it gave rise to a linguistic koiné of a kind. Poets hailing from different corners of the Campidanese area tend to compose in a variety that keeps away from the most marked features of the Campidanese domain (Arrègulas 2009; Mereu 2014), and follows rather closely the model of Cagliaritano (the Campidanese Sardinian spoken in the city of Cagliari) (Paulis 2001; Virdis 2013). As will be shown, poets developed a de facto standard, building on an etymologic criterion, which discards various innovations attested in many Campidanese varieties.
a. Conservation of $/ \mathrm{n} /$ in intervocalic position

The cantadoris always realize the intervocalic /n/ as [n]. Nowadays, as shown in Section 5, in many Southern Campidanese varieties a phonologi-
${ }^{13}$ The scheme is the following. Opening section: ABCDEFGHA; Quatrains: ABAB, BCBC, CDCD, DEDE, EFEF, FGFG, GHGH, HAHB.
cal rule deletes intervocalic $/ \mathrm{n} /$ and nasalizes the preceding vowel. It is an active phonological process, as hinted by the fact that it regularly applies to loanwords (Virdis 1978: 53, 81). In South-Western Sardinia (Sulcis area), a different rule applies: intervocalic /n/ is realized as [?] (Virdis 1978: 41; Molinu 2009). Neither rule is found in the cantadoris koiné: in Loni's mutetu quoted above one reads <manu> 'hand'.
b. Conservation of $/ l /$ in intervocalic position

The cantadoris retain the lateral alveolar approximant /l/ in intervocalic position, unlike several Campidanese varieties (see Section 5 above).
c. Conservation of $\mathrm{r}+\mathrm{C}$ clusters

Some southern varieties remove rothics in coda position by completely assimilating them to the obstruent that follows: e.g., /mortu/ $\rightarrow$ [mottu]. These assimilations are rejected by the cantadoris.
d. Lack of metathesis

One clear example of cantadoris' preference for etymologic forms is the general lack of metathesis. Metathesis is one of the features most peculiar to Southern Campidanese varieties. Both liquids in plosive-liquid clusters and liquids in coda position were historically affected by some form of metathesis, even though a certain degree of variation is observed (Wagner 1941: 381382; Virdis 1978: 76; 2013: 174; Bolognesi 1998: 419; Molinu 1998; 1999: 164-165; Cossu 2013: 120; Lai 2015a: 286-291).
e. Lack of tapping

In some Southern Campidanese varieties, there is a phonological rule that gives [r] as an allophone of $/ \mathrm{t} / \mathrm{in}$ intervocalic position e.g. /ssa taula/ $\rightarrow$ [sa'raula], 'board, plank' (Virdis 2013: 174; Lai forthcoming). However, this innovative rule is rejected by cantadoris.
f. Lack of alterations of pretonic vowels

In several Campidanese varieties, pretonic vowels were affected by an extravagant range of assimilation and dissimilation (see Wagner 1941: 3438). The language of the cantadoris retains the etymologic vowels.
g. Presence of the prosthetic vowel /a/

Among the features of the language of cantadoris, Arrègulas (62) list the prosthetic vowel/a/. In Campidanese, words starting with a rhotic systematically developed prosthesis. In present day Campidanese, two outcomes of this diachronic insertion are observed. The more ancient one, already attested in Medieval Campidanese documents, is now attested only in Northern Campidanese, in which a range of prosthetic vowels (/a, $\varepsilon, \rho /$ ) is observed before word-initial rhotics. In Southern Campidanese, a more recent and simpler outcome is observed: the prosthetic vowel is always /a/, e.g., Southern Camp. /arrosa/ vs. Northern Camp. /orrosa/ (< rosa(m)) (Wagner 1941: 95-101). Cantadoris choose the southern outcome over the northern one.
h. Sporadic attestation of prosthetic [i] before $s C$

Both Arrègulas and Mereu (2014: 44) claim that the poetry of the cantadoris includes sporadic attestation of a phonologically unmotivated prosthetic [i] before $s \mathrm{C}$ clusters (ibidem). I refer the reader to Mereu (2014) for a literature review on this topic and possible explanations of these exceptional cases of prosthesis. The phenomenon would call for a more in-depth examination of the cantadoris corpus. Campidanese has indeed a phonological rule that inserts a prosthetic [i], but in well-defined contexts: in both Southern Campidanese (cf. Bolognesi 1998: 158-171, 411) and Northern Campidanese (Lai 2015b), when a heterosyllabic cluster (an $s C$ clusters or a word-initial geminate) is preceded by a consonant-final word, a prosthetic [i] surfaces at word boundaries, e.g., /is skovas/ $\rightarrow$ [izis'kovaz(a)] 'the broomsticks'. If sporadic [i] is indeed attested, that must be regarded as exceptional in that it sets the koinè apart from Campidanese varieties. It is worth pointing out, though, that (at least in Loni's Mutetu above) the only sC clusters that display prosthesis are those preceded by a consonant-final word, e.g., <ses istraciau>, while no prosthesis occurs before a vowel-final word, e.g., <sa spensierada>. The pattern is in keeping with the phonological rule mentioned in this section.

## 7. The orthographic design of Arrègulas

The authors of Arrègulas accommodate the previously listed features of the cantadoris' poetry in developing their Campidanese standard. As we will see, the etymologic criterion employed by the cantadoris is also favoured by the Arrègulas, and the result is a Southern Campidanese variety without the phonological rules mentioned in Section 6. Arrègulas implements its orthographic conventions by building on that reference variety, in part by following the lead of traditional Sardinian orthographies, and in part by borrowing from Italian orthography.

### 7.1 Vowels

As reported in Section 5.1, Campidanese has a seven-vowel system (i.e., $/ \mathrm{i}, \mathrm{e}, \varepsilon, \mathrm{a}, \mathrm{o}, \mathrm{o}, \mathrm{u} /$ ), but in word final position only/i, a, $\mathrm{u} / \mathrm{can}$ occur. By contrast, Logudorese shows a five-vowel system with the same five vowels that can appear in every position, including word-final position. This remarkable difference was disregarded in the development of the two Logudorese-based standards sponsored by the Sardinia Region. Both LSU and LSC allow for five word-final vowels, and expected Campidanese speaker to conform (cf. LSC 2006: 13; Lai 2017: 183). This would likely prove problematic for Campidanese speakers, because the relevant distinction is by now inaccessible to their phonological competence. A Campidanese speaker cannot be assumed to be aware of the fact that, for example, an item such as /kani/ should be written <cane> because its etymological form was /kane/. This difficulty is
avoided by Arrègulas, which inherits the Campidanese vowel system. The developers explicitly point out that in word-final position the only admissible vowels are /i, a, $\mathrm{u} /$. On the other hand, they choose to follow LSC in not representing oppositions among mid vowels: $/ \varepsilon$, e/ are to be written as <e> and $/ 0, o /$ as $\langle 0\rangle$. This choice seems reasonable, since the functional load of these oppositions is very low to begin with. To sum up, Arrègulas orthography allows for the vowel graphemes $\langle\mathrm{i}, \mathrm{e}, \mathrm{a}, \mathrm{o}, \mathrm{u}\rangle$, on the condition that only <i, a, u> can occur in word-final position.

One aspect is worth mentioning that does not directly relate to the standard orthography, but to the phonological system of Campidanese: prosthetic vowels (cf. Arrègulas 2009: 88). Arrègulas, by following the language of cantadoris (see Section 6 above), has a prosthetic /a/ before /r/, but not the [i] prosthesis before $s \mathrm{C}$. The choice seems wise, in that it is consistent with the phonology of Southern Campidanese. The two phenomena, however, are of entirely different natures. As already pointed out, the insertion of the prosthetic vowel $/ \mathrm{a} /$ was a diachronic process. As a result, the phonological form of words that started with /r/ in Latin must be assumed to include the prosthetic vowel in Campidanese. By contrast, the addition of [i] before heterosyllabic clusters (such as $s \mathrm{C}$ clusters) is governed by an active rule (cf. Lai 2015b and Section 6 above). This, it is worth emphasizing, is one of the foremost differences in the phonologies of Campidanese and Logudorese (cf. Lai forthcoming). Campidanese, unlike Logudorese, tolerates word-initial heterosyllabic clusters, both geminates and sC clusters. This means for instance that the phonological form of the word for 'school', is /iskola/ in Logudorese and /skola/ in Campidanese. Thus, the Logudorese-inspired prescription by LSC of a prosthetic vowel before sC cluster and no vowel before word-initial /r/ disregarded the phonology of Campidanese altogether.

### 7.2 Consonants

Arrègulas replicate the Italian orthographic conventions in representing various consonants. The digraphs <ch> and <gh> are respectively used for $/ \mathrm{k} /$ and $/ \mathrm{g} /$ before $/ \mathrm{i}, \mathrm{e}, \varepsilon /$, while the graphemes $<\mathrm{c}>$ and $<\mathrm{g}>$ are used for the same phonemes before $/ \mathrm{a}, \mathrm{v}, \mathrm{o}, \mathrm{u} /$. As for the post-alveolar affricates $/ \mathrm{t} /$ / and /dz/: the digraphs <c> and <g> appear before /i, e, $\varepsilon /$ and the digraphs <ci> and $<\mathrm{gi}>$ before $/ \mathrm{a}, \mathrm{o}, \mathrm{o}, \mathrm{u} /$. Again, the phoneme $/ \mathrm{J} /$ is represented by the digraph <sc> before /i, e, $\varepsilon /$ and by <sci> before /a, $\rho, \mathrm{o}$, u/ (Arrègulas 2009: 70). Italian is the dominant language in Sardinia and the language of literacy. On the one hand, an advantage of this choice is that it can help the transfer of literacy skills. On the other hand, there is an argument to be made that orthographic inconsistencies of a dominant language should be avoided in developing a new orthography (cf. Seifart 2006: 285).

Other conventions explicitly depart from Italian orthography. The alveolar affricate /ts/ is represented by the digraph <tz>, as in tziu/ttsiu/ 'uncle', as was the case in Campidanese writing traditions (Arrègulas 2009: 68). The same applies to the palato-alveolar fricative / $3 /$, which is absent from Northern Campidanese but it is a phoneme in the south (ibidem). This fricative is represented by the grapheme <x>, as in àxina /azina/ 'grapes'. Note that both <tz> and $\langle x\rangle$ are so entrenched in the Campidanese tradition that they occur in several widespread Southern surnames, such as Atzori, Atzeni, Putzu, Maxia, Puxeddu.

The voiced alveolar affricate /dz/ is only found in Italian loanwords, written $<\mathrm{z}>$. As a result, while Italian has one grapheme (i.e., <z>) for both the voiceless and voiced alveolar affricates, Arrègulas has one grapheme for each of the two phonemes (i.e., <tz> and $<z>$ ).

As for the nasal series, the bilabial $/ \mathrm{m} /$ is represented by $<\mathrm{m}>$ and the alveolar $/ \mathrm{n} /$ (like its velar counterpart [ n$]$ ) is always represented by $<\mathrm{n}\rangle$, e.g., /konka/, [koŋka], <conca> 'head'. The lateral /l/ is written <l>. Remember that intervocalic $/ \mathrm{n} /$ and $/ \mathrm{l} /$ undergo a number of phonological rules but Arrègulas do not represent them in their orthographic conventions (cf. Section 5 above).

The alveolar trill is widespread in the Sardinian domain and is represented by <r>. In some areas another rhotic occurs, i.e., the alveolar tap [r] as an allophone of $/ \mathrm{t} /$ in intervocalic position: e.g., /ssa taula/ $\rightarrow$ [sa'raula], 'board, plank'. The result of this phonological rule is not represented by $A r$ règulas (again, cf. Section 5).

As mentioned above, some intervocalic plosives and fricatives (namely, $/ \mathrm{p}, \mathrm{t}, \mathrm{k}, \mathrm{b}, \mathrm{d}, \mathrm{g}, \mathrm{t}, \mathrm{f}, \mathrm{s} /$ ) undergo lenition across word-boundaries. These phonological alternations are not represented in the orthography, e.g., /ssu fogu/ $\rightarrow$ [su vogu] 'the fire', is to be written <su fogu> (cf. Arrègulas 2009: 104). Analogously, the assimilation processes that affect final consonants such as $/ \mathrm{s}$ / and $/ \mathrm{t} /$ across word-boundaries are not taken into account by the orthographic conventions.

A peculiarity of Arrègulas, as well as of LSC (LSC 2006: 9; Lai 2017: 184), is the representation of phonetic geminates. Sardinian does not have length contrasts in stops (Lai 2015b, among others). This means that there are no minimal pairs with respect to consonant length in stops. Thus, intervocalic stops are always represented as simple consonants, even though they may be pronounced long, e.g., /mata/ 'tree' is pronounced either ['matta] or ['mata]. Its graphic form, though, is <mata> 'tree'. The only exception is the voiced retroflex stop, which is represented with the doubled consonant <dd>, e.g., /peddi/, [peddi], <peddi> 'skin' (cf. Arregulas 2009: 94). It is worth mentioning that in some traditional orthographies /dd/ is written <ddh>. Consonant length is distinctive only for laterals, rothics and the alveolar nasal, e.g. ['filu] 'string' vs. ['fillu] 'son'; ['karu] 'dear', vs. ['karru] 'cart'; ['manu] 'hand'
vs. ['mannu] 'big м.SG ' (from Virdis 1978: 90). These geminate consonants are represented by doubled consonants, i.e., <fillu>, <carru>, <mannu> as opposed to <filu>, <caru>, <manu> (ibidem: 93).

### 7.3 Accent, apostrophe and hyphen

Arrìgulas uses the grave accent ( ` ) on all vowels (i.e., <ì, è, à, ò, ù>) to mark lexical stress in oxytone (including stressed enclitics) and proparoxytone words, but not in the paroxytone ones (ibidem: 70). The acute accent (' ) is used only "in homographs, lest there be any doubt as to the meaning of the word" (tr. mine), e.g., <òru> /oru/ 'gold' vs. <óru> /oru/ 'edge, rim'. As argued in Section 7.1, the functional load of these oppositions is very low, so this measure might be regarded as superfluous.

The apostrophe is used to contract both definite ( $s u, s a$ ) and indefinite articles ( $u n u, u n a)$, e.g., <s'amigu> 'the friend', <un'amigu> 'a friend' (ibidem: 72,106 ), as well as the proclitic pronouns $m i$, $t i$, $s i<m$ 'iat donau> ' $s / h e$ gave me'. It cannot be used in periphrastic tense forms, or with the proclitic pronouns $d d u$, $d d a$, $d d i$, ndi or nci, (ibidem: 72).

The hyphen $(-)$ is used to signal the boundary between members of a clitic cluster, e.g., <mi-ddu donas> 'give it to me', <boga-mi-nce-ddu> 'bring it out of there for me'. In enclitic clusters, the hyphen must also be used to separate the host verb from the first clitic (ibidem: 70, 120, 122). LSC uses the interpunct ( .) for the same purposes, (LSC 2006: 9-10). The Arrègulas convention has the advantage of wider availability on computer keyboards and other input devices.

## 8. Concluding remarks

As a whole, Arrègulas can be regarded as an adequate standard language and writing system for the Campidanese speaking area. By looking at the programme introduced in Section 1 of Arrégulas, two potential advantages of the proposal become apparent. First, among other influences, cantadoris' poetry is an art form appreciated in wide sectors of the population in small towns and rural areas, where poets are active in community events such as wedding parties and religious festivals. This ensures a degree of prestige among Campidanese speakers that official Regional standards lacked altogether. Second, unlike other literary traditions, oral poetry is a living practice, strongly rooted in its reference community. The language variety employed by poets is familiar to the general Campidanese public, regardless of dialect boundaries. As a result, it might prove acceptable even to those Campidanese speakers whose native variety differs from the standard in some respects. More generally, though, if two standards are ever to be implemented, difficulties are to be expected with speakers in the transitional area between Logudorese
and Campidanese, where the dialectal fragmentation is stronger. Standards, then, would ultimately have to be regarded as general guidelines, allowing for a certain degree of flexibility.

Because of these strengths, the Arrègulas standard avoids one risk that would be intrinsic to any educational policy based on LSC or LSU: in the context of a standardization effort, new speakers of a minority language often end up being unable to connect and communicate with other speakers, as was reported, for example, for Breton (Hewitt 2017). ${ }^{14}$ This divide affects the minority community and excludes older speakers from the minority language's cultural and political scene. Arrègulas, by contrast, builds on pre-existing attitudes and practices that ensure mutual intelligibility and a good degree of acceptance in the Campidanese community.

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# Terrorism in German and Italian Press Headlines 

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#### Abstract

: This paper illustrates the phenomenon of Islamic terrorism by applying frame semantics and metaphor analysis to German and Italian press headlines of the two online weekly publications Der Spiegel and L'Espresso between 2014 and 2017. The study identifies conceptual metaphors that confirm previous research constituting terrorism as war, terrorism as a criminal organisation both in German and Italian press headlines. The concepts of terrorism as a natural event, as a disease and terrorists as animals are represented in Italian headlines, while the contrasting metaphorical concepts of antiterrorist groups as family and I or friends are present in both publications and languages. The paper shed light to new results constituting terrorism as a dramatic play in the German and Italian languages and terrorism as a game and wares in the Italian language. In addition, the research illustrates how media discourse - through the use of conceptual metaphors - triggers a particular perception of the phenomenon among the general public so that governmental strategies and policies are accepted and terrorists are perceived as evildoers. This implies regarding them as members of an uncivilised group "other" opposed to the civilised group "we". Media discourse about terrorism produces an intensive emotion of fear that is remarkable in both German and Italian language taking into account all similarities and differences.


Keywords: Cognitive linguistics, Contrastive linguistics, Frame semantics, Islamic terrorism, Metaphor analysis

## 1. Introduction

Since the $9 / 11$ terrorist attack, the media have played an important role in the representation of terrorism. As Schwarz-Friesel and Skirl (2011:3) point out: "Terrorism, in its destructive activity and reach, depends on the dissemi-
nation of news through the media. [...] This creates the danger that mass media reporting allows itself to be manipulated for terrorist ends". The Islamic State, also known as the IS Caliphate, was declared on 29 June 2014 (cf. Von Sikorski, Matthes and Schmuck 2018: 1). Compared to the preceding period when there was talk of the Al-Qaeda's Organization, the scenario changes, because the West, for the first time, is pitted against an enemy described as a State. Ballardini (2015: 8) criticizes the term "State" and supports rather the term "anti-State": "Se ci ritroviamo di fronte all'Antistato per antonomasia, dunque, è assolutamente folle attribuire all'ISIS la dignità di Stato, come hanno fatto già alcuni autori, perché significherebbe legittimarlo". The focus of this paper is the phenomenon of Islamic State's terrorism reported on the basis of the German and Italian press headlines in the online weekly publications of Der Spiegel and L'Espresso. The term terrorism used in this study refers to the Islamist terrorist attacks that took place between December 2014 and January 2017. The choice of this time span depends on the self-proclamation of the IS and on the conspicuous number of terrorist attacks in Europe. The press headlines are analysed on the basis of Lakoff and Johnson's conceptualisation of metaphor and Konerding's frame semantics in order to focus on the categories, or the matrix frames, in which each metaphor is settled, by identifying if and how actors/ roles, reasons, consequences, conditions/circumstances, phases, goals, strategies, properties are lexicalized. This paper concentrates on the textual aspect of discourse and, in particular, on the rhetorical figure of speech of metaphor. The paper conducts a qualitative and contrastive analysis and the aim will be to investigate how Islamic terrorism is conceptualized in German and Italian on the basis of the above mentioned media by identifying the similarities and the differences that are present in both languages. Since this study is based on two weekly publications, the limited focus cannot claim to represent a complete picture of the discourse on terrorism, it does bring to light new and interesting results that contribute to the ones that have been explored by previous research. By way of example, the study explores how the frame of terrorism as a dramatic play is conceptualised in both languages, while terrorism as metaphors of game and wares are conveyed in Italian. In both languages, the contrasting frames such as antiteorririst groups are conceptualized as family and friends.

The content of the study is presented as follows. First, conceptual metaphors will be presented, followed by a brief overview of the previous relevant research regarding conceptual metaphors of Islamic terrorism. The next section contains a detailed explanation of the corpus and methodology that was used for the analysis, and the presentation and discussion of the results. The paper will close with a brief recapitulation of the research goals and the insights outlined from the corpus analysis.

## 2. Conceptual metaphors

The traditional approach to metaphors as language embellishment, used in poetry and rhetoric with a persuasive purpose, has undergone several modifications owing to the seminal work by Lakoff and Johnson Metaphors We Live By (1980). These authors argue that most of our ordinary conceptual system is metaphorical in nature and that metaphors are a central part of language, pervasive in life and cannot, therefore, be considered just an embellishment of the text. This cognitive approach includes not only metaphorical structures and language, but also human thoughts and actions. Lakoff and Johnson's conceptualisation of metaphor identifies a distinction between abstract conceptual metaphors and specific metaphorical expressions: the conceptual metaphor is an abstract rule or mapping which connects two distinct conceptual domains (cf. Lakoff and Johnson 1980: 7-8), e.g. the conceptual metaphor terrorism as war, involves the abstract connection between a source domain (war) and a target domain (terrorism). The conceptual metaphor is reflected in our everyday language by metaphorical expressions that can be specific such as "War against terrorism" (Krieg gegen Terrorismus, guerra al terrorismo) or words like "soldiers" and "enemies" (Kämpfer, Feinde, combattenti, nemici), that draws on the general conceptual metaphor terrorism as war.

Metaphor concerns a comparison among different words in different domains and, according to Kenneth Burke, "metaphor is a device for seeing something in terms of something else" (cf. Beer and De Landtsheer 2004: 8). Also, the source domain is more concrete and based on human experience, while the target domain is abstract and more difficult to understand (cf. Kövecses 2002). In addition, a metaphor functions through a set of conceptual mappings, associations between elements of the target and source domain (cf. Landau and Keefer 2015). Therefore, metaphors are important rhetorical instruments, that influence the behaviour, the cognition and the reception of human beings (cf. Beer and De Landtsheer 2004: 5-6) as our world and conceptual system are full of metaphors. Anderson (2004: 92) states that:

In their now standard work on metaphor, George Lakoff and Mark Johnson show that metaphor consists not merely of isolated instances of original figurative language but of repetitive and pervasive patterns of language that may even seem literal to the persons engaged in communication. The semantics of every natural language consists of a large, diverse set of families of metaphors, famously exemplified by "argument is war". Thus English speakers in an argument "attack" each other's "position" and "defend" against debaters' "thrusts" and "sallies". Communicators' choice of metaphors from this set determines the meaning that they exchange.

Metaphors are cognitive instruments, and the interaction among their different domains develops a new understanding of reality (cf. Charteris-Black 2004: 27). Indeed, metaphors are used in order to understand unknown things
through known things (cf. Chilton and Ilyn 1993: 8); they help us categorise the world in a specific way, and to understand many abstract and vague concepts (cf. Carver and Pikalo 2008: 57) by the way they are conveyed through words. As Hülsse affirms: "Wirklichkeit wird nämlich nicht nur durch das konstruiert, was ich sage, sondern auch durch die Art und Weise, wie ich es sage" (Hülsse 2003: 212). According to this perspective, metaphors build the social reality. As a consequence, it is possible to speak of cultural metaphors as "each nation has its own clusters of metaphors" (Beer and De Landtsheer 2004: 111). Moreover, metaphors play an important role in the press, as we can see from the corpus analysed in this study; metaphors "sollen auch im Journalismus schwierige Zusammenhänge durch bekannte Bilder vermitteln, das Unbekannte anschaulich machen" (Gehr 2014: 29). The following section will present some of the most significant research conducted on conceptual metaphors about Islamic terrorism.

## 3. Previous research

Due to the prominent position conceptual metaphors occupy in media discourse about Islamic terrorism, they were the subject matter of many research projects, especially in the aftermath of $9 / 11$. Since that period, as Lakoff (2004) affirms, there was an activation of the frames of fear and of the war against terrorism, which implies that people are constantly terrified. The destruction of the twin towers represents the loss of control conveyed by archetypal metaphors such as democracy vs. tyranny and freedom vs. oppression that the U.S. government created after the $9 / 11$ to highlight the us vs. them polarization, a typical resource used to legitimize strategies against terrorism that are grouped under the term counter-terrorism (Zhang 2007). With regards to counter-terrorism, the work by Kruglanski, Crenshaw, Post and Victoroff (2008) presents a psychological perspective and identifies different types of conceptual metaphors related to war, law enforcement, containment of a social epidemic, prejudice reduction. The same can be observed in the British tabloid media discourse on terrorism between 2001 and 2005. For example, in analysing The Sun, Spencer (2008) identifies four conceptual metaphors constituting terrorism as war, crime, uncivilised evil and disease. The author points out how metaphors regarding terrorism have changed since the 9/11 attacks and those that took place in Madrid in 2004 and London in 2005. In fact, he notes a shift in the structure of the terrorist organization Al-Qaeda, which went from being a military entity to a criminal one. After the terror attacks in Madrid, the metaphorical conceptualization of terrorism in political speeches by José Luis Rodriguez Zapatero, the then Prime Minister of Spain in 2004, was investigated by García (2009), confirming the fight metaphor, thus revealing the conceptual metaphor of disease, where the government is the doctor and the society is the patient (García 2010).

Regarding the German media and the 9/11 terrorist attacks, specifically in the press headlines of Focus and Der Spiegel from 2001 to 2003, Susanne Kirchhoff (2010) identifies natural catastrophe, murder, and war metaphors and Spencer (2011) in the Bild newspaper points out five conceptual metaphors about war, crime, uncivilised evil, natural event, disease. In the same vein, Schwarz-Friesel and Skirl (2011) show how terrorism after 9/11 is metaphorically characterized in thousands of articles taken from German print media, particularly weekly newspapers like Der Spiegel, Die Zeit, Die Welt, Focus et al. These papers focus on the persuasive aspect of information activating emotions, primarily the emotion of anxiety. Some metaphorical expressions are analysed such as terrorism as cancerous sore, as crazy (graffiti) sprayers, as mosquito bites. The interaction of language, cognition and emotion is reflected in the language of the German press about violence and Islamic terrorism also through the conceptual metaphors of body, animals and fabulous creatures (Schwarz-Friesel and Kromminga 2014).

Stamenković (2017) analyses the metaphors in a corpus comprising Donald Trump's presidential campaign speeches. Specifically, the corpus consists of 12 transcripts from 2015 to 2016, 10 transcripts from 21 October to 9 November 2016, the inaugural address he gave on 20 January 2017. The metaphors that are identified in this corpus are: animal, fire, journey, goods, machine, plant, sports, liquid, vacuum, house, burden, rocket. Precisely, Donald Trump used relevant conceptual metaphors like terrorism is an animal, a terrorist is an animal, terrorists are insects, terrorism is a weed (Pilyarchuk and Onysko 2018).

Rafoss (2018) examines George W. Bush's major public speeches on terrorism as well as those by Jens Stoltenberg after the $9 / 11$ terrorist attacks and those that took place on 22 July 2011. The author chooses to compare Bush and Stoltenberg because they were very similar in responding to the terrorist attacks, yet also very different. The metaphors of personification of nation, fight and war, and evil were revealed by the authors; a negative description of terrorists compared to a positive description of a compassionate national community.

To sum up, the majority of the research studies identifies the conceptual metaphors of terrorism as warlfight, crime, natural catastrophe, disease, uncivilised evil, terrorists as animals by pointing out a distinction between $u s$ and them, in which we includes victims and civilised people, while they includes evil and uncivilised people. This paper presents a number of similar results, but also adds new ones, as listed accordingly. The next section will present the methodology used to analyse the metaphors by applying frame semantics.

## 4. Methodology

The corpus consists of press headlines available on the Internet. Der Spiegel and L'Espresso provided headlines from December 2014 till January 2017 regarding the two terror attacks in Paris, namely the Charlie Hebdo
attack on 7 January 2015 and the 13 November 2015 attack; in Brussels on 22 March 2016, in Nice on 14 July 2016, in Ansbach on 25 July 2016 and in Berlin on 19 December 2016. The selection of press headlines instead of the complete articles is based on the observation that people often tend to read only the online headlines because they attract greater attention and are spread all over the social media. The corpus material was analysed manually to detect conceptual metaphors with the support of the software program AntConc, a freeware corpus analysis toolkit. The keywords used in AntConc were: Terrorismus, Terror*, Terrorist*, islamisch*, Islamist*, Is, Islam, Kalifsstaat*, Kalif*, Anschlag*, Anschläge*, Attentat* in the German language and terrorismo, terrorist*, terrore, islamic*, islamist*, isis, is, Islam, califfato, califfo, jihadis*, kamikaze, estremis*, fondamentalis*, attentat*, attacc* in the Italian language. The focus was placed on all metaphorical expressions used in terrorism rhetoric, classified then in conceptual metaphors and categorized in matrix frames and predicates by applying frame semantics on the basis of Konerding's (1993) studies.

A frame is, as Fillmore (1982: 111) states:
By the term 'frame' I have in mind any system of concepts related in such a way that to understand any of them you have to understand the whole structure in which it fits. [...] I intend the word 'frame' as used here to be a general cover term for the set of concepts variously known, in the literature on natural language understanding, as 'schema', 'script', 'scenario', 'ideational scaffolding', 'cognitive model', or 'folk theory'.

Certain words and some expressions are associated in the memory to particular frameworks. In this way, a particular word in a proper context activates in the recipient's mind a certain frame which activates, in turn, other associations with other words (cf. Baldi and Savoia 2010: 120).

Konerding (1993) carried out a lexicological pilot study on the basis of dictionaries - in particular of the Duden Deutsches Universalwörterbuch (Duden Universal German Dictionary) - a hyperonym reduction of substantives, working exclusively with nouns, because hyperonyms usually occur in dictionary meaning explanations as the main elements of nominal phrases and also because "everything that is addressed and thus can be made the object of explicit categorical and predicative analysis is nominalizable" (Konerding 1997: 65, quoted in Ziem 2014: 268). The results of Konerding's hyperonym type reduction is a small set of German nouns and they correspond to the highest hyperonyms, the so-called matrix frames: object, organism, person/ actant, event, actionlinteraction/communication, institution/social group, surroundings, part/piece, totality/whole, state/property. The second step of Konerding's pilot study consists in determining the potential reference points of each category, so that conventionally expectable routinized predications arise as predicators. Konerding explored to which predicators the ascertained noun
types can be linked. The predicator schemata answers to questions such as 'under what conditions?', 'in what phase?', 'how long?', 'in what way?', 'with what consequence?', 'for what reason?':

Diese Fragen werden in den vorgeschlagenen Matrixframes der Pilotstudie [...] mit Hilfe der folgenden Phrasen gebildet [...]: Unter welchen Bedingungen?, In welcher (Existenz)Phase?, Wie lange?, Auf welche Art und Weise?, Mit welcher Folge?, Aus welchem Grund? Ein Ziel der Pilotstudie war es, Antworten zu derartigen Fragen ebenfalls in die Form von Nominalen zu bringen, um eine iterierte, d.h. thematisch progressive Anwendung der Matrixframes zu ermöglichen und somit eine kontrollierte, schrittweise progressive Wissensmodellierung durchzuführen. (Konerding 1993: 203)

After identifying the most prominent metaphors used in conceptualizing terrorism, the metaphorical expressions were divided into groups according to their source domain and the predicates of the matrix frame to which each conceptual metaphor belongs. The following section presents the matrix frames and metaphors found and aims to explain their discursive implications.

## 5. Results and discussion

The source domains in the press headlines, including the number of expressions for every source domain used in conceptual metaphors related to Islamic terrorism are given in Figure 1.


Figure 1. Source domains of Islamic terrorism

### 5.1 Terrorism as war

The conceptual metaphor terrorism as war, as stated in previous research, is verbalised both in Der Spiegel and $L^{\prime} E s p r e s s o$.

Considering Konerding's (1993) frame semantics, the frame war concerns the matrix frame of an event with all his possible predicates, such as its phases, its causes, the people involved in it. The predicates of an event that are listed by Konerding are:

Matrix frame event ${ }^{*}$
Predicates characterising: the development circumstances; the hierarchically superordinate whole; the functions/roles; the essential phases; the essential actors; the essential properties of the actors; the conditions in which the event changes; the typical duration; the conditions in which the event begins; the conditions that support the event; the conditions under which the event recurs; the conditions under which the event ends; different types of state and other events in which the event can recur; other names for the event; different consequences for the people; the meaning; similar events; theories; information.

In the analysed corpus five of the listed predicates are lexicalized, as shown in Table 1:

| Predicates | Der Spiegel | L'Espresso |
| :---: | :---: | :---: |
| Other names for the event | Kampf gegen Terrorismus; Anti-Terror-Kampf; Krieg gegen den IS; im Kampf gegen den islamistischen Terrorismus; im Kampf gegen den Terror auf Invasionen; Kampf gegen Islamisten; Terrorismusbekämpfung; Terrorbekämpfung | Guerra al terrorismo; La Guerra Totale; Prepararsi alla guerra; Rendere più efficace la guerra contro lo Stato Islamico; Guerra al Califfato; La lotta al terrorismo; Lotta contro i terroristi; Lotta contro I jihadisti; Combattere il terrorismo |
| The essential actors | Kämpfer gegen den Terrorismus; Terrorismusbekämpfer; IS-Kämpfer; Feinde; Interessenvertretung der Soldaten; Soldatengruppe; Anti-Terror-Allianz | Combattenti; commando; comandi alleati; alleati; esercito; nemici; soldati dello Stato Islamico; i soldati dell'Isis; le milizie del Califfo; truppe del Califfato; miliziani islamici; reclute; reclutarori |
| Different consequences | Widerstand; Aufrüstung; Ausrüstung, Rüstungslieferungen; Bitterer Sieg; besiegen; bombardieren; Bomben werfen; aufrüsten; bewaffnen; gewinnen; verteidigen | Vincere; sconfiggere; perdere; combattere; attaccare; bombardare; arruolarsi; arretramento; avanzata; assalto; riconquista |

[^83]| The <br> conditions <br> that support <br> the event | Kriegswaffen; Schusswaffen; <br> Kampfjets; Strategie gegen den <br> Terror Sicherheitsoffensive; <br> Militäroffensive; Militärausgaben; <br> Rekrutierunsstrategie <br> des "Ilamischen Staates" | Strategie; Linee strategiche; <br> soluzione militare; cooperazione <br> militare |
| :--- | :--- | :--- |
| The essential <br> phases | Frankreich an die Front, Brutaler <br> Kampf an allen Fronten | Fronte; campo di addestramento; <br> paese militarizzato; città <br> militarizzata |

Table 1. War-event
In the German press headlines of Der Spiegel there are the two words Terrorismus and Terror. The word terror derived from English reflects the emotion of intensive fear. Terrorism - Terrorismus - is a political instrument to disseminate fear not meant to kill as many people as possible, but to set societies in a great feeling of danger: the dissemination of death and fear is the power of terrorism (cf. Lakoff and Wehling 2016: 119). During 9/11 Bush spoke about a war against terror, meaning 'against fear', but since then European politicians and journalists speak of war against terrorism, but use the two terms indiscriminately. The use of these words reflects a sort of manipulation by means of the language of terrorism: since the people have an intensive fear, they need help and want security, and for this reason they support any solution, including war. The emotions have an important role - as in this case fear - so that metaphors become a powerful instrument to promote social change and support for security (cf. Hanne, Crano and Scott Mio 2015: 253). The problem of an expression like Krieg gegen den Terrorldie Angst is that people, rather than feeling secure, have an increasing feeling of insecurity (cf. Lakoff and Wehling 2016: 121). Moreover, there are three noun forms that express this insecurity: Krieg means a conflict with armed forces among States or nations, or a greater military conflict that lasts for a longer period of time; Kampf means a military conflict among hostile troops or enemies in general rather than among absolute States; Bekämpfung reflects the action of the verb bekämpfen, or the action of destruction related to enemies (die Feinde bekämpfen) or the action of controlling, containing, preventing or overcoming, towards which strong measures are needed (cf. Duden 2011).

In addition to the concept of Krieg gegen den Terrorismus/Terror, there is another similarly significant expression, that of Kampf der Kulturen, Kulturkampf gegen Islamismus which, since 9/11, has taken on a clear warlike metaphor. In comparison with the metaphor Krieg gegen Terrorismus, it does not mean a war between us and an abstract phenomenon, but between our culture and the culture of the other: two cultures literally cannot fight, but metaphorically different cultures have different ways to speak and for that reason they cannot communicate, but just - in this case - to conduct a war.

In L'Espresso, in comparison with the German expression Krieg gegen Terror, the Italian expressions Guerra al terrorismo, Guerra al Califfato, La lotta al terror-
ismo, Lotta contro i terroristi, Lotto contro i jihadisti, Combattere il terrorismo focus on the phenomenon of terrorism and not on the emotion of fear/terror. The 'caliphate' is a word that comes from the Arabic, that means succession and identifies an Islamist governmental form. Moreover, as in the German press headlines, there are the words guerra, lotta and combattere: as a matter of fact guerra and combattere have the same meaning of Krieg and bekämpfen; Lotta means fight, battle among two or more people or animals, in which someone wants to dominate, but it has also a metaphorical meaning like "fight against cancer", "fight against illiteracy" or "conflict", "discord" (cf. Lo Zingarelli 2019). The phenomenon of Kampf der Kulturen is verbalised also in the Italian press headlines with the expression Scontro di civiltà: the word scontro in the dictionary refers primarily to a collision with vehicles. Secondly, it refers to a short term fight, followed by the fight in the field of sports and then figuratively it means accesa polemica, aspro confronto, namely "intense dispute", "bitter confrontation" (cf. Lo Zingarelli 2019); the word civiltà, from Latin civilis, "civil", refers to the complex of the social, political, economic, cultural structures and developments that characterize a given society; it refers also to the progress and to common courtesy; the difference between civiltà and cultura is that the last word is of narrower context and refers to cognitions, knowledge, traditions, art, habits, behaviours (ibidem). The focus in the Italian language sheds light on the fight/dispute and on the wider term civiltà instead of cultura. In the German language the focus is on the (military) conflict and the narrower term Kultur which refers to intellectual, artistic, formative performance of a society (cf. Duden 2011). In addition, in German there is no mention about the development of the society as in the Italian expression. For that reason, the Italian expression civiltà can be seen as a reinforcement of the idea of "developed civil society" which creates a clear distinction between us and the others, between a "civil society" and an "uncivil society". The expression "the clash of civilizations" is famous owing to Huntington's work (2011) published in 1996, and criticised by Todorov (2009: 125) who asserts that the proper word would not be "clash" but "encounter" or "meeting" because the "meeting" among cultures or "civilizations" should not produce a "clash", or a war, but an interaction.

Both in the German and in the Italian press headlines the conceptual metaphor terrorism as war is verbalised. The frame of war can be clearly recognized through the participants of this war - the States, the soldiers, the troops, the allies and the adversaries, who need and use strategies to win the war. The fighter also needs weapons and the war against terrorism is fought in different places, fronts and cities.

### 5.2 Terrorism as a criminal organisation

Similarly to the work conducted by Alexander Spencer (2008), also in the analysed corpus terrorism is verbalised both as war and as crime. Therefore, there is an entire frame about crime, and terrorism is conceptualised as a criminal organisation.

The frame criminal organisation concerns the matrix frame of an institution/ social group. The predications characterising this matrix frame are:

## Matrix frame institution/social group

Predicates characterising: the social processes or connections; the roles/functions; the elements and manifestations; the people involved; the way in which the people are included; the parts; the activities; the pros; the limitations; other properties; the dimension; development circumstances; the circumstances that lead to the dissolution; the typical existence phases; the distribution; other names for it; the intentions, needs, purposes, goals; the actions; the goals; the conditions; the way in which it works; the way in which it is effective; the duties and the responsibilities; the rights; the instruments; the meaning; similar social groups/institutions; theories; information.

In the analysed corpus four of the listed predicates are lexicalized, as shown in Table 2:

| Predicates | Der Spiegel | L'Espresso |
| :---: | :---: | :---: |
| The people involved | Haupt- und Terrorverdächtige; Anhänger des verbotenen „Kalifsstaates"; Täter, Angreifer, Komplizen; Fahndunashelfer, Mörder, Massenmörder, Amokläufer | Sospetti terroristi; membri dell's; omicida; complici; assalitori |
| The elements and manifestations | Spuren | Tracce |
| Similar social groups/ institutions |  | Al pari delle associazioni mafiose, l'Is agisce e si finanzia commettendo reati; I kamikaze sono un clan |
| The circumstances that lead to the dissolution of the institution/ social group | Straffällig; vorbestraft, Fahndung; Terrorfahndung; Terrorverdacht, verdächtigen; ermitteln; durchsuchen; identifizieren; Haft ohne Anklage; Zugriffen; Anti-TerrorRaids; Gefängnis | gli investigatori danno la caccia...; la polizia è alla ricerca; indagine; inchiesta; ipotesi investigativa; identikit, intercettazioni; liste di chie è sospettato di attività terroristiche; ordini d'arresto; blitz anti-terrorismo |

Table 2. Criminal organisation - social grouplinstitution
The investigators search for the traces of the terrorists, who are sometimes in hiding places and on the run: the identity of the terrorist is unknown and the investigators have just suspects. This uncertainty produces clearly a feeling of fear.

In the Italian language there are some comparisons with the Mafia. Usually the word clan is often used to refer to the Mafia, Camorra or other criminal organisations: I kamikaze sono un clan. This word comes from the Gaelic clann, it means family and refers to a familial group with masculine descend-
ant. The word today refers also to a closed group of people that share the same interests and are related to criminal groups of the Mafia (cf. Lo Zingarelli 2019). This comparison clearly conveys the idea of the reception of terrorism as crime. Terrorists are compared increasingly with the Mafia and the Islamic State is received therefore as the Mafia organisation (cf. Ballardini 2015:7) which then produces certain connections. For example, as the Mafia is seen in Italy as the "opposing State", as well as a network that has a great power and is everywhere, in this case, Islamic terrorism is very similar to the Mafia.

Both in German and Italian press headlines terrorism has not been fought but restrained through laws. In fact, in order to destroy the organization, law enforcement needs to identify its members.

The first two conceptual metaphors about war and crime are not very different. Regarding the conceptual metaphor terrorism as war, there is a military and repressive answer; concerning the conceptual metaphor terrorism as crime, there is a lawful solution, but both aim to pass new laws about war and emergency (cf. Spencer 2012: 405).

### 5.3 Terrorism as a dramatic play

Terrorism is also verbalized as a dramatic play, as something unreal. In this field there are more metaphorical expressions in the Italian then in the German press headlines.

The frame dramatic play concerns the matrix frame of an action/interaction/communication. The predications characterising this matrix frame are:

Matrix frame action/interaction/communication*
Predicates characterising: the reasons; the goals; the bierarchically superordinate whole; the essential phases/states; the duration; the actors; the roles; the properties and the states; the instruments, strategies, tactics; the abilities; the essential mistakes and their consequences; the possibilities of the correction; the typical consequences; the typical actions/events or phases with which it overlaps; similar actions/interactions/ communications.

In the analysed corpus five of the listed predicates are lexicalized, as shown in Table 3:

| Predicates | Der Spiegel | L'Espresso |
| :--- | :--- | :--- |
| The actors <br> The roles | Regie | regista dei massacri; il regista <br>  <br> delle stragi di Parigi; ma quale <br> è la regia che ha organizzato <br> end <br> l'offensiva?; aggressori <br> protagonisti; 007 |


| Similar actions/ interactions/ communications | Apocalypse Now |  |
| :---: | :---: | :---: |
| The essential phases/states The goals | Live-Events inszeniert, dramatische / schreckliche Szenen; ein grausames Spektakel; grausame Szenen aus Terrornächten; Szenen aus einer Metropole, die Terror erlebt, Actionszenen; Totentanz; Tragödie; Albtraum; Schauplätze des Terrors | tutta una nuova serie di scenari geopolitici; possibile scenario caldo; silenzio irreale; trame islamiste; spettacolo di morte; si moltiplicano; combattimenti in una città spettrale / città fantasma; in stile gangster; teatro siriano |

Table 3. Dramatic play - action/interaction/communication
In both languages there is a conceptualisation of terrorism as something unreal: terror attacks are perceived as shows or a theatre-like performance - as made clear in the Italian metaphorical expression teatro siriano. Each terror attack is experienced as a tragedy and a nightmare, something, that does not seem to be real and would be possible just in a plot of a movie, a play or in a nightmare. The reception of terrorism as a movie has already been instituted, with a connection between terrorism and horror scenes of films and it reflects the difficulty to receive these events as something real (cf. Schwarz-Friesel and Kromminga 2014: 58-59).

This conceptual metaphor very clearly reproduces the difficult reception of terrorism in Western cultures and it is clearer in the Italian L'Espresso headlines. In theatre, the "Islamic plots" develop (trame islamiste) and concern a "performance of death" (spettacolo di morte); the terrorists - as in a horror movie with zombies - 'increase' (si moltiplicano) and the police is the 007 of this movie. The "battles" are filmed "in a spectral city" (combattimenti in una città spettrale) full of "ghosts" (cosi si vive nella città fantasma). The terrorists use a particular style as in a 'gangster' movie (Iterroristi hanno aperto ilfuoco con i kalashnikov in stile gangster).

The conceptual metaphor terrorism as a dramatic play is clear in the Italian language, where the word "theatre" is pointed out. In the German language there is the word Spektakel which is not that frequently used today but reflects the sense of unreality in perceiving the phenomenon of terrorism. The German press headlines focus their attention on the performance; the Italian press headlines focus on the place - where the performance takes place - and on the performance.

### 5.4 Terrorism as a disease

In the Italian press headlines there is just a small network around the frame of disease and some metaphorical expressions. The frame disease concerns the matrix frame of an event (section 5.1). In the analysed corpus three of the predicates are lexicalized, as shown in Table 4:

| Predicates | L'Espresso |
| :--- | :--- |
| Other names for the event | L'Isis è un cancro; Chi compie attentati <br> solitari ha livelli di psicopatologia più <br> elevata rispetto a chi si muove in gruppo; <br> siamo in preda alla nevrosi dell'insicurezza; <br> Una società sull'orlo di una crisi di nervi |
| Different consequences | la violenza nascosta che infetta anche <br> i sistemi democratici; 3.600 morti di <br> terrorismo; Il terrorismo di matrice <br> jihadista è il più concreto e potenzialmente <br> letale |
| The conditions under which the <br> event ends | estirpare l'Is |

Table 4. Disease - event
Terrorism is a cancer, a disease that is not easy to "defeat" and to control. As Jackson (2005: 73) asserts "terrorism is a cancer on the human condition and we intend to oppose it":

The communicated conceptualization terrorism as cancerous sore reveals that terrorism is presented in analogy to cancer case, which establishes a specific view. Through the reference to a serious, life-threatening illness, a strongly negative evaluation is established, which contains a considerable emotional potential (repulsive, frightening). The conceptualization can be understood as an indirect persuasive demand for action (must be investigated/combated). (Schwarz-Friesel and Skirl 2011: 4)

Moreover, terrorists are psychopathic and terrorism is a neurosis (Chi compie attentati solitari ha livelli di psicopatologia più elevata; siamo in preda alla nevrosi dell'insicurezza). Here it is interesting to notice a connection with the problem of insecurity which is clearly connected with the feeling of fear that we continue to find in these different conceptualisations about terrorism: the expression 'neurosis of insecurity' underlines the feeling of fear that spreads in an insane way. We suffer from phobias about terrorism, a neurosis due to a terror fear, caused by terrorists, because we cannot control this phenomenon. In the metaphor terrorists as psychopathic, terrorists are perceived as unhealthy, especially if they organise terror attacks alone. This negative perception of terrorists that are alone will be underlined in the section (5.8) about the metaphor of animals. This way to describe terrorism and us as victims supports the difference between the persecutors and the victims. Terrorists are fool, irrational and uncivil and we are the opposite, therefore rational and civil:

Mentally disturbed assailants are driven by deep fears, irrational hostilities, and mad ambitions. Similarly, closed-minded ideologues and militant fanatics are immune to practical reason and rational influence of any kind. [...] Indeed, Sam Keen observes that the tendency to dehumanize the face of a foe is universal. Drawing on war propaganda posters and other sources from societies throughout the world, he lists what he calls archetypes of the hostile imagination, which construct the enemy as a stranger, an aggressor, as faceless, a demon, an enemy of God, a barbarian, as greedy, as criminal, a torturer, a rapist, a beast, a reptile, an insect, a germ, as death, and even as worthy opponent. (Lakoff 2004: 80-81)

Terrorism is a virus, that can easily spread (la violenza nascosta che infetta) and causes 'deaths' ( 3.600 morti di terrorismo). Terrorism is 'lethal' (potenzialmente letale). Terrorism - like a cancer - has to be 'extirpate', literally in Italian estirpato. The verb estirpare means 'uproot' or 'root out', like e.g. 'taking out weeds' (estirpare le erbacce) or 'taking out cancer' (estirpare il cancro), figuratively it means 'to remove completely', it is used also against phenomena as corruption, drogues, terrorism (cf. Lo Zingarelli 2019).

### 5.5 Terrorism as a natural event

In the Italian press headlines the conceptual metaphor terrorism as a natural event is verbalised. The frame natural event concerns the matrix frame of an event (section 5.1). In the analysed corpus only two of the predicates are lexicalized, as shown in Table 5:

| Predicates | L'Espresso |
| :--- | :--- |
| Other names for the event | Tsunami; Terremoto |
| Different consequences | L'onda nera del terrorismo; L'onda lunga |
|  | del jibadismo; Cavalcare l'onda dell'odio; |
|  | Ultima ondata terroristica; La nube nera |
|  | degli attacchi dell'Is; Un lampo e poi il |
|  | fumo; infiltrazioni |

Table 5. Natural event - event
The reception of terrorism as a "tsunami" or "earthquake" gives again the idea of something that is not so easy to control - as for the case of the disease. When we read that terrorism causes l'onda nera, l'onda dell'odio ('the black wave', 'the wave of hate'), it means that terrorism is a phenomenon that cannot be easily stopped. Moreover, terrorism is also received as a blitz: the word derives from the German Blitzkrieg and refers to a military operation characterized by the unpredictability of the attack and the speed of the execution (cf. Lo Zingarelli 2019). As a consequence it is something that lasts not so long; a terrorist attack can last just ten minutes and then there is smoke and nothing more then hard consequences and other victims.

Terrorism is also verbalised as water ('wave', 'tsunami'): indeed we find also the metaphorical expression infiltrazioni; terrorists leak in the nations and we have to stop these 'infiltrations'. Like in the case of the 'virus' that infects our territory in the disease frame, also in this case there is something that breaks into our area and as Lakoff asserts "security is as containment - keeping the evildoers out" (Lakoff 2004: 57), or clearer when he speaks about container metaphors:

We are physical beings, bounded and set off from the rest of the world by the surface of our skins, and we experience the rest of the world as outside us. Each of us is a container, with a bounding surface and an in-out orientation. We project our own in-out orientation onto other physical objects that are bounded by surfaces. Thus we also view them as containers with an inside and an outside. Rooms and houses are obvious containers. [...] But even where there is no natural physical boundary that can be viewed as defining a container, we impose boundaries [...] whether a wall, a fence, or an abstract line or plane. There are few human instincts more basic than territoriality. And such defining of a territory, putting a boundary around it, is an act of quantification. (Lakoff and Johnson 1980: 29)

From this perspective, therefore, terrorism and terrorists that break into our boundaries are a problem and trigger a feeling of fear and insecurity - as stated before.

In conclusion, terrorism is perceived as a natural event or a natural catastrophe in the Italian press headlines. terrorism is a tsunami, a wave: "als naturale Katastrophe ist Terrorismus ein Ereignis, das über 'uns' hereinbricht" (Schlag 2017: 65). In particular, in the Italian language, we speak about 'earthquake', 'blitz' and 'smoke': as a shock or an explosion and then just smoke - or better said - the consequences of terror attacks that occur over and over again. They spread not just as a 'virus' but also as 'waves' and 'tsunamis'. The reception of terrorism as a disease and as a natural event are therefore very similar, because both of them reflect a phenomenon that is not easy to control.

### 5.6 Terrorism as a game

In relation to the 'war against terrorism' in the Italian corpus terrorism is verbalised as a game. The frame game concerns the matrix frame of an action/interaction/communication (section 5.2). In the analysed corpus seven of the predicates are lexicalized, as shown in Table 6:

| Predicates | L'Espresso |
| :--- | :--- |
| The actors | Tre uomini; forze dell'ordine; l'slam <br> mite; leader dell'IS |


| The instruments, strategies, tactics | Il rebus della guerra siriana; manuali <br> dell'orrore; istruzioni per la morte; <br> tutorial del terrore; un progetto di legge <br> propone di giocare d'anticipo; scacchiere <br> mediorientale |
| :--- | :--- |
| The goals <br> The typical consequences | scacco al califfo; tre nomini hanno tenuto <br> in scacco le forze dell''ordine di un'intera <br> nazione; attacco al divertimento |
| The essential phases/states | il leader dell'Is ha lanciato una sfida <br> non solo all'occidente; lancia anche una <br> sfida culturale; immigrazione, paura del <br> terrorismo, periferie sono questioni che <br> mettono in gioco gli equilibri democratici <br> in Europa e in Italia |
| The essential mistakes and their <br> consequences | cosi ci siamo giocati l'slam mite |
| The properties and the states | non hanno nulla da perdere |

Table 6. Game - action/interaction/communication
Terrorism is verbalised as chess, there is a chessboard and the chess pieces. In relation to this Lakoff (1987: 16) asserts:

Wittgenstein pointed out that a category like game does not fit the classical mold, since there are no common properties shared by all games. Some games involve mere amusement, like ring-around-the-rosy. Here there is no competition - no winning or losing - though in other games there is. Some games involve luck, like board games where a throw of the dice determines each move. Others, like chess, involve skill. [...] Chess and go both involve competition, skill, and the use of long-term strategies. Chess and poker both involve competition.

The metaphor of chess gives an idea of a terrorism that have strategies and abilities to be ready for the competition. The chess pieces move in the same way of terrorists: it is all about a competition, similar to war.

Terrorism is also conceptualized as rebus. The uncontrollability of the phenomenon of terrorism is verbalized as a 'Rebus of war' (il rebus della guerra siriana) and this produces laws 'to play in advance' (un progetto di legge propone di giocare d'anticipo). In the Italian language the word rebus refers to a puzzle game and it is used metaphorically for incomprehensible or uncontrollable people or things (cf. lo Zingarelli 2019), and this is very similar to the phenomenon of terrorism.

We can lose or win in a game and in Italian there is an expression for this, namely giocarsi qualcosa, which means to 'gamble' or to 'risk' something (cosi ci siamo giocati l'Islam mite). From the perspective of terrorism, terrorists have 'nothing to lose' in this game (non hanno nulla da perdere) and they plan attacks
against our way of life which is a Dionysian life, based on music and alcohol. Such amusement is not accepted by the Islamic State and for this reason they 'attack entertainment' (attacco al divertimento). Other common sayings in the field of game are lanciare una sfida, 'throw down a challenge' (il leader dell'Is ha lanciato una sfida non solo all'occidente; lancia anche una sfida culturale) and mettere in gioco, literally 'put into play' (immigrazione, paura del terrorismo, periferie sono questioni che mettono in gioco gli equilibri democratici in Europa e in Italia).

### 5.7 Terrorism as wares

In the Italian press headlines terrorism is also verbalized as wares. There is a frame network about wares that concerns the matrix frame of an object. The predications characterising this matrix frame are:

## Matrix frame object ${ }^{*}$

Predicates characterising: the form, colour and measurements; additional discernible features; the bierarchically superordinate whole; the essential parts; the arrangement, functional roles and special features; other exceptional features; the conditions; the later phases; the distribution; the availability; other names for it; activities in which it functions/ plays a role; roles in such activities; the meaning, similar objects; theories; information.

In the analysed corpus three of the listed predicates are lexicalized, as shown in Table 7:

| Predicates | L'Espresso |
| :--- | :--- |
| Other names for the object | Terrorismo; strage; guerra |
| Activities | la strage costata la vita a dieci turisti; il costo <br> umano ed economico dell''perazione sale; la guerra <br> costerebbe 50 morti a settimana; si contano ancora i <br> morti; deve fare i conti con nuovi equilibri geopolitici |
| Roles of the object in such <br> activities | imprenditori del terrore; veniamo a nostre spese <br> per vincere la barbarie; estremisti da eliminare a <br> qualunque costo; a farne le spese i nigeriani ma anche <br> l'Europa. E il terrorismo ci guadagna |

Table 7. Wares - object
The metaphor of wares is verbalized as terrorism since there are expressions with 'terrorism' / 'war' / 'disaster' that 'costs' instead money many human lives (la strage costata la vita a dieci turisti; il costo umano ed economico dell'operazione sale; la guerra costerebbe 50 morti a settimana) and in this "death-market" we count the dead (si contano ancora i morti). The sellers of terrorism are some imprenditori del terrore, 'businessmen of terror' and we, intended as Europeans, are the buyers and victims.

Conceptual metaphors about the frame of wares referring to women have already been explored, and this is particularly true about prostitutes, who are described as objects and wares (cf. Grenz 2007: 164). In this case we find an abstract phenomenon, terrorism, that is perceived as wares.

Terrorism is therefore wares that have to be paid for with the lives of the victims and just as with victims or money, it has to be counted. The sellers of these wares are the 'businessmen of terror' and the buyers are the victims: we "buy" terrorism and we "pay" with our "life-money". In this conceptual metaphor there is again a distinction between us and the others: we the "buyers" and the others the "seller" of fear.

### 5.8 Terrorists as animals

In the Italian press headlines terrorists are verbalized as animals. The frame animals concerns the matrix frame of an organism. The predications characterising this matrix frame are:

## Matrix frame organism*

Predicates characterizing: the form and the color; properties; the essentialparts; the mass; the abilities; the habits; the natural events; the roles; the development circumstances; the natural environment, the distribution; the conditions; certain existence phases; other names for it; the actions of the people; the meaning, the production processes; similar organisms; theories; information.

In the analysed corpus four of the listed predicates are lexicalized, as shown in Table 8:

| Predicates | L'Espresso |
| :--- | :--- |
| Other names for the organism | Lupi; Pescecane; Squalo |
| Oher particular properties | Solitari; ma sono i "upi solitari" il vero pericolo; <br> i lupi solitari possono fare danni; un pescecane che <br> terrorizza i bagnanti; Il Califfo non cinguetta piü |
| The meaning of the organism <br> for the people | ITtalia teme i "lupi solitari" |

Table 8. Animals - organism
From some years now, terrorists are called 'lone wolves', in the Italian language lupi solitari. Today, compared to the Al-Qaeda period, an organization of kamikaze who plans attacks, but what we are witnessing in current attacks are 'lone wolves' who organize attacks spontaneously and with no support, but just on the basis of the Islamic State's ideology, and this State claims responsibility for the attacks. For this reason the terrorists are verbalized as wolves.
'Lone wolves' can cause 'damages' (i lupi solitari possono fare danni), represent a 'danger' (ma sono i "lupi solitari" il vero pericolo) and 'Italy is afraid of them' (l'Italia teme i "lupi solitari"). A terrorist can also be 'a shark who scares the beach goers' (un pescecane che terrorizza i bagnanti) and on the same level also 'the Caliph' is associated with 'the shark' (Lo squalo e il califfo) and with the small bird who 'does not twitter anymore' (Il Califfo non cinguetta più). Since terrorists are animals and, as all animals, they have a 'den' (covi) where they hide.

This conceptual metaphor underlines the distinction between our civilisation and their barbarity: they are violent, brutal, uncivilised and animals - and not pets that are usually connected with something positive in our culture, but really scary and savage animals. As Ivie (2004: 78-79) underlines:

Savagery is a multidimensional image of the enemy that contrasts the civilized victim's rationality, morality, and peaceful purposes with irrational and immoral behavior of the uncivilized aggressor. [...] Enemies are dehumanized, that is, by rhetorically stripping them of their identity as civilized Others. Decivilizing vehicles are among the war rhetor's most important symbolic resources for this purpose; they articulate the key contrastive features distinguishing civilized from savage agents while synthesizing several dimensions of meaning into an integrated image of threat.

Media discourse after 9/11 has typically verbalized terrorists as animals: George W. Bush often used expressions that represent terrorists as awful animals (cf. Charteris-Black 2005: 181-184). There is a clear distinction between us and the others: when we say that the others are animals, the perception is that they are inhuman. We are human, we think and have emotions; they are evil, similar to 'wolves' or 'sharks' that are recognized as horrible animals: terrorists are scary and generate fear.

### 5.9 Antiterrorist groups as family and/or friends

Both in Der Spiegel and in L'Espresso there is a discourse about solidarity in relation to the 'war against terrorism', that arises from the frames of family and friends through different metaphorical expressions: nations unite to fight the war against terrorism. Europe, nations, cities and antiterrorist groups are verbalized as friends and family. Lakoff has already spoken about the conceptual metaphor nation-as-family and asserted: "the Nation-as-Family metaphor, in which the nation is seen as a family, the government as a parent and the citizens as children" (Lakoff 1995: 11); in this case, however, the conceptual metaphor can be observed both in family and in friends. The frame family/ friends concerns the matrix frame of the institution/social group (section 5.2).

In the analysed corpus four of the listed predicates are lexicalized, as shown in Table 9:

| Predicates | Der Spiegel | L'Espresso |
| :---: | :---: | :---: |
| Other names for the institution/social group | Regierung; Berlin; Volk; Deutsche; uns alle | Europa; Gruppo; Governo; Popolo; Rifugiati e berlinesi; persone; francesi; Siamo tutti figli della Marsigliese; Ue e Turchia, amici per forza |
| The intentions, needs, purposes, goals | Zusammenhält, <br> Unterstützung; Beistand; <br> Nach dem Attentat von <br> Nizza ruft die Regierung <br> zu Einigkeit auf, engere <br> Zusammenarbeit, <br> dem Hass der <br> Terroristen "unsere Mitmenschlichkeit und unseren Zusammenhalt" engegenzusetzen; mit Liebe antworten | Se l'Europa non lavora insieme faremo vincere i terroristi che ci attaccano; necessaria risposta forte e coesa contro il terrorismo; Ritroviamo il senso della comunità; Uniti contro il flagello del terrorismo [...] il mondo deve unirsi [...] stare insieme aldilà della nazionalità, della razza o della fede |
| Other properties | Berlin trauert, die Welt trauert mit, Volk teile die Trauer der Deutschen | rifugiati e berlinesi cantano insieme contro la paura; Milioni di persone unite dalla musica; Il grande abbraccio che ha attraversato l'Italia; I francesi si stringono nel tricolore |
| The elements and manifestations | in Trauer vereint, enger zusammen; Mitgefühl; Solidarität | il valore positivo delle relazioni e del gruppo; Sentimento di vicinanza al governo e al popolo; Uniti |

Table 9. Familylfriends - institution/social group
Through a process of personification in the German and Italian press headlines there is a Europe that resembles a great family that stays together and in times of trouble nations are united in mourning and search for support and assistance from other countries. When there are difficulties in a family or among friends, they stay united. The unity of people is the key aspect of many German press headlines: they want to be very close and they collaborate. They feel an intensive sadness and it is reflected in the word Mitgefühl, 'compassion': a German word that clearly illustrates how people can share the same emotions with other people: Berlin trauert, die Welt trauert mit'Berlin is in mourning, the world is in mourning' or Volk teile die Trauer der Deutschen 'the population shares the mourning of the German citizens'. Among the nations there is a 'solidarity wave' Welle der Solidarität. Terror attacks strike the victims but also 'us' uns alle and all together we have 'to contrast the hate of
terrorists with our humanity and cohesion' dem Hass der Terroristen "unsere Mitmenschlichkeit und unseren Zusammenhalt" engegenzusetzen and we can 'answer with love' mit Liebe antworten.

In the Italian press headlines the values of cohesion and relationships have an important role in the fight against terrorism. These values of the group are important to find a feeling of community and proximity. The victims of terrorism are similar to many friends or a family, who 'embrace' and are 'all sons' of the same culture with the same values of freedom, equality and brotherhood: Il grande abbraccio che ha attraversato l'Italia; I francesi si stringono nel tricolore; Siamo tutti figli della Marsigliese; Ue e Turchia, amici per forza.

There is, once again a distinction between us and the terrorists and in opposition to the "evil" persecutors, we are civil, free and equal: "Democracy, liberty, and freedom are customarily feminized terms that require protection from brute forces threatening to overwhelm and subdue them" (Ivie 2004: 86). Against the evil and uncivil terrorists, who want to separate us, we need to keep together and maintain our humanity and our values.

## 6. Conclusions

The discourse about Islamic terrorism in the German and Italian online weekly publications Der Spiegel and L'Espresso is full of conceptual metaphors. On a contrastive level, there are some differences between the German and Italian press headlines: the German news is basically more neutral and shows less comments and metaphors. Also, there is often a distinction between neutral news and news with comments. In fact, the Italian press headlines are a mixture of information, comments and metaphors. As a result, emotions as fear and sadness play a key role in the Italian press headlines, although they play a role also in the German press headlines, but not in similar ways because there are fewer metaphorical expressions and therefore conceptual metaphors.

We think and speak with metaphors even if we are not aware of it and metaphors have an important role to play in phenomena that are so difficult and abstract to explain. Since the $9 / 11$ scholars have found conceptual metaphors for terrorism: terrorism is conceptualized as war and between 2004 and 2005 terrorism is also received as a criminal organisation. These are just some of the results of this cognitive linguistic research, but they are the key points that initiated this research: the two frames of war and crime regarding terrorism discourse represent the main metaphorical expressions both in the German and Italian press headlines. In the Italian language there is a marked connection between terrorism and Mafia.

In previous research, terrorism has been verbalized as disease and natural event, but in the analysed corpus these two conceptual metaphors are verbalized only in the Italian press headlines. Terrorism is received as a 'cancer', a 'psychopathology', a 'virus', 'waves', 'tsunami', in other words, something that is not so easy to con-
trol. Both metaphors represent the problem of controlling and stopping the phenomenon of terrorism.

The metaphors terrorism as a game and terrorism as wares represent the new results in the Italian language, while the animals metaphor has already been explored.

The conceptual metaphor terrorism as a dramatic play illustrates terrorism as something unreal or similar to the plays in the theatre or in movies.

The conceptual metaphor antiterrorist groups such as Europe, nations and cities as family and/or friends concern a solidarity that characterizes families and friends.

According to Konerding's frame semantics, every matrix frame was analysed with its predicates: the three metaphors terrorism as war, disease and natural event are settled in the matrix frame event; terrorism as a criminal organisation and antiterrorist groups as family/friends are part of the matrix frame institution/social group; the dramatic play and game metaphors are categorised in the matrix frame action/interaction/communication; terrorism as wares and terrorists as animals are settled in the matrix frames object and organism. The most evident result, if we take into account the entire set of matrix frames, is that there is a lexicalisation of the actors/roles, consequences, conditions/circumstances, phases, goals, strategies and properties about terrorism, but there are no predicates about the reasons/development circumstances and, due to the difficulty of identifying the 'enemy', there are different ways of naming them such as 'soldiers', 'criminals', 'cancer', 'wolves'. These different ways to conceptualize terrorism and terrorists question the ability of metaphors to represent an abstract phenomenon in a clear and concrete way. Actually metaphors are often "used as an equivalent for uncertainty, lack of clarity and abstraction [...] they emphasize through their vagueness the opacity, unexplained nature or exaggerated significance of the phenomenon" (Schwarz-Friesel and Skirl 2011: 7).

Media outlets indicate that we as "victims" cannot react, but just suffer and mourn. They also showcase terrorism as a spectacle. In this regard, Onfray highlights how the news is "spectacular" as it has to attract the attention of the readers (cf. Onfray 2016: 74). Unreality and a great pessimism play a key role in the Italian language and, in a narrower context, in the German language as well.

The distinction between $u s$, considered as a great family or friends characterized by civility and humanity, and them seen as enemies or members of a criminal organization characterized by inhuman qualities or as animals is a lie, just as the image of our group, our State pitted against their State, their group is a lie.

Lesperienza storica della guerra al terrore ha infatti messo in crisi le distinzioni categoriali classiche che, avendo al centro lo Stato-nazione, definiscono l'opposizione tra spazio politico interno e spazio politico esterno. [...] Il nemico della guerra al terrore è al medesimo tempo un nemico interno ed esterno: non si trova solo in Afghanistan o in Iraq ma spesso [...] vive nelle comunità occidentali e di queste fa
parte. [...] Dove si colloca allora il nemico? È tra noi, assomiglia a noi e non è da noi distinguibile: è interno (è un concittadino), va all'esterno e ritorna nello spazio nazionale (porta in patria). È potenzialmente dappertutto [...] Abbiamo così cominciato a parlare di 'guerra permanente', non riuscendo neanche a immaginare i modi per decretarne una fine. (Salerno 2012: 10-11)

The limited focus cannot claim to represent a complete picture of the discourse on terrorism, but the results shed light on metaphors that afford the understanding of how it legitimises security measures, for example. The perception of uncertainty, insecurity, unreality and uncontrollability, verbalised in the conceptual metaphors, produce an intense emotion of fear typical of the Western culture. Todorov (2009) describes Western countries as dominated by fear and Zimbardo (2008) focuses his attention on the power of fear that consists in the vulnerability, insecurity, lack of control which, in turn, cause changes in people's thought and action, the increase of authoritarianism and of conservative ideologies, the refusal of freedom in exchange for security, a weak and scared society. The problem is that this fear is clearly generated by the media through the power of the words and has a consequence in some reactions of people and in facing other phenomena such as the phenomenon of immigration, increasingly connected with terrorism in the media and political communication.

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[^1]:    a. 'torne / tur'nate 'mannole / mannu'lelle 'tsokkəle / tsukku'lonə 'pefke / pifka'torə 'legga / lid'duetta
    b. 'boka/bu'kal 'pok / pu'kin 'pensa / pin'sar 'tsesta / tsas'ton

[^2]:    ${ }^{1}$ Katamba (1984) highlights the fact that roots of the form - CeC- do not cause lowering on the suffix -ul-, cf. tem-ul-a in (13b) and accounts for this oddity by resorting to a diacritic. We ignore this point here.

[^3]:    ${ }^{2}$ We do not focus here on the fact that in many Italian dialects the actual phonetic content of final nuclei is obscured by reduction to schwa or deletion, or that in some dialects all mid vowels raise to [iu], which makes them identical to originally metaphonic triggers /i u/ (see for discussion Maiden 1991, Calabrese 1998, Savoia 2015, Canalis 2016). When this is the case, metaphony is crucially involved in the expression of inflectional content, e.g. masc. $\mathrm{s} / \mathrm{pl}$. for nouns, 2 P ind pres, etc. We assume that also in morphologized metaphony final nuclei preserve some abstract phonological content, anchored to inflectional content, that is able to determine regular phonological effects on the stressed nucleus.
    ${ }^{3}$ In Calabrese's model of metaphony, repair strategies apply to the outcomes of [+high]-spreading when they violates language-specific constraints. For example, the spreading of [+high] to [-high -ATR] vowels, i.e. to [ $\varepsilon \Omega$ ], would produce the ungrammatical combination [+high -ATR], which is repaired by 'negation' and tranformed to [-high +ATR], a well-formed feature setting corresponding to $[\mathrm{e} o \mathrm{o}$. We will not discuss this aspect here.

[^4]:    ${ }^{4}$ We are aware of recent work by Harbour (2016) defining Persons in terms of functions, which at least prima facie seems even more complex than the characterization in terms of features. Our discussion takes us in the opposite direction of radical simplification, cf. (23)-(24) below. We note that at least the ontological issue holds of Harbour (2016). In other words, 1P as represented in the grammar is not atomic.
    ${ }^{5}$ There shouldn't be any special difficulty in drawing number into the picture. In essence, plural amounts to set divisibility. Thus, the 1P plural denotes a set x such that x includes the Speaker ( 1 Excl ) or the Speaker and the Hearer ( 1 Incl ) - and similarly for 2P. In the syntax of a 1P pronoun we can assume that the [Speaker] property is modified by a superset relator $\supseteq$, namely $[[S$ peaker $] \supseteq$, and this syntax is read as referring to some superset including the speaker (and eventually the hearer), along the lines of (i). The same syntax holds for other person plurals. We refer to Manzini and Savoia (2018b, 2019), Savoia et al. (2018), Manzini et al. (2019) for a discussion of number in DPs (see also the references quoted there).
    (i) 1Excl: [[Speaker] $\supseteq] \quad \rightarrow \quad \exists \mathrm{x}, \mathrm{x} \supseteq$ SPEAKER

    1Incl: [[Speaker $\wedge$ Hearer $] \supseteq] \rightarrow \exists \mathrm{x}, \mathrm{x} \supseteq$ (SPEAKER $\wedge$ HEARER)
    2: $[[$ Hearer $] \supseteq] \quad \rightarrow \quad \exists \mathrm{x}, \mathrm{x} \supseteq$ HEARER

[^5]:    ${ }^{6}$ Pancheva and Zubizarreta (2017) support their characterization of Appl by reference to a different set of facts, namely Charnavel and Mateu's (2015) Clitic Logophoric Restriction (CLR). However "discourse participants" (i.e. 1/2P) and "empathy locus" (i.e. Dat) behave differently under the CLR, as Charnavel and Mateu discuss. Vice versa for (Pancheva and Zubizarreta's) PCC to work they must work alike and hence enter into competition.

[^6]:    ${ }^{7}$ Alternatives to binary feature systems, or their underspecification variant include cartographic ones. Thus, Bianchi (2006) uses the categories 3P or SAP (Speech Act Participant) to label the syntactic tree. Bianchi shows that an analysis entirely based on (monovalent) categories of $1 / 2 \mathrm{P}$ and 3 P can express the PCC and the Inverse Agreement facts in terms of Minimality intervention on movement. Full pronouns must check Person projections no less than clitics but different types of chains are involved. Nevertheless cartographic hierarchies have problems of their own (Chomsky et al. 2017). Bianchi invokes the representation of Person in the universe of discourse to postulate SAP and 3P projections. However, discourse considerations may licence the presence of SAP projections, but not necessarily of 3P. More to the point, if the justification for SAP projections is to be sought in discourse factors one may predict differences between sentence types (e.g. indicative vs subjunctive, Giorgi 2009) which are obviously irrelevant for PCC effects.

[^7]:    ${ }^{8}$ In Italian, at least in the normative variety, DOM does not affect $1 / 2 \mathrm{P}$ full pronouns. Thus lexical DPs and clitics are associate with slightly different case systems. The $1 / 2 \mathrm{P}$ vs 3 P cut is independently attested for full pronouns in Abruzzese varieties (Manzini and Savoia 2005).

    It is also possible that the same language has DOM in both the clitic domain and the full argument domain, but not with the same cut on the referential hierarchy - as seems to be indicated by some of the intrincate data concerning clitic doubling (leismo, loismo, etc.), cf. Manzini (forthcoming, and references quoted there).
    ${ }^{9}$ The same alternation affects DOM objects in Indo-Aryan. In ergative alignments, absolutive objects agree with the perfect participle; DOM objects agree in some languages, while in others (e.g. Hindi) they don't.

[^8]:    ${ }^{10}$ E. Kiss $(2013,2017)$ highlights the relevance of Uralic languages, including Hungarian, for the theoretical debate on the PCC, also in connection with DOM. The lack of accusative case marking and the anti-agreement effects with $1 / 2 \mathrm{P}$ in Uralic are strikingly similar to those observed for Italian 1/2P clitics. Barany (2017) applies the Cyclic Agree model of Bejar and Rezac (2009) to the Hungarian facts; see E. Kiss (2017) for possible problems.

[^9]:    ${ }^{1}$ A consistent part of the material discussed and analysed in this work comes from Manzini and Savoia (2005). However, all data have been reviewed and completed on the basis of the original material transcribed during the previous field investigations or by means of new recent investigations, as in the case of Torricella Peligna, Guardiaregia, Monteroduni, Secinaro and San Giorgio del Sannio. Moreover, there are systems illustrated and discussed here for the first time, as the ones of Monte Giberto, Gravina, Corato and Morano.
    ${ }^{2}$ Raddoppiamento Fonosintattico is a sandhi process, whereby the initial consonant of a word geminates depending on the prosodic or lexical properties of the preceding word. It characterizes Central and Southern Italian dialects, although with differences as to the set of lexical triggers (Rohlfs 1966 [1949]; Loporcaro 1988, 1997). In the dialects that we examine in this work, RF is triggered by a set of monosyllabic words, such as tre 'three', a 'to, at', etc. RF is generally induced by the forms of $b e,(j)_{\varepsilon}$ '( $s$ )he is', ss 'I am', si 'you are', su 'they are'. Other monosyllables, such as $a$ '(s)he has', present a more variable behaviour. We remind that so, si/fe, semolfemo, sete/fete are the $1^{\text {st }} \mathrm{SG}, 2^{\text {nd }} \mathrm{SG}, 1^{\text {st }} \mathrm{PL}$ and $2^{\text {nd }}$ PL of be, while $a$, ao are the $3^{\text {rd }}$ person forms, singular and plural, of have. In the examples, we have: $\mathrm{F}=\mathrm{Feminine}$, $\mathrm{M}=$ Masculine, $\mathrm{N}=$ Neuter, $\mathrm{SG}=$ singular, $\mathrm{PL}=$ plural, Refl=reflexive clitic.

[^10]:    ${ }^{3}$ This pattern coincides with the one discussed for Arielli (Abruzzo) in D'Alessandro and Scheer (2015; cf. below).

[^11]:    ${ }^{4}$ The data of San Benedetto del Tronto in (10) coincide with the ones presented in Manzini and Savoia (2005, II: 682-683), on which the discussion in Ledgeway (2018: 290291) is based. The data of Secinaro in (11) in turn coincide with the ones provided by Manzini and Savoia (2005, II-III: 691-113), although enriched with some more examples from the data gathered in the original investigations. However, RF in active contexts is documented also by the examples in Manzini and Savoia (2005).

[^12]:    ${ }^{7}$ More precisely, in keeping with Franco et al. forthcoming, we assume that the particle Loc lexicalizes the inclusion relation, $\subseteq$, between two arguments, as illustrated in (i).
    
    ig ev-u fa:m.

[^13]:    ${ }^{8}$ The data examined in the literature show that RF is a phonological process partially influenced by different phonetic, pragmatic and socio-linguistic contexts. In many communities it is variable, as noticed in Cennamo (2001) for the Neapolitan dialects with the pattern H E E E E H that the author investigates. Stylistic and personal differences may be present in the productions we consider in this article, thus motivating some possible variation or uncertainty in the data.

[^14]:    ${ }^{1}$ For instance, the pair die-kill (=cause to die) is rendered via the addition of the suffix -(n)i in Javanese, as shown in (i).

[^15]:    ${ }^{2}$ The idea that syncretisms correspond to natural classes is certainly not novel. Jakobson (1936) assumes that syncretism can be taken to reveal the fine-grained structure of a set of underlying (binary) featural distinctions. In recent literature this idea is strongly associated with the work of Gereon Müller (cf. e.g. Müller 2007). This is deemed to be too strong a position face to empirical evidence - yet the conclusion is based on assuming/revising the traditional repertory of categories and features (cf. also Stump 2001; Baerman et al. 2005; Grimm 2011, among others).

[^16]:    ${ }^{3}$ A similar approach to applicatives is the one sketched in Caha (2009). He basically analyzes applicative morphemes on the verb as the spell out of features of an oblique adposition.

[^17]:    ${ }^{4}$ For Harley (2002) the head of the predication in an English Dative Shift sentence is an abstract preposition $\mathrm{P}_{\text {HAVE }}$, for Beck and Johnson (2004), the head of the predication is an abstract verb have. Pesetsky (1995) limits himself to an abstract characterization of the predicate head as G.

[^18]:    ${ }^{5}$ Recently, Belletti (2017) reforms the VP-movement analysis of causatives so as to bring out the parallel with the smuggling analysis of passive. Thus the a/da phrase in (14) is constructed as the by phrase in Collins (2005). The external argument of transitive (or unergative) predicates embedded under causative verbs, for instance in (14), occupies the Spec, vP/Voice while being case-marked by the alda dummy attached to the sentential spine. We follow Manzini (2017) in rejection the smuggling analysis of passive, as involving again movement of the VP and - generally - the "dummy" nature of adpositional heads.

[^19]:    ${ }^{6}$ An unnoticed (but crucial) fact in providing evidence for a "relational" content of such morpheme, is that the same $n i$ is employed to express the lexical item "chest"/"cavity", namely it conveys a (relational, part-whole) body-part meaning. This morpheme may also denote (when applied as a verbal affix) a 'part of' the argument encoded in subject function, as in (ia, b), or "an area of" the place where this argument is or becomes located, as in (ic).
    (i) P'orhépecha (Capistrán Garza 2015: 207ff)
    a. María p'á-ni-s- $\varnothing$-ti

    Maria touch-cavity-prf-prs-3ind
    'Maria touched her breast'
    b. p’orhóta xawá-ni-s- $\varnothing$-ti
    hole deepen-cavity-prf-prs-3ind
    'The hole is deep'
    c. xí wekó-ni-s- $\varnothing$-ka kawáru

    1 sg fall-cavity-prf-prs-1/2ind ditch 'I fell into the ditch'
    ${ }^{7}$ As shown in Svenonius $(2002,2007)$ C-selection, as the determination of syntactic conditions on a dependent, hold only between a head and its complement. For example, a verb usually may determine idiosyncratic case on its internal arguments, but not its external arguments. Cross linguistically, adpositions quite commonly determine the case of a complement. Following Svenonius, this can only be demonstrated using language-specific

[^20]:    ${ }^{9}$ When benefactives, instrumental and causative meanings are lexicalized by different morphemes in natural languages, their ordering in the verbal skeleton is quite free, as shown by Buell and Sy (2006) for Wolof, undermining a cartographic/nanosyntactic approach to

[^21]:    ${ }^{11}$ Following Bellucci (2017), we can assume that oblique causees are formally identical to the oblique subjects found in the ergative alignment.

[^22]:    ${ }^{1}$ We thank two anonymous reviewers for their suggestions and comments on a previous version of this paper.

[^23]:    ${ }^{9}$ Unlike prenominal ones, postnominal adjectives can only be interpreted restrictively, intersectively and as stage-level predicates (Kolliakou 2004; Campos and Stavrou 2004; Alexiadou et al. 2007; Stavrou 2012).
    ${ }^{10}$ Kolliakou (1999, 2004), Campos and Stavrou (2004), Alexiadou et al. (2007), Alexiadou (2014).
    ${ }^{11}$ An anonymous reviewer points out that "platonic dialogues (or drama) have elements of oral speech, so they are relevant texts for the study of discourse-related phenomena". We

[^24]:    ${ }^{19}$ Notice that the speakers who accept the sequence $\operatorname{Art} N D e m$ Art $A d j$ also accept the sequence Art NArt Adj Art Adj, and those who do not accept the former do not accept the latter either.

[^25]:    ${ }^{20}$ Giorgi and Longobardi (1991), Cinque (2015).
    ${ }^{21}$ For the syntax of quantifiers in AG, cf. also Manolessou (2000).
    ${ }^{22}$ See, among many others: Jannaris (1897), Gildersleeve and Miller (1900-1911), Moulton

[^26]:    ${ }^{35}$ According to Alexiadou and Wilder (1998), thematic adjectives (i.e. adjectives denoting arguments) are not possible in polydefinite constructions in SMG: most speakers do not accept them. See also Manolessou (2000) for a further list of adjectives not accepted by speakers of SMG in polydefinite structures.

[^27]:    ${ }^{37}$ This property (and the difference with SMG) has been connected (Guardiano 2012, 2016) with the fact that AG licenses empty Ds in a broader range of structural conditions than SMG (e.g., empty Ds are licensed with all types of non-definite singular count nouns in argument position).
    ${ }^{38}$ In the following two examples the apposition is postnominal: in (1a) both articles are visible; in (1b) the (expletive) article preceding the proper name is null. Similar cases are also found in the Gospels.
    (1) a. Symposium 215 b 4
     'to the satyr Marsyas'
    b. Symposium 179 e 5 $\tau \tilde{q} \dot{\varepsilon} р \alpha \sigma \tau \tilde{\eta}$ Патро́к $\lambda \omega$ 'to the lover Patroclos'

[^28]:    ${ }^{39}$ The different positions are usually associated with different interpretations, which, due to lack of space, we will not discuss here: we refer to Guardiano (2003) for an overview of the literature. In the absence of a visible article, $\alpha \lambda \lambda o s$ is found both pre- and postnominally (1). $\dot{\alpha} \lambda \lambda$ oc appears to the left of adjectives (2). When cooccurring with an indefinite item, it is found to the right of it (3). When occurring with a DP-initial numeral, it usually precedes it (4).
    (1) a. i. Cratylus $385 \mathrm{~d} 7-8$
     'another kind of correctedness than this'
    ii. Symposium 214 d 3
    
    'a man other than this'
    b. i. Mark 12.4
    ä $\lambda \lambda o v$ סoṽ $\lambda o v$
    'another servant'
    ii. John 6.22
    
    'there was no other boat there except one'
    (2) Apology 33 c 6 व̈̀ $\lambda \eta \eta$ $\theta$ кí $\mu$ оĩ $\alpha$ 'another divine destiny'
    (3) Symposium 183 a 3 тıva $\ddot{\alpha} \lambda \lambda \eta v \delta \check{v} v \alpha \mu \nu$ 'some other power'
    (4) a. Symposium 184 c 2
    
    'so there is left just one other voluntary slavery'
    b. Matthew 4.21
    $\alpha \ddot{\alpha} \lambda 0 \cup \varsigma \delta$ óo $\alpha \delta \varepsilon \lambda \varphi o u ́ \varsigma$
    'two other brothers'

[^29]:    ${ }^{40}$ There are other instances of these constructions in CG, but they seem very rare. Cf.
     Olen (...) also made the other ancient hymns').
    ${ }^{41}$ Cratylus 427 b 5
    $\tau \tilde{\alpha} \lambda \lambda \alpha \pi \alpha ́ v \tau \alpha \tau \grave{\alpha} \tau \circ 1 \alpha v ̃ \tau \alpha$
    'all the others of that sort'.
    ${ }^{42}$ In DPs with no visible article, غ̌̃ $\varepsilon \rho \circ$ o̧ is prenominal in all its occurrences of the corpus (1a) and, when cooccurring with a DP-initial numeral, it follows it (1b).

[^30]:    ${ }^{45}$ Only found with the adjective in predicative function (see footnote 28).
    ${ }^{46}$ Only found in predicative structures (see the examples in 13), which are not computed in the table.
    ${ }^{47}$ See examples in (12).
    ${ }^{48}$ Throughout the table, the symbol * signals that the structure is unattested in the corpus.
    ${ }^{49}$ See example (17).

[^31]:    ${ }^{57}$ A (further) test for this hypothesis would be to check the relative order of multiple prenominal adjectives: indeed, as shown in (4)-(6), adjectives merged prenominally are strictly ordered. Yet, this test cannot be applied to our data, because the corpus does not contain any instance of multiple prenominal adjectives, which are actually very rare in AG: "there is a tendency to avoid a multiplicity of modifiers between article and noun" (Manolessou 2000: 237).
    ${ }^{58}$ For a discussion of further data, their diachronic distribution from Classical to Medieval Greek, and the differences in the interpretation of the attested linear orders, see Manolessou (2000).

[^32]:    ${ }^{59}$ Actually, this type of sequences is only attested in very high registers which imitate older stages of the language (especially 'katarevousa').
    ${ }^{60}$ An anonymous reviewer suggests that "the string $D N D$ Gen/PP/Part attested in AG could be analyzed in terms of a Suffixaufnahme phenomenon", as described for instance in Manzini and Savoia (2019) and references therein. In principle, at a first glance the data of AG seem not to be incompatible with an analysis along these lines. Yet, a deeper crosslinguistic comparison would be required, in order to check whether the conditions which allow for an analysis in terms of Suffixaufnahme are actually met by AG. This will be a fascinating topic for future research. It must be noted that an analysis along these lines might in principle hold also for the sequences in (18b) and (18c) discussed above: under that hypothesis, the interpretation of ( $18 \mathrm{~b} . \mathrm{i}$ ) would be 'my son, the one who I love', that of ( 18 c ) 'the bread out of heaven, the true one', and so on. Yet, if this were the case, we would expect sequences with a non articulated postnominal adjective to be possible, while this is never the case in our corpus. The conclusion seems to be that postnominal adjectives can only emerge from a polydefinite structure like (9).
    ${ }^{61}$ A crucial assumption here is that indefiniteness in Greek has a zero exponence as a default realization. The indefinite article which may appear in indefnite DPs, or, in fact, any (indefinite) quantifier, or cardinal, are realizations of either QP or NumP, functional categories merged in position(s) lower than D.

[^33]:    ${ }^{1}$ We do not discuss the verbal -ing form, since it is non-finite in any case.

[^34]:    ${ }^{2}$ At least in the dialect of Shkodër, taken by Manzini and Savoia $(2007,2018$ a) as their empirical basis. For other dialects see Manzini and Savoia (2007).

[^35]:    ${ }^{4}$ A set of facts from the Florentine dialect of Italian seems to indicate that 'short infinitives', i.e. verb stems, are a morphological realization of the properties of infinitival embedding open to all of the Romance languages - and are as such independent of the particular external circumstances of Eastern Romance. The facts are relatively well-known in the descriptive dialectological tradition under the label of 'embedded imperatives', because they involve the embedding in infinitival contexts of forms homophonous with the $2^{\text {nd }}$ person singular imperative, as in (i).
    (i) bizonna zmetti-la
    is.necessary cease-it
    'It is necessary to stop'
    In reality, as argued by Graffi (1996), the $2^{\text {nd }}$ person imperative is the true exponent of the verb stem in Italian (and Florentine). The example in (i), from Manzini and Savoia (2005: $\$ 7.2 .5$ ), to which we refer for further discussion, shows that $2^{\text {nd }}$ person interpretation is in no way associated with the embedded null subject (here a so-called arbitrary PRO). The corresponding inflected infinitive in Italian/Florentine is smettere and the truncated form is smette (like the $3^{\text {rd }}$ person singular present indicative), therefore truncation of the inflected infinitive is not at stake.

[^36]:    ${ }^{5}$ The data are from Manzini and Savoia (2007, 2018a), where a discussion of the general shape of the verbal and complementation system both of Geg and of Tosk Albanian, can also be found.

[^37]:    ${ }^{1}$ The presence of šel does not imply that Ns are interpreted as indefinite (Danon 2007, where the following data are taken from):
    (i)
    a. xulcat ha-yeled nirteva shirt the-boy got.wet
    'the boy's shirt got wet'
    b. ha-xulca šel ha-yeled nirteva the-shirt of the-boy got.wet 'the boy's shirt got wet'

    As a general rule, though, we can say that the head noun inherits the definiteness features of the genitive noun, which led to the stipulation of a mechanism involving upwards percolation (on this particular point see Borer 1988; Shlonsky 2012) to account for the phenomenon of definiteness spreading. On the other hand, the indefiniteness features of the genitive noun do not seem to spread to the head noun (Borer 1988).

[^38]:    ${ }^{3}$ For further discussion on the nature of linkers see Franco et al. 2015.
    ${ }^{4}$ This also includes the Romanian pre-genitival linker, stemming from the Latin ille (cf. Giurgea 2012).

[^39]:    ${ }^{5}$ Arteaga takes the fact that Old French arguments of juxtaposed genitives occurred in

[^40]:    ${ }^{1}$ The presence/absence of subject clitics may vary across clause types as the inventories of proclitics and enclitics are often dissimilar. This point will not be discussed further; what follows is based on the analysis of proclitics.

[^41]:    ${ }^{2}$ ASIt: Atlante Sintatico d'Italia, [http://asit.maldura.unipd.it](http://asit.maldura.unipd.it).

[^42]:    ${ }^{3}$ Clitics are considered present in the system even if they are optional.

[^43]:    ${ }^{1}$ Conversely, the conditional clausal modification corresponds to a structure in which the proposition expressed by the consequence (or apodosis) is true only in those worlds defined by the antecedent (or protasis). Thus, the antecedent functions as a domain restrictor operating on the modal base of the consequence.

[^44]:    ${ }^{2}$ For some languages it has been observed the requirement whereby the wh pronouns fulfill the case requirement of both the matrix and the relative clauses ('Matching Effect' of FRs; Grosu 1994; van Riemsdijk 2005: 346-356). According to Grosu's (1994) typological distinction, at least three classes of languages arise: (i) fully matching languages (e.g. English, French, Hebrew, Russian, Italian); (ii) non-matching languages (e.g. Latin, earlier stages of the Romance, Old and Middle high German and possibly Gothic); (iii) partially matching languages, i.e. languages that allow non-matching only under restricted circumstances (e.g. Finnish, Spanish, Catalan, Romanian).

[^45]:    ${ }^{6}$ In some examples, I omit the matrix clause for the sake of simplification, and I put a comma and three dots at the end of the FR clause.
    ${ }^{7}$ Romance languages also employ non-grammaticalized expression involving a generic noun (Haspelmath 1997: 6970, 25365). These expressions are put in brackets in Table 1.

[^46]:    ${ }^{10}$ Nonspecific free relative clause in Haspelmath and König (1998: 616).

[^47]:    ${ }^{11}$ In other Italo-Romance varieties, e.g. among Apulian dialects, a conjunction appears between the two Vs (D'Onghia 2019).

[^48]:    ${ }^{12}$ The data collected refer to the central, upper southern and extreme southern Italian dialects spoken in the following localities, from north to south: Sant'Egidio (Perugia), Neapolitan, Buonvicino (Cosenza), Orsomarso (Cosenza), Verbicaro (Cosenza), S(anta) Maria del Cedro (Cosenza), Altomonte (Cosenza), Lecce, Carpignano S(alentino) (Lecce), Squinzano (Lecce), Villa San Giovanni (Reggio Calabria), Ragusa. Further relevant data were collected from the Sardinian Campidanese variety of Sinnai (Cagliari). All data have been elicited through interviews to native speakers, unless otherwise stated.
    ${ }^{13}$ To my knowledge at the date, the reduplication ever FRs are attested across Ita-lo-Romance with a patchy geolinguistic distribution. For example, among the Salentino dialects of the area immediately surrounding Lecce some varieties only build the ever FR through reduplication structures (e.g. Carpignano S.), whereas some other do exhibit a formulaic usage of them only, as in the dialect of Squinzano (as well as the variety of Lecce itself), where the reduplication structure only co-occurs with the whever pronoun (addunca 'wherever'; i) or has a formulaic state (ii):
    i. Addunca vae vae lu Vitu, cumbina sempre wai. wherever goes goes the.MSG Vito makes always troubles 'Wherever Vito goes, he always gets in trouble'
    ii. Sia komusia, su contenta ca osce su binuta. be.3SG.SUBJ how be.3SG.SUBJ be.1SG.IND happy.FSG that today be.1SG.IND come.PPT.FSG 'No matter how it goes, I am happy that I came today'
    (Squinzano, Lecce)

[^49]:    ${ }^{14}$ This is not the only possible word order for FRs in Romance languages. Another type of FRs formed through reduplication that exhibits a distinct word order as well as different modal properties is discussed in $\$ 5$.

[^50]:    ${ }^{15}$ This pre-theoretical account of the predication on the identity clearly correlates with the property of (non)identifiability of discourse referents that characterizes some other pronouns that fall into the category of indefinites. With free-choice pronouns what is relevant is exactly the nonidentifiability of the referent as the individual's identity can be left freely interpretable (see Gianollo 2018:135 for an overview).

[^51]:    ${ }^{17}$ Subject, as well as the object, if focalized or topicalized, can be also further extraposed to a higher position in the left periphery (see example (22)).
    ${ }^{18}$ Several ways of analyzing the derivation of VOS order in Romance have been proposed which can be reconducted to two main views: one in which the subject stays in its base-position (Gallego 2013) whereas the object shifts to the higher specified of $\nu \mathrm{P}$ (Ordóñez 2000); another whereby the resulting structure is given by a VP-fronting (Cecchetto 1999; Belletti 2001, 2004). In my analysis, I adopt a version of the VP-fronting analysis.

[^52]:    ${ }^{23}$ In these varieties, plain concessive clauses may be introduced by a matrix complementizer (usually CA; see Colasanti and Silvestri 2019 on other types of matrix complementizers in Italo-Romance):
    i. (Ca) si mintiəssə quala cravatta vo

    CA self=put.3SG.SUBJ.PST which.F.SG tie wants
    'S/He may wear whichever tie s/he wants' (Verbicaro, Cosenza).

[^53]:    ${ }^{24}$ Cf. the 'Principle of Semantic Relevance' by Ross (1972: 106): "Where syntactic evidence supports the postulation of elements in underlying structure which are not phonetically manifested, such elements tend to be relevant semantically."

[^54]:    
    wlqht ksp-wzhb w'ŝyt 'trvt wśmt br'š Yahôšua' bn-Yahôṣādāq hkhn hgdwl
    'Take the silver and gold and make crowns, and set it on the head of Yahôšua' bnYahôṣādāq the high priest'.
    
    wh'ṭt thyh lhlm wltwbyh wlhn bn-ṣpnyh lzkrwn bhykl Yhwh
    'and the crowns will be for $h \underline{l m}, \underline{t w b y h}, y d$ ' $y h, \underline{h n}$ bn-spnyh as memorial in the temple of the Lord'.

[^55]:    ${ }^{1}$ La traduzione italiana dei testi in lingua è dell'autrice.

[^56]:    ${ }^{2}$ L'intuizione alla base di questo trattamento è condivisa da numerose teorie del parametro del soggetto nullo a partire da Taraldsen (1979), Chomsky (1981) fino ad arrivare Baker (2003).

[^57]:    ${ }^{1}$ According to the circular published on the MIUR (Ministero per l'Istruzione, l'Università e la Ricerca) website, entitled "Procedures for entry, stay, and enrollment of students requesting visas to attend courses at higher education institutions in Italy for the academic year 2019-2020," the "institutions of higher education are tasked with verifying linguistic competence for access to the courses" unless the students possess a B2 level language certification issued by the CLIQ quality system. For more information, refer to the websites shown in the sitography.

[^58]:    ${ }^{2}$ There are still no studies showing that this is the most widespread teaching method, but I have ten years of experience in the university field (first as a student and then as a teacher) and can say that this is currently the norm. Following the ever-increasing open-ing of China and the rapid changes it is experiencing, it is possible that this model will be reformed in the coming years.

[^59]:    * The author is grateful to the two anonymous reviewers for their useful comments and suggestions and to the families of the school of Firenzen Suomi-seura / Associazione italofinlandese di Firenze.

[^60]:    ${ }^{1}$ Note that in Finnish child oriented speech $3{ }^{\text {rd }}$ person singular is generally used by the mother/caretaker when referring to herself or to the child.
    (i) Mother: Ottaako Nina mehua? take-PRES3sg-WH Nina juice-PARTsg
    'Does Nina take some juice?' (when speaking directly to the child)
    (ii) Mother: Odota hetki, äiti auttaa wait-IMP2sgs second mom help-PRES3sg
    'Wait a second, mom helps you'.
    2 The check has been made by the author of the present contribution.
    ${ }^{3}$ Since the main focus of the paper is rather on overt pronouns, we address the interested reader to Rizzi (2002) among others for further readings on subject omissions and early null subjects in L1 acquisition.

[^61]:    ${ }^{4}$ Third person null subjects are allowed when the subject is non-thematic (e.g. with weather verbs), when the subject is a generic pronoun (e.g. similar to the English 'one'), and when the subject is controlled by an argument in a higher clause. As these cases are behind the scope of the present discussion, they will not be examined any further.
    ${ }^{5}$ We refer here to the colloquial variety of the Southern part of Finland, in the region of Helsinki. Other colloquial variants of pronouns are e.g. mie 'I', sie 'you' (Northern Finland) or mä/mää 'I', nä/nää 'you' (Oulu area). These forms are nevertheless always shortened with respect to the standard ones and thus cannot be omitted.

[^62]:    ${ }^{6}$ The pronoun se has a wide use in colloquial Finnish, see for example Holmberg (2005) on the emergence of sitü ' it', the partitive of se, as an expletive pronoun in colloquial Finnish and Laury (1991), Dal Pozzo and Matteini (2015) on the use of se as a definiteness marker.

[^63]:    ${ }^{7}$ In order to make data anonymous, names were substituted by numerical coding Ch1, Ch2, Ch3, etc. Age at time of testing is given after colon.

[^64]:    ${ }^{1}$ Detailed information is not given due to the rareness of the syndrome and privacy issues.

[^65]:    (9) A: proviamo a cercare la pizza su Google? try-1PL to search-INF the pizza on Google 'Let us try to search for (the picture of) a pizza on Google'

    J: sì

[^66]:    ${ }^{1}$ See [http://winthecustomer.com/86-percent-of-u-s-adults-will-pay-more-for-a-bet-ter-customer-experience/](http://winthecustomer.com/86-percent-of-u-s-adults-will-pay-more-for-a-bet-ter-customer-experience/) (05/2019).

[^67]:    ${ }^{2}$ See [https://www.latimes.com/archives/la-xpm-2001-nov-11-cl-2758-story.html](https://www.latimes.com/archives/la-xpm-2001-nov-11-cl-2758-story.html) (05/2019).

[^68]:    ${ }^{3}$ For a deeper understanding consult The Mirror-Neuron System, Giacomo Rizzolatti and Laila Craighero. [http://psych.colorado.edu/-kimlab/Rizzolatti.annurev.neuro.2004.pdf](http://psych.colorado.edu/-kimlab/Rizzolatti.annurev.neuro.2004.pdf) (05/2019).

[^69]:    ${ }^{5}$ For further acknowledge consult Musée de la Grande Guerre Du Pays de Meaux: Facebook 1914 [https://www.youtube.com/watch?v=qz4E9iBZJf0](https://www.youtube.com/watch?v=qz4E9iBZJf0) (05/2019).

[^70]:    ${ }^{3}$ We have an overview of these in Rando (1990), so this is not a too recent phenomenon.
    ${ }^{4}$ A prestito di lusso 'luxury loan', in the words of Coco (2003: 44), is used not because the lack of an equivalent in that language, but "per ottenere effetti stilistici ed espressivi, per darsi un tono, per snobismo, per il prestigio accordato ad una data civiltà e cultura" ('to obtain stylistic and expressive effects, to give oneself a tone, for snobbery, for the prestige accorded to a given civilization and culture').

[^71]:    5 "Being the best; being great, awesome, amazing or spectacular; sure to succeed (used as a term of approval, similar to long live)", see <bit.ly/1ndaUBg>.

    6 "For all those people who find it more convenient to bother you with their question rather than google it for themselves", <lmgtfy.com/>.

[^72]:    7 'Have we already done the flame on the poveraccy who complain on the socialino of taxes, low salaries and unfair cuts?'.

[^73]:    ${ }^{15}$ '(but what does OALD mean in the context of Friendfeed?) (Viejo) (OALD = old, already seen) (ah thank you)'.

    16 'I open from utg ['under the gun'] with AJ [...]. what I ABSOLUTELY did not see coming ([...] had I played all in against him I would have died) is the next game. The chipleader that is very aggressive opens from cut off. [...]. I send everything with $K Q s$ and the guy there with the hood FOLDS AK from the big blind. absurd move. okay that I can push even with AA or KK [...]. the chipleader opens EVERYTHING, I know that, so it's standard for me to share [...] what he has to do now is to repush me'.

[^74]:    ${ }^{17}$ During the game, players can chat with each others either via voice or using an instant messaging system.

[^75]:    18 'Questa sensazione di essere invasi dalle parole inglesi, infatti, potrebbe essere paragonata a quella temperatura percepita di cui tanto spesso si sente parlare nei telegiornali estivi. Come ci hanno spiegato i meteorologi, a una temperatura obiettiva (misurabile tramite il termometro) corrisponde - nelle calde giornate d'estate - una temperatura percepita più alta, perché condizionata dal notevole tasso di umidità. Quello che succede per gli anglicismi non è molto diverso: una presenza obiettiva contenuta in percentuali fisiologiche viene avvertita come preoccupante invasione perché amplificata dai mezzi di comunicazione di massa'.

    19 "L'abuso di tecnicismi e parole poco note (esotismi o no) appartiene alle fasce culturalmente basse dei locutori, a quelli che a Napoli chiamiamo mezze calzette".

[^76]:    ${ }^{1}$ The other historical minority languages of Italy were listed as Albanian, Catalan, Croatian, Franco-Provençal, French, Friulian, German, Greek, Ladin, Occitan and Slovenian (cf. Savoia 2001; Dell'Aquila and Iannàccaro 2004: 51-58).
    ${ }^{2}$ Sardinian literacy among native speakers can be assumed to be scarce at best. Literacy in Sardinian schools has traditionally been taught exclusively in Italian.
    ${ }^{3}$ The regional committee included Eduardo Blasco Ferrer, Roberto Bolognesi, Diego Salvatore Corraine, Ignazio Delogu, Antonietta Dettori, Giulio Paulis, Massimo Pittau, Tonino Rubattu, Leonardo Sole, Heinz Jürgen Wolf and Matteo Porru.

[^77]:    ${ }^{4}$ The concessions were limited to admitting the use of Campidanese plural definite article is as an alternative to Logudorese sos and sas, and the adoption of Campidanese clitics $d d i, d d u$, $d d a$ as alternatives to Logudorese forms li, lu, la (cf. LSC 2006: 25, 28, 37ff).
    ${ }^{5}$ Amos Cardia, Stefano Cherchi, Nicola Dessì, Massimo Madrigale, Michele Madrigale, Francesco Maxia, Ivo Murgia, Pietro Perra, Oreste Pili, Antonio Pistis, Antonella Rodi, Paola Sanna, Marco Sitzia. Eduardo Blasco Ferrer and Paolo Zedda are indicated as consultants.

[^78]:    ${ }^{6}$ On orthographic conventions in Medieval Sardinian documents, see Virdis (2018).

[^79]:    ${ }^{7}$ I am adopting the view that both the final vowel raising and Campidanese metaphony are historical changes (Wagner 1941: $\$ 46$; Virdis 1978: 24-27; 1988: 900-902; Blasco Ferrer 1984: 178; Loporcaro 2015: 56; Mensching and Remberger 2016: 272; Lai forthcoming). As a consequence, I claim that the instances of metaphony attested in Campidanese are lexicalized items, the output of a no longer active metaphony rule. By contrast, some generative linguists (e.g. Bolognesi 1998: 16-22; Frigeni 2003; Savoia 2015, 2016; Molinu 2017: 350-352) claim that both metaphony and the final vowel raising should be regarded as active synchronic processes, namely, a metaphony rule would apply before a vowel raising rule:

[^80]:    ${ }^{10}$ In Northern Campidanese, [kj] and [tj], evolved in the geminate /s/, e.g., ['prassa] (< platēa $(\mathrm{m})$ ), while in the Southern-Western Campidanese (Sulcis area), the outcome is the affricate /ty/, e.g., ['pratffa] (< platēa(m); Virdis 1978: 64-65).

[^81]:    ${ }^{11}$ The information in this section is drawn from Zedda (2009), which interested readers are encouraged to consult for further details. For a corpus study of the language employed by mutetu poets, see Mereu (2014).
    ${ }^{12}$ On the formal properties of this poem, see also the discussion in Fabb (2015: 69).

[^82]:    ${ }^{14}$ Neo- or new speakers of a minority language are defined as "individuals with little or no home or community exposure to a minority language but who instead acquire it through immersion or bilingual educational programs, revitalization projects or as adult language learners" (O'Rourke, Pujolar and Ramallo 2015: 1).

[^83]:    ${ }^{1^{*}}$ For a complete picture of the matrix frames predicates consult: Konerding, Klaus-Peter. 1993. Frames und lexikalisches Bedeutungswissen. Untersuchungen zur linguistischen Grundlegung einer Frametheorie und zu ihrer Anwendung in der Lexikographie. Tübingen: Niemeyer.

