Social Media, Politics and Journalism

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Creative Industries Research Seminar

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Mapping Networked Politics – The German Election 2013 Case

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January 2013-December 2014

Christian Nuernbergk / Julia Neubarth
Project: „Mapping Networked Politics“

Theoretical Background

- Emergence of the **Networked Public Sphere**
  - **Decentralized communication** (Benkler, 2006; Ausserhofer and Maireder 2014)
  - Constellations between political actors, journalists and the audience increasingly consist of **multifaceted communications** and effects.
  - **Dynamic social navigation**: attention and selection patterns
  - **Who contributes?** Level of openness, content diversity, and quality

- Political Communication Online: Adoption of emerging practices
  - ‘**Normalization**’ vs. **revolutionary effects** (Larrson and Svensson, 2014; Margolis and Resnick, 2000; Wright 2012).
  - **Participatory potential**: Is political communication on the Internet best understood as **representation or participation**? (Larrsson and Moe, 2013)
  - **strategic communication channels** offering new ways to reach key audiences (Jackson & Lilleker, 2011)
► Project: „Mapping Networked Politics“
Theoretical Background / Empirical Findings

Context of Twitter Usage by Political Actors

- Research focuses mostly on **election campaigns and candidates**
  - Twitter as "bandwagon they need to jump on" (Jackson and Lilleker, 2011)
  - **Strategies** for the use of Twitter: campaign updates/promotion, mobilization, negative campaigning, organization, interaction/dialogue (Glassmann/Straus/Shogan 2011; Grant/Moon/Grant 2010; Meckel et al. 2013; Graham et al. 2013)
  - Influencing media coverage? Journalists in interaction networks (Graham et al. 2013)
  - **Dynamics** of the campaign cycle are mirrored (Bruns and Burgess, 2012; Jürgens and Jungherr, 2011)
  - Missing evidence for contribution to electoral success (Metag and Marcinkowski, 2013)

- **Communication style: “topic-informative” or “personal-interactive”**
Project: „Mapping Networked Politics“
Theoretical Background / Empirical Findings

Context of Twitter Usage by Political Actors

- Use of Twitter:
  - **Age and party membership** main predictors (Saalfeld and Dobmeier, 2012)
  - Distribution of tweets and engagement in dialogues strongly vary between users (Jungherr, 2014; Graham et al., 2013)

- Inconsistent findings on **party representation**
  - **Powerful offline actors** may also dominate on Twitter (Jungherr, 2014; Gibson and Ward, 2009)
  - **Limited organizational resources and smaller party size** may increase the likelihood of social network activity (Saalfeld and Dobmeier, 2012)
  - The (progressive) **Green party** has been found a leading actor across different countries (Graham, Jackson, and Broersma, 2014; Vergeer and Hermans, 2013; Maireder and Ausserhofer, 2013).
Project: „Mapping Networked Politics“

Theoretical Background / Empirical Findings

The German Context

- 60% of the **parliamentarians on the national level** use Twitter (Meckel et al. 2013)
- Limited reach in Germany, but increasing in 2013: 7% of **German onliners** use Twitter (van Eimeren and Frees, 2013)
- Twitter activities of politicians are often covered by the media

- **Democratic Divide** despite social media: The **majority** of Germans **refuses to participate actively** in online political communication (Emmer/Vowe/Wolling 2011)
  - dominance of younger, male and well educated users
  - participation derives mostly from users who are already very interested in politics (→ Mobilization of supporters)

- Evidence for a **positive development concerning the reception of political information** via Internet (von Pape/Quandt 2010)

**Electoral System:** Mixed-member system: combines a personal vote in single-member districts with the principle of proportional representation.
Project: „Mapping Networked Politics“
representatives: network of interactions, content and general activity

- How can we describe the interactions and communicative relationships of German and Australian representatives on Twitter?
- Duration: 2013/2014; Granted by: DAAD/ATN (with QUT partner Axel Bruns)

Comparative content and network analyses:

- continuous monitoring of all tweets distributed by MdBs since February 2013
- network analysis and comparison of network metrics
- quantitative content analysis of selected weeks
Research Questions

RQ 1: What activities dominate the Twitter-usage of German representatives?

RQ 2: With which actors do the German representatives interact on Twitter?

Substudies: routine phase/election phase on Twitter in Germany

- **complete analysis** of all published Tweets by representatives and their activities (i.e. retweets, @mentions)
- **selected week(s):** 20th – 26th of March 2013 / 15th to 21st of September 2013
- **method:** content analysis/network analysis
- routine activities, half of the week = session period
- software-based generating of archives via **Twitter-API** based on a compiled list of Twitter-accounts maintained by German representatives of the Bundestag (= 338 Accounts)
- **N = 11,980 tweets** in the selected time periods
- 16 coders in March, 20 coders in September (two research classes)
Sample

- 208 actively twittering Members in March
  (= 34% of all Members of the Bundestag [=MdBs])

- Sep 15th- 21st: 221 (= 36%)

- 4392 tweets in one week; 20,4 tweets/person (SD: 36,5)
- 7736 tweets 35,0 tweets/person (SD: 41,5)
  - comparison to other countries: 416 candidates/UK twittered 29,5 tweets/person
  7 days before the election 2010 (counted pro rata: Graham et al. 2013)

Table 1: Tweeting German MdBs by party in March and September 2013

<table>
<thead>
<tr>
<th></th>
<th>number of MdBs of this party in the Bundestag</th>
<th>number of active Twitter-accounts of MdBs by fraction</th>
<th>percentage of MdBs of this fraction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MAR</td>
<td>SEP</td>
</tr>
<tr>
<td>CDU/CSU</td>
<td>237</td>
<td>54</td>
<td>57</td>
</tr>
<tr>
<td>SPD</td>
<td>146</td>
<td>43</td>
<td>45</td>
</tr>
<tr>
<td>FDP</td>
<td>93</td>
<td>35</td>
<td>39</td>
</tr>
<tr>
<td>Die Grünen</td>
<td>68</td>
<td>42</td>
<td>46</td>
</tr>
<tr>
<td>Die Linke</td>
<td>75</td>
<td>34</td>
<td>33</td>
</tr>
</tbody>
</table>
Distribution and frequency of tweets by party

- **Imbalanced posting activity**  (on avg. per MdB: Mar: $M=20.4$, Sep: $M=35.0$)
- **Members of the Green Party** reached highest values on avg. in both time periods (Mar: $M=25.2$, Sep: $M=50.7$)
- **Conservatives (CDU/CSU)** showed a substantially increased posting rate in September (Mar: $M=20.3$, Sep: $M=38.1$)

Distribution of seats in the German Bundestag (in %)
- CDU/CSU: 38%
- SPD: 24%
- FDP: 15%
- Die Grünen: 11%
- Die Linke: 12%

Distribution of MdBs' tweets in September 2013 (in %)
- CDU/CSU: 28%
- SPD: 30%
- FDP: 13%
- Die Grünen: 18%
- Die Linke: 10%
Rate and distribution of tweets

Percentage of twittering MdBs who publish … per week

- Percentage of tweets from
  - ‘directly’ elected MdBs from single-member districts: 46%
  - Fraction Members with special functions (i.e. spokesman): 11%
  - head of commissions or deputies: 8%

…composed 56% of all MdBs’ tweets in September

March 2013
Sep 13

0% 10% 20% 30% 40% 50% 60%
0% 10% 20% 30% 40% 50% 60%

1 tweet 2-9 tweets 10-49 tweets 50-99 tweets 100 or more tweets

9% 2% 40% 26% 43% 6% 14% 2% 2% 6%

March 2013
Sep 13
results RQ1: Twittering Behavior

- **Communicative reference/context of tweet content** (n=2902) / (n=4671)
  - publicly relevant communication: Mar: 81% vs. Sep: 94%
  - private-only communication: Mar: 18% vs. Sep: 4%
  - Both periods differ significantly (Cramer-V=.241, p<.001, Chi-square=439.5, df=2)

- **Self-composed tweets containing publicly relevant communication** (n=2317) / (n=4311)
  - containing references to politics: Mar: 90% vs. Sep: 94%
    - references to a specific policy field: Mar: 72% vs. Sep: 23%

Table 4: References to specific policy fields in self-composed tweets (in%)

<table>
<thead>
<tr>
<th></th>
<th>CDU/CSU</th>
<th>SPD</th>
<th>FDP</th>
<th>Die Grünen</th>
<th>Die Linke</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MAR</td>
<td>SEP</td>
<td>MAR</td>
<td>SEP</td>
<td>MAR</td>
<td>SEP</td>
</tr>
<tr>
<td>Self-composed tweets containing political communication* with reference to a policy field</td>
<td>n=360</td>
<td>n=1004</td>
<td>n=430</td>
<td>n=715</td>
<td>n=308</td>
<td>n=574</td>
</tr>
<tr>
<td>CDU/CSU</td>
<td>65.6</td>
<td>12.4</td>
<td>58.8</td>
<td>16.2</td>
<td>71.8</td>
<td>21.8</td>
</tr>
<tr>
<td>SPD</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDP</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die Grünen</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die Linke</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tests for independence: MAR [between parties] Cramer-V=.225, p<.001, Chi-square=94.8, df=4; SEP [between parties] Cramer-V=.238, p<.001, Chi-square=213.4, df=4

Between periods: Phi=-.474, p<.001, Chi-square=1275.3, df=1

*Only tweets which also showed publicly relevant communication were considered for the analysis.
results RQ1: Election Campaigning in Tweets

- MdBs’ tweets most often provided information on party-related activities and events.
- In September, the number of tweets containing mobilization efforts clearly went up.

Table 5: Forms of political campaigning and voter interaction (in %)

<table>
<thead>
<tr>
<th>Form of Campaigning</th>
<th>MAR</th>
<th>SEP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political campaigning (e. g. for party-related events, activities or information) ((\Phi_i=.202, p&lt;.001, \text{Chi-square}=276.7, df=1))</td>
<td>19.5</td>
<td>39.3</td>
</tr>
<tr>
<td>Political mobilization (e. g. call for votes, demonstrations and further participation) ((\Phi_i=.112, p&lt;.001, \text{Chi-square}=86.2, df=1))</td>
<td>3.4</td>
<td>9.7</td>
</tr>
<tr>
<td>Call for party-related donations (n.s.)</td>
<td>0.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Internal communication with reference to election campaigning (e. g. hints for team members and associated supporters) (n.s.)</td>
<td>1.9</td>
<td>2.1</td>
</tr>
<tr>
<td>Dialogue with citizens and voters (e. g. feedback call, call for ideas etc.) ((\Phi_i=-.050, p&lt;.001, \text{Chi-square}=17.3, df=1))</td>
<td>9.1</td>
<td>6.3</td>
</tr>
<tr>
<td>Negative campaigning (n.s.)</td>
<td>4.2</td>
<td>3.6</td>
</tr>
</tbody>
</table>

*Only tweets which also showed publicly relevant communication were considered for the analysis.
results RQ2: Network Interaction

Table 6: @mentions and retweets in MdBs’ tweets by parties

<table>
<thead>
<tr>
<th></th>
<th>@Mentions MAR</th>
<th>@Mentions SEP</th>
<th>Retweets MAR</th>
<th>Retweets SEP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In %</td>
<td>abs.</td>
<td>In %</td>
<td>abs.</td>
</tr>
<tr>
<td>CDU/CSU</td>
<td>52.4</td>
<td>453</td>
<td>42.6</td>
<td>739</td>
</tr>
<tr>
<td>SPD</td>
<td>60.9</td>
<td>560</td>
<td>40.1</td>
<td>472</td>
</tr>
<tr>
<td>FDP</td>
<td>35.1</td>
<td>149</td>
<td>27.5</td>
<td>217</td>
</tr>
<tr>
<td>Die Grünen</td>
<td>54.9</td>
<td>428</td>
<td>45.3</td>
<td>657</td>
</tr>
<tr>
<td>Die Linke</td>
<td>26.6</td>
<td>123</td>
<td>29.9</td>
<td>197</td>
</tr>
<tr>
<td>Total</td>
<td>49.7</td>
<td>1713</td>
<td>39.3</td>
<td>2282</td>
</tr>
</tbody>
</table>

1 Only self-composed tweets were considered for the analysis.
Tests for independence:
@mentions: Between periods: \( \Phi = -0.101, p < .001, \text{Chi-square}=94.8, df=1; \)
Retweets: Between periods: \( \Phi = .067, p < .001, \text{Chi-square}=53.3, df=1 \)

- **Differences by party and period** were found regarding the use of **Twitter operators**.

- **Most apparent @mention-partners** (Mar: n=2295, Sep: n=2875): other political actors (Mar: 49%, Sep: 45%), ‘normal’ citizens (Mar: 35%, Sep: 37%), journalists/newsrooms (Mar: 9%, Sep: 14%) (Difference between parties: Mar: Cramer-V=.136, p<.001, Sep: Cramer-V=.164, p<.001)

## Results RQ2

### Table 7: Network characteristics of retweet and @mention networks during March and September (with MdBs-only subnetworks)

<table>
<thead>
<tr>
<th></th>
<th>Nodes</th>
<th>Ties</th>
<th>Dyad Reciprocity</th>
<th>Density</th>
<th>Avg. Weighted Degree</th>
<th>Components</th>
<th>Connectedness</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RETWEETS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAR: all</td>
<td>494</td>
<td>644</td>
<td>0.014</td>
<td>0.003</td>
<td>1.634</td>
<td>466</td>
<td>0.056</td>
<td>11</td>
</tr>
<tr>
<td>SEP: all</td>
<td>948</td>
<td>1450</td>
<td><strong>0.006</strong></td>
<td>0.002</td>
<td>2.135</td>
<td>917</td>
<td>0.028</td>
<td>14</td>
</tr>
<tr>
<td>MAR: MdBs-only</td>
<td>117</td>
<td>182</td>
<td>0.052</td>
<td>0.017</td>
<td>1.983</td>
<td>89</td>
<td>0.193</td>
<td>11</td>
</tr>
<tr>
<td>SEP: MdBs only</td>
<td>123</td>
<td>231</td>
<td><strong>0.041</strong></td>
<td>0.020</td>
<td>2.463</td>
<td>92</td>
<td>0.154</td>
<td>13</td>
</tr>
<tr>
<td><strong>@MENTIONS</strong> (only self-initiated)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAR: all</td>
<td>986</td>
<td>1308</td>
<td>0.046</td>
<td>0.002</td>
<td>2.388</td>
<td>932</td>
<td>0.055</td>
<td>10</td>
</tr>
<tr>
<td>SEP: all</td>
<td>1452</td>
<td>1897</td>
<td><strong>0.026</strong></td>
<td>0.001</td>
<td>2.096</td>
<td>1406</td>
<td>0.028</td>
<td>10</td>
</tr>
<tr>
<td>MAR: MdBs-only</td>
<td>115</td>
<td>251</td>
<td>0.301</td>
<td>0.034</td>
<td>3.870</td>
<td>61</td>
<td>0.404</td>
<td>9</td>
</tr>
<tr>
<td>SEP: MdBs-only</td>
<td>121</td>
<td>270</td>
<td><strong>0.216</strong></td>
<td>0.033</td>
<td>3.959</td>
<td>75</td>
<td>0.265</td>
<td>9</td>
</tr>
</tbody>
</table>

1 without isolates (degree <1)
2 Mentions within retweets not included, unless author tweeted them directly

**Comparative network analysis**
results RQ2

Network analysis

Fig. 1: Retweet Network with MPs-only, September 2013 (Label: all, Algorithm: Yifan Hu; Colours: blue: CDU/CSU, red: SPD, yellow: FDP, green: Die Grünen, purple: Die Linke)
results RQ2: Homophily pattern

Table 8: @mention and retweet homophily (based on E-I group indices)

<table>
<thead>
<tr>
<th></th>
<th>@mentions (MdBs only)</th>
<th>Retweets (MdBs only)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>March</td>
<td>September</td>
</tr>
<tr>
<td>E-I-Index (n=115)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDU/CSU</td>
<td>0.000</td>
<td>-0.106</td>
</tr>
<tr>
<td>SPD</td>
<td>0.106</td>
<td>0.091</td>
</tr>
<tr>
<td>FDP</td>
<td>0.500</td>
<td>0.200</td>
</tr>
<tr>
<td>Die Grünen</td>
<td>-0.429</td>
<td>-0.258</td>
</tr>
<tr>
<td>Die Linke</td>
<td>-0.333</td>
<td>-0.622</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-I-Index (n=121)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDU/CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die Grünen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die Linke</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-I-Index (n=117)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDU/CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die Grünen</td>
<td></td>
<td></td>
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<tr>
<td>Die Linke</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E-I-Index (n=123)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDU/CSU</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die Grünen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Die Linke</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The **E-I index** is calculated following Krackhardt and Stern's formula (Krackhardt and Stern, 1988) and **measures the ratios between group external and internal ties** for each individual actor, subgroups as well as the whole network. The index ranges from -1 to +1.
- An E-I index close to -1 indicates that the group is totally focused on itself. A ratio near to +1 indicates that the group is totally focused outside itself.
results RQ2

Summary of other comparable approaches (network analysis)

- **Group densities**
  - In both selected weeks, members of the Green party were the most active @mention-group. They also shared the most group-internal relations.

- **Group centralities (by fractions)**
  - The different *centrality calculations* show that the distribution of @mentions is concentrated to some extent on prominent network actors (SPD ↑ Grüne ↑ Linke ↓)

- **Network levels of indegree and outdegree centralization**
  - the increased activity in the last week of campaigning in September also affected the level of network centralization in retweet and @mention networks
    - The outdegree centralization in the September retweet and @mention networks decreases (→ broader subset of more active contributors)

- **Individual users’ centrality ranks**
  - Leading candidates more central in September
Conclusion

- **Main functions** of twitter usage by MdBs: information and interaction
- Representatives tend to hold their own public conversations on Twitter – citizens are not their primary partners of interaction
- **Leading party** concerning Twitter use: Green Party
- **Specific types of usage differ between parties and positions** (i.e. interactivity patterns; spokesperson vs. average member)
- **Dynamics of the campaign cycle:** Networks exhibit clear election-related activity dynamics

- Further research should clarify cohesion and the evolution of network patterns
- Analysis of further periods as well as the comparison of different countries concerning network metrics and types of actors helps to identify overarching patterns and campaign strategies
Journalism and Social Media
The Federal Press Conference on Twitter

Grant: Media Authority North Rhine-Westphalia (LfM)

February 2014-July 2014
Project: „The Federal Press Conference on Twitter“

Theoretical Background

- Emergence of the **Networked Public Sphere**
  - Constellations between political actors, journalists and the audience increasingly consist of **multifaceted communications** and effects.
    - Openness of interaction networks (Lawrence, Molyneux, Coddington und Holton (2013)
    - Reestablish relationships with audiences (Singer et al, 2011)

- ‘**Normalizing New Media**’ (Singer, 2005)
  - Journalism as usual? (Lasorsa, Lewis and Holton, 2012)
    - One-way publishing; little adoption of the affordances of multi-way communication (Domingo et al., 2008)

- **Journalism practice in social media** (Lasorsa, Lewis and Holton, 2012)
  - expressing personal opinions,
  - sharing the gatekeeping role
  - providing a semblance of accountability and transparency to their professional work (e.g. background information about the news process)
Research Questions

**RQ: What do journalists share on Twitter and with whom do they interact?**

- Topical contents,
- Use for journalistic activities (news presentation, user participation, online research),
- Interaction partners,
- Use of functional operators (RT, #, @mentions)

Sample and Research Design

- **complete analysis** of all published Tweets by journalists and their activities (i.e. retweets, @mentions)
- **selected week**: 8th – 14th of March 2014
- **method**: content analysis/network analysis
- **software-based generation of archives via Twitter-API** based on a compiled list of Twitter-accounts maintained by journalists in the Federal Press Conference (BPK) (= 218 Accounts)
- **N = 1872 tweets** were published by 134 journalists in the selected period
- 4 coders; intercoder reliability: 0.92 (Holsti’s method), 0.75 Krippendorff’s $\alpha$ (on avg.)
► results RQ1: Twittering Behavior

- **Communicative reference/context of tweet content** \((n=1882)\)
  - publicly relevant communication: 90%
  - private-only communication: 5%

- **News beats**

Table 1: Topical focus of journalists’ tweet by media type

<table>
<thead>
<tr>
<th>Topical focus</th>
<th>Daily Newspapers ((n=672))</th>
<th>Magazines ((n=272))</th>
<th>TV/radio ((n=603))</th>
<th>Internet-only ((n=80))</th>
<th>News agencies ((n=37))</th>
<th>Total ((n=1,664))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Politics</td>
<td>55,8</td>
<td>43,8</td>
<td>66,0</td>
<td>41,3</td>
<td>21,6</td>
<td>56,1</td>
</tr>
<tr>
<td>Media/Internet</td>
<td>10,6</td>
<td>17,6</td>
<td>11,4</td>
<td>27,5</td>
<td>73,0</td>
<td>14,2</td>
</tr>
<tr>
<td>Economics</td>
<td>4,9</td>
<td>4,8</td>
<td>2,0</td>
<td>3,8</td>
<td>0</td>
<td>3,7</td>
</tr>
<tr>
<td>Other</td>
<td>28,7</td>
<td>33,8</td>
<td>20,6</td>
<td>27,5</td>
<td>5,4</td>
<td>26,0</td>
</tr>
</tbody>
</table>

Cramer-V=0.185, \(p<0.001\).

- Tweets were often composed in **information-oriented style** \((84\%, n=1.821)\).
- **Impartiality and nonpartisanship** considered relevant: Most of the tweets did not disclose their authors’ opinions \((64\%, n=1365)\).
- **Factual tweets** dominated; irony, satire or jokes were rare \((11\%, n=1.957)\).
results RQ1: Twittering Behavior

- Expanding potentials for transparency remain untapped
  - Only very few tweets provided personal insights into how stories were crafted or provided context of the development of news coverage
  - Every second tweet contained hyperlinks, but sources were only rarely mentioned

- Low audience participation: opportunities for Twitter users to participate in the news-creation process were not provided
  - No requests of user material (fotos or videos) or help in crowdsourcing tasks
  - In a few cases journalists requested some feedback or help from their followers concerning current events (3%, n=2069)

- Visible conversation about news: interactive tweets addressed to specific users also contained answers or questions about current news (8%, n=2051)
► results RQ2: Network Interaction

@mentions
(k-core, n=130)

Retweets
(k-core, n=95)

- Journalists
- Politicians
- Others
results RQ2: Network Interaction

- Journalists mainly reply to and retweet their fellow reporters on Twitter
  - ‘tweeting in a bubble’-pattern
- Layers of communication mirror different source types
  - Reliance on non-affiliated citizens and politicians varies

Table 2: Actor type of accounts being retweeted by journalists

<table>
<thead>
<tr>
<th></th>
<th>Daily newspapers (n=201)</th>
<th>Magazines (n=72)</th>
<th>TV/radio (n=160)</th>
<th>Internet-only (n=23)</th>
<th>News agencies (n=27)</th>
<th>Total (n=483)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalistic Actors</td>
<td>64,7</td>
<td>77,8</td>
<td>75,0</td>
<td>87,0</td>
<td>96,3</td>
<td>72,9</td>
</tr>
<tr>
<td>Political Actors</td>
<td>15,9</td>
<td>1,4</td>
<td>7,5</td>
<td>0</td>
<td>0</td>
<td>9,3</td>
</tr>
<tr>
<td>'Ordinary' Citizens</td>
<td>11,9</td>
<td>18,1</td>
<td>13,8</td>
<td>0</td>
<td>0</td>
<td>12,2</td>
</tr>
<tr>
<td>Other Actors (grouped)</td>
<td>7,5</td>
<td>2,8</td>
<td>3,8</td>
<td>13,0</td>
<td>3,7</td>
<td>5,6</td>
</tr>
</tbody>
</table>

Cramer-V=0,163, p<0,001.

Table 3: Actor type of accounts being @mentioned by journalists

<table>
<thead>
<tr>
<th></th>
<th>Daily newspapers (n=411)</th>
<th>Magazines (n=141)</th>
<th>TV/radio (n=358)</th>
<th>Internet-only (n=65)</th>
<th>News agencies (n=24)</th>
<th>Total (n=999)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalistic Actors</td>
<td>46,2</td>
<td>65,2</td>
<td>57,3</td>
<td>63,1</td>
<td>75,0</td>
<td>54,7</td>
</tr>
<tr>
<td>Political Actors</td>
<td>34,1</td>
<td>5,0</td>
<td>21,8</td>
<td>10,8</td>
<td>12,5</td>
<td>23,5</td>
</tr>
<tr>
<td>'Ordinary' Citizens</td>
<td>10,2</td>
<td>22,0</td>
<td>15,6</td>
<td>21,5</td>
<td>4,2</td>
<td>14,4</td>
</tr>
<tr>
<td>Other Actors (grouped)</td>
<td>9,5</td>
<td>7,8</td>
<td>5,3</td>
<td>4,6</td>
<td>8,3</td>
<td>7,4</td>
</tr>
</tbody>
</table>

Cramer-V=0,161, p<0,001.
# Conclusion

- **What is Twitter:** A **vital space** that enables citizens to communicate their views, discuss news and be heard? Or a **strategic communication channel** incorporated by professional actors?

- Twitter allows the observation of **conversations** of the political and journalistic elite. Both, journalists and politicians, seem to refer to their peers primarily
  - **Citizens’ views are rarely mirrored** by politicians and journalists
  - The majority of German politicians and news elite actors still does not actively contribute to Twitter
  - **Twitter is difficult to interpret** because of **skewed distributions:** among those twittering, varying degrees of posting activity and interactions were found

- The **average political journalist** mostly tweets about publicly relevant communication. He/she reports in a factual, information-oriented style. Transparency is provided only on his/her topics of interest. Occasionally, news are being discussed with specific users

- A fertile ground for stabilizing the **“working relationship”**: journalists incorporate politicians into their regular circle of contacts. The purpose of these interactions needs further examination
► Other projects

- “Topic Dynamic in the Internet Public Sphere”: Funded by the German Research Foundation (DFG) (2012-2016), Christoph Neuberger & Sanja Kapidzic, in cooperation with Stefan Stieglitz, University of Münster, Business informatics

- “Analysis of Discourses in Social Media”: Funded by the Federal Ministry of Education and Research (BMBF) (2012-2015), Christoph Neuberger & Ines Engelmann, in cooperation with Manfred Stede, University of Potsdam, Computational linguistics, Stefan Stieglitz, University of Münster, Business informatics, Thorsten Quandt, University of Münster, Communication studies

- “Federal Election 2013 in Social Media”: Funded by the Konrad Adenauer Foundation and Vodafone Institute (2013), Christoph Neuberger & Jennifer Wladarsch, in cooperation with Stefan Stieglitz, University of Münster, Business informatics

- “Social Media and Journalism”: Funded by the Media Authority of North Rhine-Westphalia (LfM) (2014), Christoph Neuberger, Susanne Langenohl & Christian Nuernbergk
Federal election 2013 in social media

Fig. 1  Ratio of items related to different topics over time in %

Thank you for your attention

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