

# MOBILITY AND MEDIA EDUCATION IN A DIGITAL AGE: CONCEPTUAL CONSIDERATIONS AND PERSPECTIVES BETWEEN MEDIA ACTIVISM AND ADJUSTMENT BY MEANS OF LEARNING TECHNOLOGIES

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## Abstract

Mediated lifeworlds and mobilities involve new challenges and subject matters for education. In recent years, conceptualizations and methods have been developed in educational research and practice. The spectrum includes innovative perspectives for media education and mobile learning, technologically or economically driven approaches, concepts for education as hacking or media activism, and also sophisticated concepts of education essentially ignoring processes of digitization and mediatization. The paper starts with 1. reflections on some paradoxical aspects of contemporary education and quests for educational answers in view of media-cultural entanglements, followed by 2. a discussion of selected dimensions of mobile education and the concept of relevance formulas in education. In so doing, the literacification of everything is being problematized. Finally,

the contribution aims at 3. critical thoughts on concepts and practices of media activism and (action-oriented) media education as different forms of intervention and an outline for a framework for relevance formulas in media education considering the relevance of mobilities in a post-societal era.

### Keywords

Mobility, media education, digitalization, mediatization, educational theory, mobile learning

## 1. Introduction

There is no doubt that digital media have become an increasingly relevant and integrated part of everyday life, cultural practices, institutional development, communication, economy, and politics in wide parts of the worlds. As to education, all fields and basic understanding<sup>1</sup> - from upbringing (Erziehung) and formation (Bildung) to training (Ausbildung) and educational studies (Erziehungswissenschaft) - are concerned, too. Accordingly, new topics, subject matters, conceptualizations and methods have been developed in educational research and practice along with issues of mobility and processes of digitization, mediatization, and globalization of communications and lifeworlds. Although there is a wide spectrum of respective modes of thematization including e-learning practices, mobile learning as well as new learning cultures, policies of e-inclusion and digital literacy, mental impoverishment and all sorts of (un-)desirable 'media effects', conceptual clarity and methodological accuracy is often missing.<sup>2</sup> Moreover, there is hardly any common ground apart from general-purpose expressions of relevance of 'media'.

Indeed, it is generally conceded that media play an important role in the processes of growing up, the development of identities, values and everyday aesthetics, or the shaping of references to the self and the world. And it is beyond doubt that media are involved in *Moving Cultures* (Caron & Caronia, 2007), the creation of realities and the formation of communicative processes, and that they have to be considered an agent of socialization. It is all the more remarkable that media are granted quite constructive traits, especially when influences and impacts of media are judged as destructive.<sup>3</sup> However, when it comes to how to shape and assess this role, how the aspects can be specified and respective dynamics can be described accurately, which understandings of medium and media are relevant in the first place, which situational or societal descriptions are appropriate and which goals and purposes of education (if any) should be

<sup>1</sup> The term 'education', for instance, may be translated in German to 'Bildung', 'Ausbildung', 'Bildungswesen', 'Bildungsweg', 'Erziehung', 'Eduktion', 'Unterricht', 'Schulung', 'Training', 'Unterweisung' as well as 'Bildungswissenschaft' (the course of studies) and 'Erziehungswissenschaft' (the academic discipline).

<sup>2</sup> On the other hand, it is noticeable that even most recently media are not mentioned at all in differentiated examinations of education as a key-term (cf. Stojanov, 2014) or at the utmost in the sense of disturbing one-sided mass media institutions (cf. Lederer, 2014).

<sup>3</sup> The idea of parallels to complaints in religious contexts suggests itself insofar people are accused of starting to believe and pray only in situations of existential threats or acute emergency. Similarly, tendencies of anxiety in the context of social policy measures in view of undesired (side) effects like cyber mobbing, distribution of pornographic content or Internet addiction of otherwise massively supported technological developments are obvious.

preferred and why, and to what extent a consideration of media as a socialization agent is adequate, opinions vary widely. Perceptions differ tremendously, particularly with regard to a wide range of conceptions of educationability (Bildsamkeit), constructivity, contextuality, mobility, and mediality.

In this situation of similar, complementary, and incommensurable understandings of (media) education and its key issues new paradoxes and ambivalences are emerging. Of course, antinomies and paradoxes play a significant role in education since the beginnings of its theorization (cf. Vogel, 1925; Winkel, 1986; Hug, 2011). Polarities and contradictions between freedom and open space for development on the one hand and constraints and enforcement on the other have been discussed in the context educational action in different ways and versions – just remember Plato's view of the educational system in the ideal state, Kant's view of humans who in contrast to animals need education which includes nurture, discipline, instruction and moral training, or more recent discussions of fields of tension between self-determination (Selbstbestimmung) and heteronomy (Fremdbestimmung).

Among contemporary inconsistent or paradoxical aspects are the following:

- statements of policy makers in educational and political institutions regarding the relevance of media education but most of the money is spent in support of technological developments or public relations offices, and only very little in support of media educational studies and respective applications research;
- distribution of all sorts of hypes, tech promises, and self-sufficient explanations comparatively sparse communication of solid scientific analysis, thoughtful deliberation, and well-considered educational applications;
- claiming noble motives as related to academic aims and attitudes at the same time subjecting institutions to media logics of entertainment industries and distributing mission statements as sales platitudes;
- promoting 'information literacy' without reflecting on the issues related to personalization and tracking when using commercial search engines or library services based on matching technologies which originally were meant for supporting consumer cultures and economic growth;
- EU-wide initiatives like the 'Bologna'-process aiming, among others, at enhancing mobility of students and the continuous growth of red tapes (Verwaltungsbürokratien) in educational institutions;
- rather general claims of educational technologists or media educationalists which on closer examination are often pars pro toto arguments ignoring other approaches or positions, sometimes arguments limited to perspectives of discourse communities, academic

associations, languages, university locations, or geographical regions waiving efforts of clarification of relations to other perspectives, and occasionally self-satisfied views of individuals or small collectives;

- constantly increasing numbers of Internet users in most of the world regions,<sup>4</sup> new media dynamics and cultural convergence, but educational policies are still focusing on traditional teaching subjects and knowledge architectures from a typographical age, hardly taking notice of changing lifeworlds, mediated life-styles, systemic perspectives of offline-online relations as well as interrelations of global public spheres and their relevance for education;
- Internet trends towards a majority of digital media consumption in terms of mobile apps (cf. for example, comScore, 2014), and new forms of mobile communication, but mainstream education in many places is still treating digital mobility as an "exception" if not banning mobiles from educational institutions.

The list could be continued and there is a quest for educational answers in view of ambivalent or paradoxical aspects and media-cultural entanglements. Not least along with recent developments of digital mobility a manifold of approaches to future perspectives on learning and education has been conceived in terms of empirical research, theory formation, and applications development on various levels of differentiation. The spectrum ranges from conceptual design for mobile learning, microlearning, augmented learning, and sustainable development of media literacy, digital literacy as well as many other kinds of 'literacies' to a multitude of approaches to MOOCs, BYOD, learning analytics, etc. From an educational perspective including aspects of self-determination, personal maturation, and developments beyond competence development, qualification or knowledge reproduction, quite a few of these approaches appear to be rather part of the problem than the solution.

The paper aims at offering some conceptual clarifications between Scylla of widespread media-phobic traditions and Charybdis of media-philic viewpoints resuming technological solutions for educational, social, communicative, cultural, or economic problems.

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<sup>4</sup>Cf. Internet Live Stats, available at <http://www.internetlivestats.com/internet-users/> (July 16, 2015).

## 2. Digital Mobility - Towards new Relevance Formulas in Education?

Aspects of mobility widely remained underexposed in the history of educational thinking. Only over the last ten to fifteen years, along with spread and ubiquity of mobile digital technologies and services keywords like mobile communication, mobile learning (m-learning), microlearning, mobile education, were disseminated in many places, and first commercial mobile education stores opened. As to mobile learning, many considerations, concepts, and applications were focused on technological aspects. Speaking of 'mobility' meant –and for many still means– targeting miniaturized, power grid independent multimedia devices, currently mostly tablets or smart phones, perspective data glasses and smart watches, too.

Mobile learning, for example, has been often defined as a sub-domain of e-learning enabled or supported through mobile computational devices (cf. Pinkwart et al. 2003). In contrast, Pachler et al. (2010) point out that mobile learning is not primarily about technology or about delivering content to mobile devices

«but, instead, about the processes of coming to know and being able to operate successfully in, and across, new and ever changing contexts and learning spaces. And, it is about understanding and knowing how to utilise our everyday life-worlds as learning spaces» (p. 6).

While voices close to the market (cf. Bitkom-Arbeitskreis, 2014) often remain caught up in technology-driven approaches<sup>5</sup> academic discourse aims at overcoming such blind spots. This counts for historical aspects, too. Although Crompton (2013) focuses on recent history after the turn of the millennium only, she admits that historical and cultural roots of mobile learning could be traced back «through history far beyond the invention of the Gutenberg's printing press and the influence of the Industrial Revolution» (Crompton, 2013, p. 3). Her definition of m-learning as «learning across multiple contexts, through social and content interactions, using personal electronic devices» (Crompton 2013, p. 4) offers manifold options for analysis and designing mobile learning. Nevertheless, I want to slightly modify it as follows: *Mobile learning is learning across multiple contexts, through social and content interactions, using mobile devices.*

This definition can serve at least as a working definition for long-term analysis across cultures, too, including a wide range of phenomena from pre-historic and ancient traditions to recent developments and the future

<sup>5</sup> See also statements, for example, collected in *Mobile Education - Lessons from 35 Education Experts on Improving Learning with Mobile Technology*, available online at <http://de.slideshare.net/DavidRogelberg/mobile-education-27782655>.

of mobile learning and education. It is not only or necessarily electronic devices which are relevant here. As to mobility and portable units, various modalities have been of importance in the context of learning and education such as following:

- dealing with<sup>6</sup> clay tokens for administrative purposes in pre-historic times;
- social and religious learning with the Pauline epistles;
- distance education by means of portable learning materials;
- stealing or borrowing (loan) exhibitions or circulating artifacts by means of traveling exhibitions or roadshows;
- learning in the context of field trips and excursions;
- interacting by means of ethno portals;
- use of audio devices or smart phones in modern museums and science centers;
- learning across formal and informal contexts using mobile devices;
- augmented learning, development of digital mobile fluency, and processes of embodiment when using data glasses, etc.

This listing of examples and aspects as relevant at the seams where mobility, education and learning come together illustrates that there is a long and hardly comprehensible history to a rather complex theme. To my knowledge there is no systematic analysis of this wide range of phenomena until this day - neither in m-learning discourses nor in broader discourses of educational theory or mobile communications. Indeed, it stands to reason that such an analysis is hard to accomplish especially if we take 'education' as an umbrella-term that encompasses a variety of analytic and normative perspectives on a wide array of phenomena including preparation for life, upbringing, learning learning, transformation of self- and world-relations, capacity development, personal maturation, qualification, acquisition of knowledge, school career, learner achievement, mediation of skills, values, or habits through teaching, training, or research, and an academic discipline dealing with these and related phenomena. As an 'essentially contested concept' (Gallie, 1956) educational processes may aim at maturity, responsibility, autonomy, self-determination, reasonable and sober-minded acting, self-

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<sup>6</sup> 'Dealing with' in several respects like spending time together, bothering, acting, working on, distributing, trading, and doing business. As to dealing with clay tokens, MacGinnis et al. (2014) point up that these tokens played a role in the Neo-Assyrian imperial administration after development of the cuneiform writing system, too. Moreover, the tokens were relevant to educational aspects, for example, because they "constituted a system for the keeping of tallies and dynamic totals over extended periods of time providing, at the same time, a wider base for simple literacy which allowed those without formal education to participate in the administrative process" (MacGinnis et al., 2014, p. 303).



reflexivity, self-actualization, self-transformation, competence development, etc. At the same time, it is rather enforcement of particular perspectives and assertion of pars pro toto arguments which cause individual and societal problems rather than acceptance of a plurality of understandings and context-sensitive evaluation.

Moreover, the examples listed show that mobility can be relevant for education and learning in many respects. In a broad sense, mobility signifies motion potentials, moves and the ability to move, or positional changes in physical, geographical, technological, cultural, social, cognitive, or virtual spaces including, for example, forms of movement of people within or between social strata and milieus or in terms of temporal or permanent migration, moving cultures and changing media practices, movable technical devices and technologies, or flexible use of cognitive structures in complex situations or heterogeneous conditions of life. All of these aspects are related to particular characteristics in historic media constellations. As to digital media constellations, transversal media systems and the digital turn (Kosseck and Peschl, 2012) characteristics of digital mobility are closely related to dynamics of media cultural convergence, scalability and large-scale dispersion of content, path dependence in media economy and economies of sharing, new forms of connectivity, multimodality and socio-technical integration, and not least the work of algorithms.

One way of reducing complexity which can be helpful in this context is to focus on guiding differences and formulas of relevance for education both in history and today. From a historical perspective, the tension between normative aspects of internal and external legitimation and educational discourses on conceptual clarifications of the core areas and responsibilities of the discipline, on the one hand, and the increasingly multi-faceted demands of society on the discipline and the educational institutions, on the other hand, can be differentiated by means of educationalization formulas (Pädagogisierungsformeln) and their historical relevance. Veith (2003, pp. 183-201; see Tab. 1) provides a useful historical overview of reproduction problems and educationalization formulas for the German-speaking area.

TABLE 1

Reproduction problems and educationalization formulas (cf. Veith, 2003, p. 185)

Date	Reproduction crisis	Author/Theory	Educationalization formula
1519	Crisis of orientation	Luther	School teaching
	Crisis of stability	Ratke	Didactics
<b>Teaching (<i>Unterricht</i>)</b>			
1648	Crisis of faith	Comenius	Moral education
	Crisis of poverty	Pietism	Vocational



			education
	Rationality deficit	Early Enlightenment	Beneficialness ( <i>Nützlichkeit</i> )
1740	Crisis of supply	Philanthropism	Usefulness ( <i>Brauchbarkeit</i> )
	Structural change	Sextro	Industrial education
<b>Upbringing (<i>Erziehung</i>)</b>			
1789	Erosion of solidarity	Pestalozzi	Popular education
	Crisis of legitimacy	Humboldt	Development of self ( <i>Subjektbildung</i> )
	Foreign rule	Fichte	National education
1815	Restoration	Schleiermacher	Humanistic education
	Value shift	Herbart	Character education
1849	Inequality	Diesterweg	Teacher education
	Class struggle	Herbartians	Ideological education
<b>Education (<i>Bildung</i>)</b>			
1871	Loss of tradition	Progressive education	Spontaneity
	Critique of profession	Meumann	Development
1914	Scarcity of raw materials	Stern	Talent
	Consequences of the war	Humanities	Acquirement of culture
1945	New beginning	Pedagogy of the German Democratic Republic	Practical learning
	Rebuilding	Pedagogy of the Federal Republic of Germany	Maturity
1961	Need for innovation	Action pedagogy ( <i>Tätigkeitspädagogik</i> )	Creativity
	Education calamity ( <i>Bildungsmisere</i> )	Pedagogy of learning	Capacity to act
1990	Globalization	Competence discourse	Self-organization
<b>Learning</b>			

Although the overview has its weaknesses<sup>7</sup> and although it could be further differentiated in a number of ways, namely in regard to most recent developments and contemporary observations, it is useful for *quo vadis* answers in the sense of being aware of the *unde venis* and partly overcoming historical amnesia (*Geschichtsvergessenheit*) and blind spots in media education.<sup>8</sup> In his overview, Veith (2003) shows how societal functions and requirements of reproduction correspond with vital interests of acting individuals or groups and with educational practices. In so doing, he elucidates that conceptual changes, terminological preferences, accentuation of themes as well as shifts of meaning are not just a matter of logical clarification but also a matter of forms of usage of concepts in a certain historical context.

«Such historical contextual bonds can be shown for all guiding concepts and target formulae in educational theory, from the early modern ideals of 'eloquence' in humanistic language education to confessional 'demands of discipline' and state-controlled economic foundations of 'concepts of skills' to 'strength of character of morality' in the restored corporative state of the 19th century, or to the multi-variant ideas of the individual 'personality development' in the 20th century. The same applies to the concept of 'competence development', which – even where it is tailored for professional activities only – seamlessly joins the ranks of tradition of modern educational thought, because it refers to contemporary societal issues of reproduction and tries to resolve them through the implementation of learning-cultural arrangements and the mobilization of respective human resources» (Veith, 2003, p. 184).

Today, we are facing a large number of diagnoses of the times and socio-theoretical self-descriptions – often branded with key concepts like knowledge society, reflexive modernity, network society, media cultural society, etc., and each of them foregrounding different core problems and aspects of reproduction crises. Moreover, there are also perspectives thinking beyond traditional sociological perspectives and discussing issues of a 'post-societal era'. Urry, for example, in his *Sociology beyond Societies* (2000) presents a

«manifesto for a sociology that examines the diverse mobilities of peoples, objects, images, information and wastes; and of the complex interdependencies between, and social consequences of, these diverse mobilities» (Urry, 2000, p. 1).

Similarly, Faßler (2009) is questioning traditional sociological thinking of capabilities of inheritance and reproduction of societies. In his book

<sup>7</sup> For example, indications of reproduction problems and educational formulas in different countries and regions as well as comparative analyses are missing, interdependences and interferences of different relevance formulas in national, international, transnational and global contexts are not considered.

<sup>8</sup> Cf. for example, contributions to a recent conference of the Division of Media Education of the German Educational Research Association (GERA) on "Fields of Areas of Tension and Blind Spots: Media Pedagogy (*Medienpädagogik*) between Emancipation and Discourse Avoidance" (Aachen/Germany, 19/20.03.2015), <https://blog.rwth-aachen.de/fruehjahrstagung-der-sektion-medienpaedagogik/>.

*After Society* (2009) he puts forward the hypothesis that rational predictability of societal and economic processes more and more frequently manifests as phantasma, and that complex economic, artistic, collaborative, and project-linked informational realities are increasingly important, particularly since their innovation capacity and forms of selected networking operates beyond societal bases of legitimation.

Which options for educationalization formulas (*Pädagogisierungsformeln*) do we have in view of a 'world in flux' (Bachmair and Pachler, 2014)? At least in the English-speaking world, the term 'literacy' is widely favored at this point. Also Bachmair and Pachler (2014) are aiming at «an educationally motivated practice of literacy as critique, creativity, participation, self-control of media consumption, and so on» (ibid., p. 1) – underlining, that ubiquity of mobile devices and

«ongoing transformation of the fields of 'media,' 'public,' 'citizen,' and 'education' requires a rethinking of these definitional elements and their interrelationship, especially as a result of the emergence of the Internet and its social media» (Bachmair and Pachler, 2014, p. 1).

Considering various literacies and a broader notion of 'multimodal literacy' as well as the fact that the «process of delimitation through mobile, individualized, convergent mass communication blurs any distinct relationship between competencies and types of modality» (ibid., p. 6) they come to the interim conclusion «that the concept of literacy retains a certain degree of legitimacy because it is widely used and linked to a wide range of pedagogical practices» (ibid., p. 6).

From a theoretically less elaborated perspective, Parry (2013) promotes 'mobile literacy' as understanding information access, hyperconnectivity, and the new sense of space. Although he also has some terminological doubts, he claims that «the ability to use social media, and particularly social media as amplified through the power of the mobile web, has become a key literacy» (ibid., p. 14).

The list of 'literacies' could easily be continued<sup>9</sup> and in addition to 'multimodal literacy' and 'mobile literacy' there are more options such as 'new literacies' (cf. Jenkins et al., 2006; Street and Lefstein, 2007, pp. 45-47), 'transliteracy' (Thomas et al., 2007), 'metaliteracy' (Mackey and Jacobson, 2011) or 'post-literacy' (Tucker, 2012) etc., which could be argued for contemporary educationalization formulas. Albeit many authors advocating enhancements of literacy-thinking offer important

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<sup>9</sup> Among the numerous compound terms which are currently used we find following: art literacy, computer literacy, consumer literacy, cultural literacy, cyber-literacy, digital literacy, diversity literacy, ecological literacy, emotional literacy, environmental literacy, fashion literacy, film literacy, financial literacy, food literacy, geographical literacy, hacking literacy, health literacy, information literacy, intercultural literacy, internet literacy, library literacy, management literacy, mobile literacy, multicultural literacy, multi-literacy, multimodal literacy, numerical literacy, sexual literacy, situated literacy, television literacy, visual literacy, zoological literacy, etc.

ideas and links for further discussion, the metaphorical expansions obscure more than they illuminate. Therefore ongoing processes of the literacification of everything appear to be questionable. To what extent and how does the promotion of a manifold of literacies constitute the problem that promoters are suggesting to solve? In my view, we have to move towards considerations beyond literacies (Hug, 2012a) and take into account that gestures, letters, words, images, pictures, icons, sounds, numerals, formulas, etc. are linked with various forms of articulation, meaning-making, significance attribution, development of schemata, sense-making and knowledge creation. Therefore, we should better clarify the characteristics of literacy, numeracy or mathemacy, oracy and picturacy and relations to cognition, culture, forms of knowledge as well as modes of understanding and orientation.

### 3. Media Education – Towards a Framework for Educationalization Formulas between Continuities and Renewals

So far, considering the relevance of mobilities in a 'post-societal era' including special forms of mobility like voluntary or enforced migration, mobilization of individuals and groups, unequal distribution of potentials for mobility, 'immobile mobility' as cognitive and social mobility without much travelling, and also our joys and sorrows *Living inside mobile social information* (Katz, 2014) does not seem to be at the core of mainstream media educational discourse. On the one hand, calls for critical thinking play an important role when the quo vadis question is answered both in academic literature and in the context of initiatives and statements.<sup>10</sup> On the other hand, at least in the context of formal education both preservation from assumed or factual negative media influences and encouragement of using digital learning objects, learning platforms, and educational apps are rather geared to regulations on institutional, regional or state-run levels, usually without regard to considerations referring to

<sup>10</sup> Cf. "Manifesto for Media Education" in the UK (<http://www.manifestoformediaeducation.co.uk/>), "No Education Without Media! Manifesto on Media Education" in Germany (<http://www.keine-bildung-ohne-medien.de/Manifesto-on-Media-Education.pdf>), „Media Education NOW!“ in Austria (<http://www.medienbildungjetzt.at/>), Déclaration de Bruxelles pour l'éducation aux Médias tout au long de la vie (<http://csem.cediti.be/sites/default/files/files/declaration%20de%20bruxelles%20-%20fr.pdf>), or statements provided in preparation of the international conference "Media – Knowledge – Education: Why Media Education?" at the University of Innsbruck, Austria, February 27-28, 2015 ([http://media.brainity.com/uibk2/mwb2015/?page\\_id=32](http://media.brainity.com/uibk2/mwb2015/?page_id=32)), etc.

transversal media systems, media cultural convergence, mediated lifeworlds, global media ecologies, or mobile communication.

Paradoxically, wide parts of the discourse on innovation in education and related policies and practices produce effects towards structural conservatism. Then again, there are progressive, future-oriented voices. Meyer (2015), for example, takes Baecker's *Studies of the Next Society* (2007) as central point of departure and argues in terms of *Next Art Education* (2015) as follows:

«The hero of the Next Society – it's neither the intellectual of the Enlightenment who appeals to public reason nor is it the critic as the sole judge over real and ideal –, it's the hacker» (Meyer, 2015).

Similarly, Missomelius is asking for «forms and practices of subversive knowledge» (Missomelius, 2015) which can be mobilized. And Giroux, to cite a third example, uses *Border crossings* (2005) as metaphor in the sense of an educationalization formula aiming at the creation of alternative public spheres which are relevant for the «formation and enactment of social identities» and the conditions «in which social equality and cultural diversity coexist with participatory democracy» (Giroux, 2005, p. 14). Correspondingly, Wimmer (2009) discusses Giroux's positions in the context of media activism.

Indeed, from a systematic perspective quo vadis questions can be answered with regard to polarities like continuation and renewal, adaptation and innovation, reform and revolution, as well as holistic and particularistic views. Broadly speaking, concepts and practices of media activism and (action-oriented) media education can be understood as different forms of intervention in society and as more or less contrastive fields in which media educational endeavors can be positioned. Related spheres are disjunctive or (partially) identical depending on whether we conceive them broadly or narrowly. Basically, there are three options (cf. Hug, 2012b):

1. We are talking of largely disjunctive spheres if we consider institutionalized forms of media education as only partially concerned with unmasking the shortcomings of democracy, practicing civil disobedience, promoting moral courage and resistance opposite problematic mainstream developments.
2. Conversely, the two spheres can be described as largely identical if we think of media education as paragon of the creation of counter public, socio-critical pedagogical interventions and initiatives, and the promotion of obstinacy, self-determination, self-empowerment and emancipatory transformation.
3. Last but not least, partial overlaps of the spheres can be argued inasmuch as media-critical motives, enhancement of scopes of action, partial overcoming of hegemonic tendencies and power interests play

an important role in both spheres, and if we, for example, cherish informal and non-formal educational dimensions of hackerspaces.

Although media have also been conceptualized as media of resistance (Sützl, 2011) and media critique matters at least to some extension in formal education, mutual exchange and encounters between the two spheres are rare. Then again, the three options show that conceptual contrapositions in terms of assimilated media education vs. critical media activism or conformist criticism vs. down-to-earth yet effective intervention fall short. A clear assignment of the indicators shown in tab. 2 to media activism and media education may seem possible at first sight. If we take a closer look it quickly becomes clear that such a strict separation only applies in the context of a juxtaposition of especially contrary understandings of the two spheres. Claims of critiquing and democratizing communication structures are significant in both areas, and media education does not only deal with differentiated perception, interpretation, analysis and reflection but also with designing media and change-oriented forms of intervention. However, there are also differences connected to aspects such as temporality and scopes of action, institutional responsibility and legal mandate, significance of cultural resources and autonomy of people and media, and reach of claims for education for all, many or some.

TABLE 2  
Media activism and media education – tendential indicators

destabilization	-	stabilization
discontinuity	-	continuity
short-term intervention	-	long-term intervention
revolution	-	evolution/reform
subversion	-	transparency
disobedience	-	obedience
self-will/obstinacy	-	solidarity
resistance	-	adaptation
refusal	-	participation

As to media activism, there is a broad spectrum including graffiti, radio activism, community media, internet activism (Meikle, 2002), visual activism, tactical media (Garcia and Lovink, 1997), alternative media



(Lievrouw, 2011), and more recently, media interventions questioning the workings of biopower (Da Costa and Philip, 2008; Sützl and Hug, 2012). Regarding mobile activism, we rather find scattered initiatives and predominantly politically motivated collective actions (Rheingold, 2008; Ekine, 2010; Liu, 2013) than systematic application scenarios or offerings designed for educational purposes. Studies of socialisational dimensions of resistance in the context of media use (cf. Bell, 2011) are scarce. Even if we consider disruptive innovation as an important trend in mobile activism (cf. Kreuz, 2008) and in education, too, we should also mind stable and instable, conservative and progressive media dynamics as well as special effects like shocks, disruptions, upheavals, etc. (cf. Rusch, 2007) if we want to promote sustainable forms of media education.

In view of ongoing media cultural dynamics, issues of informational self-determination and commercialization of information, various kinds of contemporary, often institutionalized trance-phenomena in the wake of ideologies and power strategies, and in times of economies of the commons and abolishment of net neutrality, warfare and surveillance practices, it does not make much sense to limit media education to programs of technology enhanced learning (TEL), digital literacy policies, strategies oriented towards politically motivated activism or conservative educational (bewahrpädagogischen) ideologies, or to a single purpose or path at all. There are many purposes of education<sup>11</sup> if any and –no matter which set of purposes we are preferring– we are wise to also consider spaces and times thought as purposeless – in educational contexts as well as part of an art of living.

In my view, viable paths for successful media education and formation can be created most likely if we let go of breathless chasing after ever new tech promises and educational hypes as well as obsolete ideas of a strict opposition between technophobic humanities and techno-euphoric engineering and natural sciences. The same counts for one-sided perspectives as related to reproduction of instant knowledge as paragon of education or to all to sublime educational ideals of a well-rounded personality excellently mastering transformations of self- and world-relations. The gap between challenges to deal with one's own heterogeneous conditions of life and some overly heroic concepts of education –particularly from German-speaking traditions– can easily be overwhelming.

Instead, we should keep in mind ambivalent and dialectical dynamics as related to educational processes. There is no education without mobility and bonding. On the other hand, chances for prevention of education are high if we are focusing on the promotion of all kinds of mobilities or on

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<sup>11</sup> See, for examples, claims and statements published at <http://purposed.org.uk/>, <http://educationforthe crisis.wikispaces.com/> or [http://www.ted.com/conversations/20241/what\\_is\\_the\\_purpose\\_of\\_educati.html](http://www.ted.com/conversations/20241/what_is_the_purpose_of_educati.html).



strong ties and relational bonds only. In other words, successful education is necessarily related to balancing ambivalent dynamics including mobility and quiet or rest, stimulation and stabilization, connecting and decoupling, adherence and letting go, affinity and distance, identity and difference, satisfaction and refusal, and others.

As to educational aspects connected with the manifold balancing challenges the concept of bricolage appears to be helpful. Initially, it has been introduced by Lévi-Strauss (1968) in anthropology and theory of knowledge characterizing an action-oriented form of knowledge which is situated between rule-oriented planning and creative spontaneity making use of locally available resources (cf. Perger, 2003). Decades later, Turkle and Papert (1992) used the term when evaluating two different styles of problem solving in a programming course. In contrast to an analytical style of solving problems they described a more playful style by which students were trying out things, provisionally testing and probing by referring to Lévi-Strauss's bricoleurs who «construct theories by arranging and rearranging, by negotiating and renegotiating with a set of well-known materials» (Turkle and Papert, 1992, p. 7). Kincheloe and Berry (2004) used the term 'bricolage' in educational research for designating multi-perspective research methods in order to enable a transformative mode of multi-methodological inquiry. In my own understanding, education as bricolage refers to a concept of general education including 1. transversal competencies when dealing with heterogeneous conditions, different codes, formats and medial forms, 2. multi-perspective reflection of learning processes, and 3. successful approaches to discursive constraints and various reference modalities in mediated lifeworlds (cf. Hug, 2010). With the term 'bricolage' I want to emphasize an antifoundationalist approach (cf. Heyting, 2001) aiming predominantly at medium-term perspectives and as possible deliberate, self-reflexive, context-sensitive, self-determined modes of weighing and deciding on alternatives. In so doing, know-how (Handlungswissen) for improvising modes of dealing with limited resources and spatio-temporal constraints plays an important role.

Regarding professional work in the field of (media) education I want to highlight a few key anchor points for further consideration:

- Today, discussing and promoting issues of education without consideration of dynamics of mediation, mediatization, media cultural convergence and (digital) mobility enables even in its noblest and most sophisticated forms, at best, half-education (Halbbildung), and at worst, invitations to sails into unexplored waters of tomorrow with navigation tools of yesterday.
- Although quality of media educational offers is an issue in view of cheap options for large-scale distribution, there are potentials for education in many media cultural contexts including popular culture.

Mediated lifeworlds and media ecologies offer educational values which can be important for individuals or groups even though they may not satisfy strict assessment criteria of educational taskmasters or exponents of all sorts of ideologically inflated Isms. Correspondingly, we should be aware of transitions between different domains including those especially designed for education. Educational media ecologies refer to a variety of conceptualizations addressing educational aspects of mediated learning environments, patterns of relationships between learners, educators, and their media environments, interrelationships between cultural resources, media practices and educational processes and purposes, connections of learning, media and informational ecologies with the material, global and ecological challenges, as well as interconnections of family, home, school, media, and community in which people grow up in media societies.

- Mobility is no value per se - physical, geographical, technological, cultural, social, or cognitive mobilities are relevant in contexts and dependent on criteria of actors. There is no general logic of development in one direction. Mobilities are conceptualized more appropriate in terms of networked development (Lüpke and Voß, 2000) and relations of potentials for mobility and factual performances (cf. Kaufmann, 2002).
- Regarding learning contexts and educational performances of individuals and institutions we should keep in mind the difference between self-regulated learning and self-determined learning. Self-regulated learning refers to learning processes in which learners autonomously are planning, directing, regulating, monitoring, and evaluating actions toward goals of acquisition of information, knowledge or skills, expanding expertise, or self-improvement; in doing so, goals, scopes for actions, and modes of collaboration, may be defined by the learners themselves or by others. In contrast, self-determined learning refers to learning processes in which learning is initiated, planned, organized, and evaluated by learners starting from their individual experiences, deciding for themselves what, why, how, when, where and with whom together is learned; in doing so, learners are aiming at self-imposed goals, above all the enhancement of abilities to act.<sup>12</sup>

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<sup>12</sup> Generally speaking, learning can be conceptualized, among others, as 1. process of building up and organizing knowledge, 2. process of transformation based on processes of meaning-making in specific contexts, or 3. as process enabling or leading to relative permanent capacity change beyond "pure" biological maturation or aging. No matter, if we are referring to changes of behaviour, attitudes, values, mobilities, mental abilities, task performance, cognitive structures, emotional reactions, action patterns or social dynamics, in all cases there are possibilities of addressing micro-, meso- and macro-aspects of learning.

- Among the mobilities relevant for education migration of medial forms plays a crucial role in understanding contemporary forms of creation, mediation and dynamics of knowledge. It has become problematic to link differentiations of knowledge systems with individual media and their devices (Leschke, 2010, p. 303). Therefore, transversal and transmedial dimensions have become particularly important in media theoretical debates. According to Leschke (2008) medial forms are perfectly suitable as classification tools in transversally linked media systems (2010, p. 305). He illustrates this as follows, using the example of offers of mass media entertainment:

«While the complex of interpretive knowledge, identity construction and self-concept of the humanities was still largely based on the media-historical constellation of letterpress involved in the general literacy and competence for positing meaning, at the present, the medial constellations with augmented reality, the intermedial migration of forms and the imperceptible transitions between entertainment media and functional media require and generate first and foremost formal knowledge» (Leschke 2008, p. 49).

In this sense, medial forms<sup>13</sup> can be taken as shapes and structures of distinguishable tools in transversally linked media systems –for example, structural elements of comic or games in film, or the use of icons in various medial constellations– which are related to dynamics of migration and imperceptible transitions. They can be described and analyzed on the level of middle range theories and they figure prominently in all concerns of orientation in contemporary media constellations.

- As Bachmair and Pachler (2014) point out, context awareness – «becoming aware of the frames under my construction, constructed under the conditions of ubiquitous mobility at the interface of formal and informal contexts» (ibd., pp. 23-24) – is a key issue in pedagogy – generally and especially in the sense of user-generated contexts taken as «processes by which users of mobile digital devices are afforded the synergies of knowledge distributed across people, communities, location, time and life-course, social contexts, sites of practice, networks and systems, and so on» (ibd., p. 21). From a meta-theoretical perspective it is important to be aware of epistemological and methodological research contexts as well as researcher-generated contexts, too – in particular, if we want to avoid pitfalls of epistemological foundationalism<sup>14</sup> and arbitrary positings (Setzungen).

<sup>13</sup> In contrast, commonly the term 'medial form' signifies a sub-area of media, for example, wikis or podcasts as forms of social media.

<sup>14</sup> More than 40 years ago, Rorty (1979) in *Philosophy and the Mirror of Nature* showed up the problems of classical foundationalism as related to empiricism, rationalism and transcendentalism.

A non-foundationalist or 'antifoundationalist' approach as outlined by Heyting (2001) and Goor et al. (2004) appears to be useful here. Such an undogmatic approach takes account of the undecidable character of many questions, and it helps countering premature, oversimplified 'solutions' or arbitrary strategies by means of a threefold contextualization of specific problems and topics: reflection on the meaning context, personal context and discourse context (cf. Goor et al., 2004, p. 176).

- So far, (media) educational discourses largely show characteristics of monologues, sometimes of dialogues allowing for partial reciprocal influences. But just like it is «necessary to inquire about the conditions for the possibility of systematic philosophy under the premise of different cultural imprints, which can be effective on every level of reflection and argumentation» (Wimmer, 2001, p. 382), effects of implicit assumptions and culturally determined ways of thinking should be analyzed and reflected in educational discourses, too. Moreover, research in a 'world in flux' (Bachmair and Pachler, 2014) suggests polylogic orientations allowing for extensive reciprocal influences of various positions and promoting situations in which all basic concepts, assumptions, starting points and methods are debatable. Polylogue then means that «for each tradition [...] every other one [is] 'exotic' in the sense that each is foreign to all the others and none of them are beyond question» (Wimmer, 2001, p. 392).

#### 4. Conclusion

As we have seen, managing balancing acts between educational challenges in view of complex media (cultural) dynamics and constellations of 'mediated mobilities' (Keightley and Reading, 2014) and idealistically over-inflated concepts of (media) education as transformation of self- and world-relations easily appear to be problematic. On the other hand, there are perspectives for media education between media activism and adjustment and submission by means of learning technologies. As to future-oriented educationalization formulas, concepts of context awareness and education as bricolage turn out to be particularly fruitful. They open up flexible options for education as critical mediation between individual and cultural memory (cf. Schäfer, 2009) as well as between human agency and the work of algorithms. Although there are indications that concepts of mobile education aiming at seamless learning (cf. Wong et al., 2015), bridging formal and informal learning contexts or blurring boundaries between student's consumer cultures and their academic life are at least to some extent missing the point (cf. Caronia, 2009, p. 30), considering transversal and transmedial

dimensions has become crucial for media education. The same counts for dynamics of media cultural convergence and mediatization of knowledge. Moreover, understanding and taking it serious that all knowledge is contextually bound may contribute to overcoming some myths of distribution of education and knowledge transfer in the future.

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