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Abstract: This paper advances the research on personalization of political communication by investigating whether this process of focusing on politicians instead of political issues plays a role on Twitter. Results of a content analysis of 5,530 tweets posted in the run-up to the German federal election provide evidence that Twitter communication refers more often to politicians than to issues. However, tweets containing personal characteristics about political leaders play only a marginal role. When distinguishing among different groups of actors on Twitter (journalists, politicians, citizens), we find that citizens focus more on candidates than do journalists or politicians. Investigating the impact of a televised debate on Twitter communication, we observe that this person-centered event puts the focus on individual politicians instead of issues.

Keywords: political communication, personalization, Twitter, televised debate

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1 Introduction

Personalization of politics – the concept that denotes a development in which politicians become the main anchor of interpretation in political communication (Holtz-Bacha, Lessinger, and Hettesheimer, 1998) – is probably "as old as politics itself" (Radunski, 1980, p. 15). It has received a lot of scholarly attention (Adam and Maier, 2010; van Aelst, Sheafer, and Stanyer, 2012). So far, changes in the political process and its contexts, for example, the introduction of private television (Hayes, 2009), have regularly stimulated research on personalization since they have been identified as possible drivers for it. However, a recent change in political communication – the advent of social media – has not yet led to new studies of personalization. This is surprising, given that social media applications do not only provide new discursive spaces for political communication, they also offer researchers new opportunities to investigate in a new setting 'old' concepts of political communication like personalization (Bentivegna and Marchetti, 2014; McKinney, Houston, and Hawthorne, 2014).

Until now, personalization has been studied in three rather separate areas: personalization of (1) politicians' strategic communication (Brettschneider, 2008; Kruikemeier, van Noort, Vliegenthart, and Vreese, 2013), (2) media reporting (Bachl and Brettschneider, 2011; Holtz-Bacha, Langer, and Merkle, 2014), and (3) political behavior of citizens (e.g., Hayes, 2009). However, the specific characteristics of Web 2.0 dissolve the boundaries between these areas since politicians, journalists, and citizens alike use social media applications for various purposes in political communication. Besides strategic communication on Twitter by *politicians and parties* (Golbeck, Grimes, and Rogers, 2010; Graham, Jackson, and Broersma, 2014), *journalists* cover live events, do research, or promote their own work (Parmelee, 2013). Citizens use Twitter to discuss current political issues (Rainie, Smith, Schlozman, Brady, and Verba, 2012) or as a backchannel for political TV shows (Shamma, Kennedy, and Churchill, 2010), for instance, televised debates that regularly provoke high levels of traffic on Twitter (Thimm, Anastasiadis, Bürger, and Einspänner, 2014; McKinney et al., 2014; Voss, 2013).

Based on these considerations, the first goal of this paper is to tackle the issue of whether personalization is a central feature in political communication on Twitter and if there are differences between the three groups of tweeters – politicians and political parties, journalists and media, and citizens. Moreover, we are interested in the particular case of televised debates, aiming at clarifying whether they 'personalize' Twitter communication.

To answer these questions, we conducted a content analysis of tweets collected during the run-up to the 2013 German federal election. While former research on these three fields has been a relatively isolated endeavor, for example,

through surveys involving citizens or content analyzes of media coverage, Twitter as a common discursive space for politicians (parties), journalists (media), and citizens alike makes it possible to investigate personalization in all three areas based on a single set of data, and to *compare* personalization in these areas of political communication.

2 Personalization of political communication

Personalization comprises two propositions. The first assumption describes a stronger focus on politicians instead of on political parties and issues. The second one, also known as privatization, denotes that a greater relevance is attributed to non-political traits of politicians instead of their political competences (for comprehensive summaries, see, e.g., Adam and Maier, 2010; van Aelst et al., 2012). Some fear that this may have negative consequences for democracy (Holtz-Bacha et al., 1998): Since personalization is suspected of "weaken[ing] the influence of current issues and party programs on voting decisions" (Adam and Maier, 2010, p. 214), it could harm the normatively desirable rational process of political decision making. The criticism becomes even harsher if non-political traits or the private lives of political actors come into play, since this seems to "seduce people into making superficial judgments based on candidates' styles and looks" (Adam and Maier, 2010, p. 214).

Both propositions have been investigated in three areas of political communication. Personalization of election campaigns describes a process in which top candidates become more important than their respective parties, representing themselves relatively independently of those parties. According to meta-analytical assessment, empirical evidence for personalization of political campaigns is mixed: Most studies come to the conclusion that there is hardly any evidence for a trend of personalization in recent years (for Germany see, e.g., Brettschneider, 2002; Holtz-Bacha, 2000; Holtz-Bacha et al., 1998; for the U.S. see, e.g., Gilens, Vavreck, and Cohen, 2007; Johnston and Kaid, 2002; for the UK see, e.g., Brettschneider, 2002; Hodess, Tedesco, and Kaid, 2000). There are only few studies that have focused on the second proposition so far, suggesting no privatization tendencies in election campaigns (Brettschneider, 2008; Holtz-Bacha et al., 1998; Holtz-Bacha, 2000, 2004).

Personalization of media coverage is understood as politicians becoming the main focus in reporting instead of parties and issues. Typically, these studies conduct content analyses of political media coverage (during election campaigns); longitudinal analyses are then able to detect trends. In comparison to

personalization of political campaigns, there is empirical evidence at least for the first proposition of the personalization hypothesis. However, the level of personalization depends on the country in which the study is conducted (Holtz-Bacha et al., 2014; Kriesi, 2012). Yet no study so far has provided evidence for privatization (Adam and Maier, 2010; Langer, 2007).

Finally, personalization of citizens' (voting) behavior refers to people basing their political perceptions, attitudes, and voting decisions on political candidates rather than on issues or parties. However, studies mostly using survey data from representative election panels have not found any evidence for an increase of personalization when it comes to citizens' behavior (Adam and Maier, 2010; Brettschneider, 2002; Brettschneider, Neller, and Anderson, 2006).

All results reported, to this point, stem from research in the context of traditional media, e.g., political ads, media coverage of election campaigns, or surveys with citizens. However, nowadays social media applications have extended the range of communicative means. In the following, we will focus on Twitter as one example of such applications.

3 Twitter communication

Among others, politicians, the media, and citizens use Twitter for distinct purposes: *Politicians and parties* integrate Twitter into their communication strategies (Golbeck et al., 2010; Graham et al., 2014). Here, politicians tweet to inform voters about political issues rather than to enter into a dialogue with them (Elter, 2013; Vergeer, Hermans, and Sams, 2013) or for self-promotion (Golbeck et al., 2010). There is a considerable scientific debate about how big the impact Twitter has on important outcomes; however, some could show that tweets are able to influence the media and the political agenda (Conway, Kenski, and Wang, 2015) as well as citizens' voting behavior (see, e.g., Kruikemeier, 2014).

Adding to its relevance – despite smaller user numbers in Germany –, Twitter is the most used social media application by *media and journalists* (Weaver and Willnat, 2016). Neuberger, Nuernbergk, and vom Hofe (2011) found that the main Twitter use of German online journalists was to promote content found on their own outlet, followed by research activities, interaction with recipients, and live coverage of ongoing events. Parmelee (2013) confirms this result for US journalists.

Citizens use the platform as a forum for political deliberation. Especially in the context of totalitarian regimes; so-called "Twitter revolutions" are claimed to have taken place when protesters used the platform to organize their efforts

or to mobilize their fellow citizens. In more general terms, the application serves as a backchannel for political TV shows and events (Shamma et al., 2010). Also, citizens state their opinions on current issues, encourage others to participate in political action, or distribute links to political content (Rainie et al., 2012).

Interestingly, these three groups (citizens, journalists, and politicians) are also the most important and frequent communicators in terms of live-tweeting during televised debates both in the US (Hayes, Houston, and McKinney, 2013) and Europe (Bentivegna and Marchetti, 2014). Given the rising importance of Twitter communication during election campaigns and the huge body of research concerning personalization of political communication (Adam and Maier, 2010), we attempt to combine these areas of research.

4 Personalization on Twitter

Despite the relevance of social media platforms, there is, to our knowledge, no study analyzing the amount and dynamics of personalization on Twitter communication. Although there is no evidence for personalization in traditional campaigning instruments like political ads, some scholars claim that social media services are predestined to put the focus on the politicians (van Santen and van Zoonen, 2010). Vergeer et al. (2013) stress that

> with social media such as Facebook and Twitter, candidate-centered campaigning of the pre-modern period (interactive and localized) seems to be intensified, [...] personality-centered campaigning goes beyond conveying political messages, sending out messages on what occupies politicians from a personal or even private perspective. (p. 482)

Politicians themselves try to "humanize" their campaigns by creating highly personalized tweets and achieve personal contact with recipients and followers of their tweets[1] (Kruikemeier et al., 2013). However, these notions only refer to *politicians*. Whether personalization can be found in journalists' and citizens' communication on Twitter has not been investigated until now.

So far, we have considered personalization as a general phenomenon of political communication, both in traditional and in new social-media settings (Table 1). However, we have not yet discussed the assumed driving forces behind this

1 There are some studies analyzing personalization on Web 1.0. For example, Hermans and Vergeer (2013) found evidence for strategic personalization on websites of candidates during the elections for the European Parliament but not for privatization.

phenomenon. Among other developments, televised debates have been accused of promoting both propositions of personalization (Donsbach, 2002; Donsbach and Jandura, 2005). Also, they are among the most important events for Twitter communication. Hence, in the following, we will first look at the impact of televised debates in traditional settings of political communication before elaborating on the particular case of social media.

Table 1: Empirical evidence for personalization hypothesis in different areas and settings.

	Traditional setting			**Social media setting**
Area *Dimension*	Campaigns	Media coverage	Citizens' behavior	Twitter
Proposition 1: individualization	–/+	+	–	?
Proposition 2: privatization	–	–	–	?

Note. Adapted from "Personalization of Politics: A critical review and agenda for research" by S. Adam, and M. Maier, 2010, *Communication Yearbook*, *34*, p. 232.

5 The impact of televised debates on personalization – offline and online

Many scholars agree that televised debates place a strong focus on individual politicians and their personality characteristics (Druckman, 2003; Maier and Maier, 2007). Again, studies can be categorized according to whether strategic communication by politicians, media coverage, or citizens' behavior is the subject of investigation. Televised debates are huge media events attracting lots of viewers (Benoit, Hansen, and Verser, 2003; Reinemann, 2007). Thus, it does not come as a surprise that, for instance, the hashtag for the televised debate 2013 was the most frequently used hashtag on that day worldwide (Voss, 2013). The reasons for televised debates to be the event which gains most attention in election campaigns in Germany and elsewhere are manifold: First of all, televised debates are considered to be useful for the media, for politicians themselves as well as for voters (Maier and Faas, 2011); moreover, the characteristics of televised debates – personalization, conflict, relevance – add to a highly newsworthy event being thus able to gain much attention online and offline (Authors, 2018).

There is some evidence that debates are able to set journalists' focus on candidates and their performance rather than on the arguments and issues discussed during the debate (Bachl and Brettschneider, 2011; Brettschneider et al., 2006; Reinemann, 2007). Regarding privatization, we do not know whether televised debates shift the media's focus from political to non-political portrayal of the candidates. However, as discussed above, privatization is a rather uncommon phenomenon in the media in general, thus we would not assume that the media reports on non-political characteristics of the politicians in the post-reporting of a debate (see, e.g., Balmas and Sheafer, 2013).

With regard to citizens' behavior, after the first German televised debate in 2002, Donsbach (2002) stated that citizens focus on persons instead of issues or parties and – implying privatization tendencies – tend to "evaluate politicians according to the same criteria as show masters" (p. 21, own translation). In the context of the 2005 German televised debate, Maurer and Reinemann (2007) found a priming effect resulting from televised debates: People who watched the debate tended to base their political decisions (e.g., voting decisions) on their evaluation of politicians rather than on their political viewpoints or party identification. For privatization, results of studies are not as clear. While some scholars speak of evidence supporting privatization through televised debates (see above), recent studies could not find a focus on non-political characteristics as an effect of debate reception (Maier and Maier, 2007; Maurer and Reinemann, 2007).

While the impact of televised debates on personalization in traditional political communication settings is subject to intensive research, research on personalization in a Web 2.0 environment in the context of televised debates is still in its infancy. To our knowledge, hardly any findings are available. As one of few, Thimm et al. (2014) found on the basis of hashtag-analysis that in the 2013 German federal election campaign personalized hashtags (like #merkel) were the most popular hashtags and skyrocketed the day after the debate. However, analyzing hashtags should only be seen as a starting point in an examination of whether election campaign communication on Twitter is personalized or not.

Building on the literature on personalization, televised debates, and the content of social media conversations, we are, consequently, interested if personalization tendencies are existent in political social media communication. In particular, we ask:

RQ1a: Are political candidates more important in the Twitter discourse of the 2013 German federal election campaign than political parties or issues?
RQ1b: Are non-political characteristics like sympathy or attractiveness of a candidate more important in the Twitter discourse than political characteristics?

Second, we aim to investigate if there are differences in personalization between politicians and parties, journalists and the media, and private citizens in the Twitter communication in the run-up to the 2013 German national election:

RQ2a: Are there differences in personalization between groups of tweeters?
RQ2b: Are there differences in privatization between groups of tweeters?

Third, we focus on the effects of a televised debate on political communication on Twitter. Particularly, we are interested if such personalization tendencies hold until Election Day:

RQ3a: Does the event of a televised debate foster personalized Twitter communication?
RQ3b: Does the event of a televised debate foster privatized Twitter communication?

6 Method

To answer the research questions, we conducted a quantitative content analysis of tweets. Tweet collection was accomplished by using the Twitter search API in the run-up to the election of the German Bundestag 2013 over the course of 40 days (August 14 to September 22, 2013)[2]. This time frame covered the two weeks prior to the televised debate on September 1, 2013 and the three weeks after the debate leading up to election day on September 22, 2013. Instead of collecting data by using keywords or following preselected tweeters, we chose a hashtag approach. That is, we saved all tweets containing one or more of the hashtags #merkel, #steinbrück, #btw13, and #tvduell[3].We chose these four hashtags as they were the established ones for the two politicians and very popular in the election run-up, for instance, #btw13 was the most often used hashtag in the context of the run-up (Thimm et al., 2014).

2 The study was conducted during the run-up to the 2013 German federal election and included a televised debate on September 1, 2013. Incumbent Chancellor Angela Merkel and her social democratic challenger Peer Steinbrück met to debate in a 90-minute show three weeks prior to Election Day. It was broadcast on five TV stations simultaneously.

3 Incumbent Chancellor Angela *Merkel* and social democrat Peer *Steinbrück* were the leading candidates of two major parties in Germany. The abbreviation *btw13* stands for Bundestagswahl 2013, that is, national election, TV-Duell means televised debate.

7 Database

After automatically excluding non-German tweets, the data set comprised 86,000 tweets from which we drew a random sample of 7,989 tweets. We automatically saved the textual information of the tweets, the tweeters' names and the time of the tweeting. Although we controlled for language and relevance by capturing only hash-tagged tweets, further data cleaning of the sample was necessary. Hence, trained student coders excluded tweets which were written in languages other than German, were incomprehensible, contained only a link, or did not have any relevance for our research questions, that is, tweets that contained one of the hashtags of interest but referred, for example, to advertisements for other TV shows. This procedure led to the final data set of 5,530 tweets, which had been posted by 3,591 individual tweeters. 7.7% of the tweets in the sample were retweets; however, these were not excluded from the sample. Depending on the research question, this sample size varied. For example, to answer the first part of the first research question we used the entire sample, for the second part only those tweets referring to politicians and, hence, allowing differentiation between role-related and non-role-related characteristics of politicians. To answer Research Question 3 concerning the impact of the televised debate on personalization, we divided the sample into three almost identical parts, that is, before, during, and after the debate.

8 Variables and content analysis

A standardized content analysis was applied to coding the tweets and tweeters. To answer RQ1 and RQ3, single tweets served as the unit of analysis. With regard to the first proposition of the personalization hypothesis, variables were coded for the *reference* of the tweet, differentiating whether the tweet referred to an *issue*, a *protagonist*, or *both*. *Issues* were coded according to a slightly modified list of relevant issues which was used in the German Longitudinal Election Study (GESIS, 2011) comprising policy and politics issues. A single tweet could include up to two issues. *Protagonists* were coded with a list of current members of the German government, leading politicians such as chairmen or chairwomen of parliamentary groups, and host journalists of the televised debate. Here, a single tweet could include up to three protagonists. We stopped after the third protagonist mentioned. Tweets mentioning more than five protagonists were also excluded from the sample.

Concerning the second proposition of the personalization hypothesis, *protagonists* who were coded as politicians[4] were further coded for *characteristics*. Here, we distinguished between whether the given information about the politician in question was related to his/her role as a politician or referred to him/her in a non-political role. Following former research on personalization, we differentiate *role-related characteristics* into competences, integrity, leadership, and caring. *Non-role-related characteristics* encompass non-political traits like sympathy, private information on, for instance, hobbies, and information on attractiveness and looks (see also Table 7) (for a discussion on political and non-political characteristics see, for example, Kaid, 2004; van Zoonen and Holtz-Bacha, 2000).[5]

Coding was accomplished by four student coders, who were trained in multiple sessions until they reached a satisfying Holsti's coefficient which averaged .77, ranging from .73 for the reference of the tweet to .80 for the characteristics of the protagonist.

To answer RQ 2, we also coded the tweeters in our dataset, distinguishing between private citizens (32.8%), politicians or political parties (25%), or journalists/specific media outlets (29%). We regarded private citizens as individual people, excluding organizations such as universities, scientists, bloggers or NGOs, which accounted for 13% of the tweets (intracoder-reliability: Holsti=.95).

9 Results

We will now report the results for all three research questions to clarify the general existence of personalization (*RQ1a*) and privatization (*RQ1b*) on Twitter, the difference of the personalization and privatization hypothesis between the tweeter groups of politicians/parties, journalists/media, and citizens (*RQ2a+b*), as well as the impact of the televised debate on personalized Twitter communication (*RQ3a+b*).

The first proposition of the personalization hypothesis states that candidates are more important in comparison to political issues and parties (n = 5530). In our study, the majority of the tweets were both candidate-oriented *and* issue-ori-

4 In the following, political protagonists will be called candidates.

5 *No dimension* was coded when the tweet contained neither a reference to role-related nor to non-role-related characteristics, for example, "#Steinbrück is losing" or over-all evaluations of the respective candidate, for example, "I don't want Merkel and I don't want Steinbrück. This is not a real choice".

ented (47% of all tweets)[6]. However, and in line with the first proposition of the personalization hypothesis, only 19% of the tweets focused only on political issues, while 33% contained only references to candidates. Thus, we can partly confirm the first proposition of the personalization hypothesis for conversations on Twitter for the 2013 German election campaign[7] (see Merkle, 2015).

With regard to our first research question, we were also interested in whether non-political characteristics were more important than political characteristics in the Twitter conversations (n = 3145). Supporting the second proposition of the personalization hypothesis, we are able to show that the candidates' issue competences are the most frequent attributes tweeters mention in tweets (23%). However, non-political traits such as the sympathy of the candidate are also highly important (15%) and even more important than a candidate's integrity (10%) or leadership-qualities (4%). Private details of the candidates play a marginal role in tweets (1%); however, all references to non-political attributes of the politicians (i.e., sympathy, private information, and physical appearance) make up more than 20% of the tweets that were coded for characteristics.

The second goal of our study was to compare the number of personalized and privatized tweets of three different groups of tweeters, that is, politicians and parties, journalists and media, and citizens. As Table 2 shows for personalization, Twitter communication seems to be most personalized for citizens' tweets during the 2013 national elections. Over 50% of the personalized tweets stem from private citizens. Tweets from the official accounts of politicians and parties seem to be the least personalized messages.

6 Most tweets referred to the televised debate itself as a campaign event (23%), followed by survey results (8.2%), the election campaign itself (4.9%), and the NSA spying scandal (4.8%).

7 One could argue that the selection of #merkel and #steinbrueck as 'personalized' hashtags facilitates the verification of the personalization hypothesis, and our Twittersample is already biased towards personalized tweets. However, the neutral hashtag #btw13 is the most common hashtag outnumbering #merkel and #steinbrueck. Moreover, #merkel and #steinbrueck were among the most commonly used hashtags in the 2013 campaign. Finally, comparing the hashtags #btw13 with #merkel and #steinbrueck leads to almost exactly the same results with 19.2% (#btw13) issue-centered tweets vs. 19.0% issue-centered tweets (#merkel and #steinbrueck) and 33.3% and 33.6% personalized tweets, respectively.

Table 2: Personalization of tweets for the three tweeter groups.

	Politicians/Parties		Media/Journalists		Citizens	
	n	%	*n*	%	*n*	%
Tweets within total sample	245	25.2	283	29.2	319	32.8
Subject of the tweet						
Issue-centered	40	21.4	54	28.4	45	17.0
Candidate-centered	38	20.3	46	24.2	107	40.4
Issue- *and* candidate-centered	109	58.3	90	47.4	113	42.6

Note: Remaining tweets could not be assigned to the respective categories.

To check if the differences are also statistically significant, we excluded the mixed category, that is, issue- and candidate-centered tweets, from further analysis and focused on the dependent variable of issue-centered (coded with 0) and candidate-centered (coded with 1) to conduct a binary logistic regression. Since tweets that were posted from one and the same tweeter are likely to be more similar than tweets from different tweeters, we conducted a logistic regression with cluster-robust standard errors to account for the nested structure of our data (Table 3).

Table 3: Logistic regression for personalization of tweets.

	B		Odds Ratio (95% CI)	
Constant	0.87***	(0.19)	2.38	(1.63 – 3.48)
Group (Reference: citizens)				
Politicians/Parties	–0.92**	(0.32)	0.40	(0.22 – 0.74)
Media/Journalists	–1.03***	(0.28)	0.36	(0.21 – 0.62)
N	330			
McFadden's R^2	0.41			

Note: Cluster-robust standard errors in parentheses.
*** p<0.001, ** p<0.01, * p<0.05

The results show that tweets by citizens have the biggest chances of being personalized. Using citizens as a reference category indicates that the odds of being personalized for the tweets by the other groups are 0.4 times smaller (politicians/parties: $B = -0.92$, $SE = 0.32$, $p = .004$, odds ratio = 0.40, 95% $CI = (0.22 - 0.74)$) and 0.36 times smaller (media: $B = -1.03$, $SE = 0.36$, $p < .001$, odds ratio = 0.36, 95% $CI = (0.21 - 0.62)$).

For privatization of Twitter communication, politicians' tweets – again – are the least privatized ones, rather focusing on the issue competence (28.9%) and integrity (13.3%) of the candidates than on private details or the likability (9.6) of politicians (Table 4). Citizens concentrate on these non-political characteristics (25.8%). Media reporting focuses on issue competences (28.9%).[8] For further statistical analysis, we collapsed some categories due to the small n of some cells, focusing on the differences between political (0) and non-political (1) characteristics for the three groups of tweeters. Again, we applied binary logistic regression with cluster-robust standard errors (Table 4).

Table 4: Privatization of tweets for the three tweeter groups.

Personality dimension	**Politicians/Parties**		**Media/Journalists**		**Citizens**	
Political	*n*	%	*n*	%	*n*	%
Issue competence	24	28.9	28	28.9	25	16.6
Leadership	6	7.2	3	3.1	5	3.3
Integrity	11	13.3	5	5.2	20	13.2
	41	49.4	36	37.2	50	33.1
Non-political	8	9.6	23	23.7	39	25.8
No dimension	34	41	38	39.2	62	41.1

Note: n=349

The findings show that tweets that stem from parties and politicians have 0.25 times smaller odds of being privatized than tweets from citizens (B = –1.39, SE = 0.51, p = .007, odds ratio = 0.25, 95% CI = (0.09 – 0.68)). No significant results were found for the media and journalist group (p = 0.57). Again, our finding is rather surprising as earlier studies did not find any privatization tendencies (see Table 1); however, a closer look at citizens' online and offline discussions about politics may explain these findings (see discussion section).

To answer this third research question, we compared tweets from our sample that were created before and after the televised debate with tweets that were posted during the debate (Table 6). We can state that political candidates are the most prevalent subjects of discussion during the televised debate in comparison to the time periods before and after the debate: While there are only 23% candidate-centered tweets before the debate, the frequency rises to 47% during the

8 However, the majority of the tweets that dealt with an actor did not entail any of the dimensions relevant to the privatization hypothesis, referring neither to political nor to non-political characteristics.

debate and falls again to 34% in the days after the debate. Vice versa, issue-centered tweets fall from 27% before the debate to 8% during the debate and rise back to 19% for the time period after the debate until Election Day. However, the most tweets contain both candidate- and issue-centered information.

As in Research Question 2.1, we concentrate for the further analysis on the dimensions of issue-centered (0) vs. candidate-centered (1) only (Table 6). Applying logistic regression with cluster-robust standard errors, we find that tweets that were posted during the debate had the greatest chance of being personalized; the odds were 7.3 times larger than for the reference category of before the debate (B = 1.99, SE = 0.15, p < .001, odds ratio = 7.3, 95% CI = (5.49 – 9.71)). Likewise, tweets posted after the debate also had a greater chance of being personalized compared to the time span before the debate (B = 0.75, SE = 0.10, p < .001, odds ratio = 2.12, 95% CI = (1.73 – 2.58)). Yet the odds are smaller than during the debate. Thus, we can state that the debate sets the focus on candidates instead of political issues, supporting the assumption that televised debates foster personalization of political communication.

Table 5: Logistic regression for privatization of tweets.

	B		**Odds ratio (95% CI)**	
Constant	-0.25	(0.23)	0.78	(0.50 – 1.22)
Group (Reference: citizens)				
Politicians/Parties	-1.39**	(0.51)	0.25	(0.09 – 0.68)
Media/Journalists	-0.20	(0.35)	0.82	(0.41 – 1.62)
N	197			
McFadden's R^2	0.46			

Note: Cluster-robust standard errors in parentheses
*** p<0.001, ** p<0.01, * p<0.05

Table 6: Main subject of the tweets before, during, and after the debate.

Subject of the tweet	Before the debate		During the debate		After the debate	
	n	%	*n*	%	*n*	%
Issue-centered	433	27.0	85	7.6	502	19.3
Candidate-centered	358	22.9	531	47.4	897	34.4
Issue- *and* candidate-centered	803	50.1	504	45.0	1207	46.3
N	1604		1120		2606	

Concerning the second proposition of the personalization hypothesis (privatization), the results are not as clear (Table 7). There are more tweets about non-political characteristics of the politicians during the debate (21%) than before (10%) and after the debate (15%). According to the assumption that the TV images of the candidates also place the focus on the looks of the candidates, information on their physical appearance is more frequent during the debate (6%) than before (2%) or after the debate (5%). However, the results also indicate that tweeters communicate about political characteristics more frequently during the debate: Political competences rise from 22% before the debate to 27% during the debate and then fall to 18% after the debate.

Table 7: Characteristics of tweets before, during, and after the debate.

Personality dimension	Before the debate		During the debate		After the debate	
Political	*n*	%	*n*	%	*n*	%
Issue competence	160	23.0	254	27.8	280	23.5
Leadership	25	3.7	28	3.1	62	3.9
Integrity	74	10.6	85	9.3	122	9.5
Caring	15	2.2	11	1.2	17	1.5
	274	39.5	378	41.4	481	38.4
Non-political						
Non-political	77	9.9	235	25.7	198	14.9
Personal, private	11	1.6	7	0.8	29	2.2
Looks	14	2.0	64	7.0	72	5.4
	102	13.5	306	33.5	299	22.5
No dimensions	320	45.9	231	25.3	561	41.8
N	697		915		1341	

To test whether these results are statistically significant, we again collapsed some categories, focusing on the differences between political (0) and non-political (1) characteristics for the three points of tweeting, applying binary logistic regression with cluster-robust standard errors (Table 8).

Table 8: Logistic regression for privatization of tweets and time of posting.

	B (SE)		Odds ratio (95% CI)	
Constant	-0.16	(0.08)	0.85	(0.72 – 1.00)
Time (Reference: before the debate)				
During the debate	1.99***	(0.15)	7.30	(5.49 – 9.71)
After the debate	0.75***	(0.10)	2.12	(1.73 – 2.58)
N	2,793			
McFadden's R^2	0.71			

Note: Cluster-robust standard errors in parentheses.
*** p<0.001, ** p<0.01, * p<0.05

We find that the odds of there being a reference to non-political traits are 2.17 times larger during the debate than before ($B = 0.78$, $SE = 0.14$, $p < .001$, odds ratio = 2.17, 95% $CI = (1.65 – 2.86)$). The same holds true for after the debate with the odds being slightly smaller than during the debate. The odds of being privatized after the debate are 1.68 times larger than before the debate ($B = 0.52$, $SE = 0.14$, $p < .001$, odds ratio = 1.68, 95% $CI = (1.28 – 2.19)$). Given that the frequency distribution of the privatization of tweets for the three points of time showed that *both the main candidates*' political *and* non-political traits are the subject of discussion during the debate, we cannot fully support the assumption of privatization of politics due to televised debates.

10 Discussion

With the advent of social media applications, communicative behaviors have changed. Citizens, the media, and politicians use applications like Facebook or Twitter in the political discourse. In this paper, we have explored this new communicative space and provided results from a content analysis of the Twitter communication in the run-up to the 2013 German federal election, looking into whether personalization is also a central feature of political communication on

social media applications. We analyzed whether (1) political candidates were more prevalent than political parties or issues and (2) non-political characteristics of a candidate were more dominant than political characteristics on Twitter. In particular, we were interested in overall personalization tendencies on Twitter and in differences between tweeters. Assuming that televised debates may foster personalization, we paid special attention tocomparing Tweets posted before, during, and after the 2013 German televised debate.

Our results provide evidence that personalization is a trend in political Twitter communication. Yet we found differences between both propositions of the personalization hypothesis. In line with the first proposition, we found the overall Twitter communication to contain more tweets on political candidates than on issues. This is especially true when focusing on tweets posted during the debate. In accordance with researchers who have pointed out that televised debates as person-centered events can foster personalization (Druckman, 2003; Maier and Maier, 2007; Maurer and Reinemann, 2007), we found that tweets contained significantly more references to political candidates during the televised debate than in the pre- or post-debate phase. For issue-centered tweets we observed an opposite trend. These results, however, largely resample content analyses of traditional media and campaign coverage. If one took traditional media outlets as a benchmark for personalization, the results would be quite similar with around 60% candidate-centered or candidate-issue centered media items in Germany, but only very few mentions of personal characteristics (Holtz-Bacha et al., 2014). Again, along the same lines, Adam and Maier (2010) point out that only around 20% of the media coverage has been non-personalized since the 1960s. Despite the fact that content analyses of traditional media sometimes use different operationalizations to determine whether a media item is personalized, the amount of personalized communication does not seem to vary a lot between offline and online communication.

However, the picture is not as clear when looking at privatization: There was almost an equal number of tweets about the issuecompetences of the candidates and about the non-political attributes of the politicians. Focusing on tweets posted during the debate, we found an increase of comments on non-political and political characteristics. Hence, we conclude that Twitter communication in the context of the federal election is person-centered and that televised debates can raise this level of personalization. However, these personalized tweets are political and do not necessarily focus on private details or physical appearance, and televised debates do not clearly foster privatization of Twitter communication.

Unlike citizens' voting behavior, citizens' tweets seem to be the most personalized ones. This appears to be surprising at first glance as this contradicts earlier

findings on citizens' voting behavior as being not personalized at all (Adam and Maier, 2010). However, it is clear that voting behavior and communicative behavior on Twitter are not at all the same kind of (political) behavior. Rather, these results can be interpreted in the light of research on offline media personalization and citizens' offline interpersonal communication following media reception. With regard to the former, for the coverage of the 2013 run-up, Leidecker and Wilke (2015) found the majority of press articles of four German national newspapers to be personalized (see also Merkle, 2015). At the same time, it seems that personalized content about important political decisions that are extensively covered in the media has a significant influence on the frequency with which they are the subject of interpersonal conversations (Sommer, Fretwurst, Sommer, and Gehrau, 2012). Understanding Twitter as an application that resembles offline interpersonal communication (Thimm, Einspänner, and Dang-Anh, 2012) might be an explanation why the findings contradict results on privatization of citizens' voting behavior.

At this point, certain limitations of our study need to be addressed. First, while the number of tweets posted during the three phases of the debate is almost equal, the particular time spans are not. The pre- and post-phase each lasted about three weeks, the televised debates only 90 minutes. Hence, tweets posted during the debate are highly overrepresented in our sample. It could be worthwhile to investigate in greater detail how personalization of political communication develops during election times. In a similar vein, our results give little insight into the personalization of Twitter communication in non-election times. While our results suggest that personalization might rise within the campaign period, there is reason to believe that politicians and journalists alike might focus more on issues in non-campaign periods and/or right after the election (Brettschneider, 2002).

Second, we used pre-defined hashtags for collecting tweets. Although this is a common approach in research on Twitter (Anstead and O'Loughlin, 2011; Larsson, 2014), we are well aware of the risks of this static procedure since events such as run-ups to elections or televised debates are dynamic in nature (Magdy and Elsayed, 2014).

Finally, frequent Twitter users are far from being representative for the population of politicians, journalists, or voters. Twitter users are rather young, well-educated, and politically interested. These variables might – of course – influence the way the users communicate about politics and politicians. This bias as well as the fact that Twitter communication can hardly be compared to other political behavior such as voting make it difficult to compare the results here to offline behavior and offline communication.

Our findings, however, make clear that studying communication on Twitter is a promising way to transfer the concept of personalization into the new setting of

social media applications. Yet it becomes obvious that more research is needed. Content analyses of televised debates, for example, content analyses of topics or rhetoric strategies, would make it possible to link the tweets to the content which stimulated the tweets. Moreover, one could use the characteristics of the tweets (personalization, privatization) to clarify basic questions of communication research like media selection and attention. Based on content analyses one could, for example, analyze the retweets and favorite ratings of tweets to investigate whether personalization and privatization are able to explain the attention that is given to a certain tweet. Research on personalization on Twitter suggests that citizens pay special attention to personalized tweets (Kruikemeier et al., 2013; Lee and Oh, 2012). Similar to that, studies have found personalized information better than abstract entities (like, e.g., political parties) (McGraw and Dolan, 2007). If this were the case, it could, in turn, affect the strategic communication of politicians and parties on Twitter and other social media platforms. Quite similar to the *effect* of personalized tweets on citizens' selection, attention, and evaluation of these tweets, one could investigate whether journalists react differently to personalized vs. non-personalized tweets, as personalization is a news value in traditional media outlets (Maier et al., 2018). Furthermore, comparisons of Twitter communication in different countries, elections, and by different parties or media might be promising for personalization research. It is – for example – not very surprising that presidential systems with their focus on individual presidential candidates have provided a perfect setting for personalized political communication (Adam and Maier, 2010). The overall question might be whether it is a good strategy to use personalization and privatization instead of – or in addition to – issues.

All these research strands are particularly suitable to being studied within social media. Social media provide us with a unique database, bringing together citizens, parties and politicians as well as journalists and the media in one discursive space.

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References

Adam, S., & Maier, M. (2010). Personalization of politics: A Critical review and agenda for research. *Communication Yearbook*, *34*, 213–257.

Anstead, N., & O'Loughlin, B. (2011). The emerging viewertariat and BBC Question Time television debate and real-time commenting online. *The International Journal of Press/Politics*, *16*(4), 440–462.

Bachl, M., & Brettschneider, F. (2011). The German national election campaign and the mass media. *German Politics*, *20*(1), 51–74.

Balmas, M., & Sheafer, T. (2013). Leaders first, countries after: Mediated political personalization in the international arena. *Journal of Communication*, *63*(3), 454–475.

Benoit, W., Hansen, G., & Verser, R. (2003). A meta-analysis of the effects of viewing U.S. presidential debates. *Communication Monographs*, *70*(4), 335–350. https://doi.org/10.1080/0363775032000179133

Bentivegna, S., & Marchetti, R. (2014). Tweeting and watching television. New forms of media hybridization. *Comunicazione politica*, *14*(1), 61–78.

Brettschneider, F. (2002). Kanzlerkandidaten im Fernsehen [Chancellor candidates on TV]. *Media Perspektiven*, *6*, 263–276.

Brettschneider, F. (2008). Personalization of campaigning. In W. Donsbach (Ed.), *The international encyclopedia of communication* (pp. 3583–3585). Oxford: Blackwell Publishing.

Brettschneider, F., Neller, K., & Anderson, C. J. (2006). Candidate images in the 2005 German national election. *German Politics*, *15*(4), 481–499. https://doi.org/10.1080/09644000601062667

Conway, B. A., Kenski, K., & Wang, D. (2015). The rise of Twitter in the political campaign: Searching for intermedia agenda-setting effects in the presidential primary. *Journal of Computer-Mediated Communication*, *20*(4), 363–380. https://doi.org/10.1111/jcc4.12124

Donsbach, W. (2002). Sechs Gründe gegen Fernsehduelle: Zur politischen Bewertung einer medialen Inszenierung [Six reasons against televised debates: About a political evaluation of a media staging]. *Die politische Meinung*, *396*, 19–25.

Donsbach, W., & Jandura, O. (2005). Urteile mit Verfallsdatum: Einflüsse auf die Wahrnehmung des ersten TV-Duells [Evaluation with expiry dates: Influences on the perception of the first televised debate]. In E. Noelle-Neumann, W. Donsbach & H. M. Kepplinger (Eds.), *Wählerstimmungen in der Mediendemokratie: Analysen auf der Basis des Bundestagswahlkampfs 2002* (pp. 141–163). Freiburg: Alber.

Druckman, J. N. (2003). The power of television images: The first Kennedy-Nixon debate revisited. *Journal of Politics*, *65*(2), 559–571.

Elter, A. (2013). Interaktion und Dialog? Eine quantitative Inhaltsanalyse der Aktivitäten deutscher Parteien bei Twitter und Facebook während der Landtagswahlkämpfe 2011 [Interaction and dialogue? A quantitative content analysis of the German parties' activities on Twitter and Facebook in the run-up to the federal state elections 2011]. *Publizistik*, *58*(2), 201–220.

GESIS (2011). *GLES 2009 Codierschema: Agendafragen* [Coding scheme: Agenda questions]. Retrieved on 4-23-2018 from https://dbk.gesis.org/dbksearch/download.asp?id=20305.

Gilens, M., Vavreck, L., & Cohen, M. (2007). The mass media and the public's assessments of presidential candidates, 1952–2000. *Journal of Politics*, *69*(4), 1160–1175.

Golbeck, J., Grimes, J. M., & Rogers, A. (2010). Twitter use by the US congress. *Journal of the American Society for Information Science and Technology*, *61*(8), 1612–1621.

Graham, T., Jackson, D., & Broersma, M. (2014). New platform, old habits? Candidates' use of Twitter during the 2010 British and Dutch general election campaigns. *New Media & Society*. Advance online publication. https://doi.org/10.1177/1461444814546728

Hayes, D. (2009). Has television personalized voting behavior? *Political Behavior*, *31*(2), 231–260. https://doi.org/10.1007/s11109-008-9070-0

Hayes, D., Houston, J. B., & McKinney, M. S. (2013). Live-Tweeting a presidential primary debate: Exploring new political conversations. *Social Science Computer Review*, *31*(5), 552–562. https://doi.org/10.1177/0894439313490643

Hermans, L., & Vergeer, M. (2013). Personalization in e-campaigning: A cross-national comparison of personalization strategies used on candidate websites of 17 countries in EP elections 2009. *New Media & Society*, *15*(1), 72–92. https://doi.org/10.1177/1461444812457333

Hodess, R., Tedesco, J. C., & Kaid, L. L. (2000). British party election broadcasts: A comparison of 1992 and 1997. *The Harvard International Journal of Press/Politics*, *5*(4), 55–70.

Holtz-Bacha, C. (2000). *Wahlwerbung als politische Kultur: Parteienspots im Fernsehen 1957–1998* (1st ed.) [TV ads as political culture. Party ads on TV 1957–1998]. Wiesbaden: Westdeutscher Verlag.

Holtz-Bacha, C. (2004). Germany: How the private life of politicians got into the media. *Parliamentary Affairs*, *57*(1), 41–52. https://doi.org/10.1093/pa/gsh004.

Holtz-Bacha, C., Langer, A. I., & Merkle, S. (2014). The personalization of politics in comparative perspective: Campaign coverage in Germany and the United Kingdom. *European Journal of Communication*, *29*(2), 153–170.

Holtz-Bacha, C., Lessinger, E.-M., & Hettesheimer, M. (1998). Personalisierung als Strategie der Wahlwerbung [Personalization as election campaign stratgegy]. In K. Imhof (Ed.), *Die Veröffentlichung des Privaten – die Privatisierung des Öffentlichen* (pp. 240–250). Opladen: Westdeutscher Verlag.

Johnston, A., & Kaid, L. L. (2002). Image ads and issue ads in US presidential advertising: Using videostyle to explore stylistic differences in televised political ads from 1952 to 2000. *Journal of Communication*, *52*(2), 281–300.

Kaid, L. L. (2004). Measuring candidate images with semantic differentials. In K. L. Hacker (Ed.), *Presidential candidate images* (pp. 231–236). Lanham: Rowman & Littlefield.

Kriesi, H. (2012). Personalization of national election campaigns. *Party Politics*, *18*(6), 825–844. https://doi.org/10.1177/1354068810389643

Kruikemeier, S. (2014). How political candidates use Twitter and the impact on votes. *Computers in Human Behavior*, *34*, 131–139. https://doi.org/10.1016/j.chb.2014.01.025.

Kruikemeier, S., van Noort, G., Vliegenthart, R., & de Vreese, C. H. (2013). Getting closer: The effects of personalized and interactive online political communication. *European Journal of Communication*, *28*(1), 53–66. https://doi.org/10.1177/0267323112464837

Langer, A. I. (2007). A historical exploration of the personalisation of politics in the print media: The British Prime Ministers (1945–1999). *Parliamentary Affairs*, *60*(3), 371–387. https://doi.org/10.1093/pa/gsm028

Larsson, A. O. (2014). Everyday elites, citizens or extremists? Assessing the use and users of non-election political hashtags. *MedieKultur, Journal of Media and Communication Research*, *30*(56).

Lee, E., & Oh, S. Y. (2012). To personalize or depersonalize? When and how politicians' personalized Tweets affect the public's reactions. *Journal of Communication*, *62*(6), 932–949.

Leidecker, M., & Wilke, J. (2015). Langweilig? Wieso langweilig? Die Presseberichterstattung zur Bundestagswahl 2013 im Langzeitvergleich [Boring? Why Boring? Media coverage of the German national elections in 2013 compared over time]. In C. Holtz-Bacha (Ed.), *Die Massenmedien im Wahlkampf: Die Bundestagswahl 2013* (pp. 145–172). Wiesbaden: Springer VS.

Magdy, W., & Elsayed, T. (2014). Adaptive method for following dynamic topics on Twitter. In Association for the Advancement of Artificial Intelligence (Ed.), *Proceedings of the eighth international AAAI conference on weblogs and social media* (pp. 335–345).

Maier, J., & Faas, T. (2011). 'Miniature campaigns' in comparison: The German televised debates, 2002-09. *German Politics*, *20*(1), 75–91.

Maier, J., & Maier, M. (2007). Das TV-Duell 2005: Katalysator für die Personalisierung des Wahlverhaltens? [The televised debate of 2005: Catalyst for the personalization of voting behavior?]. In F. Brettschneider, O. Niedermayer & B. Wessels (Eds.), *Die Bundestagswahl 2005: Analysen des Wahlkampfes und der Wahlergebnisse* (vol. 12, pp. 219–232). Wiesbaden: VS Verlag für Sozialwissenschaften. https://doi.org/10.1007/978-3-531-90536-5_10

Maier, M., Retzbach, J., Glogger, I., & Stengel, K. (2018). *Nachrichtenwerttheorie* [Theory of news values]. Baden-Baden: Nomos.

Maurer, M., & Reinemann, C. (2007). Personalisierung durch Priming: Die Wirkungen des TV-Duells auf die Urteilkriterien der Wähler [Personalization through priming: The effects of the televised debate on voters' evaluation criteria]. In M. Maurer, C. Reinemann, J. Maier & M. Maier (Eds.), *Schröder gegen Merkel: Wahrnehmung und Wirkung des TV-Duells 2005 im Ost-West-Vergleich* (1st ed.). Wiesbaden: VS Verlag für Sozialwissenschaften.

McGraw, K. M., & Dolan, T. M. (2007). Personifying the state: Consequences for attitude formation. *Political Psychology*, *28*(3), 299–327. https://doi.org/10.1111/j.1467-9221.2007.00570.x

McKinney, M. S., Houston, J. B., & Hawthorne, J. (2014). Social watching a 2012 Republican presidential primary debate. *American Behavioral Scientist*, *58*(4), 556–573. https://doi.org/10.1177/0002764213506211

Merkle, S. (2015). Personalisierung und genderspezifische Berichterstattung im Bundestagswahlkampf 2013 – 'Ausnahmefall' Angela Merkel oder typisch Frau? [Personalization and gender-specific media coverage of the German national election campaign 2013 – Exceptional case Angela Merkel or typically female?] In C. Holtz-Bacha (Ed.), *Die Massenmedien im Wahlkampf: Die Bundestagswahl 2013* (pp. 217–247). Wiesbaden: Springer VS.

Neuberger, C., Nuernbergk, C., & vom Hofe, H. (2011). *Twitter und Journalismus: Der Einfluss des 'Social Web' auf die Nachrichten* [Twitter and journalism: The influence of the social web on the news]. Düsseldorf: Landesanstalt für Medien Nordrhein-Westfalen.

Parmelee, J. (2013). Political journalists and Twitter: Influences on norms and practices. *Journal of Media Practice*, *14*(4), 291–305. https://doi.org/10.1386/jmpr.14.4.291_1

Radunski, P. (1980). *Wahlkämpfe: Moderne Wahlkampfführung als politische Kommunikation* [Election campaigns: Modern election campaign strategies as political communication]. Munich: Olzog.

Rainie, L., Smith, A., Schlozman, K. L., Brady, H., & Verba, S. (2012). *Social media and political engagement*. Pew Research Center.

Reinemann, C. (2007). Völlig anderer Ansicht. Die Medienberichterstattung über das TV-Duell [Completely different point of view. Media coverage of the televised debate]. In M. Maurer, C. Reinemann, J. Maier, & M. Maier (Eds.), *Schröder gegen Merkel: Wahrnehmung und Wirkung des TV-Duells 2005 im Ost-West-Vergleich* (1st ed., pp. 167–194). Wiesbaden: VS Verlag für Sozialwissenschaften.

Shamma, D., Kennedy, L., & Churchill, E. (2010). Conversational shadows: Describing live media events using short messages. In *Proceedings of the Fourth International AAAI Conference on Weblogs and Social Media* (pp. 331–334).

Sommer, D., Fretwurst, B., Sommer, K., & Gehrau, V. (2012). *Nachrichtenwert und Gespräche über Medienthemen* [News values and conversations about media content]. *Publizistik*, *57*(4), 381–401.

Thimm, C., Anastasiadis, M., Bürger, T., & Einspänner, J. (2014). *Der Bundestagswahlkampf 2013 auf Twitter* [National election campaigns 2013 on Twitter]. Bonn.

Thimm, C., Einspänner, J., & Dang-Anh, M. (2012). Politische Deliberation online – Twitter als Element des politischen Diskurses [Political deliberation online – Twitter as element of political discourse]. In F. Krotz & A. Hepp (Eds.), *Mediatisierte Welten* (pp. 283–305). Wiesbaden: VS.

van Aelst, P., Sheafer, T., & Stanyer, J. (2012). The personalization of mediated political communication: A review of concepts, operationalizations and key findings. *Journalism*, *13*(2), 203–220. https://doi.org/10.1177/1464884911427802

van Santen, R., & van Zoonen, L. (2010). The personal in political television biographies. *Biography*, *33*(1), 46–67. https://doi.org/10.1353/bio.0.0157

van Zoonen, L., & Holtz-Bacha, C. (2000). Personalisation in Dutch and German politics: The case of talk show. *The Public*, *7*(2), 45–56.

Vergeer, M., Hermans, L., & Sams, S. (2013). Online social networks and micro-blogging in political campaigning: The exploration of a new campaign tool and a new campaign style. *Party Politics*, *19*(3), 477–501. https://doi.org/10.1177/1354068811407580

Voss, K. (2013). Bundestagswahl 2013 im Netz [National elections 2013 online]. *Aus Politik und Zeitgeschichte*, (*48–49*), 34–39.

Weaver, D. H., & Willnat, L. (2016). Changes in U.S. journalism. *Journalism Practice*, *1–12*. https://doi.org/10.1080/17512786.2016.1171162