Social Construction of Nuclear Risks: Analysis of Institutional Communicative Discourses on Astravets Nuclear Power Plant

VIDAS VILČINSKAS

Kaunas University of Technology, K. Donelaičio St. 73, 44249 Kaunas, Lithuania Email: vidas.vilcinskas@ktu.edu

> The paper is located within scholarly fields of risk sociology and nuclear risk communication. It employs the Belarusian Astravets Nuclear Power Plant (BelNPP) case to show how political entities discursively construct the understanding of nuclear risks. The BelNPP is an important case in a broader European region, and especially – for Belarus and Lithuania, due to its debated safety and impacts. The analysis of political institutional communicative discourses, as taking place in the national governments and parliaments in Belarus and Lithuania, was performed as part of the master thesis research. The empirical basis consisted of 132 texts, published during 2012–2017 and defined as official institutional press releases. The theoretical explanatory model included theories of discursive institutionalism, agenda-setting and issue-framing. The results show that the discourse is dominated by the 'safety' topic. The Belarusian discourse more frequently communicates BelNPP in a detailed technical manner and dominant frames attenuate the associated risks. The Lithuanian discourse focuses on political aspects and uses issue frames that amplify the socially constructed risk.

> Keywords: discourse analysis, Astravets Nuclear Power Plant, Nvivo, content analysis, nuclear risk communication

INTRODUCTION

Nuclear energy and nuclear power plants are seen as risk factors that are dangerous and can cause disasters at a regional level (Ulrich 2015). Public discourses would sometimes present nuclear risks as inevitable (Perrow 2011). Academic literature also discusses the benefits (not just the risks) of nuclear energy developments (Wilkerson 2016). However, framing nuclear energy as a 'risk' has implications on decision making. For example, the Ignalina Nuclear Power Plant, that had a similar design to the Chernobyl Nuclear Power Plant, has been closed due to the pressure from the EU, despite the strong public opposition (WNA 2017). After the Fukushima Nuclear Power Plant disaster in 2011 nuclear safety of power plants came into more intense debates. Germany reviewed its energy policy and closed eight of its nuclear reactors in 2012 (WNA 2017). France, on the contrary, stays strongly dependent on nuclear energy.

The official governmental-parliamentary perspective is very important in shaping these types of nuclear regimes. In the Lithuania's public discourse, nuclear safety is important for a long time already, but gained a new momentum due to the Belarusian Astravets Nuclear Power Plant (BelNPP) being built near the Lithuanian border. Although Lithuania had plans to build its own new nuclear power plant, it had to resign from the project because it was voted against in the national referendum. The Astravets Nuclear Power Plant is similarly seen in the Lithuanian public discourse as causing nuclear safety issues. Belarus denies claims on safety related issues. A comparative analysis of political actors' communications that represents the Parliaments and Governments of Belarus and Lithuania will be performed in order to examine the political institutional discourse on a national level.

Research on nuclear risks and nuclear risk communication is ample, yet the case of BelNPP is under-researched. There is also a lack of cross-country comparative research. Pilibaitytė (2011) has performed the public media discourse analysis on nuclear energy in Belarus and Lithuania, published in 2006–2009 (prior to when the BelNPP case came into focus). Juozaitis (2016) dealt with the Lithuanian foreign policy with regards to BelNPP, and Česnakas and Juozaitis (2017) explored the political background of the BelNPP project.

This paper is based on master's theses defended by V. Vilčinskas (2018). The problem addressed in this paper is as follows: What is the content of institutional political communicative discourses as produced by Belarus' and Lithuania's Parliaments and Governments about the Astravets Nuclear Power Plant related issues? Thus the object of this study is political communicative discourses on the Astravets Nuclear Power Plant. The article aims at describing and explaining in a comparative manner the content of the Belarusian and Lithuanian institutional discourses on BelNPP. The tasks are as follows: to develop a theoretical framework enabling the description and explanation of possible differences in the two countries; to analyse the discourse on BelNPP in Belarus and Lithuania; to examine the differences of the discourse content.

The empirical research included the content analysis of communication messages as produced by Belarus' and Lithuania's political actors of the Parliament and the Government. The BelNPP project gained its momentum in 2012, thus texts were sampled out using criterion sampling. In vivo software was used for the qualitative data project management and analysis. Data analysis methods included word frequency analysis, cluster analysis, coding intensity (hierarchy charts), measuring relations between variables or measuring coding differences between texts (matrix coding).

CONCEPTUALISING INSTITUTIONAL DISCOURSES

Foucault (1998) defined discourse as a certain system of ideas and co-produced knowledge, embodied in spoken or written texts through a specific vocabulary. According to A. Telešienė (2005: 1), social sciences extend discourse definition by focusing on discourse as a social interaction. Many studies on political discourse use texts and talks of professional politicians or political institutions, e.g. presidents, prime ministers, other members of government, parliament or political parties as their empirical material. Political discourse is 'concerned with formal/ informal political contexts and political actors with, that is, inter alia, politicians, political institutions, governments, political media, and political supporters operating in political environments to achieve political goals' (Wilson 2003: 1).

The term to 'achieve political goals' is important in this research as it describes 'political potential of language' (Wilson 2003: 1). And 'one of the core goals of political discourse analysis is to seek out the ways in which language choice is manipulated for specific political effect' (Wilson 2003). Chilton (2008: 226) defines political discourse as 'the use of language to do the business of politics and includes persuasive rhetoric, the use of implied meanings, the use of euphemisms, the exclusion of references to undesirable reality, the use of language to arouse political emotions and the like'. It means that political discourse is not constructed neutrally as a typical communication. But rather it is 'compared with the discourse of advertising which is designed to lead its audience in the direction of particular thoughts, beliefs, and ultimately actions' (Gloria 2015: 28). In this paper, thus political discourse analysis will focus on the use of language.

Official communicative messages as produced by members of the Belarusian and Lithuanian Parliaments and Governments represent a specific type of political discourse. That falls under the clasification of political institutional communictive dicourse. The theory of discursive institutionalism (DI) helps to explain the institutional context of political discourse. It is also called the fourth 'new institutionalism', together with historical, sociological and rational choice institutionalism (Schmidt 2008). This perspective tends to concentrate on ideas and discourse, particularly in the institutional context. The approach classified discourses into coordinative and communicative. DI focuses on ideas and discourse (Sigurdardottir 2015). Also 'on the interactive processes that serve to generate those ideas and communicate them to the public' (Schmidt 2008). 'The "institutionalism" in the term, moreover, highlights the fact that this is not only about the communication of ideas or "text" but also about the institutional context in which and through which ideas are communicated via discourse' (Schmidt 2008). The ideas fall within two types of content: cognitive, i.e. 'what is and what to do'; and normative, i.e. 'what is good or bad about what is' in light of 'what one ought to do' (Sigurdardottir 2015). An important distinction has to be made between 'coordinative' and 'communicative' political discourses. 'The "coordinative" discourse among policy actors engaged in creating, arguing, bargaining, and reaching agreement on public policies in the policy sphere and the "communicative" discourse between political actors and the public engaged in presenting, contesting, deliberating, and legitimating such policies in the political sphere' (Schmidt 2008). This paper addresses the 'communicative' discourses as it is concerned with how political positions are intentionally communicated to the public. The 'communicative discourse' consists of texts communicated by political leaders to the public (Borras, Seabrooke 2015: 157).

The distinction between simple and compound polities is also relevant for this paper. Simple polities have a stronger communicative discourse because there is a limited need to compromise with others, and compound polities, on the contrary, would have a stronger coordinative discourse, 'because political actors need to coordinate and compromise with one another' (Gorp 2015: 19). Belarusian polities could be categorized as close to what is called 'simple polity' and has a characteristic of a stronger communicative discourse. Governance in Belarus tends to be concentrated. Open discussions on important matters are less likely to happen, although the Government has to justify its action in order not to lose legitimacy. In the case of the Astravets Nuclear Power Plant, the Belarus Government is more likely to implement a controversial project due to its authority, but justification is necessary, which can be achieved by paying a significant attention to a communicative discourse. Lithuania could be categorized as close to what is called 'compound polity', with a strong coordinative discourse. Governance is distributed among different bodies, that all have to communicate and cooperate with each other. Controversial and significant projects are less likely, for example, the Visaginas Nuclear Power Plant that faced controversy and is not eventually being implemented.

The agenda setting theory adds an additional powerful explanatory power for the explanation of the communicative political discourse on BelNPP. According to McCombs and Reynolds (2002), the agenda setting theory describes 'ability of the news media to influence the salience of topics on the public agenda'. There are two main points that underlie most research on agenda-setting: the press and the media do not reflect reality – they filter and shape it; media concentration on a few issues and subjects leads the public to perceive those issues as more important than other issues (UT 2017).

Rogers and Dearing (1988) distinguish three main types of agenda setting. They are public agenda setting, media agenda setting and policy agenda setting. Albalawi (2015) and Dekker (2013) have further argued about the importance of social media and have introduced it to the agenda setting model. Policy agenda setting typically deals with how media and public agendas might influence the decisions of elite policy makers. But this paper is based on the analysis of the content of policy agenda. This is important because the policy agenda has a 'backward' impact on public and media agendas.

It is also important to mention the issue framing theory. The framing approach is related to the agenda setting theory but extends it by concentrating not on a single issue, but on the nature of closely related issues instead. Framing is 'a process by which people develop a particular conceptualization of an issue or reorient their thinking about an issue' (Chong, Druckman 2007). A framing effect occurs when, in describing an issue or event, a speaker's emphasis on a subset of potentially relevant considerations causes individuals to focus on these considerations when forming their opinions (Druckman 2001). Issues related to the Astravets Nuclear Power Plant are also framed by political actors in the desired direction. Framed approaches towards BelNPP may be different in Belarus and Lithuania, and this is captured in the content of communication. Further in the article discourses are perceived as institutional political communicate it to the public, and are usually presenting issues in intentionally framed ways.

RESEARCH DESIGN

Discourse analysis is the main methodological strategy. The methodology of content analysis is also adapted for the purposes of this research. The content of the discourse includes various statements on the object of focus (Jančevskaitė, Telešienė 2013). The content is described through themes that are developed in texts. Themes define what the discourse is about, they organize the discourse and provide with the most important information about the discourse. The discourse context is understood as social, political, cultural and historical structures where the discourse is happening. Also the context in discourse analysis is understood as a direct situation of the discourse process, where the situation of the discourse is commonly being described, discourse actors are named, as well as their relations (RINOVA 2009).

The main sources of information are communicative political discourse texts as produced by the Belarusian and Lithuanian Parliaments and Governments. Those texts are treated as institutional products and do not represent directly or solely the views of separate political actors, but rather represent an institutional approach towards the topic. The texts are produced mostly as news or press releases, thus are filtered, edited and directed towards general public audiences. Thus the research results will speak of the discursively controlled and consciously constructed institutional positions on the Astravets Nuclear Power Plant related issues.

In the Lithuania's case, official news and press releases from the Parliament and Government websites (lrs.lt and lrv.lt) are analysed. In the Belarus case, news and press releases from the official governmental Belarus website has been chosen (belarus.by). The texts were sampled from the period of 2012–2017. 2012 marks the rise of the discourse. The end date of the sampling period is 04/11/2017 as this marks the start of data gathering.

In the second stage of purposive criterion sampling, the relevant texts were sampled out of the totality of news and press releases found in the lrs.lt, lrv.lt and Belarus.by for the period 2012–2017. The search phrases were the following: 'Ostrovets Nuclear Power Plant', 'Ostrovets' and 'Astravets'. Only texts published on behalf of a member of Parliament or Government were sampled. The last and most important criterion is if the text is essentially about the Astravets Nuclear Power Plant. A total of 65 news and press releases were selected from Belarus communications. For sampling of Lithuanian texts out of totality of texts in lrv.lt and lrs.lt websites, an equivalent phrase (as for the search of Belarus news) was used, which is 'Astravo atominë elektrinë. The keyword Astrav* has also been used for the search. Additionally, to make the Lithuanian political discourse comparable to that of Belarus, the websites of ministries have been examined: am.lt, enmin.lrv.lt and urm.lt. A total of 67 press releases and news have been sampled from the Lithuanian discourse.

The sampled texts were coded using an open coding technique and followed the principles of abduction (deductive and inductive coding combined). The codes cover the topics of discourse actors, main discourse themes, timeline, etc. The Nvivo11 software for qualitative and mixed research methods has been used. The main data analysis methods included the qualitative content analysis and quantitative content analysis: word frequency, cluster analysis, coding intensity (hierarchy charts), measuring relations between variables or measuring coding differences between texts (matrix coding).

INSTITUTIONAL COMMUNICATIVE DISCOURSES ON ASTRAVETS NUCLEAR POWER PLANT: EMPIRICAL FINDINGS

The main topics of the political communicative discourses on BelNPP were analysed first. The first research question was as follows: *What are the main topics under which the Astravets Nuclear Power Plant is discussed in Belarusian and Lithuanian political discourses*? (Fig. 1, source: Vilčinskas 2018: 39).





The main topics in the Belarusian political discourse are 'Safety' (N = 70), 'Technical aspects' (N = 60) and 'Information provision' (N = 51). In the Lithuanian political discourses the main topics are 'Safety' (N = 134), 'Politics' (N = 71), 'Environment' (N = 59). The 'Safety' topic is among the most pronounced topics in both of the discourses. Secondly, the topic on 'Technical aspects' is very much pronounced in the Belarus case, although this topic is less manifest in the Lithuanian discourse, where the topic 'Politics' is more pronounced. This proves that political bodies in both countries use different frames and put different focuses within their agendas. Belarus representatives rather talk of BelNPP as a technical project, focusing on soundness and technical precision (as well as safety). Lithuanian representatives speak of impacts and threats posed by BelNPP and usually bring forth the arguments about accidents (several of those have occurred during the construction process). The Lithuanian representatives use the frames of energy independence and threat from Russia. It can be stated that BelNPP is both an issue of technical nature and an issue of political nature, depending on the issue framing put forward by different discourse actors.

The further research question is as follows: *Which topics in political discourses are communicated similarly, and which differently*? The results of the cluster analysis – a technique that allows to display patterns in order to discover how similar words are used within and between the categories – are presented in Fig. 2 (source: Vilčinskas 2018: 41).

In the Belarusian communicative political discourse (Fig. 3) the topics 'Environment' and 'Safety' fall within the same cluster, because they use a similar wording. Other topics are not constructed using significantly similar words. In the Lithuania's communicative political discourse, the topics 'Safety' and 'Politics' fall within the same cluster, and the topics 'Environment' and 'Information provision' form another cluster. Other codes have no significant similarities of words. The cluster analysis adds an additional argument to the use of different frames. In the Belarusian discourse the vocabulary used to present 'technical aspects' is quite close to the 'safety' and 'environment' wording. And the wording used for utterances on political matters (code 'political') is rather distant.



Fig. 2. Cluster analysis of the main topics within the Lithuanian and Belarusian discourses (categories grouped by similarities of words; Sørensen coefficient applied)





The main discourse actors were analysed further using the 'Matrix coding' technique (allows different code families or sources to be compared). The research question is as follows: *What discourse actors are present (mentioned, referred or otherwise) in the Belarusian and Lithuanian political discourses*? The data is provided in Table 1 (source: Vilčinskas 2018: 43).

The discourse actors most often mentioned in the Belarusian political discourse (Table 1) are: 'International organizations and conventions' (N = 88), 'Lithuania' (N = 64) and 'Russia' (N = 30). In the Lithuanian discourse these are: 'Belarus' (N = 169), 'International organizations and conventions' (N = 95), 'Government' (N = 88) and 'European Union' (N = 69).

The discourse actors 'International organizations and conventions' included IAEA, Espoo Convention, WANO, United Nations (Nuclear Safety Convention) and Aarhus Convention.

Discourse actors	A: Belarusian texts	B: Lithuanian texts
1. Belarus	_	169
2. Contractors	15	4
3. European Union	16	69
4. Government	19	88
5. International organizations and conventions	88	95
6. Japan	5	0
7. Latvia	2	5
8. Lithuania	64	_
9. Other countries	16	23
10. Parliament	0	47
11. Russia	30	24

Table 1. Discourse actors; n of coded references (total references in Belarusian texts N = 255, total references in Lithuanian texts N = 524; Belarusian texts coded N = 65, Lithuanian texts coded N = 67)

To deepen the analysis on the discourse actors, the Matrix coding has been performed including the code families of 'Discourse actors' and 'Stakeholder relations'. The question is as follows: *What type of stakeholder relations are mentioned when discourse actors are mentioned*? (Table 2, source: Vilčinskas 2018: 46).

If we look at the data for 'conflicting relations', as taken from the Belarusian discourse, we can see that only Lithuania has been mentioned under this type of relationship. This might be because of the Lithuania's negative approach towards BelNPP, which is known to the Belarusian actors. A cooperative relation is seen especially common with the international organizations and conventions, Lithuania and Russia. The international organizations and conventions are often mentioned in cooperative relations as cooperation with them in the nuclear security field is a very important topic in the Belarusian discourse. Of course, one has to notice that Lithuania is even more often mentioned in the discourse in the context of cooperative relations. In general, the Belarusian political communicative discourse is not directed towards negative aspects of BelNPP, for few exceptions when discussing Lithuanian safety claims. In the Belarusian discourse, Russia is seen as having a cooperative relation – probably because of its involvement in the project. Lithuania is a dominant subject in the political discourse by being frequently mentioned in informing relations. This shows how Lithuania is distinct from other discourse actors by being involved in various aspects of the project. The international organizations are distinct as having a strongly cooperative relation.

If one would look at the Lithuanian political discourse (Table 3, source: Vilčinskas 2018: 47), he would find Belarus as a dominant actor. This can be explained by a strong Lithuania's criticism towards BelNPP. The Lithuania's Government is also often mentioned in the discourse as having conflicting relations. This is because of the Lithuania's Parliament criticism for the Government regarding performance on BelNPP. It is interesting thus that Lithuania, while framing BelNPP as a political issue, mainly addresses (accuses) Belarus and discursively constructs another issue frame – that this is not a two-country issue, but rather one that is relevant to EU and international communities. At the same time the Belarusian discourse is not addressed towards one clear actor, but is rather diversly addressed towards a great variety of actors.

Discourse actors	A: Conflicting	B: Cooperative	C: Informing	D: Neutral
1. Contractors	0	10	1	3
2. European Union	0	15	1	0
3. Government	0	15	2	2
4. International organizations and conventions	0	72	4	3
5. Japan	0	0	2	2
6. Latvia	0	0	1	1
7. Lithuania	16	24	22	5
8. Other countries	0	7	5	5
9. Parliament	0	0	0	0
10. Russia	0	23	1	3

Table 2. Coding matrix of 'Stakeholder relations' and 'Discourse actors'; Belarusian texts (references N = 245, texts N = 65)

Discourse actors	A: Conflicting	B: Cooperative	C: Informing	D: Neutral
1. Belarus	109	10	13	7
2. Contractors	2	0	1	1
3. European Union	0	52	7	0
4. Government	25	33	18	7
5. International organizations and conventions	0	69	15	1
6. Japan	0	0	0	0
7. Latvia	0	4	0	1
8. Other countries	4	17	2	2
9. Parliament	10	20	8	3
10. Russia	8	5	2	4

Table 3. Coding matrix of 'Stakeholder relations' and 'Discourse actors'; Lithuanian texts (references N = 459, texts N = 67)

Analysing the emotional load of texts is a typical analytical task. It shows if issues in political discourses on BelNPP are constructed positively, neutrally or negatively. The research question is as follows: *What are the emotional loads of Belarusian and Lithuanian political discourses on the Astravets Nuclear Power Plant*? (Table 4, source: Vilčinskas 2018: 48).

In the Belarus political discourse on BelNPP a positive emotional load dominates (N = 150), although a neutral emotional load is also frequent (N = 108). In Lithuania's political discourse a negative emotional load dominates (N = 133). To deepen the analysis, the Word Frequency Query was run. The research questions were as follows: *What words are used in Belarusian political discourses when speaking positively about BelNPP*? (Table 5). *What words are used in Lithuanian political discourses when speaking negatively about BelNPP*? (Table 6).

Comparing the previously presented tables, there are words that match: construction, safety, IAEA, project and minister. This indicates that certain topics in Belarus have been constructed using positive frames, and the same topics in Lithuania using negative ones. In general, the word 'Safety' is significant as it is important in both of the discourses; although in the Lithuanian discourse it is most frequently mentioned with a negative emotional load, when in the Belarus discourse it is most frequently mentioned with a positive emotional load.

Discourses usually localize the discussed issues. This might serve as a discursively empowering tool, e. g. locating risk in national settings legitimizes national authorities to act upon those issues. The research question is as follows: *How the issues related to the Astravets Nuclear Power Plant are localized in the Belarusian and Lithuanian political discourses on BelNPP?*

Table 4. Emotional load of Belarusian and Lithuanian political discourses; n of coded references (total of references
in Belarusian texts $N = 224$, total of references in Lithuanian texts $N = 233$; Belarusian texts coded $N = 65$, Lithuani-
an texts coded $N = 67$)

	A: Negative	B: Neutral	C: Positive
1. Belarus_news	16	108	150
2. Lithuania_news	133	61	39

Word	Count	Similar words
Construction	244	Construction, constructive
Safety	188	Safety
IAEA	186	IAEA
Project	184	Project, projects
Minister	167	Minister, ministers
Mikhail, Mikhadyuk	122	Mikhail, Mikhadyuk
International	103	Internal, International
Development	102	develop, developed, developing, development, developments
Cooperation	96	cooperate, cooperated, cooperates, cooperating, cooperation

Table 5. Word count results for Belarusian texts, excerpts coded with 'positive emotional load'

Table 6. Word count results for Lithuanian texts excerpts coded with 'negative emotional load'

Word	Count	Similar words	
Safety	263	Safety	
Environment	149	Environment, environmental	
Europe	111	Europe	
Conventions	111	Conventions, convention	
Minister	89	Minister, ministers	
Espoo	85	Espoo	
Construction	74	Construction, constructive	
Project	70	Project, projects	
IAEA	65	IAEA	

The Belarusian discourse frames BelNPP as a national issue (Fig. 3, source: Vilčinskas 2018: 54). This comes with a discursively constructed sense that in the case of national issues, the national government is the most legitimate actor. The Lithuanian discourse localizes BelNPP issues as regional, thus evoking a set of international actors. The two discourses attribute the discursive power to different governance levels, where the national level discursive empowerment serves well Belarusian interests, and the international level discursive empowerment serves well Lithuania interests.

The analysis is continued by using the Hierarchy Chart with the code family 'Timeline'. The question is the following: *How issues related to the Astravets Nuclear Power Plant are chronologically presented in the Belarusian and Lithuanian political discourses*? (Fig. 4, source: Vilčinskas 2018: 57).

The biggest difference is in the use of 'past' and 'future' tenses in the political communicative discourses. Chronologically framing an issue as a 'future matter' calls for action and framing an issue as a 'past matter' would call for reflection and deeper discussion on the issue. The Belarusian political communicative discourse serves as a BelNPP risks attenuation tool (for explanation of the term see Kasperson et al. 2003), because it frames BelNPP as a 'here and now' issue. Coupled with information on how the national government deals with the BelNPP project





might potentially create a discursive sense that it is 'our business' and it is under control. Following the agenda setting theory, it would mean that the policy agenda in Belarus tries to lower the possible BelNPP risk perception within the public agenda. And the contrary conclusion could be drawn about the Lithuanian political communicative discourse. By focusing on 'past' and 'future' frames, it gives more space to reflection and awareness of the issue.

CONCLUSIONS

Communicative political discourses use issue framing with a purpose of making an impact on public agenda. The research has shown how issue framing is used to communicate different positions on the Astravets Nuclear Power Plant related risks by Belarusian and Lithuanian political entities. The main finding is that the BelNPP project is framed in different ways in Belarus and Lithuania. The Belarusian political communicative discourse frames BelNPP as a national issue, something happening 'here and now', focuses on technical aspects of the project, colours its messages with mostly a positive or neutral emotional load and does not focus or direct its discourse to any specific actor. The Lithuanian political communicative discourse, and focuses on safety issues. The Lithuanian discourse more often uses a negative emotional load in its messages and more often brings the time-frames of the 'past' or the 'future'. Those time-frames require reflection and ask for action, i.e. an alarmist discourse is being constructed around BelNPP. This type of political agenda certainly serves as an amplification tool and has an effect on public agenda. Hypothetically, alarmist discourse would raise high risk perceptions within the wider public. And the Belarusian 'don't worry' type discourse attenuates the BelNPP risk perceptions.

Received 20 May 2018 Accepted 8 November 2018

References

1. Albalawi, Y. 2015. "Agenda Setting for Health Promotion: Exploring an Adapted Model for the Social Media Era", *JMIR Public Health Surveill* 1(2): e21.

2. Borras, S.; Seabrooke, L. 2015. *Sources of National Institutional Competitiveness*. Oxford: Oxford University Press.

3. Česnakas, G.; Juozaitis, J. 2017. *Nuclear Geopolitics in the Baltic Sea Region*. Washington: Atlantic Council Global Energy Center.

4. Chilton, P. 2008. Political Terminology. Berlin: Walter de Gruyter GmbH & Co.

5. Chong, D.; Druckman, J. 2007. "Framing Theory", Annual Review of Political Science (10): 103–126.

6. Dekker, R. 2013. *How to Study Social Media Agenda Setting Dynamics in a Local Government's Policy Subsystem*? Rotterdam: Erasmus University of Rotterdam.

7. Druckman, J. 2001. "On the Limits of Framing Effects: Who Can Frame?", *Journal of Politics* 4(63): 1041–1066.

8. Foucault, M. 1998. Diskurso tvarka. Vilnius: Baltos lankos.

9. Gloria, I.-N. N. 2015. Critical Discourse Analysis of Selected Political Campaign Speeches of Gubernatorial Candidates in South-Western Nigeria 2007–2014. Nsukka: University of Nigeria.

10. Gorp, J. A. 2015. "Ideas and the Study of Political Parties: the Added Value of the Discursive Institutionalist Approach", *Revista Uruguaya de Cienca Politica* 24(2): 15–28.

11. Jančevskaitė, R.; Telešienė, A. 2013. "Klimato kaitos diskursas Lietuvos spausdintinėje ir internetinėje žiniasklaidoje", Filosofija. Sociologija 24(2): 92–99.

12. Juozaitis, J. 2016. "Lithuanian Foreign Policy vis-à-vis Belarusian Nuclear Power Plant in Ostrovets", *Lithuanian Foreign Policy Review* 35: 41–66.

13. Kasperson, J.; Pidgeon, N.; Roger, E.; Slovic, P. 2003. *The Social Amplification of Risk: Assessing Fifteen Years of Research and Theory*. Cambridge: Cambridge University Press.

14. McCombs, M.; Reynolds, A. 2002. "News Influence on Our Pictures of the World", in *Media Effects: Advances in Theory and Research*, eds. J. Bryant and D. Zillmann. Lawrence Erlbaum Associates, 1–18.

15. Perrow, C. 2011. Fukushima and the Inevitability of Accidents. Available at: https://thebulletin.org/fukushima-and-inevitability-accidents (cited 08.12.2017).

16. Pilibaitytė, V. 2011. "Nuclear Energy Discourses in Lithuania and Belarus", *Media Transformations* 5(9): 66–87.

17. RINOVA. 2009. *Rizikos suvokimas, viešoji komunikacija ir inovatyvus valdymas žinių visuomenėje.* Kaunas: Lietuvos valstybinis mokslo ir studijų fondas.

18. Rogers, E. M.; Dearing, J. 1988. Agenda-setting Research: Where Has It Been? Where Is It Going? Newbury Park: Sage.

19. Schmidt, V. 2008. "Discursive Institutionalism: The Explanatory Power of Ideas and Discourse", *Annual Review of Political Science* 11: 303–326.

20. Schmidt, V. A. 2008. Bringing Ideas and Discourse Back into the Explanation of Change in Varieties of Capitalism and Welfare States. Brighton: Centre for Global Political Economy.

21. Schmidt, V. A. 2010. "Taking Ideas and Discourse Seriously: Explaining Change Through Discursive Institutionalism as the Fourth 'New Institutionalism", *European Political Science Review* 2(1): 1–25.

22. Sigurdardottir, H. 2015. *Discursive Institutionalism: The Explanatory Power of Ideas*. Available at: https:// prezi.com/agv-qfjahv3b/discursive-institutionalism-the-explanatory-power-of-ideas/ (cited 22.12.2017).

23. Telešienė, A. 2005. "Kritiškosios diskurso analizės metodologinių principų taikymas sociologiniuose tyrimuose", *Filosofija. Sociologija* 2: 1–6.

24. Ulrich, K. 2015. *Greenpeace*. Available at: https://www.greenpeace.org/usa/lesson-fukushima-safe-clean-energy-future-will-nuclear-free/ (cited 08.12.2017).

25. University of Twente (UT). 2017. *Communication Studies Theories*. Available at: https://www.utwente. nl/en/bms/communication-theories/sorted-by-cluster/Mass%20Media/Agenda-Setting_Theory/ (cited 20.10.2017).

26. Vilčinskas, V. 2018. Comparative Analysis of Political Discourses on Astravets Nuclear Power Plant in Belarus and Lithuania. Master's Thesis in Political Science. The Faculty of Social Sciences, Arts and Humanities, Kaunas University of Technology.

27. Wilkerson, J. 2016. *Reconsidering the Risks of Nuclear Power*. Available at: https://sitn.hms.harvard.edu/flash/2016/reconsidering-risks-nuclear-power/ (cited 08.12.2017).

28. Wilson, J. 2003. Political Discourse. Blackwell Publishing.

29. World Nuclear Association (WNA). 2017. *Nuclear Power in Lithuania*. Available at: https://www.world-nuclear.org/information-library/country-profiles/countries-g-n/lithuania.aspx (cited 19.12.2017).

30. World Nuclear Association (WNA). 2017. *Nuclear Power in Germany*. Available at: https://www.world-nuclear.org/information-library/country-profiles/countries-g-n/germany.aspx (cited 05.01.2018).

VIDAS VILČINSKAS

Branduolinės rizikos socialinis konstravimas: institucinių komunikacinių diskursų apie Astravo atominę elektrinę analizė

Santrauka

Straipsnis priskirtinas rizikos sociologijos ir branduolinės rizikos komunikacijos sritims. Remiantis Astravo atominės elektrinės atveju (BelNPP) parodoma, kaip politiniai subjektai diskursyviai kuria branduolinės rizikos supratimą. Dėl kontraversiškų diskusijų apie saugumą BelNPP yra svarbus Europai, ypač Baltarusijai ir Lietuvai. Atlikta politinių institucinių komunikacinių diskursų analizė, vykstanti nacionalinėse vyriausybėse ir parlamentuose Baltarusijoje ir Lietuvoje. Analizė atlikta kaip magistro baigiamojo darbo dalis. Empirinį pagrindą sudaro 132 tekstai, kurie buvo paskelbti 2012–2017 m. ir apibrėžiami kaip oficialūs instituciniai pranešimai spaudai. Teorinis aiškinamasis modelis apima diskursyvinio institucionalizmo, darbotvarkės nustatymo ir problemų rėminimo teorijas. Rezultatai rodo, kad diskurse vyrauja "saugos" tema. Baltarusijos diskursas dažniau BelNPP demonstruoja kaip techninį iššūkį, o naudojamos laiko, vietos ir kt. sąvokos silpnina branduolinės rizikos suvokimą. Lietuvos diskurse daugiausia dėmesio skiriama politiniams aspektams, o naudojami diskursyvūs "rėmai" sustiprina socialiai konstruojamą rizikos suvokimą.

Raktažodžiai: diskurso analizė, Astravo atominė elektrinė, *in vivo*, turinio analizė, branduolinės rizikos komunikacija