

Generational Divides in Terms of the Actor-Network Theory: Potential Crises and the Potential of Crises

Verena Fuchsberger

Doctoral Student at the University of Innsbruck
Research fellow at the HCI Unit of the ICT&S Center, University of Salzburg
Sigmund-Haffner-Gasse 18
A-5020 Salzburg
email: verena.fuchsberger@sbg.ac.at
web: <http://www.icts.sbg.ac.at>

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Abstract

Using the term generational divide implicitly contains the idea that the generational divide is exclusively or at least mainly disadvantageous for the older generations. Regarding western societies, they do not keep up with the younger ones in terms of new media, i.e. the Internet, social media etc., still less in an environment of manifold and rapid technological transitions. However, when considering traditional forms of media, e.g. newspapers or books, there might be a *reversed* generational divide. Do younger ones unlearn how to read books and newspapers? The aim of this paper is to describe the generational divide as a crisis, which is driving changes positively or negatively. According to Bruno Latour's actor-network theory and its explanation for adopting a change, a divide illustrates a crisis, which leads to action. As soon as any prescription is perceived, actors will act (according to Latour, those can be humans or non-humans, e.g. technology or media). This paper tries to figure out how the generational divide might be described in terms of Latour and his understanding of the process of change. Thus, two modes of action in the relationship between seniors and media are conceivable:

- (1) The program (i.e. an attempt to cause a change) is stronger than the antiprogram, (i.e. the (re-)action of the attained actors to avoid a change) – seniors might accept and use new media as the media make them to.
- (2) The program cannot convince the antiprogram – the adoption is not performed by the human but by the non-human actors through a resignation in the prescriptions.

If the program and the antiprogram are equal, there will be no crisis or divide and thus no change. The paper will describe those structures in detail and illustrate them through examples about reading in times of ongoing transitions and instability, e.g., seniors reading the news “online” or “offline”, their preference of printed books instead of reading them online, etc.

Introduction

Media and their rapid transitions are a hardly comprehensible phenomenon because of their enormous diversity and variability. New possibilities (i.e. devices, content, structures) are emerging, which are both transient and determining for at least some consumers. This is illustrated distinctly by the history of the term “new media”, which is used to describe digital media, but initially focused on video communication or email (e.g., Dennis and Kinney 1998, p. 256). Due to the immense progress in digital media, like mobile phones or virtual worlds (e.g., Reinhard and Dervin 2010, p. 3), the term is still used to cover all of these possibilities, although many of them are obviously not new any more. Thus, also the meaning of terms changes rapidly and requires people’s constant pursuit to be up to date.

The aim of this paper is to describe and discuss changes and instabilities of media in regard to their potentials and problems for old as well as young people. My interest in this topic is intensified through an involvement in the project FamConnector, which aims to facilitate online interactions between geographically distant grandparents and grandchildren. It is located in the field of Ambient Assisted Living (AAL) and focuses on intergenerational activities. Within this project, both young and old people are addressed and thus it is of specific interest how they are affected by the instabilities and changes of media.

Discussions about the effects of changes on individuals and societies mainly focus on “young” people, from children to adults and their usage of digital media (see, e.g., Kaplan

and Haenlein 2010 or Vandewater and Lee 2009, for two illustrative examples). When talking about young people it is assumed that they are able to cope with changing circumstances and environments, especially those young people are often driving changes and progress. At least there are efforts to educate them by addressing “issues that are central to the experience of growing up in a world full of mass media, popular culture and digital media” (Hobbs and Jensen 2009, p. 9). These digital media require a range of important new media literacy skills (Hobbs and Jensen 2009, p. 9), involving ‘writing’ the media as well as ‘reading’ them (Buckingham 2010, p. 68).

Nevertheless, there is the apprehension that these media transitions will or might have negative effects at least for some individuals or groups. One very popular and also well-researched domain is the digital divide (e.g., Zillien and Hargittai 2009, p. 274 or Agarwal et al. 2005). This divide in access and usage of digital media is addressed in various ways by the investigation of the variables that seem to influence or cause a gap between users or usage. Typically, those variables involve barriers due to people’s ethnic origin, culture, gender (Brandtzæg et al. 2011, p. 123) or socioeconomic background (Zillien and Hargittai 2009, p. 274). Thereby, the digital divide does not only refer to an access divide, but also to an imbalance of usage; it can thus be described as a participation inequality (Brandtzæg et al. 2011, p. 123f).

Besides, there is one important factor determining an inequality of technology usage, i.e. age. Brandtzæg et al. (2011, p. 133) investigated the relationship between access and age of Internet user types in five European countries (Austria, Spain, Norway, Sweden and UK). Their results showed evidence that most older people are non-users, who often do not even have access to the Internet (80 % of 65 to 74 year old people). About 15 % of persons aged 55 to 64 years are instrumental users, who use the Internet in a goal-orientated fashion (e.g., searching for information about goods and services). However, this kind of usage decreases for 65 to 74 year old persons beyond 10 %. The authors conclude, that

“It is to be expected that the penetration and diffusion of broadband, digitalization, and media convergence will increase in the near future. It is reasonable to believe that, together with the emphasis on new technology in schools, this convergence will result in a trend towards more widespread use of the Internet among young generations.” (Brandtzæg et al. 2011, p. 134)

All these findings refer to a generational (digital) divide, which also extends beyond questions of access (Loges and Jung 2001, p. 556). Although the gap seems to disappear due to the increased work with computers for almost everyone, there is still the evidence that seniors will not use certain media (e.g., the Internet for homebanking) as an intrinsic consequence of ageing, e.g., to guard privacy or preserve resources (Loges and Jung 2001, p. 559). Herring (2008, p. 87) suggests focusing on life-stage related behavior rather than indicating an ongoing change for all users. However, Gilleard and Higgs (2008) rebut this perspective of age as an 'endogenous' explanation for the digital divide on basis of a longitudinal study of ageing in the UK and infer that "those now entering retirement may well bridge the current divide." (Gilleard and Higgs 2008, p. 238) These perspectives correspond mainly with two major social theories of ageing, i.e. the activity theory and the disengagement theory (e.g., Alley et al. 2010 or Franklin and Tate 2009), which describe seniors' tendency to participate in social life actively versus refusing to as a kind of retreat.

Discussing the usage of digital media does not only mean focusing on access to or the technology itself, but also on changing behaviors to be able to cope with the content provided, e.g., for reading texts. In the past, reading texts required printed papers or books and thus specific skills to handle these print-based texts, but reading (and writing) is now changing in terms of altered demands for competencies and behaviors (Hagood 2003, p. 389). When reading this statement, one is tempted to interpret it as a disadvantage for older users to the benefit of younger ones, or as Herring (2008) writes ironically:

"... the generational divide is typically interpreted to mean that people on one side of the gap – youth – have more access and a greater ability to use new technologies than those on the other side – the adults (especially, older adults) who had the misfortune to be born before the advent of the Internet." (Herring, 2008, p. 71)

In order to overcome this perspective, Herring (2008, p. 72) suggests moving away from a fascination with technologies to a focus on people themselves. The competencies and behaviors in using digital media adjudicated to the youth are more or less visions of adults, who construct a certain picture of the youth (Herring, 2008, p. 72ff). She claims a more balanced view that recognizes not only flux and change in new technologies but also continuities and trends (Herring, 2008, p. 86). The generational divide thus might be a construct, which is influenced by the perspectives of those, who deal with it. Furthermore, the generational divide almost always portrays the seniors as the losing part of this

dichotomy. However, is it really only one dimension, i.e. a gap between ‘winners’ and ‘losers’? Maybe there is another dimension, illustrating a dichotomy *within* one party of the gap, i.e., gaining specific knowledge for and of digital media might also mean losing (or never getting) knowledge about other kinds of media. Perhaps younger people unlearn how to read books or newspapers, or at least are not willing to handle printed texts. The following example, found in a blog about the future of books, perfectly illustrates these concerns:

“This is going to sound incredibly lazy, like someone who gets in their car to drive a few blocks rather than walk, but the physicality of the book, having to hold it open then lift and turn each page, was a lot more exhausting than I remembered. All of that holding and lifting and turning distracted me from the act of reading, took me out of the story if you will. A few pages into it I gave up, logged in to Amazon, and bought the Kindle book.” (White 2011)

Currently there are efforts to even create books with characteristics of digital media (Dresang 2009), probably to address readers like the author of the blog entry. This means that changes of media lead to altered behaviors, which again cause changes in technology or media to meet the new requirements.

All these changes, instabilities and concerns are now becoming obvious and require to be investigated on their potential and problems for different generations. Within the following chapter this will be done based on the actor-network theory to create a new perspective on the generational divide.

The generational divide in the light of the actor-network theory

What we *know* after the preliminary chapter is that we *do not know* how the generational divide affects the young and the old generation, and if it does, whether it is beneficial or disadvantageous. What we further know is the assigned characteristics to digital media, i.e. driving changes and instabilities, which can be considered as potential crises. In the following these crises will be discussed on their potential especially for older generations regarding their media usage.

It seems to be obvious that digital media are advantageous for many purposes, e.g., the Internet is seen as an extraordinary educational and cultural heritage resource (Preece

2002, p. 24). But, some authors, e.g., Nickerson and Landauer (1997, p. 19), wonder what happens if access and computer-based resources become a critical determinant of how effectively one can function in society? Apart from “functioning effectively” in society, the essence of this statement also brings along a negative connotation in terms of seniors’ voluntary goals. Thinking about seniors reading the newspaper, one might not be surprised if it involves a printed version. We might not be concerned about this situation, but having in mind the prediction that there will not be any printed newspapers in the near future¹ any more, seniors will have to cope with a somehow changed situation – and a crisis will have begun.

Describing a crisis in terms of actor-network theory (short: ANT²) requires at least a brief comment on this theory, which will be presented in the following.

One basic postulation of ANT is the view of everyone and everything being an actor as soon as he/she/it acts and thus influences or evokes an action of someone or something else. Actors can thus be humans, but also every kind of artifact that influences the behavior of others as the term implies no special motivation of human individual actors, nor of humans in general (Latour 1996, p. 5). In this sense technology, media, younger or older people are considered equally as actors. They might have different assigned attributes (e.g., being human or not), but this does not make a difference in their role as actors.

This is illustrated best with an example, which is frequently used to describe ANT (e.g., Schulz-Schaeffer 2006, p. 131). Imagine a hotel manager telling you that you should hand in your key when you leave the hotel, as she does not want you to lose it. Maybe you follow her wish sometimes, but you might also forget to hand it in. This happens very often, so, in frustration, she places a note at the reception desk which repeats the wish. As this does not bring about the effect either, she decides to use heavy and bulky key chains. Every time you leave the hotel, the keychain prompts you to hand it in just because of its heaviness and bulkiness. As soon as the artifact leads to an action, i.e. handing in the key, it is an actor. If

¹ Estimations vary considerably, with some believing printed newspapers might cease to exist within the next two years, whereas others believe within thirty years (Thurman and Myllylahti 2009, p. 691).

² When using the acronym “ANT” for the actor-network theory, Latour (2007, p. 9) also establishes a connection with (non-human) animals and their behavior, which he finds comparable in some ways to humans (e.g., both try to find trails).

the note on the front desk had got you to hand in the key, it would also have been an actor. Within ANT this is called *prescription*, i.e. a behavior that is imposed onto humans by non-human delegates, which in the example is the key chain or the note (Latour 1992, p. 232).

After having illustrated briefly what an actor is in terms of ANT, the next step is to define the network, being a central part of the theory¹. The actors act – but always within a network, which they form in turn. If a network falters, the actors may falter too (Mol, 2010, p. 258). A network consists of associations, which initially have to be made, and this is hard work. The associations define the relatedness within the network, and can be clarified by the terms collaboration, clash, addition, tension, exclusion, inclusion etc. (Mol, 2010, p. 259). The term “tinkering” is now more frequently used than “association”, which might better describe the step-by-step activities performed by the actors. Thereby, not only gaps (i.e. places where no associations exist) are depicted in networks but also tensions (Mol, 2010, p. 264f).

“... there is not a net and an actor lying down the net, but there is an actor whose definition of the world outlines, traces, delineate, limn, describe, shadow forth, inscroll, file, list, record, mark, or tag a trajectory that is called a network.” (Latour 1996, p. 11)

This quotation highlights that a network is not stable, but is constituted by the actions of the actors involved. Actors participate and mediate the relational networks, but are also the outcome of the same relationships (Cordella and Shaikh 2003).

ANT, its actors and networks, will now serve as a basis to describe seniors’ rejection of online newspapers and their preference of reading offline versions instead. The actors seem to be quite clear in this case: seniors and the (offline, print-based or online) newspaper. Both act, somehow, in this relationship, i.e. the seniors are reading a printed newspaper and the newspaper provides the information, which can be read. Although the online version is not read, it is also an actor, as it *tries to be read* by seniors. We could go further by looking at potential actors: What about the paper the news is printed on? What about the Internet

¹ The pioneers of the ANT (Latour, Callon, Law, etc.) developed the term “actor-network theory”, although they indicated often that it is not a theory in a regular sense, as it does not provide an explanatory framework. The third link was added to strengthen the term, which “actor-network” could not serve. Mol (2010, p. 253f and 261f) highlights this problem in detail and argues that ANT is nonetheless a theory, though one with a different meaning of what a theory is (Mol, 2010, p. 262) – in case of the ANT it is an adaptable, open repository (Mol 2010, p. 265).

content providers? What about the editors? What about everyone and everything else that is involved in the relationship between seniors and their newspapers? The network we are talking about will get very complex if we try to find every participant (human or non-human), involved in any way. Thus, the following steps will focus on the network senior-newspaper to illustrate the basic idea.

After having figured out the basic actors and the foundation of the network senior-newspaper the next step will be to have a closer look at what makes the involved actors behave like actors. An actor-network is characterized by 'something social' that connects the actors. In this sense, the social is not a substance, but a movement between non-social elements (Latour 2007, p. 159). This means that the social is temporary; it is within the network and attributed to actions, not to the actors. Thus, both human and non-human actors are non-social elements within the network. As soon as they interact, the interaction itself is the social component of the relationship.

Thus, there needs to be an interaction to talk about an actor-network, here constituted by seniors and newspapers. The senior buys the newspaper, reads it, stores it or throws it away. The newspaper is printed, sold, read, stored or thrown away. These passive expressions might lead to the impression¹ that the newspaper itself cannot be an actor, as it does not do anything itself, it does not act. But, in a different way, it does. It is the newspaper that e.g. provides information and news. The argument against this might be that it is not the newspaper itself, but the journalists, who investigated and wrote the articles. But here is a key point of the actor-network theory: Although journalists (also editors, designers, graphic artists etc.) intend to affect or influence the potential readers, they can only inscribe the readers' anticipated behavior into the artifact (i.e. the newspaper), what can both succeed or fail. Nevertheless, the interaction takes place without them as it only includes the newspaper and the person reading it. Finally, these two actors constitute the network, which will be described in the following chapter.

¹ This statement also illustrates the basic assumptions of ANT: An expression leads to an impression – the actor 'sentence' has an effect on the actor 'reader', i.e. the impression. A network is made. As soon as the reader really gets the impression, or is amused or annoyed about it, there is a 'social something', which connects the actors.

Arguing for activity: Program or Antiprogram

In order to describe¹ the relationship, the interaction or the interplay between seniors and newspapers, it is necessary to understand that we can only notice and describe phenomena if they are about any kind of controversy. Latour suggests to “paradoxically take all the uncertainties, hesitations, dislocations, and puzzlements as our foundation.” (Latour 2007, p. 47) Regarding the situation of seniors and unstable media this becomes obvious. If there were no recognition of a generational divide, we would not think about it and we would not talk about it. In this sense, a change (i.e. a crisis) is needed to become aware of situations, actors and networks. Thus, the generational divide can serve as a starting point to figure out about the effects of media, their usage and potential.

One essential point of ANT is its perspective while describing phenomena. Actors are – as already indicated by the term itself – acting and thus active. This is one aspect that makes the ANT interesting: when using it to describe things, there is no possibility to assign a passive, pitiful role to any involved party. Especially if the phenomenon has per se a negative connotation, i.e. being disadvantageous for seniors², it helps to evade clichés and stereotypes.

With regard to the active role of the involved actors I will now try to define the relationship between seniors and online newspapers. To do so, I will briefly come back to the above-mentioned example of the key chain to illustrate the term ‘program of action’, which was introduced by Latour to “... denote goal-directed behavior of human actors as also of technological artefacts” (Schulz-Schaeffer 2006). The example of the key-chain is a typical one, which Latour (2000, p. 41) described in terms of a program of action, saying that the key chain tries to reach a goal, i.e. to be left at the reception desk. The hotel guests have another goal, they just want to have the key available as soon as they need them, regardless of whether they take it with them or leave it at the reception desk. Consequently, they form

¹ According to Latour, *describing* phenomena is central in research, rather than finding explanations. Thereby, the object will be focused, and nothing else. Many arguments for this perspective can be found in Latour (2007, p. 141ff) as an readable interlude in form of a dialog on the difficulty of “being an ANT”.

² In terms of the ANT, I could also argue for the disadvantageous role of the printed newspapers, which might cease sooner or later. But as the paper is about the generational divide, I will focus on the seniors to be consistent.

the antiprogram, i.e. they do not want to leave the key at the reception desk primarily, as this would mean to think about it every time they leave the hotel and come back.

Regarding the network of seniors and newspapers, this would mean the following: The program is the newspaper; its goal is to provide information and to be read. Regarding the generational divide I will focus on the online version, as the digital equivalent of the newspaper. Consequently, the seniors constitute the antiprogram, trying to avoid reading the newspaper online. As we have seen before, there is the need for a crisis to be able to perceive situations, to become aware of them. Thus, if seniors read the newspapers offline there is no crisis. Crises arise as soon as there is a change of the situation. Talking about media transitions, crises become obvious. All instabilities and changes can cause crises, and as media change rapidly, we have to deal with many of them.

Two modes of action

After having figured out what the program and the antiprogram might be, two modes of action are conceivable in the network of seniors and new media. Using online newspapers as an example illustrates the program-antiprogram link¹.

(1) The program is stronger than the antiprogram

Briefly, this means seniors accept and use new media as the media make them do². Thereby, the program can be understood as having all the benefits that will arise in case of reading the online version of the newspaper, but also the disadvantages that appear when not reading it.

In case of seniors and online newspapers the program might be phrased as follows: as long as there are many printed versions, there will not be the necessity to deal with online versions. But, as stated above, the printed versions will cease and thus the availability of alternatives changes. Not reading an online version would possibly mean not reading any newspaper. Furthermore, it might be beneficial for

¹ Besides, the two modes of action could be transferred to almost every example about seniors and new media.

² Although this seems currently not to happen for online newspapers, it is for printed ones (or also books, the program remains the same).

seniors to read the newspaper online due to its form of appearance: being in a good physical condition, a senior might be outside, traveling etc. In this case, the online version would only be advantageous if the senior would have a mobile device to take with her/him, but then it would increase mobility as it becomes unnecessary to find a seller, to deal with many large-format pages, which will crumple if it's raining, and with small font sizes, which could be adjusted in online versions.

All these possible benefits of the online newspaper are prescriptions as soon as they impose an action on another actor, i.e. the senior. However, the seniors are striving against this program and form an antiprogram. This means they might not agree with the benefits or accept potential disadvantages. In case the prescriptions are strong enough, they will convince the antiprogram and its actors, thus the seniors will read the newspapers online.

But, as stated above, this is currently not happening, so there is the need for a second mode of action to describe the situation, which will probably be more adequate to describe seniors' interplay with newspapers:

(2) The program cannot convince the antiprogram

Although there is a program trying to convince the antiprogram, the attempts might fail due to the strength of the antiprogram. For the senior-newspaper network this implies that there is no adoption by the older adults. Instead, the non-human actors (i.e. the newspapers) resign; they do not prescribe behavior onto seniors any more. Thus, seniors have a strong antiprogram, which is defined by the rejection of buying, reading or even considering online newspapers. Again, this can be transferred to other phenomena as well, e.g., reading books online.

The important point within this case is that the seniors *choose* not to act (either consciously or unconsciously); they are *actively not adapting or changing* anything.

Although both above-mentioned modes are conceivable, neither of them represents the current situation exhaustively. If one of them would, we would not have a crisis, because the situation was defined than as there were no more efforts of the program or antiprogram. Furthermore, there would be the problem of simply producing clichés, which would mean in case (1) e.g., to describe all seniors as early adopters of new media without a reflection of

whether the progress is good or bad, in case of (2) to describe them as deniers of potentially beneficial programs. Consequently, this is not a question of either/or, but a continuous struggle of two opposed parties.

To bring it back to a reversed generational divide, there would also be many examples for describing the situation of younger users in terms of programs and antiprograms. Just imagine the above-mentioned attempts to create books with digital characteristics – the program of the books changes to convince the actors of the antiprogram, i.e. young people, who do not want to or are not able to read conventional books.

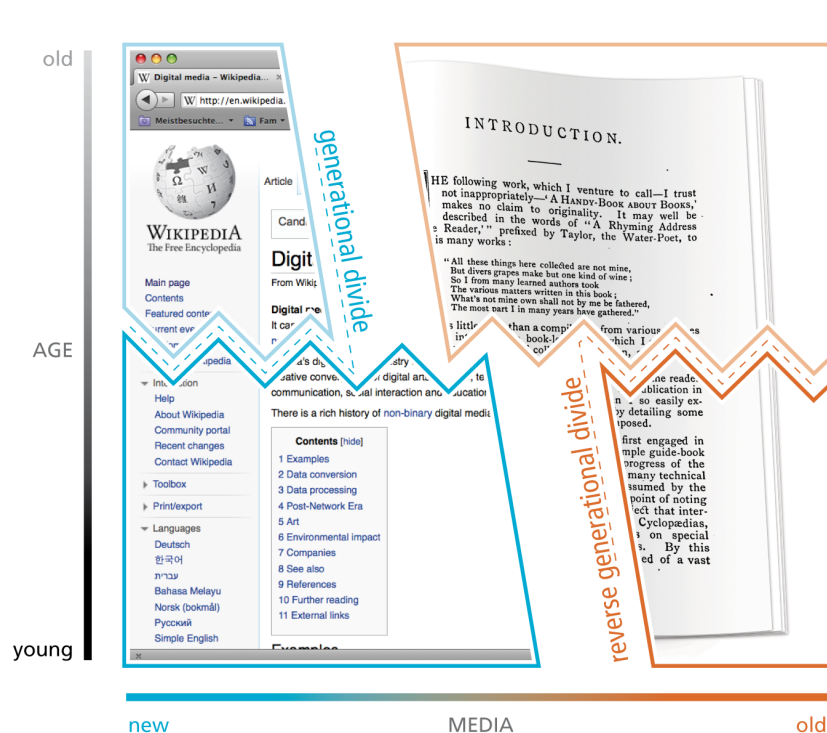


Figure 1: reversed generational divide

The reversed generational divide (see figure 1) is a gap in access, knowledge or skills that depends on the one hand from the media itself (old versus new) and on the other hand from the people's age (young versus old).

Balancing the programmatic behavior – the effect of transitions/crises

The situation we are now able to describe is a struggle between program and antiprogram, or between actors of the program and those of the antiprogram. There will be temporary outcomes¹ (Rip 2009, p. 410), or as Schulz-Schaeffer (2006) states, referring to Latour:

„His answer is that the programmes of action will affect each other with the result that neither of the original goals will be realised but a new programme of action will emerge and a new goal to which it leads.“ (Schulz-Schaeffer 2006, p. 132)

This implies that every actor, and thus every program, has a specific goal, which he/she/it seeks to achieve, but as long as the program and the antiprogram are not equal, this is associated with efforts and thus activity. Nevertheless, I would not refer to it as a ‘new’ goal emerging through these attempts of balancing, rather as an adopted, adapted or balanced goal. If one of the two programs is stronger than the other one, it is clear which goal will be achieved. But – as we already know this might rarely happen – it is more a continuum, within which the goal is balanced or also ‘hard-fought’.

The potential of crises has now become visible. There would be no activity at all, if there were no transitions or instabilities. There would be no struggle for change, or even more important, for situations to remain unaffected. A crisis is on the one hand a point of departure for an involvement and an analysis of situations, triggered by transitions and instabilities. On the other hand it is also the result of the struggles, which might lead to new or adapted crises.

Conclusion

Describing seniors’ joint behavior with media and not being a senior myself demands to acknowledge that this paper is influenced by my perspective on seniors², which is not first-

¹ In the example of the key, Rip (2009, p. 410) refers to its shape, which changes and remains open to further changes induced by the program.

² According to Herring (2008) the description or construction of generational issues is often not done by the generation concerned, but by others. Thus, it is biased and may lead to descriptions, which contain much information about the author’s perspective, not about the generation in question. Or – referring to Wittgenstein – both construct a perspective, but one’s own construction about oneself is usually more coherent (Lütterfelds 1995).

hand, but *mediated*. This means that all the descriptions are from the outside of the target group, but are mediated by literature, theories and observations. Nevertheless, this paper tries to describe the relationship between seniors and media – and hopefully it will serve as a basis to better understand it or at least for rising the discussion about the potential of transitions and instabilities (i.e. crises).

Using ANT for this purpose had two reasons: First, this theory allows to ascribe to both seniors and technology an equally important role – as soon as they are actors, there is no assumption about who or what is in a better (i.e. convincing) situation. Second, the ANT makes specific, surprising, so far unspoken events and situations visible, audible, and sensible (Mol, 2010, p. 255). However, one problem when using the ANT for the examples above is the complexity of the situation as soon as actors are involved in more than one network, with their different discourses, logics, modes of ordering and practices (Mol, 2010, p. 260). E.g., the online newspapers try to persuade seniors to read them. The program could be very specific for seniors, but as the newspapers also strive to be read by other age groups, they cannot focus exclusively on seniors. Thus, they are actors in more than one network, which makes the situation more complex and challenging¹.

However, the ANT served as a starting point for describing the generational divide from a new perspective, which takes the effects of a situation into account, but does not hunt for causes – and the effects are mostly unexpected (Mol, 2010, p. 261).

The overall goal of this paper was to describe the potentials and problems of changing media. However, these instabilities illustrate points of departure for producing activity, as the actors are challenged to do something, whether adopting or rejecting the changes. This applies to both younger and older generations and manifests itself e.g., in access to and skills of certain kinds of media. The implication for the above-mentioned project is that seniors as well as children need to be confronted with the new possibilities media bring along for taking over active roles within the senior-children-technology network. The challenge for the development of the intergenerational online activities is to inspire activity and to overcome the reversed generational divide. The basis is already made within the

¹ I decided to use the example of the newspapers' program here to illustrate the potential complexity of networks and situations. The example would have been much longer if I had tried to describe the complexity of the role of seniors as actors within this network. Even so, the important point is that inconsistencies of goals will not only affect the program and the antiprogram, but also different goals of *one* single actor.

project, as it integrates both parties and requires joint activity. Thus, the perspective of forming and constituting a network allows the actors not only to deal with instabilities but also to tap their full potential.

Finally, the paper aimed to stress that the generational divide need not be negative *per se*, as it accentuates the active role of seniors, youths and technology. Loges and Jung (2001) phrased the active role of seniors vividly: “Older people may have lower Internet connectedness because they don’t want higher Internet connectedness” (Loges and Jung 2001, p. 559). This statement illustrates perfectly the core of the ANT and its appropriateness for describing the interaction between seniors and media, as it allows and also requires activity of all actors.

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