"I just have to have it" or "It's enough for me"? Gendered tendencies in attitudes towards and usage of mobile communication technology

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ABSTRACT

The mobile phone is an excellent example of a rapidly developing innovation that changes societal norms and lifestyles and may also affect gender relations. Previous research has shown that technology design and technology usage behavior is gendered: men and women position themselves in relation to technology based on femininity and masculinity norms (Aaltojärvi, 2012; Akrich, 1992; Green, 2002; Kelan, 2007; Oost, 2000; Rakow, 1988; Shade, 2007; Taipale & Fortunati, 2014). We use a social constructionist view and discourse analysis to look at how German men and women position themselves in relation to the mobile phone in private and occupational life. Our findings uncover strong gender dimensions in the discourse around mobile communication technology and indicate the emergence of practices that weave gender and technology together in new ways.

KEYWORDS
mobile phone; gender; use of mobile phone; gender performance.

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INTRODUCTION

In our study of attitudes towards mobile phone technology among German adults (part of a broader interdisciplinary project) we noticed a strong tendency for men and women to say very different things about the role of mobile phone technology in their lives. The choice of words revealed gendered tendencies that map onto existing patterns of gender and technology as identified in the literature (Aaltojärvi, 2012; Shade, 2007). We add to this body of work by presenting our findings on German men and women's gendered tendencies towards mobile communication technology.

The Gender System and Mobile Communication Technology

According to Ridgeway and Correll, "gender involves cultural beliefs and distributions of resources at the macro level, patterns of behavior and organizational practices at the interactional level, and selves and identities at the individual level" (2004: 510-511). Ridgeway and Correll call for research to identify the key components in the gender system and to examine how these components maintain or change it. We view mobile phone technology, first invented for an international hegemonic business masculinity context (Burkart, 2007), as one component of the gender system. The mobile phone structures patterns of behavior by creating codes of importance and activity: who interrupts whom by calling, who stops local interaction to accept a call, who distances him or herself in public space through absorption with the technology, who mediates social relationships through this electronic media, who is in demand, how is work organized geographically and across time using this technology? Mobile communication technology shapes "selves and identities at the individual level" (Ridgeway & Correll, 2004: 511) by inviting answers to the questions, 'Am I a person who is tethered to technology? Am I interested in the many features of a smart phone? Am I popular with others as measured by contact via the device? What is the pleasure or necessity of the mobile technology, and how do these stand in relation in my life? How do my answers to these questions define me?'

Mobile communication technology has been called the "fastest diffusing medium on the planet ever" with a global penetration of 87 percent in 2011 (Campbell, 2013: 9). It is shaping everyday time and space relations in new ways (Green, 2002; Ling, 2008). Mobile communication technology is personal (attached to an individual), portable (mobile), and pedestrian (the mundanity of much of the communication, as well as its pervasive physical presence in social life) (Ito, 2005). Much has been written about the time-space shifts, compressions, and connections in relation to mobile communication technology. It remains crucial, however, to ask about causality and social differentiation when thinking about time and space

changes as a result of mobile communication technology: *whose* time, *whose* space, *whose* mobility is being shifted or modified, and how are power relations playing a role in the use, spread, and meaning of mobile communication technology (Massey, 1993; Green, 2002)? Given social differentiation and inequalities along gender lines, it is reasonable to enquire how men and women may experience this mobile device differently and have different understandings of what this technology means to them, how it is marketed to them, and the degree to which it both defines them and shapes their social relations (Aaltojärvi, 2012; Blakley, 2012; Shade, 2007; Tacchi et al., 2012; Gill & Grint; 1995; Faulkner, 2001; Wajcman, 2004, 1991).

Telephones as sites of Gender Scripts

Telephones themselves shifted over time from masculine to feminine associations (Martin, 1991). Household telephones were considered a feminine technology because they were associated with the (feminine) home and women's conversations (Fortunati, 2009; Shade, 2007; Rakow, 1992; Moyal, 1992). The mobile telephone was first marketed to men, as a tool (Fortunati, 2009; van Oost, 2003). Early marketing efforts in the USA promoted this technology to men by focusing on power and virility; for women, the focus was security and kin-keeping (Katz, 1999; Townsend, 2000). The mobile phone in 2014 with its multiple functions can both be considered a masculine gadget and a feminine social technology. From a sociological standpoint, the occurrence of both feminine and masculine attributes in one device is a unique opportunity to examine the relation of gender to technology (Skog, 2002; Wilska, 2003).

Using the notion of 'script', we can say that the mobile phone is inscribed with the ideas and biases and experiences of the designers, and these ideas or scripts are interpreted or read from the experiences and viewpoints of the users (Akrich, 1992; van Oost, 2003; Shade, 2007; Aaltojärvi, 2012). "Not all people perceive the same gadgets the same way, and this reading process may be quite different from that which the designers had expected" (Aaltojärvi, 2012: 211). Gender scripts are representations designers unconsciously slip into artifacts that function on both a symbolic and individual level to reflect and construct gender differences (Shade, 2007; Van Oost, 2003). So let us take as a starting point that gender identities and representations are ascribed into the materiality of the mobile phone and ask: how are these potentially *re-ascribed* by users? As yet there has been no research in Germany that explores the strategies of users towards information and communication technologies, especially towards the mobile phone, though a growing literature presents perspectives from other parts of the world, occasionally also specifically the gender dimension: for example, in Finland (Wilska, 2003), Norway (Skog, 2002), the USA and Canada (Shade, 2007; Katz, 1999; Martin, 1991), Australia (Moyal, 1992), Japan (Ito, 2001; Ito & Okabe, 2005), India (Tacchi et al., 2012), and China (Wallis, 2011). We wish to examine the case for Germany.

Gill and Grint (1995) and Henwood (2000) suggest that women tend to play their technological competence down because being technically competent is not in line

with norms of femininity. Wajcman (2000) maintains that men's affinity with technology is becoming integral to the constitution of male gender identities and also the culture of technology. Multiple masculinities and various technologies of course express themselves in unique ways, but in contemporary Western society under hegemonic masculinity, the culturally dominant form of masculinity is still strongly associated with technologically prowess and power (Wajcman, 2000: 454; Hofmeister & Witt, 2009; Connell, 1985, 1987). If being male means being technically competent and being female means being less competent than men, technology can be used to comply with a gender system that reproduces forms of inequality (Gill & Grint, 1995; Henwood, 2000; Ridgeway and Correll, 2004). Yet these findings are a few decades old; meanwhile, new generations of users have grown up with unprecedented technological developments. The more recent literature shows a stronger affinity of women in their use of and attitudes towards mobile communication technologies (Tacchi et al., 2012; Ito & Okabe 2005, Blakley, 2012).

Before we go further, it is important to take a moment to distinguish between mobile phone technology and mobile communication technology. Because of the rapid advances in technology around mobile communication, the concept of a 'cell phone' or 'mobile phone' may soon (if not already) be replaced with the broader concept of mobile communication technology, defined within the interdisciplinary field of mobile communication studies as "devices and services that supported mediated social connectivity while the user is in physical motion" (Campbell, 2013: 9). We began our research with a focus on the mobile phone system, but mobile communication technologies such as smart phone wireless connectivity emerged in the discussion.

In this article we look at how German men and women position themselves towards mobile communication technology in everyday life and how they communicate this positioning. We analyze transcriptions from seven focus groups about the mobile phone system. A social constructionist view and discourse analysis are our theoretical and methodological orientations. We identify two gender-conforming tendencies towards the mobile phone and one counter-tendency and much nuance in the ways men and women describe even the same features of the phone, but in ways that conform to gender expectations.

Social Construction of Technology and Gender

According to social constructionists, the world as we know it and the objects in it result from interactions or interchanges among people (Pinch & Bijker, 1989 (1987)). In this view, an artifact or technical system has its specific shape and design and is successfully adopted by society because of the social system around it. Pinch and Bijker (1989(1987)) theorize that the social aspects - including gender - that people bring to the design and use of an object influence the development of that object.

Previous research has shown that technology is not free from gender, and that the relation of gender to technology is complex and not fixed. Not only gender, but

also technology is socially constructed (Wajcman, 1991). The social construction of gender argues that gender is the result of a continual performance (West & Zimmerman, 1987). Based on social interaction, people decide how they become men and women, and also based on social interaction, they choose among technical alternatives (Cameron, 1995; MacKenzie & Wajcman, 1999). Mobile communication technologies raise issues around how people relate to each other, with the mobile communication, technology becoming a mediator of the communication and how users relate to space and behave in public settings and shared spaces. For example, Ito and Okabe (2005:27) point out that "public transportation and meeting places were previously sites for 'people watching' and occasional lightweight contact with strangers. Now these situations are being transformed into setting for intimate and private contact with physically absent others.". They ask questions about how assumptions of the permanent presence of the device itself on or near the human body - and the permanent reachability that affords - change the symbolic properties of the mobile communication technology as well as of the human being (Campbell, 2013:11). In addition, Campbell argues that this technology is in permanent interaction with a broader infrastructure of technology and of other devices (Campbell, 2013:12). Mobile communication technologies can also shape gendered inequality, as they contribute to or mirror other social inequalities (Katz, 2008).

The relationship of technology and masculinity is expressed through knowledge and practices that coincide with the development and usage of technological objects (Gill & Grint, 1995). Technology can thus be seen as a part of male culture, and, as a 'male' concept, technology is necessarily thereby in juxtaposition to female culture (Gill & Grint, 1995; Cockburn, 1983, 1985; Cockburn & Ormrod, 1993; Wajcman, 1991). Closely tied to this male culture is a limited definition of technology that equates it largely with machines; this term excludes female skills and with feminine-connotated working areas (Döge, 2001). If, as earlier research indicated, women actively distance themselves from technology in order to reify the role of technology as male, their actions can be understood as 'doing' gender (West & Zimmermann, 1987). People may perform their relationships to technology in order to establish or confirm themselves socially as men or women; a specific relation to technology is performed to conform to normative gender expectations (Gill & Grint, 1995; Henwood, 2000).

Gender and technology are both socially constructed, and partly constructed in relation to each other; they are mutually defining and reinforcing (Faulkner, 2001; Kelan, 2007). The masculine associations with technology in itself could be unproblematic for an individual woman and not deter her from an interest in technology in the least, but men in her social context may be threatened by her affinity to technology. She may receive sanctions or stigmatization for her technology interest, which could encourage her to reject technology. A man's assessment of a specific technology as acceptable, or his take-up of it, seems to influence his wife's use of it, but the reverse has not been found. In a longitudinal study of spouses in the USA collected in the early 2000s, Chesley (2006) found that technology use at time 1 diffuses from husbands to wives, and increases a wife's use of that specific technology at time 2, but the same diffusion or transfer did not

occur for technology first used by wives and transferring to husbands. And yet, studies indicate that more women than men are active in social media (Blakley, 2012), have worked with computers at work due to their higher prevalence in administrative jobs (Chesley, 2006), and used traditional telephones more (Frissen, 1995). The relationship of gender to technology, and technology to gender, is anything but straightforward.

It is important to understand the inscription of gender into artifacts to understand how technologies force, invite or block specific gender performances. Technologies are able to stabilize the hegemonic representation of gender. Two processes can be identified: on the one hand, the development and use of technologies is embedded into a social context that is structured by gender. On the other hand, technologies have the potential to stabilize exactly this gender relation due to underlining typical male and female competences and interests (Akrich, 1992). Thus, gender-stereotypes are inscribed into technological artifacts that support societies' structure of the division of labor and therefore stabilize the system of the binary conception of gender. Although designers play a key role in terms of gendering technological artifacts due to integrating their assumptions about skills, motives and traits of potential future users into the design of a new product, the role of the user should not be forgotten. Users cannot be reduced to passive consumers; they are active agents in the process of technology shaping (Lie and Soerensen, 1996). Users do not have to inherit gender scripts that are inscribed into artifacts; they can accept or reject them, or create new scripts.

In the context of the mobile communication system, this means that hegemonic masculinity can be expressed by being interested in mobile phones and femininity by being less so or not interested. Individuals can do gender differently by consciously or unconsciously rejecting hegemonic gender beliefs and/or by having an interest in mobile phone technology that runs counter to hegemonic gender ascriptions. Empirical research is needed to analyze how the relation of gender and technology is constructed. The aim of this paper is to analyze how men and women position themselves in relation to mobile phones: their attitudes and usage behaviors as they describe these in the presence of others. We want to identify subjective perspectives and social contexts that may play a role in men and women's positioning toward mobile phones.

Gender and Mobile Technology in Germany

Although mobile phones have been in Germany in various incarnations since 1958 (Burkart, 2007), a combination of technologies and new networks led to a rise in mobile phone use after 1992. Price decreases, coverage increases, and lighter weight phones meant that by 2006, there were more cell phones than residents in Germany, and from 2002 to 2012 the use of mobile transmission had doubled (IZMF, 2015). By 2006 Germany was 100 percent covered by mobile phone reception (IZMF, 2012). Besides its function as a phone, the mobile device is used also as a multifunctional gadget (IZMF, 2015).

Gender in Germany has been shaped and contested by unique historical forces in the second half of the 20th century. At the end of World War II, Germany was divided into two parts, West and East. Each country's employment and family policies as well as cultural attitudes fostered differences between them regarding, among other things, men and women's family and work roles (Adler & Brayfield, 1996; Bast & Ostner, 1992). West German policy encouraged women's unpaid domestic labor and men's paid market activity, and East German policy emphasized gender egalitarianism, with both men and women active in the paid labor market and women strongly represented in engineering and technology fields (Cooke, 2007). After reunification in 1990, West German family policy structures were imposed upon the East (Ostner, 1993; Bast & Ostner, 1992). Yet the cultural legacy of occupational egalitarianism in East Germany has left its mark, in combination with cultural trends in western industrialized countries generally. Women's roles in paid work and men's roles in unpaid home tasks are contested and negotiated domains throughout unified Germany well into the 21st century (Cooke, 2007).

One component that is especially significant to the framework of mobile communication technology within Germany is the "cult of the immobile woman" (Ostner, 1993). Ostner identified a West German tendency after WWII to organize gender relations around men's mobility and women's immobility. The suburban isolation of post-war housing, the arrival of children home for lunch in the middle of the school day, the half-day school day where the second half was to be spent doing homework with mother, and a host of social and bureaucratic expectations for an adult presence at home during the work day reinforced the notion of the woman as being at home, immobile, while husband and children came and went from their activities at work, school, and voluntary associations. In light of the fact that a special feature of the mobile communication technologies is affording mobility, West German post-WWII femininity being organized around immobility lends special importance to examining the use of and attitudes towards mobile communication technology especially for West German women.

The rebuilding of Germany after World War II had another relevant consequence besides drawing new lines around gender relations. West Germany became a modern, technologically advanced ally of other western nations with the financial and political support of the Marshall Plan and became home to numerous high-tech firms. German engineering became world-famous. Thus technological affinity may be a stronger norm in Germany than elsewhere, at least for men.

Due to the contested nature of gender relations in German society, and Germany's identity as a technologically-oriented society, we expect that technology use as manifested in frequently-used technologically advanced gadgets such as the mobile phone may play an especially important role in affirming or remaking gender relations in Germany.

DATA AND METHOD

This paper joins the extensive tradition of qualitative empirical research on mobile communication (Taipale & Fortunati, 2014) to examine how people position themselves in relation to mobile communication technology and how they do gender in this positioning process (Kelan, 2007). The research uses discourse analysis, which can reconstruct the positions the participants create when talking about mobile phones (Potter & Wetherell, 1987; Kelan, 2007; Tonkiss, 2004). In general, "a discourse is a group of statements which provide a language for talking about – i.e. way of representing – a particular kind of knowledge about a topic" (Hall, 1992: 290). Different positions are available during a conversation. Due to adopting or rejecting positions people create themselves as certain subjects (Potter & Wetherell, 1987; Kelan, 2007). Discourse analysis is especially appropriate because the researchers have recorded the conversations of seven focus groups, which means that statements are made in the context of conversations and are ideally interpreted as such.

The Sample

We collected data for this study in Germany in 2010 through seven group discussions and as part of a larger interdisciplinary project that focused on mobile network acceptance. As such, the group discussions were geared toward topics around general adoption, use, and anxieties about or trust in mobile phones, masts, and wireless signals. One test interview preceded the focus groups to evaluate and improve the instrument. A total of 11 men and 12 women (n=23) participated, selected from a variety of industries and community groups in order to reflect a wide range of experience with technology or mobile communication systems. Two groups were all men, two groups were all women, and three groups were mixed; all groups were divided by age, either being those aged 25 to 49 years or those aged 50 to 72 years. To ensure that the heterogeneity of the field is considered, participants were invited using local advertising in a variety of workplaces and selected to participate using the principle of maximum structural variation, meaning that participants were deliberately sought to be in focus groups together based on having widely varying occupations, ages, urban/rural residences, and education levels (Kleining, 1982; Kelle and Kluge, 1999). Our respondents represent rural and urban residents as well as those with and without university degrees. With such a small number of cases, the only dimension that was robust in the findings and which we focus on in this paper is the gender dimension.

The group discussions lasted from 55 to 100 minutes and were conducted in German and led by a native speaker. The discussions followed an open structure (based on a flexible interview guideline) and covered the following topics: private and job-related usage behavior with mobile devices (e.g. means of communication, frequency and reasons for usage), attitudes toward the mobile communication system, effects on social relationships (e.g. facilitating or disrupting social relationships), and health (e.g. risks, effects on children).

The order of questions was not fixed; depending on the content of discussion, open questions were asked based on the topics mentioned. The gender component was not an explicit part of the questioning but emerged as a result of examining the statements made within the context of general mobile phone use by men and women. After the interview, participants were asked to fill out a short questionnaire to answer demographic questions (e.g. gender, age, education, occupational status, family status). The group discussions were filmed, audio taped and fully transcribed. For the analysis in this paper the parts of transcripts that mentioned either a private or occupational context in relation to mobile technology have been chosen.

Method

Our aim as researchers was to identify topics and to generate categories that are close to the text (transcripts). This means that the categories refer to the interviewees' words, to their semantic, own theories and relevance systems. We chose to create codes based on the interview material, thus bottom-up. This procedure is highly sequential, which means that the transcripts are analyzed from the beginning to the end step by step so as not to be influenced in the beginning by later passages.

We coded the analysis material into two core categories, gender-conforming and gender-challenging positioning. We further sub-coded these main categories into the following: fascination, change, no interest, control, makes life easier, economic usability, playing, emergency use, private use, occupational use. The codes can overlap and therefore many text segments belonged to more than one sub-code.

We use pseudonyms to protect the interviewees' identities. We add the interviewee's age after the pseudonym. We use a simplified notation system to present quotes from the transcript and translate these quotes into English. As mentioned, other social dimensions did not reveal within-group or between-group differences (possibly due to the small number of cases in each category except for the gender category) and so we focus exclusively on gender dimensions.

RESULTS

As outlined above, men and women's positioning toward technology may be a way of "doing gender" (Akrich, 1992; Faulkner, 2001; Kelan, 2007). We examined discourse around performing hegemonic gender tendencies through attitudes and usage. Then we turned to contrast cases that challenge, remake, or reframe gendered tendencies. We then drew conclusions and discuss the findings and limitations.

Performing hegemonic gender: Attitudes

Many men expressed a *positive attitude* toward the mobile communication system. We identified among the men, independent of their age, that they described a close relation to technology, fascination with technological development, and frequently

mentioned the advantages that arose due to mobile phone usage, such as "more time" and "getting more done":

Interviewer: "What is your opinion about the mobile communication system?"

Frank (58): "Well, I consider this a positive development. I mean, the technical progress, regardless of which topic, is always fascinating for us, regardless of the fields, right? I mean, what a mobile phone could do back then, and that it can do more and more, is fascinating, and I consider it good, right? And I want to own a mobile phone that can do this, right? I just want to have it."

Ole (29): "(My attitude) is definitely, 'positive' is an understated expression for it. In my circle of friends as well as at work it has brought so much additional time. Instead of driving home and then doing things, you can do them already on the way home. I nowadays get more things done than in the past."

Many men directly mentioned the mobile phone in relation to the *occupational sphere*. These quotes highlight the positive advantages men saw in using mobile technology, or mobile phones, especially for job-related reasons.

Interviewer: "What attitude do you have towards mobile communication systems?"

Phil (25): "Very positive, alone from a job-related perspective."

Ole (29): "Yes, well, I use it privately as well as professionally, for teaching. We always try to involve many international contacts and thus to do international teaching projects, then people just have to use these things. They just have to use such communication forums and use wikis for example to work together, simply to collaborate."

Matthew (58): "Well, I can't imagine AT ALL to be occupationally WITHOUT a mobile phone. 1994, I got my first mobile phone. 1994."

Matthew (58): "One assumes that, when someone has a mobile phone, especially in leading position, you have to reach HIM, NO MATTER where he is. But it is IMPORTANT in ANY case. VERY IMPORTANT. But in private use I actually think it's totally UNimportant. Privately, for myself, I don't use it at ALL, ONLY in emergencies, then it's ok."

Frank (58): "Well, I make plenty of phone calls, right, that's for sure, it's mostly job-related, because I have to make phone calls all the time, because I have to call my customers."

The above excerpts from the interviews demonstrate some evidence that men distanced themselves from the private use of the mobile phone. The men wanted to present themselves as using the mobile phone for job-related reasons, but that for private reasons it's "totally UNimporant" and "mostly job-related." Even Ole,

who admitted using social networks on his mobile phone privately as well as professionally, made sure to follow up his comments with an extensive explanation of how his use was professional: "many international contacts" to do "international teaching projects". The business context was emphasized by the men in the focus groups; this seemed a site of shared, consensual legitimacy for the mobile communication technology.

Performing hegemonic gender: Usage

The following excerpts from the focus groups highlight the *usage behavior,* which was not limited to basic functions like making phone calls and writing text messages. Several functions like navigation, organizers and the internet were mentioned:

Interviewer: "Which functions of the mobile phone do you mainly use?"

Phil (25): "Navigation, well, to run mobile navigation on it, that is a really very big advantage that I use very often then, quickly look something up in the Internet, like for example whether I perhaps want to look some addresses up which I can simultaneously copy across again with copy and paste, then navigation with it, virtually to find your way quicker, just quickly to look something up in the internet, if you are looking for something, to observe an auction for example. If we look at it in business matters again, access to customers' computers, if you are on your way. Until half a year ago it worked that I had to go to a local desktop computer in order to establish a connection to a customer's computer and now I can do it while mobile, which naturally is a big advantage if you are on your way somewhere that you can quickly and directly access it in order to look up a status update."

Tom (31): "That is great. You can do more and more [with the mobile phone]. You have got all your documents with you. One can read books with it. I like American colleagues, they have these a little bit larger smart phones, they always upload their book on it and read, although it is pretty small, however, and work with it. You have your pictures with you, your music. Now, when I sit in a train, when I was on a train yesterday, seven hours, then I'm certainly glad if I have that thing with me. Then I can have a quick look in the Internet, I can quickly retrieve my emails. Then I can look at some pictures, listen to music a little bit and, that simply is, yes, a way of passing the time."

Tim (29): "Yes, surely. I mean, the telephone is the first choice to quickly reach people."

The aspect of speed as well as convenience came up often in the discourse men used regarding their mobile phone use. The overall message that use happened "quickly on your way somewhere" implies many things associated with successful hegemonic business masculinity (Connell & Messerschmidt, 2005): speed, activity, efficiency, and motion. The mobile phone granted superhero capabilities: instant

information, instant navigation, entertainment while traveling for business, and access.

These quotes showed men as constructing themselves not only as having an affinity to technology; the technology helped them execute hegemonic business masculinity. Men's use and interest in technology was regularly emphasized as primarily for work reasons.

We also found evidence of the gendered position that women distance themselves from technology. We found very little technology fascination among the ways women talked about mobile phones. The main reason for mobile phone usage across all age groups among women in our sample was for emergency and security reasons. Women in a wide range of ages said basically the same thing about the functions they use:

Interviewer: "Which functions of the mobile phone do you mainly use?"

Finni (72): "It's always a good thing for emergencies."

Helga (61): "No. I just need the mobile phone when I'm out. I mean, so that one can reach me if there's anything. Also, my husband always says: 'Just give me a brief call, so that I know that you're there'. But besides this I don't need a mobile phone. Not during the day, when I'm not out. And I'm not out that much."

Iri (25): "I really just need it to be available and to have the chance to call in case of an emergency. It doesn't have a camera, nothing. It's quite simple. But that's enough. But I consider it good to have it. It always makes me feel safe."

Silvia (25): "Right. I also feel safe with it, definitely. That's the most important thing: to know that you're available. When we go walking with our dog, we always carry a mobile phone with us, because sometimes you are on solitary roads or something, and then I just feel safer when I know that I can call if there's anything."

Thus, the use of the mobile phone was combined with the purpose of safety. The words 'safe' and 'safety' in fact appeared often. In some ways the mobile phone was the medium through which a rescuer may be reached. In these juxtapositions, where the phone was a source of help for women, a source to be called upon to find a rescuer or source of comfort or help, the mobile phone mediated a prime gender enactment: that of the rescuer and the rescued, quite possibly unconsciously.

Among the women in this sample it was not seen as necessary to have a smartphone or up-to-date mobile phone. The most used functions among this group were making phone calls and writing text messages. Therefore, a mobile phone with different or many functions was seen as excessive:

Interviewer: "Which functions of the mobile phone do you mainly use?"

Mia (28): "Well, I never needed such a high tech thing, right? When my contract runs out and I can choose a new one, I just say "I want one with which I can phone and text messages, that's enough". My mobile phone doesn't need to be capable of more. That's enough for me".

Iri (25): "Well, I rather see it practical."

Silvia (25): "Practical, right. For me, too, for me, too. It's indeed nice to make a pretty picture with it, right? But that's not the most important feature."

These quotes show how the mobile phone was put in a specific place in these women's lives, filling a practical purpose: "that's enough for me." Technology had to fulfill a function. The mobile phone had to solve everyday problems and was not used for entertainment or identity by these women. Or at least this was how the women allowed themselves to present their use in the company of others: "For me, too, for me, too".

The hegemonic gender influence on technology use and attitudes was indicated when our respondents made reference to their use of, and attitudes toward, the mobile phone in ways that were in line with hegemonic masculinity and femininity. This gendered position can thus clearly be associated with men expressing enthusiasm for mobile technology and women distancing themselves from technology (Henwood, 2000; Corneliussen, 2004; Faulkner, 2001). In both cases, the attitude was relatively positive, but in very different ways. The men said "I just want to have it" and "I nowadays get more things done than in the past" and the women say "I never needed such a high-tech thing" but "it makes me feel safe" and "it's enough for me".

Challenging hegemonic gender tendencies: the case of Heidi

The only exception among the women was Heidi (28). She positioned herself as oriented toward technology. She talked in the following way about her changing attitude towards the mobile phone:

Interviewer: "Has your attitude towards the mobile communication system changed over time?"

Heidi (28): "It got more positive, because it got more important for me. In the beginning [of mobile phones being on the market] it [mobile phone] actually was relatively unimportant, because one had the whole family and circle of friends around oneself. It [mobile phone] got more important because you can bridge the distance so that you can take the small world you had before with you."

She clearly pointed out that her attitude towards mobile phones became more positive over time as her life changed, when her living conditions altered. Relocating for job-related reasons, or in other words, getting and being mobile, made (mobile) technology use important for her. She used technology to bridge the distance between herself and her family and friends:

Interviewer: "Has your usage behavior changed over time?"

Heidi (28): "Yes, that increased, too. When I think about it now. I got my first mobile phone at age 18. I bought it myself. And there one had to, one was still in school, … in high school. There one actually had had ones circle of friends and family center always around oneself. There it was that we often wrote only short messages, good night or something, or exchanged brief information. Phoning actually only in important emergency situations, because everyone was actually always around. And, yes, in the course of my studies then also, because I went to (big city), with long distance relationships and the like, the circle of friends and family naturally extended widely, and thereby also telephoning behavior was different, because one considered it to be simply a way to keep in touch. And it got more and more important to telephone and send short messages was a lesser priority, because they're only some text, and one can just as easily write an email instead that costs nothing, or use other chats, instead really simply to hear the other one, so as to arrange something and to talk, whatever, with friends or husband or family. Also, simply in this unfamiliar situation to hear each other in a different place, too. This is how it was to me."

As demonstrated in this quote, technology as such was not important to her, but the fact that she could stay in touch with people was. Moreover, her usage behavior changed from using basic functions like text messaging in school and extended to using mobile devices (netbook, mobile phone), multiple functions (phone calls, text messages, organizer) and social networks (Facebook) after relocating for job-related reasons to stay in touch with friends and family. She said that mobile technology *enabled* her relationships to grow.

However, Heidi did not only use a mobile phone for personal connections but also for job-related reasons. What is interesting about this is that she had two mobile phones, a private and a business phone, and that she strictly separated the private and occupational sphere with the help of these two devices:

Interviewer: "Do you have both, a private and a business cell phone?"

Heidi (28): "Well, with me it's that I have two things. I have a Blackberry just for the job, und then a mobile phone for private use. I separate that very strictly. Because I somehow want to, I don't want to be called by a business contact on my private mobile phone. And therefore it simply is important to me that I separate these things. Then I don't have any problems that I have two things [mobile phones] in my bag. Above all because I, well in the beginning it [the private call] could only be five minutes, or a few minutes, but then it [the private call] could also last a little bit longer. Then I would like to, when I'm phoning with my business phone, I would like to cancel the [private] call."

She clearly pointed out that she did not want to be called by business contacts on her private phone. And, she did not want to use her business phone for private calls because they could last longer. Her words indicated that her main interest in the mobile phone was its enabling of private communication.

Although she used different mobile devices and knew how to use them, she didn't not express fascination with this technology. For her it was more a tool to keep in touch with family and friends who were outside her immediate physical environment. Her mobile devices were predominantly used for conversation. She clearly separated the private and public sphere.

Skepticism toward mobile communication technology: price and availability

We found that there were men in our sample who distance themselves from technology through critiques along the dimensions of price and what it does to social interaction, even though men's affinity to technology was dominant in the sample. Some men preferred the landline phone over the mobile phone. The reason for this preference lay in the costs the men perceived that arose due mobile phone usage in Germany in 2010.

Interviewer: "Which device do you use more often: the landline or mobile phone?"

Frank (58): "I'd say it this way. I'd say that I do 95 percent of my calls via landline. From home anyway. There's no mobile phone, there are no mobile phone calls. I do this all via landline."

Matthew (58): "It's lower priced." (referring to the landline)

Frank (58): "In any case it's lower priced." (referring to the landline)

Matthew (58): "I don't just think of the price. When I'm home I have two devices. One costs 20 cents (per minute), the other 7. In this case I call with the one that costs 7."

Aside from cost savings, the availability that arose due to the mobile phone was perceived as negative. Because availability was seen as a disadvantage, only specific people had the number of their mobile phones, exclusively close family members. Some men went so far as to have family members mediate their access to their professional contacts:

Interviewer: "Who has your mobile phone number?"

Matthew (58): "Um, nobody knows my mobile phone number at work. They can reach me with a speed dial when they're at work. And that's enough. During meetings there's an entirely mobile phone ban, so that I can really communicate with the people at the table. Most often it's a real nightmare, here a mobile phone, there a mobile phone and there a mobile phone. Everybody has his own ring tone and every two minutes a new tune. Yeah, and this is very, very disturbing."

Frank (58): "Well, anyway. I arranged it by now, I now have, we [Frank and his wife] arranged it so that the customer usually doesn't get a mobile phone number, and they get used to it. They should call me at home, and then my

wife calls me immediately, that is, I know that this only can be my wife when my mobile phone rings, this can't be anyone else. Yes, this is working very well."

Frank used his mobile phone exclusively in a Goffmanian 'back stage' manner in that only his wife had access to him via his mobile number (Goffman, 1959). When he answered, he had no performance demands. To accomplish this, Frank's wife performed the 'front stage' with Frank's clients when they called for her husband. The question of how well this system worked for the wife, who acted as secretary in the case of a client call, who interrupted her activities twice, once to answer the call and once to relay the message to her husband, did not enter his description. In both cases, these men didn't want to be available, and so they carefully controlled access to their mobile phone numbers.

Men's limitations on private use and their gendered reframing of 'the call for help'

Men also described usage behavior similar to women's. In these cases, the mobile phone was only used for a purpose; either for job-related reasons or for emergency cases in private life. However, the way they described it was quite different from the words the women chose:

Interviewer: "For what purposes do you use your mobile phone?"

Ralf (45): "As I said, when you are in an emergency situation you can help yourself with it. Or you can help other people. It's not just that you can help yourself, you also can call someone when there's an accident. These days the technology progresses steadily. And when you're, don't know, somewhere in the middle of nowhere, you can, you get along well with it, and when the technology is accordingly good, yeah, why not, I'd say it's a useful item then."

Matthew (58): "In private use I actually think it's [the mobile phone] totally UNimportant. Privately, for myself, I don't use it at ALL, ONLY in emergencies, then it's ok."

These analyses point to men's distanced relationship to mobile phones in the way they discussed their use of the phones. Men in particular distanced themselves from *private* mobile phone use, declaring it useful mainly for "emergencies" where "you can help yourself" and "you can help other people". The content paralleled what women said about private use, but the choice of words differed. Men described themselves as the active agents in an emergency, agents of their own rescue and providers of help for others. We contrast this to women's descriptions of "calling for help" which had a different sense of agency than the men's description that "you can help yourself".

In this section we have drawn attention to an example in which one woman communicated a stronger orientation to technology than women otherwise did in the group discussions. Her example indicates that, for some women, constructing themselves as appreciating the functionality of technology may have been an

acceptable way to construct femininity. At this point it is important to stress that she was the only example and that all other women distanced themselves from any orientation toward the mobile phone. In addition, she observed the relationship-oriented advantages of the phone, in contrast to technology-affine men who mentioned the gadget-like aspects. Whether this is a single case or a representation of the use of feminine scripts within technology affinity would need to be tested in further research.

On the other hand, some men distanced themselves from the mobile phone even more strongly than women did. For these men, the phone was exclusively used for job-related reasons or in emergency cases in private life. This group of men felt disturbed by the availability the mobile phone allows and complained about the costs. Overall, more negative than positive statements were found among this group, indicating a clear distance from the mobile phone.

CONCLUSION AND DISCUSSION

We began this paper by defining the gender system as involving macro, interactional, and individual levels (Ridgeway & Correll, 2004). We have attempted to identify some of these components in the gender system as described by individuals and to examine how these components serve either to maintain or to change the gender system. Specifically, this paper gives insight into how German men and women's ways of talking about mobile phone use in 2010 revealed aspects of the construction of gender. The aim was to examine whether and how German men and women position themselves in hegemonically masculine or feminine ways toward mobile phone technology based on the ways they talk about it and the words they choose. Discourse analysis of group discussions suggested that men and women construct and communicate gender through a certain relationship to the mobile phone, even when the activity is identical. This kind of analysis helps to examine how the construction of gender is achieved through communication.

Doing gender according to hegemonic norms could be identified in our discourse analysis: men tended to express positive associations with the mobile phone, but these associations were couched in language that framed its use mainly for job-related reasons. Women mostly distanced themselves from the mobile phone and stated that they use it mostly in emergency cases and to stay in touch with friends and family. Overall, in Germany in 2010, men's descriptions of their usage behavior happened mainly for job-related reasons; the women's for private reasons.

Francine Deutsch (2007) calls for a renewed effort to use 'doing gender' awareness to help dismantle gender systems that perpetuate the gender hierarchy, to break up existing gender roles, and to give men and women the same opportunities. Those who leave gender scripts and write new ones open up space for men and women to move away from standard feminine or masculine positions towards technology (see also Kelan, 2007). In our research, we saw that in 2010 some German men were skeptical of the mobile phone, especially its invasiveness, and one woman signaled a stronger affiliation with the mobile phone, contradicting the gendered tendency that the other women demonstrated to distance themselves

from technology. Heidi appreciated its value as a source of contact and connection. She actively negotiated private and public boundaries by using two devices. However, Heidi was not oriented toward the technology as such but rather appreciative of the possibility of enabling social relationships through the options it offered to stay in touch with friends and family. This is contrary to the reasons for usage men mentioned in the interviews: their main reason for use was their occupation, and the related information or entertainment needs that arose while conducting business (such as using job-related travel time to answer mails or be entertained). Private use occurred rarely, and only for short information retrieval and emergency cases. More research is necessary to understand the boundaries around comfort/discomfort, interest in the technology itself or in what it can facilitate, and whether gender boundaries are cross-cutting or aligning with these dimensions. Since the research was conducted, costs and opportunities for mobile communication have changed radically, and new research is needed to understand whether the relationship of gender to technology have been reinvented, retooled, or reinforced as a result.

Contemporary gender stereotypes assume men to be instrumental and agentic, women as more communal (Eagly, Wood, & Diekman, 2000). The discourse men and women used to describe their mobile phone use evoked gender scripts and thereby affirmed those scripts, confirming their participation in a gender system. But not only are communal-agentic dichotomies affirmed by the discourse of this sample of men and women around the mobile phone; the gender hierarchy is also reinforced. Men stated their sense of privilege to have the latest: "I just want to have it". Women took a back seat with respect to the technology: "It's enough for me".

Men in our study seldom mentioned their own private calls, although they certainly made them. However, in the German setting in 2010, it's likely that men called on cell phones to wives on landlines more often than wives called on cell phones to husbands on landlines, given the higher rates of job-related mobility of men (Schneider & Collet, 2010) and the German tradition of the "cult of the immobile woman" (Ostner, 1993).

We find it particularly interesting to note the differences in how men and women talked about the same function of mobile phones, that of using it to call for help in emergencies, but using gendered framing. Women repeated variations of the word 'safe' and highlighted the importance of having a mobile phone for the occasion that one needs to call for help. Men repeated the word 'help' and emphasized being able to 'help oneself' through calling, framing themselves as the independent problem solver, and emphasized the importance of using the mobile phone also to 'help others'. Here discourse analysis helps reveal gendered semantic differences in the way men and women describe the exact same functionality of the mobile phone.

Frank, self-employed, provides an interesting case of the mobile phone mediating gender relations and public-private relations. Frank's business calls went to his wife at home, who acted in a secretarial role by taking the calls for him. She was the

only one with his cell phone number, so she alerted him to return his calls. In this way Frank avoided having to maintain a front-stage persona on demand for business callers. His wife, however, had to perform all the front stage behaviors, within her own home, and thereby protecting him from the outside world. But he does not describe it that way. To him, the arrangement with his female protector 'works very well'.

Gender beliefs about the appropriate use of and orientation to the mobile phone are part of a broader picture of cultural rules enforcing difference. The social relational contexts where gender roles are used and enforced are as simple as making a call or sending a text message.

Gender is flexible and performative: it may be performed so as to conform to norms or in new ways that deviate from norms - and may eventually create new norms. We find that gendered performance around the use of, and attitudes towards, the mobile phone and mobile communication technologies fell along gender lines among our respondents, but showed some evidence of malleability as well. Our findings have limitations in that the sample size is small and regional, in far-western Germany and at a specific historical time. The respondents were making statements in group discussions, a context where they were being watched and evaluated by others. The social desirability of comments certainly played a role with what was said. And this is precisely also the strength of the research because it uncovers self-presentation and shared gender scripts. But because the research collection was taking place in the context of a broader set of questions, and our findings emerged while observing the data for other features, the design could be optimized in future research to reduce the "social desirability" risks in the answers that can arise in focus groups and get more directly at what scripts people describe when they're alone. Future research is necessary to determine the degree to which our findings would be confirmed in other populations using other methods. Longitudinal data would reveal how use changes over time, and how gender constructions are therefore reshaped, challenged, or reinforced via mobile communication technology. The extent to which mobile communication technology use extends to other kinds of technologies is also an open question for future research.

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