

ON THE PROBLEM OF FORMATION OF ECOLOGICAL CONSCIOUSNESS IN POST-NORMAL TIMES: THE EXPERIENCE OF DISCOURSE ANALYSIS

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Abstract. Human loves comfort. Throughout the history of his existence, he transforms the environment for his comfort. As a result, we live in the Anthropocene epoch, in which Homo sapience impacts the planet's geological processes. Maintaining an ecological balance is vital for the human race's survival. One of the ways to organize a well-balanced urban environment is to analyze the way how the public communicates this problem, paying attention to the specific circumstances of a particular place. The methodology of the electronic sociological survey was used, as well as work with Google Trends to analyze the popularity of search queries on environmental issues in Almaty. This article, on the basis of an interdisciplinary study, analyzed the formation and development of the mass media discourse on urban ecologization in Almaty. The paper concludes that the ecological discourse form not only the main vector of the media content but also ecological consciousness since the greening of cities is impossible without the development of the ecology culture and ecology thinking.

Key words: ecology, politics, Postnormal times, Anthropocene, Capitalocene, core values

Introduction

Ecology has its roots deep in the culture and traditions of many countries. As a science, ecology declared itself in the 60s of the 19th century. At the stage of formation, it is associated with the name of Ch. Darwin and in the later period of E. Haeckel. Ecology originated as a branch of biology until the 60s of XX. Since the middle of the XX century, the subject of this science has been expanding. For example, have been emerging such areas as social ecology, and landscape ecology. The focus of the research mainly shifted toward an understanding of the relationship between man and the surrounding urban environment. The contours of urban ecology are being outlined by J.M. Pelt, B. Davis, and Foreman and Gaudron

worked in this direction. Since about the 70s, there has been a tendency to create an ecology of cities. In this regard, since the middle of the last century, attention to ecology as a science has been increasing. The most important researchers who laid the foundations of the national ecology are D.N. Kashkarov, T.Z. Zahidov, A.A. Abdulkasimov, P.I. Marikovskiy. The most important classical works on the study of urban ecology were written by M. Alberti, F. Adler and K. Tanner, R. Forman, K. Etingoff, and K. Paris, Modern researchers dealing with urban ecology in Central Asia are N.M. Rustamova, R.A. Salimbayeva, Sh.A. Normatova, N.I. Muminova, S.A. Fayzieva, D.T., Zinedinov and A.N. Sarsenbayeva, Sh. Fayziev, M.J. Burlibayev and D.M. Burlibayeva, G.A. Khodzhaeva [1].

It should also be disassembled key works in the field of ecology related to cities or places of the largest concentration of people. The book by M. Alberti (2008) entitled "Promotion of Urban Ecology: The Interaction of Human Activity and Natural Processes in urban ecology" describes the processes that influence the future of the Earth's ecosystems. The author of the book says that the pace and nature of urbanization have an increasing impact on the environment. Thus, one of the most difficult tasks for natural scientists and sociologists is to understand the complex system of interaction between humans and environmental processes. The questions and research methods characteristic of traditional disciplines give partial representations that reflect various epistemologies of the world. To generalize this knowledge of the necessary perception of the urban ecosystem as a whole. In this regard, the author believes that there is a need to change the way questions and methods are posed [2].

The first books on urban ecology were conference materials and appeared in the 1970s. In the 1980s, the first textbooks appeared, but their number left much to be desired. And in the 90s new books on urban ecology appeared almost every year. One such example is the book "An International Perspective on the Interaction between People and Nature" by Marzlaff et al., 2008 or the book entitled "Integration of Man and Environmental Processes" written by M. Alberti in 2008, or Forman's book "The Science of Cities" published in 2014. These sources of literature can be divided into various sections, one of which is urban ecology [1].

Urban ecology covers the biophysical and social causes and consequences of city heterogeneity. It should be noted that this direction is largely interdisciplinary. The conceptual and theoretical core of urban ecology connects the disciplines of humanities with natural science disciplines. Urban ecology can be described as a relationship between human activity and the structure, processes, and changes that took place in the city landscape. Urban ecology focuses on spatial heterogeneity. Its main research focus is on how humans interact with ecosystems and bring a spatial perspective to urban planning.

The following works analyze the origin and development of urban ecology. One of the books that are fundamental for urban ecology is written by Richard Forman and Michell Wile in 1986. The book is named Urban Ecology and con-

tains a wealth of material on ecology, geography, and biology. The book written by K.M. Parris (2016) “Ecology of Urban Environments” could be considered an introduction to urban ecology, based on an established ecological theory, and emphasizes the common features of urban ecology. The author argues that the existing ecological theory is adequate for understanding urban ecology at all levels of the organization, from individual organisms to entire ecosystems; effective science and management do not need to wait for a new theory of urban ecology [3].

The growth of both peaceful and military industries is increasing in the world. There is an increase in the number of chemical, biological and nuclear weapons of mass destruction. Pollution of soil, water, and air by industrial and agricultural wastes is stated. In the pursuit of profit, people are predatory towards living and inanimate nature. Modern man is mired in consumerism. There is a real threat of human extinction in the wake of the disappearance of many different species of living organisms on Earth. According to the Postnormal Times theory by Dr. Z. Sardar, the modern world is experiencing many crises. It is already difficult for a reasonable person to separate the crisis associated with the spread of viral infections from economic or political crises. Besides the fact that crises occur simultaneously, they have a global character. The world is global and the problems of our time, too. According to the scientist, this can be most clearly seen by the example of the environmental crisis, which no country can cope with alone. Environmental problems are inherent in all countries. And to one degree or another, the whole world is feeling the consequences of environmental problems. Environmental problems occupy a priority place and require urgent measures. The development of solutions should be based on research and scientific knowledge. One of the ways to organize a well-balanced urban environment is to analyze the way how the public communicates this problem, paying attention to the specific circumstances of a particular place [4].

In the XX century, the illusion of security was formed. A person achieves this illusion by means of separating himself from the “wild” nature with walls of glass and concrete. There is no dirt in the city, in other words, there is no land in the city. Rolling the living earth everywhere with smooth asphalt, the townspeople talk about the illusion of sterile cleanliness. However, the 2019 pandemic proves the opposite. We are part of nature and the human body itself is “dirty” in other words, we are not sterile and cannot live in sterile conditions. When we try to put ourselves in a super-sterile urban landscape, where there are no blades of grass, where it is wrong, why that sterility is another way to suppress what is inherent in nature, that is, nature is naturally considered as “dirty”. There is a need to revise many concepts and statements related to humans and urban ecology. Architect Dilip de Cuncha wrote the book “The Invention of Rivers” in 2019. The main idea of the book is that a person imagined that he could somehow control nature by indicating where it should be and in what form [5].

According to the author of this book, the very concept of a river does not exist. Our understanding of nature has led us to this, that we draw a line on the map

and say, here the land ends, and here the water begins. Moreover, we perceive this artificial line that we have drawn on the map as nature. However, nature does not include this non-existent, in fact, line. As a result, when the water passes beyond this line, we call this phenomenon a flood. Now the attitude towards the urban landscape and planning is changing in line with the idea expressed in this book. City planning departs from the illusion of binary opposition between the city and nature. The realization comes that man is a part of nature.

In the industrial era, the main goal of urban planning was to restrain the manifestations of nature, to try to take its manifestations under its control, and to put nature in some kind of framework. And now it turns out that we are coming to a new realization that the city is a part of nature. The city structure should not exclude all living things, there should be a balance. To achieve a balance with the environment, it is necessary to move away from the usual understanding of cleanliness in terms of asphalt sparkling in the sun and concrete and glass used everywhere in the urban environment. From the above, it becomes clear that there is a need to build a public ecological consciousness since the latter determines what the future of the planet will be. One of the options for building public ecological consciousness is to build communication about urban ecology in the media.

This paper, on the basis of a comprehensive interdisciplinary study, analyzed the formation and development of the mass media discourse on urban ecologization in Almaty.

Methodology

The article uses an interdisciplinary research method. The article uses the system method, the method of analysis and synthesis, and the statistical method. The methodology of the electronic sociological survey was used, as well as work with Google Trends to analyze the popularity of search queries on environmental issues in Almaty. In order to obtain conclusions, sociological surveys were conducted using the method of analysis based on ideas from M. Alberti (2008), and K. Parris (2016) was used to process the data obtained as a result of opinion polls.

Status of the Sustainable Development Goals of the Republic of Kazakhstan

The concept of the transition of the Republic of Kazakhstan to sustainable development for 2007-2024 is one of the most discussed topics. The functioning of specialized funds is recognized as one of the main economic instruments of environmental protection for financing projects aimed at preserving biodiversity and sustainable environmental management in Kazakhstan. There are more than a hundred environmental non-governmental organizations in Kazakhstan. To attract

the general public, such centers as the “National Environmental Action Plan for Sustainable Development”, the “National Environmental Center for Sustainable Development”, and the “Interstate Fund for Saving the Aral Sea (MFA)” were created, which includes the main divisions as the “Interstate Coordination Commission for Water Resources Management, a Regional environmental project was also created. The Center for Central Asia and the Center for Sustainable Development. The Aarhus Center, NGOs, the Coordination Center, the Fund for Sustainable Development in Kazyna (Samruk-Kazyna), and others play important roles in fulfilling international obligations related to sustainable development. Within the framework of the Caspian Environmental Program, regional monitoring centers, biodiversity, and desertification were established [6].

The large-scale environmental initiative “Green Bridge” was proposed by the first President of the Republic of Kazakhstan Nursultan Nazarbayev at the 66th session of the UN General Assembly in September 2011. The Green Bridge initiative is formulated as follows: “Fair and safe to improve the quality of life for everyone, within the ecological boundaries of the planet”. The goal of the Green Bridge partnership is to create a practical interregional mechanism to support businesses developing in the direction of sustainable development, in other words, the transition to “green rails” using investments in the latest production technologies. In 2002, the Concept of Development of Environmental Education of the Republic of Kazakhstan was adopted. According to this concept, the country’s education system should develop and strengthen a program strategy for the introduction of environmental subjects for the formation of environmental consciousness [7].

The topic of ecology was further developed in the Law “On National Security of the Republic of Kazakhstan”, which came into force in 2012. 25, Article 181 specifies the following objectives: formation and development of an active life position of citizens and ecological culture in society based on the principle of sustainable development. The main problem in the Republic of Kazakhstan is the shortage of water resources. Quarterly reports on water quality were collected by Kazhydromet and evaluated for data quality and continuity. The reports include quarterly average measurements taken at some of Kazakhstan’s main water bodies in permanent locations. There are data from other sites, but they are not shown here because the continuity of the data was unsatisfactory [8].

Climate presents data indicating that climate change is likely to have a significant impact on Kazakhstan in the coming decades. For example, warming and decreasing precipitation in the arid western regions of Kazakhstan are likely to increase the current burden on human health and the availability of food and water. In addition, glaciers play an important role in the hydrological cycle of Central Asia, and an increase in temperature due to climate change, of course, can lead to the retreat or disappearance of glaciers, and there is evidence of such a decrease in Kazakhstan. The impact on water resources in this region can be dramatic, in fact, similar pressure

has occurred in the recent past. If there is a long period of net mass loss, glacial runoff will initially increase until the glacier reaches its maximum runoff velocity, and after reaching the runoff will decrease as the glacier volume decreases [9].

In Kazakhstan, the Aral Sea depends on the flow of two glacial rivers, the Syr Darya and the Amu Darya, which originate in the Pamir and Tien Shan mountains. The Pamir Mountains are located south of Kazakhstan, mainly in Tajikistan, and the Tien Shan Mountains are located on the border with Kyrgyzstan and northern China. Kaser et al. (2010) found that the melting of glaciers feeding the Aral Sea basin, which leads to a lower seasonal dependence on glacier melting, will lead to an even greater decrease in seawater levels [10].

The consumption of fresh water for industrial processes is the highest in Almaty (19.5% of the total consumption in the country) compared to other regions where fresh water is used for irrigation and agricultural water supply. Excessive lead content in some samples may indicate the possible development of kidney disease since lead negatively affects the work of the excretory system. Our data on the excess lead content in the air, water, and soil are consistent with the results of other authors who found the highest concentrations of heavy metals in the soil of the intersection, airports, and military depots.

Megacities are the most susceptible to environmental problems. Solving environmental problems in cities such as Almaty, Astana, Ust-Kamenogorsk, Temirtau, Atyrau, etc. is the preservation, first of all, of the vital activity of the urban environment and man.

Media Discourse Analysis Results

In Kazakhstan, mass media stories related to the ecology of cities are increasingly appearing. However, there are nuances and difficulties in the communication of urban ecology problems. One of the reasons for the complexity of communication of urban ecology problems is that the picture that scientists predict and the consequences associated with it do not always fit into the subjective framework of understanding urban ecology issues. For example, global warming can be questioned by ordinary people due to the fact that in a certain city, there is a sharp drop in temperatures. In this connection, people are wondering what kind of global warming is if it's cold in our country. Scientists often make predictions related to the future of our planet. In the press, they are reflected in articles about the terrible pictures of our future and calls for immediate action. Because if we don't do anything now, by 2050 it will be too late, and the apocalypse will come. However, such stories in the press are also not always positively perceived by the public. Readers get tired of this kind of alarmism. Does the question arise of how to build a communication system to transform public consciousness? After all, it is the public consciousness that should serve as a driver of political and economic changes.

In connection with the above, there is a need to build a general concept of building communication of urban ecology in Kazakhstan. This in turn justifies the need to analyze existing models of communication and discourse of urban ecology in the Kazakhstan mass media.

In the course of work on the analysis of the discourse of urban ecology and communication models, the leading Kazakhstan media were analyzed. In particular, communication mechanisms are analyzed, how they work, how they don't work, and why one should talk about certain problems in one way or another. Based on the analysis of the press had been found out six important topics in the discourse on urban ecology.

- Subjective-negative communication model and its inherent subjects
- Subjective alarmist
- Subjective-constructive communication model and its inherent themes
- A model of subjective communication based on political and economic problems
- A model of subjective communication based on questions – “What to do?” and “Whose fault is it?”
- The model of objective communication and its inherent subjects

An analysis of the media resources of Kazakhstan shows that the subjective-negative topic of discourse is one of the most pronounced topics, accounting for 35.2 percent.

The topic of the discourse “Subjective alarmists” is one of the most common topics of discourse in the Kazakhstan media and accounts for 26.3 percent of the total number of stories. The topic of subjective and constructive discourse is well covered by 20.2%.

The subjective topic of discourse, covering political and economic topics, is represented by 9.8 percent. Although the environmental issue is the basis of the official development policy of Kazakhstan, these topics of discourse do not attract much attention.

The model of objective communication based on personal stories is 7.8 percent. Analysis of the range of the subjective communication model based on the questions – “What to do?” and “Whose fault is it?” shows that this topic is the least affected topic of discussion. It accounts for only 4.7 percent of articles in the Kazakhstan press. Consequently, the most popular topics in the Kazakhstan media include: subjectively negative, subjectively constructive, and alarmist, stories raising the question – “Whose fault?” and stories based on an economic approach to discussing urban problems ecology.

Analyzing the Kazakhstan media, we can distinguish two trends that we are observing now and that we will observe in the near future. First of all, this is a description of the consequences of climate change. These changes are very difficult to predict, and they are happening more and more often. If there are floods and hurricanes in one city, then there may be drought and fires in another. Of course, the manifestations of climate

change are associated with geographical factors, and the preparedness of the authorities and the population to solve environmental problems, but these facts do not remove the question of the comfort and safety of living in modern cities. And the second trend concerns everyday life. For example, faulty storm sewer systems that do not withstand pressure during heavy rainfall and stop working, which leads to flooding of pedestrian crossings, sidewalks, and so on. During the heat, the townspeople also experience inconveniences. Vast highways of megacities are heated and the city turns into an oven, which affects the growth of cardiovascular diseases and exacerbations of other chronic diseases. Of which two main paradigms were identified.

In the next section of the paper, the features of communication associated with each of the narratives outlined above will be outlined. An objective model of communication and its inherent themes. These topics consist of narratives that can be called objective and scientific. In other words, these are stories in the media that narrate and appeal to scientific facts, narratives in which there is no place for the subjective – human. These narratives are the basis of scientific and government reports, including reports on the work of intergovernmental groups and experts on climate change. Such reports are regularly published in the Kazakhstan media and on the basis of these reports, a further agenda of actions taken at the global and regional levels are formed.

That is, there is the language of science, the language of dry facts, graphs, statistics, and historical facts. Graphs and figures are perceived by the public if they are colorfully visualized and presented in a language accessible to the general public. However, such communication still has its limitations, and first of all, they are connected with the fact that a person or a story related to a person is mostly absent in this type of communication.

The narrative covering stories related to the scientific view of climate change problems is characterized by the scale and absence of a person or a subjective position in the stories, perhaps due to the fact that some processes are so large-scale that it is difficult to understand and feel them. For example, even by and large we cannot imagine how big the “garbage island” in the Pacific Ocean or the landfills of megacities is. Even if we come and look at the landfill, we still won’t get our eyes around it.

Subjective-Negative Communication Model

Another model of communication with its inherent narratives was identified. The second model contains stories of specific people. Such stories are very often used as arguments in climate communication. These stories are subjective and talk about climate change through problems related to specific people. Such stories help to understand the possible consequences of climate change. This type of communication is very common in Kazakhstan. For example, there are many stories in which citizens suffer from air pollution or the quality of drinking water. This method of communication in the center poses specific problems faced by the population

of large cities. This model is communication-based on a subjective purely human understanding of the problem. The plots of this communication model talk about what is happening here and now, how bad it is already now, and how bad it is for a particular city or a person who breathes polluted air every day.

There are too many stories with a negative narrative, and they are no longer perceived as something important that requires everyone's attention and intervention. The media of Kazakhstan very often cover stories in which the audience begins to see just suffering people. Stories of endlessly suffering citizens from floods, sudden cold snaps, or abnormal heat are broadcast on news channels, and they are written about in newspapers and magazines. In other words, in these stories, environmental issues and the need to change the situation fade into the background. In response to this negative news, viewers sometimes have a backlash, which they share in the comments under the articles. For example, that they are not so bad, or they are far away and it does not concern them, there are opinions that global warming is even for the best since it will get warmer in the cold regions of the country.

Subjective Alarmist Model of Communications and its Inherent Themes

Another variant of the ecological narrative is based on the idea that it is already bad now, but it will be even worse later, it is also called an alarmist. Basically, the picture described by such plots is large-scale and pessimistic. In this version of communications, there is a description of the pictures of the future of the planet. For example, in 100 years, what the earth will look like, how all the island states will disappear, and what will become of people in coastal cities? This type of communication is similar to the subjective-negative model of communication by the number of negative stories and differs mainly in the scale of these stories. Just as in cases with a subjective-negative model of communication, people get tired of constant negativity and stop taking the problem seriously. This kind of subjective alarmist model of communications and its inherent themes, we often observe in Almaty, hearing scientists' predictions about future changes that will affect life in megalopolises in the near future.

Subjective-Constructive Model of Communication and its Inherent Themes

Based on the peculiarities of the human psyche, the audience gets tired of constantly negative news, and interest in the topic of environmental problems weakens, trying to abstract, and close themselves off from problems, thereby not taking all the consequences seriously. In this regard, a third variant of the climate narrative and climate communication is being formed, which is associated with so-called decision journalism or constructive journalism. This variant of the climate narrative is that instead of telling stories of how people endlessly suffer, stories of positive experiences are told. For example, stories about how someone did something and changed the situation for the better. Often the media of Kazakhstan, sanctify the solution of

problematic situations or scientific inventions that help to improve the situation, thereby focusing the attention of citizens on the problem from its positive side.

The essence of the model is that all people are exposed to the harmful effects of climate change, which have a global scale, but the stories of this model of communication are connected with the solution to a local problem. For example, the existing problems in such a large city as Almaty, namely insufficient purification of drinking water, or too many cars on the streets of the city, which increases the level of air pollution, illegal felling of trees, or the construction of park areas. That is, the story begins with an explanation of the problem and its consequences in a specific place at a specific time. Against this negative background, a hero or a group of people appears who are doing something to solve this problem, proposing or implementing a specific project. These heroes come up with some kind of solution. It can be activists; it can be social entrepreneurs or a local initiative group that comes up with some kind of solution to the problem. In other words, people who are making efforts to solve the problem at the local level. In this kind of story, the initiative is promoted and a way to solve problems is proposed.

The main feature of this kind of story is that, to the description of the problem and the suffering of people, a solution to this problem or a way to solve this problem is added. For example, environmental actions of various kinds are held in Almaty, such as the cleaning of urban areas from garbage by an initiative group with the support of government agencies. Various actions are being held in Almaty to clean up territories, as well as tree planting actions, one such eco-actions is “Planting the forest together”, 500 trees were planted in the Aksai gorge. And it is the solution to the problem, even a small one, that becomes the central idea of the plot. The focus of this communication model is always a specific hero or a group of heroes who did something and it turned out, and this is the essence of the approach of decision journalism or constructive journalism. And there are more and more such stories.

On the one hand, there are stories in the Kazakhstan media based on dry scientific facts. For example, discussing the nature of global warming, which began 30,000 years ago, and which continues to this day and will continue for tens of 1000 years. On the other hand, in parallel, there are topics of discourse directly related to a person related to the separation of garbage, saving water and electricity at the household level, and the like.

In connection with the division of discourse into two paradigms, a certain paradox arises based on the contradictions between the discourse about global processes and local stories related to human existence, which, referring to Rosemary Randall, can be designated as parallel narratives. And they were also discussed above, at the beginning of the chapter, when comparing scientific ecological consciousness and public ecological consciousness.

Public ecological consciousness raises subjects related to subjective issues. For example, whether a citizen should throw a plastic cup into a plastic basket is not cor-

related with strictly scientific subjects. These two discourses exist in their own paradigm, subjective and objective. Man is part of nature and part of the global process of the sixth extinction of species. By virtue of this, the problem of choice is removed since humanity does not choose between this process and some other, man himself is part of this process. These two discourses are parallel narratives that do not fit together at all.

On the one hand, there is a narrative about large geological processes, and on the other hand, there is a narrative about the fact that people should reduce CO₂ emissions by 2030, people should share garbage, they should educate our compatriots about possible ways to introduce an environmentally oriented consciousness. There is a gap between these standards to such an extent that in fact, when it comes to discussing global warming from the point of view of guilt and responsibility, everyone always talks about it from a subjective position.

From the above, a question arises related to another storyline related to the concept of guilt. Some people wonder why a person should be ashamed that he threw away plastic cups being part of this inexorable and grandiose natural process. In connection with the above, it is possible to distinguish various discursive coalitions that support the idea that climate change on the planet is a very big problem, against which human efforts are simply lost. There are discursive coalitions supporting the idea that there are processes on a geological scale and nothing can be done about it. Within the framework of this discourse, global warming is fiction. An optimistic view of global warming is also being developed - it's good that there is global warming, and it's nothing that people caused it, there's nothing terrible about climate change, it's just getting warmer in the north.

On the other hand, one should pay attention to the arguments about anthropogenic factors of climate change. All these narratives somehow imply human involvement, and subjectivity, which can be explained by the specifics of human consciousness. The objective narrative is arranged in such a way that there is no person in it, that is, it is some kind of mechanism of change that is arranged by itself.

The subjective narrative is something that can affect us, we are talking about facts that make us think, and the question arises about our involvement in these events. For example, whether we are to blame for this or not we are not to blame for this. However, why it is impossible to speak simply in the language of science or cause and effect, in other words, why the question is posed precisely as a question of guilt and responsibility or its absence?

From the above, it follows that there is a need for systematic ignorance of the causes since this ignorance of the causes makes freedom of choice possible. Due to the fact that we do not admit this to ourselves, we think of ourselves as free. However, simultaneously with the emergence of free will and the presentation of oneself as a free subject, responsibility, and some anxiety appear. For example, this anxiety acts as a sense of guilt, before involvement in global warming. There are stories claiming the guilt of each of us for the ongoing climate change, and we are

making efforts to change this situation. There are stories claiming that the state and transnational corporations are responsible for all environmental problems. In this way, we try to avoid anxiety, but it always returns in some way.

In order to understand this, we need to understand the mechanisms of consciousness, so that we find ourselves inside the story about global warming, it must appear somehow differently, namely, it must appear in the light of the free will of choice. Free will is what we have to think, think ourselves, what is called a Cartesian subject or what is called self—consciousness. Studying the question directly in the city of Almaty in an anonymous online test survey conducted by me, the description and results of which I have given below, in the city of Almaty, one of the ten questions was: “Do you take part in environmental actions?”, and in Almaty, almost the majority answered that they are taking part or are ready to take part. This suggests that the people of megacities, feeling the environmental problems themselves, are ready to become participants in urban environmental improvements in possible ways. Who but the residents themselves know about the problems of their city? This question is very important for me, to find out how much residents are willing to take part in the ecology of the city and prove their decision in practice. But my survey also showed little awareness about the beginning or about the organization of urban environmental actions. That is, what I wrote earlier in my work says that the coverage of environmental problems is actively discussed in the media, and various non-governmental and governmental organizations, but these messages already talk about the results: urban environmental actions, various solved problems or, for example, global environmental problems. One of the possible answers to the question “Do you take part in environmental actions?” was “No, but if invited, I will take part”, in Almaty 10% answered in this way. This indicates the willingness of people, the realization that they can improve the environmental situation as much as possible, but perhaps there is little awareness of the population.

It should be noted that in the discourse of ecology of the cities of both states, the question is increasingly raised that there is a need to adapt the urban environment to climate change in order to make it safe for living. This process of adaptation to the urban environment becomes one of the main drivers of urban planning. It is important to note here the ideas of the famous Danish architect Jan Gale for the city of Almaty, as well as the development strategy of the “Smart Almaty” 2020 – 2050.

The paper considers the question of how the perception of the discourse of urban development can be considered from the point of view of the peculiarities of the formation of environmental consciousness in the media. After all, the media is the connection of the people with the state and various governmental and non-governmental organizations. One of the most discussed issues in the media of Kazakhstan is the issue of risks associated with the urban environment. In particular, how dirty are the air and water of our cities, and how unnatural are the products of consumption? The world’s problems related to climate change on the planet, the disappearance

of the diversity of fauna and flora, and the reduction of ecosystems are also widely discussed. The concept of the sixth extinction of animals is also discussed. Issues related to the ecology of the urban environment are discussed at different levels in different contexts, for example, political, and economic contexts. And it is obvious that the discussion of the same issues at different levels causes a variety of reactions. The analysis of Kazakhstan mass media revealed six thematic groups: “Whose fault?” economic, objective, subjectively negative, subjectively constructive, and alarmist.

There is a need to develop a conscious attitude to the issues of planning the urban environment and changing the approach to the perception of what nature is and the relationship between man and nature. The rejection of the usual understanding of nature as something located behind the aisles of the city and the development of awareness that the city and people are part of nature.

There is a need to move from our individual needs, how I want to feel good, light, warm, not hot so that there were goods quickly delivered to me and cheap around me, to awareness of the importance of the public good, which implies the transformation of public consciousness.

Conclusion

The constant population growth in cities requires a constant expansion of the production of goods, which inevitably leads to the consumption of depleted natural resources. It is necessary to consider a number of factors for maintaining a balance in the relationship between man and nature, in particular the ecology of cities. One of these factors is sustainable development. The greening of urban spaces takes place in three models: national, regional, and global, each of which corresponds to national and global priorities presented in national environmental development strategies and the Concept of Sustainable Development.

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Постқалыпты кезеңдегі экологиялық сананы қалыптастыру мәселесі: дискурстық талдау тәжірибесі

Аңдатпа. Адам жайлылықты жақсы көреді. Өзінің өмір сүру тарихында ол өзінің жайлылығы үшін қоршаған ортаны өзгертеді. Нәтижесінде біз антропоцен дәуірінде өмір сүріп жатырмыз, онда *Homo sapiens* планетаның геологиялық процестеріне әсер етеді. Экологиялық тепе-теңдікті сақтау адамзат баласының өмір сүруі үшін өте маңызды. Қалалық ортаны дұрыс ұйымдастырудың бір жолы – белгілі бір жердің нақты жағдайларына назар аударатырып, жұртшылықтың бұл мәселені қалай жеткізетінін талдау. Электрондық социологиялық сауалнаманың әдістемесі қолданылды, сонымен қатар Алматыдағы экологиялық мәселелер бойынша іздеу сұрауларының танымалдылығын талдау үшін Google Trends-пен жұмыс жүргізілді. Бұл мақалада пәнаралық зерттеу негізінде Алматыдағы қала экологиясы туралы БАҚ дискурсының қалыптасуы мен дамуы талданған. Мақалада экологиялық дискурс медиа-контенттің негізгі векторын ғана емес, сонымен бірге экологиялық сананы да қалыптастырады, өйткені экология мәдениеті мен экологиялық ойлауды дамытпай қалаларды жасылдандыру мүмкін емес деген қорытындыға келеді.

Түйін сөздер: экология, саясат, постқалыпты уақыт, антропоцен, капиталоцен, негізгі құндылықтар

Шакенов Д.П.

К проблеме формирования экологического сознания в постнормальные времена: опыт дискурс анализа

Аннотация. Человек любит комфорт. На протяжении всей истории своего существования он преобразовывает окружающую среду для своего комфорта. В результате мы живем в эпоху антропоцена, когда *Homo sapiens* влияет на геологические процессы планеты. Поддержание экологического баланса жизненно важно для выживания человечества. Одним из способов организации сбалансированной городской среды является анализ того, как общественность коммуницирует эту проблему, обращая внимание на конкретные обстоятельства конкретного места. Для анализа популярности поисковых запросов по экологической тематике в Алматы была использована методика электронного социологического опроса, а также работа с Google Trends. В данной статье на основе междисциплинарного исследования проанализировано формирование и развитие дискурса СМИ по вопросам экологизации городов в Алматы. В статье делается вывод, что экологический дискурс формирует не только основной вектор медиаконтента, но и экологическое сознание, поскольку озеленение городов невозможно без развития экологической культуры и экологического мышления.

Ключевые слова: экология, политика, постнормальные времена, антропоцен, капиталоцен, основные ценности.