



Educational Expectations and Media Cultures

Petra Missomelius¹

Leopold-Franzens-Universität
Institut für Psychosoziale Intervention und Kommunikationsforschung
University of Innsbruck, Austria
E-mail: petra.missomelius@uibk.ac.at

Abstract

This article investigates the media-supported educational resources that are currently under discussion, such as OERs and MOOCs. Considering the discursive connection between these formats, which is couched in terms of educational freedom and openness, the article's thesis is that these are expectations which are placed on the media technologies themselves, and then transferred to learning scenarios. To this end, the article will pursue such questions as: What are the learners, learning materials and learning scenarios allegedly free from or free for? What obstructive configurations should be omitted? To what extent are these characteristics which are of a nature to guarantee learning processes in the context of lifelong learning or can these characteristics better be attributed to the media technologies themselves and the ways in which they are used? What advantages or new accentuations are promised by proponents of the education supplied by media technology? Which discourses provide sustenance for such implied "post-typographic educational ideals" (Giesecke 2001 and Lemke 1998)? The importance to learners, teachers and decision-makers at educational institutions of being well informed as far as media is concerned is becoming increasingly apparent.

Keywords: media technology, expectations, learning, freedom, education, knowledge, participation, MOOC, industry, OER, media studies.

Introductory Remarks

In times marked by general complaint about deficiencies in the educational system and lamentations over insufficient qualifications, while at the same time public education is being decried as uneconomical it only makes sense to look for satisfactory forms of learning. This is not merely a question of human capital, but of nothing less than up-to-date education in today's media culture. As would seem only natural, discourses also affect alternatives through the use of media technologies in educational scenarios. In what follows, I will argue that there is a tendency here to resort all too quickly to monocausal conclusions and to assume that the latest technologies also bring about desirable processes of social change.

In the present article I will also question the development processes of media technology and the changing educational scenarios in terms of their implicit

expectations. I argue that these expectations are also reflected in the assessment of online learning groups: they have a pronounced influence on the way these groups are evaluated. It is important to be aware of these implicit expectations, since they are essential conditions which determine the success or failure of these educational scenarios.

Media Technologies and Expectations

The proposition that expectations are a case of recurring patterns in the further development of media technologies is supported by the following three authors: Hartmut Winkler, in his outline of the history of digitization “Docuverse: Zur Medientheorie der Computer” (“Docuverse: on the media theory of computers”) (Winkler 1997), describes the altered social needs which cannot be satisfactorily fulfilled by traditional media and which seem to be more promisingly served by new media. One could say that the deficits in the “old” media created a vacant space for the new media. Winkler suspects that the change of media was expedited almost automatically owing solely to a recurring dissatisfaction with what has already been achieved or developed. According to Winkler, a change of media always arises in connection with the wishes and desires of the recipients. And technical innovations, he claims, are attempts to fulfil these.

In his 2010 study “Technik als Erwartung” (“Technology as Expectation”), Andreas Kaminski presented an approach to the philosophy of technology in which he understands technical development projects and interactions with technologies as forms of expectation.

Along with Kaminski’s category of expectation and Winkler’s structures of needs, Klaus Krippendorff, in “The Semantic Turn” (2006), addresses the question of the meaning which users associate with design artefacts, whether these be objects, services or technologies. According to Krippendorff, the fate of artefacts is decided in the narrative discourses which accompany their emergence and use. Studying the respective narratives and myths serves to promote these attributive meanings.

Myths on the Origin of the Internet

It hardly came as a surprise to media theorists that the Internet triggered a sweeping revolution, for basic changes in media culture which accompany the establishment of new media technologies are also part of both the enthusiasm and the fear that accompany the introduction of new technologies to society. They are the concomitant effects of every change in media, eliciting both euphoric and sceptical reactions.

In the context under consideration here – that of educational scenarios related to media culture – the expectations of Internet enthusiasts are especially interesting. To this end, I would therefore like to go back to the earliest days of computers. In 1945, Vannevar Bush announced the basic idea of the Memex System in his essay “As We May Think”. The novelty of this idea was to link the contents of several documents by association. Users of this system, Bush maintained, could insert their own ideas into existing texts. Searching for relevant texts in this system was connected to writing and understood as an active process.

Bush’s basic idea of the Memex system was taken up twenty years later by Ted Nelson in the Xanadu project. Xanadu is the idea of a “legendary place”, here signifying the vision of joining documents through hypertext, a kind of text database, that is, the universal network he called the Docuverse (which pro-

vided the name for Hartmut Winkler's publication). Xanadu also resorted to metaphors when taking its orientation from the functioning of the human brain and being based on the model of the “fluidity of thought” (Nelson 1992, p. 13). At the same time, Xanadu was supposed to be available to a large number of users, all of whom could move freely in various directions. For instance, users could readily access texts they were looking for, edit existing texts at any time and retrieve all texts previously edited by other users in the Docuverse. This is how Nelson describes hypertext, highlighting user involvement and already thinking of the computer.

Common to both development projects is their claim to have found solutions to a problem which had already emerged at that time. They are attempts to manage the flood of information technically, to deal with its complexity and uncertainty, for the body of knowledge and scientific specializations proved to be too great a burden to human capacities.

These expectations, which are inherent in the myths of the origin of the Internet, account for the suggestion that digital media technologies are suited to educational scenarios. Moreover, they continue to have an effect on the discourse concerning these scenarios. The book, for example, still represents the epitome of education, and forms the basis of the OER logo, in which multiple hands reach out from it in all directions.



The book as the epitome of education

Fig. 1: Global OER Logo CC-BY Jonathas Mello

Expectations of digital media technologies as educational media
Externalization of the human brain (imagery and metaphors)
Revolution (basic change in the world and in culture, potential democratization, promise of salvation)
Access to and availability of world knowledge (universal library)
Knowledge on demand

Fig. 2: Central expectations concerning educational media (based on theory analysis)

The Myth of Freedom of Media-Supported Educational Scenarios

Within the scope of the currently discussed forms of online learning, such as MOOCs (massive open online courses), OE (Open Education) and OER (open educational resources), a continuation of the narrative presenting technologies as paths to freedom can be detected, and this was already being imputed to the Internet at the time of its inception. As early as 1995, the sociologists Richard Barbrook and Andy Cameron were discussing the naïveté of the “Californian

ideology”, a conflation of West Coast Bohemia and high-tech business emanating from Silicon Valley. The normative openness of these learning scenarios under discussion today, at first presented with positive connotations, concerns the legal aspects of their use and their technical characteristics (cf. Foote 2005). This primarily refers on the one hand to the compatibility of various resources and systems; in this instance, the use of proprietary software or formats has an essentially restrictive effect which is basically opposed to the idea of sharing, and this is why the use of FLOSS (free/libre/open-source software) tends to be preferred. On the other hand, the openness of the licensing framework for educational resources, as in the guise of the “creative commons”, is also intended.

As far as the learners are concerned, they are on the one hand interested in freedom from (“negative freedom” in the philosophical sense), that is, freedom from the coercion and bureaucracies of (educational) institutions. Furthermore, many of the offerings are free of charge, so that we can also speak of the financial independence of OER actors beyond any ideally institutional and objective-ideological freedoms.

In his 1945 essay, Bush was already giving a positive twist to his perspective on the inadequacy of the human memory by calling it the “privilege of forgetting”. Hence he expresses the freedom of being permitted to forget (the freedom from being constrained to remember) as a positive (and freedom-related) aspect of the human condition. This aspect – which will not be pursued here – concerns human deficits and inadequacies which are not seen as reasons for attempts at technological compensation, but rather, in line with Bush’s reasoning, are simply to be left alone.

Although this phase does not involve external coercion, a knowledge of the necessity that learners have the freedom to do something is still evident. This “positive freedom” refers to designing one’s own paths throughout life – akin perhaps to personal fulfilment through self-empowerment and independence in learning. A closer look reveals not only freedom of choice, but also the obligation to choose. In this instance, recourse to an emphatic concept of individuality in the discourses on self-management, which these learning scenarios not only offer, but also demand, is noteworthy. “Freedom technology” is supposed to enable forms of living and self-determined lifestyles in which individuals trust to their own abilities, talents and aptitudes, allow themselves to be advised, taught and assessed, and accept as a matter of course normative educational requirements, such as lifelong learning, while regularly updating an individual e-portfolio. Characteristic of the post-industrial West, according to Klaus Krippendorff, is the narrative “of free access to information, of unlimited contact ... of the ability to make over the world, including one’s own identity”ⁱⁱ (Krippendorff 2013, p. 259). This also includes the contemporary narrative of choice (although all possible choices cannot be exhausted, their mere existence is positive). These mythological narratives channel people’s participation in a technologized culture. Klaus Krippendorff calls these mythologies the actual sources of impetus.

Education as Part of a DIY Culture

The publicist Anya Kamenetz refers to “edupunks” and “edupreneurs” in connection with do-it-yourself learning cultures in the area of higher education, as she calls the learner-centred educational configurations. Prominently displayed on the back cover of her 2010 book: “DIY U: Edupunks, edupreneurs, and the coming transformation of higher education” is the slogan “A revolution in higher learning: affordable, accessible, and learner-centered.”

Edupunks evade the formal education system by using free educational media, while as edupreneurs they construct educational media for themselves and others in entrepreneurial terms, thereby creating an institutional framework for these media. As suggested by the use of the term “punk”, these changes are to take place on an individual level by establishing alternative “distribution channels” for education. The implementation of these changes is intended to compensate for the deficits of the traditional public education system through individual initiative and, by means of technologically supported, self-determined learning management, lead to innovative thinking in the long run. The expectation here is to replace a deficient system through individual activities and the availability of technology in order to bring about transformation within education and to achieve educational goals. These new possibilities are supposed to guarantee an educational programme tailored to the needs of the individual. The characteristics expected of successful learners include (self-) motivation, the ability to focus, self-discipline and determination. However, there are no offers of support (for instance, of a psychological or didactic nature) accompanying the learning scenarios to enable learners to familiarize themselves with this kind of learning and overcome obstructive constellations in order to meet such expectations. These are the real tasks of teachers. Hence the actual processes of learning and motivation are primarily characterized by expectations, while apparently failing to go beyond the formulation of ideals. An instantly successful “just do it” attitude is taken for granted. Rather than a transformation of the educational system, the impression is that of the learners being transformed in a subjective learning process (cf. J1995).-These learners are now expected to do their duty in the name of self-empowerment, sovereignty and autonomy and assume sole responsibility for their own educational biography.

However, as Mackness, Mak and Williams state in their study, many learners, while using such scenarios, in actual fact do not want this freedom (and the concomitant self-responsibility). On the contrary, the freedom resulting from something so open is a source of irritation. Moreover, they expect a course structure:

“The research found that autonomy, diversity, openness and connectedness/interactivity are characteristics of a MOOC, but that they present paradoxes which are difficult to resolve in an online course. The more autonomous, diverse and open the course, and the more connected the learners, the more the potential for their learning to be limited by the lack of structure, support and moderation normally associated with an online course, and the more they seek to engage in traditional groups as opposed to an open network. These responses constrain the possibility of having the positive experiences of autonomy, diversity, openness and connectedness/interactivity normally expected of an online network.” (Mackness, Mak & Williams 2010, p. 266).

In the reality illustrated in the afore-mentioned study, autonomy is felt to be a lack of necessary support. The notion of openness is inconsistent, as well, for it can also mean avoiding networking and sharing. The fact that each learner has different skills influences online behaviour and therefore leads at best to education in self-contained groups. The authors of the study recommend teachers as moderators in order to limit disorientation and to detect undesirable behaviour that might be an obstacle to learning. They recommend (as do Cillier, 2005, and Snowden & Boone, 2007) not stipulating what should happen, but what should not happen.

Expectations placed on successful self-directed learners in MOOCs
Freedom from / to
Self-monitoring
Good awareness of one's own learning behaviour
Setting individual goals
Self-motivation and determination
Ability and willingness to take an active part in a community of sharing

Fig. 3: Central expectations concerning learners (based on theory analysis)

The requirements inherent in learning theoretical knowledge are relinquished entirely to the learners in the free educational media, while for learners, the attraction resides primarily in the emphasis on personal interest and freedom. The usually idealized networking aspect is perceived as a positive component of what is offered. Variety, connectivity and the possibilities of sharing knowledge are considered to be the advantages of educational networks. As part of the assessments of learning theory concerning the collaborative development of fields of knowledge, these forms of networking are guaranteed to have a high level of innovation when knowledge is freely shared: “The users are freely revealing their knowledge and, thus, work cooperatively.” (Larsen & Vincent-Lancrin 2005, p. 16)

Online Learning Communities as Cultures of Sharing

The theory of these learning scenarios is already treating such temporary communities as an end in themselves: in the network culture, interconnected networking is a good in and of itself. Users of these learning communities belong to a variety of social, cultural and ethnic groups, have diverse educational backgrounds, cultivate a variety of habits and pursue different educational goals. They correspond to the post-traditional communities diagnosed by the sociologist Ronald Hitzler (Hitzler 1998). Their most salient feature is their limitation to a temporary group of people who comprise a voluntary community united by a common interest. This is characterized by their arising “not qua tradition, but through individual participation for a time”ⁱⁱⁱⁱ (Hepp 2008, p. 135). These learning communities are an expression of a technical interconnectedness of users whose aim is personal benefit. In such cases, self-interest as the most compulsive form of usefulness remains as far from consideration in the theoretical perspectivation of idealized cultures of sharing as do competition and rivalry among the learners, which also characterize learning scenarios, ideally as an incentive. This is not insignificant, especially since some educational offers are linked directly to potential employers' labour recruitment by way of the evaluation of the Big Data they generate (Learning Analytics). Another important aspect which requires close examination is the phenomenon of social loafing, in which the willingness of some people to perform in a group is lower than when they learn in isolation – a problem which frequently plagues teamwork in general. These objections and misgivings are not intended to rule out the possibility that similarities can, in fact, be discovered and nurtured, thereby also making collaborative learning possible. In terms of learning theory, a peer-to-peer configuration is recommended, since this may result in educational results that are more sustainable than those achieved through individual efforts at learning. Certainly, participating in a group and

linking can create the possibility for a narrative 'We' to emerge, in the sense of "We-Learning" (Bersin 2009). However, this cannot be assured through networking alone. Unfortunately, the size of the learning community also entails an increase in noise and interference (cf. Mackness/Mak/Williams 2010). The lack of clarity concerning the manner and objectives of a MOOC, for instance, and the lack of moderation in its discussion forums, merely serve to intensify this effect. Trust is not only a fundamental prerequisite for knowledge processes (Gendolla & Schäfer 2004), but also for sharing (Hemetsberger 2012, p. 225). However, building trust takes time and demands a certain familiarity with one's fellow students. Endeavouring to establish trust is yet another challenge in dealing with OER, while at the same time limiting independence in terms of time. This is particularly evident when participants withdraw from MOOCs, that is, the more accessible such courses are in their conception, the more obstacles to sharing are created.

When in the context of these scenarios a multiplication of public spheres in the sense of a radical democratic principle is postulated and public space, as a space of publicity, is said to be extended to as many sectors and institutions of society as possible, then these represent mere expectations and wishes.

Klaus Krippendorff also speculates on the motivation to take part in the creation of something worthwhile (in this case education, whereas Krippendorff considers it to be the vision of a design activity in society as a whole). This, he claims, is self-motivating (!) and satisfying, and, in the process, one can attribute to these things a meaning of one's own and incorporate them into one's own life. Thus one constructs these things and oneself, both as an individual and as part of a social community (Krippendorff 2013, p. 106).

Economization Tendencies

The pedagogically unambitious xMOOCs, which are not at all open in the way noted above, present lecture videos of star scientists – preferably from U.S. elite universities – as well as multiple-choice tests, and have now generated an education industry which is trying out business models, such as charging graduates for their degree certificates or selling the Big Data thereby collected to potential employers. In terms of education policy, the chance to save money by outsourcing teaching jobs appears attractive to those institutions which formerly offered institutionalized education. Hence the many programmes promoting a trial of these models in German-speaking regions. The invitation to bid for ten *MOOC Production Fellowships* extended in 2013 by the *Stifterverband der deutschen Wissenschaft* (Association of Foundations for German Scholarship and Science) together with iversity, a commercial provider of education is a case in point. The discovery of the education sector as an area of society not yet entirely given over to capitalist exploitation could also put free and critical intelligence up for grabs. A view informed by media studies demonstrates that the development of economic models incorporating new media technologies in various walks of life is nothing new, either. By the same token, there are already a large number of more or less unsuccessful efforts at using media to teach educational content, such as educational television or radio (on this point, cf. also Lehmann 2013).

Economic Expectations from Media-Supported Education Scenarios

Savings in education (rationalization, only a few elite brick-and-mortar institutions)

Creation of an education industry (cf. for instance xMOOCs providers in the USA, such as Udacity, Coursera and edX)

Development of business models, such as revenues from certification charges and/or evaluation of Big Data

Attractive and hence successful offerings thanks to internationally renowned representatives of reputable educational institutions

Fig. 4: Central expectations concerning media in educational contexts (based on theory analysis)

The Education Industry as a Promise of Salvation? Summary and Prospects

Although xMOOCs are the only version of Massive Open Online Courses currently under discussion owing to their economic reach, the so-called cMOOCs, which have been developed and tested in Canada by George Siemens and Stephen Downes, are lagging behind. They refer back to Ivan Illich (e.g. see Siemen's blog <http://www.connectivism.ca/> and Downe's blog <http://learnonline.wordpress.com/>) and are characterized by a connectivist approach which, while it may not yet have achieved the status of a new theory of learning, nonetheless offers potential for a discussion of new forms of learning and didactic approaches, including those outside institutionalized education.

The interplay between societies affected by network media and changes in educational practice produces dynamic areas of tension which, moreover, do not react to one another simultaneously. Furthermore, media technologies are not only involved in processes of creating accessibility, but are also necessary for the production and teaching of bodies of knowledge. Thus a basic description of today's learning cultures is needed. As shown by the study carried out by Mackness, Mak and Williams, what appears to be important to a study of online learning communities is the fact that they cannot be evaluated in the same way as social network sites. Although understanding can be approximately coordinated, it can by no means be shared. At best, learning materials can be shared, but not learning and processes of understanding, nor knowledge itself. Furthermore, particular pedagogical attention must be paid to such phenomena as social loafing.

The visions of learning associated with new media-supported scenarios sound most inspiring and hark back to traditional ideals of education, such as "education for all" and historic traditions of sharing – a subject explored in depth by Theo Hug in his article (in this issue). However, merely building on the latest media technologies is not sufficient. There is still a long way to go before new forms of learning can seriously be realized – especially since there is no one best way, given the plethora of occasions for learning. From the perspective of media studies, it is indispensable to look more closely at the history of media if we are to evaluate omnipresent acceleration processes, define our relationship to such processes, and critically to question and reflect upon the basic conditions of changing education and educational institutions. It is highly desirable that educational research is study in more detail how exactly to

promote and support these positive effects in online communities. Attention should be given to how they can actually result in successful learning in the current era of network media. For several years, this goal has been pursued by such initiatives as “Keine Bildung ohne Medien” (“No Education Without Media”) in Germany and “Medienbildung JETZT!” (“Media Education NOW!”) in Austria, which champion basic education in media studies for all involved in teaching.

To continue along the lines of Klaus Krippendorff’s design-related ideas, successful scenarios require a “second-order understanding”, an understanding of the learning processes of others which embeds them recursively in one’s own understanding. If learners in digital scenarios are presented with a wide range of educational offers with teachers and learners in one person, they will accordingly need either ways to learn the fundamentals of pedagogical action or they will be unable, even in these scenarios, to do without the professional knowledge of trained teachers, whether in the form of supervision, advice or coaching.

Bibliography/ Literature / References

- Barbrook, R. & Cameron, A.: The Californian Ideology.
<http://www.imaginaryfutures.net/2007/04/17/the-californian-ideology-2/> [10-03-2014].
- Bush, V. (1945): As We May Think. *Atlantic Monthly*, 176 (1), 101-107.
- Bersin, J. (2009): Blogeintrag mit dem Titel From E-Learning to We-Learning, Freitag, 25. September 2009. Bersin by Deloitte <http://www.bersin.com> [08-04-2014].
- Cilliers, P. (2005): Complexity, Deconstruction and Relativism. *Theory, Culture & Society*, 22 (5), pp. 255-267.
- Foote, T. (2005): Wikipedia. Utah: Open Education Conference.
<http://cosl.usu.edu/media/presentations/opened2005/OpenEd2005-Foote.ppt> [12-12-2013].
- Gendolla, P. & Schäfer, J. (2004): Zettelkastens Traum. In: P.Gendolla & J. Schäfer (ed.): Wissensprozesse in der Netzwerkgesellschaft (pp. 7-27). Bielefeld: Transcript Verlag,
- Giesecke, M. (2001): Auf der Suche nach posttypographischen Bildungsidealen. *ZfPäd*, 51(1), 14-29.
- Hitzler, R. (1998): Posttraditionale Vergemeinschaftung. Über neue Formen der Sozialbindung. *Berliner Debatte INITIAL*, 9(1), 81-89.
- Hemetsberger, A. (2012): ‘Let the Source be with you!’ – Practices of Sharing in Free and Open-Source Communities. In: W. Sützl; F. Stalder, R.Maier & T.Hug (Eds.): *Media, Knowledge and Education: Cultures and Ethics of Sharing / Medien – Wissen – Bildung: Kulturen und Ethiken des Teilens* (pp. 117-128). Innsbruck: Innsbruck university press,
- Hepp, A. (2008): Medienkommunikation und deterritoriale Vergemeinschaftung. Medienwandel und die Posttraditionalisierung von translokalen Vergemeinschaftungen. In: R. Hitzler, A.Honer & M. Pfadenhauer (Eds.): *Posttraditionale Gemeinschaften. Theoretische und ethnografische Erkundungen* (pp. 132-150). Wiesbaden: VS Verlag,.
- Holzkamp, K. (1995): *Lernen: Subjektwissenschaftliche Grundlegung*. Frankfurt am Main; New York: Campus Verlag.
- Kamenetz, A. (2010): Learning freedom and the web. Mozilla. URL:
http://learningfreedomandtheweb.org/Mozilla_LFW.pdf [15-01-2014].

- Kaminski, A. (2010): *Technik als Erwartung. Grundzüge einer allgemeinen Technikphilosophie*. Bielefeld: Transcript Verlag.
- Krippendorff, K. (2013): *Die semantische Wende*. Basel: Birkhäuser Verlag. (OT *The semantic turn*. Boca Raton, London, New York: Taylor&Francis, CRC Press. 2006).
- Larsen, K. & Vincent-Lancrin, S. (2005): The impact of ICT on tertiary education. Advances and promises. <http://advancingknowledge.com/drafts/Larsen-The-impact-of-ICT-on-tertiary-education-AKKE.doc> [17-01-2014].
- Lehmann, B. (2013): Es liegt was in der Luft. Educational Broadcasting. In: R. Schulmeister (Ed.): *MOOCs – Massive Open Online Courses. Offene Bildung oder Geschäftsmodell?* (pp. 257-271). Münster/New York/München/Berlin: Waxmann Verlag,.
- Lemke, J. (1998): Metamedia Literacy: Transforming Meanings And Media. In: D. Reinking, M.C.McKenna, L.D.Labbo & R.D.Kieffer (Eds.): *Handbook of Literacy and Technology: Transformations in a Post-Typographic World* (pp. 312-332). Mahwah, NJ: Erlbaum,.
- Mackness, J., Mak, S. & Williams, R. (2010): The ideals and reality of participating in a MOOC. *Proceedings of the 7th International Conference on Networked Learning 2010* (pp. 266-275). University of Lancaster, Lancaster.
- Nelson, T. H. (1992): *Literary Machines*. Sausalito: Mindful Press.
- Snowden, D. J. & Boone, M. E. (2007): A Leader's Framework for Decision Making. *Harvard Business Review*, 85 (11), 68-76.
- Winkler, H. (1997): *“Docuverse: Zur Medientheorie der Computer”*. Grafrath: Boer Verlag.

ⁱ **Petra Missomelius**

Petra Missomelius is dr. phil., is a senior researcher at the Institute of Psychosocial Intervention and Communication Studies at the University of Innsbruck, Austria. She is working on media education, media literacy and e-education. PhD in Media Studies on digital cultures at Marburg University, Germany. Publications about media and perception; media aesthetics; media art; film cultures; body and technoscience; privacy activism; mashup and remix culture. Recent work includes the interferences between medialization, knowledge dynamics and learning processes.

ⁱⁱ My own translation of “des freien Zugangs zu Information, des unbegrenzten Kontaktes [...] der Machbarkeit der Welt, einschließlich der eigenen Identität”.

ⁱⁱⁱ Personal translation of: “nicht qua Tradition, sondern durch individuelle Partizipation auf Zeit”