

# Watchdog or Copycat? Examining News Diversity in Slovenian Journalism System

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## ABSTRACT

*The study examines the dynamics of news diversity within the Slovenian journalism system, a small and structurally constrained media market facing ownership concentration, political instrumentalisation, and resource limitations. Drawing on critical approaches to news diversity and the concept of the journalism system, the study conceptualises pluralisation and homogenisation as concurrent and interdependent processes that structure, enable, and limit democratic communication. The analysis investigates whether the Slovenian journalism system sustains a watchdog function that fosters plural public debate or gravitates toward a copycat logic marked by content uniformity. Empirically, we analysed 13,207 news items from television, radio, and online outlets using text-reuse detection, network clustering, and large language model-assisted source extraction. The findings reveal that news diversity in Slovenia is structurally conditioned, segmented, and unevenly distri-*

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*buted, shaped by intertwined ownership, organisational, and ideological factors. Pluralisation coexists with homogenisation, yet the symbolic power of dominant actors—political and institutional elites—remains largely intact, reproducing systemic inequalities in the journalism system. These results show that news diversity is fundamentally determined by broader political-economic relations that define who can speak and which perspectives are prominent. The study underscores the normative importance of news diversity as a cornerstone of democratic communication and calls for structural reforms to foster a more inclusive and pluralistic journalism system.*

*Keywords: news diversity, journalism system, homogenisation, pluralisation, Slovenia*

## **Introduction**

In the last three decades or so, research on news diversity has become a key area in media and journalism studies. The study of news diversity lies within the broader framework of examining external and internal content pluralism in the media, where three dimensions are generally considered: structure, including media ownership, organization, and business models; content, encompassing the diversity of genres, topics, sources, and viewpoints; and exposure, measuring audiences' access to heterogeneous content in traditional/digital media (Karppinen, 2018; Hendrickx, Ballon, and Ranaivoson, 2020; Loecherbach et al., 2020; Joris et al., 2020).

News diversity always reflects the interaction of two simultaneous processes – pluralization and homogenization – both crucial for shaping a democratic public sphere. Normatively, pluralization refers to the media's articulation of ideas and interests of individuals and various social groups, including marginalized ones, as part of a rich, rational, and well-argued public debate. The homogenization of shared issues and problems is required to facilitate public discourse, the forming of public opinion, and participation in political life.

In different social contexts, these two processes often manage to hinder/limit democratic public debate. On one hand, pluralization can become fragmentation, driven by the logic of individualization and the tailoring of information to specific groups (segmentation) or individuals (personalization), causing a splintering of audiences and content. The media space is thus divided into niches, which may appear to increase diversity but actually can weaken the shared communicative foundation

and hence undermine public discussion. On the other hand, concentrated media ownership fosters homogenization by pursuing business rationalization and managerial synergies, leading media with a common owner to adopt shared information sources, business strategies, and similar production practices (Beckers et al., 2017; Hendrickx and Ranaivoson, 2019; Hendrickx and Van Remoortere, 2022). An extreme result of homogenization is “excessive similarity” (van Cuilenburg, 1999: 195), seen in the journalistic practice of “churnalism”, where journalists, typically without verification or further analysis, “churn” content already published in other media, press releases, and wire service reports – quickly produced, recycled informational “butter” (Vobič, 2025: 68). Homogenization thereby makes the media landscape less diverse and impoverishes the public sphere as pluralist perspectives are replaced by repetitions of the same topics, voices, and viewpoints.

A noteworthy finding of contemporary research on news diversity is that the processes of pluralization and homogenization are not merely simultaneous but often contradictory and intertwined. Karppinen (2018: 501–503) identifies a paradox in the (over)abundance of choice–limited perspectives relationship, reflecting a core tension in modern social communication: although citizens have access to plentiful information, diversity does not automatically translate into stable conditions for democratic deliberation. The paradox is observable in the public perceiving it has a choice among various media and platforms, yet in reality faces repetitions of dominant topics, voices, and perspectives. In itself, the abundance of news and channels is no guarantee of greater diversity and can instead lead to a narrower range of topics, voices, and viewpoints mirroring power asymmetries in society. Accordingly, pluralization and homogenization are not exclusive of each other but together impact a complex environment where news diversity is constantly questioned.

The “journalism system” (McChesney, 2016) provides a crucial analytical lens in this context for studying news diversity by examining the processes of homogenization and pluralization. McChesney defines a journalism system as a structured framework in which news is produced, distributed, and consumed. It encompasses institutions, practices, economic models, and regulatory arrangements that shape how journalism fulfils (or does not) its democratic role: informing citizens with credible and diverse information, holding power to account, and enabling inclusive public deliberation. This system is nevertheless increasingly strained by neoliberalism, the collapse of advertising-based commercial models, and technological transformations that prioritize speed and repetition over investigation and context (cf. McChesney, 2016; Pickard, 2020; Golding and Murdock, 2022). Against this critical backdrop, the present study investigates the dynamics of news homogenization within the Slovenian journalism system, concentrating on the extent and forms

of news diversity and the implications held for democratic public life. Drawing on the conceptual distinction between pluralization and homogenization as concurrent and often interwoven processes in journalism systems (Karppinen, 2018; Nechustain, Zamith, and Lewis, 2023), focus in the analysis is given to the ways Slovenian news media converge/diverge regarding topics, perspectives, and presented voices. Slovenia is a particularly illuminating case for examining these tensions. As a small and peripheral media market, its journalism system encounters acute structural pressures of ownership concentration, political instrumentalization of media, manifold crises of public media, and limited resources for news production (Vobič, 2023). These conditions make the country a relevant site for observing how journalism systems depart from their normative watchdog role of providing credible information to citizens, holding power accountable and fostering informed public participation, to more passive, derivative forms of reporting associated with what we label “copycat logics”, also known as “churnalism” or “iterative journalism” (Nerone, 2022).

The study’s main goal is to investigate how structural conditions of the Slovenian journalism system manifest in patterns of pluralization and homogenization with a view to revealing how ownership, organizational, and ideological factors influence the distribution of visibility and symbolic power across the media in the country. A critical approach to news diversity is adopted, moving beyond liberal and deliberative frameworks that stress either a “marketplace of ideas” logic (Voakes et al., 1996; Napoli, 1999) or rational deliberation in a Habermasian public sphere (e.g., Calhoun, 1992). We define news diversity as a normative requirement for the recognition, inclusion, and visibility of different social voices in news coverage, notably those systematically excluded or marginalized in public discourse due to economic, political, or cultural inequalities (Karppinen, 2018; Raeijmaekers and Maesele, 2015). We argue that news diversity entails more than a numerical count of sources or platforms since it involves opening a symbolic space for silenced voices and contesting the structural conditions that perpetuate power asymmetries. News diversity – namely, the diversity of information on publicly relevant current events and their analyses, interpretations, or commentaries –not only refers to the variety of topics, voices, and perspectives, but also the potential for expanding the symbolic space of the media to encompass experiences and interests that challenge prevailing material and symbolic power relations and related inequalities. In this sense, news diversity is a key condition for the democratization of social communication because it enables the media to transform from reflections of dominant social relations into instruments for questioning and redistributing symbolic power.

Empirically, the study analysed a sample of 13,207 news items published by 141 Slovenian media outlets (TV, radio, online) over a defined time period. Combining exact text-reuse detection ( $\geq 10$ -grams), network clustering, and LLM-assisted source extraction, source linkages across outlets are mapped before we quantify the overlap and dispersion. The aim is to provide a more nuanced understanding of news diversity as both a democratic value and a structural challenge, especially in smaller journalism systems grappling with global transformations under localized constraints.

The study contributes to the literature on news diversity by offering a conceptually grounded and empirically supported analysis of how market concentration, source routines, and patterns of representation influence news-content diversity in a small media system. Drawing on a multidimensional understanding of diversity – including source, content, and actor diversity – the research explores the ways institutional structures and journalistic practices affect the range of voices, viewpoints, and topics presented in Slovenian news coverage. The study namely examines the Slovenian journalism system as it simultaneously enacts a watchdog function supporting plural public debate and exhibits copycat tendencies that drive content uniformity, demonstrating how structural, organizational, and ideological conditions shape this interplay.

## **Conceptual framework and contextual background**

### *Understanding news diversity amid conceptual ambiguity*

News diversity is a long-standing concern in media and journalism studies, particularly as concerns ownership concentration and the dominance of certain voices and perspectives in news content (Brown et al., 1987; Napoli, 1999; McQuail, 1992; Vokes et al., 1996). In recent years, diversity research has expanded during intensified digitalization, platformization, and algorithms' growing influence on communication. Notwithstanding the many studies, several reviews suggest conceptual clarity and analytical coherence are lacking (Karppinen, 2018; Hendrickx, Ballon, and Ranaivoson, 2020; Loecherbach et al., 2020). The term “news diversity” appears in multiple forms and meanings across literature, frequently used interchangeably with media or content diversity, making comparative analysis difficult and obscuring the normative underpinnings of multiple studies.

As Hendrickx et al. (2020) observe, the lack of agreement on the meaning, purpose, and measurement of news diversity makes it a vague and contested concept. Similarly, Joris et al. (2020) argue this ambiguity stems from implicit normative

assumptions, complicating the interpretation of findings and assessments of news diversity's democratic value. Conceptual clarity is therefore crucial – especially regarding the normative role of news diversity in sustaining informed public discourse and democratic participation. Despite its conceptual ambiguity, three main approaches dominate the literature: liberal, deliberative, and critical.

The liberal approach views media as “mirrors of society”, where diversity arises from competition in a “marketplace of ideas” (Raeijmaekers and Maesele, 2015). It emphasizes balanced, objective, and impartial reporting to ensure the free flow of information and reflect social heterogeneity. Normatively, it supports informing citizens, monitoring power, and enabling diverse viewpoints to impact public opinion (Magin et al., 2024). However, critics contend that it overlooks structural inequalities in media production and distribution, thereby privileging dominant voices (Karppinen, 2018).

The deliberative approach conceives of media not simply as reflectors but also facilitators of public discourse (Raeijmaekers and Maesele, 2015). Building on Habermasian theory (cf. Calhoun, 1992), diversity is seen as vital for an inclusive and informed public sphere that fosters rational debate and social cohesion (Loeckerbach et al., 2020; Hendrickx et al., 2020). Rather than balance or proportionality, it stresses open diversity where the equal participation of all relevant actors is a normative ideal (Magin et al., 2024). Still, it too is criticized for underestimating power asymmetries and the challenges of real-world pluralism (Karppinen, 2018).

Critical approaches reject the assumption that diversity emerges neither through balance nor participation, and view media as being embedded in broader power structures. From a political economy perspective, media function as cultural industries shaped by capitalist logics where ownership structures and market forces constrain diversity. Seen through the lens of critical cultural studies, media are contested fields of ideological struggle where diversity reflects the tension between dominant and marginalized discourses (Raeijmaekers and Maesele, 2015). These approaches highlight how editorial decisions and institutional media dynamics determine which voices are legitimized or silenced. Here, news diversity is not just a numerical count of voices, but a question of symbolic inclusion and access. Diversity is understood as a dynamic process affected by ongoing struggles over visibility, legitimacy, and the redistribution of symbolic power (Karppinen, 2018).

This study approaches news diversity critically, understanding it as a historically and structurally conditioned process in which power relations are constructed, reproduced, or contested via media practices. Diversity is thus not simply about the formal presence of different viewpoints but about access to public discourse and the

visibility of marginalized voices in a journalism system. In this respect, the study examines how journalistic routines, source selection, and representational patterns contribute to news homogenization. Adopting a multidimensional understanding of diversity – spanning sources, content, and actors – the research explores the embedding of symbolic power relations in everyday news practices. Such a perspective is relevant in the Slovenian context where structural features like ownership concentration, political instrumentalization of media, editorial pressures, and the crisis of public broadcasting influence the conditions for producing news.

*A long dual revolution and the journalism system in Slovenia*

The development of media and journalism in Slovenia in the past three decades has entailed a “long dual revolution” (Vobič, 2023: 162–163) marked by complex reconfigurations of power in the journalism system. Described by Splichal (2001) as a “imitative revolution”, it is characterized by two sets of tendencies: those imitating Western traditions, ideas, and institutions, shown in the processes of privatization, commercialization, and internationalization; and those replicating power relations from the past, particularly those of the socialist era, seen in renationalization and ideological exclusivism. While Splichal (2001: 33) acknowledged that mimicry had a role in democratizing public life along Western lines, he noted the conditions for a pluralistic and participatory media system to develop have not generally arisen. Instead, a paternalistic-commercial media environment has emerged, associated with blurred boundaries between political and economic interests and the marginalization of civic concerns. Such “paternalistic commercialism” (Vobič, 2023: 152) merges commercial and political logics, shaping media regulation and ownership reconfigurations (e.g., Bašić and Kerševan, 1999; Bašić Hrvatín, Kučić, and Petković, 2004; Splichal, 2020a), alongside editorial strategies and journalistic practices that constrain professional autonomy (e.g., Vobič, 2020).

Second, the “digital revolution” (Vobič, 2023: 162) has deepened the structural problems of journalism in Slovenia, despite its democratic potential (Vobič 2025). As an enduring process affecting all aspects of life, digitization has been shaped more by dominant social relations than by technology alone (Splichal and Dahlgren, 2016). It has disrupted traditional media through tensions between journalistic centres and peripheries, resistance to new production models, and struggles over professional authority (Vobič, 2013). Slovenian media have developed a sort of an “antipodal relation” with digital platforms, described by both value opposition and asymmetrical competitive dependency (Kaluža and Slaček, 2021). While platforms gain disproportionate control over content visibility and distribution, traditional me-

dia are increasingly forced to follow platform-driven commercial logics (cf. Vobič, 2025). This has led to pressure for content optimization, click maximization, and labour flexibilization. Journalistic work has become routinized, precarious, and geared to fast, networked news production, relying on standardized formats and insecure employment (e.g., Vobič and Bembič, 2021; Kaluža and Slaček, 2020).

The media environment's long dual revolution in Slovenia highlights the key political, economic, cultural, and technological factors impacting the journalism system's structural conditions and capacity for news diversity. These dynamics operate on interconnected levels: different media sectors, organizational and managerial structures, and production processes. Multiple converging dynamics influence the main structural conditions, holding significant consequences for news diversity in Slovenia (see Table 1).

Table 1. Main structural conditions affecting news diversity in Slovenia

*Tablica 1. Glavni strukturni uvjeti koji utječu na raznolikost vijesti u Sloveniji*

Structural conditions	Description	Implications for news diversity
Ownership concentration and networked control	A complex network of companies linked by shared ownership, directorship, and familial ties, allowing one actor to control a cross-sectoral media empire (Media24) (radio, daily press, magazines, television, and digital) while avoiding formal ownership regulations (Kučić, 2020; Pirc, 2023; Milosaljević and Biljak Gerjevič, 2024)	Content homogenization tendencies across outlets, semi-automated republication, and reduced editorial independence
Monopolization tendencies in the advertising market	High television ratings and online reach give Pro Plus producing market dominance, influencing advertising flows and hindering smaller outlets (Kučić, 2015; Vobič, 2023)	Market power centralization reduces news diversity; smaller media struggle to survive and compete
Crisis of the newspaper industry	Decline in circulations, ad revenues, and employment conditions; growing reliance on native advertising and diversification of the revenue models toward non-media sectors (Vobič, 2020; Bembič & Vobič, 2021; Sekloča & Slaček, 2024)	Reduced space for investigative and critical journalism; the proliferation of hybrid formats
Political instrumentalization of public media	Various mechanisms for state influences on governance structures and funding of public RTV Slovenia and the STA news agency, leading to periods of editorial subordination and politicization in the last decade (Splichal, 2020b; Vobič, 2023)	Risk of the erosion of professional autonomy; public trust in the media deteriorates

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Partisan media infrastructure	Politically affiliated media outlets (Nova24TV, weekly Demokracija, and a pool of news websites) with owners, directors or editors with (in)direct ties to the right-wing SDS party, shared design and coordination, shared design and coordination, serving partisan propaganda purposes (Kučić, 2019; Vezjak, 2020; Splichal, 2020)	Fragmentation and polarization; distortion of public debates; decline in editorial standards
Structural marginalization of the third media sector	Due to short-term, unstable, project-based public funding, the third media sector faces financial uncertainty and symbolic marginalization in the journalism system (Bašič Hrvatin, 2004; Radio Študent, 2024)	Limited capacity to produce diverse, locally relevant content; decline in autonomy due to dependency on state funding

These structural conditions have been systematically examined in the last two decades or so from the perspective of media pluralism (e.g., Bašič Hrvatin, Kučić, and Petković, 2004; Bašič Hrvatin and Milosavljević, 2010), especially more recently within the Media Pluralism Monitor that considers four key dimensions: basic protection, market plurality, political independence, and social inclusiveness (e.g., Milosavljević and Biljak Gerjevič, 2024). Fewer studies, however, have examined content diversity in a focused manner (Adam et al., 2008; Tomšič et al., 2020). Those that did so often adopted a reductionist approach, operationalizing pluralism or diversity primarily through the ideological, value-based, or political orientation of media and journalists – typically simplified to left–right alignments or pro- vs. anti-government sentiment. The presented study seeks to fill that gap by moving beyond the simplified binary logic of previous research on media content pluralism (e.g., left–right, liberal–conservative, pro-government–neutral–anti-government) to examine patterns of pluralization and homogenization of news within the Slovenian journalism system, explain the underlying power relations reflected in news diversity, and explore the implications for public discourse.

### *Research questions*

The study’s central goal is to investigate how structural conditions in the Slovenian journalism system manifest in patterns of pluralization and homogenization, thereby revealing the ways ownership, organizational, and ideological factors shape the distribution of visibility and symbolic power across media in Slovenia. Although the media landscape is characterized by quite a mixed institutional structure – comprising public media, commercial outlets, and the third media sector with

varying geographical coverage – this diversity does not automatically translate into news diversity. The journalism system is dominated by a powerful public broadcaster and the national news agency, while structural challenges continue, including media ownership concentration and direct partisan instrumentalization of outlets via ownership and influence on local, regional, and national levels. Strategic synergies and organizational rationalizations are common within media groups linked by ownership, business, or shared interests. Building on this context, the first research question focuses on how these structural conditions appear in actual patterns of shared content between outlets:

**RQ1:** *How are Slovenian news outlets grouped into structural clusters based on near-verbatim text reuse characterised by ownership, geographic, and ideological patterns?*

The second research question concerns the composition of information sources. Sources are a core indicator of news diversity since they shape which social actors routinely appear in the media. Rather than assuming a direct one-to-one correspondence between source inclusion and social power, source distributions are employed to examine how strongly news in different outlet groups revolves around institutional political actors vs. other source types.

**RQ2:** *How do various structural groups of news media differ in the distribution of source categories in their coverage?*

Finally, it is not only the categories of sources that matter, but also which individual actors and institutions become focal points of news coverage. The prominence of certain figures can signal both institutional centrality and political conflict, and may vary considerably among structural groups.

**RQ3:** *Which individual actors and institutions are most prominent in each structural group's news output, and how concentrated is the attention paid to a small set of actors within these groups?*

## **Methodology**

### *Sample, temporal structure, and selection of outlets*

Given the practical impossibility of monitoring all Slovenian news output continuously, our primary aim was to construct a sample that approximates the routine flow of socio-political news in different outlet types. To that end, we combined a banded-week temporal design with a broad selection of outlets that reflect the main

ownership constellations, formats (TV, radio, online), geographical levels (national, regional, local), and editorial profiles in the Slovenian journalism system. These constraints mean the sample is not statistically representative of every item published in the country, yet still provides a structurally balanced snapshot of core news production.

To capture routine news production for a full weekly cycle, banded temporal sampling was employed on seven weekdays: Monday, 2 Oct 2023; Tuesday, 10 Oct; Wednesday, 18 Oct; Thursday, 26 Oct; Friday, 3 Nov; Saturday, 11 Nov; and Sunday, 19 Nov. The influence of one-off events was reduced by this design, which also enabled cross-day comparisons of publishing dynamics. While methodologically robust for week-level patterns, it omitted continuous narratives developing outside the selected days and may still be skewed if a major event (e.g., escalation of war, resignation of the government) dominated on a sampled day. The findings should hence be interpreted as indicative of regular production, not as fully representing longer cycles. The entire corpus comprised 13,207 news items from 141 outlets spanning national, regional, and local media; general-interest and topic-focused outlets; and various ownership models (i.e., public, commercial, governmental, NGO). Priority in eligibility was given to outlets that routinely cover socio-political affairs with a breadth of genres (i.e., hard news, thematic, tabloid).

The item corpus was assembled from four data sources: (1) the Trendi automated archive of selected outlets (5,534; 39%); (2) a custom crawler/normalizer targeting smaller local outlets (4,257; 30%), including paywalled content accessed via subscriptions or research agreements (e.g., STA, Delo, Dnevnik, Večer, Primorske novice, Mladina, Demokracija, Družina); (3) broadcast monitoring via Kliping d.o.o., extracting news segments and transcribing them to text (2,868; 20%), with radio focused on the 07:00–10:30, 11:00–14:00, and 16:00–19:00 slots, and TV on evening newscasts (RTV programmes re-collected to improve representativeness); and (4) the MMC RTV Slovenia portal (1,535; 11%).

### *Structural diversity of the Slovenian media landscape*

To examine how news homogenization emerges from structural diversity in the Slovenian media system, we quantified verbatim text reuse and mapped overlaps among outlets. As a preprocessing step, we first removed articles of the Slovenian Press Agency (STA) (1,398), providing a clearer view of non-agency overlap. Every pair of news items was then compared and a match flagged when  $\geq 10$  consecutive identical words (10-grams) were detected, with 2,751 of such articles being identified. The 10-word threshold was chosen because it is long enough to filter out

accidental overlaps and generic phrases, and also generally excludes short, formulaic quotes from press conferences or public statements, meaning detected matches indicate substantial reuse of copy rather than isolated identical fragments. The result was a visualised network of outlets, with undirected connections per outlet pair, where greater weight indicated more shared text. We focused on the 75 outlets with the strongest overall connections and built a readable map by keeping exactly 150 of the strongest links. To accomplish that, we: (1) retained only the heaviest links needed to keep each part of the map connected (to prevent weak, accidental bridges from dominating); (2) added all very strong links (the top ~20% by strength); and (3) assured every outlet kept its four strongest links; if that produced fewer than 150 links, we gently relaxed the cut-offs or, if too many, kept the 150 strongest. All 75 outlets remained on the map, even if a few ended up without strong links. A standard grouping method (Louvain) was then used to find sets of outlets more closely connected to each other than to the rest: *structural groups*. The pipeline was implemented in Python (pandas, networkx, scipy), while the final map was rendered in Gephi.

In the co-reporting backbone network (top outlets; edges weighted by source-overlap scores and sparsified to the strongest ties), each community detected by modularity optimization is reported as a triple  $(C_k; n / \bar{k}_v^w / \chi)$ . Here,  $C_k$  is the community label;  $n = |V_k|$  is the number of outlets (nodes) in community  $k$ ;  $\bar{k}_v^w$  is the average internal weighted degree, computed on the subgraph induced by  $V_k$  as the mean, across nodes in  $V_k$ , of the sum of within-community edge weights after sparsification; and  $\chi$  is a cohesion index that normalizes the community's internal tie strength to the network baseline, defined as  $\chi = 100 \times (\text{mean } w_{ij} \text{ for } i, j \in V_k) / (\text{mean } w_{ij} \text{ over all edges in the backbone})$ . Thus,  $\chi = 100$  indicates average cohesion relative to the whole backbone,  $\chi > 100$  above-average (tightly knit) communities, and  $\chi < 100$  below-average (looser) ones. For example, (no. 3; 7 / 4.57 / 42.0) denotes community 3 with seven outlets, an average internal weighted degree of 4.57, and internal cohesion at 42% of the backbone mean.

### *Identifying information sources identification*

To investigate how categories of social actors are presented as sources in Slovenian news media, we used a semi-automated, LLM-assisted pipeline to extract attributed sources from news articles. A fixed prompt (with a Slovenian reporting-verb lexicon) directed GPT-4o (temperature 0.2) to return a structured record for every explicitly attributed statement (direct quotes or indirect speech with a clear source), including person/organization and article ID; multiple statements by the same so-

source within an article were merged, media/news agencies (e.g., STA, AFP, Reuters) were coded as organizations, and ambiguous attributions were labelled anonymous. We also manually annotated 704 broadcast video items since source attribution in these segments frequently relies on embedded interview soundbites and on-screen captions (lower thirds) – information not retained in transcripts – rendering sources otherwise unidentifiable. Names were standardized to canonical forms to collapse the spelling of variants and homonyms. For indirect chains (e.g., “DPA reports X saying...”), we coded both the reporting outlet and original source. Validation on a stratified sample of 39 articles (104 cited sources) yielded precision/recall/ $F_1 = 0.94$ . The final database comprised 20,814 named-source records.

For analysis, we identified the top-20 named sources and computed (1) row-normalized distributions (each source’s spread across structural groups); and (2) column-normalized shares (which sources dominate each structural group), visualized as heatmaps. Complementarily, for each identified structural group we produced concise top-5 “source repertoire” profiles to characterize internal hierarchies of influence.

### *Prominence of social actors*

We examined the varying prominence of different categories of actors across structural groups by automatically classifying quoted sources with the ChatGPT API (OpenAI, gpt-4o-mini, temperature = 0) using a constrained Slovenian prompt that enforced a 13-class taxonomy (politician, public administration, security, judiciary, diplomacy/international, business, civil society/NGO/union, expert/academia, media, citizen, religious, culture/sport, other). The pipeline read a 3-column CSV, prioritized a person+position+organization field to identify the source, and – when missing/ambiguous – supplied up to ~1,200 characters of article text as fallback; the model returned strict JSON (class, subclass, confidence), which we normalized to fixed labels. Among 20,841 source strings, 1,154 (5.54%) were unresolvable; initial macro  $F_1$  was 0.82, rising to 0.97 after a manual review of the 1,000 most frequent sources (covering 55.2% of units). We canonicalized entities (collapsing surface variants), reducing unique strings from 7,586 to 6,951 (–8.37%). For analysis, we built a cluster  $\times$  category table, converting counts to within-cluster percentages.

To make differences between groups comparable, we converted the counts of occurrences into percentages within each group. To measure the breadth/dispersion of sources, we used Shannon entropy, which captures how evenly sources are distributed across categories. For ease of interpretation, we also express entropy as an effective number of sources (ENS). ENS can be interpreted as the ‘number of equ-

ally sized categories' that would yield the same level of dispersion. For example, if a group has an ENS value of 5, this means the source structure in that group behaves as if five equally represented categories were present.

Given that entropy is a logarithmic measure, it is not linearly sensitive, and small differences – for instance, 0.2 – imply noticeable changes in structure; if, for instance, the entropy value is 3.1, this corresponds to  $\approx 8.5$  equally weighted categories, whereas a value of 3.3 corresponds to  $\approx 9.9$  categories. A difference of 0.2 thus means the dispersion of sources increases by more than one 'equivalent' category.

We further calculated, for each cluster, the combined share of political actors and public-administration sources. In the tables, we refer to this combined share as "elite" for brevity, yet interpret it analytically as a narrow proxy for the centrality of these institutional political sources in the news agenda, rather than as a comprehensive measure of social elitism.

### *Information source profiles*

For greater insight into the reporting of individual structural groups, we compiled source profiles. Here, for each media group we identified the five most frequently used sources (individuals, institutions, organizations) in the coverage and assigned them to predefined categories, which permits a comparison of the relative weight of institutional political sources and other categories of actors across groups.

## **Results**

### *Structural diversity of the Slovenian media landscape: ownership, geography, and ideology as drivers of homogeneity*

Three primary structural logics underpin media co-reporting patterns: highlighting the manifestations of news homogenization (Figure 1): ownership and affiliation ties, regional proximity, and ideological alignment. We illustrate each through key clusters (cluster ID; size/avg. degree/avg. strength).

**Ownership** proved to be the strongest driver of homogenization. Large media networks like Media24, which comprises outlets connected by various ownership arrangements to the businessman Martin Odlazek and includes an extensive network of radio stations along with print and online, routinely reproduce the same content across different media. This network unfolds into several subclusters. The first is a north-eastern regional hub in which the most central outlets from the Media24 group (no. 1 in Figure 1; comprising 10 media outlets/6.2/64.8) include the

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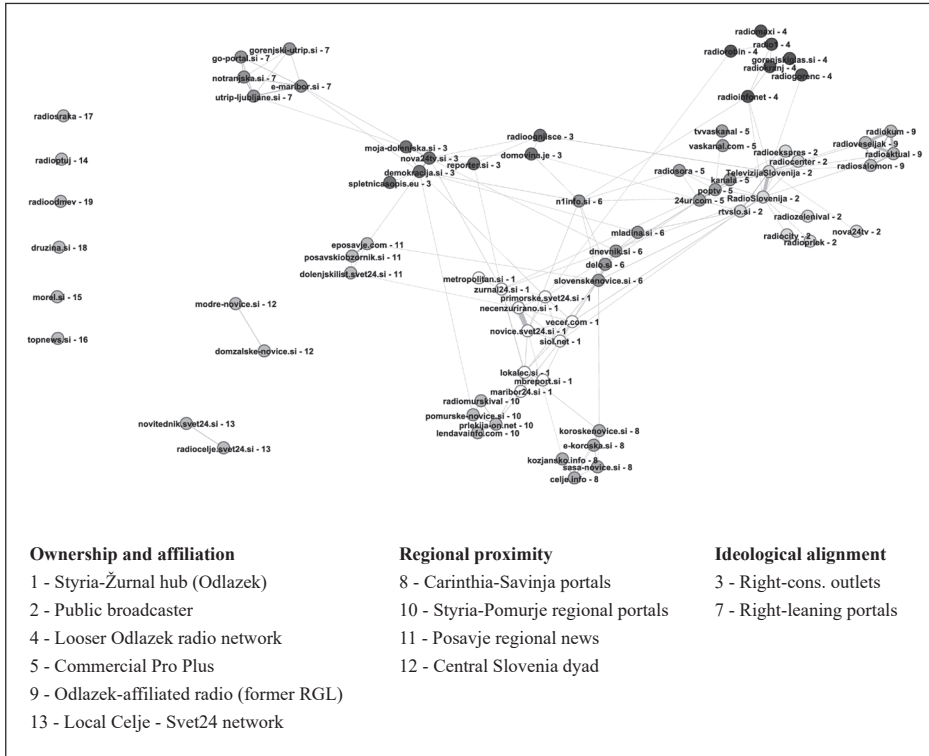


Figure 1. Media Co-reporting Backbone (top-75 Outlets, weighted edges by source overlap; 150-edge sparsification; structural groups)

*Grafikon 1. Medijska okosnica suizveštavanja (top-75 medijskih kuća, ponderirane veze prema preklapanju izvora; prorjeđivanje na 150 veza; strukturne skupine)*

portals novice.svet24.si, necenzurirano.si, vecer.com, primorske24.si, and zurnal24.si. This hub also includes local Styrian portals such as mbreport.si, maribor24.si, and lokalec.si, indicating frequent co-publication within the Styria region. The second subcluster is a closely connected radio network (former Radio Glas Ljubljane – RGL group; no. 9; 4/4.25/121.0) comprising Radio Veseljak, Radio Aktual, Radio Kum, and Radio Salomon. The third is a radio network with looser ownership links (no. 4; 7/2.71/17.4), including Radio Kranj, Radio 1, Radio Infonet, Radio Maxi, and Gorenjski glas. A smaller local Celje network within the Svet24 group (no. 13; 2/1.0/14.5: novitednik.svet24.si, radiocelje.svet24.si) similarly indicates shared production practices and news flows.

Structures associated with Odlazek do not form a single network, but several separate and condensed subnetworks. Irrespective of connected ownership, these outlets form compact yet mutually distinct subgroups, underscoring the varying nature of news homogenization, even within the same conglomerate. Similar shared production flows are also observed among other ownership-linked groups. The cluster around the public service broadcaster RTV Slovenia (no. 2; 9/5.22/51.9) is centred on [rtvslo.si](http://rtvslo.si) and includes Radio Slovenia and Television Slovenia. The co-location of commercial radio stations (Radio Ekspres, Radio Center, Radio City, Radio Zeleni val) points to overlapping news agendas rather than common ownership.

The group associated with Pro Plus (no. 5; 6/4.33 average degree/37.7% density) reflects ownership ties between POP TV (the news programmes 24UR popoldne, 24UR, 24UR zvečer and the portal [24ur.com](http://24ur.com)) and Kanal A (the news programme Svet na Kanalu A), while also including regional media without ownership links to Pro Plus (e.g., Radio Sora, TV Vaš kanal). These local outlets' co-location in the cluster suggests they frequently follow and republish national stories and frames originating from Pro Plus, thereby adopting mainstream national narratives on the local level instead of feeding local-specific agendas back into the national news flow.

The print outlet cluster represents a professionalised, nationally oriented core formed by Delo and Slovenske novice (shared ownership), closely connected to Dnevnik, Mladina, and N1info (United Group). The latter acts as a bridge to a television–digital ecosystem, although in content logistics it remains aligned with the same national news pipeline. Taken together, these outlets are legacy media with relatively large newsrooms, a strong focus on politics, public affairs, and socio-economic issues. This constellation appears in the network as a compact central cluster; peripheral ties to RTV Slovenia and Pro Plus reflect agenda overlap rather than ownership links. Spatially, all actors are national or based in the capital; connections to regional clusters are weaker and arise mainly through topical pulses rather than geography, such as national politics, the economy, and the courts.

**Regional proximity** emerges as the second-most important factor in homogenization, sometimes intertwining with ownership structures. Proximity encourages routine coverage of the same municipal, service and regional news, thereby connecting multiple media communities. Of note here is the group of Carinthia–Savinja regional portals (no. 8; 5/3.4/25.8): [celje.info](http://celje.info), [koroskenovice.si](http://koroskenovice.si), [e-koroska.si](http://e-koroska.si), [kozjansko.info](http://kozjansko.info), [sasa-novice.si](http://sasa-novice.si); and the Styrian–north-eastern regional group (Styria–Pomurje) (no. 10; 4/3.5/28.0: [prlekija-on.net](http://prlekija-on.net), [pomurske-novice.si](http://pomurske-novice.si), Radio Murski val, [lenda-vainfo.com](http://lenda-vainfo.com)). In addition, Posavje regional news take shape (no. 11; 3/3.0/36.7) and form a Central Slovenian pair (no. 12; 2/1.0/10.5).

Some media, such as Radio Odmev, Radio Sraka, and Radio Ptuj – appear isolated due to the specific profiles of their sources. Unlike stations integrated into national radio networks, these outlets are not part of larger ownership clusters and operate as independent local radios. Their network isolation suggests more distinctive, locally rooted news repertoires that do not systematically reproduce the shared production flows of major networks.

**Ideological similarity** functions as the third-most important driver of homogenization. Editorial orientation influences co-reporting patterns because outlets holding similar political leanings often rely on the same topics and interpretations. In the cluster of right-conservative media (no. 3; 7/4.57/42.0) – including *demokracija.si*, *nova24tv.si*, *Radio Ognjišče*, *reporter.si*, and *moja-dolenjska.si* – content homogeneity is strongly linked to ideological proximity. Similar patterns are observed among politically profiled portals that cover both national and local topics, including *utrip-ljubljane.si*, *e-maribor.si*, *notranjska.si*, *go-portal.si*, and *gorenjski-utrip.si* (no. 7; 5/4.6/44.4). Simultaneously, certain outlets maintain their own distinct editorial perspectives and remain separate from larger homogenization clusters – for example, *druzina.si* (1/0.0/12.0), *topnews.si* (1/0.0/15.0), and *morel.si* (1/0.0/8.0).

The configuration of politically profiled portals resonates with critical accounts of party-adjacent local media in Slovenia, where clusters of outlets closely aligned with certain parties or factions recycle similar narratives and interpretive frames (Vezjak, 2021). The position of *druzina.si* outside the main right-conservative cluster is less a sign of ideological distance than of a distinct thematic focus: the outlet concentrates more on religious, ethical, and community issues and less on day-to-day party politics, which also leads to a specific, church-centred source repertoire.

Overall, the analysis shows that news homogenization is conditioned by ownership ties, geographical proximity, and ideological affinity. This, in turn, raises the question of how power relations are reflected amid the selectivity of sources and representation of actors in Slovenian news.

### *Pluralization patterns revealed by the information sources selected*

In the collected items, we identified 14,645 cited sources – namely, persons/organizations to whom the journalist attributes specific information in a story, either quoted or paraphrased with a clear attribution. The analysis showed that the level of pluralization varies significantly across media groups. To measure plurality, we used entropy, the effective number of categories (ENS), and the share of elite sources. These indicators show how broadly the set of actors is represented and the extent to which certain groups – notably political sources – predominate. The results

reveal pronounced differences between groups of outlets, confirming that the Slovenian media sphere is not uniform but subject to different informational logics that shape how outlets structurally select and distribute categories of sources.

Across the full sample, we observed a structural advantage for official and political voices and the underrepresentation of civil society and expertise. The biggest shares of sources were political actors (3,328; 22.8%) and public administration/agencies voices (2,155; 14.7%); together accounting for 37.5% of all attributions, indicating a marked tilt toward institutional elites. Among broader thematic categories, culture and sport (1,605; 11.0%) and media/journalists (1,461; 10.0%) stand out, broadening the topical spectrum but not necessarily the balance of power. Civil society/NGOs/trade unions (1,063; 7.3%) and experts/scientists (875; 6.0%) are noticeably less represented; together they reach only 13.2%, roughly one-third of the elite's share. Security actors (police, army, firefighters) (886; 6.1%) and business (802; 5.5%) appear with medium frequency, whereas citizens/community members (639; 4.4%) are relatively rare. Diplomatic/international officials contribute 4.1% (595), the judiciary 3.0% (435), religious organizations 1.1% (163), and the "other/unknown" category 4.3% (623). The overall picture confirms the systemic primacy of official and political voices and underrepresentation of the civil and expert spheres. Fifteen sources had missing values (incomplete or unclassified records); we coded them as missing and excluded them from the category distributions, which means they do not materially affect the findings.

Table 2. Entropy, effective number of categories, and share of the elite by cluster

*Tablica 2. Entropija, efektivni broj kategorija i udio elite po klasteru*

Cluster label	Entropy bits	ENS effective category	Elite %
Print outlets cluster	3.38	10.4	33.95
Styria-Zurnal hub (Odlazek)	3.36	10.23	32.48
Public broadcaster (RTV) cluster	3.32	9.98	40.44
Commercial Pro Plus cluster	3.29	9.77	36.36
Odlazek-affiliated radio network (former RGL)	3.14	8.83	44.62
Right-conservative outlets	3.12	8.67	44.96
Looser Odlazek radio network	3.03	8.18	51.97
Radio Ptuj, radio Sraka and radio Odmev	3.03	8.17	50,00
Carynthia-Savinja regional portals	3.02	8.12	43.10

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morel.si	3,02	8.10	37,50
Styria-Pomurje regional portals	3.00	8.01	44.27
druzina.si	2,96	7.81	19.60
topnews.si	2,96	7,79	50,00
Posavje regional news	2.92	7.59	39.05
Right-leaning portals	2.87	7.31	41.51
Local Celje - Svet24 network	2.35	5.09	65.39
Central Slovenia local dyad	1.14	2.21	15.38

The highest level of diversity is shown by the print press group, with entropy of 3.4, ENS of 10.4, and an elite-source share of 34%. This indicates a broader set of actors, including experts, civil-society representatives, and citizens. Although political and public-administration sources still dominate, the presence of actors from other social spheres strengthens the pluralization of media reporting. We observed a similarly high level of diversity among regional outlets in north-eastern Slovenia (Styria-Žurnal), where entropy reached 3.4 and ENS 10.2, suggesting that local media are able to include a range of social actors as news sources.

Also among the highest-ranked in pluralization terms is the public service broadcaster, where entropy was 3.3, ENS 10,0, and the elite share of sources 40.4%. While the elite share at RTV Slovenia is somewhat higher than in the press yet lower than in radio networks or right-conservative media (where it exceeds 45%), the broader repertoire of sources indicates a commitment to including voices from different social spheres. The analysed indicators also reveal outlets in the Pro Plus group belong to the more plural segments of the media landscape. With entropy of 3.3 and an ENS of 9.8, they approach the press and the public service, meaning they rely on a relatively wide spectrum of sources in news production. Their elite-source share (36.4%) suggests that politics and public administration play a smaller role in their reporting, while the share of citizen sources (11.2%, Table 3) is among the highest across the identified groups, indicating the presence of citizens' voices in their coverage.

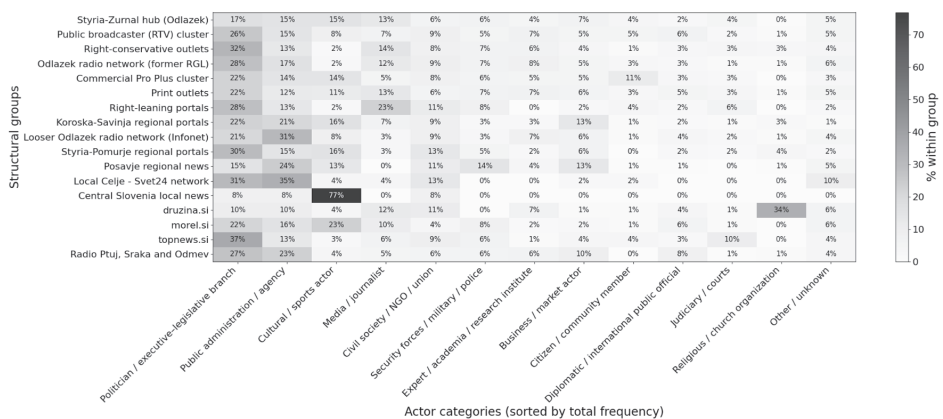
Radio networks appear as a segment with a distinctly bigger share of elite sources and lower content dispersion compared with the press and television. The former RGL network, today part of the Odlazek media conglomerate, has entropy of 3.1 and ENS of 8.8, with elite sources making up almost half of all attributions (44.6%), while the Infonet network has similar values (entropy 3.0, ENS 8.2) but an even higher elite share (52.0%). This means that, on average, radio stations strongly reproduce the voices of political and institutional actors, leaving considerably less

room for non-elite sources such as civil society, citizens, or experts. With entropy of around 3.0 and ENS of between 8.0 and 8.8, radio networks are less diverse than the press, RTV Slovenia, or Pro Plus, pointing to a more standardized and substantively narrower production. Radio networks thus contribute only partly to pluralization since their content generally reinforces dominant institutional voices.

Right-conservative media and politically oriented portals emerge as segments where source diversity is relatively constrained, and the elite share is markedly high. The right-conservative group (entropy 3.1; ENS 8.7) draws primarily on politicians and public-administration representatives, who together account for nearly half of all attributions (45.0%). Such a high share reflects an intense and often conflict-driven focus on day-to-day politics rather than a broader range of social issues and actors. Their reporting consequently leaves much less space for civil society, minorities, or experts, and content homogenization often follows a clear ideological line. A similar pattern holds for politically oriented portals (entropy 2.9; ENS 7.3), where elite sources appear in over 41% of cases. Although this group includes portals that additionally cover local topics, their source repertoires remain quite narrow, with the strong presence of political interpretations and less room for a plurality of voices. This suggests these media contribute only modestly to pluralization because they tend to reinforce ideological narratives rather than create space for broader social diversity.

Table 3. Distribution of source categories by structural group (%)

Tablica 3. Raspodjela kategorija izvora prema strukturnoj skupini (%)



Citizens thus constitute a category quite modestly represented in the source structure – around 4% of all sources in the full sample – meaning citizens’ voices rarely appear in the news. When they do, it is most often in poll- or vox-pop-type statements, reactions to crises like accidents and severe weather, or with regard to local topics. In national and politically oriented media, this share is even lower, indicating that citizens’ voices are often overlooked in national debate. The observation that individuals as actors in the public sphere are marginalized, while elites are privileged, is thereby confirmed.

Together, citizens (4.3%), civil society (7.2%), and experts (5.9%) account for about 17% of all sources in the full sample. As actors outside the institutional political and administrative sphere, one would expect them to contribute substantially to news diversity and hence to pluralization. Although not negligible, the mentioned share is considerably smaller than the combined share of political actors and public-administration sources (together exceeding 37%). Namely, institutional political and administrative sources hold a structurally advantaged position in news coverage, whereas the voices of civil society, citizens, and experts are present, albeit clearly secondary. In a more diverse media environment, one would expect a more balanced distribution across these groups since they introduce alternative perspectives, critical scrutiny, and expert interpretation.

Nonetheless, there are notable differences between outlet groups. The print press, the public service broadcaster, and the commercial Pro Plus Group display somewhat broader source repertoires, with bigger shares of experts and civil-society representatives than with most other clusters. This pattern is likely related to their larger newsrooms, more resource-intensive formats, and broader editorial agendas, which provide greater opportunities to occasionally include a wider range of voices, even though institutional political actors remain central in their coverage. Further, the overall picture remains one of clear hierarchies: across the system, political and public-administration sources dominate, while citizens, civil society, and experts occupy a more marginal position in news agendas, holding important implications for the range of perspectives that can be considered in public debate.

### *Patterns of actor prominence across structural groups*

The representation of different actors in the news provides a way for understanding how the journalism system distributes symbolic visibility across individuals and institutions. The degree to which the media landscape is open to diverse voices and viewpoints depends not simply on the number of outlets and topics, but also on which actors are recurrent focal points of coverage. To capture these patterns, for

each structural group we analysed the five most frequently cited sources and how strongly attention is concentrated on a small set of actors.

**Agency dependence and institutional centralization.** The largest groups – the public service broadcaster RTV Slovenia, the north-eastern regional news cluster (Styria–Žurnal), and the print press – primarily rely on news-agency (STA, AFP, dpa) and official sources (e.g., the police). The percentages are low and evenly distributed, indicating dispersion and relative diversity. Even though these media form the backbone of the information system, they nonetheless reproduce a homogenized flow since most sources come from the same institutions.

Table 4. Structural group profiles – top 5 sources

*Tablica 4. Profili strukturnih skupina – top 5 izvora*

Structural group	Top 5 profile
Styria-Zurnal hub (Odlazek)	Slovenian Press Agency (STA): 2%; AFP: 1%; Police: 1%; dpa: 1%; Robert Golob 1%
Public broadcaster (RTV) cluster	Joe Biden: 1%; Robert Golob: 1%; Benjamin Netanyahu: 1%; Nataša Pirc Musar: 1%; Josep Borrell: 1%
Right-conservative outlets	Janez Janša: 2%; STA: 2%; Robert Golob: 2%; Tatjana Bobnar: 1%; Nataša Pirc Musar: 1%
Odlazek-aff. radio network (former RGL)	Robert Golob: 2%; Občina Medyode: 2%; Mestna občina Kranj: 1%; Tanja Fajon: 1%; Zoran Janković: 1%
Commercial Pro Plus	Robert Golob: 1%; Janez Janša 1%; Srečko Šestan: 1%; Joe Biden: 1%; Marjan Šarec: 1%
Print outlets	AFP: 2%; STA 1%; dpa: 1%; Robert Golob: 1%; Joe Biden: 1%
Right-leaning portals	Radio Ognjisce: 4%; Tatjana Bobnar: 4%; Robert Golob: 4%; MMC: 4%; Tina Heferle: 2%
Carynthia-Savinja regional portals	STA: 4%; Government of Slovenia: 3%; Milan Zver: 2%; Alenka Bratušek: 2%; Alenka Helbl: 2%
Looser Odlazek radio network (Infonet)	Robert Golob: 4%; Police: 4%; Nataša Pirc Musar: 3%; Srečko Šestan: 3%; Klavdij Strmčnik: 3%
Styria-Pomurje regional portals	Damjan Anželj: 3%; Boštjan Poklukar: 2%; Milan Zver: 2%; Rafael Kant: 2%; Urška Mayko Tuš: 2%
Posavje regional news	Novo mesto police directorate: 4%; Ivan Molan: 4%; Ristribution unit of Nuclear Powerplant Krško: 4%; Srečko Ocvirk: 3%; Sevnica municipality: 2%
Local Celje - Svet24 network	Lojze Posedel: 10%; Branko Kidrič 6%; Slovenian Forest Service: 4%; Suzi Kvas: 4%; Miran Jurkošek: 4%

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Central Slovenia local dyad	Bruno Najdić 12%; Blaž Peterka: 8%; Dominik Kozjek: 8%; Mladen Kašič 8%; Draga Jeretina Anžin: 4%
druzina.si	Vatican News: 5%; Brane Gregorčič: 2%; Pope Francis 2%; Andrej Saje: 2%; Johan Verschueren: 2%
morel.si	Bruno Najdić: 39; Mladen Kašič 3%; Miha Štamcar: 3%; Environmental Agency of Slovenia (ARSO): 3%; Associated Press: 2%
topnews.si	Janez Janša 4%; Palestinian Red Crescent: 3%; Josep Borrell: 3%; Tatjana Bobnar: 3%; Tanja Fajon: 3%

**Political polarization and concentration in a few actors.** In right-conservative media, on politically oriented portals, and *topnews.si*, there is strong concentration because a handful of actors – like Janez Janša, Tatjana Bobnar, Robert Golob, and selected opposition figures – occupy a disproportionately large share of attention. Their shares are considerably greater (3%–4% and more), indicating the group’s profile is built on a narrow set of politically polarizing sources.

It is important to stress that high prominence does not automatically imply affirmation or control over a given outlet. A politician might be highly visible precisely as a target of criticism, scandal coverage, or ideological attack. In our data, for example, government and former government leaders appear frequently in right-conservative outlets, while opposition leaders receive extensive attention in left-leaning weeklies. In each case, prominence reflects political conflict and polarization rather than a straightforward expression of ‘social power’ over these media. Our measures therefore capture symbolic centrality in the news agenda, not the direction or tone of coverage.

**Local personalization.** Regional structural groups – namely the local Celje network within the Svet24 group, central Slovenian portals, and Posavje outlets – show a pronounced focus on a small set of recurring local actors. Local journalism in these groups is thus revealed to rely more on a narrow circle of locally embedded figures than on national and news-agency events and stories.

**Ideologically specific niche.** Religious media such as *druzina.si*, which positions itself within the sphere of religious press with a firm emphasis on Christian (Catholic) values and views of society and has an ownership link (the publisher is co-owned by the Archdiocese of Ljubljana and four other Slovenian dioceses), have a homogeneous structure; the bulk of their sources are church institutions and their representatives (e.g., the Catholic outlet *Vatican News*, Pope Francis, and the secretary-general and spokesperson of the Slovenian Bishops’ Conference, Andrej Saje).

A **noteworthy homogenization profile** is formed by politically oriented portals (*e-maribor.si*, *utrip-ljubljane.si*, *notranjska.si*, *go-portal.si*, *gorenjski-utrip.si*), whi-

ch in their reporting exhibit a high share of (primarily) elite sources and, compared with other structural groups, the highest concentration of media sources – indicating a pronounced reliance on summarizing or republishing content from other outlets.

## **Discussion and conclusion**

This study adds to previous debates on news diversity (e.g., Karppinen, 2018; Hendrickx, Ballon, and Ranaivoson, 2020; Loecherbach et al., 2020; Joris et al., 2020) by empirically demonstrating how structural, organizational, and ideological conditions shape the Slovenian journalism system's character between watchdog and copycat logics. The findings of the analysis of news diversity in Slovenia confirm that pluralization and homogenization operate simultaneously and in tension, structuring the news environment in ways that both expand and constrain the conditions for democratic debate. The analysis shows that the institutional centralization of information sources in the country's journalism system, together with ownership structures, regional proximity, and the ideological orientation of news media outlets, are the key drivers of homogenization, while the selectivity of sources and asymmetrical representation of social actors confirm systemic inequalities in the symbolic space shaped by media through news. In this context, harmful patterns appear to be reinforced by the concurrent processes of homogenization and pluralization, as also shown by our findings.

The study findings stress the role of ownership as a key driver of news homogenization. The Media24 network reproduces content across multiple subclusters – from regional newspapers and online portals to radio networks – indicating production rationalization and structurally conditioned homogenization. However, the analysis also reveals differences among individual subgroups. While radio networks operate as compact clusters with a high degree of content similarity, regional online and print media display greater variation, indicating some degree of differentiation. Within this media conglomerate, homogenization is not uniform but dispersed across multiple dense albeit separate sub-networks with regional or local characteristics. Media24 did not emerge as a single homogenized news network, but in several nodes. The identified structure indicates that ownership links lead to homogenization with a segmented character, holding various effects on news diversity and pluralism within individual parts of the media landscape. Similar patterns, yet with varying intensity, are observed in other networks. The group around RTV Slovenia forms a homogeneous node with a strong central portal and connected radio and television programmes, while the Pro Plus network shows a combination of ownership ties and parallel patterns of homogenization with some regional media. Right-conservative media form their own node with a strong homogenization pattern, where

content and interpretations often overlap, internally reinforcing the potential for ideological uniformity within the network.

The study also reveals that source selectivity and the representation of social actors in the analysed media display clear hierarchies: political and official voices are most prominent, accounting for over one-third of all cited sources, while civil-society, expert, and citizen voices are systematically underrepresented. This pattern is consistent with critical accounts that interpret source routines as being shaped by institutional hierarchies. Simultaneously, our quantitative measures of visibility cannot distinguish between supportive and antagonistic coverage; the frequent appearance of a politician in a given outlet could reflect conflictual scrutiny as much as alignment. Our findings show that institutional political actors occupy a structurally central position in news agendas, while other actors rarely achieve such visibility. The picture is, nevertheless, not uniform. While some media – especially print outlets, the public broadcaster RTV Slovenia, and the group around the commercial broadcaster Pro Plus – demonstrate greater diversity by including a broader range of sources, radio networks and right-conservative media show more pronounced levels of elite source concentration. The results confirm findings from earlier studies (e.g., Karppinen, 2018; Hendrickx, Ballon, and Ranaivoson, 2020; Loecherbach et al., 2020; Joris et al., 2020) that source diversity is less a question of quantity and more a reflection of existing power relations since social hierarchies are reproduced through news. The diversity of sources and social actors in news is not merely about the number of voices and perspectives, but who strengthens symbolic power via news and who remains on the margins.

The overall findings show the Slovenian journalism system operates as a hybrid and segmented structure in which pluralization and homogenization occur concurrently albeit unevenly across interconnected media networks. News diversity in Slovenia is structurally conditioned, segmented, and unevenly distributed, impacted by intertwined ownership, organizational, and ideological factors. The concentration of ownership, institutional centralization of sources, and rationalization of news production have produced structurally driven homogenization, while regional and organizational variations reflect limited and context-dependent pluralization. Analysis indicates the system's internal differentiation based on "segmented homogenization", where internal uniformity coexists alongside inter-cluster diversity. These dynamics reproduce symbolic hierarchies that privilege political and official voices while marginalizing civil society, experts, and citizens. From a critical perspective, this underscores that fostering diversity involves more than increasing the number of voices – it requires interrogating who holds the power to speak, how institutional dynamics shape visibility, and which structural conditions enable/constrain news di-

versity. News diversity in the Slovenian journalism system is ultimately determined by broader politico-economic forces – ownership concentration, market rationalization, political instrumentalization, and adaptation to the logic of digital capitalism (Splichal, 2020a; 2020b; Vobič, 2023) – which together influence who is granted a voice in news and which actors and voices are prominent. These findings underline the normative relevance of news diversity as a prerequisite for the democratization of public communication and the urgent need for structural reforms to foster a more inclusive and pluralistic journalism system.

### *Limitations and future research*

This study has several limitations. Pluralization and homogenization are simultaneous and intertwined dynamics within the broader generative processes of news production, and their empirical expression depends heavily on the chosen unit of analysis. In this study, homogenization was operationalized on the textual level by identifying near-verbatim co-occurrence across outlets and reconstructing content-reuse networks. This approach isolates isomorphic textual outputs – instances in which distinct outlets publish identical or functionally equivalent copy – thereby mapping the shared production channels that structure news in the Slovenian journalism system.

Alternative operationalizations could illuminate different layers of convergence and diversity, including agenda and framing alignment, the representation of social actors, or evaluative asymmetries concerning how those actors are portrayed. Investigating these dimensions would require shifting the unit of analysis to the level of sources. In this respect, format differences are particularly salient for commercial radio networks where news is typically presented in short bulletins and segments centred on traffic accidents, crime, and emergency events. Such formats structurally privilege official sources and leave limited space for a broader range of actors; estimates of source diversity in these outlets should therefore be interpreted in light of these constraints. At the same time, because the analysis focuses exclusively on news content, the results are news-bounded. Non-news genres and formats – especially on radio and television (e.g., call-in programmes, talk shows, magazine formats) – offer distinct interactional affordances that can amplify citizen voices and reshape source distributions. Since these formats were excluded, the study's estimates of pluralization and citizen participation should be understood as conservative lower bounds. Future research should accordingly employ quantitative and qualitative designs that extend beyond news content to assess whether the identified patterns generally appear across genres or different formats systematically produce distinct repertoires of voices and perspectives.

### Funding Information

This study forms part of the *Targeted Research Programme* project *Medijska krajina v Sloveniji med pluralizacijo in homogenizacijo* (*Media Environment in Slovenia between Pluralization and Homogenization*), funded by the Slovenian Research and Innovation Agency (ARIS) and the Ministry of Culture of the Republic of Slovenia (grant number V5-2297). It was also supported by the research programme *Množični mediji, javna sfera in družbene spremembe* (*Mass Media, Public Sphere and Social Change*), funded by ARIS (grant number P5-0051). This work was also supported by the European Union's Horizon Europe Research and Innovation Programme under the ERA Chair scheme (Grant Agreement No. 101186647, "AI4DH – Centre of Excellence in Artificial Intelligence for Digital Humanities"). The funder had no role in study design, data collection, analysis, or publication decisions.

### AI Disclosure

The authors declare the use of generative artificial intelligence tools—specifically *ChatGPT-4*, *ChatGPT-5*, and *Gemini*—for non-substantive tasks such as translation, condensation, and summarization of selected textual passages within this manuscript. All AI-assisted content was thoroughly reviewed, verified, and linguistically edited by the authors, who assume full responsibility for the accuracy, integrity, and originality of the published work.

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# Pas čuvar ili mačak-lopov? Ispitivanje raznolikosti vijesti u slovenskom novinarskom sustavu

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## SAŽETAK

*Studija ispituje dinamiku raznolikosti vijesti unutar slovenskog novinarskog sustava, malog i strukturno ograničenog medijskog tržišta koje se suočava s koncentracijom vlasništva, političkom instrumentalizacijom i nedostatkom resursa. Polazeći od kritičkih pristupa raznolikosti vijesti i koncepta novinarskog sustava, studija konceptualizira pluralizaciju i homogenizaciju kao istovremene i međusobno povezane procese koji strukturiraju, omogućuju i ograničavaju demokratsku komunikaciju. Analiza istražuje održava li slovenski novinarski sustav nadzornu funkciju koja potiče pluralnu javnu raspravu ili teži logici kopiranja obilježenoj sadržajnom uniformnošću. Empirijski smo analizirali 13.207 vijesti s televizije, radija i internetskih portala koristeći detekciju ponovne uporabe teksta, klasteriranje mreža i ekstrakciju izvora uz pomoć velikih jezičnih modela. Nalazi pokazuju da je raznolikost vijesti u Sloveniji strukturno uvjetovana, segmentirana i neujednačeno raspoređena, oblikovana isprepletenim vlasničkim, organizacijskim i ideološkim faktorima. Pluralizacija koegzistira s homogenizacijom, no simbolička moć dominantnih aktera — političkih i institucionalnih elita — u velikoj mjeri ostaje netaknuta, reproducirajući sistemske nejednakosti u novinarskom sustavu. Rezultati pokazuju da je raznolikost vijesti temeljno određena širim političko-ekonomskim odnosima koji definiraju tko može govoriti i koje perspektive dolaze do izražaja. Studija naglašava normativnu važnost raznolikosti vijesti kao temelja demokratske komunikacije te poziva na strukturne reforme radi poticanja uključivijeg i pluralističnijeg novinarskog sustava.*

*Ključne riječi: raznolikost vijesti, novinarski sustav, homogenizacija, pluralizacija, Slovenija*