

9. The interaction of natural and social systems: how International Relations theory can inform research on Arctic marine invasive species

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9.1 Introduction: Natural and social systems, International Relations theory and invasive species in the Arctic

Marine invasive species are an excellent case of the interlinking of natural and social systems, as they display feedback between these systems. This essay will discuss how International Relations theory can outline research agendas and supply useful concepts and assumptions of actors and causalities for exploring this interlinking.

Search on International Relations literature and invasive species yield little (Bright 1999). It is therefore a research field to be developed. It is clear from this workshop and this volume that the question of marine invasive species in the Arctic are a case of how international political and economic processes are affecting and could affect biological systems with feedback to politics and the economy. It therefore seems appropriate to outline how Arctic marine invasive species can be explored in International Relations.

This chapter will discuss possible International Relations research agendas on Arctic marine invasive species through the following steps. In light of the absence of such a tradition and to introduce such a possible tradition outside circles of political scientists, International Relations research in the Arctic and International Relations theory will be introduced as a starting point.

Initially International Relations research topics on the Arctic will be briefly introduced. Then the scholarly and policy importance of linking natural and social systems, such as concerning Arctic marine invasive species, will be discussed briefly. These discussions lead to the main part of the chapter, which is a discussion of how the main theoretical traditions in International Relations, realism, liberalism, institutionalism, transnationalism, and constructivism each can propose research agendas with concepts and assumptions of actors and causalities for analyzing the international politics dimensions of Arctic marine invasive species. Finally, there is a brief concluding discussion of how International Relations theory can contribute to the debate and analysis of the interlinking of natural and social systems in general and in particular concerning Arctic marine invasive species.

9.2 Doing International Relations Arctic research

The Arctic is a science-dense region compared to other human activity in the region, and much popular and media attention to the region has been because of science and exploration.⁶ The region is very big with important natural science phenomena, while relatively few people live there. The research attention to the Arctic has therefore historically predominantly been natural scientific. This predominance has been reflected in the international organization of Arctic research such as the previous International Polar Years and international scientific organizations. In recent years, the human and social sciences aspects of Arctic research have gained attention and strength as reflected in the most recent International Polar Year (they have naturally always been there, especially with ethnographic research on the indigenous peoples of the North) (Barr, Luedecke 2010; Launius, Fleming, DeVorkin 2010).

The field of International Relations interacts with its subject matter, international politics, also concerning the Arctic. International Relations are also a fairly young discipline, which emerged in the interwar years from the carnage of World War One. The Arctic came into international politics with the Cold War. In this conflict, the Arctic was a theatre of confrontation between the superpowers and of deployment of strategic

⁶ See, for instance, the *Arktis* exhibition at Louisiana, 26.9.2013-2.2.2014, <http://www.louisiana.dk/dk/Menu/Udstillinger/Tidligere+udstillinger/ARKTIS/Arktis>

nuclear weapon systems and warning systems. Arctic International Relations research reflected this (Heininen, Southcott 2010).

With the thaw between East and West under Mikhail Gorbachev, Arctic international politics changed as well. In 1987, Gorbachev gave the famous Murmansk speech calling for Arctic environmental and research collaboration and disarmament. Finland followed up on this opening with the Rovaniemi process leading to the Arctic Environmental Protection Strategy in 1991. Canada continued this momentum leading to the Ottawa declaration of 1996 establishing the Arctic Council. These developments made the Arctic an area of transnational environmental and research collaboration between the Arctic states and some European states with Arctic research traditions (Heininen, Southcott 2010).

Readers are undoubtedly aware of the expanded global interest in the Arctic in recent years, which culminated in the admission of rising or established Asian powers, China, India, Japan, South Korea and Singapore, as permanent observers to the Arctic Council in May 2013. This Asian interest in the Arctic is driven by environmental (climate change) and political-economic globalization. For instance, Arctic climate change may affect its Chinese weather patterns and thus agriculture and food security with possible impacts on social and political stability. The “rise of the rest” (especially Asia) in the world economy shifts economic and eventually political power to the East. Countries as China and India see themselves as natural stakeholders in the governance of regions around the world, including the Arctic. The rise of Asia has led to an almost insatiable appetite for raw materials and energy, where the Arctic is a possible new politically stable supplier region. The Asian growth economies are export-based economies, whose exports travel on ships, and new, shorter and securer shipping lanes to markets in Western Europe and the East Coast of North America are therefore of interest. Arctic International Relations scholarship today is to a significant extent about this global attention to the region (Li, Bertelsen 2013, also for literature review).

More concrete examples of Arctic International Relations scholarship with relevance for Arctic marine invasive species looks at the history, present and future of the North Atlantic parts of the Kingdom of Denmark (Iceland previously and today the Faroe Islands and Greenland). Here I am interested in the long process of devolution of power from Copenhagen starting in the 1840s with the reestablishment of the Icelandic Althingi as a consultative assembly to the Danish king. What are the conditions for state-building and independence? In my view, they are political will, human capital and fiscal independence (Bertelsen 2013; Bertelsen 2014; Bertelsen, Justinussen, Smits 2014).

And these conditions actually have relevance for the question of Arctic marine invasive species, which make heavy demands on environmental management and scientific capacity for micro-states. The question of marine invasive species and shipping in connection with offshore energy projects, raw materials mega-projects or trans-Arctic transshipment hubs (which Iceland, the Faroe Islands and Greenland have high hopes for), highlights importance of state-, institution- and capacity-building. Iceland, due to intense shipping to and from the island, is already host to a range of marine invasive species (see Thorarinsdottir *et al.*, chapter 6, this volume). These are particular challenges to very small or micro-states, even if they have strong human capital as Iceland or the Faroe Islands, and even more so for Greenland with its human capital challenges. Some of my research has touched upon how Iceland, the Faroe Islands and Greenland as very small or micro-states can design and implement efficient comprehensive security policies, where human capital is key. Marine invasive species highlights the topic of bio-security and the threats increased shipping to these areas (which is highly desired by these societies) poses.

9.3 Linking natural and social systems

Talking about the importance of looking at the interlinkages of natural and social systems to the Esbjerg workshop and probably to most readers of this volume is “preaching to the converted.” However, we are all faced with colleagues and students in either the natural or human or social sciences who are not sufficiently aware of these linkages and their importances, whether scientifically, policy-wise or for the career prospects of our graduates.

Many of the most interesting and important phenomena in the natural or the social world are the results of interactions between natural and social systems. Climate change is probably the most important one right now. Here the human invention of the steam engine and the onset of industrialization and later the invention of the combustion engine led to an explosive rise in the use of fossil fuels which changed the global environment with significant social, political and economic consequences (Stern 2007; Intergovernmental Panel on Climate Change 2013).

Here we are looking at marine invasive species, where an international economic-political phenomenon of shipborne international trade leads to the transplant of species between environments. These invasive

species can have very important environmental consequences, which again can have important social consequences.

In my view, it is important to introduce students from an early stage to this interaction between natural and social systems in the world. Especially in Europe (without the American liberal arts undergraduate tradition), students overwhelmingly set out studying in narrow fields in natural, human or social sciences and are not exposed to interdisciplinary thinking before a later stage. Introducing such interdisciplinary thinking early is important for scholarly reasons, but also for professional reasons. Very few graduates will find work in pure natural, human or social science. Whether they come from natural, human or social sciences many will find work in the intersection of the natural and the social world, where a thorough grounding in this interaction of natural and social systems will be valuable.

In light of the lack of scholarship on the international politics of (Arctic) marine invasive species despite their importance, I will turn to outline how International Relations theory can guide such inquiry.

9.4 Theoretically informed International Relations research on invasive species in the Arctic

International Relations theory is characterized by a number of rich theoretical traditions and their constant debate. The debate between these theoretical traditions is what constitutes to a large extent International Relations as a discipline (see Knutsen 1997 for an overview).

As mentioned above, International Relations as an academic discipline emerged after World War One with the practical purpose of understanding how such an international catastrophe was possible and how to make it impossible in the future. The field was therefore imbued with an agenda of and a belief in the possibility of international progress and cooperation, so the first academic theoretical tradition was liberalism (Knutsen 1997).

However, these beliefs in international progress and cooperation were of course dashed in the interwar years and World War Two. These actions gave rise to the realist school of thought in International Relations, which was much more doubtful of the possibility for international progress and cooperation. Realism was the predominant theoretical school in International Relations until the 1970s, when new liberal schools pointed out the rise of international institutions, interdependence between nations and transnational ties between non-state actors.

In the early 1990s an alternative school, constructivism, gained prominence pointing out that key aspects to international politics and the international system are historically and socially constructed directing our attention to meanings, discourses and norms (Knutsen 1997).

In the following sections, I will suggest how these theoretical traditions in International Relations each can propose useful concepts and assumptions of actors and causalities for exploring the international politics of (Arctic) marine invasive species.

9.5 Realism: Power (Transition), China and the Arctic

Realism is often the starting point for trying to make sense of international politics (although it was a response to liberalism), because it addresses key concepts such as the state, power and the nature of the international system. Looking at the international system, it is clear that the states are very important, perhaps the most important, actors in this system. It is also clear that the states are sovereign and there is no higher authority, there is no world government. There is nowhere to turn for help if a state is attacked by another state, there is no night watchman. Every state must ultimately rely on it self for its survival, even in alliances, which can never be completely trusted. It is a self-help system, and it is an anarchical system in the sense that there is no higher and central authority. Therefore the relative power of states compared to each other and the development of these relative power relationships become very important topics of political strategy and of research (see Knutsen 1997 for overview).

Such a self-help system, where all are left to themselves to survive, gives reason for great pessimism about the possibilities for progress and cooperation, unlike the liberal tradition (which exactly centers on the belief in progress). Realists point back to important authors who have expressed such pessimism concerning progress, as for instance, Thucydides, who in his *History of the Pelopposian War* has the famous quote that the “strong do what they can and the weak suffer what they must.” This 5th century BC quote is not far from China’s foreign minister remarking in 2010 about maritime disputes in the South China Sea, “China is a big country and other countries are small countries, and that’s just a fact” (Pomfret 2010). Closer to the Arctic, it can be noticed that Norway recently has invested in five guided-missile Fridtjof Nansen-class frigates and will invest in more than 50 F-35 fighters, which probably illustrates other sides to the Norwegian-Russian relationship than the recent

amicable settlement of the long-standing Barents Sea maritime delimitation dispute.

Also in the Arctic and in the interface between environment and society do we see power imbalances between states play out, where seemingly more powerful greater states try to use their apparent greater power against smaller states. Right now we see a dispute over mackerel and herring quotas between the Faroe Islands, Iceland, the European Union and Norway. Here the European Union is trying to coerce the tiny Faroe Islands by closing its market to Faroese catches. The most famous example of a larger state trying to coerce a smaller state in the Arctic is of course Britain's ill-fated attempts to use destroyers and rammings by tugboats to stop Iceland from enforcing its expanded economic exclusion zones in the Cod Wars of the 1950s and 1970s (Jónsson 1982).

As mentioned, perhaps the main topic in International Relations research on the Arctic today is the rising Asian interest in the Arctic, and especially what China's political goals and strategy in the Arctic are. As mentioned above, China is deeply concerned by Arctic climate change, but that is an area where brute power is completely useless. However of interest to the topic here of Arctic marine invasive species is China's interests in Arctic shipping. China may have important interests in shipping along the Northwest Passage and the Northern Sea Route (the Northeast Passage), which may pin it against Canadian and Russian sovereignty and also environmental concerns concerning marine invasive species. Will China put its shipping interests above Canadian and Russian concerns about marine invasive species and try to coerce these Arctic coastal states from enforcing costly protective measures against this biological threat? The question here becomes whether China (perhaps backed by Japan and South Korea as major shipping nations in an unlikely show of East Asian solidarity) will try to use its power to get its way?

A realist inspired International Relations research agenda on Arctic marine invasive species will therefore look at the states and their policies and how they attempt to use their power to reach their goals and thus, how these factors may influence the potential for and consequences of Arctic marine invasive species.

9.6 Liberalism: the importance of other actors and their interests

Liberalism is the other grand old tradition of International Relations scholarship (with realism). A mainstay of liberalism is the belief in progress and cooperation. Therefore liberalism has a keen interest in the international institutions and transnational relations and economic relations that can lift the world out of the gloomy self-help anarchy of realism. In the anarchic world of realism, the states are the main actors and their interests and strategies are forced upon them by the anarchic system. In liberalism, there is a much wider range of actors, such as international organizations, corporations, civil society movements, political parties, bureaucracies, etc., and the national interest and strategy is not given by the overarching system, but emerges from a domestic political process involving this wide range of actors (see Knutsen 1997 for overview).

Early interwar liberalism was highly optimistic about international progress and cooperation, but in vain, and therefore called utopian. When liberalism reemerged as an important International Relations research program in the 1970s, it was much less utopian and more scientific. It accepted the states as central actors acting under anarchy, but developed important research programs on how states despite anarchy could collaborate and form institutions, and how economic integration created complex interdependence, often unequal, between countries. The attention to a broader range of actors also led to the introduction of the transnational research agenda (Keohane, Nye 1977; Knutsen 1997). Institutions and transnational relations are discussed further below.

The liberal International Relations tradition also makes useful suggestions for studying the international politics of Arctic marine invasive species. Liberalism raises the questions of who are the actors concerning Arctic marine invasive species besides the states? Possible actors could be shipping interests, importers and exporters, ports, fishermen, ship-based tourism operators, local communities, bureaucracies, and civil society organizations at start and end of the shipping journeys in question.

Liberalism reminds us to ask the questions: "What are the interests of all these different international organizations, state and non-state, commercial, civil society, etc., actors concerning Arctic marine invasive species?" "Who benefits from the shipping creating the biological threats, and who pays the price?" "How are the national interests and positions formed and formulated?" This multitude of interests interacts for forming interests and positions at multiple levels.

The importance of this wide range of actors and their interests for preference-formulation is therefore an important liberal research agenda. This research agenda could look at the role of international organizations as the International Maritime Organization and their efforts to establish a Polar Code along with the Arctic Council and its recent focus on “safe Arctic shipping,” how governments form their positions and the role of a multitude of actors in that process.

9.7 Institutionalism

A fundamental question for debate between realism and liberalism is whether institutions matter? Do international agreements and international law matter? Can the world progress through agreement from anarchy? Or is realism right, that the world is locked in a self-help system where every state is left to rely on itself and might is stronger than right? The counter-argument would sound that, there are a multitude of international agreements, rules and regulations. But a more sophisticated realist criticism could sound that states decide themselves if and when they want to be bound and they can and will break the rules if they judge it necessary. Also a sophisticated realist criticism would be that these rules are set by states and they reflect the power relations between states, so strong states get institutions that reflect and promote their interests. The debate continues with institutionalist arguments that institutions develop lives of their own and have an influence beyond the intentions of the states that founded them. Also institutions can outlive the reasons for their creation, so that they start acting on other issues and in other contexts than what they were created for. Finally institutions affect the people working within them. They socialize and create norms and worldviews different from the ones of their founding states. So why do states create institutions? The liberal institutionalists claim that institutions can facilitate cooperation in the interest of self-interested states acting under anarchy. Institutions validate agreements, create common expectations, facilitate flows of information, address issues of common interest, and make keeping of agreements easier (Krasner 1983, Keohane 1984, Slaughter Burley 1993, Hall, Taylor 1996, Martin, Simmons 2001).

There are important institutions concerning Arctic maritime affairs. The most important is naturally the United Nations Convention on the Law of the Sea, which plays a pivotal role in Arctic international politics. UNCLOS definitely creates common expectations and makes it easier for

the Arctic coastal states and others to cooperate. However, it is also clear that the strongest Arctic state, the United States, has not ratified the convention for domestic political reasons and can remain outside the convention despite the strong international norm of ratification the convention (the Administration does adhere to the convention). The convention creates the rules of the game for claiming extended continental shelves, which facilitates the positive interaction and cooperation of the coastal states significantly. However, it remains to be seen if powerful states as Russia will abide by any negative rulings on its claims to extended continental shelf around the North Pole.

The development of the law of the sea saw bitter conflict between NATO allies over this institution, which is of course the Anglo-Icelandic Cod Wars of the 1950s and 1970s. Here Iceland and Britain were in bitter conflict about the content of important international institutions, the exclusive economic zone, and both sides used state violence to enforce its interpretation of the institution (Jónsson 1982). Another example was the Canada-Spain Turbot wars in 1995. The status of the Northwest Passage and the Northern Sea Route (Northeast Passage) are often depicted to be central controversies of Arctic international institutions in the years to come.

So the institutionalist research agenda concerning Arctic marine invasive species would ask questions such as: "Is it possible to design effective international agreements to minimize the risk of Arctic marine invasive species?" "Will different governments around the world commit to such instruments?" "How will agreements come about, and whose interests will they reflect?"

9.8 Transnationalism (science)

A part of the liberal resurgence in International Relations theory in the late 1960s and 1970s was the focus on transnational relations. Two of the main authors, Joseph Nye and Robert Keohane (1971), defined transnational relations as the movement of information, goods, people and money by non-state actors across borders. This definition captures a multitude of economic, media, academic, people-to-people, etc., relations. In this Arctic marine invasive species context, we will focus on transnational science and indigenous relations.

The Arctic is characterized by transnational scientific research. Science and knowledge production plays an important role concerning the Arctic. The place of science in Arctic affairs is clear from, for instance, the trans-

national International Polar Years, the role of the working groups in the Arctic Council and the use of science for legitimizing a place at the Arctic table for non-Arctic states. We see how outsiders legitimate their presence in the Arctic through science (as in the Antarctic Treaty System). The original European observer states in the Arctic Council from the founding were accepted based on their Arctic research traditions. Similarly, the Asian newcomers are entering the Arctic via scientific research.

The strength of transnational Arctic science raises the questions: “What are transnational science relations concerning Arctic marine invasive species?” “Who are the participants, scientists in universities, various kinds of research organizations, corporate researchers, environmental organization researchers, and from what countries?” Arctic science is transnational (as science in general), which raises the question whether there are Arctic epistemic communities and perhaps even integrated into one? An epistemic community is a transnational group of experts and professionals who agree on what the world looks like, what the challenges are and what the solutions look like (Haas 1992). Possible Arctic epistemic communities could be the working groups of the Arctic Council and the International Arctic Science Committee. So this transnational community of Arctic scientists, do they agree on what the Arctic looks like, what the challenges are and what the solutions would be? Does any Arctic epistemic community have an influence on policy? To what extent is Arctic Council policy based on working group recommendations?

9.9 Transnationalism (indigenous peoples)

Transnational relations can be about people-to-people relations and the linkages of sub-state actors. Another very interesting research agenda on transnational relations in the Arctic is concerning the indigenous peoples and their struggle to protect their rights and interests. The Arctic Council stands out for the prominent place it accords indigenous peoples as the six permanent participants of Arctic Athabaskan Council, Aleut International Association, Gwich'in Council International, the Inuit Circumpolar Council, Russian Association of Indigenous Peoples of the North, and the Saami Council. The various arrangements for indigenous self-government are among the most important traits of the Arctic. As is clear from the six permanent participants of the Arctic Council, it is clear that Arctic indigenous people organize and operate transnationally.

Arctic marine invasive species can be a significant threat to the livelihoods of Arctic indigenous peoples. It is therefore an important transnational studies research agenda to describe and analyse how Arctic indigenous peoples could be impacted by and could mobilize and respond to the threat of Arctic marine invasive species.

9.10 Constructivism

Constructivism is the important newcomer in International Relations theory. The realist and the liberal schools of thoughts share the assumption that identities and interests are given. This is most clear in realism, where the anarchic structure of the international system forces states to act in a self-help way. In economics-inspired liberalism, material self-interest is a given. Constructivists have pointed out that identities and interests are rather socially constructed through social interaction. Actors develop meanings about what their identities and interests are through interaction with other actors. Alexander Wendt made the famous claim that “anarchy is what states make of it” (1992). The constructivist research agenda highlights the power of words, images and norms. How we speak about international politics becomes important because it both reflects established norms and expectations originating in shared meanings, and such talk also is part of an ongoing effort to shape our shared meanings about international politics.

Constructivism makes us think about how we talk about the Arctic, where do shared meanings and understandings come from, and who are trying to change how we talk about the Arctic? The five Arctic coastal states have been collaborating to create a discourse of the law of the sea giving them the rights and the responsibilities to manage the Arctic Ocean. This discourse should create a generally accepted norm that these five Arctic coastal states are undisputedly sovereign in the Arctic Ocean over their exclusive economic zones and their claimed extended continental shelves.

However, these discourses are not undisputed. Most clearly China has been advancing a discourse of China as a “near-Arctic state” with legitimate rights in the Arctic and the Arctic as the “common heritage of mankind.” This discourse is a clear example of China trying to influence the shared meaning of the Arctic in order to gain acceptance for its interests and demands. If China can affect the discourse on the Arctic in the direction of the “common heritage of mankind,” it will strengthen China’s say and role in the region and undermine the discourse of the

five Arctic coastal states as the rightful and responsible sovereigns of the Arctic Ocean (see Li, Bertelsen 2013 for overview of literature).

Constructivism therefore also suggests a potentially fruitful research agenda on the international politics of Arctic marine invasive species. Constructivism points to the question of how do we talk about Arctic marine invasive species? What are the discourses on these invasive species? How are they portrayed as risks and challenges? Who are blamed? What are the norms about Arctic marine invasive species? What is considered as acceptable behaviour by a range of actors globally and in the Arctic? How have the discourse and norms on Arctic marine invasive species emerged? Who have shaped this discourse and these norms? Who are seeking to reshape this discourse and these norms today? What is the effect of Arctic marine invasive species discourses and norms on policy today?

9.11 Conclusion

The Arctic environment is a very fruitful place to study the interaction of natural and social systems. It is an environment, which is deeply affected by human activity around the world through mechanisms as climate change, long-range pollutants or marine invasive species. These environmental changes have significant feed-back mechanisms into local and global environments, politics and economics. The Esbjerg workshop and this volume is all about this natural-social interaction concerning Arctic marine invasive species.

International political and economic processes are important in the original mechanisms and feedback mechanisms of Arctic marine invasive species. Arctic marine invasive species are therefore an obvious International Relations research topic concerning the Arctic and the global environment. Therefore this chapter discusses how International Relations theory can guide research on the international politics of Arctic marine invasive species.

Theory matters. It provides frameworks of assumptions of important actors and causal connections. It guides research explicitly (hopefully), and academic or popular theories guide much debate, analysis and policy-making implicitly. It opens arguments to explicit criticism on its assumptions. It is therefore important to be clear about theory both in scholarship and in debate and policy-making. This chapter tries to assist clear scholarly analysis of the international politics of Arctic marine invasive species and debate and policy-making in broader public and pro-

fessional circles by suggesting how many theoretical traditions of International Relations can assist in understanding the international politics of Arctic marine invasive species.

9.12 References

- Barr, S. and Luedecke, C. (eds.) (2010): *The history of the international polar years (IPYs)*. Berlin, Heidelberg: Springer-Verlag.
- Bertelsen, R.G. (2013): Historical, current and future microstate security policy making in the High North Atlantic: the Faroe Islands, Greenland and Iceland. Zellen, B.S. (ed.) *The fast-changing Arctic: defense and security in a warming world*. Calgary: University of Calgary Press, pp. 159–185.
- Bertelsen, R.G. (2014): *The Kingdom of Denmark – an Arctic history and a complex Arctic future*. Korea Maritime Institute.
- Bertelsen, R.G., Justinussen, J.C.S. and Smits, C. (2014): Energy as a developmental strategy for North Atlantic microstates in search of independence: creating knowledge-based energy sectors in Iceland, Faroe Islands and Greenland. Hønneland, G. and Jensen, L.C. (eds.) *The handbook of the politics of the Arctic*. Edward Elgar Publishing
- Bright, C. (1999): Invasive species: Pathogens of globalization. *Foreign Policy, Fall, No. 116*, pp. 50–64.
- Haas, P.M. (1992): Introduction: epistemic communities and international policy coordination. *International Organization, Vol. 46*, No. 1, pp. 1–35.
- Hall, P.A., and Taylor, R.C.R. (1996): Political science and the three new institutionalisms. *Political Science Vol. 44*, No. 5, pp. 936–957.
- Heininen, L. and Southcott, C (eds) (2010): *Globalization and the Circumpolar North*. Fairbanks, AK: University of Alaska Press
- Intergovernmental Panel on Climate Change (2013): *Fifth assessment report*. Geneva: Intergovernmental Panel on Climate Change.
- Jónsson, H. (1982): *Friends in conflict: the Anglo-Icelandic cod wars and the law of the sea*. London: C. Hurst
- Keohane, R.O., and Nye, J.S. (1977): *Power and interdependence: world politics in transition*. Boston: Little, Brown
- Keohane, R.O. (1984): *After hegemony: Cooperation and discord in the world political economy*. Princeton, NJ: Princeton University Press.
- Knutsen, T.L. (1997): *A history of international relations theory*. 2nd edition. Manchester: Manchester University Press
- Krasner, S.D., (ed.) (1983): *International regimes*. Ithaca, NY: Cornell University Press.
- Launius, R., Fleming, J.R. and DeVorkin, D.H. (eds.) (2010): *Globalizing polar science: reconsidering the international polar and geophysical years*. New York: Palgrave Macmillan.
- Li, X. and Bertelsen, R.G. (2013): The drivers of Chinese Arctic interests: Political stability and energy and transportation security. *Arctic Yearbook*, 16pp.
http://www.arcticyearbook.com/images/Articles_2013/LIBERTLESON_AY13_FINAL.pdf
- Martin, L.L. and Simmons, B.A. (ed.) (2001): *International Institutions: An International Organization Reader*. Cambridge, MA: MIT Press.

- Nye, J.S., and Keohane, R.O. (1971): *Transnational relations and world politics: an introduction*. *International Organization*, V. 25, No.3, pp. 329–349
- Pomfret, J. (2010): *U.S. takes a tougher tone with China*. *Washington Post*. 30 July.
<http://www.washingtonpost.com/wp-dyn/content/article/2010/07/29/AR2010072906416.html>
- Slaughter Burley, A-M. (1993): International law and international relations theory: A dual agenda. *American Journal of International Law* V. 87, No. 2, pp. 205–239.
- Stern, N. (2007): *The economics of climate change: the Stern review*. Cambridge: Cambridge University Press
- Wendt, A. (1992): Anarchy is what states make of it: the social construction of power politics. *International Organization* V.46, No. 2, pp. 391–425.