Farewell to a Utopia. Technology Discourse in the German NSA Debate[1]

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Abstract
Communication and media researchers have repeatedly highlighted that current technology discourse is characterized by an emphasis on "liberation technology" (Diamond, 2010). They agree that liberation technology is a myth that successfully impacts on the relation of society and technology. Critical disenchantment, in consequence, is a necessary precondition for democratic conceptions of technology. In this article I investigate the debate on Edward Snowden's famous bulk surveillance disclosures as a moment of de-mystification or disruption of technology myths. Theoretically, Eran Fisher's concept of technology discourse is used to closely examine the German legacy media NSA debate. In particular, two questions are addressed. First, which conceptions of technology emerge and are pursued in the course of the debate? And, second, how are social and individual legitimations used to justify the role of technology in society?

Keywords technology discourse, liberation technology, NSA debate, relation of technology and society, social and individual legitimation of technology

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1. De-mystification of technology

In January 2014, half a year after Edward Snowden had revealed bulk surveillance by US and British secret services, Sasha Lobo (2014), German author and blogger in the field of technology and society, referred to one of the key outcomes of Edward Snowden's disclosures. In a widely shared article he argued that the most sustainable consequence was the smashing of the utopia of a democratic internet. Now, the internet was "*kaput*" (broken) and showed its ugly uses: surveillance and misuse of data. While Lobo requested new visions of the internet, others experienced the positive side-effects of this internet disillusion. Namely, Germany security technology companies observed that the internet had "*lost its innocence*" (Martin-Jung, 2013). Customers, coming to terms with the opportunity that constant surveillance is a common governmental and economic practice, appeared to have altered their consciousness regarding the risks of digital technologies. They were increasingly ready to pay for more secure devices.

These examples illustrate why investigating the NSA case is insightful from a communication and media perspective. Communication and media researchers have repeatedly outlined that current information and communication technology discourse is dominated by a "liberation technology" paradigm (Diamond, 2010), highlighting that digital technology enables participation, community and equality, while, in fact, exclusionary mechanisms and individualization happen (Diamond, 2010; Fisher, 2010; Gürses, Kundnani and Van Hoboken, 2016; Milan, 2015). The NSA case has the potential to trigger a public debate on the role of information and communication technology (in the following: technology) in a society that questions the myth of liberation technology. As the "mask" falls, technology discourse could provide more, alternative perspectives on the role and potential of technology in society.

Based on an investigation of German legacy media debate, taking into account more than half a year of debate on Snowden's revelations, this article asks whether the farewell to internet utopia provided by the NSA case triggers a more "productive" technology discourse. Theoretically, I refer to the concept of technology discourse, provided by Eran Fisher (2013). Technology discourse is a cognitive map that legitimates the role of technology in society. In particular, I investigate which technology constructions the NSA debate offers and how the role of technology in society is justified.

2. Technology discourse

Current communication and media research is concerned with describing the complex unfolding of technology within diverse dimensions of society (Couldry and

Hepp, 2016; Esser and Strömbäck, 2014; Just and Latzer, 2016). In this context, the idea that the way we debate and conceptualize technology plays a crucial role for the actual role technology plays in society (Christensen, 2013; Diamond, 2010). Numerous researchers highlight the neat connection between discourses that frame and construct technology and the design as well as uses and interpretations of technology. In the words of Stefania Milan: "*Artifacts are inscribed with the visions of their designers and their representations of target users and intended uses*" (Milan, 2015: 3).

By coining the concept of technology discourse, Eran Fisher (2010) introduced a perspective on the role of technology in society that focuses on this important communicative hinge in the role technology plays in society (Christensen, 2013: 35). Fisher's core argument is that *"the discourse on technology is not simply a reflection of the centrality of technology in the operation of modern societies; instead it plays a constitutive role and enables exactly that centrality"* (Fisher, 2010: 231). Technology discourse can either be regarded as projection, central debate or, finally, ideology. In this sense, technology discourse shapes society.

Fisher's considerations base on the assumption that current societies pursue a technology discourse that mystifies the role and impact of technology. Other mystifications of technology have been identified by Larry Diamond (2010), pointing to the myth of liberation technology, or by Nick Couldry stating that social media create a "myth of us" (Couldry, 2014) while rather creating individuals-in-group structures (Milan, 2015). Yet, while Diamond and Couldry reveal the contradictions of communicative constructions of technology and social reality, Fisher claims that technology discourse is a *"cognitive map* […]*, a body of knowledge that is inextricably intertwined with technological reality, social structures and everyday practices*" (Fisher 2010: 235). Thus, technology has consequences for social order and rule.

Fisher's notion of technology discourse is characterized by two key assumptions. This concerns, first, the question whether there is a coherent idea of technology, offered by technology discourse. Fisher highlights that current debates are characterized by technological centrism. Technology is presented in the light of participation and empowerment. This narrative construction is a key component of digital capitalism, as it creates the myth of individual benefit. For this phenomenon, Larry Diamond (2010) has coined the critical notion of "*liberation technology*". Liberation technology is *"any form of information and communication technology that can expand political, social, and economic freedom"* (Diamond, 2010: 70). It is important to understand that Diamond uses it as a critical notion.

Translating Fisher's assumptions on technology into analytical dimensions, it is important to point out that communication and media research distinguishes at least two basic understandings of technology. Following Feenberg (1995: 304,

307), determinist, or techno-centric, approaches regard technology as a collection of devices that follow a unilinear development. This development is independent from societal influences, but society must adapt to its implications. Constructivist approaches, in contrast, regard technologies as social objects, as a design that offers a multiplicity of interpretations, applications and solutions (Bijker, 2001; Feenberg, 1995: 307). When investigating technology discourses it is, thus, useful to ask whether determinist or constructivist understandings (or the combination of both) emerge and whether they are consequently used.

A second aspect, closely connected to the first, concerns the question how the current role of technology in society is legitimated. Fisher (2010: 237) argues that contemporary technology discourse promises to overcome "*the alienating components of capitalism because of its integration with network technology*" and thus refers to "individual emancipation" (Fisher, 2010: 244). Fisher (2010: 424) argues that during Fordism technology was legitimated in order to mitigate worker's exploitation. Technology was presented as providing better working conditions and more free time. This legitimation was basically a social legitimation of technology. Contemporary discourse, in contrast, provides arguments for individual emancipation, while "*downplaying concerns for social emancipation*" (Fisher, 2010: 243).

Altogether, Fisher argues that contemporary technology is characterized by two narratives. First, determinist technology conceptions are put forward that praise the democratic benefits of technology. And, second, the role of technology is legitimated by individual, in contrast to social, emancipation. Assuming that his analysis was correct, what if the myth of liberation technology is challenged? Do we find opportunities for a broader debate including constructivist narratives, referring to social legitimation? It is thus worth to dive into technology discourse with regard to both dimensions, the role of technology in relation to society as well as social and individual legitimations of technology. Yet, before doing that, I will briefly sketch some specifics of the German NSA debate.

3. Cornerstones of the German NSA debate

The NSA debate is crucial to understand technology discourse at it had and continues to have the potential to do away with the mystification of technology in many regards (Bauman et al., 2014). The case disenchanted beliefs in the political regulation of communication; it revealed that, against all commitments to democracy, surveillance is a common governmental and economic practice and that we lack political answers and ethical standards in dealing with current technologies. These are exactly the key problems that were addressed in the German legacy media NSA debate. The German debate was characterized by moral outrage at spying citizens and

the German Chancellor, it was concerned with debating rules for technology control and debated the potential transformation of democratic states into techno-authoritarian regimes (see for NSA debates in other countries Kunelius et al., 2017).

The German case is interesting for three reasons. First, in the news coverage, based on Snowden's leaks, it was shown that Germany (and, particularly, Angela Merkel as head of state) was watched systematically by the NSA. This triggered debates on the naïve trust of German politicians in their political friends in the US and UK. Yet, US-German relations were regarded as the backbone of German international politics. Second, given the country's history with the notorious secret service of the Stasi in the former German Democratic Republic (GDR), the surveillance of ordinary people is an extremely sensitive issue in Germany (Eurobarometer, 2015). This resulted into a long-term debate, which was intense for over half a year. This provides opportunities to compare technology discourses over time. Third, given its predominant status in the world economy and politics, Germany had an opportunity to reclaim an international role in solving the legitimacy crisis resulting from the Snowden case.

The study presented in the following pages used a frame analysis to understand how the issue was discussed in the editorial sections of German journalism: we focus on two leading, quality German newspapers, *Frankfurter Allgemeine Zeitung* (FAZ) and *Süddeutsche Zeitung* (SZ), both considered newspapers of record. We selected SZ because the paper was in a coalition with the German TV channel NDR, which continuously investigated the material leaked by Snowden and aired the first TV-interview with the whistle-blower worldwide (after Glenn Greenwalds and Laura Poitras records). FAZ, on the other hand, is known for addressing current debates beyond the day-to-day revelations by reflecting on larger societal implications. Based on a large sampling of the entire NSA coverage, starting with the Snowden revelations, we selected three weeks with intense, peak periods for analysis. After the first, initial peak of the revelations (June 24 - 30, 2013), the second one focused on the "Merkel mobile affair", when Snowden's documents showed that the German chancellor's cell phone had been eavesdropped (October 28 - November, 3 2013). The third period of intense coverage followed Barack Obama's public speech assessing the reform US intelligence agencies policy (January 20 – 26, 2014). During this time, the debate focused on Germany's domestic affairs. On the whole, 69 editorial articles were selected for our analysis. In the sample of German editorial coverage, we identified four thematic areas: 1) international relations, 2) citizens, 3) economy and 4) future of democracy. In each of these broad frames, questions about digital technology were articulated in different ways. Overall, it is important to note that technology was not in the focus of the debate, but an important sub-issue. Thus, technology discourses could be discovered when practiced.

4. Technology and society

So far, I have highlighted that the German NSA debate is a debate that emphasized ethical and regulatory questions regarding the uses and misuses of technology. Very roughly speaking, it is a debate about the value and menace of democracy, and a debate about the way to maintain them in a digital age. Herein, the idea of liberation technology is a thing of the past. Trust and mistrust, security and freedom, connection and disconnection are dominant paradigms. The relation of society and technology is, thus, directly addressed. But how is this relation defined? Which conceptions of technology emerge and are pursued across the whole debate? Is technology presented in a determinist way, i.e. by pointing to its inescapable impact on society, or is it designed as a set of choices, open to democratic change?

In short, both approaches play a role, yet not always in pure form. Technology is constructed as based on an autonomous functional logic, following a unilinear development and heavily impacting on society on the one hand (Feenberg, 1995: 5). On the other hand it is depicted as a design that results from numerous choices and decisions, in close interaction with economy, politics, and society. Yet, while Fisher characterizes the "*general tone of the digital discourse*" as "*located on the spectrum between optimistic and euphoric*" (Fisher, 2010: 235), technology conceptions in the German NSA debate appear to rather follow a realist-pessimistic perspective. To the beginning of the debate, determinist approaches dominate while towards its end constructivist approaches gain relevance.

Directly following Edward Snowden's revelations, the debate offers a wide range of options to describe technology as a powerful and complex "black box". Technology, mostly the internet, is approached as an intransparent, powerful and global phenomenon that offers an incredible range of new opportunities and threats. This narrative also implies that technology impacts on society. Surveillance appears as a natural consequence of the role technology plays in society. As surveillance mechanisms are "*baked in*" the digital infrastructure (Gürses, Kundnani and Van Hoboken, 2016: 588), people will continue to use technology, several authors argue. And thus companies, secret services and governments will continue to surveil. Spying is easy when using technology and thus becomes an inevitable ingredient of technology societies.

While directly following the revelations the coverage mirrored the overall disappointment with bulk surveillance by the Americans. During the debate a more pragmatic viewpoint emerged: technology has been "normalized" and thus is surveillance. Politics must not complain but adapt to this new landscape by finding new regulations and norms. At the same time, technology severely threatens democracy. This is why numerous authors closely investigate current legal frameworks, incapable of regulation technology. The demand for adapting regulation

is everywhere. In conclusion, it is not technology that must adapt to democratic standards, but democracy that must adapt to technology.

In contrast to black box interpretations of technology, constructivist notions highlight that the NSA case shows that liberation technology was a myth. Following Edward Snowden's revelations, they argue, everybody now clearly understands that the internet is indeed not a symbol of democracy and human rights and that the computer is not a *"freedom machine"* (Frank, 2013). Authors mention that we witness a demystification of technology and that the internet has lost its innocence. Authors following this technology concept explicate that these narratives were created by the Silicon Valley elites and were implicitly accepted by citizens: "*we wanted to be fooled*" (Jarosinski, 2014).

An article by Evgeny Morozov (2014 a, 2014 b, published almost identically in both newspapers) illustrates both determinist and constructivist approaches. In this piece, Morozov maps out opposing scenarios in the struggle for a digital political future. One scenario is based on accepting the dominant role of technology by adapting regulatory frameworks. He argues that citizens actually contribute to this solution unwittingly, as they "*hand over political decisions to technocrats that might correct some details here and there, but do not profoundly question the system*". In the second scenario, *"Snowden's revelations point to the increasing and mostly ignored erosion of the democratic system"*. This approach affords more radical discussions about the future of democracy. In particular, citizens are called to participate in the decentralization of the internet.

This rough overview provides two insights. First, if contemporary technology discourse is characterized by a liberation technology narrative, the NSA debate can be considered a harassing fire. While the significance and the centrality of technology are not called into question, technological ideologies are demystified. And second, the debate offers more than a determinist narrative. Especially the later debate provides alternative, constructivist approaches to technology. This is not to say that the NSA case has triggered a diverse and multi-dimensional debate on technology. This question can only be discussed after looking into technology legitimations.

5. Social and individual legitimation of technology

A second dimension of analysis refers to the provision of technology legitimations. As shown earlier, Eran Fisher distinguishes two ways of justifying the role of technology in contemporary society: social and individual legitimation (Fisher, 2010: 243). Social legitimation, or emancipation, refers to group effects, such as inclusion, exploitation or inequality. Individual legitimation, or emancipation, means that technology implications affect a single person, such as empowerment, crea-

tivity or, in negative terms, inauthenticity. Fisher argues that while social legitimations were predominant in the industrial era, contemporary technology discourse is characterized by individual legitimations linked to the determinist understanding of liberation technology.

Continuing on the former finding that the NSA debate provides more than determinist media conceptions, one can legitimately ask whether it also offers more than individual legitimations of technology. And, beyond that, we must ask whether these legitimations refer to determinist or constructivist conceptions of technology and thus provide a variation of technology interpretation. In fact, again, we find both, social and individual legitimations of technology. Yet, the analysis shows that determinist technology concepts relate to both social and individual legitimations, while constructivist concepts predominantly emphasize individual legitimation.

Dominant social legitimations in the technology discourse relating to the NSA debate refer to security, often framed as national security, as well as to prosperity and growth. Both aspects link to a determinist understanding of technology. In particular, authors argue that societal security provided by technology outweighs concerns about freedom. Especially arguments on technology enhancing national (or, in the case of Europe, transnational) security are a dominant paradigm. This narrative closely links technology control and political strength, both describing US-American characteristics. Among contributions to this narrative one finds, for instance, supportive admiration for China's strategy to maintain control over national communication flows by installing Chinese technology. Accordingly, a German politician argues Germany lacks behind in investing into innovative national technology (Schirrmacher, 2013). Another legitimation refers to technology as a field of economic growth. Authors provide arguments that technologies are necessary to protect societies, in spite of their high cost. Economic growth, thus, is a necessary precondition for increasing Germany's and Europe's technological potential.

Beyond that, determinist concepts of technology are linked to individual legitimations. This concerns, namely, the introduction of crypto technology, such as Blackphones or encryption software. In the light of surveillance threatening privacy, customers are asked to take care for their own individual data security. As long as governments do not provide sound technology regulation they will rely on the citizens' ability "*to take care of themselves*" (Altenbockum, 2013). This implies an improvement of individual technology skills as well as private investment into secure technology. As another author says, politicians also need to question their uses of technology. Angela Merkel, for instance, is obliged to use secure technology.

These examples illustrate how privacy is constructed as a quest for individual responsibility. This narrative corresponds to arguments provided by top tier technology managers. Their positions on the future "internet of everything" received increasing attention at a later point in the debate. In the future, customers will be responsible

for deciding about the shape and the extent of "their" private spheres on their own.

While both legitimations, social ones and individual ones, are used to justify technology in a determinist conceptualization, social legitimations do not relate to a constructivist understanding of technology. Instead, individual legitimations clearly dominate. Individuals are invited to increase their technology abilities and to contribute to the decentralization of the internet. Individual action shall cause "friction" and "contradiction" within the global surveillance system. Another author observes that innovative internet engineers continue their work "*as if surveillance had never happened*" (Freidel, 2013); implicitly expecting them to take over individual responsibility in the creation of technology. In fact, the absence of socio-political technology legitimations, such as technology as an object of social or political demands, is compelling.

In contrast to Fishers claim that contemporary technology discourse is characterized by an absence of social technology legitimations, the NSA debate provides numerous arguments pursuing technology as a tool heading for collective or political ends. Yet, the NSA debate also points to a stable and established presence of narratives referring to techno-centric conceptions of technology, based on both social and individual legitimations. Constructivist conceptions, in contrast, appear to solely refer to individual legitimations. Altogether, while the NSA debate triggers a more complex conceptual offer as characterized in Fisher's technology discourse analysis, constructivist approaches seem not to offer perspectives relating society and technology, but only individuals and technology.

6. Towards a productive technology discourse

The analysis presented in this chapter demonstrates why public debates related to the Edward Snowden's revelations are instructive for current communication and media research. First, technology discourse is a narrative about the centrality of technology in society (Christensen, 2013: 43). This centrality can have various faces. Some of them were illustrated in the above analysis. Technology can be characterized as an overwhelmingly influential, yet intransparent impact on society. Technology can be characterized as a failed vision. Finally, technology can be characterized as co-constructed by civil society. All of these approaches share the finding that democracy needs to come to terms with the role technology plays in society and thus empathize its political significance.

Second, investigating technology discourse within the NSA debate, illustrates that the deconstruction of contemporary technology myths (Milan, 2015) can occur, a process that Nick Couldry (2014) has called a "necessary disenchantment". But does that result into a broader debate, offering society alternatives in con-

ceptualizing the relation of technology and society? In his conceptualization of technology discourse Fisher has pointed out that he uses the notion of "discourse" to highlight its "productive" dimension. That is, technology discourse can alter its message and thus support alternative approaches to technology in society.

Fisher's perspective on contemporary technology discourse did not apply to the NSA debate. In contrast, different conceptions of technology emerged as the debate evolves and alternative legitimation patterns were offered. Yet, what is compelling is that constructivist conceptions of technology are not socially legitimated. Communication and media research has repeatedly pointed to the need to "feed" democratic rules into technological infrastructures (Feenberg, 1995; Gürses, Kundnani and Van Hoboken, 2016). How would that be possible if there wasn't even a debate on a joint social construction of technology? And when will the Germans start a debate on techno-political change?

A glimpse back into sales figures of security technology provides reasons for skepticism. While foreign customers, from Brazil, Spain or Switzerland, started to invest into secure technology, German clients debated the need for technology investment, but largely remained inactive. Trust and custom remain strong engines of digital practice.

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Biography

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