

2 The Digital Turn in Higher Education Towards a Remix Culture and Collaborative Authorship

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2.1 Introduction

Abstract

An ongoing process of media change is affecting and, increasingly, challenging all fields of society (Krotz, 2008). This change has been discussed as an epochal shift leading to a digital age (Hanson, 2014; Nordmann, Radder & Schiemann, 2014). The process in which the structure of media in society is redefined can be termed a 'digital turn'. This digital turn is increasingly affecting academia: the university can be viewed as a space of digitalization. Universities propagate inventions which push the digitalization process. But science itself is changing in the course of digitalization. Thus the concept of 'e-Science' describes the increase in digital scientific research and the establishment of digitally based scholarly communications (Büffel, Pleil & Schmalz, 2007; Lang & Zobl, 2013; Heidkamp, 2014). Media change in the academic sector makes new demands on higher education. Higher education has to ensure that students acquire the academic media skills needed in a digital age. According to the goals of the Bologna Process, higher education must ensure students' employability in the professional world of the digital age. But at the same time, the university is a space for critical reflection on the impact of digitalization. Following Derrida, one can envisage the university as a space of critical reflection and resistance (Derrida, 2002). From this perspective, the university is bound to discuss the shift in which digitalization re-defines the media landscape.

This heuristic consideration raises a crucial question: What does the term 'digital turn' mean in the context of higher education?

Keywords: Digital turn, Higher education, Remix culture, Digital age, Collaborative authorship

2.2 The Double Perspective of the Digital Turn in Higher Education

The 'digital turn' can be defined in two ways: as an analytical strategy to discuss the digitalization process affecting society, and as a description of the digitalization process itself. This process leads from the 'book culture' of the so-called Gutenberg Galaxy to a digital age. The following two subsections discuss this 'double perspective' of the digital turn.

2.2.1 The 'Turn' as an analytical Perspective

In the field of culture studies (Bachmann-Medick, 2006) the concept of the 'turn' is used to describe and to analyze societal discursive practices. Several turns have been identified. Each has a specific analytical focus: the postcolonial turn, the linguistic turn and the spatial turn enable us to analyze societal dynamics from a paradigmatic perspective in the sense of Kuhn (1970). These different analytical approaches provide a strategy for focusing on complex social realities from different perspectives. In adopting a specific focus, the use of a 'turn' offers a particular analytical perspective on social reality: thus the methodological focus of the linguistic turn opens up the linguistic dimension of social reality – or the 'linguistic

construction of reality' – for analysis. It is a premise of the linguistic turn that the analysis of language facilitates an appropriate understanding of social reality. Our understanding of reality, or the way in which we construct reality, is represented in our language and the concepts we adopt. Language analysis can thus be used to understand how we give things a meaning, how we order our reality through words, or even how we produce things through words – for instance, using the term 'alternative facts'. For just one example of how language represents and shapes our world-view, we might consider the term 'disabled'. Handicapped persons are termed 'disabled'. The word 'disability' defines handicapped people as 'not-able-to-do-something' instead of describing them as 'other-abled'. The term 'disabled' carries the implication that a disabled person lacks something. S/he differs from the norm and is limited in his or her functionality.

According to the linguistic turn, the analysis of language provides a better understanding of how we give meaning to the world through words. In contrast to the linguistic turn, the spatial turn facilitates the analysis of social reality in its spatial structure – for instance, when we map the distribution of wealth in the districts in a city. This enables us to reconstruct the socio-economic structure of a city in a spatial dimension (Döring & Thielmann, 2008). In conclusion, the concept of a 'turn' signifies an analytical strategy. The specific form of the turn (linguistic, spatial, or otherwise) provides a specific analytical angle on social reality.

This definition of 'turn' casts the digital turn as an analytical strategy which enables us to focus on the role of digitalization within social reality. As an analytical perspective, the digital turn makes it possible to analyze and discuss the societal meaning of digitalization. The term 'digital turn' thus signifies an analytical approach which centers on the role of digitalization within a society. If the linguistic turn is defined by the epistemological assumption that reality is constructed through language, the digital turn is based on the assumption that social reality is increasingly defined by digitalization. Social media symbolize the digitalization of social relations. Individuals increasingly engage in identity management on social networking sites (SNS) such as Facebook, Twitter, Snapchat, and Instagram. SNS are polydirectional, meaning that users can connect to each other and share information. Social media such as SNS "became informal but all-embracing identity management tools, defining access to user-created content via social relationships" (Mitrou et al., 2014, p. 2; see also Boyd & Ellison, 2008). The concept of a digital turn opens avenues for further research concerning how digital communication changes social relations.

With these considerations in mind, the digital turn in higher education should be understood as an analytical angle focusing on how higher education, learning, and teaching are changing in the course of digitalization.

2.2.2 *The Digital Turn as Term for an ongoing Media Change*

The semantic dimension of the term 'turn' denotes a motion or change. As a term for analytical strategies in the field of cultural science, the motion expressed in the 'turn' is the shift towards a new analytical focus. From the perspective of media theory, the term 'digital turn' means more than a change of analytical perspective or paradigm shift: According to Kuhn (1970) the paradigm shift represents the emergence of a new analytical perspective on the world. With this new perspective, new methodological assumptions and research strategies emerge. Kuhn's concept of the paradigm shift does not take into account that the media landscape of an entire field may change. The change inherent in the digitalization process challenges the established media of the academic field. A basic example is that citation

systems such as APA-Style, Harvard-Style, and Chicago-Style were developed for book and journal citations. They were not developed to refer to internet sources. The development of appropriate strategies for quoting from a chat record or podcast is still far from accomplished.

From the perspective of media theory, a turn signifies an ongoing change in media, recasting their place in society. In this sense, the digital turn can be defined as the process which leads from the so-called Gutenberg Galaxy to a Digital Age. In his analysis of the Gutenberg Galaxy, McLuhan (1962/2011) pointed out how book-print changed the media landscape and, with it, the practices of Western society. According to McLuhan, the book and print technology led to a redefinition of the media used by civil society. The new media landscape had specific effects on social interaction: "Print had a levelling function on all verbal and social forms" (McLuhan, 2011, p. 239). According to one theory, the digital turn is now causing a redefinition of society's media, as the Gutenberg Galaxy did in its time. In other words, the digital turn signifies the shift in the structure of media within society. From this perspective, the digital turn in higher education represents the shift as it affects and challenges universities and higher education as a whole. The double perspective inherent in the term digital turn thus becomes clear:

- As an analytical focus, the digital turn calls attention to the digital dimension of social processes.
- In the context of media theory, the digital turn refers to the restructuring of a society's media.

2.3 The Double Perspective of the Digital Turn and the Double Challenge to the University

The digital turn challenges the university in both respects. This double challenge corresponds to the double function of the university. The university is

- a place of critical reflection and resistance on the one hand; and at the same time
- an educational space and institution.

In encountering the digital turn, the university has to

- analyze the societal dimension of this change; and also
- react to the shift in the academic field's media and its implications for higher education.

The theme of a double challenge to the university through the double perspective of the digital turn will be developed in this subsection.

Digitalization is inevitable but, at the same, a social product. This means that digitalization, and media change generally, does not occur like a force of nature. It is a cultural manifestation and has to be discussed as such. Digital media are part of our everyday lives and cultural practices – we need to reflect on this pervasiveness and discuss how digital media change our practices. In our discourses we give digital media a meaning in everyday life – and from the perspective of critical discourse analysis we should question this meaning. Following Derrida (2002), we can think of the 'unconditional university' as a space where the societal meaning of digital media can be questioned.

Here then is what I will call the unconditional university or the university without condition: the principal right to say everything, whether it be under the heading of fiction and the experimentation of knowledge, and the right to say it publicly, to publish it. (Derrida, 2002, p. 26)

The university “should remain an ultimate place of critical resistance – and more than critical – to all the powers of dogmatic and unjust appropriation” (Derrida, 2002, p. 25f.). Derrida’s concept of the unconditional university makes critical reflection, here analyzing the digital turn in the sense of a fundamental media shift, a task of the university. At the same time, the university is an educational institution: as such it is tasked with educating skilled workers. In the interest of students’ employability, higher education has to meet the challenge of ensuring that they acquire the media skills required for professional life in the Digital Age.

2.3.1 *University and Higher Education as Drivers of Innovation in the Digital Age*

The double perspective carried by the digital turn entails a double challenge to the university. One task is the critical analysis of, and reflection on, the digitalization process. On the other hand, the university has to equip future professionals to handle the challenges of the media shift leading to a Digital Age.

These two tasks also challenge teaching and learning in higher education. According to Derrida’s concept of the unconditional university, teaching and learning have the goal of mediating critical thinking strategies. In higher education, the unconditional university manifests itself in learning which enables students to develop a critical attitude towards ‘the powers of dogmatic and unjust appropriation’ by scholarly means (Derrida, 2002, p. 25f.).

Another goal of higher education during the digital turn is to mediate the necessary media skills for employment in a Digital Age. This means that students must learn how to harness the flexibility, and polydirectional and collaborative potential, of digital media in their field of study. Strategies such as mobile and inquiry-based learning with digital media, are likely to prove important for such purposes. These strategies enable participative, action- and product-orientated learning with digital media.

In a dawning Digital Age, higher education is in a position to experiment with innovative forms of teaching and learning, to foster critical thinking, and prepare students for employment. In line with the innovative role of the university as a place where knowledge is discussed and produced, the university can also provide best practice examples for the implementation of digital media. These could then be transferred into the professional world. In this respect, the university and higher education in general have the potential to act as a driver of innovation in the Digital Age.

It is not yet possible to predict how higher education teaching and learning will change in the Digital Age. What we can safely say is that teaching and learning in higher education are already changing. The following section considers, through the lens of the digital turn as analytical approach, how the digitalization process can change teaching and learning in higher education. The starting point is a changed conception of the author. With a new understanding of the author – or rather, with the substitution of digitally based collaborative authorship for the old single author – learning and teaching will change in their turn.

2.4 From Author to Authorship

The author provides one example of the impact of digitalization, and the way in which it alters cultural practices and concepts. It seems likely that the concept of the individual author will be replaced by that of collective authorship. This process can be interpreted as a *pars pro toto* for the ongoing structural change in media – or digital turn – leading from the Gutenberg Galaxy to the Digital Age.

The rise of collective authorship affects the way in which people read and write and, consequently, teaching and learning in higher education. This point will be developed in the following section.

2.4.1 *The Concept of the Author in the Gutenberg Galaxy*

With the Gutenberg Galaxy, “the dynamic logic of printing as a centralizing and homogenizing force” (McLuhan, 2011, p. 230) emerged. This led to the concept of the individual author, who creates literature and distributes knowledge by the publication of their books. Barthes points out the historical conditions which gave rise to this concept:

The author is a modern figure, a product of our society insofar as, emerging from the Middle Ages with English empiricism, French rationalism and the personal faith of the Reformation, it discovered the prestige of the individual, of, as it is more nobly put, the ‘human person’. It is thus logical that in literature it should be this positivism, the epitome and culmination of capitalist ideology, which has attached the greatest importance to the ‘person’ of the author. (Barthes, 2008, p. 313)

In the academic field, the scholarly author represents the emancipated, active citizen who constructs rationally based knowledge with their writings.

The scholarly author produces knowledge and disseminates it through books. The ‘author concept’ establishes a scholarly hierarchy, which is defined by the poles of ‘writing’ and ‘reading’. The author represents the one pole: they write the book. The unidirectional orientation of the printed book performatively reproduces the poles of reading and writing. The structure of the printed book requires a sharp distinction between author and reader. The author provides knowledge through their written text and printed book, and needs a reader. In academia, the author communicates their knowledge by way of books and journals. The “order of the book” (Weel, 2011, p. 91) and the concept of the scholarly author also influences learning. In the Gutenberg Galaxy, learning is based on the distinction between the author and the reader, who can be considered the ‘learner’: “The printed book was a new visual aid available to all students and it rendered the older education obsolete. The book was literally a teaching machine” (McLuhan, 2011, p. 164). The student reading a book became an iconic representation of study.

The idea of the ‘author’ not only influenced learning but also other fields such as law: just as the merchant owns his goods, the author owns his works. With the advent of printing technology, the idea of the single, creative author gained currency and was eventually enshrined in copyright laws: copyright was established in the USA in 1790, in France in 1793, and in Prussia in 1837. Copyright legislation constituted the author as a legal person (Dommann, 2008, p. 44).

Setting the concept of the author against ongoing media change, one may ask whether digitally based and polydirectional forms of writing are likely to develop a similar impact. Such a development could see the rise of a collective, digitally based conception of authorship to replace the individual author who writes books for print publication.

2.4.2 *The Emergence of collective Authorship in the Digital Turn*

Media change challenges the concept of the single author: in 1962, McLuhan wrote that ongoing media change leads from a book-based Gutenberg Galaxy to an ‘Electronic Age’. In view of the emergence of the internet and the digitalization process, we may term today’s Electronic Age the Digital Age. According to McLuhan, one essential feature of the change that leaves the book behind and leads to an Electronic Age, “is the new drive for decentralism and

pluralism in big business itself" (McLuhan, 2011, p. 230). The polydirectional and polyphone potential of the internet – mainly the Web 2.0 – provides the communicative basis for decentralism and pluralism. The participative structure of social software challenges established concepts like the author, and consequently higher education teaching and learning. Simplifying for emphasis, one might say that in the Gutenberg Galaxy, the scholarly author provided the knowledge and the student could acquire it by reading printed books. In the Digital Age, by contrast, the concept of the author changes or is indeed replaced by digitally based collective authorship. For a theoretical approach to help formulate a new concept of authorship, one might refer to Barthes' idea of the 'death of the author': In 1967, five years after the Gutenberg Galaxy was published, Roland Barthes formulated the thesis of the death of the author: "The removal of the author [...] is not merely an historical fact or an act of writing, it utterly transforms the modern text" (Barthes, 2008, p. 314). Barthes argues that to "give a text an author is to impose a limit on that text, to furnish it with a final signified, to close the writing" (Barthes, 2008, p. 315). Instead of focusing on the author, Barthes stresses the role of the reader as the real actor who gives the text its meaning – "[A] text's unity lies not in its origin but in its destination" (Barthes, 2008, p. 316). According to Barthes, the reader is "someone who holds together in a single field all the traces by which the written text is constituted" (Barthes, 2008, p. 316). Barthes concludes that "the birth of the reader must be at the cost of the death of the author" (Barthes, 2008, p. 316). One might propose that media change provides the technical infrastructure for texts in which the sharp distinction between author and reader dissolves. A new way of reading and writing could establish itself thanks to the polydirectional and polyphone potential of digital media. Wikipedia represents an example. A Wikipedia article is at least potentially the product of diverse individuals, who are readers and writers simultaneously. They may use the participative features of Wikipedia to discuss the subject and can re-write the article. The single author dissolves into a plurality of perspectives which constitutes a collective authorship, represented in a collaboratively written article. Collaborative writing tools such as Authorea or GoogleDrive make collaborative writing practical in the academic field. A consequence of collective authorship could be texts which remain in constant flux. Lessig (2001) anticipated this digitally based remix culture 16 years ago:

Technology could enable a whole generation to create – remixed films, new forms of music, digital art, a new kind of storytelling, writing, a new technology for poetry, criticism, political activism – and then, through infrastructure of the Internet, share creativity with others (Lessig, 2001, p. 9).

The text is no longer an entity, immutable once written, which waits for its readers. "Moreover, the 'democratisation' of textual production, distribution and consumption creates an entirely new relationship between author and reader" (Weel, 2011, p. 4). Instead of reading a text only by oneself, it is possible to annotate collaboratively and thus change a text with social bookmarking tools like Diigolet. When Barthes empowers the reader as the person who gives a text a meaning, the digital media transfers the text into a constant collaborative process of knowledge construction. The text can be 'used', changed, remixed – readers inscribe themselves in the text. The result is a new text with a new perspective, or a mash-up of the earlier text. Such 'textual instability' (Weel, 2011) marks a break with the concept of the 'lasting structure of a printed text'. According to Weel, this idea of lasting textual stability is an effect of the book which was established in the course of the Gutenberg Galaxy – "The printing press has in the course of time created a (largely unconscious)

expectation of stability and permanence of form and content” (Weel, 2011, p. 149). The digital text is literally in motion: “Different people can comment on the same digital text, giving rise to, for example, various – virtual – combinations of texts and commentaries” (Weel, 2011, p. 159).

The new possibility of producing and remixing a text digitally, calls into question the relationship between reader and author. The redefinition of this relationship affects other fields just as the concept of the ‘author’ once did. A challenge to the established copyright principle thus arises: the copyright which emerged out of the Gutenberg Galaxy and constituted the author as legal person is being subjected to modifications. The so-called Creative Commons license (CC) approach provides an example. It not only ensures non-commercial use of the text, but also allows derivatives. The CC license model provides a legal structure to underpin the ‘remix culture’ (Lessig, 2008) which has emerged from of the polydirectional and polyphone media of the Digital Age. The ‘read and write culture’ of the Digital Age stands in contrast to the ‘read only culture’ (Lessig, 2008) that derives from the established, book-based distinction between author and reader.

There is an argument that the concept of the ‘author’, which emerged in the course of the Gutenberg Galaxy, is vanishing (or ‘dying’) in the Digital Age. The author, writing alone in their study, is being replaced by collective authorship. This change is bringing about a remix culture and also challenging (copyright issues aside) the entire book-based conception of learning. Weel (2011) identifies “many challenges” in the context of digitalization. Chief among them is to learn “how to deal with turning the solid, unchangeable monuments of print into the continual, ever-changing events of the digital realm” (Weel, 2011, p. 218). Taking Weel’s cue, we may conclude that the higher education system will have to adapt to ongoing media change and develop strategies to deal with the university’s ambivalent position in the digital age. From the perspective of an unconditional university, critical thinking must be practiced. As an educational institution, the university has to ensure the employability of its students. In other words, students need to acquire the critical thinking and other skills with which to exploit the collaborative potential of digital media, so as to participate in the remix culture of the digital world. This can be achieved with participative higher education strategies such as inquiry-based learning, heutagogy, mobile learning, and problem-based learning. These strategies must harness the collaborative potential of digital media to establish a critical remix culture in learning and teaching, reading and writing. Using such approaches, the university can develop best practice examples which can then be adopted by the professional world as it seeks appropriate strategies to adapt to digitalization.

This analysis and conclusion remain tentative and limited in scope, but provide a heuristic frame in which to think about teaching and learning in higher education in a changing world.

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