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Openness in Education: Claims, Concepts, and Perspectives for Higher Education

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Abstract

Characteristics of openness can be found in many respects throughout the history of education. From Comenius' call for pedagogical reform to postmodern educational theory, requirements of access, social justice, creativity, knowledge sharing, innovation, and capacity building have been emphasized in various ways. The chapter provides an outline of different understandings and notions of openness in educational contexts as well a discussion of their relevance for openness towards academic knowledge cultures and different forms of knowledge. Finally, the contribution highlights organizational, methodological, and critical perspectives as three aspects which appear to be undervalued in current debates about openness in higher education.

Keywords: Education for all; Open education (OE); Open educational resources (OER); Massive Open Online Courses (MOOCs); Knowledge cultures; Educational commons; Open learning; Future of higher education;

Introduction

Since about 15 years, we find a variety of initiatives dealing with open education (OE), open educational resources (OER), and Creative Commons (CC) licenses. Almost 10 years ago, in 2008 Stephen Downes and George Siemens led a course called Connectivism and Connective Knowledge at the University of Manitoba (Canada) which inspired Dave Cormier to coin the term 'MOOC' as an acronym for a Massive Open Online Course. Apart from a small number of students learning in class, over 2200 online students from the general public and various backgrounds took part in this course. Today, we find a wide range of OE and OER initiatives as well as diverse kinds of MOOCs all over the world. Consistently, the activities are aiming at opening up education in one way or another by the use of digital media technologies. However, these initiatives as well as related discourses and practices, are predominantly linked to general policy statements, claims of educational policies aiming at basic, vocational or higher education, and institutional strategies on global, international or regional levels. So far, these themes and developments have been taken up rather reluctantly in mainstream educational theory and philosophy. Comparatively few theoretically ambitious contributions have been published

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in the area (cf. for example, Bergamin et al. 2009; Deimann 2014; Cebrián-dela-Serna & Desenne 2015; Deimann & Peters 2016).

Notions of open education are often linked to notions of open access, open society and free culture, open source and Free/Libre Open Source Software (F/LOSS), open science and knowledge commons, open government and open innovation, as well as further related notions. Most commonly, recent debates about education for all, enabling universal education, or free educational infrastructures can be characterized by a kind of historical amnesia – calls for education for all are anything but new, they can be traced back at least to the work of Johann Amos Comenius (1592-1670) and social and religious learning with the Pauline epistles. Characteristics of openness and motives of opening up education can be found in many respects throughout the history of education. From Plato's elitist concept of education for a ruling class of philosophers to the strategic efforts of the UNESCO and other institutions to improve the quality of education, the relation of private and public issues and its relevance for educational processes have been highlighted repeatedly.

As to higher education, respective discourses are oscillating between political calls for employability and economization, industrial hopes for funding for digitization strategies and implementation of new learning technologies, management objectives of marketization and efforts to profit financially. The commercialization of academic institutions generally follows socio-political commitments to enable access to higher education more widely. On one hand, educational policies aim at opening new latitudes and flexibilities for students and teachers. On the other, educators make significant pedagogical efforts toward expanding scopes of action learners and educational institutions involve themselves co-create institutional conditions for all involved. Public aspirations tend to lean toward free culture, educational commons, and democratization through openness and media.

At the Crossroads of Openness and Education

Characteristics and motives of openness can be found in many respects in the context of education. Throughout history of education, we can find implicit dimensions of openness. For example, there are many reasons to assume that children educated themselves largely through varying degrees of free play, exploration, sharing and exchange for thousands of years. Even though historic conditions, cultural constraints and media constellations are to be considered when reflecting such forms of openness *avant la lettre*, they remind us of always changing modes and scopes of learning and knowledge acquisition. Although children's play for its own sake might seem a prototypical example for openness in education at first sight, dynamic interrelationships of dimensions of opening and closure are essential for a differentiated understanding of the various aspects of free play, open education, and its conditions and constraints. Moreover, dynamics and interdependencies of opening and closure are generally underestimated in discourses about openness in education, culture, and society.

As far as notions of openness are related to the achievements of the Enlightenment, education for openness remains an ambiguous endeavor that

Seminar.net - International journal of media, technology and lifelong learning Vol. 13 – Issue 2 – 2017 extends to openness to criticism, intellectuality, freedom of expression, reasonable and sober-minded acting, bureaucratization of society as well as Eurocentric thinking and European colonialism.

From a systematic perspective, openness in education refers to all levels of education as well as formal, informal and non-formal contexts. This counts for both, opening up educational processes and institutions as well as opening up minds, bodies, hearts, or communicative dynamics through education.

As to OER and higher education, the "definition of 'open' is constantly evolving and varies according to context e.g. sharing software source code, re-(using) content and open access to publications" (Yuan et al. 2008, p. 2). Generally speaking, in the context of OE and OER the term 'open' may refer to meanings such as

- free availability and accessibility of content
- open-mindedness and listening to critique
- policies of reducing restrictions of all sorts as far as possible
- avoidance of (significant) monetary costs for users
- guidelines for building communities of use
- modes of licensing
- standards of interoperability.

According to Lane (2009, p.4), basic meanings of 'open' in OER refer to open access, open licensed, open format, open software. Albeit such listings highlight important dimensions of openness in education and OER initiatives, we have to be aware that they can be supplemented easily and that they tend to blanket other aspects and dimensions. In order to avoid or overcome possible pitfalls we can contrast contemporary claims with historic strands of discourse on open education, for example, with reference to Nyquist (1972) and Nyberg (2010 [1975]), or in terms of current basic research, for example, with reference to Peters (2010) or Deimann and Peters (2016). Another possibility for opening up debates and encouraging an open approach to openness in education might start by asking for synonyms of "open" and "education" or closely related terms. Table 1 shows a series of basic meanings and synonyms in the form of a matrix. Of course, other terms than those offered in table 1 could be used, too, such as "uncovered," "unprotected," "free from concealment," or "not restricted to members of a particular group" for "open," and "schooling," "instructional principles," "learning to learn," "distribution of content," "transmission of knowledge," "pedagogical interaction," "touching events," or "biographical upheavals" for "education." Thus, understandings and conceptions of "open education" can be conceptualized in the fields of such a matrix. Then again, existing notions of "open education" or "openness in education" can be positioned tentatively in one or more of the fields.

Table 1. Example for an OE-Matrix – At the crossroads of interpretations of interpretations of ... (cf. Hug 2016, p. 3)

Open Education	without barriers	allowing for passage	broad-minded	free	permeable	tbc
training	easy to access	eligibility certificates	free choice of material	no or low monetary costs	coming and going	
learning in formal contexts	no eligibility assessment s	authorizatio n	transformative learning	self- organized learning	revising and reusing OER	
self-learning	self- empowerm ent	crediting open learning, self- improvemen t	critical literacy	educational commons, edupunk	sharing, redistributing content	
teaching	teaching as learning	professional growth	democratic orientation	fair use, (re-)use of OER	team-teaching	
lesson, class	low- threshold access	skipping classes	global education	lessons at no (obvious) charge	flipped classroom	
formation (Bildung, dannelse)	free choice of educational material, rhizomatic education	social mobility	enabling self- deter-mined processes	personal enrichment, education for its own sake	choices for individuals in the course of education	
upbringing (Erziehung)	anarchic education	adequate bonding	personal maturation	liberal education	intercultural education	
tbc						

Obviously, further enhancements of (re-)thinking openness in education can be considered beyond complementing further meanings in an OE-Matrix as exemplified in table 1. One way of moving beyond the addition of other basic meanings can be realized by introducing a third dimension in order to reflect on (a) temporal or spatial dynamics, (b) informational, socio-cultural, relational or emotional ecologies, or (c) on definitional and metaphorical uses of key concepts including related goals and politics of concepts (*Begriffspolitik*). In addition, contexts of use, language games, alternative approaches, and discursive relationships can be opened up for debate according to problem descriptions being in negotiation.

Although, often there are various limitations to negotiate meta-reflexive considerations in academic or pedagogical contexts, it is not least the metareflexive leeway which indicates the quality of dynamics and interdependencies of opening and closure. Correspondingly, modes self-reflection on the level of individuals, groups, institutions and organizations can act as important

Seminar.net - International journal of media, technology and lifelong learning Vol. 13 – Issue 2 – 2017 indicators for the analysis of different forms and limitations of openness in education. This regards earlier forms of open learning, self-organized studygroups, open plan classrooms, or open schooling, just like more recent developments associated with open universities, open courseware, and open education. In all of these contexts, claims for open education are always dealing with tensions between programmatic, conceptual and performative dimensions as well as with differences between self-determined (*selbstbestimmt*) and self-directed (*selbstgesteuert*) forms of learning. In other words, open education always aims at opening up new horizons and encountering new limitations from now on.

Generally speaking, openness in education can be regarded as an operative fiction and also as an "educationalization formula" (*Pädagogisierungsformel*) (cf. Veith 2003, pp. 183-201) that has been and can be interpreted in many ways. Veith (2003) provides a useful historical overview of reproduction problems and educationalization formulas. Although it has been developed for issues of education in the German-speaking area, it can be helpful to focus on guiding differences and formulas of relevance for education both in history and today in a wider sense, too. He analyses tensions between normative aspects of legitimation and educational discourses regarding conceptual clarifications of the core areas and responsibilities of the discipline, and the increasingly multifaceted societal demands of providing various kinds of education.

However, his approach can be further differentiated in a number of ways, for example, with regard to educational formulas in different countries and world regions, transnational and global contexts of education, and not least recent OE developments and contemporary claims for open education, opening up education, and openness in education. Although 'openness' suggests a static understanding of the concepts, in large parts of respective discourses processes and dynamics are being emphasized rather than results.

Today, we are facing contrasting and competing relevance formulas for education rather than *one* formula, among them all kinds of *competencies* and *literacies* up to the "literacification of everything" (Hug 2012, p. 118), *dealing with complexities, inclusion*, and *openness* as a sufficiently shimmering concept that is applicable in multiple ways in pedagogical, academic, political, medial, and economic discourses. Openness in education includes patterns of thinking and speaking of education as upbringing, learning to learn, training, output, or relation. Needless to say that these and similar thinking patterns imply various options for conceptualizations. If we take education, for example, as relation and not as output¹ we can describe various qualities of educational relations and also a number of basic understandings of 'relation' or 'relational'. From a meta-theoretical perspective, the term 'relational' can be used in everyday language in the sense of both 'connected' or 'bonded' or associated domains of reference like kinship. It can be used in more specific or theoretically informed ways by referring, for example, to

- conventional Venn-diagrams,
- relational realism in relational sociology (*sensu* Charles Tilly and Pierpaolo Donati),
- ecological systems theory or human ecology theory (*sensu* Urie Bronfenbrenner) complementing the meta-model with respect to exo-

and chrono-levels,

- actors who are relationally positioned within a field (*sensu* Pierre Bourdieu) and the modes in which respective positions are determining his or her situated viewpoint of activities in and towards certain fields,
- the notational distinction between monadic versus relational predicates (*sensu* Charles S. Peirce),
- relational logics of development (Richter 2014) as a methodological basis for clarifications of the concept of transformatory education (*transformatorischer Bildungsbegriff*)
- theory of radical relationism as outlined by Peter Krieg (2005, p. 137-163).

These and other notions of 'relational' offer points of references for relationoriented conceptualizations of education and for corresponding understandings of openness in education. Accordingly, openness as educationalization formula can take many forms ranging from ideological claims to moral imperatives, and context-related norms. All of them are to be distinguished from more or less differentiated descriptions and analyses of OE practices, initiatives and conceptualizations of openness.

OER and the Case of MOOCs: Reflections and Critical Considerations

Openness can also be characterized as a meta-principle that has been relevant in many ways for educational and academic practices throughout history. In their book on The Virtues of Openness, Peters and Roberts (2012) address "the social processes and policies that foster openness as an overriding educational and scientific value, evidenced in the growth of open source, open access, open education, and their convergences that characterize global knowledge communities" (Peters and Roberts 2012, p. 4). On the one hand, many hold up values of openness as an overriding value or a meta-principle especially in academic cultures. On the other hand, we are facing new tectonics in academic landscapes in view of progressing commercialization, intensified managerialism, disruptive technological developments and institutional diseases like "Evaluitis", as well as processes of globalization, digitization and medialization.

Claims of openness have become increasingly important in academic discourses and especially in economic and political debates about organizational structures, governance and scientific development, and to lesser extent about understanding information, communication, and knowledge dynamics in transversal media systems. The spectrum ranges from philosophical works (cf. Peters and Roberts 2012) to initiatives on a policy-strategic level including initial UNESCO activities (cf. UNESCO 2002) or, for example, initiatives of the European Commision like the "OpenEducationEuropa"². Hylén et al. (2012) provide an overview about OER activities in the scope of the *Organisation for Economic Co-operation and Development* (OECD).

As to MOOCs we can find a variety of different types today, among them bMOOCs (blended MOOCs), cMOOCs (connectivist MOOCs), mMOOCS (meta, mobile or mini MOOCs), qMOOCs (qualifications MOOCs), tMOOCs (transfer

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MOOCs), vMOOCs (vocational or Vishnu MOOCs) and xMOOCs (extended MOOCs). Hypes and more quiet practices of "going aMOOC" can take many forms ranging from rather non-massive open online courses ("OOCs") with less than 30 participants to extraordinarily numbers which can go beyond 150,000 students registering for a single MOOC. In detail, further distinctions can be drawn along business models, licensing models, forms of dealing with content, tasks and networking, relations of individuals and groups, roles of students, teachers and tutors, understandings of learning and pedagogy, gender differences, and other distinguishing characteristics. In their review of literature on MOOCs published from 2008-2012, Liyanagunawardena et al. (2013) come to the conclusion that "[m]any articles published to date have discussed empirical evidence from case studies, the influence on higher education structure, or educational theory relating to MOOCs" and that there are "further interesting research avenues such as cultural tensions within courses and the ethical aspects of using data generated by MOOC participants still to be explored" (ibd.). In another systematic review the authors state in a sobered manner:

"A rich, original idea that started strongly, with high expectations based on the innovative potential of openness, has, over the years, gradually becoming a mechanical formula with little genuine creativity but more focused on reaching global audiences rather than delivery through traditional academic institutions." (Chiappe-Laverde et al. 2015, p. 14)

On the whole, skeptical assessments clearly predominate in analytic, reflective or evaluative literature. There are also critical voices from within. For example, in an interview with Chris Parr (2013), Stephen Downes argues:

"Moocs as they were originally conceived...were the locus of learning activities and interaction, but as deployed by commercial providers they resemble television shows or digital textbooks with - at best - an online quiz component." (Downes in Parr, 2013)

There are also voices claiming "that Open Education provides a road to deeply modernize education to the challenges of tomorrow, to support complex skills and to adapt education better to the demands of a knowledge society" (Meiszner & Squires 2013, p. 17). However, addressing MOOCs and uses of OER in terms of empowerment of students and faculty, better learning outcomes, or making use of course material anytime, at one's own pace and anywhere generally remains problematic. This can easily be illustrated with reference to critical issues and paradoxical aspects.

A critical scrutiny of the literature suggests that terms like «openness» and «freedom» are under-theorized (cf. Knox, 2013), and pay little respect to well established philosophical and historical evidence of its vagueness and implicit political agendas (cf. Hug 2014), as well as its hidden assumptions about self-motivation and expectations on media technologies (cf. Missomelius, 2014). Facing these MOOCs one also can detect a number of paradoxes and ambivalences regarding claims of freedom and exclusive demands for stable and advanced technologies, providing opportunities that attract the well informed and already privileged users while weakening the financial foundation for public education. A different kind of paradoxes relate to how ideology states "sharing

practices" and still promotes "branding" and marketing of prestigious institutions with rigorous copyright policies. Technologies are, similarly, most often proprietary and its proponents avoid Free/Libre Open Source Software, and – last the discrepancy between the huge exposure to learning analytics and big data analysis, while, in theory, advocating data privacy and autonomy.

Ignoring such paradoxes and ambivalences will not lead to improvements of the quality of education. As far as MOOCs and OER can be characterized as modes of *opening up educational opportunities* and disengaging them from institutional ties, the public-private nexus has to be (re-)considered explicitly in view of developments of new institutional features and widespread forms of the incorporation of profit-oriented structures especially in higher education.

Perspectives for Higher Education – All Open?

At times, it is stated that openness and knowledge sharing have always been at the heart of higher education and academic knowledge cultures. Then again, there are initiatives like the "science shop" (*Wetenschapswinkel, Wissenschaftsladen*) at least since the 1970s and more recently initiatives like the *Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities* (2003) which remind us of the unequal distribution of scientific knowledge as well as its benefits and risks, social accountability (*Sozialpflichtigkeit*) of academic knowledge, and fair access to resources and results of academic knowledge production generally. Today, open access initiatives are widespread and important but often fall short in terms of conceptual, social, and organizational aspects – at the same time ignoring former lessons learned in the context of opening up systems of scientific knowledge production (cf. for example, Leydesdorff & Besselaar, 1987).

Indeed, even connections to traditional distinctions like *doxa, epistêmê, technê, phronêsis, gnosis,* or *sophia* (cf. Glasersfeld 1997, p. 198) remain implicit or even forgotten all too often. Although in the field of theory of knowledge, there are research activities going on regarding implicit dimensions³ their relevance remains widely undervalued in contexts of higher education.

These understandings and other distinctions regarding the assumed location of knowledge, for example, in minds or heads, bodies, objects to be treated, societies, social structures or networks, in the "cloud" or Vanishing into Things (Allen 2015), are of significant importance for concrete meanings of openness in higher education and strategies of opening up academic knowledge. Distinguishing degrees of openness along the lines of access and availability, accreditation and forms of licensing, dimensions of information technology or computational thinking, and corresponding pedagogical framings and scopes for action are too narrowly considered. Beyond that, concepts and practices of opening up are always relevant in terms of knowledge cultures and knowledge politics as well as medial constellations and understandings of education, too. Besides, there is the ongoing struggle for clarification of various forms of knowledge – like experience-oriented everyday knowledge, common sense forms of knowing as well as knowing in arts and academic contexts, scientific knowledge or mythical knowledge -, not to forget about efforts to point out respective conceptual distinctions, transitions, and similarities.

In view of these complexities in flux, taking 'openness' as an absolute value or a value in itself appears to be problematic. Unintended side-effects are rather likely if claims for openness are too simply conceived and if corresponding educational practices build upon such claims. Opening up academic knowledge cultures without considering some strands of the complex interplay of understandings, organizational dynamics and practices at least in part could resemble a blind flight in foggy sky or end up in openness towards everything.⁴ Moreover, we should always be aware of socio-cultural and media dynamics of *opening* and *closure* (cf. Rußmann et al., 2012, Dobusch, 2017) as well as dynamics of co-evolution of media and culture, knowledge and space, and "knowledge scapes" (Matthiessen, 2007) as related to knowledge milieus. With this in mind, I want to highlight three aspects which appear to be undervalued in current debates about openness in higher education.

(1) From an *organizational perspective* there are issues of openness towards structural changes. *Universitas est semper reformanda* – throughout history, we find an ongoing transformation of academic cultures and scientific systems including outsourcing of technical universities in the 19th century, non-university research, and the invention of universities of applied sciences. Today, media are often described as means of empowerment, participation and digital inclusion while being used as instruments of "Wikiwashing" (Fuster Morell 2011), non-transparent data collection, surveillance, governance and control. Whitchurch (2008) – following Homi Bhaba's cultural concept of an "intermediary space" – uses the term 'Third Space' with reference to new roles between administration (in a narrow sense) and academic research and teaching. Corresponding activities are related to fields like quality management, controlling of educational "outputs", innovation management, e-learning "implementation" units, public relations offices, research management, library services, staff development, etc.

These fields have been established and continuously expanded in many universities all over the world, whereas many research departments and academic units have been struggling with substantial cutbacks. While Zellweger Moser and Bachmann (2010) are describing this development in uncritical ways, Baecker (2010) pleads in favor of balancing dynamics of research, teaching and administration. However assignment of responsibilities and competencies is being done, for example, in the context of innovation management within universities, mostly the respective activities show characteristics of re-acting or re-structuring and hardly characteristics of redesigning, re-framing, or-generating according to possible modes of coping with change (cf. Peschl & Fundneider 2008). It must remain an open question at this point, how and to what extent the ongoing activities in academic "Third Spaces" are complicating, obstructing, supporting or opening up perspectives for which areas of academic research and higher education.

(2) As far as *methodological perspectives* are concerned, wide parts of academic research are dealing with standardized methodologies. Especially in empirical research, communicative stabilization of research topics, objects and methods is crucial in order to enable traceability, validity, reliability, replicability, transparency, reflection of limitations and well reasoned arguments concerning

appropriate relations of selected subjects or objects, questions, and methods. But also in theoretical or philosophical research, quality criteria like understandability, coherent approach, value-added contribution, convincing argumentation, confirmability, critical engagement with sources or methodological reflection play an important role. However, without unbiased and open-result discussions, open-mindedness of participants, deep listening to critique, risky considerations, seriously getting involved with uncertainty, selective rule violations and courageous forms of re-framing hardly any new thoughts, theories and methods would enter academia.

Openness towards innovative solutions and research-based learning and education in a globalized world require not only multi-perspective views, well-reasoned applications of methods and thoughtful thinking but also abilities to become sensitive towards styles, languages and cultures of knowledge and science (cf. Thiel & Rost 2001, Hess 2012) and to call into question basic assumptions. In contrast to prevalent versions of *monological research*, and in contrast to much less common versions of *dialogical research*, options for *polylogical research* have been widely ignored so far. Polylogical research as outlined by Wimmer (2001) allows for extensive reciprocal influences of various positions and promotes situations in which *all* basic concepts, assumptions, starting points and methods are debatable (cf. Wimmer, 2001).

(3) As to *critical perspectives* openness towards critical thinking is widely recognized as an indispensable prerequisite to foster good scientific practice. Even though today often other forms of thinking – such as design thinking, computational thinking, complexity thinking, or emotional thinking – are being emphasized, critical thinking remains a general requirement in the sense of both a teaching and researching principle and a remedy against opportunistic or dogmatic thinking. On closer examination, it quickly becomes clear that there are varying preferences for this cross sectional subject among them logical reasoning as well as skeptical, multi-perspective, science-oriented, independent, systematic, methodical, critical of society, networked, systemic, self-reflective, and meta-cognitive thinking. By and large, on a paradigmatic level we can distinguish between four approaches:

- neo-Marxist philosophy, critical theory, criticism of ideologies
- phenomenological critique
- praxis-oriented and activist movements
- postmodern, post-structuralist and post-colonial thinking.

If we take conceptual, discursive and performative aspects of critical activities into consideration we frequently are facing parad*o*gmatic tendencies or paradoxical aspects, too. For example, it is sometimes the case that those who like to express themselves as particularly "critical", "transparent" and "democratically oriented" are concerned with the covert enforcement of antidemocratic interests. Dynamics of opening and closure play an important role in the context of critical thinking, too, not least in the sense of problematic turning-points or tilt-effects when, for example,

- criticism of ideology is turning into an ideological endeavor
- critique of culture industry comes as part of arts and entertainment industry

- re-governementalization takes place in the name of de-governmentalization
- postmodern easiness is tipping in a cynical smile, laugh, or laughter
- post-colonial activities are changing to a colonialist undertaking.

While critical thinking may end up in the prohibition of criticism of the other, a deeper understanding of open mindedness and openness in higher education aims at overcoming and avoiding pitfalls of arbitrary positings (*Setzungen*) and epistemological foundationalism based on, for example, empiricism, rationalism or transcendentalism. From a meta-theoretical perspective it is important to be aware of epistemological and methodological research contexts as well as researcher-generated contexts, too. A non-foundationalist 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, 182 ff).

Against this background, openness in education means being in search of ways between Scylla of epistemological foundationalism and Charybdis of arbitrary positings (*Setzungen*). Thus, openness as related to critique and critical thinking means opening up towards reflective forms of meta-critique (Latour 2004; Hoy 2004). This claim for meta-critical, polylogical and context-sensitive perspectives should not be mixed up with a claim for 'anything goes':

"openness to possibilities is not the same as saying 'anything goes' because possibilities are always limited and situated. Furthermore, openness is the opposite of saying 'nothing matters' because possibilities are considered open only insofar as they are found to be worth pursuing." (Hoy 2004, p. 232)

Conclusions

This essay has discussed different understandings of openness in educational contexts and their relevance for openness towards academic knowledge cultures and different forms of knowledge. It was shown that superficial understandings of 'openness' and 'education' in widespread discourses and practices related to OE, OER and MOOCs are problematic, in particular if more effort is put into marketing of learning opportunities, doubtful learning analytics, and politics of simplistic concepts than into clarification of concepts and methodologies, solid normative reasoning, and context-sensitive argumentation. Perspectives for openness in higher education turn out to be dead ends if they are based on confusions of learning, training and education, and everyday theories of pedagogical concepts, instable platforms, and priorities of fast-paced economization. Fruitful and future-oriented perspectives for openness in higher education through participation in academic research as well as theoretical and methodological deliberation.

Furthermore, this study has found that generally organizational, methodological, and critical aspects are underestimated in OE and OER contexts. As to organizational perspectives, structural changes in the sense of excessive strengthening of activities in academic "Third Spaces" prove to be ambivalent. Far more importantly, dynamics of openness and closure are related to the ongoing reorganization of academic tribes, territories and disciplines beyond epistemological essentialism (cf. Trowler et al., 2012; Müller ,2014), too. This is about nothing less than considering both *The Structure of Scientific Revolutions* (Kuhn, 1962) and the *Revolution of Scientific Structures* (Müller, 2016), and re-thinking critical thinking with an emphasis on meta-critical, polylogical and context-sensitive perspectives.

In other words: If we take seriously that all knowledge is contextually bound, then context-sensitive concepts and practices open to the future are vital. If we frame OE and OER in contexts of medialization and digitization, interdependencies between human agency and the ongoing work of algorithms are to be considered explicitly. If we consider higher education as both a public and a private good for many and not just for elites, polylogical approaches are needed in order to enable critical mediation between individual and cultural memories as well as bet-ween contemporary societal challenges and "pure" research meant to be purpose-free.

References

- Allen, B. (2015). Vanishing into Things. Knowledge in Chinese Tradition. Cambridge: Harvard University Press.
- Baecker, D. (2010). Forschung, Lehre, Verwaltung. In Unbedingte Universitäten (Eds.), Was passiert? Stellungnahmen zur Lage der Universität (pp. 311-332). Berlin: diaphanes.
- Cebrián-de-la-Serna, M. & Desenne, P. (Eds.) (2015). MOOCs (Massive Open Online Courses): Communicative Interactivity and Multimedia. MOOCs (Cursos masivos abiertos en línea): Interactividad comunicativa y multimedias. *Comunicar*, 44(XXII). Retrieved July 12, 2016 from http://www.revistacomunicar.com/pdf/comunicar44-en.pdf
- Chiappe-Laverde, A., Hine, N. & Martínez-Silva, J. (2015): Literature and Practice: A Critical Review of MOOCs. *Communicar*, *XXII(44)*. Retrieved July 12, 2016 from http://dx.doi.org/10.3916/C44-2015-01.
- Deimann, M. (2014). Open Education als partizipative Medienkultur? Eine bildungstheoretische Rahmung. In R. Biermann, J. Fromme & D. Verständig, (Eds.), Partizipative Medienkulturen. Positionen und Untersuchungen zu veränderten Formen öffentlicher Teilhabe (pp. 185-206). Wiesbaden: Springer VS.
- Deimann, M. & Peters, M. A. (Eds.) (2016). *The Philosophy and Theory of Open Learning: Peer Learning and the Intellectual Commons.* New York: Peter Lang.
- Dobusch, L. (2017). *Die Organisation der Digitalität: Zwischen grenzenloser Offenheit und offener Exklusion.* Manuscript of the inaugural lecture of January 24, 2017 at the University of Innsbruck. Retrieved March 12, 2017 from <u>https://netzpolitik.org/2017/die-organisation-der-digitalitaet-zwischen-</u> <u>grenzenloser-offenheit-und-offener-exklusion/</u>

- Fuster Morell, M. (2011), The Unethics of Sharing: Wikiwashing. *International Review* of Information Ethics, 15. Retrieved February 12, 2017 from <u>http://www.i-r-i-</u> <u>e.net/inhalt/015/015-Morell.pdf</u>
- Hess, D. J. (2012). Kulturen der Wissenschaft. In Maasen, S., Kaiser, M., Reinhart, M. & Sutter, B. (Eds.), *Handbuch Wissenschaftssoziologie* (pp. 177-189). Wiesbaden: VS.
- Heyting, F. (2001). Antifoundationalist Foundational Research: Analysing Discourse on Children's Rights to Decide. In F. G. Heyting, D. Lenzen & J. White (Eds.), *Methods in the Philosophy of Education* (pp. 108-124). London: Routledge.
- Hoy, D. C. (2004). *Critical Resistance. From Poststructuralism to Post-Critique*. Cambridge/MA, London: The MIT Press
- Hug, T. (2012). Media Competence and Visual Literacy Towards Considerations Beyond Literacies. *Periodica Polytechnica: Social and Management Sciences*, 20/2, 1-11. Retrieved February 12, 2017 from <u>https://pp.bme.hu/so/article/viewFile/1574/892</u>
- Hug, T. (2014). Education for All Revisited: On Concepts of Sharing in the Open Educational Resources (OER) Movement. Seminar.net – International journal of media, technology and lifelong learning, 10(1), pp. 10-32.
- Hug, T. (2016). Defining Openness in Education. In M. A. Peters (Ed.): Encyclopedia of Educational Philosophy and Theory (1-7). Singapore: Springer Science + Business Media. doi:10.1007/978-981-287-532-7_214-1
- Hylén, J., van Damme, D., Mulder, F. & D'Antoni, S. (2012). Open Educational Resources: Analysis of Responses to the OECD Country Questionnaire (OECD Education Working Papers, No. 76). Retrieved February 12, 2017. doi:10.1787/19939019
- Knox, J. (2013). Five critiques of the open educational resources movement. *Teaching in Higher Education*, 18(8), 1–12. Retrieved February 12, 2017. doi:10.1080/13562517.2013.774354
- Krieg, P. (2005). Die paranoide Maschine Computer zwischen Wahn und Sinn. Heidelberg: Heise - dpunkt.verlag.
- Kuhn, T. S. (1976): Die Struktur wissenschaftlicher Revolutionen. Frankfurt am Main: Suhrkamp (engl. Org.: The Structure of Scientific Revolutions. Chicago: University of Chicago Press, 1962).
- Lane, A. (2009). The impact of openness on bridging educational digital divides. *International Review of Research in Open and Distance Learning*, *10(5)*, 1–12. Retrieved July 12, 2016 from <u>http://files.eric.ed.gov/fulltext/EJ869420.pdf</u>
- Latour, B. (2004). Why has Critique Run out of Steam? From Matters of Fact to Matters of Concern. *Critical Inquiry, 30(2),* 225-248. Retrieved February 12, 2017 from http://www.jstor.org/stable/10.1086/421123
- Leydesdorff, L. & van den Besselaar, P. (1987). What we have learned from the Amsterdam science shop. In S. Blume, J. Bunders, L. Leydesdorff & R. Whitley (Eds.), The Social Direction of the Public Sciences. *Sociology of the Sciences Yearbook*, Vol. XI (pp. 135-160). Dordrecht: D. Reidel Publishing Company. Retrieved February 12, 2017 from http://www.leydesdorff.net/scishop/yearbook.htm
- Liyanagunawardena, T. R., Adams, A. A. & Williams, S. A. (2013). MOOCs: A Systematic Study of the Published Literature 2008-2012. *The International Review of Research in Open and Distributed Learning (IRRODL)*, 14(3). Retrieved May 9, 2017 from http://www.irrodl.org/index.php/irrodl/article/view/1455/2531

- Matthiessen, U. (2007). Wissensmilieus und KnowledgeScapes. In R. Schützeichel (Ed.), Handbuch Wissenssoziologie und Wissensforschung (pp. 679-693). Konstanz: UVK.
- Max-Planck-Gesellschaft (2003). Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities. Retrieved March 12, 2017 from https://openaccess.mpg.de/Berlin-Declaration
- Meiszner, A. & Squires, L. (Eds.) (2013). *Openness and education. Advances in digital education and lifelong learning* (Vol. 1). Cambridge, MA: Emerald. Retrieved February 12, 2017 from <u>http://www.elig.org/fileadmin/user_upload/files/we-share/agm/ELIG_book.pdf</u>
- Missomelius, P. (2014). Bildungserwartungen und Medienkulturen. In P. Missomelius, W. Sützl, T. Hug, P. Grell & R. Kammerl, (Eds.), Medien – Wissen – Bildung: Freie Bildungsmedien und Digitale Archive (engl. Media, knowledge & education: Open educational resources and digital archives) (pp. 73–86). Innsbruck: iup.
- Missomelius, P. & Hug, T. (2016). Opening up Education: Opportunities, Obstacles and Future Perspectives. In M. Deimann & M. A. Peters (Eds.), *The Philosophy and Theory of Open Learning: Peer Learning and the Intellectual Commons* (pp. 31-50). New York: Peter Lang.
- Müller, A. (2014). Die "Stämme" der Akademie. Österreichische Zeitschrift für Geschichtswissenschaften. 25(3), 5-15. Retrieved May 9, 2017 from https://www.univie.ac.at/oezg/OeZG143.htm
- Müller, K. H. (2016). *Second-Order Science. The Revolution of Scientific Structures.* Wien: edition echoraum.
- Neuweg, G. H. (2001). Könnerschaft und implizites Wissen. Zur lehr-lerntheoretischen Bedeutung der Erkenntnis- und Wissenstheorie Michael Polanyis. 2nd ed., Münster, New York: Waxmann.
- Nyberg, D. A. (Ed.) (2010). *The Philosophy of Open Education* (International library of the philosophy of education). London; Boston: Routledge & K. Paul (first published 1975).
- Nyquist, E. B. & Hawes, G. R. (Eds.) (1972). *Open Education: A Sourcebook for Parents and Teachers.* New York: Bantam.
- Parr, C. (2013): *Mooc creators criticise courses' lack of creativity*. Original vision lost in scramble for profit and repackaging of old ideas, say pair. Interviews by Chris Parr with Stephen Downes, George Siemens, Dave Cormier and Bryan Alexander, October 17, 2013. Retrieved July 12, 2016 from <u>https://www.timeshighereducation.co.uk/news/mooc-creators-criticise-courses-lack-of-creativity/2008180.article</u>
- Peschl, M. F. & Fundneider, T. (2008). Emergent Innovation and Sustainable Knowledge Co-creation. A Socio-Epistemological Approach to "Innovation from within," In M. D. Lytras, J. M. Caroll, E. Damiani et al. (Eds.), *The Open Knowledge Society:* A Computer Science and Information Systems Manifesto (pp. 101–108). New York, Berlin, Heidelberg: Springer.
- Peters, M. A. (2010). The Idea of Openness. In M. Peters, T. Besley, A. Gibbons, B. Žarnić
 & P. Ghiraldelli (Eds.), *The Encyclopaedia of Educational Philosophy and Theory*. Singapore: Springer. Retrieved September 24, 2013 from http://www.ffst.hr/ENCYCLOPAEDIA/doku.php?id=the_idea_of_openness
- Peters, M. A. & Roberts, P. (2012). *The Virtues of Openness: Education, science and scholarship in the digital age.* Boulder and London: Paradigm.

Polányi, M. (1966). The tacit dimension. Garden City, N.Y.: Doubleday.

- Richter, B. (2014). Bildung relational denken. Eine strukturtheoretische Präzisierung des transformatorischen Bildungsbegriffs anhand von Robert Kegans Entwicklungstheorie. Doctoral thesis at the Humboldt-University of Berlin.
- Rußmann, U., Beinsteiner, A., Ortner, H. & Hug, T. (Eds.) (2012). *Grenzenlose Enthüllungen? Medien zwischen Öffnung und Schließung*. Innsbruck: iup.
- Ryle, G. (1946). Knowing How and Knowing That. *Proceedings of the Aristotelian Society.* 46(1), 1-16. Retrieved February 19, 2017 from <u>http://www.informationphilosopher.com/solutions/philosophers/ryle/Ryle K</u> <u>nowHow.pdf</u>
- Thiel, F. & Rost, F. (2001).Wissenschaftssprache und Wissenschaftsstil. In T. Hug (Ed.), Wie kommt Wissenschaft zu Wissen? Vol. 4: Einführung in die Wissenschaftstheorie und Wissenschaftsforschung (pp. 117-134). Baltmannsweiler: Schneider Verlag.
- Trowler, P., Saunders, M. & Bamber, V. (Eds) (2012). *Tribes and Territories in Higher Education: Practices in the 21st Century*. London: Routledge.
- UNESCO (2002). Forum on the impact of open courseware for higher education in developing countries: Final report. Paris, France. Retrieved February 19, 2017 from http://unesdoc.unesco.org/images/0012/001285/128515e.pdf
- van Goor, R., Heyting, F. G. & Vreeke, G. J. (2004). Beyond Foundations: Signs of a New Normativity in Philosophy of Education. *Educational Theory*, *54*(*2*), 173–192.
- von Glasersfeld, E. (1997). Wege des Wissens. Konstruktivistische Erkundungen durch unser Denken. Heidelberg: Carl Auer Systeme.
- Whitchurch, C. (2008). Shifting Identities and Blurring Boundaries: the Emergence of Third Space Professionals in UK Higher Education. *Higher Education Quarterly*, 62(4), 377–396.
- Wimmer, F. M. (2001). Polylogische Forschung. In: T. Hug (Ed.), Wie kommt Wissenschaft zu Wissen? Vol. 3: Einführung in die Methodologie der Sozial- und Kulturwissenschaften (pp. 382-393). Baltmannsweiler: Schneider Verlag Hohengehren.
- Yuan, L., MacNeill, S. & Kraan, W. (2008). Open educational resources—Opportunities and challenges for higher education. Bolton, UK: Centre for Educational Technology & Interoperability Standards (JISC–CETIS). Retrieved May 9, 2017 from <u>https://oerknowledgecloud.org/sites/oerknowledgecloud.org/files/ OER Briefing Paper.pdf</u>
- Zellweger Moser, F. & Bachmann, G. (2010). Editorial: Zwischen Administration und Akademie - Neue Rollen in der Hochschullehre. *Zeitschrift für Hochschulentwicklung*, *5(4)*, 1-8. Retrieved February 19, 2017 from <u>https://doi.org/10.3217/zfhe-5-04/01</u>

Short CV

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¹ Cf. the conference theme "Education is relation not output? - Scenes of knowledge and knowledge aquisition" at Linnaeus University in Växjö, Sweden, May 17th-19th 2016, <u>https://lnu.se/en/meet-linnaeus-university/current/events/2016/education-is-relation-not-output/.</u> ² Cf. <u>https://www.openeducationeuropa.eu</u>/.

³ Since earlier notions of "knowing how" (Ryle 1946) on "tacit knowledge" (Polányi 1966), a variety of different dimensions has been considered, among them inaccessible memories, being unaware, not-knowing or unknowingly, unconscious dynamics, "untaught knowledge" (Neuweg 2001), impossible-to-articulate knowledge, discreetness, reticence, and various relations to explicit dimensions.

 4 This calls to mind a slogan of the Sponti-scene of the late 60 ies – "who is open to everything belongs to a closed facility". In German: "Wer für alles offen ist, kann nicht ganz dicht sein!" translation by Aloisia Moser.