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Images on Environment in the US and Russian Media Agenda in a Comparative Perspective

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Abstract

The article describes the differences and similarities in media reporting and framing of environmental images across US and Russian national and regional newspapers. The cross-newspaper analysis highlighted that in the portrayal of environmental images, the US press, compared to Russian press, took a major step forward. The rationale of such a discrepancy in media coverage could be caused by the different media industry in Russia and the US as well as by the different social and geopolitical context.

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1. Introduction

Mass media is a meaningful part of our everyday life. Giddens [1] emphasizes that mass media “integrate distant events into the framework of personal experience” and help to construct the meanings to political, social and environmental issues.

A literature review demonstrates that mass media coverage on the environmental issues has been a topic for multidisciplinary researchers who focus on the types of the environmental issues [2,3,4], scientific information [5,6], types of journalists [7,5], urgency [7], claim-makers [8,9,10], models of post-soviet media [11].

US media researchers emphasize studying the media coverage of particular environmental risks such as climate change [6,12], toxic waste [13], the analysis of coverage of specific environmental disasters or events [14] or the

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drivers in coverage of certain environmental issues [15].

Russian scholars are embedded in a much broader perspective. Under the concept of ‘green culture,’ scholars simultaneously study various domains of the environmentalism such as environmental knowledge [16,17], environmental activism [18].

Such difference in scope of the environmental images presented by US and Russian scholars could be explained by the dominant paradigms of the national social sciences. In Russian social research, a social functionalism perspective aiming at analyzing the social phenomenon in a holistic approach is quite influential while in the US adopts a phenomenological perspective.

Despite the fact that cross-cultural analysis of the media coverage is becoming more popular among the researchers [19, 20, 21], the comparative analysis of the media images presented in the US and Russian press has not been examined in the current literature. Thus, neither an adequate conceptualization of the environmental images portrayed by the Russian versus the US press, nor sociological analysis of differences between the countries’ media agenda of the environmentalism has been analysed.

To address these limitation, my research primarily focuses on the portrayal of environmental images in the US and Russian press. This allows connecting our discussion with postmodernist writers who play off the two meanings of the word ‘image’. Images are, on the one hand, reproductions, but they have a second meaning as well: a mental picture of something not real or present. Baudrillard [22] argues that dramatic changes in the technology of reproduction have led to the implosion of representation and reality. As Guy Debord [23] suggests, in “societies where modern conditions of production prevail, all of life presents itself as an immense accumulation of spectacles, which is the main production of present-day society”.

2. Literature review

To analyze the environmental images in these two meanings, the article employ the social constructivist theory that is highlighted on the relationship between producing the objective discourse and the actors’ background, the resources they use to legitimate their claims.

Employing the given approach, mass media is viewed as a part of a process of economic, political, social, and cultural struggle. According to this approach, different classes, sectors of capital, and social groups compete for social dominance and attempt to impose their visions, interests, and agendas on society as a whole to constitute them in an objective discourse. Together, environmental groups, government officials, private industry, scientists and other claim-makers constitute the “social problem industry” or what Hilgartner also called “public arenas model” [8]. As active members of the public arena, they bring attention to some environmental topics and ignoring others. Attracting media attention to the environmental problems, however, is only half of the task for claim-makers: “... the real battle is over whose interpretations, whose framing of reality gets the floor” [24]. In fact, everyone can be a part of the “social problems industry” and articulates their claims, signing petitions, participating in social movements, etc. But the groups who have more power have better chances to legitimate their claims and play a more significant role in shaping the discourse about environmental images. The claims made by less powerful groups can be interpreted by more powerful groups in a way less powerful groups neither expect nor support.

Research on news sourcing [2,5] illustrated that government officials, private industry and scientists were quoted by mass media much more than environmental groups. For example, Sigals' study [25] found that almost 75% of news sources presented in the New York Times and the Washington Post during 20 years’ time were governmental officials. Also it was found that when environmental pressure groups do appear as the main definers, they usually articulate themselves in mass media through public demonstration or protest rather than through a legitimate way [26]. Besides, the studies indicated that environmental groups have more access to local media coverage than to the national press [8].

To analyze how environmental messages are structured within media discourses, researchers have addressed journalist norms. The research on the topic stressed that journalists do not report environmental issues, they report news [24]. In this respect, reporters frame environmental news according to many journalistic norms and imperatives that make the events newsworthy, including timelessness, conflict, prominence, significance and human interest [7]. Altogether, they constitute the newsworthiness of the media coverage.

In addition, several researchers [8,10] indicated that the environmental coverage is determined by the cultural system and socio-economical values. Successful claims made by those who reinforce the dominant cultural values and governmental interests [27].

In the scientific discourse of environmental problem construction the agenda-setting hypothesis is often used. Agenda-setting model of mass communication, proposed by Maxwell McCombs and Donald Shaw in the 1970s, concentrated on the idea that mass media constructed the agenda to public opinion by coverage certain issue more often than others [5]. Mass media can manipulate public's opinion because "on a wide range of environmental issues the public would have few sources other than mass media to turn to for information" [28, p.71]. In addition, some environmental hazards like global warming or deprivation of the ozone layer are not tangible and visible for people and are more difficult for the public to form opinions on these issues.

Another popular form of media effects that can be implemented here is framing. In communication studies framing has received researches attention since 1990s and is viewed as "the principles of selection, emphasis, and presentation composed of tacit little theories of what exists, what happens, and what matters" [24, p.45].

An important component of framing is language. However, framing ultimately is much more than language: it is all about thinking. Morgan (2004) made a comprehensive list of words that are related to particular environmental frames in the media. For example, she found that when framing the environmental journalists used the following cognitive schemas: "loss of habitat, damage to animals' health, damage to people's health, destruction quality of life, etc" [29, p.4]. I will employ some of Morgan's categories to define the seriousness of the environmental problems.

In connection to the research, while agenda setting can be a method to explain the amount of the environmental coverage (the amount of the environmental articles), framing can be used to analyze the content of the message (primary topic, urgency, recommended environmental actions) and the articles visual characterizes (size of headlines, size of the article).

Based on the abovementioned theoretical arguments, following hypotheses were posited:

H1: Environmental images presented in US and Russian newspapers are more likely to be covered differently.

H2: Environmental images presented in national and local newspapers are more likely to be covered differently.

H3: Environmental images presented in the US and Russian local newspapers have more environmental messages stimulating the audience for the environmentally friendly behavior.

H4: Environmental images presented in the US and Russian newspapers are more likely to be covered as serious and alarming.

H4: Environmental images presented in the US and Russian newspapers are more likely to be portrayed in a descriptive but not in an analytical manner.

H5: Conflict issues that promote the human interest are more likely to receive the top news coverage in the US and Russian press

3. Methodology

The research employs the method of content analyses. Four US newspapers (n=402): two local (*the Kent Stater*, *the Record Courier*) and two national (*the New York Times* and *the Washington Post*) and four Russian newspapers (n=166): two local (*the Kazansky Universitet*, *the Vechernya Kazan*) and two national (*the Rossiyskaya gazeta*, *the Novye Izvestiya*) were analyzed with a total amount of 568 articles with an environmental content.

The items from newspapers were studied from January to December 2012. The given newspapers were chosen because they have several similarities that make them comparable: similar ideological positions, circulation, target audiences. However, they also have differences as a result of different social, geopolitical and cultural contexts.

4. Findings

Conceptually, the analysis was divided into two parts: non-content and content analysis. Non-content analysis or issues of visibility examine the sizes of the headlines as well as the articles' sizes. These features are crucial for the further audience decision to read the article or not. The analysis of the content of the articles includes the study of the types of the environmental messages, urgency, and environmental actions.

First, the salience of the environmental images was analysed by calculating the number of articles with the environmental images across all the newspapers for the studied period. The US press for the studied period consists of 402 articles with the environment information. Out of them the Kent Stater consists of 37articles, the Record Courier consists of 79 articles; the Washington Post - 124 articles, the New York Times consists of 162 articles.

The Russian press for the given period consists of total amount of 166 articles with the environment images. Out

of them the Kazansky Universitet consists of 9 articles, the Vechernya Kazan - 50 articles, the Novye Izvestiya consists of 42 articles, the Rossiyskaya gazeta has 65 articles with environmental images.

The data indicated that the US press has 2.5 times more articles with environmental content compared to the Russian newspapers. Furthermore, the national press has more environmental images compared to the regional and local press.

Since most of the articles presented in the standardized electronic version, we measure all the articles' size by the quantity of printed characters. The cross-newspaper analysis illustrated that regional US press compared to the Russian press consists of more articles with bigger sizes (of more than 1001 printed characters – 6.5%). This is especially true for the Kent Stater, which consists of 14 large size articles (more than 1001 centimeters).

Russian press has more articles (36.8%) compared to the US (22.1%) with the size of the articles of no more than 100 printed characters. Interestingly, there are no Russian newspapers that have articles bigger than 1001 centimeters.

Audience attention to the messages depends on the arrangement of the article in the newspaper; the key audience attention is given to the information that is situated in the first pages of the newspaper. On this criterion 90.9% of the articles across all newspapers are located in the main pages of the newspapers.

The cross-newspaper analysis shows that more articles in the US newspapers (96.4%) compared to Russian newspapers (85.5%) located in the first/main pages.

Cross-newspaper analysis shows that the US newspapers have more environmental images with an illustration (total – 96.4%) compared to the Russian newspapers (total – 85.5%).

Considering the fact that an environmental articles with an illustration demands more space, these findings positively correlate with the data that the US environmental articles compared to Russian are bigger in size and mainly located in the 'body' of the newspaper.

Genre of the articles with the environmental images could affect the content of the message. While descriptive genre is focused on the statements of facts, analytical genre analyzes them and compare with others, assesses the phenomenon, offering its vision problem.

Content analysis demonstrated that 72% of articles with environmental content are presented in the descriptive genre, while 28% of the articles presented in the analytical genre. The US newspapers with the environmental images contain less analytical information (28.6%) contrasted to the Russian press (71.4%). The leaders among the newspapers that contain the most analytical information in both cases include the national press: in the Russian press it is Novye Izvestiya (41.5%) while in the US press it is the New York Times (35.6%).

Figure 1 demonstrated that portraying of the environmental information in the US and Russian press is non-systematic in nature. For example, the Russian newspapers in August consist of 19.2% environmental articles while in July - 2.9%. Similar trends could be observed in the US press: in May there are 4% articles with environmental images while in June there were 15%.

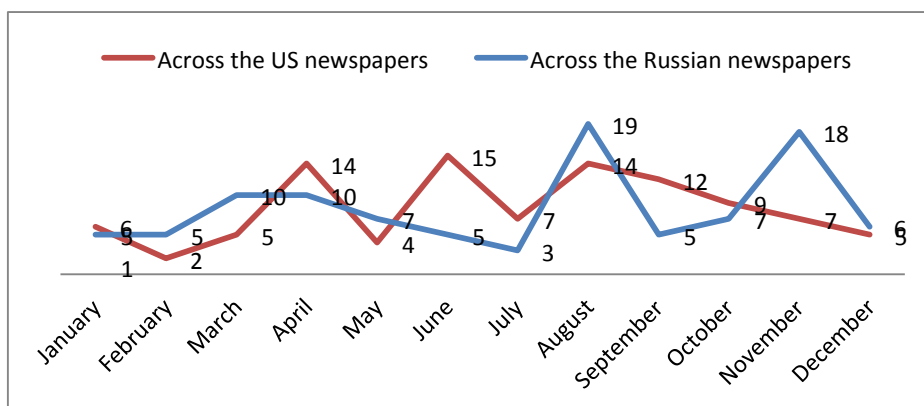


Figure 1. Distribution of the environmental images across the US and Russian newspapers in 2012, percentage of total articles

The Russian newspapers show two spikes in August (19%) and November (18%) and sharp decline in July (3%), September (5%) and December (6%). The US newspapers experienced the spikes in April (14%), June (15%) and August (14%) and sharp declines in May (4%), July (7%), December (5%).

Despite the high fragmentation of the environmental articles during the sampled period across all the newspapers, some patterns could be observed and the explanations could be introduced that could serve to interpret these differences.

For example, the high environmental media coverage across all the newspapers happens in April (13% of media coverage across all the newspapers, 14% across the US newspapers, and 10% across the Russian newspapers) could be explained by the celebration of the Earth Day (April 22th). August is the period of forest fires, drought or floods in the regions and other natural disasters that could lead to a high media coverage in the US and Russian press.

Figure 2 introduces data about the articles' dominant environmental theme. Some of the categories were taken from the literature review while others were revealed during the coding.

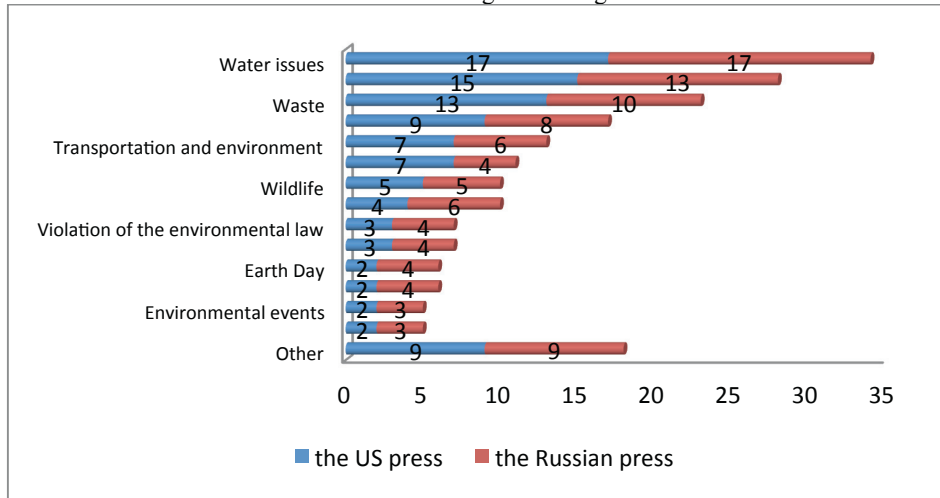


Figure 2. Dominant topic across all the newspapers in 2012, percentage of total articles

The analysis shows that there are no significant differences between the US and Russian press in the dominant environmental themes. The environmental issues of water (17% in the US and the Russian press), waste (13% in the US press and 10% in the Russian press) and corporations and the environment (15% in the US press and 13% in the Russian press) received the most coverage across all the newspapers.

The importance of water and waste issues can be caused by their direct effect on people's health. Water and air pollution are bringing damage to our health in terms of the present, 'here and now', while less visible but not less important environmental problems (such as climate change) might be harmful in a distant future. A heavy coverage of this theme in the mass media can be explained by the controversy and the conflict nature of the topic. According to the media research, controversial and conflict messages have a greater impact on the news-production [30].

However, drawing on the social constructionist perspective, these findings suggest that environment and corporations are "not one of those issues that are most important or serious as measured against objective indicators" [31,p.32]. They are not necessarily important per se, but important in terms of the claim-makers activities that "project them into the public domain" [31,p.32].

Reading media environmental images is an active process in which context, social location, and prior experience can lead to quite different decoding. It is frequently interactive, taking place in conversation with other readers who may see different meanings. Understanding it, the study provides insights on the way how mass media, personal experience, and interpersonal interaction interlink with the societal experience and frame the public's attitude and behavior about the local environment. Here, we seek to address the complexity between public and media agenda.

To do it the study compared the results of the content analysis with the results of the national surveys for the studied period. National US poll suggests that the US population most environmentally concern about the water pollution (34%), air pollution (33%), agriculture pollution (25%), wildlife extinction (17%), waste (15%).

A national Russian survey demonstrated that leaders of the students' environmental concern include the water pollution (19%), wildlife extinction (17%), waste (15%), and air pollution (14%).

The results show the strong relationship between the media and public agenda. The issues that received the high media coverage both in the US and Russian newspapers are the most popular environmental concerns among the population according to the national surveys. These patterns suggest that the populations are concerned about tangible health-related environmental problems such as air and water pollution contrasted to distant less visible issues such as global-warming.

Furthermore, I analyzed the environmental actions recommended by the newspapers to the readers. Table 1 demonstrated the environmental actions were suggested in 49.6% of the articles.

Table 1. Environmental actions recommended by the articles and across the newspapers, percentage of total articles

Newspapers	Total messages with environmental actions,%
Kent Stater	71.9
Record Courier	53.7
New York Times	66.7
Washington Post	40.8
Subtotal, %	58.2
Kazan University	50
Vechernya Kazan	42.9
Novye Izvestiya	28.6
Rossiyskaya gazeta	42.9
Subtotal,%	41.1
Total,%	49.6

A cross-newspaper analysis shows that the US press contains more articles with environmental actions (58.2%) compared to Russian newspapers (41.1%). Cross-newspaper analysis indicates that more environmental actions recommended by the articles suggested in the local newspapers (total -54.6%) compared to the national press (total – 44.8%).

Table 2 shows that the 2.3% of articles persuades the US reader to vote; 4.6% of the US and 9.3% of the Russian press persuades to write petition; 5.3% of the Russian press persuades the reader to participate in the ecological action; 1.6% of the Russian press stimulates the reader to clean water; 10.1% of the US press stimulates the reader to buy organic food; 7.1% of the US press and 11.1% of the Russian press contains recycle.

Table 2. Particular environmental actions recommended by the articles and across the newspapers

Environmental actions	The US press	The Russian press
Vote	2.3	-
Write petition	4.6	9.3
Participation in ecological action	-	5.3
Clean water	-	1.6
Buy organic food	10.1	-
Recycle	7.1	11.1
Other	75.9	62.6
Total	100	100

The singular environmental articles with the recommended environmental actions, we grouped in a category 'other'. The following list included but not limited to the following actions: 'to install modern environmental control', 'to implement new regulations under air control', 'alternative energy sources', etc.

The degree of seriousness of the environmental problems is difficult to define and operationalized since it incorporated more qualitative research and is open to interpretations. In this particular research setting, this category was defined as the attempt to capture the importance of meaning of particular environmental problems.

The analysis shows that out of all articles, 53.3% incorporated the environmental items that are serious and somehow serious in nature; 24.4% of articles do not consider the environmental problems to be serious.

The data reflected that journalists are more likely to portray environmental information as serious and alarming. Following this line of argument, my data shows that intermediate positions such as 'somehow serious' get more coverage than denials ('not serious at all'). Similar results were found in the content analysis of the New Jersey press with 58% of risky information, 18% 'not risky' and 24% mixed or intermediate [32].

5. Conclusion and discussion

This study provides insights on the media reporting and framing of environmental images across and between the US and Russian newspapers. The current relevance of the issue worldwide, and the limited number of comparative studies in the area, provides the justification for the present study.

Our research supports H1 stating that environmental information presented in the US and Russian newspapers are more likely to be covered differently. The cross-cultural analysis demonstrated that the US newspapers contain twice more articles with the environmental images; the size of the articles in the US press is larger and contains more illustration compared to the Russian press. US newspapers feature environmental articles in the first/main pages more often in comparison to Russian newspapers. The US presents more environmental articles that seek to stimulate environmentally friendly behaviour from the audience. The Russian press contains more analytical information regarding environmental issues compared to the US press. The analysis shows that there are no significant differences between the US and Russian press, however, in the list of dominant environmental themes.

Collectively, the results suggest that in the portrayal of environmental images, the US press compared to the Russian press took a major step forward. Historically, more developed forms of democracy in the USA compared to Russia formed strong civil society institutions such as various environmental organizations network, environmental legislation and monitoring, etc. It was ground for fostering active civic position of the US population and for building confidence that they could influence environmental decision-making. Most of Russian people until now do not have experience in environmental initiatives and lack the corresponding will to engage policy decisions. In Russia, the activities of individuals are regulated by the state norms and sanctions, thus collective and depersonalized decisions are dominated. Mass media in the US as an active political agent translate more articles with environmental images and with those that stimulate people for active environmental engagement compared to the Russian newspapers.

Along similar lines, my study supports H2 stating that environmental images presented in national and local newspapers are more likely to be covered differently. The cross-newspaper analysis illustrated that both the US and Russian national newspapers compared to local newspapers have more articles with environmental images, have bigger sizes of the articles, have more environmental articles located in the main/first pages and news-oriented information.

The research supports H3 and demonstrates that local newspapers have more environmental images stimulating the audience for the environmentally friendly behavior. The reason behind it is that the main environmentally active agents (environmental groups, civic initiatives, etc.) have resources (political, financial, and symbolical) to translate their claims only in the local newspapers. While environmental groups attract the attention of the public to environmental issues, politicians and "public authorities" are the social forces who legitimate this attention and shape this discourse about environment. These groups are not interested in putting environmental problems in the agenda and construct environmentally friendly solutions. The cultural beliefs about "progress", "capitalist competition" and "human exceptionalism" are working in favor of powerful industrial groups who are interested in exploiting natural resources by transforming such cultural beliefs into "latent ideology".

The study supports H4 stating that environmental images presented in the US and Russian newspapers are more likely to be covered as serious and alarming. These findings reinforce the main principles of media coverage such as 'alarm over reassurance' and 'extremes over middle' [33].

The study supports H5 stating that environmental images in all newspapers are more likely to be portrayed in a descriptive but not in a problem-solving manner.

My study proves the H6 stating that conflict issues that promote the human interest are more likely to receive the top news coverage in the US and Russian press. Thus, the environmental issues that receive the most media attention both in the US and Russian newspapers are 'social world and environmental issues'. The findings presented here

suggest that the framing of the environmental issues is regulated by and depends on the cultural system and socio-economic values. Those who reinforce the discourse projected by the dominant cultural values and governmental interests make successful claims.

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