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The structure of political debates on Twitter

Analysis of the Responsible Business Initiative



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Abstract

In recent years Social media sites have become important arenas for political debate. However, studies on social media debates in the context of Swiss votes are still rare. This study aims to determine how the Twitter debate surrounding the Responsible Business Initiative is structured and how it differs from the debate in traditional media. Using Twitter data from over 5800 users, it was possible to identify seven different communities that differed in terms of their size, position, and contribution to the debate. The most dominant communities in the debate were the green-left, mainstream, and conservative communities. In addition, the results show that communities which support the initiative and those that oppose it differ in terms of the wording in their tweets. Likewise, the results show active exchanges both within and - more importantly - between communities, indicating a more pluralistic and internally networked debate. Due to the high interdependence between Twitter and the media, activity on these channels follows the same logic, even if unusual patterns emerge over time, as in the case of the present initiative. In terms of actor structures, it was shown that Twitter does indeed give a voice to marginalized communities, with the mainstream community - representing the civil society actors - achieving significantly more resonance on Twitter than in media contributions. With regard to the use of frames, the actors seem to adapt their messages to the audience and the channel-specific debates.

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Introduction

On November 29, 50.7% of Swiss voters backed an initiative to extend liability over international human rights abuses and environmental harm caused by major Swiss companies and the firms they control abroad. The chances that were attributed to the initiative early on were unusually high. However, the proposal failed to win support in a majority of cantons, a necessary condition for a public initiative to be enacted in Switzerland. Unsuccessful initiatives are not unusual. Since the introduction of the popular initiative at the national level in 1891, nine out of ten initiatives have failed at the ballot box (Milic et al., 2014, pp. 58f). The few initiatives that have been approved by the Swiss population were mostly initiatives with more conservative concerns. In contrast, the Responsible Business Initiative is the first initiative that seriously challenged local economic interests from a global perspective and with ethical arguments. The debate about the initiative has thus created a unique dynamic.

This article examines this debate, including its characteristics and development. For this purpose, social media, more precisely Twitter communication, is analyzed. In recent years, Twitter has become an essential tool for political actors to directly communicate their positions to the public and to influence the agenda of the traditional media (Wüest et al., 2015; Vogler et al., 2019; Metag and Rauchfleisch, 2017). In addition, Twitter is increasingly being used by citizens as a source of information in political debates (Rauchfleisch and Metag, 2016; Vogler et al., 2019). I therefore examine how the Twitter communication around the initiative was structured and to what extent it polarized or facilitated discussions between different camps. In addition, the Twitter debate is compared with the debate in traditional media in terms of output and the use of frames.

The specific questions of the thesis are therefore the following:

- RQ1: Which follower communities participate in the Twitter debate surrounding the Responsible Business Initiative, and how can they be characterized in terms of their ideology, location, size, and position towards the initiative?
- RQ2: How do these communities communicate, i.e. to what extent and with what content do they communicate?
- RQ3: How pronounced is the fragmentation or polarization of the debate, i.e. to what extent are disconnected echo chambers or interactions across communities visible?
- RQ4: How does the Responsible Business Initiative debate on Twitter differ from the debate in traditional media?

This work contributes to previous research in which the use of Twitter in Swiss voting debates has been little studied. Social media developed into an essential source of information for people all over the world, as well as in Switzerland (e.g., Newman et al., 2020). In addition, the open and interactive character of social media enables a different kind of communication which creates new possibilities to counteract the top-down communication of traditional media. It is therefore very important to further analyze political debates on social media.

As mentioned above, the focus of the study is on the debate of the popular initiative "For responsible businesses - protecting human rights and the environment". In the following, the initiative is referred to by the shorter name "Responsible Business Initiative". The initiative requires Swiss companies to examine whether they comply with internationally recognized human rights and environmental standards in the conduct of their business. Switzerland has witnessed similar debates in the past. However, the initiative represents a particularly interesting case for the analysis of the social media debate. We are talking about a very heated and controversial debate with rather unusual splits between the camps. Both the SVP and religious actors were divided. Beyond that, there were strong supporters in the FDP and the economy, which overall rejected the initiative. This is probably a

result of the extraordinary strategy that the initiators used, in which they appeared with several official advocates from different groups of actors (fög, 2020a, pp. 4).

The remainder of the thesis is structured as follows. The following section is devoted to a review of previous research on voting and online debates and outlines the theoretical background and hypotheses that will be tested. Before discussing the empirical approach, the content of the initiative and the chronology and key features are discussed. The results are then presented and discussed, along with a comment on the limitations. The thesis ends with the conclusion and an outlook for further research.

1

Literature review and theoretical background

1.1 The role of the media in vote campaigns

The availability and transfer of information play a central role in voting research. If one assumes that the voting decision is the result of a direct-democratic opinion-forming process, then the information forms the basis for how political issues that are voted on are assessed. In an ideal deliberative democracy, every voter has access to all relevant information in order to form an opinion according to his or her own preferences. However, such an ideal deliberative democracy does not exist in reality, which inevitably raises the question of the influence of the media on decision-making behavior (Milic et al., 2014, pp. 285).

Voters receive information from the authorities, political parties and interest groups or through the mass media. In the media, either the information of other actors is conveyed or they deliver their own messages. This happens not only through editorial contributions but also through the selection of information and directly through voting recommendations (Milic et al., 2014, pp. 286f) ¹.

¹For an overview of the literature dealing with the role of the traditional media in Swiss votes, see Milic et al. (2014, pp. 349ff)

Another political resource that has gained a lot of users in recent years is social media. It developed into an important source of information for people all over the world, as well as in Switzerland (e.g., Newman et al., 2020). Compared to classic mass media, social media is interactive. This means that it is possible for authorities, politicians or interest groups to communicate directly with citizens without having to overcome the gatekeeping functions of traditional mass media (Rauchfleisch and Metag, 2016, pp. 2414). In addition, the open and interactive character of social media enables a different kind of communication, meaning "new opportunities for bottom-up communication, for the expression of public preferences, for participation in policy making, and for holding political actors accountable" (Esser, 2013, pp. 173). This creates new possibilities to counteract the traditional top-down communication of traditional media. Especially resource-weak groups, such as civil society activists or NGOs, can benefit from cost-effective communication on social media. This is demonstrated by the fact that these groups are generally very active on social media (Adam and Pfetsch, 2013, pp. 34). By including this diverse spectrum of interest groups and political positions, social media offers a debate structure that differs from the traditional media (e.g., Gavin, 2010, pp. 461).

1.2 Twitter in political campaigns

The microblogging service Twitter, in particular, has played a pioneering role in the analysis of digital trace data. This is not necessarily because this medium is used much more frequently than others, but rather as a result of the comparatively easy access the service offers to its data (Jungherr et al., 2016, pp. 50). As this study aims to analyze the Twitter debate around the Responsible Business Initiative, I draw on the state of research related to political campaigns on Twitter in different countries. The studies that analyze the use of Twitter in political campaigns can be grouped into three categories that relate to core areas of campaigning: (1) the use of Twitter by parties and candidates, (2) the use of Twitter during and in response to mediated events and (3) the use of Twitter by politically active publics (Jungherr, 2016, pp. 74). An overview of the previous findings in these categories is given below.

1.2.1 The use of Twitter by parties and candidates during campaigns

One aspect of studies that focus on parties and candidates is to look for patterns that explain why some actors use Twitter during election campaigns while others do not. The results of these studies are quite consistent across different countries and election cycles (Jungherr, 2016, pp. 74). In general, Twitter seems to be used more by parties and candidates in the opposition compared to members of the governing parties (Ahmed and Skoric, 2014; Hemphill et al., 2013), but also candidates and members of established major parties and those with high campaign budgets do not refrain from using Twitter (Evans et al., 2014; Gilmore, 2012). In addition, Twitter is increasingly used in election campaigns by young, urban politicians and its use depends on the intensity of the election campaign and ideological positions (Vergeer et al., 2011; Straus et al., 2013; Evans et al., 2014). In the case of Switzerland, Wüest et al. (2015) were able to show that the Swiss party Twitter sphere is systematically distorted in the direction of the political left and urban areas. Rauchfleisch and Metag (2016) examined the individual characteristics of parliamentarians who influence the use of social media in Switzerland. According to their analysis, especially the age of the politicians can predict their level of activity. In addition, they were also able to show that the right-wing parties are underrepresented on Twitter. Concerning the connection between Twitter use, public attention on Twitter and popularity or voting chances, however, no clear pattern is apparent (Jungherr, 2016, pp. 74ff). For Switzerland, Kovic et al. (2017) analyzed whether the volume of activity on social media brings advantages for candidates in parliamentary elections. Their findings suggest that social media activity has a non-trivial influence on election results, but only in terms of resonance.

Other studies examine the use of Twitter by parties and candidates. Here, too, the results show similar patterns (Jungherr, 2016, pp. 746f). However, most studies emphasized that the use of Twitter varies greatly between users. In general, Twitter is mainly used to share information about their campaign activities (Evans et al., 2014). Discussions about politics or direct calls for action are less frequent (Graham

et al., 2013; Ahmed and Skoric, 2014; Evans et al., 2014). Likewise, politicians and candidates communicate mostly in order to share information with the public, but a truly interactive use is rare (Ahmed and Skoric, 2014; Evans et al., 2014). If interactions occur, it is usually with other politicians, mainly with those from the same party, or with journalists (Rauchfleisch and Metag, 2016; Ahmed and Skoric, 2014; Plotkowiak and Stanoevska-Slabeva, 2013).

When it comes to the impact of the use of Twitter by candidates and politicians, it has been shown that candidates can successfully use Twitter to pass on information to their supporters (Jürgens and Jungherr, 2015). Candidates also use Twitter messages to influence media coverage of political issues (Chadwick, 2011; Kreiss et al., 2015; Metag and Rauchfleisch, 2017; Vogler et al., 2019).

1.2.2 The use of Twitter during and in response to mediated events

The second group of studies deals with the use of Twitter to comment on mediated election campaign events, such as televised candidate debates, party conferences, coverage on election day, or high-profile news or discussion programs. Here, too, similar patterns can be seen for different countries and election campaign events. In response to the mediated events, the volume of policy-related Twitter news is rising sharply (Graham et al., 2013; Jürgens and Jungherr, 2015; Vergeer et al., 2011). The content of the tweets shows that the opinions of the users and the performance of the politicians presented are reflected in the tweets (Cameron and Geidner, 2014). Analyzing the users indicates that the discussion of the campaign events on Twitter is not really interactive. Instead, the events are mainly commented on (Lin et al., 2014). Moreover, humor, irony and satire are also very popular (Trilling, 2015). The focus of the online discussion is on traditional political actors, such as politicians or journalists (Lin et al., 2014).

1.2.3 The use of Twitter by politically active publics

A third group of studies deals with the political use of Twitter by ordinary users during campaigns. The studies show that the users of Twitter are not representative of the overall population. The Twitter users are above average young people with a strong interest in politics (Barberá and Rivero, 2014).

Twitter usage varies greatly from day to day. However, it can be observed that the volume of political messages increases towards the end of a campaign or during important campaign-related events (Ahmed and Skoric, 2014; Jürgens and Jungherr, 2015). Furthermore, it becomes apparent that the volume of Twitter messages relating to specific political actors is closely linked to their presence in traditional media (Conway et al., 2015; Jungherr, 2014). Similarly, the importance of traditional media as sources for retweets or content connections demonstrates the high degree of interdependence between traditional media and political Twitter activity (Borondo et al., 2014; Himelboim et al., 2013).

The content of the Twitter comments contributed by the political public is even less researched than that of the candidates. So far, research has found a rather negative tone of comments on candidates or parties (Jungherr, 2013; Trilling, 2015). The analysis of the actors has not yet yielded consistent results either. While in some studies, in particular, traditional actors dominated the discourse (Larsson and Moe, 2011), in others, non-traditional actors were more prominent (Larsson and Moe, 2013; Mascaro et al., 2012).

Finally, studies on interactions on Twitter form another prominent strand in the literature. Two perspectives on the political function of Twitter in society are distinguished. On one hand, Twitter is seen as a tool for persuasion and mobilization with the goal of convincing potential voters. On the other hand, Twitter is seen as a tool for a deliberative discourse, whereby it creates opportunities for non-elite actors and emphasizes dialogue and consensus. Compared to other social media platforms, Twitter offers good conditions for a deliberative discourse with its open concept, where messages can be seen by everybody and interactions with all users

are possible. However, there are reasonable doubts as to the extent to which such a deliberative discourse takes place on Twitter, particularly since Twitter is used by a specific, non-representative group of people. Moreover, even among people who use Twitter for political purposes, it is unclear whether they engage in a deliberative discourse and exchange rational arguments to reach a consensus (Jungherr, 2016).

In this context, researchers are investigating whether the interactions on Twitter exhibit patterns of political homophilia - i.e., users who predominantly interact with other users of the same political views - or whether it is a genuine exchange between people with different opinions. The evidence is mixed. Some argue that the political content people engage with on Twitter is mostly from like-minded people and that online communication takes place in an echo chamber or a filter bubble which may lead to a problematic polarization and fragmentation of the public (Sunstein, 2009; Conover et al., 2012). Others doubt this and argue that there is indeed a discussion of overarching opinions on Twitter (Morgan et al., 2013). In their study of Swiss party politics on Twitter, Wüest et al. (2015) applied social network analysis to examine the degree of dominance of political homophilia and party elites. They found clear signs of political homophilia since most actors in network analysis were clustered along party lines. Arlt et al. (2019) examined the Twitter communities and the political debate on the Swiss Nuclear Withdrawal Initiative. They identified various Twitter communities and examined differences in the formulation of the tweets in the individual communities. An important result of their study is that they found a pluralistic and internally connected debate on Twitter. This contrasts sharply with the findings of earlier studies on political debates on social media, which identified distinct echo chambers.

1.3 Framing

In addition to the actual content, its presentation is also crucial when communicating political content. The way in which content is presented is known as framing. According to Entman's definition (1993, pp. 52), framing refers to selectively

emphasizing certain aspects of a perceived reality and highlighting them in a communicating text "in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described". Political actors use framing to convince voters of their own positions by trying to get media or individuals to focus on certain aspects of an issue and not others. In this way, framing contextualizes the discussion by highlighting certain aspects of an issue, thus creating a link between the issue and a particular frame of reference (Hänggli and Kriesi, 2010, pp. 142; Hänggli and Kriesi, 2012, pp. 260f; Johnson, 2019, pp. 90).

1.3.1 Framing decisions of political actors

According to Hänngli et al (2010, pp. 143), political actors have to make three decisions when strategically framing an issue. The first decision concerns the choice of one or more substantive frames that are capable of directing media and public attention to their own cause and away from their opponent's cause ("substantive emphasis choice"). Second, actors must decide how much attention to pay to opponents' frames and whether to use them offensively or defensively ("oppositional emphasis choice"). In general, political actors focus on issues where they can expect advantages. However, actors may also have an incentive to address opponents' frames. Offensively, actors may use their opponents' frames to appear appealing to the public. More prevalent is the defensive use of frames, in which actors feel compelled to respond to their opponents' frames and use counterframes to refute and attack their message. Accordingly, an actor's framing strategy involves not only building their own frames to mobilize citizens, but also neutralizing their opponents' framing efforts (Hänggli and Kriesi, 2010, pp. 144). Finally, political actors have to decide how much priority to give to their own content frames compared to the campaign ("contest emphasis choice"). A distinction is made between contest frames and substantive frames. Contest frames refer to the contest as such, for example horse race frames, the emphasis on conflicts or personalized frames. Substantive frames, on the other hand, focus on the content of the debate, such as problem definitions, the attribution of competencies and responsibilities, or the evaluation of the situation or possible solutions (Hänggli and Kriesi, 2010, pp. 144).

1.3.2 Framing in voting campaigns

Framing decisions are influenced by the respective context. In the case of voting campaigns, the aim is to influence the citizens' decision on an issue-specific bill. This context has a particular impact on the second and third framing decisions of political actors. The "oppositional emphasis choice" - how much priority political actors give to the content frames of opponents compared to their own frames - is influenced by the institutions of direct democracy in Switzerland by pre-structuring the voting campaign into two specific camps, the supporters and the opponents of the voting proposal. Similarly, the "contest emphasis choice," i.e., the priority of the substantive framework compared to the voting campaign, is influenced by the direct democratic process. It is assumed that content framing is more important in voting campaigns that focus on specific issues than in election campaigns. In order to understand framing decisions, it is therefore important to consider the context of the campaign (Hänggli and Kriesi, 2010, pp. 145).

Previous research on framing in voting campaigns can be divided into two groups: Research that focuses on media input and research that focuses on the effects of framing. The focus of this paper is on the former. This includes the extensive research by Regula Hänngli and Hanspeter Kriesi (Hänggli and Kriesi, 2010; Hänggli, 2011; Kriesi, 2011; Hänggli and Kriesi, 2012; Hänggli, 2020). In their research, they analyzed the framing strategies of political actors and their influence on media framing in the context of Swiss voting campaigns. For this purpose, they defined the three framing decisions described above (Hänggli and Kriesi, 2010). The results support the expectations outlined and show, among other things, that media adopt the frames of political actors. Furthermore, the authors were able to demonstrate that, in addition to focusing on their own frames, the frames of their opponents are also addressed, and predominantly in a defensive manner. Finally, as expected, substantive frames dominated in the voting campaigns. Moreover, it could be shown

that actors usually emphasize one to two main frames (Hänggli and Kriesi, 2012). The study by Schemer et al. (2012) offers insight into how frames interact with existing value orientations in the media. The assumption here is that a framing effect should be more pronounced when frames in the news match people's existing value predispositions. This assumption was tested using the political campaign on naturalization. In doing so, the authors were able to show that framing the issue in terms of the idea that the people should have the final say in naturalization procedures shaped voting preferences only among voters whose core values were characterized by social order, tradition, and security.

1.3.3 Framing and communication channel

In the chain of communication from political actors to voters, a distinction is made between mediated channels and non-mediated channels. Traditionally, the flow of communication is a multi-stage process from the political actors to the media and from there to the voters; the media thus serve as intermediaries of information. In mediated channels, political actors must respond to the needs and values of journalists. In contrast, non-mediated channels give actors control over the content and delivery of the message. Differences between these channels can be expected for at least two reasons. First, news values² may determine framing strategies in media input because political actors want to satisfy journalists. Second, successful strategic communication depends on coordinating messages across different publications. Therefore, despite some differences between mediated and unmediated channels, there should also be some similarities in framing (Hänggli and Kriesi, 2012, pp. 261).

The way political actors frame the same message across different channels in direct democratic campaigns is still little studied. In one of the few studies, Hänggli and Kriesi (2012) investigated how framing decisions of political actors differ between mediated and unmediated messages. They differentiated between media inputs as mediated messages and voting ads as unmediated messages. The results show that

²News value, as an influencing factor, determines whether a news item is newsworthy and thus appears in the mass media (Lippmann, 1922)

in ads, the core frame is used more frequently. Likewise, both ads and mediated media inputs generally refrain from using competitive frames.

Almost no research has been conducted on how framing decisions differ between online and offline channels. Online channels, especially social media, offer the opportunity to communicate directly with the public. In offline media, on the other hand, there is content that is communicated through the media as well as political ads that are communicated directly. In order to identify differences in framing decisions between online and offline channels (as opposed to differences between mediated and non-mediated channels), the focus of the following work is only on non-mediated contributions.

1.3.4 Framing on Twitter

Unlike posts in traditional media, Twitter requires politicians to condense their ideas and reactions into 280-character tweets. As a result, politicians must skillfully choose how to frame controversial issues and respond to events and each other. Although hashtag-driven political discourse is largely associated with events that are covered by the mass media, differences in framing on Twitter are to be expected. This is precisely because events and topics on Twitter are exposed to direct interaction with the public and are thus mixed with the interests of the Twitter community (Maireder and Ausserhofer, 2014, pp. 2).

So far, no studies on framing in online communication in the context of Swiss votes could be found. Even in a larger context, no systematic comparison of framing strategies between online and offline media could be found. The previous literature on framing on online channels rather focuses on methods to identify frames. Either the frames used of individual events on Twitter or the non-topic-specific use of frames on Twitter were examined.

For instance, when examining individual events, the communication patterns and frames on Twitter during the 2011 Egyptian uprisings (Meraz and Papacharissi, 2013) or the frames found on Twitter during the Vancouver riots on June 15, 2011 (Burch et al., 2015) were examined. Jang and Hart (2015) also analyzed the

use of frames on Twitter in the context of conversations about climate change, Turhan (2019) focused on the language of presidential-related Twitter accounts in the United States, and Shurafa et al. (2020) analyzed the Twitter rhetoric around the COVID-19 pandemic and the frames that shaped the discourse in a recent paper. Work examining the off-topic use of frames from Twitter increasingly relies on the computational identification of cross-topic frames, based on the Policy Frames Codebook created by Boydstun et al. (2014; for example, Johnson et al., 2017a; Johnson et al., 2017b; Johnson, 2019).

2 Expectations

This work builds on the results of previous research and, in particular, on the findings of Arlt et al. (2019) and examines the Twitter debate in the context of the Responsible Business Initiative in Switzerland. In the following, the expectations are outlined and the hypotheses are developed.

2.1 Focusing on the Swiss case

Previous studies on political debates on Twitter have focused mainly on the English-speaking world, and especially on the United States, where research has concentrated on a highly polarized country with a two-party system. It can be assumed that this structural and sociocultural polarization influences social media debates, which is why the results of the studies do not necessarily apply to other countries. Therefore, these analyses must be supplemented by studies of structurally different cases (Arlt et al., 2019, pp. 443f). For several reasons, Switzerland is a valuable case for studies on political communication and public opinion on Twitter. First, Switzerland is a relatively pure consensus democracy (Lijphart, 2012, pp. 7), in which a common solution must be found in political debates, contrasting to the US and therefore suitable for a "most different" comparison (Arlt et al., 2019, pp. 444). Due to its institutional design, Switzerland also has very low barriers to access to public debate.

Compared to most countries, a greater variety of actors is therefore able to engage in political communication. Another argument for the analysis of social media debates in Switzerland is the emphasis on direct-democratic instruments, which promotes the direct participation of the Swiss population in political decision-making and hence makes the public discourse on referendums highly relevant since it can directly influence the outcome of referendums (Wüest et al., 2015, pp. 5).

2.2 Fragmentation and polarization

As outlined in section 1.2.3, current scholarship is not yet able to assess whether the potential of social media to enable more pluralistic political debates is being exploited or whether Twitter communication is more likely to take place between politically like-minded people. The findings on the role of social media in political debates are mixed. For Switzerland, the results of Wüest et al. (2015) indicate, in an investigation of the party landscape on Twitter, that the actors are grouped according to their party lines. On the other hand, in one of the few studies on debates during voting campaigns in Switzerland, Arlt et al. (2019) did not find distinctive echo chambers.

A pluralistic debate is also expected in the present study. In particular, the unusual split between the camps that characterizes the Responsible Business Initiative should lead to users being exposed to different opinions. Both the SVP and religious actors were divided. Beyond that, there are strong supporters in the FDP and in the economy, which overall rejected the initiative. Therefore, it can therefore be assumed that despite the grouping of actors according to the party lines on Twitter, a debate between supporters and opponents took place.

H1: In the debate surrounding the Responsible Business Initiative, users engage actively with members of other communities.

2.3 Similarities and differences in online and offline debates

2.3.1 Coverage

As political actors integrate social media into their campaigns, journalists use them as sources and topics for political reporting, and the public uses them to comment on political events and discuss politics, social media services have become additional channels in the political communication space (Jungherr, 2014, pp. 239). Previous studies found a high degree of interdependence between traditional media and political Twitter activity (see section 1.2.3).

On one hand, journalists routinely integrate Twitter news into their coverage of political events (Chadwick, 2011; Jungherr, 2014; Metag and Rauchfleisch, 2017). However, this process is not deterministic. Twitter users also link their news to a large extent to content on traditional media websites, which results in at least part of the political discussions on Twitter being a reaction to traditional media coverage (Jungherr, 2014; Vogler et al., 2019). Based on these observations, the volume of comments on votes and referendums on Twitter is likely to increase along with the volume of traditional media coverage. From research on campaigns in traditional media, it is known that media coverage reaches its peak about two to six weeks before the voting day (Milic et al., 2014, pp. 287ff).

H2a: The volume of comments on Twitter regarding the Responsible Business initiative increases in line with the volume of traditional media coverage.

H2b: The volume of comments on Twitter regarding the Responsible Business initiative reaches its peak two to six weeks before the voting day.

2.3.2 Actors

Although earlier studies on the actors did not yet come to consistent results (see section 1.2.3), the theoretical argument is convincing: Online communication challenges the gatekeeper role of traditional media. The low entry thresholds and the low costs enable all kinds of actors to initiate communication and thus act

as agenda-setters and frame builders. While traditional actors also benefit from social media and have the resources to use this type of communication, social media should, in particular, enable previously marginalized actors to make their arguments visible (Adam and Pfetsch, 2013). Based on this argument, one would expect non-traditional actors to appear more often in communication on Twitter than in traditional media. Since the Responsible Business Initiative was initiated by a committee consisting of over 130 human rights and environmental organizations, non-traditional actors play a central role.

H3: In the debate about the Responsible Business Initiative, non-traditional actors received more resonance on Twitter than in traditional media.

2.3.3 Frames

In order to win a political campaign, political actors try to achieve an emphasis effect, i.e., to get the media or individuals to focus on certain aspects of an issue rather than others when forming opinions (Druckman, 2001, pp. 230; Hänggli et al., 2012, pp. 261). This emphasis on certain aspects is generally referred to as framing (Entman, 1993, pp. 52).

Although according to hypothesis 3, the non-traditional players would also be able to place their own frames on Twitter, it is expected that the same frames will be used on Twitter as in traditional media. This is because in voting campaigns, a limited number of frames generally dominate and are picked up by different actors (Hänggli et al., 2012). Twitter offers actors great control over message content. However, this also comes along with lower credibility, so actors have the incentive to use a credible message, i.e., their core frame. In addition, actors have the incentive to tailor messages to their specific audience, which is critical to the vote outcome. Both Twitter messages and ad campaigns should therefore use the frame that most effectively mobilizes the target audience. Furthermore, the media agenda is also influenced by Twitter, which is why political actors use their core frames to attract the attention of the news media (Hänggli and Kriesi, 2012; Iyengar and McGrady, 2007). Given this high interdependence between traditional media and political

Twitter activity, it is assumed that frames are more likely to be reproduced by non-traditional actors in social media rather than that these actors deploy new frames (Adam and Pfetsch, 2013, pp. 11).

H4: In the debate on the Responsible Business Initiative, the same frames dominate on Twitter and in political ads in traditional media.

3

The Responsible Business Initiative

Before the applied data and analysis methods are presented, this section provides a brief overview of the content and course of the Responsible Business Initiative.

3.1 Contents and goals

The popular initiative aimed to hold multinational companies based in Switzerland legally responsible. This legal mechanism was intended to cover violations of human rights and international environmental standards. Moreover, not only Swiss-based companies would have been affected by this mechanism, but also the companies they control and the companies that are economically dependent on them. Thus, subsidiaries and suppliers of multinational companies based in Switzerland would have been covered by this legal mechanism as well. Under the initiative, companies would have to conduct due diligence. First, they would have to analyze and identify the risks to human rights and the environment posed by their activities. Second, they would have been required to take appropriate measures to avoid these risks. And third, they would have to report transparently on the measures taken. In short, companies would have to prove that they have done their due diligence to avoid sanctions. The Swiss parliament has adopted an indirect counter-proposal to

the initiative, which also introduces new reporting and due diligence requirements. Violations here result in fines (BK, 2020; APS, 2020c).

3.2 Chronology

As early as spring 2015, an alliance of more than 100 non-governmental organizations, political parties and church circles collected signatures for the popular initiative "For responsible businesses - protecting human rights and the environment", popularly known as the Responsible Business Initiative (Konzernverantwortungsinitiative) or by some opponents under the term "Unternehmensverantworungsinitiative" ¹. On November 10, 2016, the submission of the initiative was declared valid by the Federal Chancellery with 120'418 valid signatures (BK, 2020; APS, 2020c).

The Responsible Business Initiative was the subject of lengthy debates in parliament. The debate lasted from November 2017 to June 2020. In total, the initiative was discussed three times in the National Council and three times in the Council of States. Due to the 2019 National Council and Council of States elections, as well as the shortened 2020 spring session as a result of the Corona pandemic, the debates were postponed twice. Initially, the Federal Council, the Council of States and the National Council agreed on the importance of protecting human rights and the environment but considered the legal mechanisms imposed to be too restrictive, ineffective and harmful to Swiss businesses. They therefore recommended that the popular initiative should be rejected. The three political institutions were furthermore unable to agree on the content of an indirect counter-proposal. While the National Council's proposal opted for a mechanism that only affected companies with annual sales of more than CHF 80 million and more than 500 employees, the Council of States proposed to limit the legal mechanism in the areas of "conflict minerals" and "child labor" to companies of public interest and large financial institutions. The National Council's version would have led to the withdrawal of the popular initiative. However, in the unification conference, the parliament ultimately

 $^{^{1}}$ In the following, the term "Responsible Business Initiative" is used as it has become established in the debate

took the risk of opting for the Council of States' indirect counter-proposal, thus giving the Swiss people the final say (BK, 2020; APS, 2020c).

3.2.1 Outcome

On November 29, 2020, after a campaign that lasted about a year, the popular initiative was put to the vote. The Responsible Business Initiative was approved by 50.7 percent of the Swiss population but rejected by 14.5 cantons (see table 3.1). Since a double majority is required for the adoption of popular initiatives, the initiative was not adopted. As a result, the indirect counter-proposal of the Council of States enters into force (BK, 2020).

Table 3.1: Voting results (29.11.2020)

	Voters	Cantons
Participation	47%	
Yes	50.7%	8.5
No	49.3%	14.5

3.3 Campaign

The campaign that followed this popular initiative was unprecedented in many respects. First of all, the length set it apart. Indeed, the Yes movement started in early 2020, even shortly before the conclusion of the parliamentary debates. It also benefited from the professionalization of the pro-initiative camp, which involved numerous NGOs and substantial donations. Moreover, the campaign was characterized by its intensity. In the final weeks of the campaign, press coverage of the program accounted for up to 16% of all press articles. In addition, the Swiss press published over 1000 advertisements. This makes this the eighth-most intensive campaign in Swiss newspapers since 2013 (fög, 2020a). In addition to newspapers, the balconies and windows of many Swiss citizens were decorated with orange flags, the color chosen by the organizers of the pro-campaign. "Fake news" and personal attacks were also widespread during the campaign. And finally, the large number

Table 3.2: Voting stands by parties and associations

	Vote	
Voting instructions by parties:	Yes	BDP, EDU, EVP, GL, GPS, KVP, MCG, PdA, SD, SPS
	No	CVP (2 divergent cantonal sections), FDP, SVP (1 divergent cantonal section)
Voting stands by	Yes	SBK, SGB, TravS, VPOD, Operation Libero, GSoA, WWF, Pro Natura, BioSuisse, Stiftung für Konsumentenschutz (SKS), Evangelisch-reformierte Kirche Schweiz, Schweizerische Evangelische Allianz, Verband Freikirchen Schweiz, Katholischer Frauenbund, SEV (Gewerkschaft des Verkehrspersonals), Kaufmännischer Verband Schweiz
associations:	No	eco, SAV, SBV, SGV, Schweizerischer Versicherungsverband, SwissBanking, Baumeisterverband, kantonale Industrie- und Handelskammern

of actors involved was remarkable. The involvement of the churches is a startling example. While the debates in parliament were divided along traditional left-right lines, the campaign debates showed a blurring of party lines. The human rights issue mainly affected conservative parties such as the SVP and the CVP, which rejected the initiative but were internally divided. These divisions were also reflected in the civic committee for the initiative, which included representatives from the SVP, FDP, CVP, EVP and GLP (see table 3.2) (fög, 2020a; APS, 2020b,c).

Ultimately, this popular initiative set the political agenda in Switzerland, despite its non-acceptance. It led to an intense and hard-hitting campaign, occupied the Swiss and international media landscape, put numerous multinational corporations such as Glencore, Syngenta or Nestlé in the spotlight and reopened the discussions about the double majority and the weight of the cantons in Swiss federalism (APS, 2020b).

4 Data

Four data sources are used to answer the research questions. For the analysis of the online debate, data was collected via the Twitter API. For the analysis of the conventional media, data from the Digital Democracy Lab (2021), the Research Center for Public Sphere and Society (2020b), as well as data from Année Politique Suisse (2020a), are used.

4.1 Twitter data

Twitter data relating to the Responsible Business Initiative has been collected between 28.09.2020 (previous vote on 27.09) and 03.12.2020 (voting day on 29.11). These ten weeks cover the hot phase of the campaign before the voting day as well as a few days after. For this purpose, Twitter posts containing relevant words or hashtags¹ were collected daily. The original dataset contained 630'901 tweets from 22'032 unique users.

The dataset was then filtered based on language. Only tweets in German were included. Since these account for 95% of the tweets in a Swiss national

¹Konzernverantwortungsinitiative, kovi, kovini, KVI, konzernverantwortung, MultinationalesResponsables, #kvi, #konzernverantwortung, #KVI, #Konzernverantwortungsinitiative, #Kovini, #kovi, #KoVi, #MultinationalesResponsables, #UVI, #Unternehmensverantwortung, #JaKVI, #UVINein, #kvinein, #KVIja

language (French = 2197 tweets, Italian = 64 tweets, Romansh = not specified), this was deemed justified². In total, the final dataset contains 40'324 tweets from 5827 accounts. Of these, 9323 are normal tweets (23%), 23'768 are retweets (59%), and 7233 replies (18%).

For all 5827 users, the list of Twitter accounts they followed was then downloaded to create a follower network. Only people who posted a tweet related to the initiative at least once were included in the network. After cleaning the data, the final network consisted of 5479 unique users. The network has a density of 0.026, which means that 2.6% of all possible connections actually exist within the network. The average path length, which serves as an indicator of the average number of hops along the straightest paths for all possible pairs of users in the network, is 2.35, and thus the network can be unambiguously described as a "small-world" network.

4.2 Data on traditional media

In addition to the Twitter accounts, articles from 84 Swiss newspapers that appeared in the context of the initiative were examined for the analysis of the similarities and differences in online and offline debates. The articles were obtained via the Digital Democracy Lab (2021). In total, 4243 articles containing at least one relevant keyword³ were published during the study period (28.09.2020-03.12.2020), of which 4240 were written in German and were thus used for the analysis.

To investigate the resonance of the most important actors, the data was supplemented with data from the Research Center for Public Sphere and Society (2020b), which contains information on the addressees and the position (measured by tonality) of the articles. The Research Center for Public Sphere and Society (fög) has been systematically surveying the reporting in the run-up to federal votes since 2013. The dataset includes 703 editorial articles that deal directly with the

²Since the majority of search terms used were in German, this high percentage is not surprising. However, even including the other language regions, the German tweets should make up a clear majority (see e.g., Wüest et al., 2021).

³konzern*, unternehmens*, UVI, KVI

initiative at the national level and were published in the period from September 7, 2020 to November 22, 2020, 477 of these were written in German.

In order to identify framing differences between online and offline channels, only newspaper ads are included in the present analyses of framing strategies. Compared to other contributions in the traditional media, newspaper ads belong to unmediated channels. This means that in contrast to mediated channels, in which messages reach the media in a multistage process from the political actors and from there to the voters, the actors in unmediated channels have control over the content and the emergence of the message. Since tweets also belong to unmediated messages, a direct comparison can be made between the use of online versus offline channels. For this purpose, data from Année Politique Suisse (2020a) is used. As part of the newspaper documentation, Année Politique Suisse (APS) has been collecting advertisements that appeared in print media for federal and cantonal votes in more than 50 press products and from 8 weeks before the vote. This documentation includes, among other things, information about the time of publication, the content of the articles (arguments, pro/contra) and the advertisers.

A total of 1104 ads were placed in the run-up to the vote. Of these, 935 (85%) appeared in German. The opponents of the initiative were considerably more active than the supporters: 675 (72.2%) of the ads emphasized opposing positions, only 254 (27.2%) were placed by the supporters. 6 (0.6%) advertisements took a neutral position, i.e., advertisements to draw attention to events in connection with the vote.

5

Methods and operationalizations

In the following, the applied methods, as well as the operationalizations of the variables of interest, are presented. All analyses and visualizations were created in the R programming environment¹.

5.1 Follower communities on Twitter

To identify and characterize the follower communities participating in the Twitter debate on the Responsible Business Initiative, a follower network for all users who have posted at least one tweet or retweet with a relevant keyword or hashtag was constructed. Using the Leiden algorithm for identifying communities, clusters are defined that differ in size, composition, actor structure, ideological position and opinion regarding the initiative. These identified clusters refer to subgroups in a network where nodes are much more connected to each other than to nodes outside this subgroup (Himelboim et al., 2013, pp. 159). In terms of both reduced computation time and the quality of the detected communities, the Leiden algorithm is very well suited for this type of analysis. In contrast to the often used

 $^{^1{\}rm The}$ only exception is the visualization of the networks, which was created in Gephi (see appendix B)

Louvin algorithm, the Leiden algorithm furthermore guarantees that the identified communities are well connected (Traag et al., 2019).

In order to evaluate the properties of the created network on a macro level, a baseline is needed. Therefore, for the comparison of the network on the Responsible Business Initiative, simulated graphs with a similar number of nodes and edges as the empirical network were created. The direct comparison then provides information about the properties in the empirical network. The random graphs are generated via the Erdős-Rényi (ER) model (Erdős and Rényi, 1959) using the igraph library for R (Csardi and Nepusz, 2006; Kaiser, 2017). The Degree of separation is measured according to Hu et al. (2013), who propose a score calculated by subtracting the mean betweenness centrality from the maximum betweenness centrality of the graph and dividing the result by the mean². A large value for the Degree of separation of a network means that at least one node has much larger betweenness values than most of the other nodes in the network. Thus, the larger the value, the more heterogeneous the network.

Communication on Twitter 5.2

In order to study the debate on Twitter, the communication activities of the communities are identified (distribution of tweets per discourse community over time). In addition to the activity of the different Twitter communities, the content of the communication of opponents and supporters is also examined. For this purpose, the follower communities are first grouped into supporters and opponents. In the communities with a pronounced Yes share, the same assignment was made for all users. In the case of the Conservative Community - which contains supporters and opponents - the assignment was based on whether more words or hashtags typical for the supporters³ or for opponents⁴ occur in all tweets of a user. The expert/scientific community, which overall takes a neutral position, was excluded

 $^{^2\}pi=\frac{B_{max}-\bar{B}}{\bar{B}},\,B_{max}=$ maximum betweenness value, $\bar{B}=$ average betweenness value $^3{\rm Yes},\,{\rm Pro},\,{\rm For},\,\#{\rm KVI},\,\#{\rm KOVI}$

⁴No, Against, #UVI

from this analysis. Afterward, according to this division, two corpora are created to investigate similarities and differences in the overrepresentation of certain meaningful words in the tweets of opponents and supporters. Each corpora is first cleaned (removal of punctuation and non-graphical characters, change of all letters to lower case, etc.) and the words are stemmed, which reduces the words to their basic form. Finally, the total frequency and the relative frequency of the words in each corpus are calculated and the degree of over-representation (relative frequency supporters divided by relative frequency opponents) is calculated. For these analyses, the R package quanteda (Benoit et al., 2018) is used.

5.3 Fragmentation and Polarization

To investigate the degree of interaction within and between the different communities, the response network is used, which reconstructs which of the identified users have responded to whom and with what frequency. The response network therefore represents the active contribution of each community to the communicative exchange within the whole network and allows to compare the share of responses per community within the same group ("internal responses") and to users in other communities ("external responses").

5.4 Similarities and differences in online and offline debates

To compare the online and offline campaign, the volume of comments on Twitter is compared with the volume of contributions in traditional media over time. For the comparison of the overall activity on Twitter, as well as in traditional media, data from the Digital Democracy Lab (2021) is used.

In order to analyze the resonance of the communities on Twitter and in traditional media, data from the Center for Public Sphere and Society (2020b) is used. These already contained information on the most important actors who took a stand

regarding the initiative. For the comparison of the resonance, the actors identified by the Center for Public Sphere and Society are assigned to the communities.

To achieve the best possible assignment of the actors defined by the Center for Public Sphere and Society to the communities found on Twitter, the Twitter biographies of the users are investigated. For example, in order to assign the actor group Social Democratic Party to the Twitter communities, it is determined which community contains the most people who use the word "SP" (abbreviation for the Social Democratic Party) in their description. This is the case for the "Green/Left" community, which is why articles in which the social democrats take a stand are assigned to the "Green/Left" community. The same procedure is followed for all actors. The table with the frequency of the selected word in the Twitter description by community as well as the assignment of the actor groups to the communities is shown in Table B.2 and Table B.1.

5.5 Framing

Frames form the unit of analysis for the investigation of hypothesis 4. The starting point for defining the frames was the Policy Frames Codebook by Boydstun et al. (2014). The codebook is a carefully validated resource that can be used for both human and automated content analysis. The Policy Frames Codebook aims to provide the best of both worlds: a general system for categorizing frames across policy issues that is designed to also be specialized in issue-specific ways. It contains 14 categories of frame "dimensions" that are applicable to any policy issue and in any communication context. Thus, the codebook provides the ideal starting point for defining frames for the present analysis.

The Policy Frames Codebook by Boydstun et al. (2014) is adapted as follows: In a first step, the unigrams belonging to the frame dimensions are translated into German. Afterward, these are adapted according to the Swiss context on the one hand and according to the context of the initiative on the other hand. The starting point for the adaptation according to the initiative context is the collection of important words in the coding of the campaign advertisements. The original 14 dimensions are reduced to eight dimensions considered relevant in the context of the initiative. The following eight frame dimensions are included in the analysis (Boydstun et al., 2014)⁵:

- The *Economic frame* emphasizes the costs, benefits, or monetary/financial impact of the initiative, as well as its economic impact in general. Examples are texts that emphasize that the initiative threatens Switzerland as a business location or say that the initiative harms or helps developing countries economically.
- The lack or availability of physical, geographic, space, human, and financial resources or the capacity of existing systems and resources to implement or carry out the initiative are highlighted when using the *Capacity and Resources frame*. In the context of the initiative, this frame was, for instance, used by the opponents to emphasize the increased bureaucracy that would result from the initiative.
- The Morality and Ethics frame includes any perspective, objective, or action compelled by religious doctrine or interpretation, duty, honor, righteousness, or other sense of ethics or social responsibility. This includes, for example, texts that emphasize that companies will be held accountable if the initiative is adopted or that people in developing countries will be protected.
- Texts that emphasize the equality or inequality with which laws, punishments, rewards, and resources are applied or distributed to individuals or groups are part of the *Fairness and Equality frame*. The emphasis on the balance between the rights or interests of one person or group compared to another also belongs to this frame. For instance, this framework includes texts that emphasize that the legislative changes required by the initiative should result in compliance with international human rights and environmental standards.

 $^{^5}$ The description of the dimensions as well as the corresponding unigrams can be seen in Table A.1 in the appendix.

- The Legality, Constitutionality and Jurisdiction frame includes emphasis on limitations or freedoms granted to individuals, governments and businesses by the Constitution or judicial interpretation or other rights. Texts assigned to this framework claim, for example, that the wording of the initiative and the statements of the initiators would contradict each other.
- If social norms, trends, values, and customs that make up the culture(s) as they relate to a particular political issue are emphasized, we are dealing with the *Cultural Identity frame*. This, for example, includes texts alluding to the fact that the initiative is unnecessary because it is already part of the Swiss culture to operate decently.
- The *Policy Description, Prescription, and Evaluation frame* involves texts that emphasize specific actions proposed to address an identified problem and to determine whether specific actions work or whether existing actions are effective. An example are texts which consider the initiative to go too far or which emphasize that the counter-proposal would be better suited.
- If influences on Switzerland's foreign relations with another nation or relations between groups are discussed, then the External Regulation and Reputation Frame is applied. Among other things, this includes texts that emphasize that Switzerland, if the initiative is accepted, will act as the "world's police" and impose its regulations on other countries.
- Finally, expressions of general approval or disapproval of the initiative are categorized under the *Personal Sympathy and Support/Opposition* frame.

For advertisements in traditional media, frames are operationalized with the arguments produced by each camp. Frames and arguments are not quite the same things. The goal of a frame is to highlight individual aspects of a perceived reality. In this respect, a frame is more than an argument since the latter conveys a particular understanding of the world. In contrast, an argument is merely a particular reasoning. The arguments collected in the Année Politique Suisse (APS) dataset are therefore assigned to the previously defined frames. The frames on Twitter are determined

using the custom dictionaries consisting of the dimensions and unigrams described above. The R package "quanteda" (Benoit et al., 2018) is used for these analyses.

The coding process and frame assignment are illustrated with an example: In the advertisement from figure 5.1, it was argued that the initiative is bad for developing countries. On one hand, this argument is assigned to the frame dimension "Economic", because the economic impact of the initiative on developing countries is emphasized; likewise, it was assigned to the frame dimension "External Regulation and Reputation", because the influences of Swiss policy on other nations are highlighted.



Figure 5.1: Example of the coding of an advertisement (Sonntags-Zeitung, October 11, 2021)

An example of a tweet that was also assigned to the two frame dimensions "Economic" and "External Regulation and Reputation" is the tweet by Dina D. Pomeranz, which was posted on October 29, 2020. In the tweet, the professor writes:

"Was sagen eigentlich WissenschaftlerInnen der Wirtschaft in Entwicklungsländern zur Konzernverantwortungsinitiative? Unser Statement dazu, warum die #Kovi wichtig ist für Entwicklungsländer. Von 15 Profs der Enwicklungsökonomie an 7 Schweizer Unis." ⁶

 $^{^6}$ English translation: "What do economics scholars in developing countries actually have to say about the Corporate Responsibility Initiative? Our statement on why the #Kovi is important for developing countries. From 15 profs of development economics at 7 Swiss universities."

The tweet also focuses on the economic and international impact of the initiative on developing countries.

6 Results

In the following, the results of the analyses are presented and illustrated.

6.1 Follower communities in the Twitter debate and their characteristics

To isolate the follower communities that participated in the Twitter debate on the Responsible Business Initiative, a follower network was reconstructed for all previously identified users. For the evaluation of the network properties, 100 random graphs were generated using the Erdős-Rényi (ER) model (see section 5.1). The comparison of the core network statistics is presented in Table 6.3.

The diameter specifies the length of the "longest shortest path" between any two nodes of a graph. It is representative of the linear size of a network. With a value of 8, the diameter of the follower network is significantly larger than that of the randomized graphs (3). The clustering coefficient is a measure of an "all-my-friends-know-each-other" property. The follower network has a significantly larger clustering coefficient (0.163) than the random graphs (Mean = 0.026, SD = 0.000). This high clustering coefficient is an indication of a small world network. This is further confirmed by the average path length. Although the average path length (2.75) is higher in the follower network compared to the random graphs (Mean

=1.997, SD=0.000), it is still rather small. Therefore, based on the characteristics of the network, it can be assumed that the follower network is a 'small world network'. A social network is called a small-world network if any two people in the network can reach each other through a quite short sequence of acquaintances. The degree of separation (288.93) is substantially larger than in the random graphs (Mean = 0.73, SD = 0.065)¹. Compared to the randomized graphs, the present network is thus much more heterogeneous.

Table 6.1: Core network statistics for the Responsible Business Initiative follower network and for the simulated graphs

Network Diameter	Clustering coefficient	Average path length	Degree of separation
Twitter 8	0.163	2.75	288.93
Random 3	M=0.026,SD=0	M=2,SD=0	M=0.73,SD=0.065

Note: The diameter represents the absolute number, all other numbers are averages.

Using the Leiden community detection algorithm (see 5.1), seven distinct communities were identified which differ in terms of size, composition, actor structure, ideological position, and opinion on the initiative (Table 6.2).

¹If the three nodes with the highest betweenness centrality are excluded, the polarization score is still substantially larger (45.53) than the score of the random network.

Table 6.2: Communities involved in the political debate on Twitter and their characterization

Community	Dominant position	Relevant users	Size (n/% of all users)	Average share of the daily volume	Density	Average path length	E-I-Index	Yes-Share
Green-Left	Supporter	SchutzfaktorM, Mark_Balsiger, henry_both	1387 (25%)	20%	0.035	2.53	0.14	88%
Mainstream	Supporter	redder66, Roman_Bolliger, PrettyDamnSwiss	1343 (24%)	31%	0.023	2.79	0.15	89%
Conservative	Supporter & Opponents	hans_denkt , ReneTruninger , PeterFischerSyn	1052 (19%)	21%	0.033	2.70	0.17	38%
Science/ Experts	Supporter / Neutral	wahlforschung0 , FWiedemeier , claudelongchamp	550 (10%)	8%	0.038	2.62	0.14	77%
Center and religious actors	Supporter	MullerAltermatt, martin_candinas, DieJungeMitteCH	445 (8%)	10%	0.044	2.63	0.17	91%
Foreign actors	Supporter	parents4future, BWassertisch, rotekatze78	439 (8%)	2%	0.016	3.50	0.11	87%
Basel Region	Supporter / Neutral	bzJermann , ClaudeBuehler, kasparsutter	256 (5%)	3%	0.080	2.31	0.25	69%

Note: Modularity-Score: 0.223

- The "Green-Left" community is the largest community in the network (n = 1387). It represents the voice of the ecological and liberal camp as well as the initiators. The "Green-Left" community contains various representatives of the Green Party and the Social Democrats. Based on the number of direct links, among the most relevant users are various campaign contributors (Mark_Balsiger, Mark Balsiger, Communication consulting initiators) and supporting organizations of the initiative (Schutzfaktor_M, Andrea Huber, Allianz Zivilgsellschaft; henry_both, Henry Both, Allianz Zivilgsellschaft). The community has a density of 0.035, which means that 3.5% of all possible connections within the community actually exist, and an average path length of 2.53. With a Yes-share of 88%, this community is among those in favor of the initiative.
- The "Mainstream" community is, with 1343 members, just behind the Green-Left community, the second largest one. It represents the civil society camp and accordingly also contains various civil society representatives (e.g., redder66, Reda El Arbi, journalist; Roman_Bolliger, Roman Bolliger, climate/sustainability consultant; PrettyDamnSwiss, Rea, unknown). The density of this community is comparatively lower at 0.023 and the average path length is 2.79. This community clearly supports the initiative with a share of 89% "Yes".
- The conservative community is the voice of the middle-class, conservative mainstream. At 38%, the Yes share is the smallest in this community. Although the conservative community as a whole does not completely reject the initiative, most opponents are to be found in this group. Some of the most relevant users are representatives of center-right and right-liberal parties and the conservative mainstream (e.g., hans_denkt, unknown, unknown; ReneTruninger, René Truniger, SVP ZH cantonal councilor; PeterFischerSyn, Peter Fischer, computer scientist). The density of this community is 0.033 and the average path length 2.70.

- A fourth group consists of representatives of research and experts as well as some representatives of the Green Liberals. This community has 550 members and the relevant users include the political scientist Claude Longchamp (wahlforschung0, claudelongchamp) and Fiona Wiedemeier from the Green Liberal Party (FWiedemeier). The Yes share of this group is 77%, however, many neutral comments were also posted by this group, as well as references to scientific research in connection with the initiative. The density in this community is 0.038 and the average path length is 2.62.
- The "Center and religious actor"-community consists of a smaller group (n=445) of actors from the church and center parties who appear to be supporters of the initiative. Notable community members are CVP National Councilors Stefan Müller-Altermatt (MullerAltermatt) and Martin Candidas (martin_candidas). The community has a density of 0.044 and an average path length of 2.63.
- Then there are the foreign actors with a comparatively low density of 0.0016 and an average path length of 3.50, representing political opinion leaders in countries outside Switzerland, including the German climate organization "Parents For Future" (parents4future), the organization "Berliner Wassertisch" which campaigns against privatization (BWassertisch) or the German lawyer Miriam Saage-Maas (rotekatze78). With a "yes" share of 87%, the members of this group are also among the supporters of the initiative.
- Finally, there is the community "Region Basel" which mainly consists of media professionals and politicians from the Basel region. Important representatives are Hans-Martin Jermann (bzJermann, journalist Basler Zeitung), Claude Buehler (ClaudeBuehler, producer Telebasel) and Kaspar Sutter (kasparsutter, member of the BaselStadt government). The community belongs mostly to the supporters of the initiative. The density is comparatively high at 0.080 and the average path length is 2.31. Although at first glance, a community from this region seems unusual, it appears that there are very active people on

Twitter from this region. In previous studies of Swiss initiatives, a community for Basel was also identified (Arlt et al., 2019).

The E-I ratio, which indicates how isolated a community is from the other communities, is comparable for all identified groups (see 6.2).

6.2 Intensity and content of Twitter communication

Communication on the Responsible Business Initiative on Twitter shows a typical trend of pre-announced events over time (Lehmann et al., 2012). In addition to the increased activity on the voting day (November 29, 2020), when there was a final surge of mobilization but especially when the results were discussed, three other dates show a heightened level of communication. The peaks on October 30, 2020, and November 20, 2020, are due to the broadcasts of the voting debates on Swiss television (SRF Arena). This finding is consistent with previous research on media events and Twitter, which showed that in response to mediated events, the volume of politics-related Twitter messages increases sharply (see section 1.2.2). Likewise, a peak is evident on November 18/19, 2020, when the 3rd wave of the Tamedia polls was published, revealing the tight race between supporters and opponents (Leeman et al., 2020). Both users and media reacted to this poll on Twitter, taking it as an opportunity to underline their arguments and further mobilize supporters. As is typical for such an event, activity drops off quickly after the vote (Lehmann et al., 2012).

With regard to the communicative activity of the identified communities, Figure 6.1 shows the distribution of tweets per day and discourse community over time. The two largest communities, "Mainstream" and "Green-Left", provided the highest daily activity in the Twitter debate. The Green-Left community's activity is thus fairly proportional to its size (25% of all users, 20% daily volume; see table 6.2). The activity of the Mainstream community is relative to its overall size slightly

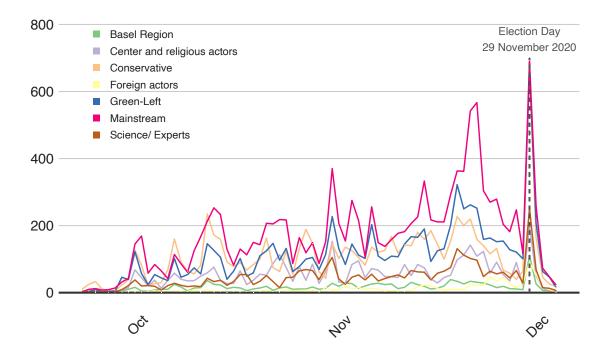


Figure 6.1: Distribution of tweets per day and discourse community over time.

higher (24% of all users, 31% daily volume). These communities are thus the ones that most strongly shaped the political debate in the run-up to the initiative.

Beyond that, the "Conservative" community likewise generated a lot of activity and was comparatively active in relation to its size in contributing to the debate on Twitter. The other, smaller communities showed a rather low activity but were still represented in proportion to their size. The "Foreign Actors" community is the most underrepresented, with an average share of total daily tweet volume of only 2%, and is also rather isolated from the other communities. The influence of this community on the political debate was therefore likely limited.

In addition to the (relative) activity of each Twitter community, the content of communications from opponents and supporters of the Responsible Business Initiative was evaluated. The results can be seen in Figure 6.2.

Figure 6.2 shows that rather general hashtags such as #kvi (the acronym of the German name of the referendum, "konzernverantwortungsinitiative") or #konzernverantwortungsinitiative as well as the general mention of the initiative were used by opponents and supporters with roughly equal frequency. The word

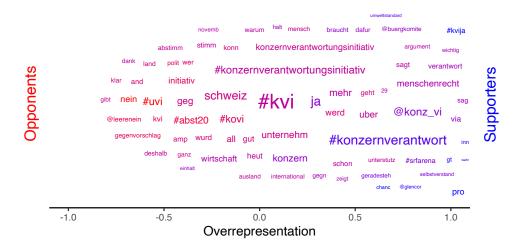


Figure 6.2: Over-representation (normalized) of keywords used by opponents and supporters (The size of the words in the figure indicates the total frequency of each word in both corpora. The color and position indicate the degree of overrepresentation by the respective camp).

"no" is clearly overrepresented in the tweets of opponents, while "yes", "for" or the hashtag "#kvija" mainly appear in the tweets of supporters.

It is clear that the opponents speak more often of companies than of corporations (#uvi as an acronym for Unternehmensverantwortungsinitiative, the name for the initiative of the opponents). This was used to stress that smaller companies are also affected by the initiative. It is also clear that the opponents increasingly emphasize the economic impact and rather highlight the culture of Switzerland ("Switzerland", "country"). In addition, the counter-proposal is mentioned much more often by the opponents than by the supporters. Quite interestingly many of the tweets of the opponents were directed at the Civic Committee for Responsible Business (BuergKomitee). This shows the tensions within the camp of the conservatives.

The supporters, on the other hand, more often use vocabulary that describes the initiative as "important" or "self-evident" and emphasizes that the initiative is "needed" and that companies should "take responsibility". Also, the vocabulary "human rights" and "environmental standards" to which the initiative is directed are more frequently found among the supporters. Finally, the proponents seem to

be mobilizing to a greater extent, which can be seen from the fact that the voting date ("29", "november") is increasingly emphasized by them.

6.3 Interactions within and across communities

In order to assess the degree of interaction within and between the different communities, the response network was used to reconstruct which of the identified communities responded to whom and with what frequency (see section 5.2 and figure B.3 in the appendix). The response network thus represents the active contributions of each community to the communicative exchange of the overall network. Table 6.3 presents the responses of users in each community to users within the same community (internal responses) and to users in other communities (external responses). Figure 6.3 graphically depicts the communication flows between communities.

The results show that Swiss Twitter users do not limit their responses to their own community. The number of "external" responses exceeds the number of "internal" responses in all communities, with the "Conservative" community having the largest share of internal responses (38%) and the "Foreign Actors" (0%) and "Science/Experts" (4%) groups having the smallest share. In other words, depending on the community, between 62% and 100% of responses went to users belonging to other communities.

45

Table 6.3: Cross-tabulation of internal and external replies to tweets posted by each discourse community.

	Community sending a reply								
	Community posting a tweet (sender)	Basel Region	Center and religious actors	Conservative	Foreign actors	Green-Left	Mainstream	Science/ Experts	Number of replies received
	Number of replies to posts from sender (n)	82	375	1831	36	812	1009	204	
	Basel Region	4%	1%	2%	4%	2%	2%	3%	115
	Center and religious actors	3%	17%	8%	8%	5%	9%	7%	460
	Conservative	54%	29%	38%	67%	51%	42%	52%	947
Community receiving a reply	Foreign actors	1%	0%	2%	0%	1%	1%	1%	52
	Green-Left	10%	33%	18%	6%	18%	18%	11%	565
	Mainstream	22%	17%	26%	15%	20%	25%	23%	1906
	Science/ Experts	5%	1%	8%	0%	3%	5%	4%	304

Overall, the "Conservative" community sent the most responses (n = 1831), of which 62% went to other communities, namely 26% to the "Mainstream" community and 18% to the "Green-Left" community, both supporters and thus ideologically different communities. A total of 1001 responses from the "mainstream" community follow a similar trend. About 75% of these were external, with 42% going to the "Conservative" community and 18% to the "Green-Left" community. In addition, the "Mainstream" community (n=1906) received by far the most responses. The "Green-Left" community also had a high percentage (82%) of external responses, most of which were directed to the "Conservative" community (51%). In general, responses from these three communities were fairly widespread, accounting for between 44% and 71% of all responses from these communities. The other communities also sent a large proportion of responses to different communities, showing a similar pattern. Most of these responses were directed to the three large communities mentioned above, with the remainder distributed proportionately among the smaller communities.

The results imply that the Swiss Twitter debate on corporate responsibility was not limited to discussions within a single community. Rather, users were highly active in discussing the issue with members of other communities. If we compare the group of communities that rejected the referendum with the group that supported the referendum, the communication between the communities actually increases over time (see figure 6.4).

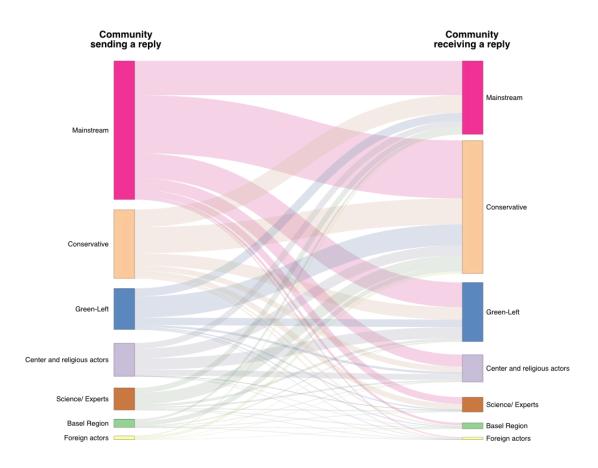


Figure 6.3: Total Communication (replies) between and within communities

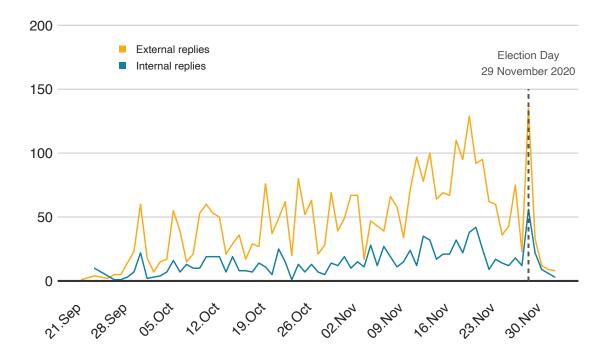


Figure 6.4: Internal and external communication over time.

6.4 Similarities and differences in online and offline debates

6.4.1 Activity

Figure 6.5 shows the share of media coverage, political advertisements and tweets per week. The starting point is nine weeks before the voting date (-9), the endpoint is the week in which the vote took place (0). Overall, it can be said that the coverage of the vote compared to previous votes has been remarkable. In fact, since 2018, media coverage one week before the vote has not been higher for any other vote (fög, 2020a).

In terms of the increase in contributions over time, it is noticeable that the peak is reached in all channels in the week of the vote. This is atypical for media coverage, as it usually peaks around 2 to 6 weeks before the vote (Milic et al., 2014, p. 287ff). This time period is marked with the red colored area.

The advertisements show that the campaign really kicked off around five weeks before the vote. Around a quarter of the advertisements were placed two weeks before the voting day - probably in order to reach those who voted by mail. However, 28 percent of all ads were still placed in the week of the vote, likely in view of the supposedly close outcome of the vote.

In comparison to the other contributions, it is evident that the advertisements follow their own logic. The course of media posts and Twitter posts, on the other hand, is closely linked. From figure 6.5, it can be seen that indeed, from about nine to six weeks before the vote, contributions in both channels suddenly rise quite sharply. But uncharacteristically, they both reached their peak the week of the vote. In fact, 19 percent of Twitter posts and 16 percent of media posts were published just before the vote.

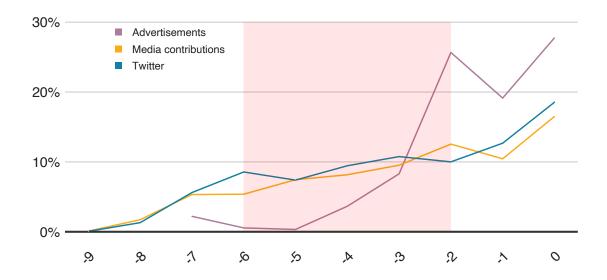


Figure 6.5: Share of contributions per channel and by number of weeks before the vote.

6.4.2 Actors

In addition to the activity over time, the focus on the contributions of the communities is likewise interesting. For this purpose, the resonance of the actors in the media posts was compared with the resonance on Twitter (see section 5.4). The results are shown in table 6.4.

The media image of the actors in the Responsible Business Initiative is complex and stands out in comparison to previous initiatives for at least two reasons (fög, 2020a): On the one hand, the resonance of the actors in the media is relatively even - usually two to three groups of actors clearly dominate. Likewise, in the case of this vote, many groups of actors are present in the media at the same time: conservatives (34%), the mainstream (16%), but also religious and center actors (21%) and science and experts (21%) make up a large part of the coverage. On Twitter, there are three communities that claim a majority of the response: The Mainstream Community (34%), the Green-Left Community (22%), and Conservatives (21%).

The mainstream community, which is also the second-largest community on Twitter, thus achieved the most resonance on Twitter. While this community was very active on Twitter, it received much less media coverage. Here, it was rather the conservative community that achieved the largest resonance. However, the

Table 6.4: Resonance of the communities on Twitter and in the media.

Community	Twitter	Media contributions
Mainstream Green-Left Conservative Center and religious actors	34% 22% 21% 10%	16% 7% 34% 21%
Science/ Experts	9%	21%
Basel Region Foreign actors	3% $2%$	- 1%

conservative community was also relatively well represented on Twitter and achieved a resonance of 21%. If both channels are taken together, it can be said that the conservatives are probably the community that received the most attention. The difference in the resonance of the green-left community is astonishing. While they represent the largest community on Twitter and can claim 22 percent of the posts, they were addressed in only 7 percent of the media contributions. Thus, they appear to be significantly underrepresented in the media. The other two communities - the Center and religious community and the Science / Experts community, on the other hand, are somewhat more strongly represented in the media than on Twitter. Unfortunately, no data is available for the media contributions of the Basel community, which is why no statement can be made in this regard. Not surprisingly, the response from foreign actors was low in both channels. Overall, while Twitter shows a rather typical picture of two to three dominant communities, the media coverage of this proposal seems to be unusually balanced.

A closer look at the resonance, divided into supporters and opponents, highlights the differences (table 6.5). On the one hand, it is clear that the media coverage is more or less balanced, with 53 percent of posts in favor of the initiative and 47 percent against it. However, the picture on Twitter is entirely different. With posting 79 percent of the contributions, the supporters were considerably more active than the opponents of the initiative. On the other hand, looking at the advertisements, the opponents were much more prominent, with 73 percent of the advertisements being placed by them.

Table 6.5: Response from stakeholders on Twitter and in the media by position.

Position	Twitter	Media contributions	Advertsiments
Opponent	$21\% \\ 79\%$	53%	73%
Supporter		47%	27%

6.4.3 Framing

The emphasis on certain aspects in political communication - known as framing - can be used differently depending on the channel. Usually, a limited number of frames dominate in the voting campaign (Hänggli et al., 2012). The analysis presented here (see 6.6) shows that the actors made use of a relatively large number of frames and used them quite unevenly in the ads and on Twitter.

On both channels, the frame "General support & rejection" was used the most. This is not surprising since the contributions mostly serve to place one's own position. Furthermore, 67 percent of the advertisements published were so-called "testimonial" advertisements, in which a person gives a voting recommendation and, sometimes, the reasons for this decision.

In addition to general support or rejection, two frames dominate on Twitter: Cultural Identity (19%) and External Regulation and Reputation (19%). The frame "Cultural Identity" emphasizes Switzerland and its culture and conditions, while the emphasis on the relationship between Switzerland and other countries as well as the focus on internationality is covered by the frame "External Regulation and Reputation". The situation is different with regard to the use of frames in the published advertisements. Here, the evaluation of the policy (17%), in which the formulations, goals and contents of the initiative were emphasized, and the economic effects (15%) were highlighted. In both channels, the "Legality and Jurisdiction" frame was used somewhat less, but still relatively frequently (15% in Adverstisements and 11% in Tweets). This frame emphasizes the legal foundations, such as international standards or the legal implementation of the initiative. The frames Capacity and Resources, Fairness and Equality, and Morality

and Ethics were used rather less, although they were applied somewhat more in the advertisements compared to Twitter.

Overall, considerable differences can be seen in the use of the frames on Twitter and in the media advertisements. However, this could also be due to the different distribution of supporters and opponents in these channels (see table 6.5). To get to the bottom of this, the differences in frame usage by channel and by position were analyzed.

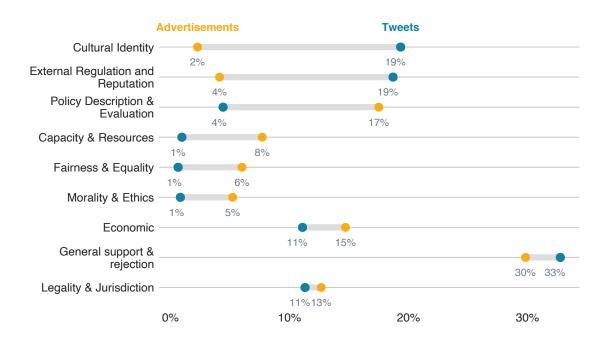


Figure 6.6: Comparison of frame usage on Twitter and in political ads.

Figure 6.7 shows the differences in frame usage by position (supporters and opponents) and channel (Twitter and advertising). The size of the circles indicates how often a frame was used during the voting campaign. It is evident that there were major differences in the use of the frames between supporters and opponents, particularly regarding the advertisements. For example, the frames "Fairness and Equality" and "Morality and Ethics" were used significantly more by supporters, while the emphasis on "Capacities and Resources" was used more by opponents. The frames "Policy Description and Evaluation", "External Regulation and Reputation", and "Cultural Identity" were also used slightly more by supporters,

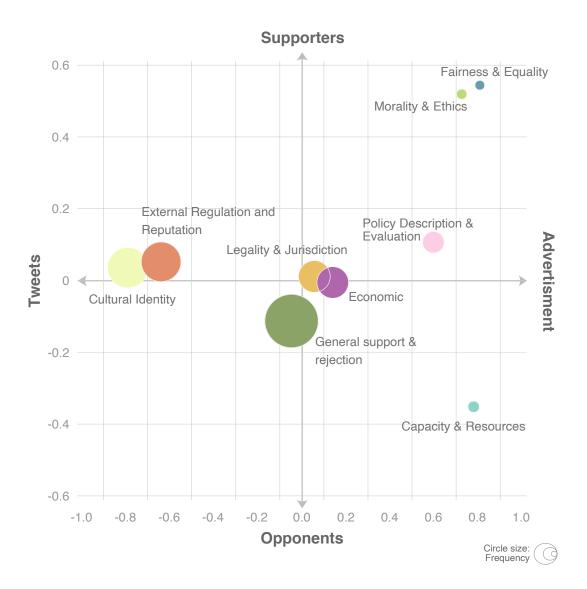


Figure 6.7: Comparison of the use of frames by position and channel.

but the former was more prevalent in advertisements while the latter two were more prevalent in tweets.

Overall, apart from the General support and Rejection frame, four frames dominate. "Cultural Identity" and "External Regulation and Reputation" among the Tweets and "Legality and Jurisdiction" and "Economic" somewhat more among the advertisements. For these four, there were few differences in the use of Supporters and Opponents. However, less frequent frames can be clearly assigned to a position, especially for the Advertisements.

Discussion

Despite the fact that social media have become an important source of political information, the use of Twitter in Swiss voting debates is still a relatively under-researched phenomenon. Due to this research gap, the Twitter debate during the Swiss Responsible Business Initiative was investigated. For this purpose, the Twitter communities that participated in the debates about the initiative on Twitter were identified and characterized. It was examined how often and with what content these communities talked about the topic. Furthermore the interactions within and between these communities were analyzed to see how polarized or connected the debate was.

The "Green-Left" community was the largest of the seven identified communities and represented the ecological and left camp as well as the initiators. But the "Mainstream" community, which comprises civil society, also made up a large portion of the Twitter users who tweeted about the initiative. Their biggest challengers were the "Conservative" community, which represented the middle-class and the conservative mainstream. Together, these three communities were responsible for 73% of the tweets about the initiative and thus a significant portion of the debate. In contrast to the Green-Left and mainstream communities, support in the Conservative community was significantly smaller. Thus, it is already evident

that the communities did not follow the lines of supporters and opponents, but that several opinions can be represented in one community. This is the first indication that users actively interacted with members who had different opinions. Four other smaller communities completed the group of seven communities.

The activity of these communities varied over time, with peaks around the release of the national polls, during the voting debates on Swiss television, and on the day of the referendum itself. This activity varied across communities, with larger communities showing disproportionately high levels of activity. Communities highlighted different content depending on their position toward the initiative. The examination of overrepresented words used by proponents and opponents of the initiative found some common terminology, as well as some significant variances in language.

However, although seven quite different communities could be found in terms of their communicative interactions, the results showed a dynamic communication both within and, more importantly, between the communities. The results showed a strong exchange between the "Conservative," "Green-Left," and "Mainstream" communities, even if they had different positions toward the initiative. Moreover, the results reveal that not only politicians participated in the debate, but also journalists, associations and non-governmental organizations (NGOs), academics, and civil society representatives.

In summary, the results show that the Responsible Business Initiative triggered a pluralistic and networked debate, which, was characterized by an active exchange both within and between the communities. In contrast to previous analyses, no pronounced echo chambers were found. Hypothesis 1, which states that users are actively engaged with members of other communities in the debate surrounding the Responsible Business Initiative, can thus be confirmed.

As outlined in section 1.2.3, current scholarship is not yet in a position to assess whether the potential of social media to enable more pluralistic political debates is being exploited or whether Twitter communication is more likely to take place between political like-minded people. The findings from the USA in which echo

chambers were found on social media (Sunstein, 2009; Conover et al., 2012) could not be verified in this study. This confirms that context must be considered when analyzing homphilia on social media and reinforces the earlier argument that due to Switzerland's consensus democracy and multi-party system, political debates in Switzerland are generally less polarized and more dialogic and consensus-oriented between different political actors. The results are thus in line with the research of Arlt et al. (2019) on the debate of the Swiss Nuclear Withdrawal Initiative. It seems that the classical groupings along party lines on Twitter (Wüest et al., 2015) dissolves somewhat during voting campaigns. Although the parties are still mostly to be found within a community, these are grouped into larger clusters in which in some cases different opinions are represented within one community. For the Responsible Business Initiative, this was all the more striking because many of the parties and groupings were divided themselves. Whether Twitter makes the debates in the referendum campaign more pluralistic therefore depends strongly on the context. At least in the case of the Responsible Business Initiative, it seems that Twitter facilitated communication between the individual groups. However, it remains to be seen whether this is due to the characteristics of the social media channel or whether Twitter merely reflects the reality.

What is more surprising, however, is that despite the rather elitist Twitter community in Switzerland, in which in particular politicians and journalists are active (Rauchfleisch and Metag, 2016), the mainstream community on Twitter was able to claim a substantial share of the contributions. This again indicates a more pluralistic exchange on social media, in which actors different from those in the traditional media have a voice. In a second part, it was therefore analyzed whether the debate on the Responsible Business Initiative on Twitter differs from the debate in the traditional media. For this purpose, the volume of posts as well as the response of the individual actors on Twitter and in the traditional media were compared. In addition, the use of frames on the different channels was examined.

With regard to the volume of posts, two findings stand out in particular: First, it can be confirmed that the volume of posts over time on Twitter and in traditional

media follows the same logic. This finding was to be expected, especially given the strong interdependence between the two channels, where journalists integrate Twitter messages into their reporting and, conversely, Twitter users refer to media posts (see section 1.2.3). However, this correlation is also confirmed with regard to the second prominent finding. Indeed, a rather unusual surge in media coverage shortly before the voting day was found. Normally, the peak of coverage is reached about six to two weeks before the voting day. The main driver for this uncommon increase towards the end of the voting campaign was the coverage of the intensive advertising efforts of the campaign actors with high campaign budgets and partly provocative campaign forms (fög, 2020a). The surge towards the end of the campaign was also found on Twitter, confirming the finding of a common logic between the two channels. Hypothesis 2a, which states that the volume of comments on Twitter about the Responsible Business Initiative increases with the volume of traditional media coverage, can thus also be confirmed. However, due to the unusual spike in contributions shortly before the vote, Hypothesis 2b, which states that the volume of comments on Twitter about the Responsible Business initiative peaks two to six weeks before voting day, cannot be confirmed.

According to a popular argument, online communication challenges the gate-keeper role of traditional media (see section 1.2.3). The low entry thresholds and low costs on Twitter enable all types of actors to initiate communication and thus act as agenda setters and frame builders. Therefore, in particular marginalized actors should be able to make their arguments visible, as they have fewer resources compared to traditional actors. In fact, the results can confirm this argument. The mainstream community, which represents the civil society camp, received significantly more resonance on Twitter than in traditional media. In the latter, on the other hand, conservatives and business representatives were much more prominently represented. This confirms hypothesis 3, which states that in the debate about the Responsible Business Initiative, non-traditional actors received more resonance on Twitter than in the traditional media. However, not only the

civil society actors, but also the Green-Left community were able to disseminate their arguments more concisely on Twitter than in the traditional media.

In general, the context of the initiative and the unusual campaign seem to have strongly shaped the actor structures. While the three communities, mainstream, green-left and conservatives, dominated on Twitter, the media coverage was distributed among more actors. This atypical picture, and probably also the different use of social media by supporters and opponents, can be explained at least in part by the strategy of the initiators. They appeared with several official advocates in different actor groups. The initiative was also highly controversial, and support for it extended far into the conservative camp. In particular, among the parties and associations that opposed the initiative overall, there were individuals who disagreed with this position. However, while the media campaign followed the vote of the party or association as a whole, individuals were able to share their personal opinions on Twitter. Thus, social media does seem to give a voice to marginalized groups - whether for financial reasons or because of low entry thresholds, or because they do not follow the opinion of the majority of their community or party.

Finally, the use of frames on Twitter and in political advertisements was compared. Given the high level of interdependence between Twitter and traditional media, the hypothesis was formulated that the same frames dominate both on Twitter and in the media. This should also be the case regardless of the higher presence of civil society actors on Twitter, since the actors generally limit themselves to only using a few frames and therefore tend to reproduce the frames of the media instead of placing their own new ones. However, the results show that there were large differences in the use of the frames on Twitter - even independent of the different distribution of supporters and opponents across the channels. Only one frame - "General support and rejection" was frequently used in both channels. In contrast, the two frames "Cultural Identity" and "External Regulation and Reputation" dominated on Twitter while in the advertisements the focus was on "Policy Description and Evaluation" and the "Economic" impact frame. Hypothesis 4, which claims that the same frames dominate the debate about the Responsible

Business Initiative on Twitter and in the political advertisements, can therefore not be confirmed.

In fact, the actors seem to have adapted their messages much more to the audience and the channel-specific debates. The reason for these differences in framing could therefore be that events and topics on Twitter are exposed to direct interaction with the public and thus blend with the interests of the Twitter community (Maireder and Ausserhofer, 2014, 2). Especially the counter-proposal as an alternative to the initiative as well as criticism of the design of the latter was much more represented in the ads than on Twitter. On the other hand, Swiss culture was emphasized much more frequently on Twitter by both the supporters, in the form of the argument that Switzerland and Swiss companies should fulfill their responsibility and play a pioneering role, and the opponents, who argued that decency is already a reality in Swiss corporate culture. However, whether this difference in the use of frames on the two channels is due to the characteristics of the debate and/or the professionalization of the campaign remains so far unresolved and could be the subject of future research.

8 Limitations

This study has a number of limitations. A first limitation concerns the external validity of the study. The extent to which the results can be attributed to the unique case of the Responsible Business Initiative remains to be seen, while the extent to which this can be generalized to public debates beyond Twitter is a topic for future research. Likewise, because the analysis was only conducted in the context of a single campaign, it is not possible to say whether the results can be generalized across time and geography. Thus, further comparative research on the political discourse in social media is needed to investigate which national, political, media, and issue-specific characteristics lead to which discursive patterns in social media.

A second limitation concerns the analysis of frames. In order to have a direct comparability of the frame usage on Twitter and in traditional media - independent of the mediation - the analysis was limited to advertisements. The results give first indications of the different possibilities and limitations Twitter has in political campaigning and how these are used strategically. However, it remains unclear what role mediated contributions in traditional media play for online campaigning. This is especially true because Twitter and traditional media mutually influence each other. Future studies will therefore have to clarify the extent to which Twitter users strategically place frames that are picked up by the media and vice versa. In

addition, the focus was placed on the content frames, as these are more important in voting campaigns. However, in the case of the campaign around the Responsible Business Initiative, towards the end of the campaign there were also discussions about the campaign itself and about the close outcome. The inclusion of contest frames would therefore be of interest for future research, especially with regard to the seemingly increasing professionalization of political campaigns.

A third limitation is the restriction of the analysis to German-speaking regions. Tweets from the German-speaking region accounted for 95% of the collected tweets, thus this approach was considered justified (see section 4.1). Nevertheless, there were language-regional differences in both the coverage of the campaign in the traditional media and the support for the initiative (fög, 2020a). The results are therefore only valid for the German-speaking region. However, future analyses which focus on the language-regional differences could provide further exciting insights into Twitter usage during voting campaigns.

Conclusion

On November 29, 2020, the vote on the Initiative for Responsible Business took place in Switzerland. The aim of the initiative was to extend liability for international human rights violations and environmental damage caused by large Swiss companies and the companies they control abroad. Although 50.7% of Swiss voters supported the bill, the initiative failed to pass in a majority of cantons. The Responsible Business Initiative was the first initiative to seriously challenge local economic interests from a global perspective and with ethical arguments. It is a particularly interesting case for the analysis of the debate in social media, as a very heated and controversial debate took place with unusual divisions between the camps.

This paper builds on the results of previous research and in particular on the findings about the political debate on the Swiss Nuclear Withdrawal Initiative of Arlt et al. (2019) and examines the Twitter debate in the context of the Responsible Business Initiative in Switzerland. The aim of this work was to investigate how the Twitter communication around the initiative was structured and to what extent it polarized or facilitated discussions between different camps. To this end, the Twitter communities that participated in debates around the initiative on Twitter were identified and characterized. The frequency and content with which these communities talked about the issue was examined, and the interactions within and between these communities were also analyzed to see how polarized or connected the debate was. Furthermore the Twitter debate was compared with the debate in traditional media in terms of output and the use of frames.

This study complements previous research in several ways: On the one hand, previous scholarship has not yet been able to assess whether the potential of social media to facilitate more pluralistic political debates is being exploited or whether

Twitter communication is more likely to take place between political like-minded people. Likewise, this work contributes to previous research in which the use of Twitter in Swiss voting debates has been little studied. Previous studies on political debates on Twitter have mainly focused on the English-speaking world and the United States in particular. Thus, research in the United States has focused on a highly polarized country with a two-party system. However, this structural and sociocultural polarization can be expected to influence debates on social media, so the results of the studies are not necessarily transferable to other countries. Finally, there is still little to no research that systematically compares the use of online and offline media during a voting campaign and, in particular, that examines the different framing strategies of the actors across the various channels. However, by including the diverse spectrum of interest groups and political positions during voting, it can be expected that social media offer a debate structure that differs from traditional media.

Using Twitter data from over 5800 users which were active in the debate on the Responsible Buisness Initiative, seven distinct communities were identified that differed in terms of their size, position, and contribution to the debate. The most dominant communities in the debate were the Green-Left, Mainstream and Conservative community. In addition, the results show that communities that support the initiative and those that oppose it, differ in terms of the wording in their tweets. Finally, active exchanges both within and between communities were found, indicating a more pluralistic and internally networked debate. Thus, the results clearly differ from those of previous studies on political debates in social media, which identified pronounced echo chambers.

The Twitter debate was also compared with the debate in traditional media in terms of output and the use of frames. The high interdependence between Twitter and the media results in the activity following the same logic, even when the contribution in traditional media show unusual patterns over time, as it was the case with the present initiative. In terms of actor structures, it was shown that Twitter does indeed give a voice to marginalized communities, with the mainstream community, representing the civil society actors, achieving significantly more resonance on Twitter than in the media posts. Furthermore, individuals representing a position opposite to their community also seem get more attention on social media. With regard to the use of frames, the formulated hypothesis that the same frames are used on Twitter and in the newspaper advertisements could not be confirmed. Rather, the actors seem to adapt their messages to the audience and the channel-specific debates. Overall, it can therefore be said that, despite the strong interdependence between Twitter and the traditional media, there are pronounced differences in terms of actor structures and content.

Overall, compared to other social media platforms, Twitter offers good conditions for deliberative discourse with its open concept, in which messages can be seen by everyone and interactions with all users are possible. In fact, the present work was able to demonstrate a pluralistic and active exchange between communities and thus also between actors with different positions. Likewise, Twitter creates new opportunities for marginalized actors to disseminate their views and thus brings new opinions into the debate. Finally, the debate on Twitter also differs in terms of the frames that are placed by the actors, which can also bring new aspects to the discussion. However, it should also be noted that both previous research and the present work show that the results are highly context-dependent and that the specific setting must therefore be taken into account, especially in the case of votes with unusual positioning of actors.

For further studies of Twitter debates - especially in the context of voting - it would be interesting to investigate how the debate is conducted on Twitter. The question of how the tonality and the quality of the debate on Twitter is manifested remains so far unanswered. Are arguments actually exchanged and discussed, or is the majority of tweets commentary? Likewise, a comparative analysis of votes in Switzerland would be very interesting.

Appendices



 ${\bf Table~A.1:}~{\bf Frames,~corresponding~unigrams~and~assigned~arguments$

Issue	Description	Corresponding unigrams	Assigned Arguments
Economic	The costs, benefits, or monetary/financial impact of the initiative.	prämien, kmu, unternehmen, steuern, wirtschaft, kosten, beschäftigung, arbeit, arbeitslos, markt, ausgaben, milliarden, millionen, geld, firma, unternehmen, finanzierung, regulierung, leistungen, arbeitsplätze, wirtschaftsstandort, entwicklung	Initiative is a threat to the economy Initiative is bad for developing countries Initiative protects SMEs Initiative is an SME trap
Capacity & Resources	The lack or availability of physical, geographic, space, personnel, and financial resources or the capacity of existing systems and resources to implement or carry out the initiative.	ressourcen, wohnen, infrastruktur, national, anbieten, bereitstellen, mittel, finanzierung, natürlich, durchsetzung, kapazität, aufwand, kosten, teuer, mehraufwand, bürokratie	Initiative leads to more bureaucracy Initiative includes a shift in the burden of proof, which is costly for companies
Morality & Ethics	Any perspective, objective, or action of initiative compelled by religious doctrine or interpretation, duty, honor, righteousness, or other sense of ethics or social responsibility.	moralisch, religionen, religiös, ehrenhaft, verantwortlich, verantwortung, illegal, schützen, götter, heilig, islam, muslim, christ, radikal, gewalt, opfer, kirche	Initiative is a matter of course Corporations should take responsibility Initiative leads to enforcement of environmental standards Open letter to the churches Swiss companies are already decent
Fairness & Equality	Equality or inequality with which laws, penalties, rewards, and resources are applied or distributed to individuals or groups. Also, the balance between the rights or interests of one person or group compared to another.	fairness, gleichheit, ungleichheit, gesetze, rechte, rasse, geschlecht, klasse, zugang, arm, bürgerlich, gerechtigkeit, sozial, frauen, lgbt, lgbtq, diskriminierung, entscheidungen	Initiative leads to compliance with human rights Initiative leads to enforcement of environmental standards

 $\textbf{Table A.1:} \ \ \textbf{Frames, corresponding unigrams and assigned arguments} \ \ (continued)$

Issue	Description	Corresponding unigrams	Assigned Arguments
Legality, Constitu- tionality & Jurisdiction	The limitations or freedoms granted to individuals, governments, and corporations by the Constitution, or judicial interpretation, or other rights. This is specifically about the power of government to regulate and the power of individuals/businesses to act independently of government.	rechte, gesetze, exekutive, urteil, verfassungsmässig, amnestie, entscheidungen, reproduktiv, legal, legalität, gericht, einwanderung, änderungen, richter, autorität, präzedenzfall, gesetzgebung, beweise, beweislast, beweislastumkehr, widersprechen, gesetz, menschenrecht, knebelvertrag, knebelverträge, erpressung, haftungsrisiko, generalverdacht, paralleljustiz, klagen, klageindustrie, wortlaut	Initiative leads to compliance with human rights Wording of the initiative and statements of the initiators contradict each other Initiative leads to enforcement of environmental standards Clear rules are necessary, voluntary action is not enough Initiative includes a shift in the burden of proof, which is costly for companies Initiative makes Switzerland the world police Initiative turns Switzerland into foreign judges
Cultural Identity	The social norms, trends, values, and customs that make up the culture(s) as they relate to a particular political issue.	identität, sozial, werte, konservativ, liberal, nation, schweiz, schweizerinnen, schweizer, gemeinschaft, gemeinschaften, land, träumer, einwanderer, flüchtlinge, geschichte, historisch, generalverdacht, anständig	Swiss companies are already decent
Policy Description, Prescription & Evaluation	Specific measures proposed to address an identified problem, and finding out if specific measures work or if existing measures are effective	politik, fixieren, funktioniert, arbeiten, vorgeschlagen, vorschlagen, vorlage, lösung, lösen, ergebnisse, rechnung, gesetz, änderung, plan, unterstützen, aufheben, reform, extrem, kontraproduktiv, experiment, dominoeffekt, konstruktionsfehler, falsch, widersprechen, schaden, unmöglich	Initiative goes too far, it's the wrong way to go Wording of the initiative and statements of the initiators contradict each other The counterproposal is better, initiative goes too far
External Regulation and Reputation	Influences on Switzerland's foreign relations with another nation or relations between groups.	regulierung, schweiz, beziehungen, international, national, handel, aussen, staat, grenze, visum, verbündeter, verbündete, vereinigt, flüchtlinge, führung, themen, europa, isoliert, weltpolizei, alleingang, paralleljustiz, erpressbar, überwachen, souveränität, souverän	Initiative makes Switzerland meet international developments Initiative turns Switzerland into foreign judges Initiative is a solo effort of Switzerland Initiative makes Switzerland the world police Initiative is bad for developing countries
Personal Sympathy & Support/ Opposition	General approval or rejection of the initiative.	ja, pro, nein, contra, für, gegen, unterstützen, sinnlos	Yes-parole, No-parole

B

Appendix II

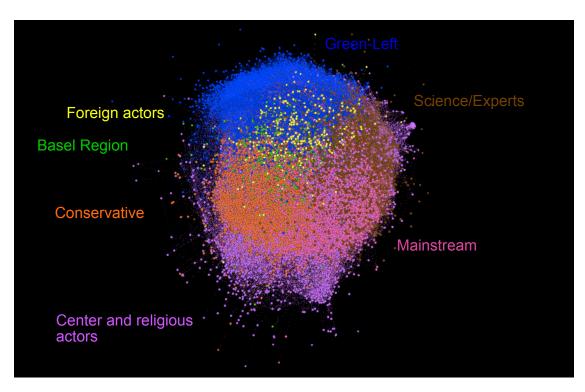


Figure B.1: With k-core decomposition filtered follower network, visualized with force atlas 2

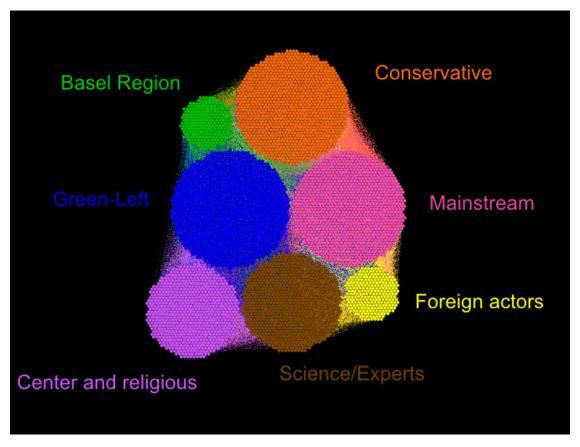


Figure B.2: With k-core decomposition filtered follower network, visualized with circle pack layout

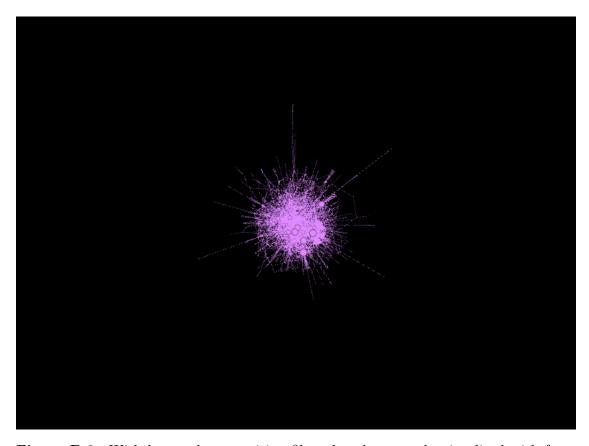


Figure B.3: With k-core decomposition filtered reply network, visualized with force atlas

Center and religious actors

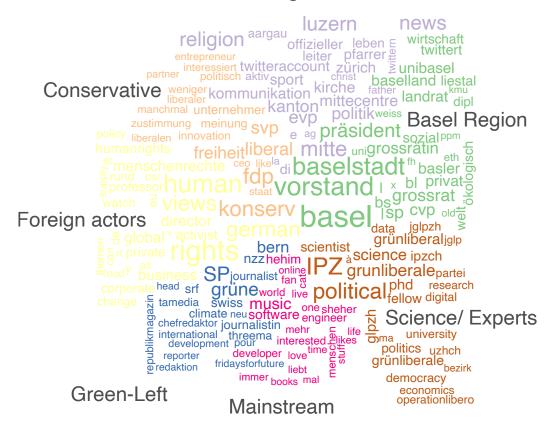


Figure B.4: Most common words in the Twitter description text by community

Table B.1: Frequency a word in the description text by community

Community / Word	wirtschaft*	scientist	relig*	germany	bdp	cvp	fdp	glp	sp	svp
Basel Region	14	1	0	0	1	7	5	0	8	4
Center and religious actors	8	0	10	0	2	13	0	2	1	1
Conservative	41	0	4	0	1	6	42	2	2	31
Foreign actors	15	3	1	4	0	0	0	0	1	0
Green-Left	30	10	7	2	1	0	3	2	33	1
Mainstream	5	7	3	0	0	1	0	3	10	2
Science/ Experts	14	12	1	0	0	1	1	34	5	3

Table B.2: Assignment of the actors to the communitiesy

Community	Assigned actors	Resonance
Conservative	Economy / Business,	34%
	FDP, Business	
	associations, SVP,	
	Opponents	
Center and religious	Religious actors, CVP,	21%
actors	BDP	
Science/ Experts	Science/Experts, Green	21%
	Liberals	
Mainstream	Civil society, Supporters	16%
Green-Left	SP	7%
Foreign actors	Actors abroad	1%
Basel Region	-	_

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