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Evidence from Social Media Debates About Migration



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Esther Ademmer, Tobias Stöhr

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## THE MAKING OF A NEW CLEAVAGE? EVIDENCE FROM SOCIAL MEDIA DEBATES ABOUT MIGRATION

Esther Ademmer<sup>a,b</sup> & Tobias Stöhr<sup>a,c</sup>

<sup>a</sup> Kiel Institute for the World Economy <sup>b</sup> Kiel University,<sup>c</sup> IZA

### ABSTRACT

Immigration has been considered critical for the emergence of a new cleavage in the European Union that pits the winners of globalisation against the losers. Ample research has demonstrated the social structure and the organisational base of this new cleavage. So far, however, there is no study showing that the rise of new parties is also associated with a stronger political identification of individuals with issues that these parties promote – a key feature to speak of a cleavage in the tradition of Lipset and Rokkan. In this paper, we provide systematic evidence on whether immigration contributes to the collective identification with the new cleavage on the micro-level. We show that an increase in immigration is strongly associated with this process and contrast our argument against alternative explanations that scrutinize the dealignment of individuals and political parties. We analyse a dataset of about 600 000 comments made on Facebook below articles of regional German newspapers using topic models to add to the debate about the emergence of new cleavages in Europe.

Keywords: cleavages; globalisation; migration; Facebook

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#### Introduction

The migration and the euro crisis have been considered critical for the emergence of a new cleavage in Western democracies that pits the winners of globalisation against the losers (Hooghe & Marks 2018; Kriesi 2010). Cleavages are usually associated with deep, lasting and historic political dividing lines in societies that structure party systems over decades and that are distinct from short-lived single-issue campaigns or an increasing dealignment of voters and parties. In order to speak of a new cleavage three conditions need to be fulfilled: first, a social structure underlies the two poles of the conflict. Second, an organisational base channels the conflict into the political realm. And third, individuals need to collectively identify with this new cleavage.

While we do know about the contents of the potential new cleavage, its social structure, and its organisational base, we know relatively little about the micro-level, i.e. whether people increasingly indeed collectively identify with new cleavage interests – the third constituent feature of a cleavage.

This paper closes this gap in the literature and adds a missing piece to the debate about the emergence of the new cleavage. We are the first to provide systematic evidence on whether immigration contributes to the collective identification with the new cleavage on the micro-level. We show that an increase in immigration is strongly associated with this process and contrast our argument against alternative explanations that scrutinize the dealignment of individuals and political parties. We innovate empirically by basing our analysis on a dataset of about 600 000 comments made on Facebook below articles of regional German newspapers. Additionally, we innovate methodologically by using topic models to analyse this extensive dataset to add to the debate about the emergence of new cleavages in Europe.

The paper proceeds as follows: in the next section, we develop our hypotheses and situate our approach in the larger literature on the debate about new cleavages. Next, we introduce our dataset and the empirical approach and present our empirical results before we conclude by discussing the implications of our findings.

#### Cleavages, dealignment and critical junctures

Cleavages are deep-seated and historically developed ideological divisions within a society that align parties and voters in a long-term alliance (Lipset & Rokkan 1967). Party competition based on shortlived single issues or unforeseen events may induce temporary deviations from cleavage politics, but leaves the fundamental ideological divisions within a society unaltered (Bornschier 2018, p. 2f). Among such deep-seated cleavages are territorial (rural/urban) and religious (church/state) divisions in societies that have emerged with nation states in Europe and have structured party competition between conservative and social democratic parties. In addition, the class cleavage emerged in the course of the industrial revolution, pitting capital owners and employers organised in *right-wing*  conservative parties against workers and those advocating for redistribution and state interference into the economy *into left-wing* socialist or social-democratic parties.

With ongoing processes of globalisation, European integration, and migration, scholars asked whether there is a new cleavage emerging within the European Union (EU). As Hooghe and Marks (201 argue, processes of regional and global integration have led to the rise of a new 'transnational cleavage' in the EU. They posit that instead of a classic left-right cleavage that depicts the conflict between capital and labour, this new cleavage is driven by cultural issues and identity politics, pitting the so-called *green/alternative/libertarian* (GAL) against the *traditional/authoritarian/nationalist* (TAN) segment of the society. It is marked by a polarisation on positions over European integration and migration. While other authors may label the GAL/TAN cleavage differently, e.g. cosmopolitanism v. communitarianism (Zürn & Wilde 2016), or demarcation v. integration (Kriesi et al. 2006) – scholars broadly agree on its characteristics. Zürn and De Wilde (2016) contrast four central conflicting positions of the cosmopolitan GAL- and the communitarian TAN-segment of society: Cosmopolitans would say, 'yes to open borders, yes to global authorities, yes to individualism and to individual rights. The communitarians, by contrast, would value borders, the sovereignty of states or specific groups and consider 'collective needs and self-determination as primary frame of justice'.

In order to speak of a new cleavage that has political impact, however, three conditions need to be fulfilled (Franklin 2010; Kriesi 1998 in reference to the original work of Lipset & Rokkan): first, a social structure or an 'objective' distinction of interests of either side on the cleavage needs to be identifiable. Second, the different interests need to have some organisational base, usually through political parties. And third, individuals on either side of the cleavage need to recognise this differentiation in terms of collective identification.

Two of these three conditions have been extensively addressed in the literature: Scholars have argued that there is indeed a distinct social structure underlying this new cleavage. Bornschier (2018) identifies three changes in the social structure that the literature often associates with the rise of the new cleavage: the expansion of higher education, modernisation, and globalisation, all of which create new and distinct groups of winners and losers in European societies. Oesch and Rennwald (2010) empirically demonstrate for Switzerland the distinct social structure that others associated with the new cleavage (see e.g. Kriesi et al. 2012): while using different labels, their findings suggest that GAL and TAN constituencies are indeed opposing poles in terms of social and employment structure: the GAL segment is especially comprised of socio-cultural professionals from the salaried middle class, while the TAN segment consists of owners of small businesses and workers. Even though the divide is structurally rooted in differences in employment, they show that the content of the divide is inherently about culture and identity, rather than economics: 'While small business owners and workers prefer cultural demarcation and defend national traditions, salaried professionals strongly favour international integration and multi-culturalism'(Oesch & Rennwald 2010).

The political potential emerging from these social ruptures resulted in new political organisations, the second constituent pillar of a cleavage. Kriesi et al. (2008; 2012) argue that the emergence of a new cultural cleavage in Western Europe has made explicit that there is a lack of political representation of certain segments of society, particularly for those who tend to be the losers (both in economic and cultural terms) of the broader processes of denationalisation. Those 'losers' constitute a large mobilisation potential for new political entrepreneurs, like populist and radical right-wing parties. In countries with multiparty systems, new parties have consequently arisen, with radical right parties representing the TAN, and green parties representing the GAL segment of voters (Hooghe & Marks 2018). What Kriesi et al. (2006: 921) call 'the transformation of the basic structure of the national political space', has led to the repositioning of established parties and the rise of mostly right-wing parties at the fringes of the political spectrum. Mainstream parties frequently suffer from intra-party dissent about issues such as European integration and, consequently, send 'mixed messages' to voters (Gabel & Scheve 2007). While there has been a substantial amount of research on two out of the three defining characteristics of the new cleavage – its organisational base and social structures – there is little evidence on the question of whether there is a collective identification with the new cleavage on the micro-level.

To be sure, there is research on polarised attitudes towards immigration and European integration and their association with social structure, usually based on survey data. Referring to Eurobarometer data, Mudde (2016) for instance, shows that TAN-related attitudes are widespread: Some 65 percent of West Europeans subscribe to the sentiment that accepting more immigrants would have severe consequences for the native population. One third of respondents openly admits to having strong racist feelings; 20 percent call for the repatriation of all (non-European) immigrants (Mudde 2016, p. 8) and some 19 percent support the claim that 'immigrants do not have the same rights as everyone else' (Mudde 2016, p. 431). Similarly, there is widespread support among Western Europeans for law and order statements with respect to policing. These attitudinal patterns suggest that there is potential for collective identification with or conscience around issues associated with the new cleavage.

Kriesi et al. (2012) have additionally found that on the attitudinal level there is a strong correlation between opposition to European integration and taking a tough stance towards immigration. Looking more closely at the supporters and opponents of integration and migration, the highly educated as well as what Kriesi et al. (2012) call the 'socio-cultural specialists' are in favour of both, while the lower educated and unskilled workers are strongly opposed to both processes. Citizens who fall towards the middle (average educational level, self-employed and lower white-collar workers) are located in the middle in terms of their attitudes – or put differently, these citizens can be drawn into either direction of the new cleavage depending on environmental factors such as the economic situation and the political polarisation through elite actors. Keeping in line with proponents of a new cleavage, the political polarisation of economic left versus right seems far less pronounced than polarisation on the cultural axis across citizens of a variety of countries analysed by Kriesi et al. (2012) meaning that

there is less contestation over economic grievances than over questions of community, values and sovereignty. Thus, it is not surprising that Zürn and De Wilde (2016) claim (in reference to Craig Calhoun), that '[...] cosmopolitanism is the class conscience of frequent travellers', and add that 'similarly, one might pose: communitarianism is the class conscience of friends of the homeland'.

While we know that people hold such attitudes and that they are associated with social structure, we do not know whether they make part of an increasingly more salient conscious identity that is activated in times of political conflict. A central aim of cleavage research, however, is less about discovering whether individuals indeed hold a class conscience that is associated with a certain cleavage, but rather 'to know (...) when the one type of cleavage will prove more salient than the other' in structuring political conflict (Lipset & Rokkan 1967).

Our goal is to add this missing piece to the debate by studying what 'class conscience' individuals activate in the course of intense political conflict. A major challenge in this regard is that we cannot directly observe what conscious identity individuals activate. Asking people, e.g. in surveys, about issues they associate with a specific political conflict would prime them to interpret this conflict as politically relevant in the first place. Asking people about specific issues they associate with political conflict is political conflict is political.

Social media communication, however, may help to advance our knowledge in this regard. Unlike established media or political parties that may still interpret conflictual issues according to established political cleavages, individuals commenting on social media have the opportunity to prioritise or discuss politics according to their – potentially diverging – collective identifications. As De Wilde et al. (2013, p. 110) show for Germany, citizens commenting on European issues, for instance, are more critical and their comments more frequent than those of journalists and political parties. Even before the rise of the right-wing party Alternative für Deutschland (AfD), when hardly any Eurosceptic opinions were raised by political parties in Germany, moderate contestation over Europe was already visible on blog posts by citizens (Wilde et al. 2013). The way issues are captured in online sources differs from surveys, where individuals are supposed to voice their attitude towards certain issues irrespective of whether they are the main heuristic through which they judge political conflict. A defining and contrasting feature of social media communication compared to traditional data from surveys is that these online data are proactive and voluntary in kind. Using them thus puts us in the position to study whether individuals collectively and consciously choose cultural themes and frames when discussing political issues and whether such themes are more important than economic themes and related collective identities in political debates.

Based on the prevalence of attitudinal patterns associated with the new cleavage and how they express themselves on social media, we would expect that the GAL/TAN cleavage is especially apparent on social media and would be more pronounced than the established economic left-right cleavage. Our first descriptive hypothesis thus reads

#### H1a (new cleavage):

On social media, users comment more on GAL/TAN issues than on left/right issues.

Learning about the micro-level foundation of the potential new cleavage is theoretically important, as there are alternative hypotheses that link changes in the social structure to party system developments without requiring new and relatively more salient collective identifications and deeply-rooted cleavages. The rise of new parties may also be the expression of an increasing *dealignment* of established political parties and voters that are disadvantaged by globalisation, become increasingly individualised and are less bound to traditional party allegiances (Bornschier 2018; Franklin 1992). The dealignment from established parties and the realignment with new parties (and associated cleavages) may be closely linked. Some argue that 'the establishment of a new cleavage may bring back citizens who otherwise lost faith in politics or who disengaged from political participation, by reinvigorating a new sense of identity politics and meaningful choice during elections' (Zürn & Wilde 2016). While there is evidence that confirms that new parties, such as the AfD in Germany, mobilised non-voters (Martin 2019), there is little evidence on whether this was indicative of the emergence of a new cleavage, or whether voting became an expression of dealignment and protest through the ballot box. If a new cleavage was emerging, we would expect to see that social media users would not debate issues associated with dealignment more frequently and rather focus on issues associated with the GAL/TAN cleavage. Our next hypothesis thus reads

#### H1b (dealignment):

On social media, users comment less on dealignment issues than on GAL/TAN issues.

While attitudes toward migration are strongly associated with the new cleavage, the recent increase in immigration into the EU is also considered a critical juncture for the emergence of the new cleavage. According to cleavage theory, a critical juncture is a 'macro-structurally induced rise in the salience of new issues that touch upon the interests of socio-structural groups in different ways thereby activating a conflict between the groups' (Stubager 2010, p. 526). The new cleavage is strongly associated with the increasing salience and occurrence of immigration, and - more recently in Europe - with the refugee (and the euro) crisis (Hooghe & Marks 2018). The reason is that:

Immigration goes directly to the nucleus of the authoritarian–libertarian value dimension – hierarchy and tolerance – and in a situation with high salience for the issue, authoritarians may be motivated to join forces to support their common value of maintaining a clear hierarchy between themselves and immigrants based on the absence of tolerance for the deviance represented by the immigrants (Stubager 2010).

In line with the literature on new cleavages, we thus hypothesise that the refugee crisis has acted as a critical juncture for the new cleavage to emerge in the following way:

#### *H2* (*critical juncture*):

The more irregular immigration increases, the more social media users comment on GAL/TAN issues, rather than dealignment or left/right issues.

Immigration, however, may also be contested on economic grounds, activating the left/right conscience of social media users. Migration represents a policy area that also exerts substantial effects on attitudes toward the welfare state within EU member states (Cappelen & Peters 2017; Eger 2010). Migration may thus be interpreted in multiple ways as a 'threat by those who resent cultural intermixing and the erosion of national values, by those who must compete with immigrants for housing and jobs, and, more generally, by those who seek cultural or economic shelter in the rights of citizenship' (Hooghe & Marks 2018). Migration hence touches upon a variety of themes that may activate the collective identification of people along a new transnational GAL-TAN cleavage, pertaining to issues of identity and values, or one that rather pertains to classic left/right patterns, especially politicising economic issues. To make matters more complex, an increase in so-called 'irregular immigration' into the EU ( as was the case during the refugee crisis) may also represent a perceived policy failure of national and European institutions (ScipioniÉ(Scipioni 2018). In this vein, the critical juncture of the 'refugee crisis' may have also fostered the dealignment of voters from the political system and the established political parties. It thus remains an empirical question whether the refugee crisis represents a critical juncture in terms of a structural breaking point that helps a new cultural cleavage to emerge, triggers economic grievances or increases the dealignment of individuals and the political system. We outline how we test these hypotheses next.

#### Empirical approach, dataset and case selection

To provide insights into the possible emergence of a new transnational cleavage at the micro-level, we created a comprehensive dataset of Facebook comments in a widely read German news segment. We selected the 100 local and regional German newspapers with the largest quarterly print runs based on 2016 data. Among these, 81 have Facebook pages, which constitute our sampling frame. On each page, we downloaded all posts (i.e. articles) and selected all those that contained at least one word from a long list of migration- and asylum-related keywords. For the remaining 32,702 posts, we downloaded all user comments, yielding a full sample of 622,621 comments.

Our specific focus on local and regional newspapers was a deliberate decision to improve the segment of society that can be represented in our data. National quality newspapers or weeklies such as 'ZEIT' or 'SPIEGEL' are more likely to be read by more cosmopolitan and more highly educated people who are frequently linked to the GAL-pole of the new cleavage. Regional or local news outlets are, by contrast, more widely read across the whole population (Bundesverband Deutscher Zeitungsverleger 2016). More specifically regarding online news consumption, data by the Reuters Institute shows that regional and local news outlets are among the most widely consumed news (Newman et al. 2016, p. 36).

While we look for evidence of the emergence of the new cleavage on the micro-level, we are aware that users commenting on online news articles are not necessarily identical to the overall population in their average characteristics. Only a portion of citizens accesses news via Facebook and among this portion a subset of them comment on the news they encounter. Some studies find that engagement online is higher among male users with higher socio-economic status but this pattern can differ widely, depending on the specific type of online activity (Lutz 2016) or platform (Blank & Lutz 2017). By contrast, Kalogeropoulos et al.(2017) comparatively study six countries including Germany and find that women are more likely to comment on news than men. They also document that users who comment on news items are more interested in hard news, lack trust in offline news and have stronger partisan convictions (see also Bayerischer Rundfunk 2016; Hoelig 2016). This implies less engagement of people with moderate political opinions or low political interest. Over recent years the rise of the populist anti-immigrant AfD has been associated with a dramatic increase in social media user engagement (Schelter et al. 2016). We, therefore, do not claim representativeness for Germany or other European countries and are aware that our sample biases our findings towards the TAN pole of the new cleavage.

However, our sample choice does not bias us towards finding evidence of the new cleavage in the first place: after all, the rise of the AfD may as well be accompanied by discussions about dealignment or economic grievances. In addition, the coverage of our data is wide and the covered population represents a relevant part of the (online) public sphere: In Germany, more than half the adults consume news online on an almost daily basis and over one in three regularly consume news on social media such as Facebook or Twitter (Bayerischer Rundfunk 2016). One in ten users also comments on news items (Hoelig 2016; Kalogeropoulos et al. 2017). Finally, we focus on developments in Germany because it is a least likely case for the emergence of a new cleavage: As Bornschier (2010) notes, until recently, Germany displayed strong and dominant traditional cleavages based on economic and religious issues, in stark contrast to other European countries. According to him, this was due to restricted access to the media and government responsibility for right-wing challenger parties, i.e. the Christian Democratic Union (CDU) tried to prevent competitors on the right, and both the CDU and social democrats depoliticised immigration issues. This changed with the rise of the salience of immigration which made depoliticising the issue more and more difficult, especially against the background of the emergence of the AfD as a challenger party. The fact that the AfD could and indeed did heavily rely on Facebook as a means of political communication (Arzheimer 2015), further amplified this development. Taken together, the study of Facebook comments surrounding the refugee crisis should provide insights into whether the new cleavage manifests itself in a country that has previously been considered firmly rooted in religious and class cleavages.

As our main goal is to understand the relative dominance of themes associated with GAL/TAN, left/right or dealignment issues in the debate about migration in Germany, we proceed in three steps to identify relevant themes in the large number of comments included in our dataset. First, we use Latent Dirichlet Allocation (LDA) to structure our dataset of comments and posts inductively into themes, so-called 'topics'. LDA is based on the idea that particular groups of words that occur together can be considered as sharing a common component. This component is called a topic. We restricted the number of topics to 100.<sup>1</sup> The algorithm optimises the topic assignment of each word iteratively, yielding a loading factor for each word and each topic, illustrated by the word clouds in Figure 1<sup>2</sup>: the topic in the upper left corner is associated with words such as 'nation', 'pride (Stolz)', and 'patriot'. The loadings can be aggregated to indicate the extent to which a piece of text (called a 'document', in our case: a comment on Facebook) is associated with each topic. Using this information, we can establish the extent to which each comment or all comments made during a specific time, for example, a day, 'load' onto a certain topic and compare it to their loading on different topics.

Second, we need to make sense of and label the topics based on the most important words that are displayed for each topic as a result of the LDA. We select topics that correspond to GAL/TAN and left/right policy dimensions in a way that has been loosely inspired by the Chapel Hill Expert Survey (Bakker et al. 2015). Coding instructions are detailed in the online appendix (Tables A1 – A3). We coded topics independently from one another, resulting in a 95 percent agreement on comments (95 out of 100, a Kappa=0.9188).

Third, we generate an index in the spirit of Azqueta-Gavaldón (2017): We aggregate Facebook comments by day, calculating the average importance of each topic. Intuitively, this can be thought of as merging all comments written at a specific point in time and then calculating the relative shares of the different topics that the discussion is made up of. The loadings for each category such as TAN are added up and then divided by the sum of all loadings of the 100 topics. This yields an index that is not driven by the overall number of comments. According to this *standardised* index, a topic such as TAN can gain salience over time if a higher share of the text people write in comments is associated with this topic. An alternative, *unstandardised* index by contrast only uses the sum of loading for the topic to illustrate the salience of the different concepts over time. Here, the main driver of the results is users writing more comments within one category.

<sup>&</sup>lt;sup>1</sup> This decision was based on an information criterion and the interpretability of the emerging topics, which typically improves as more topics are added until a tipping point after which topics become separated into too many latent subtopics to be codable. Results remain broadly the same for numbers of topics between 75 and 125.

<sup>&</sup>lt;sup>2</sup> We implement LDA using adjusted code by Hansen, McMahon & Prat (2018). As commonly done when using LDA we pre-process all documents by stemming them, i.e. using algorithms to reduce words to their common root. In English this would, for example, reduce the words "follows", "follow", and "followed" to the common root "follow". Since the Facebook comments we analysed are in German, we used two algorithms designed for German ("Snowball" and "python NTLK"). After deleting so-called 'stop words' such as 'and' or 'is', that carry no information and stemming, the sample contains 549,137 comments with some content.

GAL/TAN	LEFT/RIGHT	DEALIGNMENT
Law and order Civil liberties/minority rights Cosmopolitanism Nationalism	Economic issues Redistribution Welfare state, social spending	Media criticism Distrust in political institutions/ representatives Elite versus the people

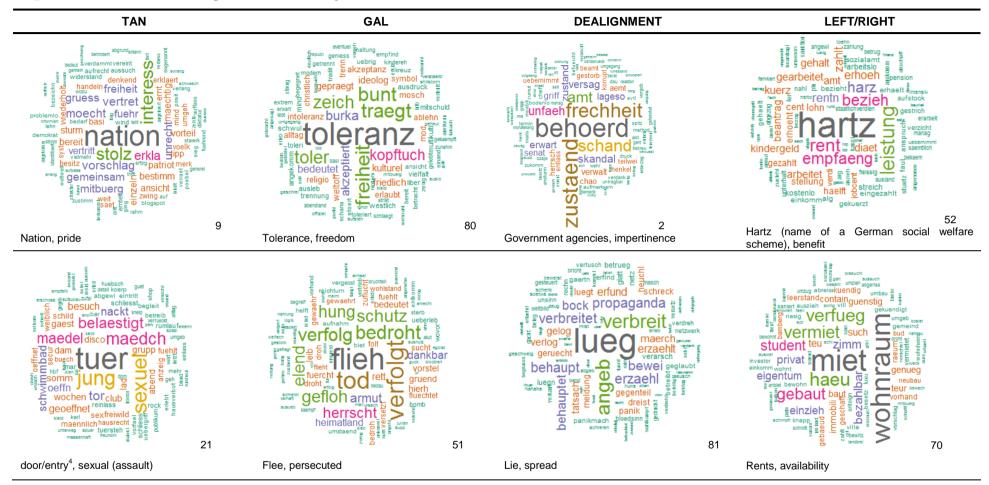
Table 1: Examples of categories and associated themes

*Note:* These themes are supposed to illustrate our heuristic for selecting topics in a simplified form; see the annex for a comprehensive list and details.

Note that the dealignment category is comprised of topics that we consider expressions of dealignment on the micro level. Marks et al. (2017, p. 2) define dealignment as a 'process (...) in which political choice becomes short term, oriented to particular issues, personalities, and evaluations that leave little trace in a person's sense of self'. They consider an increased distance from intermediary institutions and a lack of legitimacy of political parties and political institutions among the major causes for this potential development. Consequently, in this category we consider topics that express a lack of institutional trust or distance to intermediary institutions, such as media criticism or a lack of representativeness.

This category is supposed to be distinct from those of GAL/TAN or left/right cleavages. We are aware, however, that our operationalisation of dealignment taps into themes associated with populism (Mudde & Kaltwasser 2017). As new cleavage politics are frequently driven by right-wing (TAN) parties that are also populist in character (Bornschier 2010), one may criticise that our dealignment category simply captures a different facet of the new cleavage (and thus realignment) instead of dealignment. Our micro-level perspective, however, allows us to distinguish elements of populism in terms of a 'thin-centred ideology' that usually needs to be attached to other 'full' ideologies (Mudde and Kaltwasser 2017) from political conflict about specific issues that are associated with new and established political cleavages. Put differently, studies on political party programs and vote shares have trouble disentangling whether voters choose e.g. right-wing populist parties to signal their detachment from the established political system or to signal their consent on specific content that these parties promote. Our approach allows us to tell both signals apart.

**Figure 1:** Illustration of select topics and related categories<sup>3</sup>



<sup>&</sup>lt;sup>3</sup> Note that all words are displayed in German due to the language of the comments included in the dataset. We include a translation of two of the largest (i.e. the most defining) words for the respective topic in English on the bottom of each cell.

<sup>&</sup>lt;sup>4</sup> The stem "tuer" (door) is strongly associated with expressions such as "Tür und Tor öffnen" (to open the floodgates) and thus with the TAN category of law and order.

#### **Empirical results**

Our first hypothesis H1a stipulates if we were to see the emergence of a new cultural cleavage on the micro-level, we would in turn expect users of social media to comment more on GAL/TAN issues than on left/right issues. Put differently, users should discuss migration as an issue of culture and identity, or law and order, as opposed to a source of economic grievances that affects the distribution of welfare benefits or rental space. Also, in addition to a dominance of themes associated with GAL/TAN or left/right, our hypothesis H1b would lead us to expect only minor relevance for themes that are associated with dealignment, including dissatisfaction with the government, or a lack of trust in intermediary institutions, such as the media.

The results of our LDA suggest that GAL/TAN issues are more important than left/right or dealignment issues as can be seen from the simple number of topics that we can assign to the former, but not to the latter. With regard to the comments (Table A2), we coded 36 of the 100 topics as relevant to cleavages or dealignment (see Tables A2 and A3): of those, 23 topics feature the GAL/TAN category, 6 topics the left/right category and 7 topics the dealignment category. Among the GAL/TAN topics, 8 can be clearly linked to GAL, 13 exclusively to TAN and the remaining 2 are linked to both GAL and TAN. Remember that LDA is an inductive process that structures the dataset into a predefined number of topics in a way that best describes the variation in the dataset. The fact that more topics feature the GAL/TAN categories than others suggests that our text data overall supports the hypothesised salience of topics associated with the new cleavage on social media. Likewise, the articles (Table A3) also show a strong emphasis on the GAL/TAN category and specifically on TAN-related issues. Out of 30 relevant themes, 21 are related to GAL/TAN. Two out of three topics that can be specified to be either GAL or TAN correspond to TAN-related issues.

Figure 2 provides additional illustrations in this regard showing the topic loading of all comments made on a specific day. To improve readability, we use a centred moving average with a 90-day window to smooth the otherwise strong fluctuations between individual days and to show a more general trend over time. The figure underlines that GAL/TAN themes are more frequently discussed than left/right themes. In addition, and surprisingly so for the 'populist' platform of Facebook, the salience of dealignment is also much lower than the salience of the new cleavage. This suggests that news about migration triggers reactions that - on average - display conflicts about culture and identity, rather than the distribution of economic resources or general neglect of the political system and its institutions.

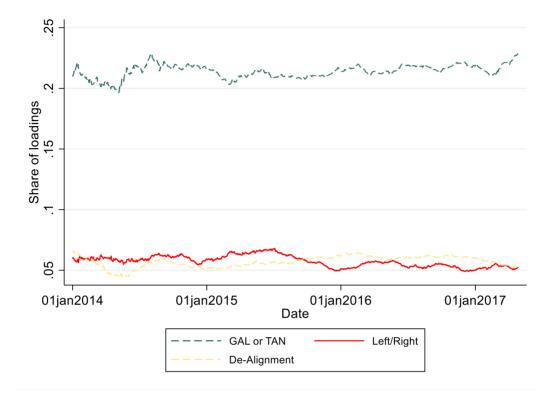


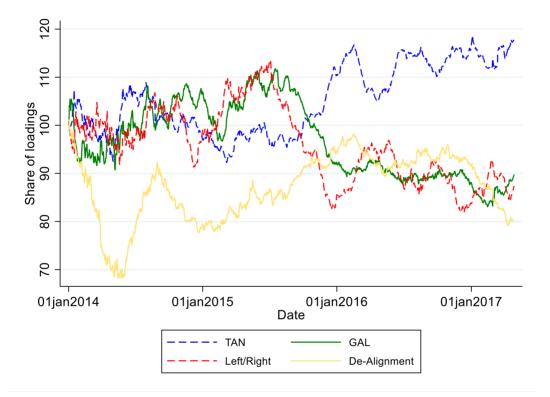
Figure 2: Relative importance of new vs. old cleavages and dealignment (standardised index)

Figure 3 disaggregates the over-time development of individual themes to show how the salience of each of the GAL/TAN, left/right and dealignment categories change in the course of time when compared to their individual starting point. We show GAL and TAN separately, as they constitute the dominant category in our dataset. Figure 3 includes our data in an indexed version that fixes the salience of each category to the value of 100 at the start of our sample period and demarcates changes with the help of a three-month moving average.

Figure 3 suggests that the TAN themes increase in salience relative to the category's individual starting point, especially starting from autumn of 2015, which is often associated with the peak of the refugee crisis in Germany. We also see that GAL themes inversely mirror the developments of TAN themes. This suggests that as commenters on Facebook increasingly discuss migration from a TAN perspective, they 'crowd out' comments from GAL perspectives. Despite this development, which would lower the overall share of GAL/TAN comments in the discussion, Figure 2 has shown that GAL/TAN comments are more salient than left/right or dealignment related comments. Figure 3 underlines the decline of left/right related comments, again starting from autumn 2015. A less pronounced but a slightly later occurring decline can also be found for GAL. While we do observe a slight relative rise in dealignment themes compared to early 2015, Figure 2 shows this rise to be still on a substantially lower level if compared to the GAL/TAN category and also to be of similar size to fluctuations during the year 2014.

Taken together, this evidence suggests that we do see political conflict that is a) associated with new cleavage politics, b) strongly tilted toward the TAN pole of the cleavage, and c) substantively more important than debates about representation and mistrust in political and intermediary institutions that we associated with dealignment.

Figure 3: Development of GAL/TAN, left/right, and dealignment in comments over time compared to the beginning of the sample period (standardised index)



Notes: Blue solid line indicates TAN, green solid GAL, red dashed line left/right, and yellow dashed dealignment. Two topics that are not clearly GAL or TAN are not included. Each time series is re-based to start at 100 on January 1<sup>st</sup> 2014.

By design, our dataset captures responses of social media users to themes that are reported by local and regional newspapers. We may thus mistakenly interpret these micro-level comments as pure reactions to cueing by media outlets. In this understanding, social media users simply discuss the themes that are set by newspaper outlets. We therefore estimate the extent to which the themes of the respective article (called 'posts' on Facebook) drive the themes of the comments in a given month. We use the aforementioned procedure for the categorisation of the comment to determine the themes of the posts. Table 2 shows that while there is a strong positive correlation between the intensity of an

aggregate topic, such as dealignment in the post by the newspaper and the comment a user makes<sup>5</sup>, the  $R^2$  indicates that this hardly explains any of the variation between comments. In columns 1-4 we only include the aggregate topic of the post in the regression. In columns 5-8 we add the average salience in other comments and other posts during the respective month. The latter regressions underline that what is written in the post and what other commenters write is significantly correlated with the content of posts, but that the predictive power is extremely low. We find a small negative coefficient on the salience of the respective topic in all posts.

This indicates that, if anything, individuals become a little less likely to, for example, discuss TAN topics in response to non-TAN articles if TAN topics are widely covered elsewhere. This underlines that commenters pick up the topics from the articles to some extent, but, as highlighted by the very low  $R^2$ , this mechanism is driving less than one percent of the variation in our topics of interest. Media cueing thus plays a minor role in the sample we study.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	DL	TAN	GAL	LR	DL	TAN	GAL	LR
Importance of respective topic in								
post	0.226***	0.264***	0.467***	0.759***	0.222***	0.298***	0.456***	0.760***
-	(0.027)	(0.024)	(0.027)	(0.024)	(0.061)	(0.067)	(0.087)	(0.047)
Importance of respective concept in all comments in respective month					0.000***	0.000***	0.000	0.000***
Torran C					(0.000)	(0.000)	(0.000)	(0.000)
Importance of respective concept in all posts in respective								
month					-0.004**	-0.002***	-0.002	-0.005***
					(0.002)	(0.000)	(0.002)	(0.002)
Constant	0.042***	0.088***	0.058***	0.042***	0.042***	0.089***	0.057***	0.055***
	(0.000)	(0.001)	(0.000)	(0.000)	(0.003)	(0.003)	(0.006)	(0.005)
Observations	540 127	540 127	540 127	540 127	540 127	540 127	540 127	540 127
Observations	549,137	549,137	549,137	549,137	549,137	549,137	549,137	549,137
R-squared	0.000	0.000	0.001	0.002	0.001	0.001	0.001	0.003

#### Table 2: Impact of media cueing on comment topics

Notes: Estimates from a linear regression at the comment level. Standard errors are clustered at the post-level.

Next, we hypothesised that the more immigration increases, the more social media users would comment on GAL/TAN issues, rather than on dealignment or left/right issues. Theoretically, this hypothesis is founded in the argument that globalisation, and especially immigration, represents a

<sup>&</sup>lt;sup>5</sup> The coefficient can be interpreted as an elasticity, i.e. a one unit increase in a posts loading on dealignment

critical juncture or structural breaking point for the new cleavage to emerge. On social media, we expect users to be sensitive toward increasing levels of immigration and respond by increasingly shifting debates to cultural issues as a result. Put differently, cultural themes grow in relative importance, the more immigration increases. We investigate this claim by analysing the impact of irregular immigration on the salience of GAL/TAN versus left/right and dealignment themes. Irregular migration is particularly important because it is associated with large and relatively unmanaged flows of migrants into the EU. By contrast, regular migration is likely to be driven by internal migration from other EU member states and may be more widely accepted.

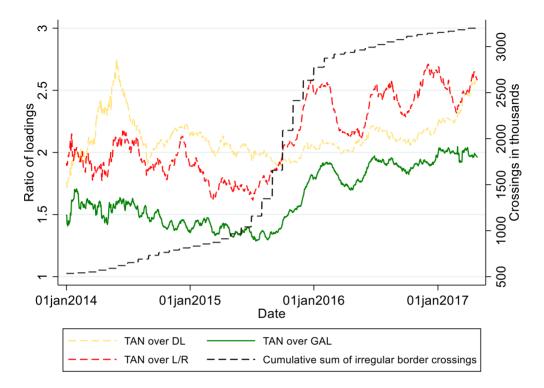
Figure 4 shows how GAL, left/right and dealignment themes developed relative to TAN over time, contrasting it with the number of irregular border crossing. Figure 4 illustrates the stark change in irregular border crossings (the dotted black line) from the late summer of 2015 until spring 2016. We use Frontex data because it constitutes the best available proxy of irregular migration over time<sup>6</sup>.

Figure 4 also shows the ratio of certain topics in the dataset at different points in time by using data that are aggregated by day. A TAN/dealignment-ratio of two indicates that at that time, TAN themes were twice as often discussed as dealignment ones. Increases of the ratios thus reflect greater importance of TAN themes. The dotted yellow line shows the ratio of comments on TAN topics to dealignment topics. Values of the left y-axis entail the ratio: in spring 2014, for instance, users have discussed TAN topics twice as much than they did dealignment issues. While this ratio gets slightly lower in the summer of 2015, it continues to increase again afterwards. The ratios of TAN/GAL and TAN/left-right comments develop in very similar ways, with the ratio substantially increasing with growing numbers of irregular border crossings. This suggests that before this increase, commenting was tilted toward TAN themes, but reflected the left-right cleavage, as well as GAL positions in a more balanced way than in the aftermath of the summer of 2015.

This went along with a massive increase in overall commenting, as we show in Figure 5. The overall of GAL or TAN related text in comments on migration and asylum increased more than fivefold within a few months from spring 2015 to the height of the inflow in fall 2015.

increases the average dealignment loading of the comments by 0.226.

<sup>&</sup>lt;sup>6</sup> Due to instances of double-counting, delays and other procedural irregularities in 2015, German arrival data is difficult to work with. An alternative measure could be asylum claims, but due to the large number of applications that authorities needed to process at the time, these are likely to be recorded with substantial and unsystematic delays.



**Figure 4:** Irregular border crossings and the relative importance of GAL/TAN, left/right and dealignment (standardised index)

**Figure 5:** Absolute importance of GAL/TAN, left/right and dealignment in user comments over time (unstandardised index)

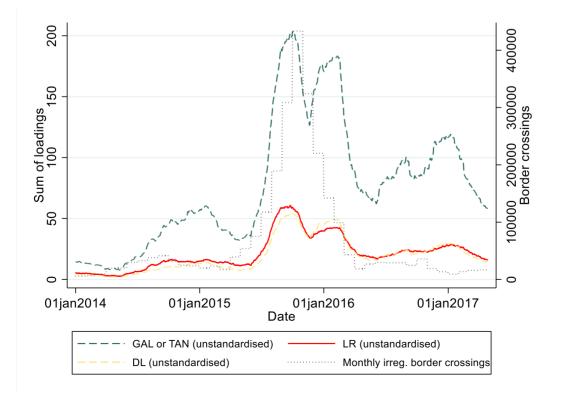


Table 3 additionally shows regression results on the impact of the month associated with the peak of the refugee crisis – August 2015 – on the salience of GAL, TAN, dealignment, and left/right topics. Table 3 shows that the salience increases in TAN and dealignment. It also highlights that the decrease in dealignment and left/right issues is strongly and significantly associated with the peak of the refugee crisis in Germany. Our model especially shows that the salience of TAN topics increases. While dealignment also becomes more salient, this coefficient is only half the size of the TAN coefficient. GAL themes lose salience in the aftermath of the summer of 2015 – which corresponds to the 'crowding-out' effect that we have shown above. The results show a substantive and significant loss of the salience of left/right themes, suggesting that after the summer of 2015, migration is discussed primarily in cultural, and not in economic terms. To our surprise, this simple model accounts for at least 22 percent of the variation in the data – although we use a simple crisis dummy and can only draw on 40 monthly observations. The relationship between the onset of the refugee crisis and the relative importance of, especially, GAL/TAN and left/right topics is thus remarkably strong with an R<sup>2</sup> of over one third in each case.

	(1)	(2)	(3)	(4)
	monthly DL	monthly TAN	monthly GAL	monthly LR
Dummy: Post August				
2015	0.00572***	0.0133***	-0.00851***	-0.00754***
	(0.00172)	(0.00284)	(0.00183)	(0.00170)
Constant	0.0541***	0.114***	0.0786***	0.0611***
	(0.00147)	(0.00169)	(0.00146)	(0.00137)
Observations	40	40	40	40
R-squared	0.227	0.367	0.362	0.340

 Table 3: Impact of irregular immigration on average monthly importance of new cleavage topics in user comments

Notes: Heteroskedasticity-robust standard errors in parentheses. \*\*\* p<0.01. The outcome variable is the average monthly importance of the topic in user comments.

We are thus confident that this micro-level evidence provides insights into the missing link that has frequently been assumed rather than demonstrated by proponents of the new cleavage hypothesis: as migration increases, themes associated with the new cleavage gain traction in the discussion on social media, while relatively speaking, economic issues become less relevant. We hence provide further support for the segment of social media users for the claim that the 'perforation of national states by immigration, integration, and trade may signify a critical juncture in the political development of Europe no less decisive for parties and party systems than the previous junctures that Lipset and Rokkan (1967) detect in their classic article' (Hooghe & Marks 2018).

#### Conclusion

In this article, we contribute a novel perspective on the debate about the emergence of a new, transnational cleavage in Europe (Bornschier 2010; Hooghe & Marks 2018). While a substantial amount of research has theorised and demonstrated the underlying social structure and the organisational base of the new cleavage, we contribute micro-level evidence to the question on whether the rise of new parties are in fact linked to a stronger political identification of individuals with issues that are associated with new rather than established political cleavages. We also investigate whether immigration contributes to the recognition of the new cleavage on this micro-level. We do so by using topic models on a dataset of about 600 thousand Facebook comments made below articles of regional German newspapers. Our results suggest that there is indeed a new noticeable cleavage at the micro-level and that an increase in irregular migration is strongly associated with the dealignment. They also suggest that these developments are more salient than those associated with the dealignment of individuals and political parties.

Our results are not without limitations. While we capture a substantial and relevant segment of the online public sphere, social media users who comment on Facebook sites of regional newspapers in Germany are not representative of the wider population of European citizens. Furthermore, investigating the utterances of social media users is likely to bias our sample into finding substantially more comments related to the TAN pole of the new cleavage, which we have observed.

Yet, we argue that our study contributes relevant insights to the academic and public debate. First, we find that social media users indeed discuss content associated with the TAN pole of the new cleavage. While this finding may not be surprising, as argued above, we have shown that TAN themes are more relevant than themes associated with processes of dealignment or economic grievances. This provides micro-level support for the claim that new cleavage issues realign voters and new parties rather than dealigning them from old parties. Furthermore, our analyses suggest that there is a certain 'crowding out' effect of GAL perspectives in the debates on social media. Interestingly, this does not only relate to comments made by social media users. We also find that TAN themes dominate in the newspaper articles in our sample, despite widespread criticism of a "GAL"-bias in newspaper reporting during the refugee crisis. This suggests that while cultural issues are dominant in the debate about migration on social media and as we argue, are likely to be indicative of a new cleavage, the character of political conflict between two opposing poles that are inherent in the concept of historical cleavages is not visible on social media.

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