



Katarzyna Dośpiał-Borysiak

University of Lodz

ORCID: 0000-0003-0425-9987

Climate Security in the Light of the Realist Paradigm as Part of the Theory of International Relations

Introduction

Over the last couple of decades, climate change has become a major international challenge, and a factor that mobilises international researchers to carry out deeper analysis. This reflection is necessary due to the global nature of the problem. Climate change concerns individuals, local communities, countries, and, in general, the future of the planet. Both its origins and consequences have a complex character that requires international solutions, extensive implementation, and political will. Having said this, it very much depends on the decision of national governments whether they will include climate policies in the catalogue of main political interest.

On the whole, adding the problems of environmental protection within the scope of external activity of the state allows to broaden the foreign policy instruments, which helps to position the state on the international arena. The goals of climate policy, just as the goals of foreign policy, can therefore serve to ensure security, increase strength and/or influence, boost prestige and position, and shape the rules of international relations.¹ However, states must first define their attitude to two fundamental issues: first of all, how they define their security paradigm in relation to the current and projected climate change; and second, whether they

¹ R. Zięba, *Cele polityki zagranicznej państwa*, [in:] *Wstęp do teorii polityki zagranicznej państwa*, red. R. Zięba, Toruń 2005, p. 50.

have opted for certain multilateral actions to ensure their national interests. Therefore, the solution to the problem of climate change to a large extent concerns the issue of conflict and cooperation between states, and thus the main currents of research in international relations can provide their insightful interpretations.

This paper is an attempt to determine the explanatory potential of the realist paradigm in the interpretation of the activities of states and the international community in the field of climate change and climate policy. Therefore, the research field has been intentionally narrowed to a selected trend, disregarding the liberal or constructivist paradigm. The hypothesis assumes that the realist paradigm has an explanatory value to selected aspects of climate security, such as short-term national interests, or failures of international cooperation on climate change. The research questions which can be a useful tool to verify the above hypotheses are as follows. What is the scope of climate security? What is the connection between the realist notion of national interest and climate change? Are games theories relevant in the case of climate politics?

Climate change as a challenge for national security

Traditionally, climate change has been understood as an element of environmental security. Ensuring environmental security by the state can be interpreted as a form of protection against global threats, such as climate change, or the deficit of drinking water, but also as limiting the impact of natural phenomena that disrupt the functioning of societies. According to Marek Pietraś, environmental security implies "a state of social relations, including the content, forms and methods of organising international relations, which not only limits and eliminates ecological threats, but also promotes positive action enabling the realisation of values relevant to the existence and development of nations and states."² The starting point for this approach is the assumption that the state should anticipate negative events by minimising threats and conflicts, taking up challenges, and securing the achieved level of citizens' quality of life. Climate change undoubtedly falls within the presented understanding of ecological security: both as a factor determining the duration and functioning of states and societies, and at the same time as a problem that requires extensive international cooperation.

There are several trends that help to define the concept of 'ecological security' that highlight different elements. The first one draws attention to the key importance of direct relationship between the human world and the natural environment. A special role is assigned to services delivered by the natural environment, i.e. the support of life itself. The second trend "associates ecological security with deliberate and planned actions that prevent ecological changes that are unfavourable to people."³ The third, in turn, draws attention to the anthropogenic nature of environmental changes and "on this basis, seeks opportunities to ensure security in this field through the evolution of relations and activities, both internally

² M. Pietraś, *Bezpieczeństwo ekologiczne w Europie. Studium politologiczne*, Lublin 2000, p. 85.

³ *Ibid.*, p. 82.

and internationally.”⁴ In defining the importance and scope of ecological security, Pietraś draws attention to four elements: 1) the anthropogenic nature of ecological threats; 2) the key role of positive actions, including international ecological cooperation; 3) importance in the security policy of protection and preservation of significant social values, and 4) elimination of international tensions and conflicts against the background of ecological problems.⁵

Undoubtedly, a majority of authors prefer the broad understanding of ecological security, which is not equated only with the environment itself, as it covers a whole range of diverse activities in various areas of social, economic and political life that can have a direct or indirect impact on the environment. Lech Zacher, who defines them as a set of norms and activities connected with appropriate means of their use, seems more inclined towards highlighting the aspect of ecological security in the category of broad political practice.⁶

In the twenty-first century, the academic community, as well as political and economic institutions, tend to distinguish climate security from environmental security. Increasingly more often, climate change is becoming a category analysed from the perspective of current and future security scenarios, both nationally and internationally. The reason for this is that the magnitude of climate change can alter social order on a global scale. Sudden weather phenomena – such as snowstorms, heat waves, floods or hurricanes, massive migrations for which even the world’s richest economies are not prepared – are intensifying rapidly. In the long term, climate change causes, among others, water shortages or the loss of biodiversity, leading to famine and mass migration, and ultimately to armed conflicts.⁷ These conflicts have already been given the name of so-called “climate wars”, in which a number of phenomena associated with climate change become a catalyst for a deep social crisis, followed by the degradation of the state, which subsequently generates military tensions in the entire region, like e.g. in the case of Sudan.⁸ In this approach, climate change can be seen as a “threat multiplier”, directly affecting national security.

In effect, climate security refers to climate-related change endangering the security of humans, ecosystems, economy, infrastructure, and societies. According to Matt McDonald, the discourse on climate security includes, beyond ecological security, the perspective of national, international and individual security.⁹ Each of these perspectives takes a different standpoint in defining reference points, threats, entities making changes, and possible solutions. From a national perspective, the main threat associated with climate change is the possibility of conflict,

⁴ *Ibid.*

⁵ *Ibid.*

⁶ L. Zacher, *Bezpieczeństwo ekologiczne – wymiary polityczne, międzynarodowe i globalne*, [in:] *Międzynarodowe bezpieczeństwo ekologiczne*, red. Z. J. Pietraś, M. Pietraś, Lublin 1991, pp. 98–99.

⁷ I. Salehyan, ‘Climate Change and Conflict: Making Sense of Disparate Findings’, *Political Geography*, vol. 43, 2014, pp. 1–5.

⁸ See e.g. H. Welzer, *Wojny klimatyczne*, Warszawa 2010; D. Heffron, ‘What do Realists Think about Climate Change?’, *Centre for Geopolitics & Security in Realism Studies Publications*, 13 November 2015, p. 10, <http://cgsrcs.org/publications/30> [accessed: 20.11.2019].

⁹ M. McDonald, ‘Discourses of Climate Security’, *Political Geography*, vol. 33, no. 1, 2013, pp. 42–51.

the loss of sovereignty, and the violation of economic interests. In contrast, individuals will primarily emphasise the prospects of deterioration of their well-being, or the need to abandon their basic values and/or practices. Meanwhile, the perspective of international security will mainly take into account the role of international organisations in their efforts to resolve conflicts and achieve global agreement. In this approach, ecological security will refer only to the state of the biosphere and postulate a change in social behaviour. It will include for example loss of biodiversity resulting from climate changes.

The above division of discourses on climate security is not clear-cut and excluding; however, it undoubtedly indicates the complexity of the relationship between climate change and security. It is clear to see that there are not only several analytical possibilities for interpreting this relationship, but they also lead to the legitimacy of various activities that potentially affect the climate policy of the state. This leads to the conclusion that due to the complexity of the problem of climate change, it is necessary to comprehensively treat the subjective and objective scope of climate security. Therefore, the subjects of such security should become both individuals, nations, states, as well as entire ecosystems, which, in turn, implies a look at the objective dimension including social, political, economic, ecological or military aspects. From the perspective of the needs of this paper, however, it seems justified to take a state-centric approach to the problem that requires a number of different solutions, both at the national and international level.¹⁰

Realist paradigm and climate security – the discussion

In the realist paradigm, the main areas of interest have become national interest, sovereignty, power, and military potential. In this view, the states, deemed rational actors, undertake the activities that remain the most beneficial for them, and therefore estimate profits and losses and optimise the resources used. On the other hand, the main feature of the international system is anarchy, where in the absence of regulation, the interests of states collide, just as in the pictorial metaphor of “billiard balls”.¹¹ The conflicting nature of international relations forces on to ensure security by building own security and on the basis of strategic alliances serving to maintain the balance of the system.¹²

The neo-realist reflection, developed in the late 1970s, added a number of elements to the traditional realism described above.¹³ First of all, the focus has been shifted from the analysis of human nature and the essence of the state to the very structure of the international system. Moreover, research on traditional security has been enriched with questions about international economics.

¹⁰ J. Vogler, *Climate Change in World Politics*, New York–London 2016, pp. 60–85

¹¹ J. Mearsheimer, ‘The False Promise of International Institutions’, *International Security*, vol. 19, no. 2, 1994/1995, p. 48.

¹² H. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, New York 1973.

¹³ K. Waltz, *Theory of International Politics*, London, 1979; *Neorealism and Its Critics*, ed. R. Keohane, New York 1986.

In a situation where climate security is a new area of research and scientific reflection, the question arises whether the traditional approach represented by realism has sufficient tools to analyse this phenomenon. It is Daniel Heffron's conviction that realism, in relation to the problem of ecological security and climate change itself, does not bring such convincing and coherent explanations as in the case of research on power, war or rivalry of superpowers. The reason is that realists define a security paradigm due to a military factor, while climate change is a different kind of global challenge. According to Simon Dalby, the realistic perception of security that shaped foreign policy during the Cold War "is currently not a sufficient conceptualisation or political framework for new conditions in which threats result from global change, not rivalry between powers."¹⁴ What is more, solving the problem of climate change requires, by definition, constant cooperation of the international community, which realistically has no chance of implementation due to the collision of state interests and the anarchic nature of the international system. In addition, realists rely heavily on the state-centric world view to ignore the impact of transnational and non-governmental actors, which are central from a climate policy perspective. The impact of international oil concerns, but also of environmental organisations is crucial at the stage of formulating the objectives of national climate policy, but also increasingly visible during international negotiations in this area.¹⁵

Considering all of the above-defined deficits of traditional realist paradigm in research on international climate policy, its exploratory possibilities should not be interpreted as exhaustive. One should acknowledge that realism revolves around the category of power and interests, which is directly linked to the problem of the causes of climate change themselves. For example, the main assumption of offensive realism is that states always strive to maximise their power, often at the expense of other states, explains the absolute efforts of states to gain access to natural resources or ensure energy security.¹⁶ The offensive nature of the states thus explains the famous "tragedy of common goods" described in 1968 by Garrett Hardin, who noted that the exploitation of goods or areas which are not subject to any jurisdiction – such as ocean waters, or global atmosphere – leads to their inevitable exhaustion, or destruction.¹⁷ For decades, access to hydrocarbons, which are non-renewable resources, has remained the imperative of most countries, i.e. their shrinking pool may cause growing competition. As Andrew Heywood noted, countries value energy from oil or gas because it gives them the opportunity to influence other countries.¹⁸ What's more, competition for resources often intensifies tension and military presence, as is the case today in the Arctic region, and often transforms into an armed conflict, e.g. during the two Iraqi wars.

¹⁴ S. Dalby, *Climate Change and Environmental Security*, [in:] *Security Studies: an Introduction*, ed. P. Williams, New York 2013, p. 312.

¹⁵ R. Giplin, *War and Change in World Politics*, New York–Cambridge 1981, pp. 10–33.

¹⁶ J. Grieco, *Realist International Theory and the Study of World Politics*, [in:] *New Thinking in International Relations Theory*, ed. M. Doyle, J. Ikenberry, Boulder–Oxford 1997, pp. 163–201.

¹⁷ G. Hardin, *The Tragedy of the Commons*, [in:] *International Politics: Enduring Concepts and Contemporary Issues*, ed. R. Art, R. Jervis, Harlow 2015, pp. 422–427.

¹⁸ A. Heywood, *Global Politics*, London 2014, p. 417.

In addition, realists point to the lack of cooperative capacity among countries, which may explain the inertia of governments during the creation of an international climate change regime. Countries, according to John Mearsheimer and Robert Powell, are always looking for relative benefits over other countries.¹⁹ According to Mark Purdon, this explains why countries want to minimize the impact of the climate change regime and lower their level of ambition to protect their own economies.²⁰

On the other hand, in the neorealist approach, research on international climate policy will emphasize an important element of the structure of the international system itself. According to the theory of hegemonic stability expressed in the works of Robert Gilpin, Charles Kindleberg and Stephen Krasner, the international system is stable if the hegemonic state is able to impose goals and rules of action on other states, also in the form of institutionalized coordination mechanisms.²¹

Assuming that the United States still remains a hegemonic entity in the international system, and for decades also the main CO₂ emitter, it can be deduced that the success of the global fight against climate change depends to a large extent on its intentions. Present experience indicates that the US has not taken the role of a leader and promoter of ambitious climate solutions. One should be aware that this country has not ratified the Kyoto Protocol of 1997, and President Donald Trump has undermined the legitimacy of the Paris Agreement of 2015. A certain form of hegemonic leadership was presented by the Barack Obama administration during the adoption of the 2009 Copenhagen Accords. Kyoto II, however, also served to guarantee the continuation of existing policy in line with US economic goals. Duncan Snidal indicates that the hegemon can act good-natured or sinister on the environment, and this is the politically variable attitude that characterizes the American administration²². In general, however, it cannot be said that the United States has used its potential and changed the structure of the international system in favour of a more cooperative climate agreement. It have gained the status of a state that significantly limits the progress of climate negotiations (*quasi veto state*). Thus, the hegemonic state did not use its resources and power for a specific global solution.

The examples presented above indicate that realism can offer a diagnosis of the failures and conflicts related to international climate policy. However, is that

¹⁹ J. Mearsheimer, *Can China Rise Peacefully?*, *The National Interest*, 25 October 2014, <http://nationalinterest.org/commentary/can-china-rise-peacefully-10204> [accessed: 20.11.2019]; R. Powell, 'Absolute and Relative Gains in International Relations Theory', *The American Political Science Review*, vol. 85, no. 4, 1991, pp. 1303–1320.

²⁰ M. Purdon, 'Neoclassical Realism and International Climate Change Politics: Moral Imperative and Political Constraint in International Climate Finance', *Journal of International Relations and Development*, vol. 20, no. 2, 2017, pp. 263–300.

²¹ See: R. Keohane, *The Theory of Hegemonic Stability and Changes in International Economic Regimes, 1967–1977*, [in:] *Change in the International System*, ed. O. Holsti, R. Siverson, A. George, Boulder 1980.

²² D. Snidal, 'The Limits of Hegemonic Stability Theory', *International Organization*, vol. 39, no. 4, 1985, pp. 579–614.

all? One should remember, for example, that defensive realism assumes that the international system creates incentives for moderate and predictable behaviour, and the security dilemma can be resolved through cooperative actions. Stephen Walt coined an interesting term “balance of threat”, which was a significant modification for the realistic concept of balance of power.²³ The author claims that states, guided by their own interests, are taking collective action to balance the threat. As he noted, “countries risk their own survival if they don’t limit the potential hegemon before he becomes too strong.” More importantly, the perception of a phenomenon is important, and not necessarily its real potential for destruction.

If one assumes that climate change were to be recognized as such a threat, countries could collectively take action to reduce emissions, guided by their own security interests. The first stage, i.e. attributing significant security implications to climate change, has already occurred in most countries, at least in a declarative sense. In 2008, the US National Intelligence Council launched a program to determine the implications of climate change for US security by 2030²⁴. The project’s conclusions made clear that climate change will contribute to increased political destabilization, migration crises and armed conflicts. The US Department of Defence has also stated that climate change will be one of the key factors shaping the security environment in the future, affecting US military capabilities, the functioning of missions and operations. In 2015, the State Department recognized climate change as one of the top four national and global security challenges.²⁵ Similar conclusions appear in the strategic documents of other leading powers.²⁶ The second stage, i.e. cooperation against a common threat, has also been institutionalized to some extent through the entry into force of the December 2015 Paris climate agreement.

The realistic paradigm also seems to justify the actions of states in the area of adaptation to climate change. The fear of destabilization and economic losses, and in extreme cases also a direct threat to the survival of the state (as in the case of oceanic states) makes anticipation of future changes and adaptation to them a category directly related to the *raison d’état*. Adaptation measures for countries belonging to the same region can also be considered as an attempt at the aforementioned threat balancing. Even if less severe impact in most of the cases will be felt all countries would have to redefine their risk management strategies and think more about human security, the leading topic of this volume.

²³ S. Walt, ‘Alliance Formation and the Balance of World Power’, *International Security*, vol. 9, no. 4, 1985, p. 5.

²⁴ *Quadrennial Defence Review Report January 2010*, US Department of Defence, p. 84, <https://archive.defense.gov/qdr/QDR%20as%20of%2029JAN10%201600.pdf> [accessed: 25.11.2019].

²⁵ ‘Enduring Leadership in a Dynamic World’, US Department of State, *Quadrennial Diplomacy and Development Review 2015*, p. 42.

²⁶ See for example: *UK Climate Change Risk Assessment 2017 Presented to Parliament pursuant to Section 56 of the Climate Change Act 2008*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/584281/uk-climate-change-risk-assess-2017.pdf [accessed: 20.11.2019].

Game theory and climate politics: the operational level

An interesting tool for analysing international climate policy may also be the game theory, which – it should be clearly emphasised – combines elements of realism and liberalism. It assumes that players have a uniform will, that is, that each government acts as an integrated entity, not a complicated social organisation, whose decisions result from internal political interactions. At the same time, this theory shows the mechanisms of how behaviours driven by self-interest can lead to an improvement in order and well-being through cooperation.²⁷

From nearly thirty games that can be used to analyse international climate negotiations involving two entities or two groups of countries for several decades, there is a clear focus on investigating the problem of cooperation through the prism of the so-called “prisoner’s dilemma”.²⁸ It clearly indicates that unit gains may conflict with group gains. At the same time, if the entities created cooperation mechanisms, their benefits would be optimised. Thus, the individual decision, e.g. to discontinue climate action, is beneficial from the perspective of the current economic profits of a given player, however, it contributes to increasing global emissions or induces other countries to similar actions, resulting in a dangerous increase in temperature in the long run.²⁹ There is a phenomenon known as free-rider problem, i.e. the use of the effects of cooperation without participating in it.³⁰

A kind of modification of the “prisoner’s dilemma” is the so-called “chicken dilemma”, i.e. a non-cooperative game in which the most can be gained or lost through confrontation. A peace strategy brings protection against the biggest loss, but it does not bring any reward. This game can be used with the assumption that the supreme goal of the state is short-term protection of own resources, i.e. current economic profit instead of long-run efforts to reduce emissions.³¹

Given the complexity of the interests of different countries during climate negotiations, it seems right to create aggregation models, i.e. oscillating around specific frameworks of behaviour patterns adopted by states. For example, Peter Wood focuses on the concepts of cooperative, non-cooperative and implementation games.³² The author has simulated various games regarding players’ decisions on further CO₂ emissions, as well as regarding decisions on

²⁷ See: Z. Pietraś, *Teoria gier jako sposób analizy procesów podejmowania decyzji politycznych*, Lublin 1997.

²⁸ J. Zhu-Gang, C. Wen-Jia, C. Wang, ‘Can Simulation of Climate Negotiation Strategies between China and the U.S. Based on Game Theory’, *Advances in Climate Change Research*, vol. 5, no. 1, 2014, p. 34.

²⁹ K. Pittel, D. Rübbecke, ‘Transitions in the Negotiations on Climate Change: From Prisoner’s Dilemma to Chicken and Beyond’, *International Environmental Agreements*, vol. 12, no. 1, 2012, pp. 23–39.

³⁰ M. Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups*, Harvard 1971.

³¹ A. Endres, C. Ohl, ‘Introducing “Cooperative Push”: How Inefficient Environmental Policy (Sometimes!) Protects the Global Commons Better’, *Public Choice*, vol. 111, 2002, pp. 285–302.

³² P. Wood, ‘Climate Change and Game Theory’, *Annals of the New York Academy of Sciences*, vol. 1219, 2011, pp. 153–170.

participation in an international agreement. His research shows that it is necessary to build a new game model, in which climate balance means the optimal effect for all players. The above research also shows that combining an international agreement with other issues such as international trade will facilitate its implementation.³³

Similar conclusions have also been reached by Beijing researchers, who applied the game theory to the simulation of negotiation strategies on climate change between the US and China.³⁴ The model adopted by them that takes into account the impact of climate change on the GDP of countries, aggregated on the basis of research done by other scientists, clearly shows that it is necessary to create compensatory mechanisms for China, encouraging investment in new technologies. This strategy was considered a cooperative game. However, in all non-cooperative game scenarios, i.e. China acts first (or first move advantage), or two countries operate simultaneously), Beijing's losses outweigh the profits. On the other hand, a strategy favourable to the United States is to help developing countries, provided that the largest emitters are joined by effective and enforceable cooperation. Practice has shown that China and the United States in 2013–2016 decided to create a strategic partnership on climate change, which was symbolically confirmed by the joint signing by Presidents Barack Obama and Xi Jinping of the Paris Agreement.

The game theory is undoubtedly an interesting analytical tool; however, with specific deficits. First of all, most games methodologically use the two-player model, which may be justified for research into the above-described bilateral relations, e.g. US-Chinese relations; however, it does not apply to a wider group of entities. Of course, it becomes possible to combine countries into specific groups with correlated interests (e.g. those occurring during international climate negotiations, such as small, Pacific countries) and to apply game theory to groups of countries. The problem, however, is that coalitions are subject to constant fluctuations, and even among a group of players representing a theoretically coherent position, there are significant differences of view (the European Union casus).

In addition to the problems that arise with the selection and justification of given actors – mostly states – there may appear some misunderstandings about the assumed gains so crucial for the game theory. These may be as follows. What do we define as potential profit or loss from the individual player level? Can the current costs be interpreted as an indispensable burden that will result in winning the game in the future? Finally, will this victory be described as stopping the rise in global temperature or maintaining, for example, high economic growth?

Conclusions

Undoubtedly, the realist perspective does not fully reflect the problems associated with climate security. By emphasizing game theory and a positivist approach, it is

³³ See: P. Chander, *Game Theory and Climate Change*, New York 2018.

³⁴ J. Zhu-Gang, C. Wen-Jia, C. Wang, *Can Simulation...*, *op. cit.*, pp. 34–40.

unable to explain changes in the behaviour of individual actors³⁵. It neither refer to historical conditions of state actions. Realism, in fact, attributes a specific, unchanging identity to the state, i.e. it assumes that states will respond to the state of anarchy in a similarly predictable way, based on rational choices³⁶. States change however, they climate policies due to political reasons and just to give an example different rationale was presented during Barack Obama and Donald Trump presidencies. With the occurrence of rapid climatic catastrophes the rational choice will be even altered within short period of time.

Another point to raise would be that realism seems to focus on military aspect of security and thus is not an adequate tool to research global problems of different origin. This is true, but only to certain degree. Climate change will have immense impact on military security too, as Expert Group of International Military Council Climate and Security noted in the World Climate and Security Report 2020, presented at the Munich Security Conference.³⁷ Thus, the military perspective of realism could be useful in analysing the dynamics of international conflicts caused by climate change but not its origin.

As a rationalist departure, the realism also assumes the maximisation of the usefulness of certain solutions as the basis for most countries' activities.³⁸ Thus, it ignores the increasingly acknowledged axiological layer of the fight against climate change, which refers to issues such as justice and responsibility of e.g. developed countries or the biggest emitters. On the other hand, the logic of maximizing own interests is the cornerstone of Paris Agreement of 2015, which in contrast to the Kyoto Protocol, does not refer to economic level of development characterizing the parties, so it ignores historical burden of emissions.

Realism, on the other hand, chiefly explains the reasons for the lack of ambition of the international climate change regime. The atomistic picture of the world it assumes, implies that individual entities maximize their needs without taking into account the needs of other entities. Countries compete thinking, above all, about maintaining access to raw materials or the competitiveness of their economies, simultaneously not taking into account the overall end result, which is to stop anthropogenic climate change. Moreover, there is no hegemonic actor or actors being able to exert their power over other countries during climate negotiations. The European Union strives to become a so called "climate normative leader", but its voice can hardly be heard outside of Europe.

Trying to foresee the future explanatory potential of realism, one may assume that it will clearly increase. Firstly, climate change will pose more pressure on the social *status quo*, putting all mitigation and adaptation strategies at the core of national interests, as the sovereignty of many countries and nations may be at risk.

³⁵ C. Cutler, *Critical Historical Materialism and International Law: Imagining International Law As Praxis*, [in:] *Historical Sociology of International Relations*, ed. S. Hobden, J.M. Hobson, Cambridge 2002, p. 181

³⁶ A. Wendt, *Spółeczna teoria stosunków międzynarodowych*, Warszawa 2008, p. 43.

³⁷ See: <https://imccs.org/2020/02/19/climate-change-more-prominent-than-ever-at-munich-security-conference-with-world-climate-security-report-2020-release> [accessed: 08.03.2020].

³⁸ J. Sterling-Folker, *Neoliberalism*, [in:] *International Relations Theories: Discipline and Diversity*, ed. T. Dunne, M. Kurki, M.S. Smith, Oxford 2010, p. 118.

Secondly, collective actions may occur as perceived risks are not manageable with individual measures. The realist “balance of threat” will enable to form coalitions against either the threat of climate change in general, or the individual states, free riders ignoring others efforts. Thirdly, climate security will have an even more direct impact on military security, as its consequences will be solved with military means. Finally, all critical elements of realism – like national interest, sovereignty, power, and military potential – will play a part in solving the problem of climate change, one of the most severe global threats of the twenty-first century.

References

- Chander P., *Game Theory and Climate Change*, New York 2018.
- Cutler C., *Critical Historical Materialism and International Law: Imagining International Law As Praxis*, [in:] *Historical Sociology of International Relations*, ed. S. Hobden, J.M. Hobson, Cambridge 2002.
- Dalby S., *Climate Change and Environmental Security*, [in:] *Security Studies: an Introduction*, ed. P. Williams, New York 2013.
- Endres A., Ohl C., ‘Introducing “Cooperative Push”: How Inefficient Environmental Policy (Sometimes!) Protects the Global Commons Better’, *Public Choice*, vol. 111, 2002.
- ‘Enduring Leadership in a Dynamic World’, US Department of State, *Quadrennial Diplomacy and Development Review 2015*.
- Giplin R., *War and Change in World Politics*, New York–Cambridge 1981.
- Grieco J., *Realist International Theory and the Study of World Politics*, [in:] *New Thinking in International Relations Theory*, ed. M. Doyle, J. Ikenberry, Boulder–Oxford 1997.
- Hardin G., *The Tragedy of the Commons*, [in:] *International Politics: Enduring Concepts and Contemporary Issues*, ed. R. Art, R. Jervis, Harlow 2015.
- Heffron D., ‘What do Realists Think about Climate Change?’, *Centre for Geopolitics & Security in Realism Studies Publications*, 13 November 2015, <http://cgsrcs.org/publications/30> [accessed: 20.11.2019].
- Heywood A., *Global Politics*, London 2014.
- Keohane R., ‘The Global Politics of Climate Change: Challenge for Political Science’, *Political Science*, vol. 48, no. 1, 2011.
- Keohane R., *The Theory of Hegemonic Stability and Changes in International Economic Regimes, 1967–1977*, [in:] *Change in the International System*, ed. O. Holsti, R. Siverson, A. George, Boulder 1980.
- McDonald M., ‘Discourses of Climate Security’, *Political Geography*, vol. 33, no. 1, 2013.
- Mearsheimer J., ‘Can China Rise Peacefully?’, *The National Interest*, 25 October 2014, <http://nationalinterest.org/commentary/can-china-rise-peacefully-10204> [accessed: 20.11.2019].
- Mearsheimer J., ‘The False Promise of International Institutions’, *International Security*, vol. 19, no. 2, 1994/1995.
- Morgenthau H., *Politics Among Nations: The Struggle for Power and Peace*, New York 1973.
- Neorealism and Its Critics*, ed. R. Keohane, New York 1986.
- Olson M., *The Logic of Collective Action: Public Goods and the Theory of Groups*, Harvard 1971.
- Pietraś M., *Bezpieczeństwo ekologiczne w Europie. Studium politologiczne*, Lublin 2000.

- Pietraś Z., *Teoria gier jako sposób analizy procesów podejmowania decyzji politycznych*, Lublin 1997.
- Pittel K., Rübhelke D., 'Transitions in the Negotiations on Climate Change: From Prisoner's Dilemma to Chicken and Beyond', *International Environmental Agreements*, vol. 12, no. 1, 2012.
- Powell R., 'Absolute and Relative Gains in International Relations Theory', *The American Political Science Review*, vol. 85, no. 4, 1991.
- Purdon M., 'Neoclassical Realism and International Climate Change Politics: Moral Imperative and Political Constraint in International Climate Finance', *Journal of International Relations and Development*, vol. 20, no. 2, 2017.
- Quadrennial Defense Review Report January 2010*, US Department of Defense, <https://archive.defense.gov/qdr/QDR%20as%20of%2029JAN10%201600.pdf> [accessed: 25.11.2019].
- Salehyan I., 'Climate Change and Conflict: Making Sense of Disparate Findings', *Political Geography*, vol. 43, 2014.
- Snidal D., 'The Limits of Hegemonic Stability Theory', *International Organization*, vol. 39, no. 4, 1985.
- Sterling-Folker J., *Neoliberalism*, [in:] *International Relations Theories: Discipline and Diversity*, ed. T. Dunne, M. Kurki, M.S. Smith, Oxford 2010.
- UK Climate Change Risk Assessment 2017 Presented to Parliament pursuant to Section 56 of the Climate Change Act 2008*, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/584281/uk-climate-change-risk-assess-2017.pdf [accessed: 20.11.2019].
- Vogler J., *Climate Change in World Politics*, New York–London 2016.
- Walt S., 'Alliance Formation and the Balance of World Power', *International Security*, vol. 9, no. 4, 1985.
- Waltz K., *Theory of International Politics*, London 1979.
- Welzer H., *Wojny klimatyczne*, Warszawa 2010.
- Wendt A., *Spółeczna teoria stosunków międzynarodowych*, Warszawa 2008.
- Wood P., 'Climate Change and Game Theory', *Annals of the New York Academy of Sciences*, vol. 1219, 2011.
- Zacher L., *Bezpieczeństwo ekologiczne – wymiary polityczne, międzynarodowe i globalne*, [in:] *Międzynarodowe bezpieczeństwo ekologiczne*, red. Z. J. Pietraś, M. Pietraś, Lublin 1991.
- Zhu-Gang J., Wen-Jia C., Wang C., 'Can Simulation of Climate Negotiation Strategies between China and the U.S. Based on Game Theory', *Advances in Climate Change Research*, vol. 5, no. 1, 2014.
- Zięba R., *Cele polityki zagranicznej państwa*, [in:] *Wstęp do teorii polityki zagranicznej państwa*, red. R. Zięba, Toruń 2005.

Bezpieczeństwo klimatyczne w świetle paradygmatu realistycznego teorii stosunków międzynarodowych

Streszczenie

Niniejszy artykuł podejmuje kwestie możliwości zastosowania paradygmatu realistycznego stosunków międzynarodowych do analizy bezpieczeństwa klimatycznego. Specyfika wyzwań związanych z globalnymi zmianami klimatu staje się inspiracją do wskazania

specyfiki bezpieczeństwa ekologicznego i wyróżnienia w jego ramach bezpieczeństwa klimatycznego. Następnie ukazana zostaje relewancja eksplanacyjna paradygmatu realistycznego w badaniach nad bezpieczeństwem klimatycznym w takich kwestiach, jak państwocentryczny obraz relacji międzynarodowych, prymat interesów indywidualnych ponad kolektywnymi czy znaczenie władzy i dominacji. Kategorie te analizowane są nie tylko w świetle dokonań realizmu tradycyjnego, ale również neorealizmu czy realizmu strukturalnego. Podjęta zostaje również kwestia możliwości zastosowania teorii gier do analizy międzynarodowych negocjacji klimatycznych.

Słowa kluczowe: zmiany klimatu, bezpieczeństwo klimatyczne, paradygmat realistyczny

Climate Security in the Light of the Realist Paradigm as Part of the Theory of International Relations Abstract

This paper addresses the possibility of using the realist paradigm of international relations to look at climate security. The challenges related to global climate change have become an inspiration to indicate the features of ecological security, and to distinguish climate security within it. The explanatory relevance of the realist paradigm in the research conducted on climate security has been presented in issues such as the state-centred picture of international relations, the primacy of individual interests over collective, or the importance of power and domination. These categories are scrutinised not only in light of the achievements of traditional realism, but also of neo-realism, or structural realism. The possibility of applying the game theory to look at international climate negotiations has also been raised as a potential research tool.

Key words: climate change, climate security, realist paradigm

Die Klimasicherheit vor dem Hintergrund des realistischen Paradigmas der Theorie von Internationalen Beziehungen Zusammenfassung

Dieses Paper betrachtet die Möglichkeit, das realistische Paradigma der Theorie der internationalen Beziehungen zur Analyse von Klimasicherheit zu nutzen. Die Herausforderungen, die mit dem globalen Klimawandel verbundenen sind, regten dazu an, die Besonderheiten ökologischer Sicherheit aufzuzeigen und Klimasicherheit in diesem Rahmen davon zu unterscheiden. Die Aussagekraft des realistischen Paradigmas zur Erklärung in Forschungen zur Klimasicherheit zeigte sich dabei in Fragen wie der staatszentrierten Sicht auf die internationalen Beziehungen, Vorrangindividueller vor kollektiven Interessen oder der Bedeutung von Macht und Dominanz. Diese Kategorien werden nicht nur vor dem Hintergrund der Leistungen des traditionellen Realismus, sondern auch des Neorealismus oder des strukturellen Realismus analysiert. Auch die Möglichkeit internationale Klimaverhandlungen spieltheoretisch zu analysieren, werden als Forschungszugang diskutiert.

Schlüsselswörter: der Klimawandel, die Klimasicherheit, das realistische Paradigma

Климатическая безопасность в свете реалистической парадигмы теории международных отношений

Резюме

В статье рассмотрены вопросы о возможности применения реалистической парадигмы теории международных отношений для анализа климатической безопасности. Специфика проблем, связанных с глобальными изменениями климата, требует обратить особое внимание на проблематику экологической безопасности и выделения в ее рамках вопросов касающихся климатической безопасности. В исследовании раскрывается релевантность реалистической парадигмы в исследованиях климатической безопасности по таким вопросам, как государственно-центрическая картина международных отношений, первенство индивидуальных интересов над коллективными, значение власти и доминирования. Эти категории анализируются не только в свете достижений традиционного реализма, но и неореализма и структурного реализма. В статье рассмотрен также вопрос о возможности применения теории игр для анализа международных переговоров направленных на принятие мер для борьбы с изменением климата.

Ключевые слова: изменения климата, климатическая безопасность, реалистическая парадигма