Digital Television Space: a Typology of Content as a Reflection of Democratic Processes in Ukraine

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Abstract

The digital television space has the informational and technological potential to ensure access to information and influence the deployment of democratic processes in the state. The typological structure of media content and the development of democratic processes in Ukraine are closely related. As a powerful resource of civil society, the media forms and satisfies information needs, determines public opinion, and influences the public consciousness of broad population segments. These information and communication advantages are due to the use of technologies for transmitting, processing, and storing the television signal in digital form using digital technologies of the DVB-T standard. The purpose of the research is to establish the level of use of the potential of digital television in Ukraine to ensure access to information in the course of the processes of democratization of Ukrainian society, ensuring freedom of speech. To realize this goal, the following tasks were performed: to determine the types of television content and features of cross-typological syncretism; establish the topological structure of the content and its representativeness on the leading television channels; to establish factors influencing the formation of the typological structure of television channels; propose ways to optimize the typological structure of television as a component of a democratic society. The scientific novelty of the study consists in establishing a correlation between the typological structure of media content and ownership of television channels in Ukraine. Results. All types of content are presented in the Ukrainian digital television space, characterized by cross-typological syncretism. The typological structure of the content of the leading television channels, controlled by oligarchic business structures, has significant disproportions in favor of the entertainment type. The informational and analytical, journalistic, and popular science types of content are characteristic of television channels officially owned by representatives of the professional media environment and civil society. The lack of transparency of the ownership structure of Ukrainian media causes the implementation of editorial policy in the owners' interests and the limitation of access to information and pluralism of opinions. Processes of media de-oligarchization should be implemented at the level of state policy. Free media, devoid of oligarchic influence, are the embodiment of two interconnected social phenomena: a function and a result of democratic transformations in society, media pluralism, and the real provision of freedom of speech.

Keywords 1

Media, television, digital TV, content type, television channel, freedom of speech, media pluralism

1. Introduction

Television channels widely use digital technologies of the DVB-T standard. In Ukraine the practice of transmitting, processing, and storing television signals in digital form using digital technologies of the DVB-T standard has spread. Digital television has many advantages: signal quality increases, the

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cost of telecommunication services decreases due to equipment maintenance, communication facilities expand (possibility of interactive participation in television programs, multilingual audio support, signal reception stop). Such high communication characteristics of digital television actualize the study of typological features of its content, which largely determine the potential influence on the formation of the picture of the world of viewers. Access or artificial hindrance to the use of digital television technologies is a significant indicator of media pluralism, the role of the media in democratic processes.

The ability to transmit, process, and store television signals in digital form using digital technologies of the DVB-T standard has a powerful potential to ensure consumer access to information and expands the information base of democratic processes. Ukrainian society, freed from totalitarian forms of government, is developing through democratization. Redistribution and actual granting of power to citizens, communities, public institutions, and organizations, enshrining in-laws the rights and freedoms of citizens. Freedom of dissemination of information is one of the essential principles of a democratic society. The media, which selects and distributes interpreted information, is a powerful tool for democratic transformations. Building an open democratic society is impossible without spreading various political and social knowledge, pluralism of views, and assessments.

The information space serves as an integrator of modern communication and social processes. It provides a synergy of such components:

- information resources recorded on media;
- organizational structures providing collection, processing, storage, dissemination, and retrieval of information:
- a means of information interaction, providing access to information resources.

Thus, it is a multilevel and multifaceted communication structure that accumulates the results of the semantic activity of society and provides a change and the formation of qualitative characteristics of social development. The organic component of the system of means of information interaction is television. Television channels' popularity and technological potential actualize the study of the typology of meanings they spread.

The typology of media content and the deployment of democratic processes in the state are closely related. Media as a powerful resource of civil society defines, corrects, satisfies information needs, and forms a public opinion and social consciousness of broad population segments. These factors determine not only the intellectual or aesthetic value of the typology of media content but also actualize the pragmatic component – the dominant type of information that directly or indirectly affects the electoral priorities of voters. The study of the typological structure of media content makes it possible to explain, at first glance, the paradoxical, unmotivated, unfounded results of election campaigns.

The worldview orientation of the information space is an eloquent indicator of the democratization processes of public life in Ukraine. The development of the typological structure allows the realization of media pluralism as one of the principles of existence of the human right to information and freedom of expression of views. The human right to information is a norm of the European community [1]. The concept of media pluralism in Ukraine is actualized in terms of access to information, the use of various sources of information, and the peculiarities of implementing forms of media ownership. The typological structure of the content is an eloquent reflection of the peculiarities of solving these issues in media activity.

Considering the typology of television content as an indicator of access to various information, various sources of information is a fundamental problem for modern Ukrainian society – the role of the media in the democratization of society and the construction of civil society.

In the information space of Ukraine, in particular on television, the state and oligarchic capital occupy a dominant position. It contradicts the requirements of developed democracies and creates potential opportunities for manipulating public opinion. Civil society institutions operate in democratic countries: public television and powerful opposition parties with their media. They oppose attempts by the state or private companies to monopolize the information space.

There are no such counterbalances in Ukraine, which negatively affects democratic processes. In the conditions of a completely undeveloped media market, the main problem of the domestic "fourth power" is not dependent on money from advertisers but on political investments in the press (without which it cannot survive) and the lack of real pluralism [2].

The research's main problem is establishing a correlation between the content of television channels and the processes of democratization of public life.

The purpose of the research is to establish the level of use of the potential of digital television in Ukraine to ensure access to information in the course of the processes of democratization of Ukrainian society, ensuring freedom of speech.

To realize this goal, it is necessary to complete the following tasks:

- to determine the types of television content, and features of cross-typological syncretism;
- to establish the typological structure of the content and its representativeness on the leading television channels;
- to establish factors influencing the formation of the typological structure of television channels;
- to propose ways for optimization of the typological structure of television as a component of a democratic society.

2. Literature Review

2.1. Typology as a method of systematizing realities according to functional purpose and genre features

General approaches to media typology. The modern variety of media actualizes the study of their typology in general and by a segment of their functioning. The classification of documents on paper and electronic media, including mass media, is one of the fundamental methodological problems of scientific disciplines in social communications. Some models of species and typological classification of documents have been created [3]–[6]. The essence of distinguishing the classification of media by species and types consists in the differentiation of objects of study by species-forming and type-forming features. Species and typological classifications are created using opposite logical processes: species classification uses the principle of differentiation of features, typology – integration of features.

During the specific differentiation of documents, the internal worldview organization of thinking is revealed in compliance with the following basic cognitive principles: systematic grouping of documents, which involves the identification of a complex of classification features that are in systemic relationships with each other and thus form integrity; the logic of the grouping of documents, which involves the division of the concept's scope and the grouping of objects of different levels, connected by genus-species relations, ensuring the hierarchy and logical sequence of the construction of the classification scheme; the innovativeness of the grouping of documents, which we interpret as a reflection in the classification development of transformational processes and their trends, that is, the introduction of new classification features for fixing and grading new types of media, substantiating the peculiarities of their conceptual and categorical apparatus; the continuity of the classification methodology, which is based on the experience of differentiating the features of documents, accumulated in librarianship, bibliography, archival science [3], [7].

A systematic approach to implementing media typology involves understanding and taking into account in practical activities the peculiarities of each type, their interrelationship, and achieving unity of purpose, tasks, and social functions. The media type is based on generalized functional characteristics, a clear focus on the target reader, and the use of similar content means of genres. So, the media type acts as a generalizing category of the theory of journalism, which determines the highest level of journalistic activity. The type is a category that is an indicator of the differentiation of the features of a certain group of media.

Systemic transformation of the system, types and functional characteristics of social communications has become a characteristic trend of modern mass media. Qualitative changes in the media sphere cause it. The theory of journalism is enriched by a significant number of scientific works on the place of the mass media in the new information space, the formation and development of systemic connections in the information structure, the influence of the regularities of the functioning of the mass media as an institutionalized phenomenon of modern Ukrainian society.

Typology of corporate media. Typology of corporate media and functional models of determining the effectiveness of corporate media activities are considered in the context of institutionalization of the concept of corporate media and features of modern corporate communication. According to the criterion

of relation to the company, corporate communication channels are divided into two main types: outsiders and insiders. Further division is into functional subtypes: events, advertising, media, and a separate category – social media. The typological division can also be based on the characteristics of the audience and communication technologies [8]. Following the goals of corporate communication and the functional needs of various divisions of the corporation, it is proposed to divide it into four types: HR editions, which aim to ensure the company's personnel management function; PR editions, which aim to ensure the company's image, brand and reputation management function; marketing editions, which aim to ensure the company's function of promoting the company's goods and services and increasing sales volumes; commercial editions, which aim to provide the company with the function of managing advertising flows [9].

Typology of individual genres. Technological progress and social transformations have created conditions for the spread of television series that explore a wide range of issues in world politics. Based on an empirical thematic study of geopolitical television series from Norway, Sweden, Denmark, Germany, and the USA, a typology of the genre into five separate groups is proposed: exotic-irrealist, parliamentary-domestic, procedural-localised, historical-revisionist, speculative-fantastical [10].

The use of digital technologies on television strengthens the potential of channels in the formation of a democratic society, ensuring freedom of speech, free circulation of information, development of critical thinking of users, instilling in them the ability to think independently, to give an objective and balanced assessment of facts. Digitization of various types of content emphasizes the functional features of meanings, under the influence of which viewers' knowledge is formed, and independent decisions are made.

2.2. Problems of formation of information and analytical content

A popular aspect of research on the relationship between television viewing and social media postings is the parasocial perception of presidential candidates, public figures, celebrities, and athletes during the 2008 US presidential campaign. The role of social networks in terms of the perception of candidates in aspects of trust in them, their charisma, the homogeneity of users, the intensity of information retrieval on the Internet was examined. The results show the consolidating role of social networks. Voters who communicated in the online space with the presidential candidate are more homogeneous than those who ignored social networks. Voters who negatively viewed the presidential candidate were more likely to turn to the Internet for information about him [11].

Viewers show considerable attention to television programs where communication campaigns of political parties and political leaders take place both during elections and during the inter-election period. The participation of political figures in various information formats of the television environment (in information, entertainment programs) is prevalent. Although the election campaign does not have a deep historical tradition, it achieves high ratings on television networks. The study of popularity ratings is one of the standard quantitative indicators of the sociology of television. The inclusion of new television channels and social networks in the election debate poses a challenge to the communication strategies of political parties, creates new challenges for ranking this new audience, which is much more active, and generates powerful content [12].

Posts on Facebook, Twitter, the blogosphere, and YouTube videos have become standard marketing practices for political occasions. Research has found that new media influence political behavior, knowledge dissemination, group formation, and voter self-efficacy. In the case study, the authors examined the credibility and performance of the media and their impact on the evaluation of candidates in the Millennials and Baby Boomers age groups during the 2012 US presidential campaign. It was examined the credibility and effectiveness of traditional (television, print, and radio) and online media (political candidates' websites, TV networks, online newspapers, Facebook, Twitter, YouTube, Tumblr, and political blogs). The findings show that traditional sources, particularly television, have higher credibility and performance ratings than Internet sources in both age groups. In addition, traditional media have a more significant influence on the evaluation of candidates in the election campaign among Baby Boomers, while Facebook and candidates' websites influence the assessment of Millennials [13].

The influence of social media on the audience has forced traditional television to adapt to the new culture of television consumption. According to the author, television for generating a new audience is

forced to consider the impact of social networks, where the audience is free to express their views, focus on inaccurate information, and learn the culture of entertainment and consumption, rather than information affects public opinion. Therefore, television genres are changing flexible formats from information and entertainment talk shows to thrash shows. The influences and mechanisms of the emergence of new television formats on Albanian television, their thematic orientation, the typology of their guests, the peculiarities of talk shows: interaction with the audience, spontaneity of interviews are analyzed. The study is based on a quantitative and qualitative analysis of the data of the highest-rated TV, and TV talk shows "Xing me Ermalin" and "Zonë e lirë", which are broadcast on national television, as well as monitoring social networks and interviews with the host, guests and media experts [14].

2.3. Problems of formation of scientific, popular science content

Scientific communicators create the visual language of scientific and popular science content through web videos on the Internet. In recent years, scientific video production has grown, characterized by various formats, genres, and styles. The use of digital technologies affects the quality of scientific and popular science content in parallel with narrative strategies, editing techniques, the graphic and sound design of the video, the number of frames, the type of editing, and special effects. These same factors indicate the growth of professionalism of scientific communicators [15].

Digital social media and video platforms are gaining significant influence over the traditional media landscape, particularly scholarly communication. The culture of active participation in digitized content has changed the role of science journalists, scientists, and experts who are communicators or recipients in the communication process between science and the public. In this context, it is relevant in two directions:

- creation of a typology of YouTube videos (independent variables, which provides an answer to the question of the successful functioning of audiovisual media for the transfer of knowledge and their impact on the episteme of society);
- a study of the information needs of Internet users (dependent variables, which provides an answer to the question of transmitting and receiving scientific information about science using YouTube videos).

Four types of audiovisual scientific communication on YouTube were identified based on a systematic analysis and classification of 400 German scientific videos: presentation, expert, animation, and descriptive, explanatory films. Based on knowledge verification (testing), the power of these new forms of scientific communication was assessed from knowledge transfer, attitude, and trust in science presentation. Video type has an essential effect on knowledge transfer and parasocial effects. One of the central findings of audience research is that video content, information needs of recipients, and knowledge test results are closely related. A high level of formation of the information needs a model of the recipients coincides with a high level of assimilation of knowledge obtained with the help of YouTube videos [16].

2.4. Problems of formation of entertaining, sports content

Local US television stations show income reduction and choose new ways to promote their information product and increase their audience. The study aimed to identify the level of use of Twitter by television broadcasters to promote traditional media content. An analysis of tweets from local TV sports broadcasters found that less than 9% of their Twitter posts were devoted to promoting their TV sports broadcasts or website. In addition, the survey of athletes showed that the management of TV stations does not encourage them to use Twitter to promote content, even in rating periods [17].

Research on the connections between social media and television opens up possibilities for modeling the behavior of players and teams in the most popular sports league in the United States, the National Football League. Marketers use research results to increase attendance at professional sports leagues. It was used sophisticated analysis of television and the NFL social network. Experimental results show that this social network is large-scale. The research methodology can be used to predict the team's

success, as it exceeds the usual rating statistics. Predicting a team's success is driven by a billionaire betting market that typically uses game statistics to make forecasts. Game statistics are also used to determine the productivity of players, which determines their salary [18].

The study of the conformity of entertainment content to the peculiarities of the perception of viewers of different age categories was conducted based on the dynamics of the rating of Indonesian serials. Furthermore, the categorization of sinetron by the purpose for different age categories, based on the posts of viewers on social networks, especially on Twitter, was compared with the results of the categorization established by the Indonesian Broadcasting Commission. Significant differences were revealed [19].

Research on the influence of activity in social networks on the number of viewers of talk shows on television, qualitative characteristics of the influence of discussions in talk shows on viewers, and the ability of talk shows to subsequently provoke discussion in social networks are relevant. The relationship between the viewers' ratings of the most famous Scandinavian talk show Skavlan and the public opinion expressed on its Facebook page is investigated. The ratings of TV viewers of the Skavlan talk show were analyzed. Text messages and comments on Facebook were classified according to the emotions and moods that the brand causes. The study reveals the patterns of user behavior in the natural and digital world [20].

Social television is top-rated. It is created by TV viewers who actively comment and communicate online about TV shows. Social TV data can be valuable to TV networks and advertisers. The study examines social television, which can be viewed on Twitter using the popular TV app GetGlue. It allows viewers to register for TV shows while watching them. The study demonstrates a significant ability to predict the number of weekly viewers of more than 80 popular TV shows. Registration data is as essential for watching TV as Nielsen ratings. Combining the two sources makes it even easier to predict watching a TV show. Research shows that social television data, published free of charge to the public, has real value, especially for accurate television forecasting [21].

2.5. Problems of formation of advertising content

Research on corrective advertising campaigns in social networks, radio, and print media is needed. The advertising activities of four large tobacco companies, which were ordered by the court to develop and distribute videos about the health risks of smoking, were studied. Social, print, and terrestrial media data were used to measure the potential impact of messages. Campaign-related posts were searched on Twitter by keywords. The analysis of data of social networks, data of ratings of television advertising, data on expenses for printed advertising was carried out. The corrective antitobacco campaign did not find a wide response on social networks [22].

The object of study is also consumer behavior and the change in thinking due to the transition from public broadcasting (NRK) to commercial (TV2) broadcasting in Norway. The moods and ratings of TV viewers and their activity on Facebook during broadcasts of international media events were analyzed. Text classification and visual analytics are used. There is a clear connection between negative attitudes and advertising. Positive changes occurred in customer behavior, negative changes – in the thinking of users [23].

2.6. Digitization of content and meeting the information needs of viewers

With the development of digital networks and television devices, there has been an increase in television channels, and people experience information overload due to numerous programs to watch. Personalization is the use of algorithms and data collection schemes, which are used to select and recommend content to viewers according to their needs. The study presents queveo.tv: a personalized system of recommendations for television programs. The proposed hybrid approach involves all the standard tools of any social network (comments, tagging, ratings). This Web 2.0 program greatly simplifies the selection of television programs [24].

Personalization effectively helps to select and recommend TV programs according to users' interests and tastes. A personalization of Tribler, a peer-to-peer (P2P) television system, was proposed. It allows the creation of social networks that can significantly improve the performance of existing P2P systems

by increasing content availability. The study presents a new scheme BuddyCast, which creates a social network for the user by exchanging user interest profiles. The method of forecasting the user's interest in television programs, the method of using the social network to implement the truly distributed recommendations of television programs are proposed. A new user interface is being demonstrated for a personalized peer-to-peer television system that includes personalized tag-based navigation to view available distributed content. The user interface also visualizes the user's social network, which enhances the sense of community, increases trust among users to available content, and creates incentives for the content exchange in the community [25].

Thus, the analysis of publications makes it possible to trace the main trends of theoretical and empirical research on the typological features of content in the television information space. We highlight the following main cross-typological directions of research:

- convergent relations of media practice of traditional television and social networks: correlation between watching television programs and posting on social networks during the election campaign and in the inter-election period; the relationship between the ratings of popular talk shows and public opinion expressed on social networks; promotion of television content through popular social networks; comparison of ratings of advertising campaigns in social networks, on television and data on expenses for print advertising;
- **information potential of new media**: communication campaigns of political parties, and political leaders during elections and in the inter-election period; marketing of political campaigns on Facebook, Twitter, blogosphere, and YouTube;
- scientific potential of digitized content transmission: presentations of scientific research; influence on the episteme of society; impact on scientific communication; impact on the educational level of the recipients;
- psychology of media content consumption: influence of new media on political behavior, dissemination of knowledge, formation of voter groups; modeling and forecasting the game of sports teams, game statistics; adaptation of traditional television to the new communication culture generated by the influence of interactivity of social networks; perception of the content of television series by viewers of different age categories; changes in consumer behavior and thinking;
- **specialized media technological developments**: personalization of effective selection and recommendations of television content according to information needs.

Published scientific studies update the convergence, electoral, technological, and psychological aspects of the functioning of various types of television content. The research presented below sheds light on the formation of the typological structure of media content as a result and functionality of democratic transformations, the formation of civil society, and ensuring freedom of speech in Ukraine, which is highly relevant for Ukrainian society.

3. Methods

General scientific methods such as analysis, synthesis, and generalization were used during the research. Among the special methods, monitoring and content analysis were used to study the typological features of Ukrainian television channels.

Typology as a method of scientific systematization occupies a key position in research methodology. It allows for the classification of media based on standard features. Typology involves grouping media based on their conformity to a specific integrated model – a type that unites media with the essential features in common. The typological series of media is formed by division from generalized to partial. Thus, the process of media typology occurs by generalizing the features of social phenomena based on an ideal theoretical model and according to theoretically justified criteria [26].

Theoretically based typology criteria provide grounds for establishing whether media content belongs to a particular type based on a set of features. Based on the concepts of document typology, we define the content typology by analogy with the document typology [3], [6]. Such a transfer allows the proximity of the scope of the concepts "document" and "content": a document is a material medium containing information, the main functions of which are its preservation and transmission in time and space [27]; content is any information placed on a particular resource [28].

Functional features of programs and programs provided by the program concepts of television broadcasting determine the typology of electronic media. This mandatory supplement to the broadcasting license defines the main content characteristics of the broadcast. Theoretically substantiated criteria give grounds to establish the affiliation of media content to a specific type by a set of features.

The most significant type-forming features for the typological classification of media content include:

- functional (target) purpose, i.e., compliance with the needs of a particular area of public life (management, science, production, education, leisure);
- reader's purpose, i.e., compliance with the requests of a particular readership group for which they are intended;
- issue and nature of information (genres) contained in the media.

The systematicity of typology is manifested in the interdependence, in the close relationship of typeforming features. Each type is based on a theoretical model formed by specific communication characteristics of the information product. An ideal theoretical model of a content type is a generalization of its features and directly corresponds to the presence of generalized communication characteristics:

- application of certain principles of content selection and systematization;
- taking into account certain linguistic, visual, and textual features of the content;
- taking into account the psychological features of the recipient's perception of the content.

Theoretically based criteria for the typology of the content of television channels are formed, taking into account the purpose of media functioning. Content types have the status of markers of their intended purpose, that is, their role in social communication processes.

The purpose of social communication is realized in the final result of communication interaction: receiving, understanding, and using the transmitted information in society. It determines the conscious and purposeful nature of the process of creating an information product on a paper or electronic medium – in a documentary form, which can satisfy the audience's information needs.

The Law of Ukraine On Television and Radio Broadcasting defines the broadcasting of programs by the following genres: information and analytical, journalistic, cultural and artistic, scientific and educational, educational, entertainment [29]. Thus, using the methodology of typification (integration, generalization of features), we define six types of content that are broadcasting by the media:

- information and analytical type, which performs the functional purpose of providing society with documental and factual information and its interpretation;
- journalistic type, which performs the functional purpose of providing society with information on topical, important socio-political issues; to exert an informational influence on the user, to encourage an active life position, to change or approve his views; to form public consciousness;
- popular science type, which performs a functional purpose to ensure the popularization in the society of the achievements of science, technology, production, their history;
- educational type, which performs a functional purpose to ensure the circulation of scholarly information in society, to meet the competencies provided by educational programs in the disciplines of educational institutions;
- cultural and artistic, which performs a functional purpose to ensure the acquaintance of society with the content of creative and artistic works;
- entertaining, which serves a functional purpose to ensure the dissemination in the society of publicly available information about entertainment, amateur art.

The main problem of the research involves studying the correlation of individual manifestations of democratic processes and only one aspect of content typology – typology by functional purpose. This aspect of the content typology demonstrates the fulfillment by television channels of the system of public functions of the media and indicates the dominant and peripheral positions of a particular type of content.

The scale of the digital information space necessitates the application of a selective approach to the selection of the empirical basis of research in the media system and the establishment of clear criteria for the selected object and subject of study. Criteria for choosing the type of media as an empirical basis for research:

- high-tech media (the presence of high technical indicators in terms of coverage, digitization of content);
- popularity among users, compliance with professional standards of journalism (high rating positions following sociological research of rating agencies, site materials, think tanks);
- relevance and social significance of the aspect of research of a specific type of media.

Thus, we consider to justified the choice of television channels as an empirical basis for studying typological features of the content of television channels.

The study of typological features of TV channels was conducted titles. The study was conducted during 01.07.2020 - 15.07.2020.

Criteria for selection of TV channels:

- belonging to the category of leading TV channels in terms of coverage, and average viewing time, as evidenced by the materials of TV channel sites, independent rating agency BIG DATA UA;
- belonging to the category of leading information TV channels;
- belonging to media holdings, which provides for a probable variety of functional and audience purposes;
- belonging to the class of DVB-T2 digital terrestrial television channels available throughout Ukraine.

The analysis of performance indicators of TV channels according to the specified criteria allowed to consider justified the choice of TV channels belonging to media holdings (Starlight Media, 1+1 media, Inter Media Group, Media Groupe Ukraine, Novyny Media Holding), as well as leading information TV channels (Priamyi, 5 Kanal, Espreso). According to the analysis of the rating agency BIG DATA UA, the UNIAN TV, Ukraina, Ukraina 24, ZIK, Newsone, 112, Priamyi and Espreso TV channels, which are part of various media holdings or are independent media, are among the top 10 channels in terms of coverage and average viewing time [30]. Almost all selected TV channels have a high level of coverage, as they are available through DVB-T2 digital terrestrial television technologies. Moreover, they are positioning as media with different thematic orientation: socio-political (STB, ICTV, Novyi kanal, 1+1, ZIK, Ukraina, K2, Inter, NTN), news (Priamyi, 5 Kanal, Espreso, Ukraina 24), scientific and popular (Mega), children's (Plius Plius), entertaining (2+2, K1, TET, Zoom, UFO TV, Indigo TV). UNIAN TV, Newsone, 112, Kino-TV, Muzyka-TV and Bihudi TV channels do not use digital television technology [31].

4. Results

4.1. Typological features of television content

An applied look at the typology of media content leads to the fact that the analysis tools become systematic. Systematic typology is manifested in the interdependence, in the close relationship of type-forming features. The dominant positions among them are occupied by functional and reader's purpose because the public functions performed by the media and the readership. It focuses on the publication, determines the depth of coverage of the issue, the nature of information, genres. Therefore, a change in the functional or reader's purpose causes a change in these parameters of the media.

The typology of electronic media is determined by the functional features of programs and broadcasts provided by program concepts of television broadcasting. This mandatory supplement to the broadcasting license defines the main substantive characteristics of broadcasting. These functional features and peculiarities of television in the context of the global media environment are the current direction of modern media research [32]. The study of television communication as a specific phenomenon of the dialogic communicative space is enriched and actualized by technologies of digitization of humanitarian content.

Television is characterized by the syncretism of typological diversity, a complex combination of self-sufficient genres and their implementation of various (albeit close to the object of representation) social functions. Therefore, we classify content by types that have clearly defined segments of social roles: information and analytical in combination with journalistic (IAJ); popular science (PS); educational (E); cultural and artistic in combination with entertaining content, which show clear signs of syncretism (CAE) (Fig. 1).

		IAJ		PS		CAE		E]	
Holding / Owner	Channel	there	1								
		is									
			not		not		not		not	_	
Starlight Media / V. Pinchuk	STB	+			-	+			-		
	ICTV	+			-	+			-		
	Novyi kanal		-	+		+			-		
	1+1	+		+		+			-		
	2+2	+		+		+			-		
1+1 media/	Plius Plius		-	+		+			-		
I. Kolomoisky	UNIAN TV	+		+		+			-		_
	TET		-		-	+			-		IAJ only
	Bihudi		-		-	+			-		IAJ + PS
	Inter	+			-	+			-		IAJ + PS + CA
	NTN	+		+		+			-		IAJ + CAE
	K1		-		-	+			-		 PS + CAE
Inter Media Group /	K2		-		-	+			-		 CAE only
D. Firtash	Mega		-	+		+			-		 missing
	Muzyka-TV		-		-	+			-		
	Zoom		-		-	+			-		
	Kino-TV		-		-	+			-		
Media Group Ukraine	Ukraina	+			-	+			-		
/ R. Akhmetov	NLO TV		-		-	+			-		
	Indigo TV		-		-	+			-		
Novyny Media Holding / T. Kozak	ZIK	+			-		-		-		
	Newsone	+			-		-		-		
	112	+			-		-		-		
V. Makeenko	Priamyi	+			-		-		-		
P. Poroshenko	5 Kanal	+		+			-		-		
I. Zhevago, L. Kniazhytska	Espreso	+		+			-		-		

Figure 1: Cross-typological syncretism of television channels (as of July 1, 2020)

The study shows that the typological structure of modern television space, which, in particular, uses terrestrial digital television technology DVB-T2 [31] and has the highest level of territorial coverage and user coverage, is deployed in all types except education (Fig. 2).

		IAJ		PS		CAE		E			
Holding / Owner	Channel	there									
		is									
			not		not		not		not		
Starlight Media /	STB	+			-	+			-	1	
V. Pinchuk	ICTV	+			-	+			-	1	
V. PHICHUK	Novyi kanal		-	+		+			-		
	1+1	+		+		+			-		
	2+2	+		+		+			-	1	
1+1 media /	Plius Plius		-	+		+			-	1	
I. Kolomoisky	UNIAN TV	+		+		+			-	l	– IAJ
	TET		-		-	+			-		
	Bihudi		-		-	+			-		– PS
	Inter	+			-	+			-		– E
	NTN	+		+		+			-		- CAE
	K1		-		-	+			-		missin
Inter Media Group /	K2		-		-	+			-	1	
D. Firtash	Mega		-	+		+			-	1	
	Muzyka-TV		-		-	+			-	1	
	Zoom		-		-	+			-	1	
	Kino-TV		-		-	+			-	1	
Media Group Ukraine	Ukraina	+			-	+			-	1	
/ R. Akhmetov	NLO TV		-		-	+			-	1	
	Indigo TV		-		-	+			-	1	
Novyny Media	ZIK	+			-		-		-	1	
Holding / T. Kozak	Newsone	+			-		-		-		
	112	+			-		-		-	l	
V. Makeenko	Priamyi	+			-		-		-		
P. Poroshenko	5 Kanal	+		+			-		-		
I. Zhevago, L. Kniazhytska	Espreso	+		+			-		-		

Figure 2: Typological structure of the Ukrainian television space (as of July 1, 2020)

The analysis of the typology of television programs and their timing, which are shown on the leading Ukrainian channels, makes it possible to trace the trends in documental and factual information in the modern television space.

No television broadcasts of the studied channels could be classified as distributors of educational content. Educational content that disseminates theoretical knowledge forms practical skills represented on regional television [33]. Educational content performs an important social function – enriching

adolescents' life experiences and the ability to exist in the digital age. Television has the opportunity to implement educational and cognitive projects for children and youth, meet viewers' information needs, and help raise the academic standards of the younger generation. However, at the national level, this remains an untapped resource.

4.2. Information-analytical and journalistic content on Ukrainian television

Information-analytical and journalistic types are widely represented by leading Ukrainian information TV channels, which often work in the infotainment format. These include TV channels whose content consists of multi-genre programs only IAJ types (Priamyi, ZIK, Newsone, 112), as well as those channels whose content contains programs belonging to other types:

information and analytical, journalistic + popular science (5 Kanal, Espreso);

information and analytical, journalistic + popular science + cultural-artistic, entertaining (1+1, 2+2, NTN, UNIAN TV);

information and analytical, journalistic + cultural-artistic, entertaining (Ukraina, Inter, STB, ICTV).

The core of any channel that claims the status of a significant source of information about real news – hard news are information-analytical and journalistic programs (Fig. 3).

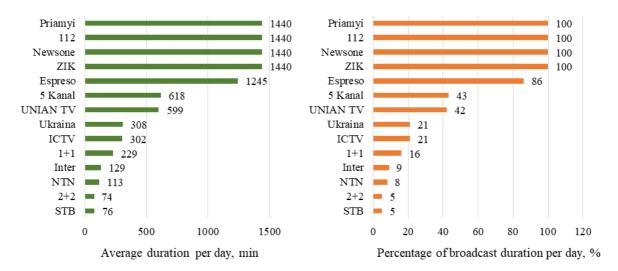


Figure 3: Timing of information-analytical, journalistic programs on Ukrainian TV channels

The duration of broadcasting such programs on different channels can be graded at several levels:

- maximum: ZIK, Newsone, 112, Priamyi (100% each);
- high: Espreso (86%), 5 Kanal (43%), UNIAN TV (42%);
- average: ICTV (21%), 1+1 (16%), Ukraina (21%);
- low: STB (5%), 2+2 (5%), Inter (9%), NTN (8%).

Topics of information and analytical, journalistic programs are diverse on channels where the timing is maximum or high: ZIK, Newsone, 112, Priamyi, Espreso, 5 Kanal. The subject of programs is determined by content analysis of their names.

The content of TV channels is updated, changes the context of the socio-political situation in the country. For example, the approach of local elections in October 2020 affected the ZIK TV channel. During the study (01.07.2020 – 15.07.2020), we observe a significant increase in information-analytical and journalistic programs: an increase in the duration of the broadcast (on average per day from 773 minutes to 1440), the emergence of new political talk shows is at 13:00, 15:00, 17:00, 19:00.

The study shows that Ukrainian television actively uses the genre of infotainment, widely presenting high-rated entertainment programs, and information-analytical and journalistic programs, the natural environment of which is documentary and factual information, are designed mainly in the form of entertainment. The integration of entertainment and information is a characteristic feature of modern

Ukrainian television content. Interactive forms of presenting up-to-date information (Skype, telephone, remote switching, voting, discussion) in real-time are widely used (Table 1).

Table 1Information-analytical and journalistic programs Ukrainian television channels

Channel	Program titles
	StarLightMedia Media Holding
STB	"Vikna-Novyny"
ICTV	"Fakty" (information issue), "Hrazhdanskaia oborona", "Fakty tyzhnia. 100 khvylyn",
	"Nadzvychaini novyny", "Sluzhba rozshuku ditei"
	1+1 media Media Holding
1+1	"TSN", "TSN-TYZhDEN", "Pravo na vladu" (final informational and analytical weekly), "Sekretni materialy"
2+2	"Spetskor", "Tsilkom taiemno"
UNIAN TV	"TSN", "TSN spetsproekt", "Spetskor", "Ukrainski sensatsii"
	Inter Media Group
Inter	"Novyny", "Podrobytsi", "Podrobytsi tyzhnia" (final informational and analytical
	weekly)
NTN	"Svidok"
	Media Groupe Ukraine
Ukraina	" Segodnya", "Sogodni. Pidsumky z Olehom Paniutoiu" (final informational and
	analytical weekly), newspaper "Segodnya", site segodnya.ua
7117	Novyny Media Holding
ZIK	"HARD z Vlashchenko. Pidsumky dnia", "Insaidy tyzhnia z Natasheiu Vlashchenko",
	"Detali dnia", "13:00" (talk show), "15:00" (talk show), "17:00" (talk show), "19:00"
	(talk show), "Chudova chetvirka", "#Novyny", "Zashkvary tyzhnia", "Narod proty"
112	(political talk show), "Mizhnarodna panorama z Nadiieiu Sass"
112	"112 khvylyn", "Novyny", "112 Ukraina Live", "Live ShOU", "PRAIM", "Novyny. Pidsumky", "Puls" (major political talk show), "MAGA", "Nedilia. Live", "Nedilia.
	PRAIM"
Newsone	"TopNews", "Utro na NewsOne", "Studyia Live", "Bolshoi vecher", "Priamoi əfyr",
Newsone	"Piatыi uhol. Razvytye", "Эруtsentr ukraynskoi polytyky s Viacheslavom
	Pykhovshekom", "Chërnыi lebed s Vadymom Karasëvыm", "Ukraynskyi format",
	"Lychnaia terrytoryia", "Aktualnыe prohrammы za nedeliu", "Protyvostoianye s
	Dyanoi Panchenko y Viacheslavom Pykhovshekom", "Khronolohyia nedely s
	Viacheslavom Pykhovshekom"
	Channels
Priamyi	"Reporter. Novyny", "Novyi den", "Priamyi" trafik", "Detali na "Priamomu", "Hariacha
	tema", "Po faktu" (talk show), "Sytuatsiia" (talk show), "Ekho Ukrainy z Matviiem
	Hanapolskym", "Priamyi efir zi Svitlanoiu Orlovskoiu ta Mykoloiu Veresnem" (talk
	show), "Priamyi" kontakt z Tarasom Berezovtsem", "Piata kolonka", "WATCHDOGS"
	(Anti-corruption journalistic investigations), "Spetsproekt Vlada khokhotala",
	"Ministerstvo pravdy", "Aktsenty", "Shchaslyve interviu", "Velykyi marafon" (talk
	show), "Viina za nezalezhnist", "THE WEEK. Mizhnarodnyi ohliad z Tarasom
	Berezovtsem ta Piterom Zalmaievym" (talk show), "Pro viisko", "Sound.ChEK", "Velyki
	novyny z Tarasom Berezovtsem"
5 Kanal	"Chas-Time", "Osoblyvyi pohliad", "Aktualno: Ekonomika. Polityka. Sotsium", "Chas
	novyn", "Informatsiinyi vechir", "Chas. Pidsumky tyzhnia", "Taiemnytsi viiny", "Pro
	viisko", "Na vlasni ochi", "Kendzor", "Vikno v Ameryku", "Sposterihach", "Randevu",
	"Ye sens", "Vechirnii preZEdent"

Channel	Program titles
	Channels
Espreso	"Mizhnarodnyi ohliad", "Studiia "Zakhid" z Antonom Borkovskym", "Subotnii
	politklub", "NOVYNY", "Espreso: Debaty" (talk show), "Verdykt", "Hovoryt Velykyi
	Lviv" (talk show), "Velykyi efir Vasylia Zymy", "Politklub Vitaliia Portnykova" (talk
	show), "Tyzhden" z Mariieiu Hurskoiu", "Chervona liniia z Serhiiem Vysotskym" (talk
	show), "#tekhnolohyy24"

Documental and factual information is not dominant for channels with medium and low timing of information-analytical and journalistic programs. And if we take into account the distribution of news on TV channels in an entertaining form – infotainment, "easy" news (soft news), then when the viewer of these channels has the opportunity to think meaningfully about the news?

4.3. Popular science content on Ukrainian television

Popular science type is represented by Ukrainian TV channels, which show programs in combination with:

- popular science + cultural and artistic, entertaining (Mega, Plius Plius, Novyi kanal);
- popular science + information-analytical, journalistic (5 Kanal, Espreso);
- popular science + information-analytical, journalistic + cultural-artistic, entertaining (1+1, 2+2, NTN, UNIAN TV).

The content of Ukrainian TV channels, which can be considered as popular science type, is presented very modestly (Fig. 4). The duration of the broadcast of popular science programs on different channels can be graded at several levels:

- high: 5 Kanal (57%), Mega (50%);
- average: UNIAN TV (30%), 2+2 (23%);
- low: Novyi kanal (8%), 1+1 (8%), Espreso (7%), Plius Plius (3%), NTN (1%).

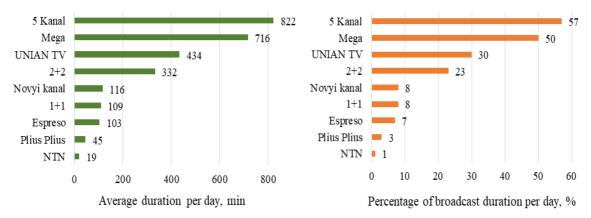


Figure 4: Timing of popular science programs on Ukrainian TV channels

The highest percentage of popular science programs is broadcasted by 5 Kanal, including "Time Machine", "Mirror of History", "Unimagined Stories", "Inspiration", popular science documentaries on historical and adventure topics. The Inter Media Group media holding presents the Mega TVchannel, successfully combining the demonstration of entertainment and educational programs. In particular, this channel broadcasts the most popular and exciting TV programs worldwide (Animal Planet, BBC, National Geographic, History), the best documentaries, entertainment and science shows, programs on historical topics, sketch shows. Significantly, TV channels with ultra-high coverage of the territory of Ukraine (STB, ICTV, Inter, Ukraina) do not broadcast a single minute of popular science content.

Undoubtedly, Ukrainian television avoids broadcasting programs of cognitive, educational, social, analytical nature (Table 2).

Table 2Popular scientific programs of Ukrainian television channels

Channel	Program titles					
	StarLightMedia Media Holding					
Novyi kanal	"Zona nochi. Novyi pohliad"					
	1+1 media Media Holding					
1+1	"Zhyttia vidomykh liudei"					
2+2	"Zahublenyi svit", "Pomsta pryrody"					
Plius Plius	"Svit chekaie na vidkryttia"					
UNIAN TV	"Hroshi", "Zbroia", "Pomsta pryrody"					
	Inter Media Group					
NTN	"Taiemnytsi svitu"					
Mega	"Remesla za pryznachenniam", "Tvarynna zbroia", "Teoriia Zmovy",					
	"Naidyvovyzhnishi tvaryny svitu", "Yizha bohiv", "Zaboronena istoriia", "NLO z					
	mynuloho", "Zahadky Vsesvitu", "Liudstvo: zabuta istoriia"					
	Channels					
5 Kanal	"Mashyna chasu", "Dzerkalo istorii", "Nevyhadani istorii", "Natkhnennia",					
	"Avtopilot-novyny", "Avtopilot test", "Kopiika do kopiiky", "Medekspertyza",					
	"Maistry remontu", naukovo-populiarni dokumentalni serialy na istorychnu,					
	pryhodnytsku tematyku					
Espreso	"Istorychna pravda", "Istorychna pravda z Espreso", "PRO finansy", "Espreso:					
	kapital"					

Therefore, a severe and inquisitive viewer who wants to supplement their knowledge, raise the level of general culture will seek information outside of television. There is also the problem of availability of high-quality popular science content because often popular science programs are paid, for example: "Life of famous people" (1+1); "Lost World", "Revenge of Nature" (2+2); "The world is waiting to be discovered" (Plius Plius); "Weapons", "Revenge of Nature" (UNIAN TV).

4.4. Cultural and artistic, entertaining content on Ukrainian television

The following channels broadcast exclusively cultural and artistic, entertaining content: Muzyka-TV, Zoom, Kino-TV, UFO TV, Indigo TV, K1, K2, Bihudi. Entertainment, cultural and artistic programs are available on all TV channels, except Priamyi, 5 Kanal, Espreso, ZIK, Newsone, 112. Entertainment products have flooded the television space. The share of entertainment programs on the leading all-Ukrainian channels is huge: STB - 95%, ICTV - 79%, Novyi Kanal -92%, 1+1-76%, 2+2-72%, Inter -91%, NTN -91%, Ukraina -79%. And these channels have the best broadcasting support. They speak through terrestrial and cable networks, satellite, digital DVB-T2, technical coverage of each of them is more than 90% of the territory of Ukraine (in Inter -99,7%).

Television programs of the studied channels, which, in our opinion, could be qualified as distributing educational content, have not been identified.

5. Discussion

5.1. The connection between media content typology and democratic realities, media pluralism

The typology of any media's content, especially as influential as television, correlates with issues of media consumption. Media consumption culture is a unique socio-communicative environment that

influences information users and forms beliefs and values. It encourages decision-making and action [34]. Therefore, a balanced typological aspect of television space directly impacts the formation of a harmonious personality and responsible civil society.

The vital issue that actualizes consideration of the typological structure of the television space lies in the course of development of Ukraine as a state that laid deep democratic traditions during the existence of the Ukrainian Cossack state, in the articles of the Constitution of Pylyp Orlyk (1710), in the state-building activities of the Ukrainian People's Republic, however, was in the status of a colony for a long time [35]. The influence of the media on forming a civil society with precise national and state-building positions, developing critical thinking among viewers, and expanding worldview are the questions that determine the side of the barricades on which the Ukrainian media stand.

For Ukrainian society, the issue of forming the typological structure of media content as a result and functionality of democratic transformations, the formation of civil society, and ensuring access to information in Ukraine is highly relevant.

Statistical data analysis proves that the specificity of media ownership is correlated with the typology of media content, ensuring media pluralism in Ukraine.

A vivid dominance of entertainment content characterizes television channels controlled by oligarchic capital. Its purpose does not involve the intellectualization of the audience or the formation of the civic position of the audience. The typological priorities of Ukrainian television channels are motivated by the possibility of their owners exerting political pressure on the authorities and, in the future, realizing their business interests.

Media companies' channels, which are the official property of civil society representatives, are characterized by high indicators of informational and analytical, journalistic, and popular science content. This direction corresponds to Ukraine's political, military, and economic challenges for the past eight years.

The typological structure of media content has not only informational, intellectual, cultural, or aesthetic significance. It also defines a pragmatic component – the dominant type of information and its quality directly or indirectly affects the electoral priorities of voters. The study of the content typology allows us to predict and explain the programming of the results of election campaigns at the national and local levels.

The influence of the content on the identity of the viewers is evidenced by a comparative study of the broadcast in the 1980s on Arab government television stations of a Japanese anime series and the showing of the same series today on Syrian social networks, but copied and edited in the traditions of the dissident culture against the Assad regime and the Islamic state Initially purely entertaining content, after editing, acquires a sharp political color. A typology of nostalgic online practices in the context of war and insurgency is proposed: nostalgic defiance expressed in calls for political action; nostalgic mockery reflected in subversive nostalgic humor aimed at authority; nostalgic pain as a response to the trauma of war and exile, such as in the Syrian refugee crisis [36].

5.2. The relationship between media content typology and ownership

The relationship between ownership and content is a determinant of the strategic tasks of media companies. The structure of content's flows includes the following types: Create and Play, in which the company retains control and ownership of the content; Discover and Link, in which the company discovers content but retains ownership; Fetch and Distribute, in which the company loses control and ownership of the content; Open and Play, in which users create the content and communication structure [37].

Since the mid-1990s, the dependence on the ownership structure and channel offerings has been traced. The success of national content on various television channels was noted, but also the constant efforts of international television channels to localize their offers. The transnationalization of television in Europe predetermines the spread and assimilation of entertainment programs across borders [38].

We believe there is a correlation between the typological structure of television channels and the owners, who use the media to realize their pragmatic goals of a political and business nature. Ownership relations in the media sphere in Ukraine are primarily opaque. Beneficial owners are individuals or companies registered in offshore zones that own or control media companies without an official and

public declaration of their rights. National legislation does not oblige media companies to disclose their actual owners nor those who influence or determine their editorial policy. Offshore legislation also protects the privacy of owners [39]. Internet publications and electronic versions of traditional television channels demonstrate a positive experience in terms of transparency. In 2021, the Institute of Mass Information published the results of research on the transparency of online publications, which related to three primary parameters:

- information on the website about contact data;
- data about the person responsible for the content (manager / editor-in-chief);
- media owner data.

According to the study's results, in 2021, 50% of Ukrainian media are mostly transparent. Let us compare, in 2020 - 40%, in 2019 - 28% [40].

However, the transparency of media ownership remains a significant public problem. We believe that the specificity of media ownership directly affects the typology of media, ensuring media pluralism in Ukraine. A specific interval from the time of the research (July 2020) to today (July 2022) allows us to assert significant changes in the ownership structure and content of television channels, but the nature of these changes is different and requires further research.

5.3. Grouping of Ukrainian television channels by the form of ownership

We single out 3 groups of television channels, which are characterized by a correlation of typological structure (and thus the purpose of the content) and ownership.

1. The most influential group comprises media holdings owned by oligarchic capital. According to the public, they are controlled by oligarchs: V. Pinchuk – Starlight Media (STB, ICTV, Novy Kanal); I. Kolomoiskyi – 1+1 media (1+1, 2+2, Plus Plus, UNIAN TV, TET, Bigudi); D. Firtash – Inter Media Group (Inter, NTN, K1, K2, Mega, Music-TV, Zoom, Kino-TV); R. Akhmetov – Media Group Ukraine (Ukraine, NLO TV, Indigo TV). Viewers and the expert community do not have accurate and reliable information about the actual owners. The typological structure of the content of the oligarchic channels is very eloquent: entertainment programs dominate, despite military, economic, social, and political problems: STB – 95%, Novy Kanal – 92%, Inter, NTN – 91% each, ICTV, Ukraine – 79% each, 1+1 – 76%. The editorial policy of these leading Ukrainian TV channels with the maximum coverage of the territory and reach of viewers indicates communication priorities: television content is aimed at thoughtless, meaningless, superficial consumption of simple, shallow meanings.

For the most popular channels of media companies controlled by oligarchic capital, the following features of the typological structure are characteristic:

- entertainment content dominates (STB, ICTV, Inter, Ukraine, 1+1, Novy, NTN are within 76% 95%);
- informational and analytical, journalistic content tends to peripheral positions (STB, ICTV, Inter, Ukraine, 1+1, Novy, NTN are within 5% 21% or completely absent);
- popular science content is absent or present in small amounts (1+1, NTN are 8% each).

How fully and effectively can actual documental and factual information be disseminated in conditions when the leading all-Ukrainian TV channels show information-analytical and journalistic programs very limited (regardless of the interpretive aspect)? Popular science programs are scarce. And the quality, intellectual, aesthetic, cultural level of many entertainment programs is beyond limits. The cognitive-educational, educational, moral, and educational functions of television are far on the margins, and accordingly, intellectual influence.

2. TV channels Espresso, 5th and Pryamiy distribute informational and analytical, journalistic, popular science content with a pronounced statist, pro-Ukrainian direction. An objective, quick and complete presentation of information, respect for human rights, compliance with ethical standards, and European and universal values – these are the basic principles of high editorial standards of Espresso, 5th and Pryamiy [41].

Channel 5 is a Ukrainian informational and educational TV channel created according to the standards of the BBC. It is the only Ukrainian channel dominated by popular science content (57%). It also widely presents informational and analytical materials (43%). From 2003 – 2021, it officially belonged to P. Poroshenko. In February 2021, P. Poroshenko became the official owner of Pryamiy,

which provides informational, analytical, and journalistic content (100%). In November 2021, media professionals, journalists, public figures, and people's deputies of Ukraine created a new media holding Vilni Media, which acquired 100% of the corporate rights of the Pryamiy and 5th channels [42].

The Espresso channel provides informational and analytical (86%) and popular science (7%) content. The channel belongs to I. Zhevago and L. Knyazhytskyi, representatives of successful Ukrainian entrepreneurship, integrated into the Western world and the professional journalistic sphere.

Thus, this group of channels, led by owners from the media and business environment, focused on establishing the democratic foundations of the Ukrainian state and spreading freedom of speech, demonstrates a typological diversification of content. It corresponds to the informational needs of the Ukrainian viewer, the current needs of social life, and the standards of leading world media.

Unfortunately, on April 4, 2022, the state Concern of Radio Broadcasting, Radio Communications and Television, without warning or further explanation, turned off the air on the T2 digital network of these three national broadcasters [43]. The staff of the news channels sent an open letter to the head of the European Union representation in Ukraine M. Maasikas [44]. The public has registered a petition on the website of the Cabinet of Ministers of Ukraine, in which Ukrainians demand to protect freedom of speech and to return TV channels to the Ukrainian digital airwaves [45], [46]. Civil society will not put up with restrictions on freedom of speech.

3. TV channels "NewsOne", "ZIK" and "112 Ukraine", which were part of the Novyny Media Holding, broadcast exclusively propagandistic informational, analytical and journalistic content of an openly anti-Ukrainian and pro-Russian orientation. By decree of the President of Ukraine, the channels were blocked due to the anti-Ukrainian activities of their owners [47]. The unofficial owner of the channels was the politician V. Medvedchuk, whom the court arrested on April 12, 2022 on charges of treason [48].

Thus, the following features of the typological structure are characteristic of the most popular channels of media companies controlled by oligarchic capital:

- entertainment content dominates (STB, ICTV, Inter, Ukraina, 1+1, Novyi, NTN are within 76% 95%);
- informational and analytical, journalistic content tends to peripheral positions (STB, ICTV, Inter, Ukraina, 1+1, Novyi, NTN are within 5% 21% or completely absent);
- popular science content is absent or present in small amounts (1+1, NTN are 8% each).

Channels of media companies, which representatives of civil society officially own, are characterized by:

- informational and analytical, journalistic content dominates or gravitates towards priority positions (5th, Espresso, Pryamiy are within 43% 100%);
- popular science content dominates or gravitates towards peripheral positions (Espresso, 5th are within 7% 57%).

5.4. Anti-oligarchic models of the media

The phenomenon of oligarchic mass media is not characteristic of countries with developed democratic traditions. The European approach to media ownership regulation policy is one aspect of a broader approach to media pluralism. The European Parliament, the European Commission, the Council of Europe, and the parliaments of states-members regulate media ownership at the level of political and legal acts. These factors influenced the development of the Media Pluralism Monitor for the European Commission [49].

Small markets for producing and selling media content in small states of Western Europe and other regions determine the peculiarities of the content structure. The dependence and high penetration level of foreign media complicate the activities of domestic media in small states. To protect and promote media pluralism, small states can pursue interventionist and protectionist policies to regulate the mass media [50].

The anti-oligarchic media model in Ukraine is considered in the context of the implementation of liberal policy and liberal subjectivity in the professional culture of Ukrainian journalists. Anti-oligarchic liberal reform of the media is based on certain Anglo-American concepts of journalistic practice. The

ideas of media liberalism have a contradictory character since, at the same time, they support oligarchic patronage and expand the influence of liberal politics in Ukraine [51].

We believe that the transition to the anti-oligarchic television model in Ukraine will expand representation on the channels of informational and analytical, journalistic, popular science, and educational content. Media activity following anti-oligarchic professional standards requires a systematic approach and solutions at different levels. We offer the following theses for discussion.

Regulatory level. The National Television and Radio Broadcasting Council of Ukraine must:

- provide for the inclusion in license agreements of a clause not only about the possible typology of channel content, but also about the quota representation of different types of content;
- to monitor compliance with the Program Concepts of the channels, which must specify explicit quotas and time in the broadcast network for popular science and educational content.

The Antimonopoly Committee of Ukraine should take measures to de-oligarchize the media environment and limit the monopoly of oligarchs on the information of holdings 1+1 media, Media Group Ukraine, Starlight Media, Inter Media Group. All media groups are unprofitable companies. In the conditions of a prolonged economic crisis in the country, there is not enough advertising content for everyone. The status of the media business is not determined by direct financial profits, or the ability to exert political influence on the government and citizens. The integration of Ukraine into the European commonwealth requires greater transparency of the big media business. The total unprofitability of media groups shows that they are not a separate business but only a tool of political pressure.

The level of editorial boards. The media work in conditions of fierce competition for the viewer's time. In Ukraine, the audience resource is divided between free networks (digital broadcast television network, satellite television network) and paid networks (cable TV, OTT, DTH services).

In total, about 10 million viewers. Classical television is gradually losing its audience, which switches to watching videos online due to new means of communication. The marketing research results and trends in selling television equipment are worth considering. Ahead is a tough fight for the audience. It is possible to attract a new target audience by promoting targeted content like popular science.

A positive example can be media that show popular science, and documentary content, but it is paid. Local and regional television promotes educational content. There are successful examples of cooperation between television and scientific and creative circles in preparing educational and cognitive content.

Audience level. Almost half of the viewers are pay-TV users. However, today there are powerful processes of diversification of media platforms usage. Payment for content should make media activity a business and eliminate oligarchic influence. An open market will enable the fight for viewers who will stop paying for content that suits media owners' business and political interests. It requires a mass audience that has critical thinking, the basics of media literacy, and information hygiene. Such information needs must be satisfied from sources of information of various types.

Thus, the state and prospects for developing the typological structure of media content are in line with the implementation of state policy, the satisfaction of business interests, and society's understanding of the importance of popularizing knowledge through the media.

6. Conclusions

The correlation between the typological structure of the digital television space and democratic processes in Ukraine was explored based on the analysis of the programming concepts of TV channels that have a high level of coverage and maximum coverage of viewers. These information and communication advantages are due to the use of technologies for transmitting, processing, and storing the television signal in digital form using digital technologies of the DVB-T standard. In the Ukrainian digital television space, all types of content are presented, except for educational content. It is characterized by cross-typological syncretism, a complex combination of self-sufficient types and their implementation of various social functions.

The typological structure of the mass media gives grounds for asserting the full realization of their social functions. An objective criterion of media functionality can only be the goal of the communication product's impact on the user.

The specificity of media ownership directly affects the media typology, ensuring media pluralism in Ukraine. The typological structure of the content of the leading television channels, which are controlled by oligarchic business structures, has significant disproportions in favor of the entertainment type. The typological priorities of Ukrainian television channels are motivated by the possibility of their owners exerting political pressure on the authorities and, in the future, realizing their business interests. The content of informational and analytical, journalistic, and popular science types is characteristic of television channels officially owned by representatives of the professional media environment and civil society.

Content is a communication product that exists on the media market in the form of communication goods and services related to the audience's access to information but carried out from the standpoint of implementing the editorial policy or interests of the owners. That is why the issue of transparency of the ownership structure of Ukrainian media is gaining particular relevance. Processes of media deoligarchization should be implemented at the level of state policy. Free media, devoid of oligarchic influence, are the embodiment of two social phenomena: both an instrument and a result of democratic transformations in society, media pluralism, and the real provision of freedom of speech.

The study of the typological structure of Ukrainian television develops the concept of information influence on consumers. The dissemination of content in social communications takes place in the system of managing social consciousness, that is, in the processes of conscious programming of consumers' views, feelings, emotions, and moods.

The development of media typology provides the processes of intellectualization of society through the circulation of objective, diverse, complete documentary and factual information. The social status of the media in the context of informatization, globalization, and widespread expansion of the media space updates documental and factual information that can be stored and reproduced on a variety of traditional and modern electronic media. However, these ideal provisions contradict political, economic, and psychological realities. The balance of the typological structure of the media is directly influenced by the political, legal, moral, ethical, and cultural realities of society. They determine the actual status and functions of the media in society. Ukraine is developing as a European, democratic state, where media practice should be controlled by the civil society based on the principles of high professional standards.

7. References

- [1] Commission of the European Communities, Media pluralism in the Member States of the European Union. Commission staff working document. 2007. URL: https://ec.europa.eu/information_society/media_taskforce/doc/pluralism/media_pluralism_swp_en.pdf.
- [2] S. Matviyenkiv, Mass media and democratization of modern society', Naukovyi visnyk Uzhhorodskoho universytetu. Ceriia: Politolohiia. Sotsiolohiia. Filosofiia 2 (2005) 216–223, URL: https://dspace.uzhnu.edu.ua/jspui/bitstream/lib/17809/1/% D0% 9C% D0% 90% D0% A1-% D0% 9C% D0% 95% D0% 94% D0% 86% D0% 90% 20% 20% 20% D0% 86% 20% 20% D0% 94% D0% 95% D0% 9C% D0% 9E% D0% 9A% D0% A0% D0% 90% D0% A2% D0% 98% D0% 97% D0% 90% D0% A6% D0% 86% D0% AF% 20% 20% D0% A1% D0% A3% D0% A7% D0% 90% D0% 9D% D0% 9E% D0% 93% D0% 9E% 20% 20% D0% A1% D0% A3% D0% A1% D0% 9F% D0% 86% D0% 9B% D0% AC% D0% A1% D0% A2% D0% 92% D0% 90.pdf.
- [3] N. N. Kushnarenko, Dokumentovedenye [Documentary science], Znannia, Kyiv, Ukraine, 2007.
- [4] V. V. Bezdrabko, Dokumentoznavstvo v Ukraini: instytutsionalizatsiia ta suchasnyi rozvytok [Documentary science in Ukraine: institutionalization and modern development], Chetverta khvylia, Kyiv, Ukraine, 2009.
- [5] S. H. Kuleshov, Dokumentoznavstvo: Istoriia. Teoretychni osnovy [Documentation: History. Theoretical foundations], Kyiv, Ukraine, 2000.
- [6] H. M. Shvetsova-Vodka, Zahalna teoriia dokumenta i knyhy [The general theory of the document and the book], Znannia, Kyiv, Ukraine, 2014.

- [7] M. Komova, Classification scheme as a reflection of the social and communicative nature of document phenomenon, Bibliotekoznavstvo. Dokumentoznavstvo. Informolohiia 3(2019). doi: 10.32461/2409-9805.3.2019.187917.
- [8] D. O. Oltarzhevskyi, Typology of contemporary corporate communication channels, Corporate Communications: An International Journal 24 (2019) 608–622. doi: 10.1108/CCIJ-04-2019-0046.
- [9] D. O. Oltarzhevskyi, Osnovy ta metody diialnosti suchasnykh korporatyvnykh media[Basics and methods of activity of modern corporate media], Tsentr vilnoi presy, Kyiv, Ukraine, 2013.
- [10] R. A. Saunders, Small Screen IR: A Tentative Typology of Geopolitical Television, Geopolitics 24 (2019) 691–727. doi: 10.1080/14650045.2017.1389719.
- [11] L. Powell, V. P. Richmond, and G. C. Williams, Social networking and political campaigns: Perceptions of candidates as interpersonal constructs, North American Journal of Psychology 13 (2011) 331–342.
- [12] X. Rúas-Araújo and N. Quintas-Froufe, Televisión, audiencias y debates electorales: hacia la multipantalla, Profesional de la información 29 (2020). doi: 10.3145/epi.2020.mar.01.
- [13] T. Towner and C. Lego Munoz, Boomers versus Millennials: Online Media Influence on Media Performance and Candidate Evaluations, Social Sciences 5 (2016). doi: 10.3390/socsci5040056.
- [14] E. Luku, Late Night Show Evolution in Albania: From Infotainment to Trash Show, Collegium Antropologicum 43 (2020) 305–308. URL: https://www.collantropol.hr/antropo/article/view/1759.
- [15] J. M. Morcillo, K. Czurda, and C. Y. Robertson-von Trotha, Typologies of the Popular Science Web Video, Journal of Science Communication 15(04) (2016). doi: https://doi.org/10.22323/2.15040202.
- [16] B. Boy, H.-J. Bucher, and K. Christ, Audiovisual Science Communication on TV and YouTube. How Recipients Understand and Evaluate Science Videos, Frontiers in Communication 5 (2020). URL: https://www.frontiersin.org/articles/10.3389/fcomm.2020.608620.
- [17] K. Hull, Examining local sports broadcasters' use of Twitter to cross-promote on-air and online content, Journal of Media Business Studies 13 (2016) 241–256. doi: 10.1080/16522354.2016.1232913.
- [18] M. de O. Salim and W. C. Brandão, Predicting the Success of NFL Teams using Complex Network Analysis, in: Proceedings of the 20th International Conference on Enterprise Information Systems, Funchal, Madeira, Portugal, 2018, pp. 135–142. doi: 10.5220/0006697101350142.
- [19] V. R. Prasetyo and E. Winarko, Rating Of Indonesian sinetron based on public opinion in Twitter using Cosine similarity, in: Proceedings of the 2016 2nd International Conference on Science and Technology-Computer (ICST), IEEE, Yogyakarta, Indonesia, 2016, pp. 200–205. doi: 10.1109/ICSTC.2016.7877374.
- [20] H. H. Larsen, J. M. Forsberg, S. V. Hemstad, R. R. Mukkamala, A. Hussain, and R. Vatrapu, TV ratings vs. social media engagement: Big social data analytics of the Scandinavian TV talk show Skavlan, in: Proceedings of the 2016 IEEE International Conference on Big Data (Big Data), Washington DC, USA, 2016, pp. 3849–3858. doi: 10.1109/BigData.2016.7841058.
- [21] S. Hill and O. Ben-Assuli, 'Social TV: Predict offline TV viewing in advance by using online social media content', WITS 2013 23rd Workshop on Information Technology and Systems: Leveraging Big Data Analytics for Societal Benefits, 2013.
- [22] G. Kostygina et al., Exposure and reach of the US court-mandated corrective statements advertising campaign on broadcast and social media, Tobacco Control 29 (2020) 420–424. doi: 10.1136/tobaccocontrol-2018-054762.
- [23] A. Hennig et al., Big social data analytics of changes in consumer behaviour and opinion of a TV broadcaster, in: Proceedings of the 2016 IEEE International Conference on Big Data (Big Data), Washington DC, USA, 2016, pp. 3839–3848. doi: 10.1109/BigData.2016.7841057.
- [24] A. Martinez, J. Arias, A. Vilas, J. Garcia Duque, and M. Lopez Nores, What's on TV tonight? An efficient and effective personalized recommender system of TV programs, IEEE Trans. Consumer Electron. 55 (2009) 286–294. doi: 10.1109/TCE.2009.4814447.
- [25] J. Wang, J. Pouwelse, J. Fokker, A. P. de Vries, and M. J. T. Reinders, Personalization on a peer-to-peer television system, Multimed Tools Appl. 36 (2008) 89–113. doi: 10.1007/s11042-006-0075-6.

- [26] V. A. Ilhanaeva, Sotsyalnye kommunykatsyy (teoryia, metodolohyia, deiatelnost): slovar-spravochnyk [Social communications (theory, methodology, activity): dictionary-reference], Horodskaia typohrafyia, Kharkiv, Ukraine, 2009.
- [27] On Information: the Law of Ukraine6, 1992. URL: https://zakon.rada.gov.ua/go/2657-12.
- [28] Site content, iGroup Ukraine, 2022. URL: https://igroup.com.ua/seo-articles/kontent/.
- [29] On Television and Radio Broadcasting: the Law of Ukraine, 1994. URL: https://zakon.rada.gov.ua/laws/show/en/3759-12#Text.
- [30] TV viewing survey November 2020, BigDataUa, 2020. URL: http://bigdataua.com/en/blog?start=20 (accessed Jul. 11, 2022).
- [31] List of terrestrial digital television channels DVB-T2, Installsat, 2020. URL: https://installsat.tv/spisok-kanalov-paketa/t2-efir/ (accessed Jul. 11, 2022).
- [32] V. V. Hoian, Televiziina komunikatsiia yak skladova masovoi komunikatsii u svitli mediadoslidzhen [Television communication as a component of mass communication in the light of media studies], Electronic library of the Institute of Journalism. URL: http://journlib.univ.kiev.ua/index.php?act=article&article=1669 (accessed Aug. 27, 2022).
- [33] I. Penchuk, Children's TV studio in the system of integrated media education', State and Regions. Series: Social Communications 3(43) (2021). doi: 10.32840/cpu2219-8741/2020.3(43).15.
- [34] T. Krainikova, Functions of media consumption culture, Visnyk Knyzhkovoi palaty 4 (2014) 39–41. URL: http://irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis_64.exe?C21COM=2&I21DBN=UJRN&P21DBN=UJRN&IMAGE_FIL E_DOWNLOAD=1&Image_file_name=PDF/vkp_2014_4_12.pdf.
- [35] D. I. Yavornytskyi, Istoriia zaporizkykh kozakiv [History of the Zaporizhzhya cossacks], Naukova dumka, Lviv, Ukrane, 1990.
- [36] O. Al-Ghazzi, 'Grendizer Leaves for Sweden: Japanese Anime Nostalgia on Syrian Social Media', Middle East Journal of Culture and Communication, vol. 11, no. 1, pp. 52–71, 2018, doi: 10.1163/18739865-01101004.
- [37] A. Bechmann, 'Towards Cross-Platform Value Creation', Information, Communication & Society, vol. 15, no. 6, pp. 888–908, Aug. 2012, doi: 10.1080/1369118X.2012.680483.
- [38] A. Esser, 'Audiovisual Content in Europe: Transnationalization and Approximation', Journal of Contemporary European Studies 15 (2007) 163–184. doi: 10.1080/14782800701499863.
- [39] Transparency of the ownership structure of offshore companies in the Ukrainian media sector, 2012. URL: http://cedem.org.ua/analytics/prozorist-struktury-vlasnosti-ofshornyh-kompanij-v-ukrayinskomu-sektori-zmi/.
- [40] 40% of Ukrainian online media will demonstrate transparency in 2021, Institute of Mass Information, 2021. URL: https://imi.org.ua/monitorings/40-ukrayinskyh-onlajn-media-demonstruyut-prozorist-svoyih-danyh-doslidzhennya-imi-i3462.
- [41] Espresso Ukrainian view of the world, espreso.tv, 2022. URL: https://espreso.tv/pronas.
- [42] Vilni Media media holding acquired Priamyi and 5 kanal, detector.media, 2021. URL: https://detector.media/infospace/article/193618/2021-11-08-mediakholdyng-vilni-media-prydbav-pryamyy-ta-5-kanal/ (accessed Jul. 11, 2022).
- [43] The Espreso TV channel was switched off from the digital airwaves in compliance with the decision of the National Security Council, Derzhspetszviazok, espreso.tv, 2022. URL: https://espreso.tv/telekanal-espreso-vimknuli-z-tsifrovogo-efiru-na-vikonannya-rishennya-rnbo-derzhspetszvyazku.
- [44] 'Espreso, Priamyi and 5 kanal appealed to the European Union due to disconnection from the digital air', detector.media, 2022. https://detector.media/infospace/article/198412/2022-04-15-espreso-pryamyy-ta-5-kanal-zvernulys-do-ievrosoyuzu-cherez-vidklyuchennya-z-tsyfrovogo-efiru/ (accessed Jul. 11, 2022).
- [45] The petition for the return to the digital air of Ukrainian TV channels Espreso, 5th and Priamyi has received the required number of votes, Censor.NET, 2022. URL: https://censor.net/ua/news/3351549/petytsiya_pro_povernennya_v_tsyfrovyyi_efir_ukrayinskyh_telekanaliv_espreso_5go_i_pryamogo_nabrala_neobhidnu (accessed Jul. 11, 2022).
- [46] "We ask you to urgently take appropriate measures to return the TV channels ESPRESO, 5th and Priamyi to the digital air" a petition on the website of the Cabinet of Ministers, espreso.tv, 2022.

- URL: https://espreso.tv/prosimo-nevidkladno-vzhiti-vidpovidnikh-zakhodiv-dlya-povernennya-telekanaliv-espreso-5-go-ta-pryamogo-v-tsifroviy-efir-petitsiya-na-sayti-kabminu.
- [47] On the application of personal special economic and other restrictive measures (sanctions): Decree of the President of Ukraine №43/2021, Official website of President of Ukraine, 2021. URL: https://www.president.gov.ua/documents/432021-36441
- [48] The court arrested Medvedchuk, Radio Svoboda, 2022. URL: https://www.radiosvoboda.org/a/news-medvedchuk-sud-aresht/31806457.html.
- [49] P. Valcke, From Ownership Regulations to Legal Indicators of Media Pluralism: Background, Typologies and Methods, Journal of Media Business Studies 6 (2009) 19–42. doi: 10.1080/16522354.2009.11073487.
- [50] M. Puppis, Media Regulation in Small States, International Communication Gazette 71 (2009) 7–17. doi: 10.1177/1748048508097927.
- [51] T. Fedirko, Liberalism in fragments: oligarchy and the liberal subject in Ukrainian news journalism', Social Anthropology 29 (2021) 471–489. doi: 10.1111/1469-8676.13063.