Stress shift under cliticization in Nuorese Sardinian

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Abstract:

In most Romance languages clitics are stress neutral: when they attach to a host, they have no effect on stress placement: this is the case of Italian and Spanish. However, a small group of Romance languages is exceptional in this respect, e.g., Neapolitan and some Catalan, Occitan and Lucanian varieties. Sardinian is among them. Sardinian varieties display stress shift under cliticization in the imperative and gerund forms. Differences can be found across these varieties with respect to stress placement (Lai 2016). Here we will focus on the behaviour of Nuorese Sardinian, a variety from the central-northern area of the island of Sardinia. We will show that Sardinian varieties are unique in the Romance domain because they display stress shift not only with enclitics but also with proclitics. This is evidence for the proposal that Sardinian clitic clusters (both in enclisis and proclisis) constitute a prosodic word of their own.

Keywords: Clitics, Metaphony, Sardinian, Stress Shift

1. Introduction*

1.1 Stress shift with clitics in the Romance languages: an overview

Following the classification in Spencer and Luís (2012), Romance languages behave in two ways with respect to stress placement with clitics.

^{*} I am grateful to Laura Bafile and Leonardo M. Savoia for their valuable comments and efforts to improve the paper, as well as to Elisabetta Carpitelli, Jean-Pierre Lai, M. Rita Manzini, Lucia Molinu, Simone Pisano, Tobias Scheer, for helpful discussions. Special thanks go to my informants, Luisa Satta and her family. Warm thanks to Ramon for Catalan and Spanish data. All responsibilities are of course mine.



ISSN 2421-7220 (online) www.fupress.com/bsfm-qulso 2017 Firenze University Press In languages, such as Spanish or Italian, "clitics can behave as 'outlaws', violating normal rules", and when a "clitic is attached to its host in such a language it will typically be invisible to the stress placement [...]" (Spencer and Luís 2012: 84ff.). In Spanish, stress is lexically determined and responds to the so-called 'three-syllable window principle': stress falls to one of the last three syllables (*Ibidem*, 84-85). However, if a string of clitics is added to the verb, this principle may result in violation because clitics do not interfere with the original stress placement of the host, as represented in (1). The vowel in boldface is under stress; italic denotes the orthographic form.

(1) Spanish

tr**a**e=me-la → *tráemela* bring=me-it 'Bring it to me'

The same is true of languages such as Italian and Central Catalan, in (2) and (3) respectively.¹

(2)	Italian	(3)	Catalan
	p o rta=me-la → p o rtamela		p o rta=me-la → p o rta-me-la
	bring=me-it		bring=me-it
	'Bring it to me'		'Bring it to me'

This means that in case of cliticization, the resultant host plus the clitic sequence can bear stress on the pre-antepenultimate syllable (fourth to the last) or even more, as can happen in Tuscan Italian when three enclitics attach to the host, e.g., porta=mi-ce-la $\rightarrow portamicela$, 'bring it there for me'. Note that these kinds of sequences are available only as a result of cliticization.

However, as underlined in several dialectological and theoretical studies, other Romance languages depart from this prosodic pattern and have clitics that are endowed with accentual properties of their own (cf. Spencer and Luís 2012: 90ff.), even though these languages differ from one another in some respects (cf. Section 5). In some Insular Catalan varieties (Bonet and Torres-Tamarit 2011), as well as in Neapolitan (Kenstowicz 1991; Bafile 1993, 1994; Monachesi 1996; Peperkamp 1997; Ledgeway 2009: 34-35), Lucanian (Monachesi 1996; Peperkamp 1997; Savoia and Baldi 2016; Manzini and Savoia 2017), Sicilian (Manzini and

¹ Here I report data from Central Catalan. For a comprehensive overview and analysis of Catalan varieties and their stress behaviour with clitics refer to Bonet and Torres-Tamarit (2011), among others.

Savoia 2017) and Occitan varieties (Manzini and Savoia 2005, 2017), when clitics cliticize to the verbal host, stress placement changes and clitics can receive stress. Among the above-mentioned languages, various stress shift patterns are available (cf. Section 5): stress can move to the penultimate or the last syllable with respect to the type of clitic and the number of clitics attached to the verb.

1.2 Stress shift with clitics in Sardinian

Sardinian patterns with this last group of languages, although differences across varieties are observed. Three different patterns of stress shift with clitics are available in the island (Lai 2016). Strings of up to three clitics are acceptable. The inventory includes personal, locative and partitive clitics, which appear in a fixed order in both enclisis and proclisis. The distribution of the prosodic patterns with clitics follows the traditional classification of Sardinian varieties. Sardinian is classified into two main linguistic groups, Campidanese (southern areas) and Logudorese (central-northern areas), to which Nuorese belongs (cf. Virdis 1978; Wagner 1984 [1941]; Blasco Ferrer 1984; Contini 1987; Loporcaro 2009; Mensching and Remberger 2016; Molinu and Floričić 2017). A central transitional area between these main groups must be acknowledged (cf. Virdis 1978, 1988). The three prosodic patterns available in Sardinian are thus from the transitional area (cf. Lai accepted), the south of the island (Campidanese Sardinian) and the central-northern areas (Logudorese Sardinian).

The transitional area between the southern and central-northern varieties has a consistent behaviour in which all clitics, no matter their number, type and combination, cause the reassignment of stress, generating paroxytone strings (see Lai 2016, accepted), e.g., $b\acute{atti} + mi \rightarrow batti=mi$, $b\acute{atti} + mi-dda \rightarrow batti=mi-dda$ (data from Lai 2016: 141). This prosodic pattern is typical of Southern Barbagia and Central-Northern Ogliastra and it is similar to the stress shift pattern found in Lucanian varieties (in the south of the Italian peninsula).

The most peculiar Sardinian pattern is from the Campidanese area. In Campidanese, clitic clusters (of two or three clitics) always cause stress shift to the penultimate syllable, while single clitics induce a shift to the final syllable or the penultimate syllable, depending on the type of clitic, e.g., *bétti* + *mi* \rightarrow *betti*=*mi*, *bétti* + *mi*-*dda* \rightarrow *betti*=*mi*.*dda* (data from Lai 2016: 138).

The prosodic pattern from Logudorese Sardinian handles single clitics differently with respect to clitic clusters. The combination of the hosting verb with a single clitic does not have effects in the stress domain of the host (e.g., *bátti* + *mi* $\rightarrow bátti=mi$), while with clitic clusters the stress is moved forward to the penultimate syllable of the whole string (e.g., *bátti* + *mi-la* $\rightarrow batti=mi-la$). I will focus here on the prosodic pattern from Logudorese Sardinian by taking into account the Nuorese variety.

Stress shift with clitics in Sardinian varieties has been reported since the earliest studies on Sardinian linguistics (cf. Wagner 1938, 1984 [1941], 1997

[1950]). Several other linguists have mentioned this prosodic property for the Sardinian varieties (cf. Pittau 1972; Virdis 1978; Blasco Ferrer 1984; Bolognesi 1998; Manzini and Savoia 2005, 2007; Ordoñez and Repetti 2014). However, it should be mentioned that a radically different interpretation of Sardinian data is offered by Kim and Repetti (2013), according to which in spite of the *prima facie* evidence, no stress shift actually occurs in Sardinian.

2. The position of Nuorese Sardinian in the Sardinian language group

The Sardinian language group is classified as endangered by UNESCO due to the loss of intergenerational transmission (see Lai 2017). Nuorese Sardinian is part of the Logudorese Sardinian group and is spoken in the central eastern region of the island, eminently in the city of *Nuoro* (*Núgoro* ['nuɣoro] in Sardinian) and its neighbouring towns and villages (cf. Pittau 1972; Wagner 1984 [1941]; Contini 1987 among others). The Logudorese group is well-known among Romance linguists for being the only extant Romance variety that lacks the palatalization process of Latin sequences G, C + *i*, *e*, (e.g., CENTUM>*kentu* 'one hundred').² Nuorese is also exceptional in that it does not show intervocalic lenition,³ a wide-spread phenomenon of Sardinian: both the Campidanese area and the rest of the Logudorese area share it. Two monographs on Nuorese is also widely represented in the Sardinian surveys of Wagner (1984 [1941]) and Contini (1987).

3. A sketch of personal and adverbial clitics in Nuorese

Nuorese has personal, partitive and locative clitics. The Nuorese personal clitic forms are listed in Table 1, after Jones (1993: 213).⁴ The 1st person singular is *mi* that has the distribution of dative and accusative. *Ti* is the 2nd person singular (accusative and dative). The 3rd person singular (nonreflexive) clitics are *li* (feminine and masculine dative clitic), *lu* (masculine accusative clitic) and *la* (feminine accusative clitic). *Nos* and *bos* are the 1st and 2nd person singular and plural reflexive is *si*. Note that Sardinian, like other Western Romance languages (i.e., Spanish, Portuguese) pluralises by adding the suffix *-s*. Thus, *lis* is the 3rd person plural dative clitic (both feminine and masculine), and *las* and *los* the 3rd person plural accusative clitics (feminine and masculine).

³ For exceptions, see Contini (1987).

⁴ Jones (1993) gives the same paradigm for both Logudorese (northern Sardinian) and Nuorese Sardinian (central-northern area).

² The now extinct Dalmatian language also shared this trait (see Tagliavini 1982: 376). Campidanese Sardinian patterns with the other Romance languages that underwent this palatalization process (cf. Virdis 1978).

ifl.	_	m.	f.	refl.
nos	bos	los	las	si
nos	bos	lis	lis	si
i	nos	nos bos	nos bos lis From Io	nos bos lis lis From Iones (19

Table 1. Personal clitics

As already reported by Pittau (1972) and Jones (1993), in addition to the personal clitic forms in Table 1, Nuorese displays three adverbial clitics: *nke* (sometimes pronounced as *(k)ke*), *nde* and *bi*. *Nke* and *(k)ke* are from Latin HINC, *nde* derives from Latin INDE, while *bi* is from Latin IBI (Pittau 1972: 84). *Bi* and *nkel (k)ke* are locatives while *nde* is a partitive.⁵

Clitics appear in a fixed order as reported in Table 2.⁶

Table 2. The order of clitics

mi					lu
ti				li	la
si	bi	nke	nde		los
nos				lis	las
bos					

From Jones (1993: 218)

As already argued by Wagner (1938: §31; 1997 [1950]: 338) and Jones (1993: 219), an important difference between Nuorese and the other Sardinian varieties (the rest of Logudorese included) is that Nuorese allows for the combinations of 3rd person dative clitics and accusative clitics:

A further restriction on clitic combinations is revealed in cases where both the direct and indirect object is third person, nonreflexive. To our knowledge, no dialects allow straightforward combinations of clitics from columns V and VI (e.g., *li lu, *lis lu, *li los, etc.). In some dialects (e.g., Nuoro, see Pittau 1972: 83), such combinations are represented by single composite items: liu (=li+lu or lis+lu), lia (=li+la or lis+la), lios (=li+los or lis+los), lias (=li+las or lis+las). More typically, in such cases a suppletive clitic [...] is used in place of the dative.

Ibidem, 219

⁵ As argued by Jones (1993: 214) "*Bi* and *nke* are primarily locative clitics roughly equivalent to English 'there'. Both of these items can be used, more or less interchangeably to denote static location, though some speakers show a preference for one or other form. In cases of dynamic location, *bi* is used to denote a Goal ('to there') whereas *nke* generally has a Source orientation ('from there'). However, the latter generalisation is confused somewhat by the dialectal and idiolectal variation, in that speakers who favour *nke* to *bi* as a static Locative clitic also allow a Goal interpretation for *nke*".

⁶ See *Ibidem*, 218ff. and Manzini and Savoia (2005, 2007) for further details.

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The reconstruction of the evolution of this kind of clitic combination is available in Wagner (1997 [1950]: 338). By looking at the Old Sardinian documents, Wagner (1997 [1950]) notes that in the Middle Ages, Sardinian (in all varieties), still had the possibility of combining 3rd p. dative clitics with 3rd p. accusative clitics.⁷

In sardo antico il pronome personale atono della 3a pers. sing. e plur. era per il dativo *li, lis = illi, illis*; per l'accusativo *lu, la, los, las,* e queste forme si usavano anche quando più pronomi atoni si susseguivano: *non li lu deit* (CSP 83); *dandelila sa corona* (CSP 2); *daulilla* (CV V, 2); *gasi illilla confirmo* (CSMB 1).

Wagner (1997 [1950]: 338)

Today, this peculiarity is retained only by Nuorese. In the rest of Logudorese the 3rd p. dat. clitic when combined with a 3rd p. acc. clitic is replaced by the clitic *bi* (from Latin IBI), while in Campidanese this is replaced by *si* (Wagner 1938: §31, 1997 [1950]: 338). Jones (1993: 220) offers the following examples for the rest of Logudorese and Campidanese:

(4) Logudorese Sardinian (excluding Nuorese)

Bi l'appo datu 'I gave it to him/her'

(5) Campidanese Sardinian Si dd'appo donau'I gave it to him/her'

Thus, in the past, Sardinian had a behaviour similar to that of Italian, in which 3rd p. dative clitics can coexist with their homologous accusatives. Modern Sardinian, in the Logudorese and Campidanese varieties, patterns with Spanish, that does not admit sequences of this kind and uses the clitic *se* for the 3rd p. dative clitics, e.g., *se lo doy* 'I give it to him/her'. Wagner (1997 [1950]: 338) attributes this change to the influence of Spanish, one of the dominant languages that followed one another in Sardinia.⁸

⁷ In Wagner' extract, the abbreviations in brackets refer to ancient sources. For a short introduction to Sardinian Mediaeval documents see Lai (2013: §1.3).

⁸ In the Middle Ages, Sardinia was divided into four independent kingdoms: *Kálaris* (south-eastern area), *Torres* (north-western area), *Arborea* (central-western area), and *Gallura* (north-eastern area). At that time, Sardinian in its local varieties was the official language of the island. The four kingdoms lost their independence and the island was disputed among the Republics of Pisa and Genoa. In 1323, the Crown of Aragon conquered Sardinia and the official language changes from Sardinian first to Catalan and then to Spanish. This situation lasts until

4. Data

As we will see, in Nuorese a single clitic added to the verb does not affect the stress placement. Only strings of clitics have an effect on the stress pattern of their verbal host.

The Nuorese pattern is similar to the Neapolitan pattern discussed in Kenstowicz (1991), Bafile (1994), Monachesi (1996), Peperkamp (1997) and Ledgeway (2009: 34-35). However, like the other Sardinian varieties, Nuorese also accepts strings of three clitics, both in enclisis and in proclisis. The data reported in Table 3 are the result of the fieldwork conducted by the author herself. To understand the condition under which Nuorese Sardinian displays stress-shift under cliticization, I take into consideration the kind of clitics available in this variety and all the possible combinations, as reported in Table 3. Note that Table 3 reports clitics in their phonetic transcription. In the text, they appear in a graphic form.

Host (impera- tive)	one clitic	1 st , 2 nd p. Acc./Dat.	Locative, Partitive clitics	3 rd p. Acc., 3 rd p. Dat.	Result (host+clitic(s))
b á tti +		mi			b á tti=mi bring.IMP.2SG=DAT.ISG
b á tti +			(k)kɛ		b á tti=kɛ bring.1MP.2SG=LOC
b á tti +				la	b á tti=la bring.1MP.2SG=ACC.3SG
	two clitics				
b á tti +		mi		la	batti=m í -la bring.IMP.2SG=DAT.ISG- ACC.3SG
b á tti +			(k)kɛ	la	batti=k é -la bring.IMP.2SG=LOC-ACC.3SG
b á tti +		mi	(k)kɛ		batti=m í- kɛ bring.IMP.2SG=DAT.ISG-LOC
	three clitic	s			
b á tti +		mi	(k)kɛ	la	batti=mi-k £ -la bring.IMP.2SG=DAT.ISG- LOC-ACC.3SG

Table 3. Stress placement with clitics

1720 when the Kingdom of Sardinia is acquired by the Dukes of Savoy, the future rulers of the Kingdom of Italy. See Lai (2013: §1.3) and the references therein.

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In the first column, I report the imperative form of *battire* (i.e., *bátti* 'bring to the speaker'), from Medieval Sardinian *battuger* (Wagner 1938: §52).⁹ In the second column, I conflate the 1st and 2nd p. accusative and dative clitics. In the third one, I include locative and partitive clitics. The fourth column hosts 3rd p. accusative and dative clitics.¹⁰ For simplicity, I only exemplify one clitic in each column. In the second column, *mi* is the 1st p. sing. Acc/ Dat. In the third one, $k\varepsilon$ is a partitive.¹¹ In the fourth column, *la* is the 3rd p. sing. feminine Acc clitic.

The last column hosts the various outputs of the different clitic combinations (e.g., 1st, 2nd p. clitics plus locative and partitive clitics; 1st, 2nd p. clitics plus 3rd p. clitics; locative and partitive clitics plus 3rd p. clitics, etc.). Every time a clitic cluster is added to the verbal host, the primary stress on the host becomes a secondary stress, while the main stress is placed on the cluster. Single clitics (of any type) do not affect the stress placement.

In Nuorese the order of the clitic string coincides both preverbally and postverbally. Compare e.g., $mi + k\varepsilon + la$ preverbally and postverbally: mikela battit[i] '(he/she) brings it.FEM. there for me' vs batti=mikela 'bring it.FEM. there for me!'. This situation is not common in Romance languages, especially if we take into account the strong linguistic microvariation of certain Occitan, Lucanian, Corsican and Ligurian dialects (see Manzini and Savoia 2005, 2017). In fact, these Romance languages present different forms for enclitics and proclitics and the order may vary.

⁹ Wagner (1938: §52) argues that Old Sardinian *battuger* is presumably from Latin ADDUCĚRE. At some point in the history of the language, the verb *battuger* or *battuier* (as it appears in ancient documents) came to be the only verb with a -ure ending in the infinitive (see *Ibidem*). Its paradigm was then analogically remodelled on the 3rd conjugation (infinitive in -ire), resulting in the current forms *battire* (Logudorese and Nuorese Sardinian) and *battiri l bettiri* (Campidanese Sardinian). Nuorese Sardinian (as well as other neighbouring villages) has also the verb *júkere* for 'to bring', (cf. *Ibidem*, §52 fn. 2).

¹⁰ This classification has been developed by comparing the behaviour of clitics and stress-shift in various Sardinian dialects. Some dialects I do not examine in this paper show a different behaviour for 1st, 2nd p. versus 3rd p. For comparative purposes, I thus adopted the same classification for all Sardinian dialects, Nuorese comprised. Regardless, bear in mind that in this variety combinations of 3rd p. Dat. and 3rd p. Acc. are possible, (cf. Section 3). For an analogous classification but from a syntactic point of view, see Manzini and Savoia (2005, 2007, 2017).

¹¹ According to Pittau (1972: 84) and Jones (1993: 214) ke can also appear as nke, both in enclisis and proclisis. Note that in the phonetic transcription of ke (cf. Table 3) I adopted the notation (k)ke to underline that this locative can be pronounced long. On Sardinian geminates, see Lai (2015) and the references therein.

5. Stress placement with clitics in the literature

The purported analyses of stress shift phenomena differ considerably. Nespor and Vogel (1986) posit one additional level in their prosodic hierarchy, called the 'Clitic Group'. A Clitic Group is assumed to be a prosodic constituent intermediate the Prosodic Word (PW) and the Prosodic Phrase (PP). Clitics, they say, have the status of PWs. Together with their host, they form a Clitic Group.

Italian, Lucanian and Neapolitan dialects are discussed by Kenstowicz (1991), who relies on metrical phonology. Stress shift is never observed in Italian, regardless of the number and nature of the enclitics. In Lucanian dialects (in the south of the Italian peninsula), stress always shifts to the penultimate syllable of the sequence verb plus clitic(s), no matter the number. On the other hand, Neapolitan only shows stress shift with clitic clusters: with one enclitic, no shift is observed.

Bafile (1994) revisits Neapolitan data and assumes that clitics can be inserted into the prosodic structure via adjunction to one of two structural levels: prosodic word or prosodic phrase. In the former case, the clitic is integrated into the metrical prosodic structure of the prosodic word, and this is assumed to induce stress shift. The reason would be that in Neapolitan, the violation of the 'three-syllable window principle' is avoided through stress shift. A sequence of two enclitics produces a metrically ill-formed sequence that must be readjusted by shifting the stress to the penultimate position.

Monachesi (1996) does without the notion of Clitic Group altogether: cliticization must be reduced in some cases to affixation and in others to morphological compounding. In the case of one clitic adjunction, the clitic and the host form one prosodic word. In the case of two or more clitics, these unite in a prosodic word, which then adjoins to the verb, in what resembles a compound.

Peperkamp (1997) proposes that clitics can enter the prosodic structure in different ways. In cases in which no stress shift is observed, the clitics are assumed to be adjoined at the Prosodic Phrase level (the Italian case). In languages with stress shift, one of two things are claimed to happen. If one clitic induces stress shift (as in Lucanian varieties), it must have been incorporated at the Prosodic Word level. If only sequences of two or more clitics cause the shift, as in Neapolitan, the clitics are believed to adjoin recursively to the prosodic word.

In contrast, Loporcaro (2000) rejects the idea that in languages without stress shift, clitics should be regarded as adjoined to the Prosodic Phrase. The existence of stress shift is not sufficient evidence to posit two different levels of adjunction (to PW and to PP): clitics must be thought to always adjoin at the PW level, the result being a post-lexical prosodic word that includes the verb and the enclitics.

Manzini and Savoia (2005: §7.3.1) discuss different patterns of stress shift in enclisis from the Western Ligurian, Campanian, Provencal, Franco-Provencal, Corsican, Sardinian, Calabrian and Lucanian dialects. The authors focus on differences between the paradigms of enclisis and proclisis that are attested in many dialects. In order to explain the shift of some Sardinian dialects, the authors propose that 3rd person clitics must be endowed with a stress-related prosodic feature that induces stress assignment to the preceding syllable. In the case of one enclitic, this amounts to stress reassignment to the final syllable of the host. In sequences of two clitics, the prosodic feature stresses the first clitic. Cross-linguistic variation is observed in 1st and 2nd person clitics. In some dialects, these clitics have two allomorphs: one is an intrinsically stressed form, which is used when it is the only enclitic added to the host. In clusters, another allomorph occurs, which is not intrinsically stressed: on the other hand, this form can receive stress if followed by 3rd person or locative clitics, which are endowed with the above mentioned prosodic feature.

A different implementation of the same kind of approach is in Manzini and Savoia (2017). The authors discuss in turn the alternations in enclisis and proclisis in the Occitan, Lucanian, Corsican and Ligurian dialects. In these varieties, a sharp difference exists between enclitics and proclitics in that the former induce stress shift but the latter do not. The differences, the authors argue, are again to be reduced to a form of allomorphy. Ultimately, this allomorphy is argued to be connected with the interpretive properties associated to the enclisis, insofar as it externalises imperative modality.

Ordoñez and Repetti (2006, 2014) argue for a different kind of morphosyntactic alternation. For them, the so called clitic pronouns must be rather classified into two different categories: true clitics and weak pronouns (*contra* Manzini 2014; Manzini and Savoia 2014, 2017; Pescarini forthcoming). The difference between the two categories would result in different stress positions: weak pronouns affect stress assignment, while clitics do not.

Bonet and Torres-Tamarit (2011) compare three Catalan varieties: Central Catalan, Majorcan Catalan and Formenteran Catalan. While the two varieties from the Balearic Islands display stress shift, Central Catalan does not. In Formenteran Catalan, clitics produce stress shift and the stress always moves to the penultimate syllable. In Majorcan Catalan, stress moves to the final syllable. In the former case, a moraic trochee is formed to the right of the clitic cluster, while in the latter case a moraic iamb is formed instead. According to their analysis, developed within the Optimality Theory framework, the two Balearic varieties have a tendency to conform to these two metrical patterns, respectively, and stress shifts accordingly.

Kim and Repetti (2013) propose an account of Sardinian clitics (from both a phonological and a phonetic point of view). According to these authors, no actual stress shift exists in Sardinian: a variation in the association of pitch accents is responsible for the patterns usually regarded in the literature as examples of stress shift.

6. Stress placement in Nuorese Sardinian

Nuorese Sardinian is a language with variable stress. The position of the stress is lexically determined. According to Pittau (1972: 20) and J-P Lai (2002: 52), the Nuorese stress system allows for paroxytone and proparoxytone words.¹² The paroxyton pattern is the most common and it is the one elected when two or three clitics are added to the verbal host. Oxytones are repaired with the insertion of a paragogical vowel, e.g.: *cras*[a] 'tomorrow', *tres*[e] 'three', (Pittau 1972: 22). There is also a notable addition in the evolution of word stress from Latin to Nuorese Sardinian: there was a tendency to change etymologically paroxytone words into proparoxytone words. A number of lexical items have been so affected historically: CAMPĀNA>['kampana] 'bell', CICĀLA>['kikɛla] 'cicada', GINGĪVA>['giŋgiba] 'gums', LIXĪVA>['lissiba] 'lye', SINCĒRUS>['siŋkɛru] 'intact' (data are adapted from *Ibidem*, 20). Thus in Nuorese, proparoxytone words are entirely licit. The phenomenon is not observed in Campidanese Sardinian, where the etymological stress position is unchanged.

7. Prosodic representation of clitics in Nuorese Sardinian

As reported in Pittau (*Ibidem*), Nuorese also displays a few proparoxytone imperatives, e.g., *bókina* 'call (Imp.)'. If a single enclitic is added to these imperatives, stress is on the fourth syllable from the right, e.g., *bókina* + $lu \rightarrow bókina=lu$ 'call him!'. These sequences from cliticization are the only preproparoxytone words available in the whole language (*Ibidem*, 21).

7.1 Single clitics

Nuorese places stress on the penultimate or the antepenultimate syllable. The only exception is when a single clitic is added to a proparoxitone verbal host: in this case, the result of cliticization is immune to the ban on the pre-proparoxitone stress. To account for the facts, we can assume that in Nuorese, single clitics are adjoined at the prosodic word level (cf. Monachesi 1996; Peperkamp 1997; Loporcaro 2000), as reported in Figure 1, below:

¹² Paroxytone and proparoxytone words bear stress on the penultimate and the antepenultimate syllable, respectively.



Figure 1. Representation of single clitics in Nuorese (adjunction into the PW)

We can hypothesise that in case of cliticization, stress assignment depends on a parametric choice that is available in the grammar (Loporcaro 2000): in some languages, clitics are involved in a postlexical stress re-assignment, while in others clitics have no effect on the stress of their verbal host. This assumption is especially useful in distinguishing between Sardinian varieties. In Sardinian varieties, the stress assignment with a single clitic is due to the following parametric choice. In case of one clitic adjunction, the southern and central-southern varieties (Campidanese Sardinian and transitional area) are subjected to postlexical re-assignment (e.g., *bétti* + *mi* \rightarrow *betti=mí*; *bátti* + *mi* \rightarrow *batti=mi*, respectively), while in the northern varieties (Logudorese-Nuorese Sardinian) the stress stays in situ (e.g., *bátti* + *mi* \rightarrow *bátti=mi*): thus, one clitic has no effect on the stress placement.¹³

7.2 Clitic clusters

Clitic clusters behave differently: they receive stress when they attach to the verbal host, as in the case of the Neapolitan and Lucanian dialects (see Kenstowicz 1991; Bafile 1993, 1994; Monachesi 1996; Peperkamp 1997). However, contrary to these languages, Sardinian varieties (Nuorese included) display a peculiar phenomenon, that to the best of my knowledge, the literature has failed to report so far. Sardinian has stressed enclitics but proclitics can receive stress as well. Moreover, clitic clusters in proclisis have the same stress pattern as clitic clusters in enclisis. This is illustrated in Table 4 below:

¹³ The Campidanese picture is especially complex and would deserve an in depth treatment. In brief, a person split is observed: the first and second person have different stress patterns than the third person (both in the singular and in the plural). See Bafile and Lai (in preparation).

	1
a. enclisis	b. proclisis
<i>batti=míla</i> 'bring it.FEM. to me!'	<i>míla battit</i> [i] 'he/she brings it.FEM. to me'
<i>batti=mikɛ́la</i> 'bring it.FEM. there for me!'	<i>mikɛ́la battit</i> [i] 'he/she brings it.FEM. there for me'

Table 4. Clitic clusters in enclisis and proclisis

In other words, strings of clitics behave like a single prosodic unit, both in enclisis and proclisis. This peculiarity suggests that in Sardinian, strings of clitics form an independent prosodic word on their own.

However, in order to argue that, we need to prove that clitic clusters are under stress. Kim and Repetti (2013: 267) suggest that in Sardinian clitics there "[...] is not a change in the word level stress, but variation in the association of the pitch accent". Kim and Repetti (2013) present an analysis of Sardinian cliticization and conclude that, in spite of appearances, word stress stays *in situ*. The so-called stress shift, they say, is actually a variation in the association of pitch accents. I would like to argue that this is not the case: Sardinian clitic clusters are actually under stress. Evidence is provided by Sardinian metaphony.

Sardinian metaphony is a well studied phenomenon (see, e.g., Wagner 1941; Paulis 1972; Virdis 1978; Contini 1987; Bolognesi 1998; Loporcaro 2005; Savoia 2015; Molinu 2017 among others). Roughly speaking, Sardinian metaphony raises stressed mid-low vowels /ɛ/ and /ɔ/ to mid-high vowels [e] and [o] respectively, when followed by high vowels, e.g., /bɔnu/ \rightarrow ['bonu] 'good (masc.)' but /bɔna/ \rightarrow ['bɔna] 'good (fem.)'. Metaphony applies only to stressed vowels. If word stress were *in situ* we would expect **báttimikelu*, without the raising of the mid-low vowel /ɛ/ (in bold) of the clitic cluster. What we observe, though, is *battimikélu*, with the regular application of metaphony. The application of metaphony is evidence that the clitic cluster bears stress. Notice that metaphony applies regularly even to proclitic clusters, e.g., *mikéla battit*[i] 'he/she brings it.FEM. there for me' vs *mikélu battit*[i] 'he/she brings it.MASC. there for me', which is evidence that proclitic clusters are under stress. This supports the prosodic representations in Figures 2 and 3 for both enclitic and proclitic clusters.

Figure 2. Representation of enclitic clusters in Nuorese



(modelled after Monachesi 1996)





(modelled after Ibidem)

Monachesi in her (1996) paper proposes that two enclitics form an independent prosodic word and that this unit combines with the verbal host in a compound structure. Being a prosodic word of its own, the clitic cluster must receive stress: by default, a trochaic foot is built in the cluster, and stress falls on its penultimate syllable.

An objection to the idea that clitic clusters can constitute a prosodic word on their own is represented by the different stress patterns of clitic clusters in proclisis and enclisis that are found in the literature (Peperkamp 1997: 191). To the best of my knowledge, in Romance languages other than Sardinian one observes stressed enclitics but the same clitic sequence lacks stress when in proclisis.

Peperkamp (*Ibidem*) rejects Monachesi's analysis by arguing that if clitic clusters formed a prosodic word, a symmetry between proclitics and enclitics would be expected. In the data reported by Monachesi this was not the case, i.e., in Neapolitan, proclitics do not bear stress. However, in Sardinian clitic clusters, we find exactly the same stress pattern both preverbally and postverbally. We can thus conclude that in Sardinian, clitic clusters are prosodic words on their own, both in enclisis and proclisis.

8. Conclusions

The case of Sardinian varieties (Nuorese among others) is especially relevant for Romance linguistics, in that it makes it possible to add a new piece in the picture of cliticization. The presence of metaphony in proclitic clusters makes it necessary to reconsider the fact that no stress shift phenomena would exist in proclisis. Stressed proclitics provide counter-evidence to the generalisation by Ordóñez and Repetti (2014) that enclitics are fundamentally different from proclitics: *prima facie* enclitics include forms endowed with stress-related features, and are actually weak pronouns rather than true clitics; proclitics, on the other hand, are always clitics. Instead, the account of enclitic and proclitic clusters should preferably be as unified as possible (cf. Manzini and Savoia 2017).

References

- Bafile, Laura. 1993. Fonologia prosodica e teoria metrica: accento, cliticizzazione e innalzamento vocalico in napoletano. PhD Dissertation. Università degli Studi di Firenze.
- Bafile, Laura. 1994. "La riassegnazione postlessicale dell'accento nel napoletano." *Quaderni del Dipartimento di Linguistica dell'Università di Firenze* 5: 1-23.
- Bafile, Laura, and Rosangela Lai. In preparation. "Clitic Stress Allomorphy in Sardinian." Ms. Università degli studi di Ferrara, Università degli studi di Firenze.
- Blasco Ferrer, Eduardo. 1984. Storia linguistica della Sardegna. Tübingen: Max Niemeyer.
- Bolognesi, Roberto. 1998. The Phonology of Campidanian Sardinian: A Unitary Account of a Self-organizing Structure. The Hague: Holland Academic Graphics.
- Bonet, Eulàlia, and Francesc Torres-Tamarit. 2011. "Les formes d'imperatiu seguides de clític: Un cas de conservadorisme lèxic." In *Noves aproximacions a la fonologia i la morfologia del català*, ed. by Maria-Rosa Lloret, and Clàudia Pons-Moll, 37-61. Alacant: Institut Interuniversitari de Filologia Valenciana.
- Contini, Michel. 1987. *Etude de géographie phonétique et de phonétique instrumentale du Sarde*, 2 vols. Alessandria: Edizioni dell'Orso.
- Jones, Michael Allan. 1993. Sardinian Syntax. London-New York: Routledge.
- Kenstowicz, Michael. 1991. "Enclitic Accent: Latin, Macedonian, Italian, Polish." In Certamen Phonologicum II: Papers from the 1990 Cortona Phonology Meeting, ed. by Pier Marco Bertinetto, Michael Kenstowicz, and Michele Loporcaro, 173-185. Torino: Rosenberg & Sellier.
- Kim, Miran, and Lori Repetti. 2013. "Bitonal Pitch Accent and Phonological Alignment in Sardinian." Probus 25 (2): 267-300.
- Lai, Jean-Pierre. 2002. *L'intonation du parler de Nuoro*. PhD Dissertation. Université Stendhal-Grenoble 3.
- Lai, Rosangela. 2013. Positional Effects in Sardinian Muta cum Liquida. Lenition, Metathesis, and Liquid Deletion. Alessandria: Edizioni dell'Orso.
- Lai, Rosangela. 2015. "Word-initial Geminates in Sardinian." Quaderni di Linguistica e Studi Orientali 1: 37-60.
- Lai, Rosangela. 2016. "Clitici e slittamento accentuale nelle varietà sarde: tra prosodia e allomorfia." In *La lingua e i parlanti. Studi e ricerche di linguistica*, ed. by Benedetta Baldi, and Leonardo M. Savoia, 135-149. Alessandria: Edizioni Dell'Orso.
- Lai, Rosangela. 2017. "Orthography Development in Sardinia: The Case of Limba Sarda Comuna". In *Creating Orthographies for Endangered Languages*, ed. by Mari C. Jones, and Damien Mooney, 176-189. Cambridge: Cambridge UP.
- Lai, Rosangela. Accepted. "Stress Shift under Cliticization in the Sardinian Transitional Area." In *Linguistic Variation: Structure and Interpretation*, ed. by Ludovico Franco, and Paolo Lorusso. Berlin: Mouton De Gruyter.
- Ledgeway, Adam. 2009. Grammatica diacronica del napoletano. Tübingen: Niemeyer.
- Loporcaro, Michele. 2000. "Stress Stability under Cliticization and the Prosodic Status of Romance Clitics." In *Phonological Theory and the Dialects of Italy*, ed. by Lori Repetti, 137-168. Amsterdam: John Benjamins.

- Loporcaro, Michele. 2005. "Typological Remarks on Sardinian. 1. Vowel Harmony 2. Sardinian in a Correlative Typology of the Romance Languages." Sprachtypologie und Universalienforschung 58 (2-3): 210-227.
- Manzini, M. Rita. 2014. "Grammatical Categories: Strong and Weak Pronouns in Romance." *Lingua* 150: 171-201.
- Manzini, M. Rita, and Leonardo M. Savoia. 2005. *I dialetti italiani e romanci. Morfosintassi generativa*, 3 vols. Alessandria: Edizioni dell'Orso.
- Manzini, M. Rita, and Leonardo M. Savoia. 2007. A Unification of Morphology and Syntax. Studies in Romance and Albanian Varieties. London: Routledge.
- Manzini, M. Rita, and Leonardo M. Savoia. 2014. "From Latin to Romance: Case Loss and Preservation in Pronominal Systems." *Probus* 26 (2): 217-248.
- Manzini, M. Rita, and Leonardo M. Savoia. 2017. "Enclisis/Proclisis Alternations in Romance: Allomorphies and (Re)ordering." *Transactions of the Philological Society* 115: 98-136.
- Mensching, Guido, and Eva-Maria Remberger. 2016. "Sardinian." In *The Oxford Guide to the Romance Languages*, ed. by Adam Ledgeway, and Martin Maiden, 270-291. Oxford: Oxford UP.
- Molinu, Lucia. 2017. "Fonetica, fonologia, prosodia: sincronia." In *Manuale di linguistica sarda*, ed. by Eduardo Blasco Ferrer, Peter Koch, and Daniela Marzo. 339-358. Berlin: Mouton De Gruyter.
- Molinu, Lucia, and Franck Floričić. 2017. "La situazione linguistica in Sardegna." In *Manuale di linguistica sarda*, ed. by Eduardo Blasco Ferrer, Peter Koch, and Daniela Marzo. 15-30. Berlin: Mouton De Gruyter.
- Monachesi, Paola. 1996. "On the Representation of Italian Clitics." In *Interfaces in Phonology*, ed. by Ursula Kleinhenz, 83-101. Berlin: Akademie Verlag.
- Nespor, Marina, and Irene Vogel. 1986. Prosodic Phonology. Dordrecht: Foris.
- Ordónez, Francisco, and Lori Repetti. 2006. "Stressed Enclitics?" In *New Analyses in Romance Linguistics*, ed. by Jean-Pierre Montreuil, and Chiyo Nishida, 167-181. Amsterdam: John Benjamins.
- Ordóñez, Francisco, and Lori Repetti. 2014. "On the Morphological Restriction of Hosting Clitics in Italian and Sardinian Dialects." *L'Italia Dialettale* 75: 173-199.
- Peperkamp, Sharon. 1997. Prosodic Words. The Hague: Holland Academic Graphics.
- Pescarini, Diego. Forthcoming. "Stressed Enclitics are not Weak Pronouns: A Plea for Allomorphy." In *Romance Linguistics 2013. Selected Papers from the 46th Linguistic Symposium on Romance Languages (LSRL)*. Amsterdam: John Benjamins.
- Pittau, Massimo. 1972. Grammatica del sardo nuorese. Bologna: Pàtron.
- Savoia, Leonardo M. 2015. *I dialetti italiani. Sistemi e processi fonologici nelle varietà di area italiana e romancia.* Pisa: Pacini.
- Savoia, Leonardo M., and Benedetta Baldi. 2016. "Propagation and Preservation of Rounded back Vowels in Lucanian and Apulian Varieties." *Quaderni di linguistica e studi orientali* 2: 11-58.
- Spencer, Andrew, and Ana R. Luís. 2012. *Clitics. An Introduction*. Cambridge: Cambridge UP.
- Tagliavini, Carlo. 1982. *Le origini delle lingue neolatine*. Bologna: Pàtron.
- Virdis, Maurizio. 1978. *Fonetica del dialetto sardo campidanese*. Cagliari: Edizioni Della Torre.

- Virdis, Maurizio 1988. "Sardisch: Areallinguistik." In *Lexikon der Romanistischen Linguistik*, vol. 4, *Italienisch, Korsisch, Sardisch*, ed. by Holtus Günter, Michael Metzeltin, and Christian Schmitt, 897-913. Tübingen: Max Niemeyer.
- Wagner, Max Leopold. 1938. "Flessione nominale e verbale del sardo antico e moderno." *L'Italia Dialettale* 14: 93-170.
- Wagner, Max Leopold. 1984 [1941]. Fonetica storica del Sardo [Historische Lautlehre des Sardischen]. Cagliari: Trois Editore.
- Wagner, Max Leopold. 1997 [1950]. *La lingua sarda: storia spirito e forma*. Nuoro: Ilisso Edizioni.