Hollowing democracy? From dialogue to cracked society in Poland

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Introduction

Public access to accurate and reliable information is fundamental to democracy and democratic decision-making. In conditions of uncertainty and imperfect information (during political crisis for example), people might seek for information from different sources in order to heighten their knowledge and understanding of the current situation being debated within the society, as well as having an impact on state institution, which is necessary for the foundations of a functioning democratic system. The 2015 Polish election has brought many changes to the party system, but also to style of politics that has been conducted by the governing majority. The various reforms introduced by the Law and Justice political party in an attempt to considerably change the media and judiciary systems have resulted in the mobilization of many who opposed the reforms. This has led to a growing polarization of society and the strengthening of divisions between those supporting and being against the government.

The judiciary reforms proposal from July 2017 have constituted to the accumulation of tense situations; being criticized by opposing parties, non-governmental organizations and major international organizations for undermining the principles of democracy. It has resulted in the mass mobilization of society with prolonged protests organized at over 250 places in front of the Polish courts in order to pressure the president to veto them. It has been successful only to some extent, since under civic pressure, the President Andrzej Duda vetoed two of three proposed reforms.

Social media played a key role in these events, serving as a source of information, but also in mobilization. The interest in social media and its impact on the nature of communication during political crisis has been researched from different angles: its usage by the activists of different movements, its content or its mobilization potential. So far, less attention has been paid to patterns of information brought up through social media during times of crises.

This article, using the example of the Polish political crisis in June 2017, attempts to explore these issues, analysing the behaviour of social media users seeking information on the Facebook pages of media and political organisations.

Poland after election of 2015 – towards deeper polarization?

The recent developments in Poland's election, call for an explanation to set the scene for further analysis of the citizens protest over judiciary reform and the social media consumption patterns during that period.

The 2015 Polish parliamentary election revealed new dynamics in the Polish party system. The right-wing Law and Justice party (PiS) became the first party since 1989 to secure

an absolute majority of seats in the lower house of parliament and the first party to form a single party government. Poland's path from a one-party state to a pluralistic democracy was marked by the establishment of new democratic institutions, the holding of regular elections and the creation of fair political competition which later followed by the accession to the European Union. However, the public debate over the stage of Polish democracy in the last decade has suggested a constant crisis, characterized by state institutions not working as planned, and citizens' increasing lack of trust towards politicians and decreasing involvement in democratic procedures. Somewhat paradoxically, at the same time Poles have constantly declared support for the democratic form of the government and remained one of the most enthusiastic nations about the further deepening of integration within the EU.

The election result has largely confirmed the presence of a division that has been emerging over the course of the last decade between two equal conservative-populist and centrist-liberal camps. Usually political polarization as a process of political opinions diverging toward extremes leads to a reduction in dialogue between people of different political views and decreases the chance of political compromise between them. The institutional reforms introduced by the new PiS government has pushed the societal polarisation even further, but has also mobilized many to oppose the government in protest types of civic participation. One of the main initiators of the civic protests was the committee "Defence of Democracy" (KOD, established in 2016). To add to this, certain spontaneously organised protests focused against controversial projects introduced by the government (for example, the Black Protest against the planned changes in the abortion law) are offered as a proof of civic engagement against the civic apathy hypothesis.

The position of Constitutional Tribunal and Supreme Court was compromised by a series of legislative acts that undermined their independence. As a result, the European Commission launched a procedure under Article 7 of Treaty on European Union against Poland. The public mass media legal framework was changed and consequent takeover of state radio and TV ensued. In Freedom of the Press 2017, Poland is no longer classified as "free", but "partly free". All this transformation of judiciary and media system could have caused strengthening the trust in particular news channels and as a result, became more linked to political views.

Theoretical perspective: hollowing democracy and social media

It is widely accepted that liberal democratic systems are dependent upon various forms of dialogue - between political parties, between different social groups and between the ruling and

the ruled. What it separates from other systems is the principle and practice of solving differences first and foremost through dialogue. Dialogue must be understood in this place as a process of the democratic institutional environment that seeks to transform conflictive relationships and enhance governance. It is based on mutual respect and enables the actors of the political system institution and society to listen to and learn from each other, all issues aside. In this case, it may also offer the possibility of improving and transforming relations between the actors. The lack of dialogue between political parties and competing views can be reflected upon the society level and therefore could deepen the social polarization, making the democracy hollowed in relation to the crucial values of dialogue; therefore mutual understanding and respect.

The development of the Web 2.0 politics provided users with platforms for meaningful discussion and debates on political issues with both, like-minded people and those of rival orientations. With its tools, it endows the potential to generate an impactful expansion of the public sphere and political engagement, which can result in the reinvigoration and transformation of contemporary democratic processes. For Habermas (2008), the public sphere is a space of critical and rational debates, in which citizens form a public group debate about community issues. Habermas emphasizes the role of 'communication rationality' in the consolidation of the public sphere. Free and independent media especially desire to contribute in the creation of such a public sphere.

The complex contemporary media ecosystem where the boundaries between traditional and internet media are blurred (internet versions of newspapers poses many methodological challenges to research of social media consumption patterns. Most scholars agree that civic participation is crucial for the health and future of democracy, and that social media can at least in theory play a major role in increasing and widening this participation (de Zuniga, Molyneux, & Zheng, 2014; Dimitrova, Shehata, Stromback, & Nord, 2014). In terms of distributing information, unlike traditional media, social media enable the free or inexpensive dissemination of user selected and/or created content across the various networks in real time. This affords users the opportunity to more easily bypass the content selection, distribution and censoring practices of governments, party officials, and the traditional media outlets.

If the information is mixed, such as in the situation of the political crisis when several points of view are presented in an adversarial manner, the subordination of public media to political parties may threaten such values as a result of openness, accountability of power and equality (Diamond & Morlino 2005). The recent studies has shown that much of the political discourse on social media tends to reinforce and accelerate the processes of political

polarization. This is because social media users tend to subscribe to news from sources that share their ideological perspectives, and that are unlikely to challenge their views in any significant way. However, Matthew Kushin and Kelin Kitchener(2009), have found that there is little evidence of widespread polarization on Facebook, or at least that Facebook in most instances, is not a causal factor in polarization. In their study they have shown that Facebook might potentially increase political tolerance and discourse precisely, because the people involved, already have personal relationships with one another that exist outside of a political context.

Individuals choose to participate in politics (or not) on the basis of costs and benefits of participating (Downs, 1957). From this perspective, one would hypothesize that social media usage is likely to affect political behaviour by changing the quality and/or quantity of information to which individual citizens are exposed. Studies demonstrate that users tend to engage with content that brings cognitive benefits, but does not require extensive cognitive effort. According to instrumental rationality and studies of Herbert Simon (1956), they make up decisions to have good enough results with minimum effort. In this case, they choose to be informed well enough (according to their expectations) without time-consuming reading through similar information.

Hypothesis 1-1. The users tend to like posts from as as little sources as possible.

Hypothesis 1-2. Political crisis is not a reason to change the liking patterns of users. The users tend to like posts published by the same number of sources as they do in non-crisis periods. The users do not have any reasons to follow more sources as the present ones meet the expectation. **Hypothesis 2.** Political crisis does not engage new users, as those engaged and interested in political information, have already been there before the crisis escalation. Therefore, the share of new users who liked posts concerning judiciary system reform is similar to the share of new users who liked posts not related to the reforms.

Hypothesis 3. The users tend to like information that confirms their beliefs and as a result, they form communities of like-minded individuals within exclusive or near-exclusive information environments. The political crisis does not change these preferences.

Data and methodology

Our database consists of 3,660,748 users who liked posts published on political or news media Facebook pages throughout 2017. The data were collected automatically via a Facebook Graph API. There are three types of pages selected to our study. Firstly, we included a page of "Committee for the Defence of Democracy" – civic organisation that cooperates with opposition parties and that was one of the organisers of the protests. Secondly, we selected pages of Polish political parties and movements that had a stable support in public opinion polls (above 1%) in 2017. We also included pages of their leaders, which sum up to 18 sites. Thirdly, we collected data from news media pages. We choose all media that was enumerated as influential in the ranking compiled by the "Institute of Media Monitoring" (IMM, 2017). However, we arranged a small change adding "Krytyka Polityczna's" page, which wasn't included in IMM's list, but it's an important and influential news source of the left-wing orientation (full list is in the Appendix). In total we have included into analysis 50 news media pages.

The original dataset was reduced in order to eliminate potentially problematic users as some Facebook users are not very active in terms of liking posts. Thus, it is impossible to investigate their behaviour changes if they left a few likes compressed in time digital traces. Therefore, from the original database we filtered out only users who liked posts for more than one month (n=1 856 000).

The process of analysis followed several steps. Firstly, we reduced the number of variables in the model, as 18 political organisation Facebook pages and their leaders as well as the 50 media pages are too many to be studied in more comprehensive way. Therefore, in order to find out if there are any regularities among users who liked certain posts linked to media and political parties, we used a multilevel algorithm (Blondel, Guillaume, Lambiotte, & Lefebvre, 2008) to detect communities of users who have similar liking patterns. We chose it because of a relatively high accuracy of results and [it gives in large networks (our network has 1 856 000 vertices and 39 687 247 edges) and speed of computation (Yang, Algesheimer, & Tessone, 2016).

The algorithm detected 11 communities (see Table 1 in Appendix). It helped us to estimate which media content is liked by individuals who liked posts from political organisations and their leaders. Due to the analysis results we proposed the following classification:

- Centrist media their posts were liked by users who didn't like posts published by political organizations;
- Media preferred by government supporters their posts were liked by users who also liked posts published by government party, and prime ministers;
- 3. Media preferred by supporters of liberal opposition their posts were liked by users who also liked posts published by Civic Platform, Grzegorz Schetyna, Polish People's Party,

Władysław Kosiniak Kamysz, Modern Party, Ryszard Petru, Katarzyna Lubnauer, Democratic Left Alliance, Włodzimierz Czarzasty¹;

- 4. Media preferred by supporters of left-wing opposition their posts were liked by users who also liked posts published by Together Party;
- 5. Economically oriented media the cluster of media that identify themselves as economically oriented and published posts that were not liked by users who liked posts distributed by any political Facebook page.

Similarly, based on community detection results, we merged political organizations into four clusters:

- Right wing governing party their posts were liked by users who liked posts published by government party, Beata Szydło or Mateusz Morawiecki;
- Anti-establishment organizations users who liked posts published by Kukiz `15, Paweł Kukiz, Freedom Party or Janusz Korwin-Mikke;
- Liberal opposition users who liked posts published by Civic Platform, Grzegorz Schetyna, Polish People's Party, Władysław Kosiniak Kamysz, Modern Party, Ryszard Petru, Katarzyna Lubnauer, Democratic Left Alliance, Włodzimierz Czarzasty
- 4. Left wing opposition users who liked posts published by Together Party.

The cluster analysis was only a preliminary step to determine users' preferences. For each user within the news media and political cluster, we calculated individual preference score, using the following formulas:

Preferences of political cluster P_i = sum of posts liked in cluster P by i/Sum of all political posts liked by *i*;

Preferences of media cluster M_i = sum of posts liked in cluster M by i/Sum of all media posts liked by *i*,

where:

P – political cluster,

M – media cluster,

i-given user.

¹ The classification based on social perception of parties on ideological axis in Poland in 2015, see: Kwiatkowska, Cześnik, Żerkowska-Balas, & Stanley, 2016.

For example, if we take a user i, who liked 40 posts on Civic Platform page, 20 on Ryszard Petru page, 5 on Kukiz '15 page, 30 on Gazeta.pl page and 120 on Newsweek Polska. She or he liked in total 40+20+5=65 posts on political pages, which fit into two clusters. *Civic Platform* and *Ryszard Petru* are in a liberal opposition cluster, therefore preference for it is (40+20)/65=0,92. Kukiz'15 is in the anti-establishment cluster and the preference of the user for it is 5/65=0,08. The user did not like posts of other political parties or leaders, therefore her or his preferences for other clusters are 0, since 0/65=0. In case of media preferences, the user also liked posts from two different media clusters. Preference for centrist media (Gazeta.pl) is 30/(30+120) = 0.2, and preference for media preferred by liberal opposition (*Newsweek Polska*) is 120/(30+120)=0.8. The preferences for other clusters of media equal 0. In the example above, the preferences of media and political pages are easily distinguishable. However, it has not always been possible to identify which cluster of pages was preferred. If a user likes 20 posts of the Freedom Party (anti-establishment cluster) and 19 posts of Law and Justice, the preference for the latter one is 0.525 and for the last one is 0.475. The results are not drastically different. Therefore, we needed a criterium of relevance. Using the concept of ROPE (range of practical equivalence, Kruschke, 2014, s. 336–339) we assumed that results between 0.45 and 0.55 are rounded to 0.5, and only the results higher than 0.55 are considered as a preference of a given cluster of pages.

In the second step, we manually coded all 22,353 posts from July and August 2017 and selected those that have referred to judiciary reform (1,119). Then we selected users who had liked posts before the topic of reform appeared, users who liked posts concerning the reform, users who liked posts not related to the reform but in a time when it was discussed $(1^{st} July 2017 - 9^{th} August 2017)$ and lastly users who liked posts after the period, whilst the reform was discussed. These allowed us to make appropriate comparisons and test our hypotheses. To answer our research question as well as test the hypothesis, the statistical analysis was performed using the bayesian approach (references). All computations were done in R, and posteriors in bayesian models were calculated in the TeachBayes package.

Analysis and results

Since every user has a unique identification number we could trace what they liked before and in time of the Supreme Court reforms discussion. If this topic influences the media consumption patterns, there should be visible differences between those who (in time of topic duration) liked posts concerning the reforms, and those who do not. Therefore, in terms of hypothesis 1, we predicted that there are no differences in the number of pages from which posts are liked between users who liked posts before the reforms and concerning reforms, users who liked posts before the reforms but did not like posts concerning reforms, when they were discussed and users who liked posts after the topic appeared

A calculation involving the number of sources needs some assumptions. We argue that it may be misleading to count the total number of pages in a given year where users like posts. For example, a user could like 150 posts on page X yearly, and only one post on page Y. It would be an overestimation to claim that she used two sources of information. To reduce this problematic issue, we calculated for each user the number of sources they used monthly and then we calculated a mean of monthly sources used.

The data suggests that the average monthly number of sources from which users liked posts is close to 1. However, the distribution is right-skewed (see Fig. 1). The means for all users in 2017 is 1.37 and the median is 1. These results accord with hypothesis 1-1.

	Number of sou	rces				
	Users who liked posts before Supreme Court reform discussion	Users who liked posts from 1 st July 2017 to 9 th August 2017 and: liked posts did not like about posts about Supreme Supreme			All users who liked posts in 2017	
		Court reform	Court reform			
Minimum	1	1	1	1	1	
1 st quartile	1	1	1 1		1	
Median	1	1	1	1	1	
Mean	1.53	1.59	1.2	1.33	1.37	
3 rd quartile	1.67	2	1	1.33	1.5	
Maximum	24.73	21	11	27.6	21.67	
SD	1	1.16	0.49	0.8	0.75	

Table 1. The average monthly number of sources from which users like posts

Ν	1,729,481	366,526	586,699	1,231,674	1,856,000
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Further, we used the Bayesian approach to calculate the differences between the number of sources in the groups of users. For each pair we used the same prior for differences N(0,1), which means that we believe that there are no differences between the compared groups, but we are only moderately certain. Therefore the standard deviation is 1.

The analysis indicates that there are no differences between the compared groups of users. It means that the average monthly number of sources the users liked are rather constant .It either happened before, during (even taking into account users interested and not interested in it) or after the crisis. It has therefore confirmed the hypothesis that the crisis has not triggered the users to check with other sources of information as they remain trustful to the sources they were acquainted with. These findings support the hypothesis 1-2.

Compared groups of users (difference)	Median	99.9% HDI
Users who liked posts before Supreme Court reform discussion – Users who liked posts from 1 st July 2017 to 9 th August 2017 and liked posts about Supreme Court reform	-0.05	-1.68 – 1.51
Users who liked posts before Supreme Court reform discussion – Users who liked posts from 1 st July 2017 to 9 th August 2017 and did not like posts about Supreme Court reform	0.11	-1.18 – 1.58
Users who liked posts from 1 st July 2017 to 9 th August 2017 and liked posts about Supreme Court reform - Users who liked posts from 1 st July 2017 to 9 th August 2017 and did not like posts about Supreme Court reform	0.16	-1.39 – 1.65
Users who liked posts from 1 st July 2017 to 9 th August 2017 and liked posts about Supreme Court reform – Users after 9 th August 2017	0.09	-1.54 – 1.64
Users who liked posts from 1 st July 2017 to 9 th August 2017 and did not like posts about Supreme Court reform – Users after 9 th August 2017	-0.07	-1.43 – 1.22

Tab. 2. Differences between average monthly number of sources used by selected groups of users

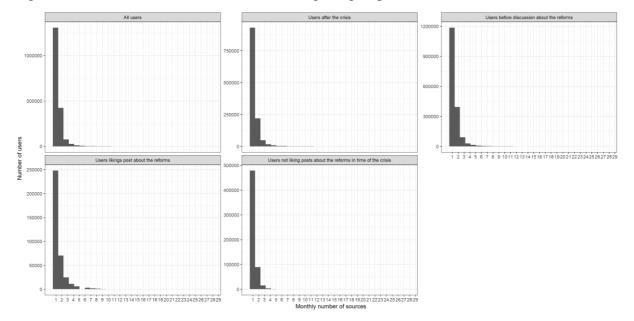


Fig 1. Distribution of number of sources among the groups of users

To test hypothesis H2 (*Political crisis does not engage new users*) we selected users who did not like any posts on political and media pages before the crisis and calculated the proportion of them in the group of users who liked the posts about the reform, as well as the group of users who didn't like any posts about it. In our bayesian model we used noninformative prior for proportion dbeta(1,1).

Users	Ν	Median	99,9 % HDI
New users	68641	7.2%	7.12%-7.29%
New users liking posts about the reforms	21008	5.73%	5.61%-5.88%
New users not liking posts about the reforms	47633	8.12%	8.00%-8.24%

Table 3. Proportion of new users among users liking posts during the political crisis

The results indicate clearly that the discussion about judiciary system reforms did not engage any new users. Interestingly, the data shows that the proportion of those who started to like the posts on the judiciary reform was significantly lower than proportion of those users who appeared and were not interested in the reforms. It only shows that even at the peak of conflict over the independence of judiciary - which started much earlier than the changes that took place in the Constitutional Court - the pool of users interested in the topic remained rather unchanged.

To test our third hypothesis, we separately investigated the shifts of users on media and political pages. We compared the odds of having stable media page choices (in-cluster stability) between those who liked and didn't like the posts about the judiciary system reforms. Liking posts concerning judiciary system reforms reduces the odds ratios of not changing media sources by 62%. Thus, users who liked posts were more likely to change their media pages preferences. Such results may appear as the opposite to what is stated in our hypothesis. However, there are certain details that need to be discussed.

The users who didn't like media pages before the crisis, did not have media preferences, liked posts on media pages preferred by centrist opposition and got engaged in the discussion about the reforms were more likely not to like posts from other media pages . They were used to compare the respective users who were not engaged in this discussion. It means that being interested in the reform topic solidifies the patterns in which posts from media pages are not liked (such users like reform relevant posts from political pages), but also choices of media associated with centrist opposition and users who liked posts from diversified clusters of media pages.

In comparison to users who didn't like posts about the reforms, those who did were less stable in their choices, if they liked previously pro-government media, centrist media, media preferred by leftist opposition and economic media.

Table 4. Odds ratios of having stable liking patterns on media pages by users who liked like posts about judiciary reform in comparison to those who didn't. Dependent variable: Stability of choices = 1

Independent variables

Odds ratios 99.9% HDI

Users who preferred following media groups before the crisis

Lik	Progov media	0,147	0.141-0.152
ing	Not using media	2,549	2.437-2.668
pos ts	No media preferences	1,279	1.192-1.374
abo	Media preferred by leftist opposition	0,797	0.774-0.82
ut jud	Media preferred by centrist opposition	1,774	1.653-1.9
icia	Economic media	0,019	0.008-0.033
ry			
sys			
te			
m			
ref			
or			
ms			
Х	Centrist media	0,189	0.186-0.193
Liking p	osts about judiciary system reforms	0,383	0.379-0.387

The users who liked posts about the reforms were also less stable in their choices of political pages. However, there were important differences between political groups of users. Only politically unengaged users before the crisis, who liked posts about the crisis, have odds ratios lower than one, in comparison to their peers who did not like posts about the crisis. It means that reacting to the posts is associated with the higher probability of liking posts published by at least one political page. In other cases, users who liked political pages and posts about the reforms are always more likely to stay with their previous pages selection in comparison to the users who also liked political pages before the crisis, but did not like posts about the judiciary system. In other words, it supports the hypothesis that crisis strengthen the previous selection of sources and make so far political y unengaged users politically biased (in terms of liking posts from one side of political spectrum). It's noteworthy that the same pattern is – in accordance with our model – visible for users who liked posts from pages that cross political lines. Thus, those who used diversified political sources before the crisis were also more likely

to use them if they like posts discussing the reforms (in comparison to part of them who did not do it).

Table 5. Odds ratios of having stable liking patterns on political pages by users who liked like posts about judiciary reform in comparison to those who didn't. Dependent variable: Stability of choices = 1

Independ	ent variables	Odds ratios	99.9% HDI
Users wh crisis	no preferred following political groups before the	-	-
Lik	Without political preferences	2,087	1.453-2.984
ing pos	Progovernment	5,294	5.004-5.602
ts	Politically unengaged	0,223	0.217-0.228
abo	Antigovernment_Leftist	1,686	1.57-1.827
ut jud	Antigovernment_Centrist	5,413	5.246-5.576
icia			
ry			
sys			
te		1,392	1.359-1.425
m ref		1,372	1.557-1.425
or			
ms			
х	Antiestablishment		
Liking po	osts about judiciary system reforms	0,725	0.716-0.735

Discussion

There are two levels that should be discussed in this place relating to the political crisis as a potential of attracting new users seeking for the information and therefore showing their

engagement through liking and the changing of media and political preferences i.e starting to like pages of other political organizations or media.

The political crisis did not show that social media might be a source of information and therefore had a more democratizing effect on the patterns for the media/information consumption patterns. Only few have searched for the information in new sources different from their usual pattern. One may ask the question on the basis of the mobilizing effect of social media (Orange revolution in Ukraine, Arab spring etc.), why the important events of political nature did not attract the attention of new users. The answer can be laid in the viciousness circle and the rule that ,,the rich get richer" and therefore not polarized. The answers can also lay in the apathy of Polish society and only small group being constantly mobilized and interested in politics. Accordingly it can have a link with political knowledge which has been proved to be a function in searching for political news and therefore engagement through liking (Norris, 2003; Stroud, 2011)

Our analysis has shown that political crisis is changing the media preferences rather than politics itself. The observation that media preferences tend to petrify the centre, the objective and those who do not like media. It could be a consequence of those, who showed their preferences for the economic, more governmental or left-leaning media, and have looked for other media sources in contrast to those who have not been informed too often about the judiciary reform and protests taking place at all.

Most users interested in judiciary reform came most visibly from the groups liking the governing party and liberal opposition. This reflects the major division in the real politics where both of this group, as the polarization line also cuts across this two groups. It can therefore explain that the activity of these groups, and also show the major dividing factor within the modern Polish society.

Komitet Obrony Demokracji		69.59
Prawo i Sprawiedliwość -	50.6	в
Razem -	45.61	
Grzegorz Schetyna -	44.44	
Platforma Obywatelska -	44.33	
Nowoczesna -	42.86	
Ryszard Petru -	38.89	
Barbara Nowacka	37.5	
Władysław Kosiniak-Kamysz -	33.33 32.43	
Prawo co dnia Rzeczpospolita		
gazetaprawna.pl - Polskie Stronnictwo Ludowe -	29.58	
Foiskie Stronnictwo Ludowe - Kukiz '15 -	27.27 26.29	
Gazeta Wyborcza	25.09	
Paweł Kukiz -	23.09	
Włodzimierz Czarzasty -	23.08	
Salon24.pl	23.08	
Newsweek Polska	21.11	
Beata Szydło	20	
Onet Wiadomości	19.69	
Sojusz Lewicy Demokratycznej	19.46	
Polityka -	18.73	
Interia Fakty -	18.4	
Krytyka Polityczna -	18.08	
WIDEO natemat.pl	17.54	
dziennik.pl	17.5	
Gazeta Polska -	15.85	
Marian Kowalski -	13.88	
Dziennik Wschodni -	13.19	
Radio TOK FM -	12.93	
Gazeta.pl -	12.86	
polsatnews.pl	12.56	
Nasz Dziennik -	11.81	
DoRzeczy -	9.38	
ASZdziennik.pl -	7.32	
Gość Niedzielny -	7.31	
Bankier.pl -	6.15	
Forsal.pl -	5.06	
RMF24.pl	4.76	
Tygodnik Sieci -	4.73	
Narodowcy RP -	4.35	
Tygodnik Lisickiego -	3.5	
WPROST -	3.03	
TVN24 -	2.27	
Tygodnik NIE -	2	
FAKT24.pl	1.86	
Telewizja Republika -	1.81	
tvp.info -	1.61	
Gazeta Giełdy i Inwestorów Parkiet -	1.28	
Puls Biznesu -	1.16	
Partia Wolność -	1.11	
Tygodnik Powszechny -	0.47	
wPolityce.pl -	0	
wGospodarce.pl -	0	
Uważam Rze -	0	
Tygodnik Solidarność -	0	
se.pl -	0	
Rzeczpospolita Ekonomia&Rynek	0	
Natemat.pl -	0	
Money.pl -	0	
Janusz Korwin-Mikke -	0	
INN Poland -	0	
Gazeta Bankowa -	0	
Forbes.pl -	0	
	0 20 40	60

Share of content dedicated to Supreme Court Reform

Appendix

Table 1.

	Туре	Names	Clus ter num ber	Frequ ency	Proport ion	Classification
1	Media	Onet Wiadomości	1	3719 39	20,04	Centrist media
2	Media	WP Wiadomości	1	3719 39	20,04	Centrist media
3	Media	RMF24.pl	1	3719 39	20,04	Centrist media
4	Media	FAKT24.pl	1	3719 39	20,04	Centrist media
5	Media	TVN24	1	3719 39	20,04	Centrist media
6	Media	se.pl	1	3719 39	20,04	Centrist media
7	Media	Interia Fakty	1	3719 39	20,04	Centrist media
8	Media	Gazeta.pl	2	1246 15	6,71	Centrist media
9	Media	WIDEO natemat.pl	2	1246 15	6,71	Centrist media
1 0	Media	WPROST	3	3373 4	1,82	Centrist media
1 1	Media	polsatnews.pl	4	4026 3	2,17	Centrist media
1 2	Media	Polsat News Dwa	4	4026 3	2,17	Centrist media
1 3	Media	Natemat.pl	5	4687 7	2,53	Centrist media
1 4	Media	INN Poland	5	4687 7	2,53	Centrist media
3 1	Media	Dziennik Wschodni	6	2269 3	1,22	Centrist media
1 5	Political party	Platforma Obywatelska	7	2502 82	13,48	Centrist opposition

1 6	Media	Newsweek Polska	7	2502 82	13,48	Media associated with centrist opposition
1 7	Political party	Polskie Stronnictwo Ludowe	7	2502 82	13,48	Centrist opposition
1 8	Political party	Nowoczesna	7	2502 82	13,48	Centrist opposition
1 9	Political leader	Ryszard Petru	7	2502 82	13,48	Centrist opposition
2 0	Political leader	Władysław Kosiniak- Kamysz	7	2502 82	13,48	Centrist opposition
2 1	Political leader	Grzegorz Schetyna	7	2502 82	13,48	Centrist opposition
2 2	Civic organisation	Komitet Obrony Demokracji	7	2502 82	13,48	Centrist opposition
2 3	Political party	Sojusz Lewicy Demokratycznej	7	2502 82	13,48	Centrist opposition
2 4	Political leader	Katarzyna Lubnauer	7	2502 82	13,48	Centrist opposition
2 5	Media	dziennik.pl	7	2502 82	13,48	Media associated with centrist opposition
2 6	Political leader	Włodzimierz Czarzasty	7	2502 82	13,48	Centrist opposition
2 7	Political organisation	Kukiz '15	8	2807 49	15,13	Anti-establishment organisation
2 8	Political leader	Janusz Korwin-Mikke	8	2807 49	15,13	Anti-establishment organisation
2 9	Political leader	Paweł Kukiz	8	2807 49	15,13	Anti-establishment organisation
3 0	Political party	Partia Wolność	8	2807 49	15,13	Anti-establishment organisation
3 2	Media	wPolityce.pl	9	2932 29	15,8	Media associated with government party
3 3	Political party	Prawo i Sprawiedliwość	9	2932 29	15,8	Government party
3 4	Media	Niezalezna.pl	9	2932 29	15,8	Media associated with government party
3 5	Prime Minister	Premier Mateusz Morawiecki	9	2932 29	15,8	Government party

3 6	Media	Gość Niedzielny	9	2932 29	15,8	Media associated with government party
3 7	Media	tvp.info	9	2932 29	15,8	Media associated with government party
	Former					
3	Prime			2932		
8	Minister	Beata Szydło	9	29	15,8	Government party
3 9	Media	Tygodnik Sieci	9	2932 29	15,8	Media associated with government party
4	Wiedła	i ygodnik sieel	5	2932	10,0	Media associated with
4 0	Media	Tygodnik Lisickiego	9	2932	15,8	government party
4				2932		Media associated with
1	Media	Telewizja Republika	9	29	15,8	government party
4				2932		Media associated with
2	Media	Gazeta Polska	9	29	15,8	government party
4 3	Media	Tugodnik Solidornoćć	9	2932 29	1 - 0	Media associated with
	Meula	Tygodnik Solidarność	9		15,6	government party
4 4	Media	wGospodarce.pl	9	2932 29	15,8	Media associated with government party
4				2932		Media associated with
5	Media	Radio Maryja	9	29	15,8	government party
4				2932		Media associated with
6	Media	Nasz Dziennik	9	29	15,8	government party
4				2932		Media associated with
7	Media	Salon24.pl	9	29	15,8	government party
4 8	Media	DoRzeczy	9	2932 29	15.8	Media associated with government party
4	media	Doniecty	5	2932	10)0	Media associated with
4 9	Media	Uważam Rze	9	2932	15,8	government party
5				2932		Media associated with
0	Media	TV Trwam	9	29	15,8	government party
5				2932		Media associated with
1	Media	Gazeta Bankowa	9	29	15,8	government party
5	Madia	Manayal	10	7889	4 25	
2	Media	Money.pl	10	8	4,25	Economically oriented media
5 3	Media	Bankier.pl	10	7889 8	4.25	Economically oriented media
5		- 1		7889	,	,
4	Media	Forbes.pl	10	8	4,25	Economically oriented media

5 5	Media	Gazeta Giełdy i Inwestorów Parkiet	10	7889 8	4,25	Economically oriented media
5 6	Media	Puls Biznesu	10	7889 8	4,25	Economically oriented media
5 7	Media	Forsal.pl	10	7889 8	4,25	Economically oriented media
5 8	Media	Rzeczpospolita Ekonomia&Rynek	10	7889 8	4,25	Economically oriented media
5 9	Media	ASZdziennik.pl	11	3127 89	16,85	Media associated with leftist opposition
6 0	Political party	Razem	11	3127 89	16,85	Leftist opposition
6 1	Media	Tygodnik NIE	11	3127 89	16,85	Media associated with leftist opposition
6 2	Media	Gazeta Wyborcza	11	3127 89	16,85	Media associated with leftist opposition
6 3	Media	Radio TOK FM	11	3127 89	16,85	Media associated with leftist opposition
6 4	Media	Tygodnik Powszechny	11	3127 89	16,85	Media associated with leftist opposition
6 5	Media	Polityka	11	3127 89	16,85	Media associated with leftist opposition
6 6	Media	Krytyka Polityczna	11	3127 89	16,85	Media associated with leftist opposition
6 7	Media	gazetaprawna.pl	11	3127 89	16,85	Media associated with leftist opposition
6 8	Media	Prawo co dnia Rzeczpospolita	11	3127 89	16,85	Media associated with leftist opposition