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Article

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Abstract
The study is based on data from a representative survey conducted in Hungary in 2020, which examined the public's consumption of political and public information. Using the survey data, the authors attempt to map the consumption patterns of the Hungarian audience, with a special focus on the relationship between party preferences and the consumption of the various news sources with different ideological backgrounds. The research aims to better understand the phenomenon of polarisation, which is increasingly observed on both the supply and demand sides of the Hungarian news media. The focus of the study is to examine news consumption patterns in Hungary and the relationship between political polarisation and news consumption. The authors analysed the prevalence of information bubbles in the Hungarian public sphere, where consumers are only exposed to the views of one political side without being confronted with information or opinions that differ. Particular attention is paid to a special category of the Hungarian media system, the grey-zone media; they might seem to contribute greatly to the pluralism of the media system, but they are, in fact, strongly politically dependent. In addition to the identified news consumption patterns, the study aims to shed light on the importance and problematic nature of this grey-zone media category and to reveal how deeply the Hungarian public is actually dependent on the government.

Keywords
Hungarian media; information bubble; media classification; news consumption; polarisation

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1. Introduction

Media diversity is not just about the quantity and quality of media content available on the media market. Diversity pluralism has ultimately become one of the most important guiding principles for thinking about the media because behind this thinking lies a vision of an informed citizen, aware of the facts of public life, able to weigh up different points of view, and involved in democratic dialogue and decision-making. Obviously, without a diversity of offerings, this vision cannot be achieved, but a diversity of offerings alone does not make an informed citizen. This is why research on the audi-ence's news consumption habits is becoming increasingly important in the study of pluralism.

Thinking about the media, especially the normative approach to media, often starts from the assumption that there is a direct link between the structure of the media and the supply of media (Barendt, 2007). In media regulation, ownership restrictions and conflicts of interest, the regulation of various aspects of media concentration, and expectations of transparency in media ownership all start from the assumption that media structure can shape the diverse content it offers. Although analyses have emerged which have sought to refute or at least nuance this link (Ariño, 2004), media law in Europe and

even in the Euro-Atlantic countries continues to be based on the close and direct link between media structure and media content.

In Hungary, the dominant instrument of this media policy is the structural transformation of the media, which has been accompanied by the unilateral and, at the same time, intensive use of community resources (public money, radio broadcasting frequency, public information) in favour of the pro-government media. This makes the Hungarian media system a mature example of a media structure in which the news consumer has access to many media products and services, behind which there is an extremely concentrated media market and an even more concentrated information centre.

It is a peculiarity of the Hungarian media that strong political influence is not typically built up through administrative decisions such as censorship. Section 3 gives a brief overview of the developments in the media market over the last decade. In the case of the Hungarian media policy, structural changes have been specifically designed to provide the government and governing parties with the infrastructure to disseminate political messages effectively and to reach as many target groups of voters as possible.

The distorted Hungarian media system is clearly visible in news consumption habits (Section 4). We analyse the size and demographic characteristics of the audience reached by media classified as pro-government and non-pro-government along objective, structural lines. Particular attention is paid to the so-called grey-zone media, which are at the mercy of the government and play an important role in spreading an alternative narrative to that of the government. However, due to their ownership and funding, they may be closed down or have their content completely restructured overnight by the government or ruling parties.

In this article, we examine the research question of whether a polarised media system also creates a polarised audience. Using data from a representative survey in 2020, we analyse the role of pro-government, non-government, and grey-zone media in news consumption, and we determine which sociodemographic variables influence the choice of news sources. We will also examine how news consumers relate to media outlets categorised as being on the other political side, and how they evaluate the credibility of the information sources.

2. Distorted Market Structure and Polarised News Consumption: Literature Review

The structure-conduct-performance model (SCP model) used in economics, on the one hand, and the political parallelism that nowadays characterises the relations between media market players and political actors, on the other, provide a useful theoretical framework for understanding the media policy and media consumption situation in Hungary. Complementing these theoretical frameworks with the cognitive bias theories explaining

news consumers' behaviour, we provide a comprehensive theoretical explanation of the relationship between the biased media system and polarised news consumption, which is the focus of this article.

2.1. Applying the SCP Model to the Media System

The SCP model describes the relationship between the market environment and the structural conditions of the market. These directly affect the behaviour of market participants, which in turn determine the market's overall performance. The model was first described by Chamberlin (1933) and Robinson (1934) and was further developed by Mason (1939) and Bain (1959). The model describes the market structure by indicators such as the number of sellers, degree of product differentiation, cost structure, and degree of vertical integration. The behaviour of market participants is embodied in their business decisions and strategies, as indicated by factors such as price, quality, research and development, investment, and advertising.

McQuail (2003) applied the model to the media system, aiming to show at which points the state can intervene in the functioning of the media system to achieve its media policy objectives. In McQuail's (2003, p. 100) analysis, "structure refers to the media system, conduct to what media organisations do, and performance to content and consequences." It follows from the SCP model that public interventions that distort the structure of the market (such as measures to support media concentration, decisions to make entry more difficult, or the use of public financial support to increase the market power of certain actors) have conduct-related consequences, including the loss of editorial independence, unequal access to information, and the subordination of ethical standards to political standards. All this leads to poorer media performance, with information being less diverse and less comprehensive, as well as a failure in its role as a check on power.

The SCP model does not, of course, provide a mechanical explanation for the consequences of individual state interventions: It cannot be applied to all market players and media consumers, and it does not deny that the behaviour of media system actors can have an impact on the structure of the market, or that the performance of the media system can also impact the behaviour of actors. At the same time, it sheds light on the possible consequences of public measures that distort the structure of the market.

2.2. Political Parallelism

In their comparative analysis, Hallin and Mancini (2004) identified political parallelism as a fundamental characteristic of media systems. Political parallelism describes relations between the political system and the media system, their intertwinements, and the former's degree of influence over the latter. Political parallelism is basically

a consequence of structural coupling, whilst the phenomenon of procedural coupling is related to journalistic professionalism and the self-censorship problem, analysed in the next point. Hallin and Mancini use the term instrumentalisation to describe cases where the political parallelism is so strong that political actors effectively eliminate the autonomy of the actors in the media system and use the media crudely as a tool to achieve their own political ends.

"Decoupling" from the political decision-makers is the main driver of the media transition for Töpfl (2011), as well. Töpfl (2011, p. 142) defines structural coupling as "all forms of influence potentiality of the political decision-makers on the media system that concern the media system at the structural level, thus at the level of media organisation." Coupling, which can be carried out, e.g., by state or politically affiliated ownership of media outlets, unfair sharing of radio and television frequencies, or biased decision-making in the public service media organisations, results in political decision-makers being able to determine who takes leadership positions within media organisations, and so opening up media content to their control.

2.3. Cognitive Bias and Media Polarisation

The cognitive characteristics that shape individual news consumption are already well understood from research in the 1940s and 1950s. As early as the 1940s, Lazarsfeld et al. (1944) demonstrated that a strong motivation for news selection is the reinforcement of one's own views and beliefs. Festinger (1957) published his theory of cognitive dissonance in 1957. According to this theory, people try to find a balance between their opinions, knowledge, values, and attitudes, while also trying to avoid situations and information that are likely to increase their sense of dissonance.

In the 1960s, Berelson and Steiner (1964) also wrote about the tendency of individuals to read, watch, and listen to media content that they like, or that corresponds to their prior knowledge, value judgments, and assumptions as a characteristic of human behaviour. The increasing range of content also inevitably led to a strong fragmentation of audiences from the 1970s onwards (Neuman, 1991).

The current media environment, even if we consider only traditional media based on editorial responsibility, makes a huge variety of content available through the expansion of channels and diversification of content. This makes it easier for individuals to be exposed to like-minded channels such as different cable channels or ideological newspapers (Prior, 2007; Stroud, 2011) and allows diverse groups within society to personalise their own news (Sunstein, 2007). These phenomena can lead to attitudinal polarisation by reinforcing individual priorities (Levendusky, 2009), social polarisation, and the drift away from different political sides (Abramowitz & Saunders, 2008; Garrett et al., 2014).

However, the spread of network communication has intensified the academic discourse on selective news consumption. In the first half of the 1990s, Nicolas Negroponte (1995) wrote about the potential for personalisation of the digital news stream, which he aptly summarised in his metaphorical newspaper headline, "The Daily Me." Chaffee and Metzger (2001) have already pointed out that personalised news gathering can easily trap users in a cocoon of self-reinforcing media. Sunstein (2001) described the same phenomenon with the metaphors of the information cocoon and the echo chamber. Empirical research in the early 2000s further refuted the assumption that the internet reinforces personalised news consumption and social polarisation (Garrett, 2009; Gentzkow & Shapiro, 2011; Purcell et al., 2010).

A personalised information ecosystem is hardly compatible with the principles of democratic openness. Comprehensive and diverse information and social dialogue face serious difficulties in an information environment from which algorithms have banished opposing views and contradictory information. The search and ranking algorithms are thus moving ever further from the ideal of a pluralist and, above all, integrated representation of the opinion scene, even if there is no clear and imminent danger of this scene disappearing.

3. Overview of the Hungarian Media Market

After 2010, the dominant instruments of Hungarian media policy were the structural state interventions aimed at permanently instrumentalising a significant part of the media system for the ruling parties.

During the 2010s, the Hungarian media landscape underwent a dramatic transformation. Several foreign investors left the market, and Hungarian investors took over their stakes. These Hungarian investors typically were businesspeople with strong ties to Fidesz, the ruling party in Hungary. Well-known media brands either disappeared completely from the market or morphed into propaganda outlets without professional credibility. In the meantime, the state has become the largest advertiser; its advertising campaigns are disseminated almost exclusively through media companies with ties to the governing party (Bátorfy & Urbán, 2020).

In the 2010s, several professional investors left the Hungarian market. Among others, the Finnish Sanoma, the German ProSiebenSat1, and the Funke Gruppe sold their Hungarian affiliations. The German telecommunications giant Deutsche Telekom sold the prestigious online news portal *Origo* (one of the top two online news sites at the time), which has since been turned into a government propaganda machine. The Swedish Metro International SA sold its free daily newspaper (*Metropol*), which became a pro-government newspaper, as did the portfolio sold by the Swiss Ringier and the German Axel Springer publishers following their merger.

The most significant development in the Hungarian media market in the last decade was the establishment of the Central and Eastern European Media Foundation (KESMA in Hungarian). In November 2018, almost all Fidesz-friendly media owners transferred the ownership rights of their media holdings to KESMA. Their companies joined the foundation, none of whom were given any compensation for doing so. The foundation's board was made up of Fidesz MPs and the CEO of a Fidesz-friendly think-tank. A total of 476 media brands were merged into KESMA; its creation has significantly increased the media ownership concentration in Hungary (Bátorfy, 2019). Analysing the Hungarian media landscape, Szeidl and Szűcs (2021) found that state advertising can influence owner ideology by making media ownership more profitable to pro-government-connected investors.

The transformation of ownership rights is just one element of the restructuring of the media landscape. The underlying transformation of the entire media ecosystem is similarly important. By media ecosystem, we refer to those enterprises and sectors that, although not focused on content production, nevertheless have a major impact on the operation of media companies, just like the advertising market or the content distribution companies. The case of *Index*, the market-leading news portal, was a good example of that. By the summer of 2020, without any change in its ownership structure, the formerly independent newsroom had become entrapped due to changes in its ecosystem. The Indamedia Network holding, which plays a major role in operating *Index*, was acquired by a pro-government businessman, and it subsequently emerged that this holding performed services that were essential to operating the news site, such as, for instance, ad sales and the operation of the newsroom's IT system. Pro-government players thus managed to wrest control of the leading media outlet in its market segment and effectively force the newsroom into resigning collectively while there was no change in the publisher's ownership (Mertek Media Monitor, 2021).

The increasing political influence in the media market resulted in decreasing media freedom. International media freedom organisations have since downgraded the status of media freedom in Hungary. Freedom House has listed Hungary among the "partly free" countries since 2019, and, according to Reporters Without Borders, the country has moved from position 25 in 2009 to position 85 in 2022 on the global list of media freedom (Freedom House, 2019; Reporters Without Borders, 2009, 2022). Bajomi-Lázár (2022) found clear similarities between the Hungarian and the Russian media systems in that the scope of independent outlets critical of the government has gradually declined.

There is increasing polarisation in journalism, and two kinds of journalistic practices prevail simultaneously. In 2019, a total of 245 cases were filed against media outlets, 158 against pro-government media, and 87 against independent outlets. The court ruled that the law was breached 65 times and 61 cases involved pro-government outlets. It suggests that professional and ethical journalistic guidelines are followed at independent media outlets. In the pro-government newsrooms, the level of professionalism is less respected; those who work there often use double standards, disseminate fake news, and blacklist critical intellectuals (Bajomi-Lázár, 2021).

The political capture of the Hungarian media market is not a random act but the result of a very deliberate and well-designed process. The Orbán government's success is well illustrated by the fact that it has also started to expand internationally. In addition to the property acquisitions in the Western Balkans, a businessman linked to the government bought controlling stakes in the pan-European broadcaster Euronews (International Press Institute, 2022).

4. News Consumption Analysis: The Various Consumption Patterns

4.1. The Objective of the Research

The main objective of our research was to examine the media diet of Hungarian news consumers in this polarised media landscape; thus, we formulated the following research question:

RQ1: How is this media structure, polarised by its relationship with the government, reflected in the news consumption of the adult Hungarian population?

To answer this question, we built a model using data from a representative survey carried out in 2020, which allows us to reconstruct the consumers' media repertory, namely which media products they regularly use to inform themselves about politics/public affairs. Together with a classification of these individual media outlets based on their political/ideological outlook, we get an overview of the nature of the information, opinions, and viewpoints that the consumers encounter in their news consumption.

4.2. The Survey

Mertek Media Monitor has been conducting surveys on the Hungarian public's media consumption and political/public affairs information patterns since 2013. The surveys were conducted with the help of the Medián Public Opinion and Market Research Institute (Hann et al., 2020; Mertek Media Monitor, 2013, 2016, 2018).

In 2020, the survey was performed on a sample of 2,179 people. The sample was hybrid: 53% was surveyed by CAWI and 47% by CATI methodology. The distortions of the random sample were ironed out by a multivariate weighting procedure based on the official census data; the details are presented in the Supplementary File (see

Table A1). The online survey response rate was approximately 10%, and the phone survey was 14%, both slightly under the long-term average. The length of the interview explains the low numbers. The survey reviewed the news consumption patterns of Hungarians based on over 156 variables, with a special focus on the relationship between the respondents' interest in political/public affairs and the sources of their information: the role of individual news sources, the political assessment, and their trust in different news sources. By asking about the consumption of almost every major media product in the Hungarian media market, the Mertek-Medián survey is well suited for learning about individual consumers' media repertory in detail.

4.3. Media Categorisation

The questionnaire included 54 specifically mentioned media products: seven television channels, six radio stations, 22 online news sites, eight dailies, and 11 weeklies. As a first step, we categorised these media outlets based on their relationship with the government to represent the supply side of the media in our model. We set non-government media and pro-government media as the two counter-poles, and we introduced a so-called grey-zone media, which is a kind of transitional category between the previously mentioned two categories. Grey-zone media are not yet pro-government but depend on the government/the state.

We defined certain objective criteria that helped us decide how to classify individual media products. Pro-government media are demonstrably in the hands of owners with close ties to the government. The political affiliation of the owners of pro-government media is not simply an assumption; they often stand up for the ruling party and participate in the party's events. State advertising revenue also proves pro-government affiliation, with more than half of the advertising revenue often coming from state advertisers. We have classified media products as pro-government where we found a link between ownership and a high proportion of state advertising revenue, so a clear pro-government categorisation is acceptable. This approach is quite similar to Bátorfy's (2020) analysis.

Non-government media outlets are highly varied in terms of their owners and their ideological outlook (Polyák et al., 2019). Non-government media are owned by foreign or Hungarian owners that are unequivocally independent of the government, and their funding does not depend on significant amounts of state advertising.

Grey-zone media do not openly profess their ties to the government, but some connection prevails nevertheless, or, despite the absence of such a connection, the media outlets in question are dependent on the government. We assigned media products into this category based on the government ties of the owner or the high share of state advertising revenues. Further details about the categorisation and the list of the assigned

media outlets are available in the Supplementary File (Table A2).

4.4. Media Repertoires

The questionnaire asked about the consumption of each of the 54 media individually, so the database captures consumption data along 54 variables. The survey methodology was very similar to that used in Ofcom's news consumption surveys (Jigsaw Research, 2021), which also include a variable measuring the frequency of use of certain TV channels with the following question: "And typically how often do you watch the news on [channel]?" The Reuters Digital News Report methodology (Newman et al., 2021) also assesses the frequency of general news consumption with the question: "Typically, how often do you access news?" The Mertek-Medián survey also asked respondents (in the same way) about how often they consumed each of the media products. Based on the answers (respondents could choose between every day, weekly, at least once a week, at least once a month, or never), we only included those media products in the respondent's consumer basket if they indicated using them at least once a week (or at least once a month in the case of weeklies).

That way, our model deals only with the regular consumers of the different media outlets. Figure 1 shows the proportion of regular consumers of the top 20 media. The dominant presence of pro-government and grey-zone media in the media market is also reflected in consumption: nine are pro-government, five are grey-zone, and six are non-government. The most regularly consumed medium is the non-government TV channel RTL Klub, the only one regularly consumed by more than half of the Hungarian voting age population. This provides some counterweight to the pro-government and grey-zone media that dominate the top 20.

As a next step in building the model, we looked at each consumer's media repertoire to see the extent to which they use the different outlets of the three categories. By identifying the regularly consumed media products for the individual consumers, we can calculate a ratio that reflects the weight of the three categories in their regular media consumption. For example, if a consumer regularly uses two pro-government, two non-government, and one grey-zone media outlet, their ratio will be 40:40:20. This allows us to sketch various consumption groups based on the following conditions:

- Those who are in a bubble and consume media of only one category: "only" pro-government/ non-government/grey-zone media;
- Those who predominantly consume media of one category and whose consumption of the given category exceeds a two-thirds share of their total media consumption: "mainly" pro-government/ non-government/grey-zone media;
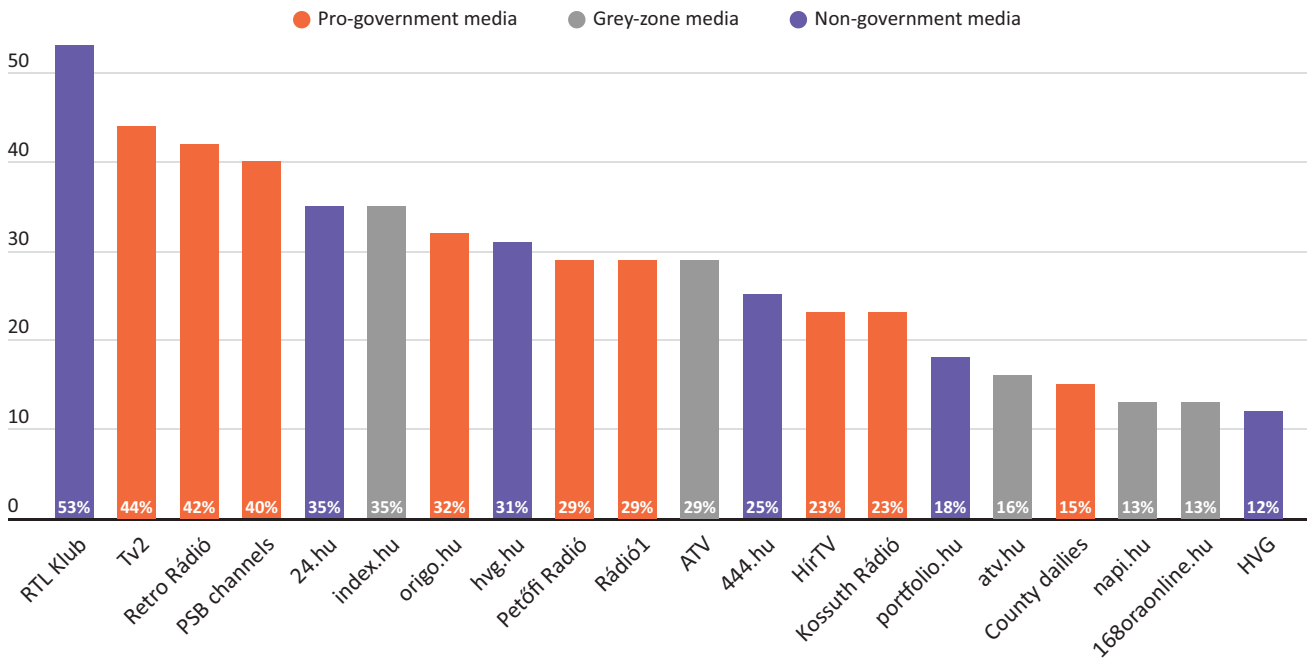
Figure 1. Percentage of regular consumers of the top 20 most regularly consumed media in the total sample (N = 2,179).

- Those with a diverse media consumption, in other words, the respondents for whom neither category exceeds two-thirds of their total consumption: diverse consumption.

Figure 2 presents eight different consumer groups. The analysis of the representative sample of 2,179 people showed that 5% of the Hungarian population does not regularly consume media. The largest group of consumers were those with a diverse media consumption, who comprise 52.9% of the population. Their media consumption basket is characterised by the presence of media products from different categories, the share of neither of the broader media categories exceeding two-thirds of their total consumption. Since this is a fairly broad group in the sense that the share of each of the three types of media we identified can make up anything between 0% and a maximum of 66.7% of the given individuals' total news consumption, we also took a more detailed look at this group in the figure, breaking them down into smaller clusters. In the case of the total segment of media consumers with a diverse media consumption (1,154 people), setting the threshold value separating balanced/diverse consumption from a heavy tilt in either direction at 50% produces interesting results. Doing so allows us to consider whether any of the three categories has a share of over 50% in the individual's media consumption; this step then reveals that an additional 26.2% of the cluster of consumers with a diverse media consumption prefer pro-government media, 9.4% prefer non-government media, and 0.7% predominantly consume grey-zone media.

The share of consumers caught up in a pro-government news bubble is 11.7%; these are the con-sumers who typically only consume pro-government media products. And although the present analysis only considers regular consumption, we are confident in asserting that the members of this group either exclusively or almost exclusively encounter only the government's narrative and information they ideologically prefer. In practice, this means that roughly every ninth citizen in Hungary does not learn about the viewpoints of any other party than Fidesz–KDNP. The share of those who predominantly (but not exclusively) consume pro-government media is 21.6%. The share of pro-government media in their overall media consumption exceeds the two-thirds threshold. Although government-friendly media dominate their media consumption, everyone in the segment also regularly consumes at least one media product that is not pro-government; that is, they presumably encounter alternative viewpoints to that of the government.

Looking at the other end of the pole, we found only a much smaller bubble of consumers (2.9% of the entire sample) whose total media consumption consists of non-government media. Another small but slightly larger segment at 4.9% were those whose media consumption was overwhelmingly (a share of least two-thirds) but not exclusively made up of non-government media. Their media consumption basket, too, included at least one other type of media product, thus ensuring that they were not insulated in a news bubble.

A mere 0.6% of the population consumes nothing but grey-zone media, and those whose media consumption consists predominantly but not exclusively of grey-zone media make up 0.4% of the total sample. Although the number of people belonging to these groups is very low, grey-zone media outlets are also heavily represented in the consumption of the other groups, accounting for
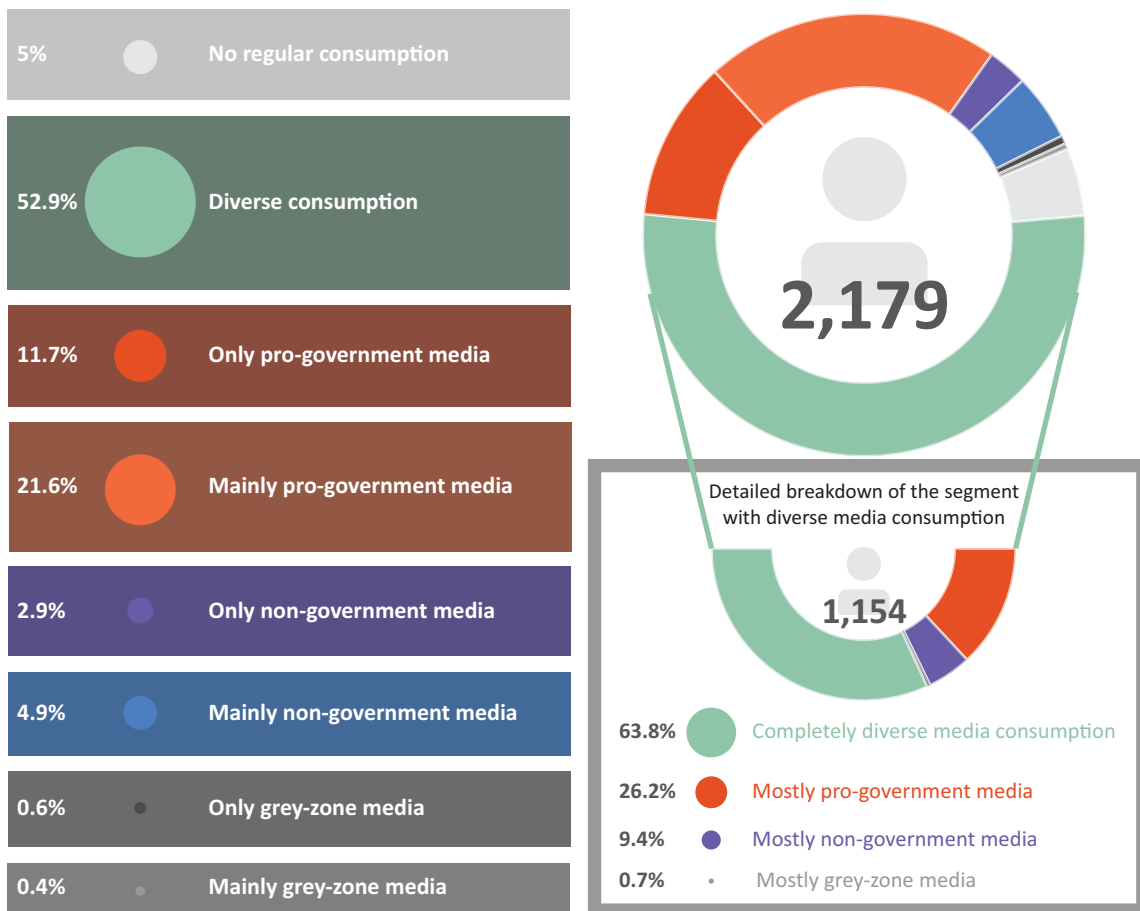
Figure 2. Consumption patterns in the three-tier classification scheme.

20% of the total sample's regular news consumption. The importance of this fact will also be discussed in the next section.

4.5. Exploring the Different Patterns

To better understand the reasons behind different consumption patterns, we formulated the following research questions:

RQ2: What sociodemographic variables make a lean in a certain direction more probable?

RQ3: What is the role of grey-zone media in news consumption? What variables make the consumption of these media products more likely?

Two models were used to analyse how the social, demographic, and party affiliation of media consumers in Hungary determines their news consumption patterns, i.e., which of the previously presented patterns they follow.

In the first model, we analyse what determines whether people are only/mainly exposed to pro-government and non-government media news instead of diverse news. This analysis excludes the 5% of the sam-

ple who are not regularly informed by any news source, and we had to exclude those who only or mainly consumed grey-zone media. The group of uninformed people was excluded because we found that the information vs. non-information is a completely separate dimension from the evolution of consumption patterns and would therefore divert the analysis from its original purpose. In addition, consumption of grey-zone media products was excluded from the first model because of the low number of cases.

To capture the role of grey-zone media, in the second model, we analyse the variables that determine their consumption in order to understand the role of this important category in news consumption patterns. The low number of cases is eliminated by capturing this consumption pattern through those who consume at least two of the grey-zone media, whether or not it dominates their consumption.

In both models, we analyse the determinants of media consumption, including gender, age, education, settlement type, household income, and activity. In addition, we include the respondents' party of choice in the model, specifically their affiliation to the two major political blocs. All variables except age are categorical; the table of the distributions can be found in the Supplementary File (Table A3).

4.5.1. Sociodemographic Variables Behind the Leaned Media Diets

In the first model, we examine pro-government and non-government media consumption using multinomial logistic regression with diverse consumption as the reference. So, we analyse the prevalence of the two types of consumption in different social groups relative to the diverse consumption (see Table A4 in the Supplementary File for the sample composition). The Nagelkerke R-square indicated that 21% of the total variation in media consumption occurred due to the variation among the seven predictor variables. The news consumption characteristics captured by the model are primarily determined by party preference in Hungary. The explained variance excluding this variable is only 9%. In the following, we will consider the model that includes party preference.

The analysis shows significant independent effects of education level, type of settlement, activity, and party preference on the news consumption patterns examined. As presented in Table 1, age, gender, and household income do not show significant associations with news consumption patterns. In the case of party preference, it is more appropriate to speak of a relationship rather than an effect since we cannot establish the direction of causality in the relationship between news consumption and party preference, but it can be assumed that there is a feedback effect. The significance level is set at $p < 0.05$.

We analysed pro-government news consumption relative to diverse consumption. We found several significant independent correlations when filtering out the effects of other variables. Pro-government voters are significantly more likely to be informed by pro-government media, and opposition voters are significantly less likely to be so than non-party voters. The result is not surprising, but it is important for us because it is the strongest correlation, compared to which all other effects are not outstanding. The effect size was calculated by decomposing our original model into two logistic regression models. For party preference, the Partial R-value is 0.229, which is far above the values of 0.043 for education and 0.076 for activity. We compared the effect size using two logistic regression models with Partial

R-values calculated from the results (see Table A5 in the Supplementary File).

All categories of education level are significantly different from the university graduate group, and the relationship is linear: The lower the level of education, the more likely it is that news consumption will be pro-government. The reference category for the type of settlement is the village. Only the capital differs from this in a significantly negative direction, i.e., living in the capital significantly reduces the probability of being informed by pro-government media. The correlation here is much weaker and was not even found to be significant in the logistic regression model. The reference category of activity is the other inactive. In comparison, the active and retired are significantly more likely to be informed by pro-government media and not to have diverse consumption.

Some correlations were identified based on a model comparing the likelihood of non-government news consumption with diverse consumption. As before, party preference is strongly related to non-government news consumption patterns. Ruling party voters are significantly less likely, while opposition voters are significantly more likely to be informed in this way. The Partial R-value of the effect size is 0.159; this exceeds the value of 0.111 for education level. For education, the likelihood of consuming non-government news increases with increasing education level. The pattern of non-government news consumption is more pronounced for those with higher education. Those living in county towns are less likely to be non-government news consumers compared to those living in the capital, but the correlation here is weak, and even the binary logistic regression model does not show a significant correlation. The non-government consumption pattern is not explained by activity, in contrast to the previously presented pro-government news consumption. However, in this part of the model, a significant correlation appears for household income: The lower the income, the less likely it is that news consumption will be non-government rather than diverse.

To assess the results, it is worth noting that diverse news consumption describes an information consumption pattern that allows for exposure to both pro- and non-government information but does not necessarily

Table 1. Effect of the variables.

	−2 Log Likelihood of Reduced Model	Chi-Square	Df	p-value
Intercept	2,963.960	0.000	0	
Age	2,965.792	1.832	2	0.400
Gender	2,969.788	5.828	2	0.054
Education*	2,998.546	34.586	6	0.000
Settlement type*	2,977.270	13.310	6	0.038
Employment status (activity)*	2,982.469	18.509	4	0.001
Household income	2,967.839	3.878	4	0.423
Party preference*	3,171.547	207.587	4	0.000

Note: * = Variables have a significant independent effect on the consumption patterns examined.

imply awareness of diverse news consumption. A significant proportion of the group comprises those who typically get their information from television, including the high-reach non-government commercial channel, RTL Klub, a style of information that is more typical of those of lower social status. This explains the dominance of non-government media and why those with higher incomes and the more educated tend to be more oriented toward one-sided information.

4.5.2. The Role of Grey-Zone Media

In the second model, because of the importance of the topic, we analysed the variables associated with obtaining information from so-called grey-zone media that are in some way dependent on the government. We analysed the phenomenon through respondents who regularly receive information from at least two of the grey-zone media, regardless of their other media consumption. As we saw earlier, these news sources do not play a particularly large independent role, with 1% of the adult population being primarily informed by one or more of these media. However, they are important because a large proportion of the population is reached by one of these news sources. Among the adult population, 61% are informed by at least one of these media; among opposition voters, 72%. It is precisely because of this high proportion that those who regularly follow at least two of these media were chosen for the study, as we were looking for a group that was more characteristically linked to this consumption pattern.

In addition to party preference and the social and demographic variables previously examined, we have added to this model the question of pro-government and non-government media consumption. As with the grey-zone media, we have redefined these: Regardless of other consumption, we consider consumers of pro-government or non-government media to be those who regularly obtain information from at least two of these media products, and we present this in two variables. Therefore, we examine how gender, age, education, activity, household income, type of settlement, party preference, and pro- or non-government media consumption individually are independently associated (filtering out other effects) with grey-zone media. In this study, we contrast those who are informed by at least two grey-zone media with those who follow at most one regularly. One grey-zone media product can be consumed randomly, but the consumption of two of these media products implies some conscious preference. The method used is binary logistic regression.

The resulting proportion of those who are informed by grey-zone news sources is 31% of the total sample and 33% of those who are regularly informed. The explained variance is relatively high, 26%.

The logistic regression analysis results (Table 2) show that age, gender, party preference, and information from pro- and non-pro-government news sources are significantly independently correlated with the consumption of grey-zone media. Thus, such consumption behaviour is not dependent on education, activity, household income, or settlement type. The significance level is set at $p < 0.05$.

The results show that the strongest correlation with the phenomenon, besides party preference (Partial R = 0.685), is positively related to information from non-government media (Partial R = 0.376). So, among those informed by at least two non-government media, the probability of consuming grey-zone media is also higher than among those not informed by non-government media. We also see that the consumption of grey-zone media also shows a positive correlation with information from pro-government media, although much weaker. This suggests that although grey-zone media is more likely to be consumed by opposition voters, it is also related to the intensity of media consumption because both types of consumption are positively correlated. In the highly polarised Hungarian media system, grey-zone media thus provide an opportunity for government communication to reach consumers who reject pro-government media. In addition to its high audience reach, this is the real importance of the grey-zone media in Hungary.

Table 2. Effect of the variables on the grey-zone media consumption (only significant correlations shown).

	B	Standard Error	Wald statistics	Significance associated with Wald statistics	Exp(B)	Partial R
Intercept	−4.573	0.375	148.973	0.000	0.010	
Gender (male)	0.299	0.005	5.948	0.000	1.349	0.040
Age	0.028	0.123	26.850	0.015	1.028	0.101
Party preference			15.823	0.000		0.685
Pro-government (compared to no party preference)	−0.379	0.160	5.631	0.018	0.685	
Opposition (compared to no party preference)	0.272	0.137	3.911	0.048	1.312	
Consuming pro-government media	0.727	0.144	25.460	0.000	2.069	0.098
Consuming non-government media	2.810	0.152	343.977	0.000	16.608	0.376

4.6. Composition of Regular Consumers of Different Media by Party Preference

The model of news consumption patterns shows that more than half of Hungarians (52.9%) are balanced in their sources of information, but almost half of the voting age population is skewed in one direction or another—with a significant proportion having a completely one-sided orientation. To understand the connections between party preferences and the consumption of media with different ideological backgrounds, it is worth looking at the audience composition of each media in terms of partisan preferences.

Figure 3 presents the composition of the 20 most regularly consumed media outlets by their audience with a party preference. The proportion of government and opposition voters is represented by the position of the bubbles on the axis: The further an outlet is from the centre in any direction, the higher the proportion of its consumers with a political preference for one side or another. The bubbles' size is related to the number of regular consumers of the particular media. These results confirm that opposition voters consume mostly non-government and grey-zone media, while pro-government voters stick to pro-government news sources. Influencing grey-zone media is thus a good tool for the government to get its message across to those who are critical of it.

This kind of polarisation can also be captured by looking at respondents' trust in certain media (Figure 4). The most important evidence of the effect of cognitive bias is that party preferences are a crucial determinant of media credibility. A media system based on partisan preferences is well suited to serve the needs of a polarised audience. However, such a divergence in the perception of the credibility of the different media makes it very difficult for society to engage in constructive dialogue, at least on fundamental social issues.

In Hungary, according to the *Reuters Institute Digital News Report 2021*, the number of people who trust the news, in general, is one of the lowest at 30%. Of the 46 countries surveyed, only in the US was people's trust in the news measured lower, at 29%. According

to both Reuters and Mertek-Medián, RTL Klub and HVG are the most credible news sources among the population in Hungary. The Mertek-Medián survey asked the respondents to rate the credibility of 12 popular media. When looking at the perception of each media outlet by party preference, it can be seen that voters from the governing and opposition parties rate very different media outlets as credible and untrustworthy. Figure 4 shows that, for example, for the six media in our sample that we have classified as pro-government, their credibility by party preference is almost a mirror image of each other: Pro-government voters trust these media the most, while opposition voters trust them the least. For non-government and grey zone media, those with a pro-government preference also rated their credibility higher, but unlike opposition voters, they are still the least credible news sources for them.

5. Conclusions

The analysis introduces polarisation in the Hungarian media environment, showing that a sizable segment of media consumers consume media according to their political preferences. In the long term, this has a devastating effect on the functioning of democracy and could contribute greatly to the freezing of Orbán's illiberal regime.

Viktor Orbán has described his way of exercising power as an "illiberal" democracy (Puddington, 2017). For Orbán, liberal democracies are obstacles to a nation's success, while illiberal democracies such as China, Russia, and Turkey are the "winners" of the last decades. However, the illiberal democracy is not a settled political or governmental concept for Orbán; rather, it is, in fact, the opposite of Hungary's political system, which was built up after political change in 1989. Its strong elements are national sovereignty, an effective government, unhindered by liberal counterbalances (such as the separation of powers or the strong defence of human rights), a politically controlled economy with strong national players, and its non-competitive elections with weak opposition. Illiberal democracy is not an unknown model in restricted democracies; the concept was formed by
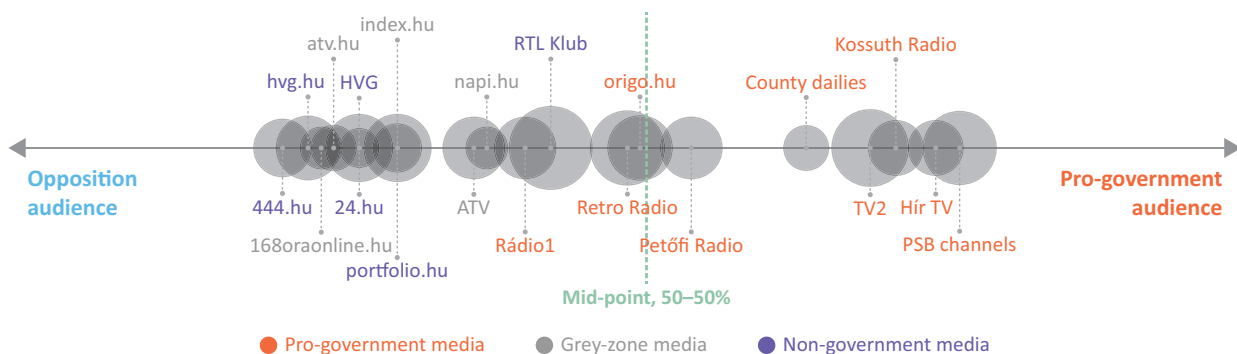

Figure 3. Audience composition by party preference of the top 20 most regularly consumed media. Notes: The position on the axis shows the proportion of the given media's audience that is pro-government or opposition; the size of the bubble depends on the number of its regular consumers.
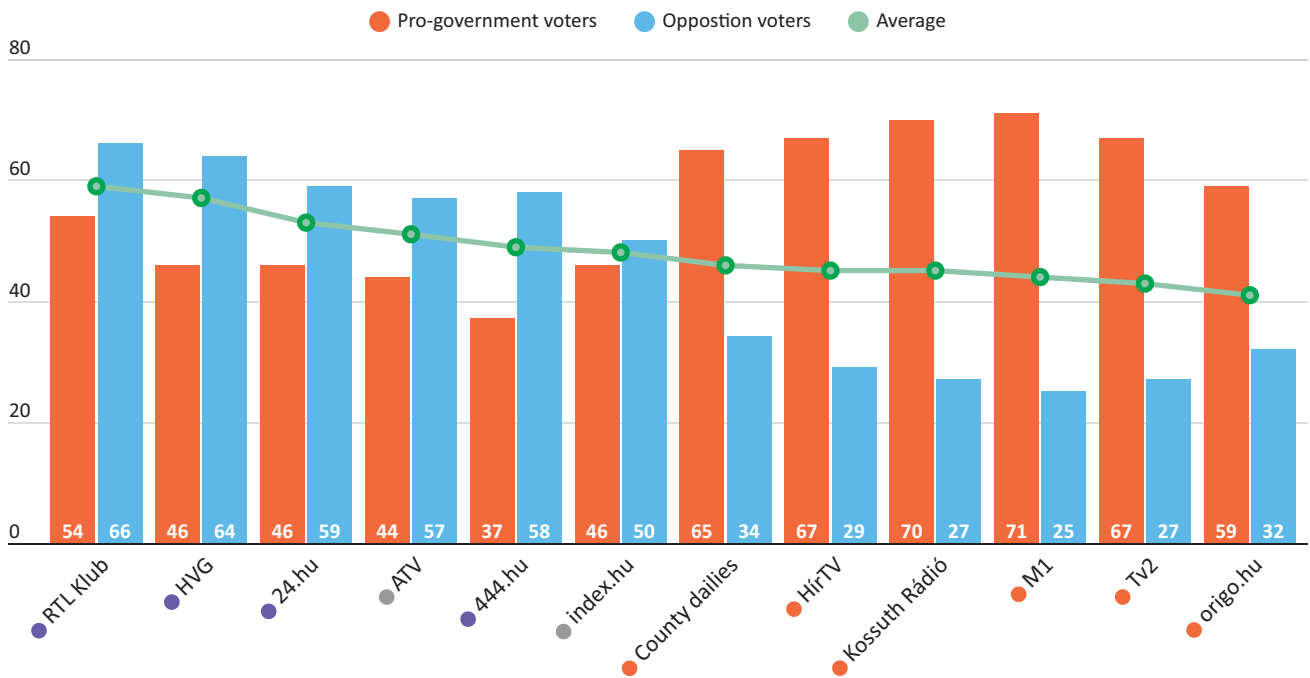
Figure 4. Perception of credibility of news sources by party preference (2020). Note: Averages on a scale of 0 to 100.

Zakaria (1997, p. 22), who distinguished "democracy" from "constitutional liberalism." Democracy can be narrowly defined as no more than "competitive, multiparty elections" (Zakaria, 1997, p. 43); constitutional liberalism, however, was developed "as a defence of the individual's right to life and property, and freedom of religion and speech" (Zakaria, 1997, p. 26).

The analysis sheds light on the fact that, if politics were to find a way to exercise control, the Hungarian media arena would be upended even more dramatically than it has been thus far. Currently, the share of those who completely or overwhelmingly inform themselves from media that are under government party control is 33%. This means that the ruling party's influence on the media is already extraordinarily strong, but the situation could deteriorate rapidly.

It is particularly worrying that RTL Klub is the only high-reach non-government voice able to reach those who are informed by traditional media. All the other major non-government media are online news portals, so the divide in society is also spectacular in this respect. Internet users with high awareness can find pluralistic media content, while non-internet users, typically the elderly who live in rural areas, are largely exposed to a one-sided pro-government narrative.

It is also remarkable how slowly news consumers recognise when the editorial practices of a news source change dramatically. A good example is the news portal *Origo*, which used to be a flagship of quality journalism, winning several awards for its factual reporting. However, following a change of ownership in 2014, *Origo* started on the slippery slope and has since become a tool for producing defamatory articles and character assassination. Despite this, it is still the source of much of people's

information, a sign that a well-established brand is much slower to erode than we might think.

What is particularly dangerous in the Hungarian media system is not merely the presence of the pro-government and non-government segments of the media, but the striking role of the third category. It can confuse consumers because, based on their content, the majority of the so-called grey-zone media cannot be assigned to the pro-government category, and they clearly help disseminate information that helps the public stay informed. At the same time, their dependence on the governing party is well-documented. These media are all susceptible to pressure from those who wield governmental power, and thus the relatively balanced coverage that they may currently provide could well be replaced by propaganda at any time. Over the past few years, ever more non-government media have entered the grey-zone media category and, over time, have moved toward the pro-government side. There is no reason to think that this process has stopped, and it will likely continue.

The practice that has emerged in Hungary is dangerous on two grounds. For one, we can be sure that the significant political pressure impacts editorial practices, and the share of content critical of the government is declining while important issues are being dropped. There are innumerable signs of this in the media products that we have assigned to the grey-zone category. On the other hand, one can never know when the governing party might decide to assert its influence over these media fully or when it might choose to transform the current balance in their news coverage, which could happen rapidly. As such, the Hungarian media system is especially vulnerable.

The Hungarian case study is also very important for the wider academic community in communication science. It helps us understand how media freedom can be violated in a European Union member state with a seemingly large number of market players, a high internet usage rate, and a generally developed technological and economic environment. However, this is only an illusion; in reality, the political structure is very monolithic, and at the same time, media pluralism is spectacularly reduced, and the public is polarised. The Hungarian case is also instructive in demonstrating how to avoid this pattern from becoming toxic in the democratic world.

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Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online in the format provided by the author (unedited).

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