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How to cite this publication
Please cite the final published version:

Tække, J. (2019). Acquisition of new communication media and social (dis)connectivity. *Current Sociology*, *67*(4), 579-593. https://doi.org/10.1177/0011392119837575

Publication metadata

Acquisition of new communication media and social (dis)connectivity

Abstract

The article discusses the relation between communication media and social (dis)connectivity. The question is how communication media provide society with different possibilities for (dis)connectivity in different historical media societies. The paper draws on Luhmann's sociocybernetic theories of social systems and communication media in combination with medium theory (especially Meyrowitz).
As a starting point, the acquisition of oral language made communicative connections and thereby society possible. Later the written media, print media and analogue electronic media opened up new possibilities for social systems to develop structures with new forms of communicative connections. Even though society is only possible because of communication media, which offer new ways of forming new structures that provide new connection possibilities, a new communication medium, especially in the beginning, causes problems and disconnectivity. After the introduction of the printing press in Europe, a great interpretation disagreement broke out and wars raged the continent for the next centuries. Later with the invention of radio and film, dictators, especially Hitler, benefitted from the new media situation. In the final section, the paper analyses if we also in the present-day society with the acquisition of digital media see signs of new disconnectivity, and it discusses if we in the new medium society, like in the former, will experience permanent societal disconnectivity go hand in hand with the new forms of connectivity.

Introduction

This article discusses the relation between communication media and social (dis)connectivity. *Disconnectivity* means that some people's communication contributions cannot link to parts of the societal communication (e.g. link to the money system, education system, democratic system or to the public sphere). *Connectivity* means actualized connection to such societal systems and the public sphere. It is not the media in themselves that disconnect certain communication contributions but either a medium's possibility space (scope) for communication or social forces in power. It is clear that every new communication medium has meant an increased possibility space for connectivity, but also as this article will show, that the new scope only partially and under major social constraints are actualized. In our time, we are confronted with enormous social fluctuations and transformations. The article will look at the origin of this situation from a medium perspective as a medium revolution, where digital media provide social systems with new connectivity

possibilities, which – when actualised – means disconnectivity in relation to many of the old communication patterns developed in the former medium society.[1] The article does not intend to take the view that society will gain a state of harmony with no disconnectivity, but it will put forward the theory that the introduction period in which the acquisition takes place is especially turbulent and characterised by disconnectivity. It takes as its point of departure the sociocybernetic theory presented by Niklas Luhmann, which places the concept of connectivity in the centre; that is the concept of *communication*.[2] The question is how communication media provide society with different possibilities for (dis)connectivity in different *historical media societies* in the Western World.[3] Luhmann (1995; 2012) has a well-developed perspective on the influence of media (Tække & Paulsen 2010). According to Luhmann, as a starting point, communication is improbable, but in line with the evolution of media, communication has become probable in more and more complex ways. Combining Luhmann's sociological communication theory and medium theory, the article reinterprets what it observes as the socio-media evolution (Tække 2006) and media history (Jakobsen 2016) in order to compare and try to understand the present situation. The article does not opt for technological determinism but connects to Luhmann claiming that "meaning forms condense only in communication itself" (Luhmann 2012: 249). A new medium only expands the social possibilities by improving and accelerating the organisation of complexity (ibid). What this article contributes is the hypothesis that the social transformations and fluctuations in the present world society may be explained in the light of the digital medium revolution, just like the great social transformations and fluctuations we have seen before after the acquisition of new basic communication media.

In the first section parts of Luhmann's theory is presented to explain what communication and media means in his theory, and to define the concept of social connectivity. This makes possible in the next sections to sum up aspects of former

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[1] An observation of the present cannot build up enough distance for a historical analysis, nevertheless the article tries to analyze the present situation using sociological theory and insights from medium theory and history to reflect upon the media's influence on the present situation.

[2] Luhmann's relation to cybernetics is discussed in Paetau (2013).

[3] The idea of historical media societies, defined by a dominant communications medium, goes back to McLuhan. This article followers Finnemann (2005) who distinguishes between five: oral, writing, printing, analogue electronic and digital media society.

media revolutions, by going through a number of media societies (oral, writing, print and analogue electronic media society). This is done with the aim of analysing (dis)connectivity, distinguishing between a first period of an acquisition, which is characterised by great turbulence, and a following period with growing connectivity and where the relation between disconnectivity and connectivity becomes more stabilised but not overcome. The final section discusses the present situation and observe it in terms of (dis)connectivity. In this section it is rendered probable that digital media like former media, by making new connectivity possible, at least initially opens for massive disconnectivity.

Communication and connectivity

According to Luhmann, communication "requires a synthesis of three selections, namely information, utterance and understanding (including misunderstanding)" (Luhmann, 1990, p. 3). *Information* is the *what* of the communication, understood by Luhmann as the difference between what is actually uttered and other possible meanings. *Utterance* is the *how* and the *why* of the communication, which according to Luhmann is the difference between the particular mode of communication and other possible modes. Finally, *understanding* is how the addressee distinguishes between information and utterance (Luhmann, 1995, p. 140). The decisive factor is this last "recursive" selection, because it implies that communication cannot be directed or even established by *one* person (understanding is always someone else's understanding). A communicative act only comes into being with the understanding (ibid.). This also implies that an elementary communication only becomes part of a communication system if a new communication *connects* to it, either accepting or negating its proposal of meaning. Such connections (following one another) produce a system with a history of accepted and negated proposals of meaning, differentiating the system from other social systems with other communication histories (Luhmann, 1995). The upshot is that communication by definition never happens as an isolated element, but is always linked (connected) to other communication. We also see that communication by definition functions on a supra-subjective level, connecting humans as contributors, not directors or subjects, to the social system.

The emergence of social connectivity

In this article, I understand *connectivity* as an elementary communication connected to another elementary communication by responding to its meaning. According to Luhmann (1995), we cannot talk about communication if there is no connection to an *utterance* distinguishing it from *information* selecting an *understanding*. On the basic level of self-reference, communication can only succeed if a link (connection) is established to one elementary communication consisting in a selection of information, a selection of utterance and a selection of understanding by another elementary communication. With the emergence of language, this self-reference, where one elementary communication recognises another elementary communication – and thereby itself – as communication, is made possible (Luhmann 1995, Tække 2011): "the unity of an element (…) is not ontically pre-given. Instead, the element is constituted as a unity only by the system that enlists it as an element to use it in relations" (Luhmann 1995, 22). From this moment of time, society can be observed as a system in its own right. Social norms and structures are developed through the communicative process of accepting and negating proposals of meaning. Society consists of condensed forms of norms and structures, and *connectivity* is a concept describing the nuclear function enabling the production and reproduction of communication. Communicative processes follow *structures* and *norms* when reproducing them, or they alter them and produce new structures and norms within the possibility scope of the communicative space of the available communication media: "If media and techniques of communication change, if the facilities and sensitivities of expression change, if codes change from oral to written communication, and, above all, if the capacities of reproduction and storage increase, new structures become possible, and eventually necessary, to cope with new complexities." (Luhmann 1990: 100). *Disconnectivity* in this context describes the disruption of the former forms of connectivity by new forms of connectivity made possible by a new medium of communication. The disconnectivity following the development of oral language could describe the disruption of the forms of cooperation in the population of hominids where there were no socially constructed norms that build structures enabling long chains of connected elements of communication, there were only instincts mediated by gens (Tække 2011). According to Luhmann (2002a, 278; 2012, 123), it is difficult to imagine that an independent autopoiesis of communication would have come into being only through non-verbal

body movements. Language is the muse of society (Luhmann 2012: 135), and "(l)anguage is the structural coupling, that is its task, its function" (Luhmann 2002a: 279). Before communication based on language, conciseness based on instincts formed part of cooperation. After the construction of a social world, conciseness contributed to cooperation in the form of meaning produced in communication (see Luhmann 1992; 2002b; Tække 2011).

Communication media

In Luhmann's (e.g. 2012; 2000a) definition, there is a distinction between form and medium. The medium is seen as a *loose coupling* of elements, while the form is seen as a *tight coupling* of a medium's loosely coupled elements. Language, for instance, is a medium that consists of loosely coupled phonemes making words possible as forms (tightly coupled phonemes). Without language there would be no words, and without words there would be no language (Esposito 1999). According to Luhmann (1995, p. 158, 1990, p. 87), communication is improbable for three reasons: Firstly, it is improbable that psychic systems will understand each other insofar as their conciseness is separated from each other and closed. Secondly, it is improbable that communicative exchanges will occur among people who are not physically close to each other. Thirdly, improbability is *success*. Even if a communication gets through and is understood, there is no guarantee that it will also be accepted and followed. While the three improbabilities make communication improbable, three different types of communication media have evolved and made communication probable (Luhmann 1995: 160-161; 2012). The medium of language makes understanding probable, distribution media, such as writing and printing, make it probable that messages reach receivers, and symbolically generalised communication media (money, power, laws etc.) make it probable that messages have an effect (economic effect, political effect, legal effect etc.). In the medium of language, the operational forms are words and sentences. In distribution media, the operational forms are written documents, letters, printed texts, TV programmes, emails etc. In the symbolically generalised communication media, the forms are payments, scientific theories, etc. The three types of media function together. You can for instance receive a printed text with sentences saying that you have to pay the rent. This is only possible because the communication media only create a weak substratum: language does not

speak; the printing press does not decide what is printed in the books; and in the scientific medium, *truth* does not determine what theories are about or which truth they make probable (Tække & Paulsen 2010). With regard to connections, communication media connect people across distances (communicatively speaking), make mutual understanding and meaning probable, and render success, in the sense that people cooperate, probable.

Meaning

To Luhmann (1995) it is a reductionism only to see media as technical devices, in the sense that they are all social. In this sense, trust is also a medium and *meaning* is the most basic social medium. Its form follows the same logic as the concept of medium (Luhmann 2007). Where *medium* is defined as form⌐medium, *meaning* is defined as actuality⌐potentiality. What gives meaning is always something actualised compared to what is not actualised but could have been. "The phenomenon of meaning appears as a surplus of references to other possibilities of experience and action" (Luhmann 1995, 60). Selected information always gives meaning compared to what is not actualised but could have been. For instance, the exam grade A gives meaning by not being B or C. The actual is the form; the possible is the medium. Luhmann (1995) distinguishes between three dimensions of meaning: a fact dimension, a social dimension and a temporal dimension. Each of them is simultaneous present in every social situation. The fact dimension provides us with the "what" (this⌐everything else), the social dimension provides us with the "who" (consensus ⌐dissensus), and the temporal dimension provides us with the "when" (past ⌐future). The oral language provided us with the possibility to define *what* we were speaking about, including *who* and *when.* This medium revolution disrupted the instinctive cooperation in the population, but made connectivity through language based communication possible, so the emerging social systems slowly began to take over the cooperation.

The medium of writing and (dis)connectivity

Writing is a symbolisation of the difference between sound and meaning in the optical medium. In the optical medium, the distinction between form and medium consist of the difference between meaning and letter combinations (Luhmann 2012: 154, see also Tække 2011). With writing, communication was loosely coupled from presence,

which allowed society to extend across time and space. From then on, proposals of meaning could be conditioned and condensed in a medium that could be transmitted in time and space. This gave new forms of connectivity and expanded the scope for administration, which made it possible to organise large empires like the Roman Empire, enabling an unprecedented nuanced division of labour as well as specialisation and the accumulation of knowledge (Innis 1991). According to McLuhan, this development also meant a disruption of the circular form of living: "Before the invention of the phonetic alphabet, man lived in a world where all the senses were balanced and simultaneous, a closed world of tribal depth and resonance (…)" (McLuhan 1969). Writing allows us to contribute to communication loosely coupled from interaction, which means that interaction now can be separated from society. We can connect to the social even when we are alone, and relative to time and space: "one formulates communication for unforeseeable social situations, which do not require one's presence" (Luhmann 1995: 87). The loosely coupling of written communication from face-to-face interaction meant a disconnection of the body as a mediator of psychic feelings as well as a loosely coupling from turn taking, which provided a scope for a stronger differentiation between the social dimension and the fact dimension, and an extension of the time horizon. Now, for instance, longer lines of argumentation could be constructed, creating societies like the Greek with democratic politics and philosophy (Luhmann 1995). The de-coupling of utterance and understanding that the writing of letters and books created can be observed as a form of disconnectivity, but writing also at the same time provided connectivity because letters could be answered and one could write another book, reacting to the book one has been reading. But the connectivity through writing ran on a new structural level excluding many communication contributor's contributions and thereby created new disconnectivity.

Society and the printing press

With the print medium, society changed again. After the introduction of printing, society began to develop a new kind of fundamental structural differentiation. Where the oral medium society can be described as differentiated in segments, and societies which were also mediated through writing can be described as stratified, the medium-society, which is also linked to the print medium, can be described as functionally

differentiated (Luhmann 2012; Tække 2006; 2011). The print medium makes the production of many identical copies of messages possible and therefore results in a huge increase in complexity, at the same time as providing society with new possibilities for communication. Together these two consequences worked as a catalyst for the emergence of the symbolically generalised communication media. Subsequently, the functional systems were separated out from the old societal hierarchy, introducing a new poly-centred order of society around the functional systems (Luhmann 2012; Tække & Paulsen 2010). "Functional differentiation is a specific historical arrangement that has developed since the late Middle Ages and was recognized as disruptive only in the second half of the 18th century" (Luhmann 1997). The printing press meant a disruption of the hierarchical society where the Machiavellian prince was uncontradicted. New forms of connectivity emerged within the society of the printing press. People got together in what has been called the public sphere (Habermas 1976), discussing news from printed texts about what had been decided by the prince. The democratic society of today's Western World was, in a medium perspective, developed in the wake of the printing press. For Habermas (1976), the public sphere was developed in cafes and coffee houses around Europe as places where citizens met to discuss printed texts and became an opponent of the state. This started a development that ended with the modern democratic states of today's Western World. Elizabeth Eisenstein (1983) pointed out how the printing press contributed to cultural advance in early modern Europe by preserving and making intellectual achievements more widely available. In the meantime, this new *feedback system* would not have had the enormous emancipatory and organising democratic effect, if it had not been for the freedom of the press/freedom of speech. Already in 1644, John Milton pointed out the importance of the freedom of speech: "the liberty to know, to utter, and to argue freely according to conscience, above all liberties".[4] According to the Norwegian historian Kjetil Jakobsen, Milton believed that the Reformation was an unfinished process that had to be continued, which could only happen with the free exchange of words. In the same way as the body, also the spirit needs resistance to grow in strength. According to Milton, even false claims are useful in relation to faith and truth, as they sharpen thinking and force rebuttals. Milton also

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[4] http://files.libertyfund.org/pll/quotes/51.html

pointed out that cognitive quality, which is essential for democracy, is assured by the free public exchange of words – and that cognitive processes consist of arguments and counterarguments (Jakobsen 2016: 36). According to Kant, freedom of the press is the only right people have against the sovereign.[5] In the Age of Enlightenment, the sovereignty of the people became a kind of a legal fiction, saying that the absolute monarch had a contract with the people. The thinkers of the Enlightenment gave the idea of the sovereignty of the people a new and more concrete expression through the concept of general will: Public opinion, as expressed in the printed press, should manage the state's development. Thereof derived the radical consequence that censorship should be eliminated in its entirety. The 18th century reflection on freedom of expression observed that a society with freedom of expression acquires different points of view that help it cope with the explosion of experienced contingency (Jakobsen 2016, p. 57). Freedom of speech has always been restricted e.g. in relation to utterances that are violent, pornographic or racially offensive, and there are laws against lese-majesty, blasphemy, libel and violation of privacy. On the other hand, law is an inefficient and slow upholder of the exchange of words, which is why the concept of Bildung becomes important. During the Enlightenment, there was a growing self-regulation in the public sphere, and the publicists developed a *culture of free speech*, meaning that the law from then on almost never had to intervene in the public exchange of words. The publishers knew how to express their opinions, because they had learned the right form of Bildung to participate in the public debate. Following Jakobsen (2016: 371), the societies that have performed best have had a well-functioning general public with secured freedom of speech. They mobilise and utilise their citizens' resources in the best way[6].

Through the new possibilities for *connectivity* of the printing press, we see a new feedback system with an enormous emancipatory and organising democratic potential actualised in the Western World. But this development also disrupted the hierarchical power of the prince. The democratic system slowly got more and more inclusive, culminating after the acquisition of electronic media. This is a system with

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[5] Kant 8: 304 Practical Philosophy: http://filozofia.umk.pl/wp-content/uploads/2017/01/Kant-Practical-Philosophy.pdf
[6] This section is almost identical with a section in Tække & Clausen (2017).

a connectivity where voters select politicians to govern, but where an important function system, the system of mass media, connects the people and the politicians. Only a tiny elite of the citizens participated directly in the printed debate, representing different groups, but before that, we saw monarchies with only the aristocracy participating in the governing of society.

Overall, the print medium meant an extension of the societal connectivity, but especially in the first phase of the medium era, it lead to large-scale disconnectivity.

When 20 of Luther's theses were printed in German language, they were spread across Germany faster than ever before.[7] Later when the bible was translated into the vernacular and printed, it became affordable to a large part of the European population, and many, primarily men, learned to read. The result was that for the first time in history, people with no schooling in interpreting the Bible read it and interpreted it for their households. This led to fanaticism and wars of interpretation all over Europe (Jakobsen 2016). It took two centuries before the functionary differentiation of society took over, and the systems of policy and religion were separated from each other as parallel functional systems.

In the time dimension, the distribution of knowledge accelerated. Thousands of copies of all kinds of pamphlets and books provided society with a shared and more present present within big areas and a much clearer comprehension of the past. In the social dimension, in the beginning we saw a growing national feeling around native tongue, and wars of religious interpretation raged, but over time mass media and freedom of expression and democracy set the stage for discussion. Hereto the functionary systems differentiated knowledge in various institutionalised feedback systems around the fact dimension, in which canonised functionary differentiated knowledge developed over time.

In the beginning of the period, hierarchical society dominated first with the oppression of peasants and then of labourers. Later when the functional

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[7] "The theses…were said to be known throughout Germany in a fortnight and throughout Europe in a month" (Eisenstein 1982, 310).

differentiation took over, the predominant relation was no longer hierarchical, but one of inclusion and exclusion: "Modern society includes and excludes persons via function systems […]. Function systems presuppose the inclusion of every human being, but, in fact, they exclude persons that do not meet their requirements. Many individuals have to live without certified birth and identity cards, without any school education and without regular work, without access to courts and without the capacity to call the police" (Luhmann 1997). Even though the disconnectivity was biggest in the beginning of the period, the new forms of connectivity did not stop producing and reproducing disconnectivity.

Analogue electronic media and (dis)connectivity
The substratum of an electronic medium is, for instance, a television, and the material content consists of illuminated dots of light and sound. The consumption of television programmes is so easy, as if there was no code except from the code of spoken language itself. Electronic media provide the ability to be in a parallel space. The sender can reach everybody who has the right equipment, and the recipients can experience the same stimuli at the same time in spite of geographical distance (Tække 2002: 32). Television exposes backstage information contrary to the print medium, which has a front stage bias (Meyrowitz 1985). Before the emergence of electronic media, politicians were more in power of selecting what was printed and how they were presented as individuals and as politicians. With electronic media, this pattern, or kind of connectivity, was disrupted because of the back stage bias. For instance, viewers saw what happened in Vietnam and reacted.

That the individuals who are loosely coupled to the functionally differentiated society also have access to electronic media means that the functional differentiation of society is exposed; now everything seemed possible, e.g. the women's liberation movement, children's rights, the youth movement of the late 1960s, etc. According to Meyrowitz, the more a medium supports the relationship between physical isolation and informational isolation, the more it supports the separation of people into many distinct positions. The more a medium allows people to gain access to information without leaving old places and without severing old affiliations, the more it fosters homogenous positions (Meyrowitz 1985, p. 61). When looking at minority groups, this

becomes clear; their members did not reflect over their belonging to minority groups before electronic media showed them that they were excluded from the larger reference group (white heterosexual male middle class Christian Americans). The members are united by their feelings of exclusion from certain rights and experiences. The sense of restriction, felt by many minority group members, might be the result of the sudden access to a larger, more inclusive information environment. To know about and constantly be exposed to places you cannot go and things you are not allowed to do makes you feel more isolated (ibid, p. 133). So electronic media create the possibility space for a more complex society. The more people share similar information, the greater the demand for consistency of treatment. We know that from the very complex welfare states in Europe were people expect to be treated in accordance with their individual and unique situation. Over time society reacted to the new information environment in the western states and women got more equal rights, and corporal punishment of children became illegal etc. In the initial period the difficulties broad about by the new information situation provided big conflicts, but even though the problems became handled and many inequalities were eliminated society as such did not became totally equal. Many conflicts and inequalities still remained in the new information environment even though they now were visible.

Looking at politicians, their communicative *connection* to the public, as was the case with the print medium, also goes through the mass media when electronic media is taken into use. Thus, in the early stage of the electronic media era, the picture was different. Here the *disconnectivity* consisted in a disappearance of the demands of the mass media (the editorial filter) known from the printing press. According to both Innis (1991, p. 81) and McLuhan (1967, p. 331), the rise of Hitler to power was facilitated by the use of loud speakers and the radio. Through speech, he could appeal to minority groups in Germany and minority nations, for instance in Czechoslovakia and Austria. Furthermore, illiteracy was no longer a barrier. As Hitler took over power, he also took over power of the media and by use of film created the impression of the superiority of the German arms and of the Jews as the cause of all bad and evil (ibid.). When Goebbels' article from Das Reich was read aloud on Radio Berlin, the content of all German newspapers the next day was fixed (Klemperer 2011: 35). After the war, the state monopoly of the European broadcast organisations was improved

by the arm's length principle in relation to the politicians and was also liberalised with the Anglo-American world as a role model.

Digital media and (dis)connectivity

The potentiality of digital media, i.e. computer-based technology, is the ability to simulate all former kinds of communication media. In the one and same medium, we are able to produce, edit, process, store, copy, distribute and retrieve knowledge (Finnemann 1999, p. 147). Looking at communication and connectivity, with a digital medium like the weblog everybody now has their own press (Gillmor 2004). With weblogs, people who are online can document to everybody else online what they see and think. With social media like Facebook and Twitter, ordinary people can network, and through Facebook groups and Twitter hashtags, they organise and share information regardless of geographical distances. This means that digital media provide an enormous connectivity possibility despite time and space.

Currently, digital media, despite their possibilities for connectivity, also provide huge disconnectivity; from the lack of attention in face-to-face meetings to distraction and multitasking in the school to the macro level, where we see a deconstruction of the pattern with mass media creating a public sphere for communicative connectivity between citizens and politicians. Now politicians, most famously with Donald Trump as an example, can bypass the mass media and communicate directly with the citizens using Twitter. This situation shares some characteristics with the printing of Martin Luther's thesis and Hitler's use of the radio. The old system constructed in the old medium environment cannot continue as it is in the new medium environment. The new connectivity taking place directly between a politician and the citizens (groups or filter bubbles of interconnected citizens, respectively) disrupts the habitual connection between citizens and politicians filtered by the mass media's critical and "objective" intervention. Also the cultivated elite of the public sphere is bypassed by webloggers, microbloggers and youtubers. Some of these bloggers provide fake news and earn big money through clickbait activities in the form of news links with conspiratorial headings (Allcott & Gentzkow 2016).[8] In the meantime, most of the

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[8] Examples are the fake news stories about Pope Francis endorsing Donald Trump and Hillary Clinton selling weapons to ISIL. Both fake news stories got more than 2 million engagements while the New

bloggers do try to be honest, but the complexity is enormous and hard to navigate. This problem has increased because our new communicative infrastructure is commercialised. One consequence is the risk of filter bubbles. A filter bubble is created when people only get search results and Facebook updates that confirm their own conviction . Humans have a tendency to consider information to be true if it confirms what they already believe, and this effect is increased in online communities, creating the risk of mutual confirmation of fake news (Giglietto et al 2016, 4). The algorithms of the social media increase this tendency. The social media, or rather the companies providing them to us with their enormous possibilities for connectivity, are paradoxically at the same time responsible for some of this bias in *connectivity,* in disconnecting society as a whole and separating it into subsystems with different connections and views. They divide users into different filter bubbles, or enhance the tendency instead of trying to balance the situation with their algorithms. The filter bubbles are like separated worlds of knowledge with different conceptions of what is true, providing society with huge disconnectivity between different filter bubbles. On the one hand, this seems like a retrogression to the era of the party press, and on the other hand, it is something new and not fully explored. In the time of the party press, the form was transmission, and now there are many possibilities for fact checking, feedback and discussions in various groups. The commercialisation of our communicative infrastructure with algorithms only aimed at making companies rich might be a problem if it means that the companies increase disconnectivity, but despite the creation of economic inequality, a company like Facebook may have been the greatest when it comes to creating connectivity in the new medium environment (which also is their slogan). Filter bubbles connects like-minded people, just like conflicts integrate opponents (following Luhmann 2000), but with commercial algorithms programed with the intention to split populations up in different interest groups with totally different knowledge and outlook, this internal connectivity means disconnectivity on the societal level with big risk for societal disintegration.

York Times' top story only got 375,000 engagements in the same period leading up to the U.S. elections in 2016. See https://www.cnbc.com/2016/12/30/read-all-about-it-the-biggest-fake-news-stories-of-2016.html . Thus, of course most try to create connectivity.

With the digitally mediated interaction, the fact orientation is guided by many different orientations. In this regard, the globalisation of trade, the neoliberal deregulation of financial capitalism and the centralisation of democratic institutions, all driven by the digitalisation, mean that populist fake news find subscribers, for instance in the Rust Belt in the US and in the outskirt areas of Denmark. This communicative (dis)connection means that the shared identity of the western countries is weakened, and an increased cognitive dissonance between different filter bubbles is seen separating urban and outskirt areas and the educated and uneducated. In some way, this was already foreseen by Castells (2003) who distinguishes between *flow of space* connecting the educated populations in and between the big urban city areas, at the same time as disconnecting the populations living in the outskirt areas left with only *place of space*. What Castells did not foresee was that the outskirt areas were also connected by the digital media and interpellated by populist politicians (Müller 2016). Populism works by a double distinction; first they claim that only they represent the people, second, they distinguish between who belongs to the people and who do not (ibid). This could be the beginning of something similar to what we saw in the thirties, but it is most unlikely. Now the populations are older, and we are much wealthier. Maybe the worst thing in this regard is that the temporary local ego-centred behaviour or the free global and non-regulated capitalism means that the climate risk is not handled properly (Latour 2017).

Another initial problem, which our period has in common with the childhood of the printing press, is that there has not yet been developed a free speech culture and media Bildung matching the communication situation in the social media and the comments fields of the mass media and weblogs. On the web, there is a lot of hate speech and filter bubbles as well as one-dimensional perception and formulation of our shared situation. Maybe we will see a new growing self-regulation in the digital mediated public sphere and a *culture of free speech* like the one we saw following the introduction of the printing press, which can provide the right conditions for a new form of connectivity. As stated earlier, according to Jakobsen (2016: 371), the best-performing societies have had a well-functioning general public with secured freedom of speech because they mobilise and utilise the citizens' resources in the best way. Through digital media, a new form of feedback system with an enormous

emancipatory and organising potential is created. Currently, there is a struggle going on and it is no surprise that the citizens are feeling disconnected. Their perspectives and their interests have not been taken into consideration by the mass media (Tække & Clausen 2017) or by the politicians from the old parties (Standing 2011: 143). Whether the digital media believe that the exclusion from the functional systems will be reduced is still uncertain, and we also do not know if social institutions like the school system, the legal system and the political system will adapt to the new media environment,[9] or if a new basic form of social differentiation will take over. After the introduction of the printing press, we saw social instability and wars for 200 years. By analogy with that development, we now see a tendency towards a joint movement (connectivity) through digital media against the divided society, where many people are suffering from the bad consequences of neoliberalism. But we also see easy populist explanations and solutions, respectively, like racism, nationalism, anti-environmentalism, anti-intellectualism, suppression and separatism.[10] This is a paradox: through digital media, we have now constructed the Tower of Babel, and it is not only used to unite, but also to marginalise and separate. The Tower of Babel means that we now all in principle can communicate with each other and therefor for the first time ever can get real connectivity, but in the present initial period this parallel communicative space is also used as a new arena for disconnectivity.

The writing medium disconnected everybody but the aristocracy, and in the end, the print medium connected almost everybody by representation. Now, however, when everybody has a voice and in that sense is connected, populists (in Müller's definition) again, like in the first era of analogue electronic media, threatens society's connectivity, while institutions and the rest of society try to make the system work the same way as yesterday (in the former medium society) .

Conclusion

The media revolutions have created an increasingly high level of communicative (social) connectivity in the Western World. We have developed from mute animals where the strongest enjoyed the most rights, to speaking beings in a writing culture

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[9] Not least to match the digitalisation of the economic system, which has become global and instantaneous.
[10] Add hereto different kinds of extremism.

exploiting slaves, to capitalists in a society which also counts the printing press and later electronic media, exploiting labours and large parts of the rest of the world, and with the functionary differentiation we saw new forms of disconnectivity. In the beginning of each period, the new media led to major disconnectivity because the old social patterns, structures, cultures and norm systems were outdated by new possibilities for building structures and for organising social processes in more complex ways. After a transitional period with wars between old and new ways of organising, and between various new ways of organising the social dimension, stable forms of social organising survived the selection game. Even though it is especially at the beginning of a medium's history of action that we see huge disconnectivity, nothing in history indicates that such a situation like the Habermasian dream of a good society, or the medium theory idea of equilibrium will come true later on. More likely, new forms of connectivity always include new or remediated forms of disconnectivity. In no medium society ever has each and every individual or group been included or lived a life that we would consider good (eudemonia). Despite this, looking at history, the first period after the introduction of a new medium has been marked by such a degree of fluctuation, instability and disconnectivity that it would be defined as an unstable period. In this period, new and unforeseen connectivity produces so much disconnectivity that even the degree of disconnectivity in the following period looks like a society in equilibrium. Again, not to be misunderstood, such a society probably would not be good for everybody, but the logic of it as well as the norms and structures are acknowledged and recognised by everybody – also those who are excluded (disconnected) in many social circumstances. In the same way as Hegel's master–slave dialectic only works because they share the same semantics about their relationship – they both knew the social structures of their time. New media of communication provide society with a surplus of meaning and through communicative processes new formations and structures are condensed. The structures condensed within communication, through acceptance or negation of proposals of meaning, determine which communication contributors' contributions finds connection and which communication contributors' contributions are disconnected.

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