Sustainability as an integrative principle: The role of international law in Arctic resource development

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Abstract
This article addresses the normative potential of the principle of sustainability to integrate the rules, principles, and procedures of international law applicable in the Arctic, so that Arctic international law can be posited more holistically and systematically. The holistic and integrative approach towards international law is particularly called for in the context of the Arctic, as the inextricable interconnectedness between its changing natural environments, its societal particularities, and its economic and industrial potential is the fundamental characteristic of the Arctic. In line with the purpose of the special issue, this article takes up a harder case of sustainability, in addressing Arctic mineral resource development. This article posits the principle of sustainability as a principle with an integrative function operating behind the primary norms relating to resource development at the international law level. In response to the claim of fragmented nature of the law at issue, this article calls for an academic examination into the normative function of the sustainability principle to forge the relevant and evolving norms applicable in the specific context of the Arctic mineral resource development towards an integral, coherent whole. This aim will be pursued using the analytical methodology employed by the International Law Commission’s (ILC) work on the “fragmentation of international law” (2006) and the “principle of integration” as identified by the International Law Association’s (ILA) work on the international law relating to sustainable development (2002–12). Finally, as an initial attempt to articulate the legal reasoning for such integration, this article examines the legal institution of environmental impact assessment (EIA) as a tool to present a holistic view of the international law on Arctic mineral resource development.

Introduction
This article addresses the normative potential of the principle of sustainability to integrate the rules, principles, and procedures of international law applicable in the Arctic. The purpose of this article is to propose a theoretical framework in which, through the sustainability principle, international law relevant to the Arctic can be posited more holistically and systematically. The holistic and integrative approach towards international law is particularly called for in the context of the Arctic, as the inextricable interconnectedness between and amongst factors such as its nature; ecosystem and resources; human, cultural, and societal particularities; economic and industrial developments; and scientific and traditional knowledge is the fundamental characteristic of the Arctic (Inagaki & Shibata, 2018). In fact, this interconnectedness poses a challenge as well as reflects a strength in envisioning effective Arctic social systems, including the international legal system for the Arctic. In line with the purpose of this special issue on “International Law for Sustainability in Arctic Resource Development,” this article takes up a harder case of sustainability, in addressing Arctic mineral resource development. The term “mineral resources” encompasses all non-living natural non-renewable resources, including fossil fuels, and metallic and non-metallic minerals.

It has been said that “there are already vast amounts of international hard and soft-law applicable in the [Arctic] region that influence how natural resources are managed”; however, “the multi-faceted governance landscape of Arctic natural resources is very fragmented, which calls for increasing scholarly efforts at thinking how to build synergies” (Koivurova, 2016, 364). This article is a response to such a call for a more synergetic examination of international law relating to Arctic resource development, exploring the possibility of horizontal synergies, or integration, of relevant norms of international law at the normative level. This article posits sustainability as a principle with an integrative function operating behind the primary norms relating to resource development at the international law level. This article calls for the academic
examination of the normative function of the sustainability principle to forge the relevant and evolving norms applicable in the specific context of Arctic mineral resource development towards an integral, coherent whole, in response to the characterisation of the law at issue as fragmented.

After ascertaining the sustainability narrative relating to Arctic mineral resources, this article first identifies precisely the fragmented nature of relevant international law in the area of Arctic resource development. In response to such a claim of fragmented nature of the law at issue, this article examines the analytical methodology of the United Nations International Law Commission (ILC) in its work on the “fragmentation of international law” and then the principle of integration identified by the International Law Association (ILA) as one element of the principles relating to sustainable development. Based on such an examination, this article posits the principle of sustainability with such an integrative function. Finally, as an initial attempt to articulate the legal reasoning for such integration, this article examines the legal institution of environmental impact assessment (EIA) as a tool to present holistically the international law on Arctic mineral resource development.

This article presents a general legal framework within which an integrative approach to international law relevant to Arctic resource development could be posited, while other articles in this special issue address specific international legal regimes, such as environmental law or trade law, to achieve sustainable Arctic resource development in an integral manner.

Arctic mineral resources and sustainability narratives

The Arctic region is complex as it is often perceived as a resource development frontier with a long history of resource exploitation. Indeed, according to the much-quoted figures of the 2009 US Geological Survey study (Gautier et al., 2009), the Arctic could potentially contain approximately 13% of the world’s undiscovered oil reserves and 30% of undiscovered natural gas resources. Climate change has accelerated the melting of ice and subsequent resource development in the Arctic, so the conundrum of trying to balance economic development, environmental protection, and human/social concerns is felt even more deeply in the Arctic region (Koivurova, 2017; Koivurova & Hossain, 2012).

The concept of sustainability has been reflected in the national mining policies and laws of many Arctic States (Kokko, Buanes, Koivurova, Masloboev, & Pettersson, 2015; Langhelle, Blindheim, & Oygarden, 2008), but the precise normative implications of these policies and laws in the specific Arctic context have not been clear. The consideration of concrete implications of sustainable mineral resource development for the Arctic has been an important agenda for Arctic international co-operation to date (Petrov et al., 2017). The 1991 Arctic Environment Protection Strategy, the first intergovernmental Arctic-wide cooperative scheme, noted that “the use of natural resources is an important activity of Arctic nations,” and, therefore, “the Strategy should allow for sustainable economic development in the north so that such development does not have unacceptable ecological or cultural impacts” (AEPS, 1991). By 1996, the eight Arctic States and indigenous representatives came to recognise the need to integrate the Strategy’s environmental programmes “with Arctic economics and social initiatives to uphold the principles of sustainable development” (Inuvik Declaration, 1996). The Ottawa Declaration on the Establishment of the Arctic Council brought to the fore the commitment of the eight Arctic States to “sustainable development in the Arctic region, including economic and social development, improved health conditions and cultural well-being” and established a Sustainable Development Working Group (SDWG) (Ottawa Declaration, 1996). The mandate of SDWG is to adopt steps to be taken by the Arctic States to advance sustainable development in the Arctic by improving the environmental, economic, and social conditions of Arctic communities (Arctic Council, 1998). The 2017 SDWG Strategic Framework upgraded this mandate into one of the guiding principles of the SDWG by recognising “the fundamental interconnectedness between the economic, social, and environmental pillars of sustainable development” to achieve holistic stewardship in the Arctic (Arctic Council, 2017a).

What is unique about the SDWG mandate is its emphasis on the perspective of local communities and Indigenous Peoples. The 2017 Strategic Framework eloquently reiterated this SDWG focus on peoples, in particular, Indigenous Peoples who have lived in the Arctic since time immemorial, by promoting the “vibrancy of the region’s peoples, cultures, and values and strengthen[ing] the resilience, capacity and well-being of the Arctic’s richest resource, its people” (Arctic Council, 2017b). This emphasis on peoples’ needs under the Arctic sustainability narrative corresponds to and even epitomises the paradigm shift in the global sustainability narrative since the Johannesburg Declaration on Sustainable Development (United Nations, 2002) that tilted the balance in favour of a variation on sustainable development centred on social well-being (Humrich, 2017; Tladi, 2007, 35–37).

The Arctic sustainability narrative focussing on the needs of local communities and Indigenous Peoples has been incorporated into Arctic Council documents relating to mineral resource development. Updating its 1997 Guidelines, the Working Group on Protection of Arctic Marine Environment (PAME) drafted its 2002 version of the Arctic Offshore Oil and Gas Guidelines in an attempt to incorporate the principles of sustainable development (Arctic Council, 2002). In the guidelines, the principle of sustainable development was identified as one of the three general principles (along with the precautionary principle and polluter pays principle), but the specific commitments requested were of environmental nature, such as the protection of biodiversity, prevention of pollution, protection of the marine environment, and minimisation of environmental impacts.

This was significantly improved in the 2009 version of the Guidelines (Arctic Council, 2009). First, the principle of sustainable development now includes, in addition to its environmental aspects, the integration of social concerns into all development processes (in this case, Arctic offshore oil and gas development) and broad public participation in decision-making. Second, the section on Arctic Communities, Indigenous Peoples, Sustainability and Conservation of Flora and Fauna has been upgraded and positioned before the section on EIA’s. In the Sustainability section, the Arctic States are urged to pursue regulatory and political structures that allow for the participation of Indigenous Peoples and other local residents in the decision-making process. This language is strengthened from the 2002 version, which called only for “meaningful participation.” Finally, taking the language from the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), the 2009 Guidelines urged the Arctic States to consult and cooperate with the Indigenous Peoples concerned through their own representative institutions in order to understand and integrate their needs and concerns with any project affecting their lands or territories and other resources in connection with Arctic oil and gas development (Baker, 2013).
In 2011, the SDWG drafted the Circumpolar Information Guide on Mining for Indigenous Peoples and Northern Communities with the aim to “increase the ability of Indigenous Peoples and residents of northern communities to understand, influence and participate in mining-related processes in order to maximise benefits and minimise negative effects on their lives, culture, land and the environment” (Arctic Council, 2011). While noting that mineral-extractive activities in the Arctic region represent a significant portion of the economic activities of the Arctic countries, the document explicitly recognises that the Indigenous and northern communities are “central stakeholders for a sustainable Arctic.”

The Arctic sustainability narrative directs us to explore the normative potential of the principle of sustainability to integrate the applicable rules of international law so as to promote the participatory role of local communities and Indigenous Peoples in Arctic mineral resource development. The question is how such integration can be constructed at the international normative level.

**International legal framework for sustainable resource development in the Arctic**

International law on mineral resource development is predicated on the principle of permanent sovereignty of States over all their natural resources and economic activities, as pronounced by the United Nations Charter on Economic Rights and Duties of States (United Nations, 1974). This simple pronouncement, reflecting customary international law, requires some legal precision. First, the resources and economic activities over which the States exercise permanent sovereignty are those located in their territories, including their land, their internal waters, and their territorial seas, as identified and delimited by international law. In addition, under the international law of the sea, the coastal States exercise sovereign rights over their continental shelves for the purpose of exploring and exploiting natural resources found there. Since most of the current and foreseeable future developments of Arctic mineral resources occur within the territories and offshore areas of the Arctic States, the permanent sovereignty/sovereign right of the Arctic State, where mineral resources are deposited and developed, provides a basic legal framework to explore the normative potential of the sustainability principle in integrating relevant rules of international law applicable to the Arctic.

Second, the right holder of permanent sovereignty over Arctic resources, according to the 1974 Economic Charter, is the State. Normally, this term does not pose a problem of identifying an entity legally justified to claim the right of permanent sovereignty over natural resources under international law. It is noteworthy, however, that the United Nations Declaration on Permanent Sovereignty over Natural Resources provided “the right of peoples and nations to permanent sovereignty” drawing a clear legal distinction between the colonial states of the time and the right of peoples who would have had the right of self-determination to become States (United Nations, 1962). In the context of the Arctic, this distinction between States and peoples exercising their right of external self-determination remains particularly relevant in the case of Greenland, with its unique historical and legal developments (Johnstone, 2020). Beyond that, the Inuit Circumpolar Council (ICC) declared that “[r]esource developments in [their respective traditional territories] must be grounded in the United Nations Declaration on the Rights of Indigenous Peoples” (ICC, 2009; ICC, 2011). This legal claim of the Arctic Indigenous Peoples directly relates to our main argument below on the normative potential of the sustainability principle to integrate relevant rules of international law in the specific context of Arctic interconnectedness.

The right of the Arctic States to permanent sovereignty over their mineral resources is constrained by corresponding duties under international law (Schrijver, 1997), but mostly in transboundary contexts of resources shared by two or more States or industrial activities with risks of transboundary harm (Barral, 2016). Moreover, such global environmental concerns as climate change, loss of biodiversity, and marine pollution translate into general obligations of State Parties under applicable treaty regimes but are usually couched in discretionary language such as “as far as possible and as appropriate” (CBD, 1992, Art.8). Therefore, as Barral points out, “it seems difficult to discern the existence of a general obligation on States to protect their own environment or to exploit their natural resources in a domestic context in a sustainable manner” (Barral, 2016, 23). More particularly, oil and gas development and mining activities have been identified as the areas of law where “most important regulatory tools remain national” (Talus, 2016, 249), and “from the perspective of international law, there is no comprehensive regulation of mining” (Kidd, 2016, 327). These statements in effect describe the current legal situation surrounding sustainable mineral resource development in the Arctic as still dominated by State permanent sovereignty over natural resources, with limited constraints by obligations of discretionary nature arising from customary international law and applicable treaties (Jakobsen, 2014). This legal situation, however, does not signify a lacuna in international law for Arctic resource development.

At this point, it is essential to explore the question of the “fragmented” nature of the current legal framework on Arctic resource development. First, the relevant customary laws are constantly evolving and could tighten the discretion of States in exercising their right of permanent sovereignty/sovereign right to develop mineral resources. For example, the ILA, a world-leading academic body with the objective of clarifying and developing international law has declared as follows in 2002:

“Principle 1.2: States are under a duty to manage natural resources, including natural resources within their own territory or jurisdiction, in a rational, sustainable, and safe way so as to contribute to the development of their peoples, with particular regard for the rights of indigenous peoples, and to the conservation and sustainable use of natural resources and the protection of the environment, including ecosystems.” (ILA, 2002)

This statement was further supplemented by a guiding statement in 2012 to the effect that “as a matter of common concern, the sustainable use of all natural resources represents an emerging rule of general customary law, with particular normative precision identifiable with respect to shared and common natural resources” (ILA, 2012, para. 3). Would it then be possible to discern the “commonality of interests” (Barral, 2016, 18) in the Arctic legal community that would legitimise the emergence of such rules as to constrain State permanent sovereignty even in non-transboundary contexts?

Another example is that of emerging customary obligations to conduct EIAs. In 2010, the International Court of Justice (ICJ) in its judgement on the Pulp Mills case declared that, although still in the transboundary contexts, a requirement to undertake an EIA is a customary obligation but added that the specific scope and content of such an assessment would be left for States to determine (ICJ, 2010, paras. 204–205). In the Arctic context, the Guidelines on Environmental Impact Assessment in the Arctic were developed in 1997 under the Arctic Environmental Protection Strategy.
and the eight Arctic States agreed to apply them (Alta Declaration, 1997, para. 4). According to Koivurova, this document “provides Arctic-specific guidance on how to conduct safe and sound natural resource exploitation in the Arctic” (Koivurova, 2016, 357). In 2019, the Arctic Council SDWG completed its work on the Good Practices for Environmental Impact Assessment and Meaningful Engagement in the Arctic (Arctic Council, 2019), and the eight Arctic States encouraged their practical application in large-scale development projects in the Arctic (Soini, 2019). Can such Arctic-specific guidance and practices be considered as constituting the specific scope and content of EIA that the Arctic States determined to be applicable to Arctic mineral resource development?

A further example is the general due diligence obligations of States over their private actors undertaking industrial activities so as not to cause transboundary adverse effects. Again, through international jurisprudence, both the precise content and scope of “due-ness” of diligence have been clarified and strengthened (Bankes, 2020). In the Arctic context, the Arctic Council has encouraged “enterprises operating in the Arctic to respect international guidelines and principles” relating to corporate social responsibility (Kiruna Declaration, 2013). The best business practices for earning “social license to operate” mining in the Arctic have also been elaborated by the Responsible Resource Development Working Group of the Arctic Economic Council (AEC) (AEC, 2019; Harland, 2019). The Arctic Investment Protocol, which provides a framework of responsible investment and good business practices in the Arctic, was drafted by the 2016 meeting of the World Economic Forum (Davos) and subsequently endorsed by the AEC in 2017 (Lim, 2020). Do these guidelines and practices inform the substantive content of the due diligence obligation of States in the specific context of Arctic mineral resource development?

Second, treaty-based general obligations could also evolve through jurisprudence and Parties’ practice. For example, the South China Sea arbitral award (merit) recently confirmed the obligations relating to the protection and preservation of the marine environment as provided in Part XII of the United Nations Convention on the Law of the Sea (UNCLOS, Arts. 192–237) “apply to all States with respect to marine environment in all maritime areas, both inside the national jurisdiction of States and beyond it” (PCA, 2016, para. 940). This clarification is particularly significant for our discussion because the marine pollution and harmful changes that trigger States’ obligations of assessment, prevention, and control under the Convention do not presuppose transboundary effects and are applicable in all maritime areas. Under the Convention, the obligations of States to take all measures necessary to prevent, reduce, and control pollution from installations and devices used in exploration or exploitation of natural resources of the sea bed and subsoil shall include establishing global and regional rules, standards, and recommended practices and procedures (UNCLOS, Art.194(3)(c) and Art.208(5)). In the Arctic context, the Ministers of the eight Arctic States endorsed Arctic Offshore Oil and Gas Guidelines drafted and updated twice by PAME (Arctic Council, 2009). In 2013, the same eight Arctic States signed the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic, with detailed non-binding operational guidelines that could be further developed and modified by the Parties (MOPPR Agreement, 2013). Can these instruments be considered as Arctic-specific regional rules and recommended practices as required by UNCLOS (Churchill, 2015, 164–174)?

Finally, it is said that international law related to Indigenous Peoples has had an “influence” on how natural resources are being exploited in the Arctic (Koivurova, 2016, 360–361). Both the ILO Convention No.169 (ILO, 1989) and international practice and jurisprudence recognise the rights of Indigenous Peoples, including a requirement of free, prior, and informed consent (FPIC) over natural resource development undertaken in their traditional territories, have been cited as applicable international law. The rights of Indigenous Peoples are now reflected in the United Nations Declaration on the Rights of Indigenous Peoples (United Nations, 2007). What is the precise normative extent of such “influence” in relation to the overarching permanent sovereignty of States over their natural resources and their economic activities in the Arctic (Åhrén, 2014)?

In other words, the above examination has left unanswered the question of the normative relationships, if any, between and amongst the Arctic-specific normative developments, both hard and soft law, on the one hand, and the evolving general international legal framework on mineral resource development, on the other. This normative disconnectedness can be described as “fragmentation.”

From fragmentation to interrelationships

As explained in the Introduction, this article does not address specific areas of international law to achieve sustainable resource development in the Arctic in an integral manner. There is already a wealth of such academic research, for example, in the areas of international law regulating EIA in the Arctic (Koivurova, 2002; Koivurova, 2008; Sander, 2016); international law regulating Arctic offshore oil and gas development (Johnstone, 2015); international law of the rights of Indigenous Peoples as to natural resources in the Arctic (Åhrén, 2016, 214–218; Bankes, 2010); and, more recently, international trade regulations to achieve Arctic sustainable development (Chong, 2019; Kobayashi, 2020).

Instead, this article aims to establish a theoretical framework or a general framework of legal reasoning capable of positing the Arctic international law on resource development more holistically and systematically. For such an aim, the methodological approach taken by the United Nations International Law Commission (ILC), which addressed the problématique of “fragmentation of international law,” is useful (ILC, 2006). The ILC’s study dealt with the so-called proliferation of treaty regimes and examined legal solutions in resolving potential conflicts between such treaty regimes. As briefly described above, the current state of international law around Arctic resource development rarely raises such conflicts in applicable treaty regimes. On the other hand, in the context of Arctic resource law, it is useful to follow the ILC’s analytical approach, first, to seek “relationships” between and amongst the relevant international legal norms, and, then, to examine the normative function of general principles as well as “general frames” of legal reasoning (Id., para. 469) to construct a coherent understanding of them.

Utilising the ILC’s norm-relationship matrix of general versus special norms, earlier versus later norms, and more important versus normal norms, the development of the international legal regime of Arctic resource development may be characterised as follows:

(1) It is overwhelmingly controlled by general norms of customary and treaty law dating back to the 1970s (permanent sovereignty) and the 1980s (law of the sea);
(2) Regionally based special norms of soft law nature have been developing since the 1990s, particularly in the area of Arctic environmental protection; and

(3) Important general norms relating to Indigenous Peoples have entered the Arctic legal discourse since the 2000s.

This is, of course, an oversimplification but still serves as a useful general frame to examine the normative interrelationships in this area. First, the more specific and later norms of Arctic environmental protection do not purport to be a regional exception to or derogation from the general international law of resource development (ILC, 2006, para. 211) but rather an application or elaboration of it (Id., para. 98). In such instances, what would be important is not the soft nature of the instruments but the actual State practice that would effectuate the elaboration of general law in the specific context of the region, in this case, in the Arctic.

Second, the ILC brought to light an “important practice that gives effect to the informal sense that some norms are more important than other norms [. . .], and those important norms should be given effect to” (Id., para. 327). The legal vocabulary, according to the ILC, that gives expression to such important norms are the concepts of jus cogens and obligations erga omnes. The ICJ, the principal judicial organ of the United Nations, has declared that the respect for the right to self-determination of the peoples of non-self-governing territories (ICJ, 1995, para. 29; ICJ, 2019, para. 180) and those under foreign occupation (ICJ, 2004, paras. 155–156) is an obligation erga omnes. Although these authoritative pronouncements do not directly relate to Indigenous Peoples, the international law on self-determination itself is evolving as to both its subjects and its substantive content (Cambou, 2020). Indeed, the United Nations Declaration on the Rights of Indigenous Peoples, although non-legally binding, explicitly recognises the right of Indigenous Peoples to self-determination as well as other rights that are based on it (United Nations, 2007, Arts. 3 and 4). These normative developments attest at a minimum to the importance of the rights of Indigenous Peoples recognised under international law in relation to other norms of international law on mineral resource development.

In constructing the holistic understanding of those relationships amongst relevant norms of Arctic resource development, the ILC’s study sees the relationships as part of a “system.” In other words, the legal reasoning to understand the relationships and interrelationships of seemingly random rules, decisions, or behavioural patterns must be the “operation of a whole that is directed toward some human objective” (ILC, 2006, paras. 32–34). In the present case, the objective is to achieve sustainable mineral resource development in the Arctic. The examination above on the Arctic narrative on mineral resource development showed recognition by the Arctic community of the fundamental interconnectedness between the economic, social, and environmental pillars of sustainable development in the Arctic, with an increasing emphasis on the participatory role of local communities and Indigenous Peoples.

This leads to the second phase of analysis on the normative function of general principles to coherently understand the interrelationships of relevant norms of Arctic mineral resource development, with a clear objective of achieving sustainable development in the Arctic.

Towards integration: The principle of sustainability

A more in-depth discussion of the principle(s) of sustainable development as such being beyond the scope of this paper, the aim of this article is limited to finding a general principle and/or general frame of legal reasoning “in the background” (ILC, 2006, para. 30) of the relevant norms of Arctic mineral resource development that will assist us in constructing them in a holistic and coherent manner. Moreover, achieving sustainable development or a factual state of sustainable development as a political objective should be distinguished from norms or principles relating to sustainable development under international law. Sustainable Development Goals (SDGs) are the former genre, whereas the principles declared by the ILA in 2002 are the principles the application of which “would be instrumental in pursuing the objective of sustainable development” (ILA, 2002). This article is interested in this latter genre.

Along with some substantive principles, one of them being the principle of sustainable use of natural resources as cited above, the ILA’s New Delhi Declaration of Principles of International Law relating to Sustainable Development contains the “principle of integration and interrelationship” which, by reason of its sheer title, is particularly relevant for the present discussion.

- Principle 7.1 The principle of integration reflects the interdependence of social, economic, financial, environmental, and human rights aspects of principles and rules of international law relating to sustainable development as well as of the interdependence of the needs of current and future generations of humankind.

- Principle 7.4 In their interpretation and application, the above (six) principles are interrelated and each of them should be construed in the context of the other principles of this Declaration. Nothing in this Declaration shall be construed as prejudicing in any manner the provisions of the Charter of the United Nations and the rights of peoples under that Charter.

The principle of integration within the context of sustainable development thus involves two levels. The first is the mandate to integrate economic, social, and environmental aspects (objectives, priorities, interests, concerns, etc.) in implementing the relevant principles and rules of international law. This involves integration at the factual level in legal implementation or in the decision-making phase. The second is the mandate to integrate the relevant norms of international law at the normative level in constructing, interpreting, and applying them (Barral & Dupuy, 2015). It is the latter level of normative integration, in Iron Rhine Railway arbitration, the Permanent Court of Arbitration said that “[e]nvironmental law and the law on development stand not as alternative but are mutually reinforcing, integral concepts” (PCA, 2005, para. 59). This is also sometimes called “the principle of reconciliation” (Weeramantry, 1997).

Either integrative or reconciliatory, this principle identifies a normative function operating behind and/or in-between the primary norms of behaviour, whose function is to inform, coordinate, adjust, and/or even modify the way the primary norms are created, interpreted, and applied. This is in essence what Vaughan Lowe called an interstitial norm, which will “exercise a very great influence on the [international legal] system” (Lowe, 2000, 217). Its normative force of integration does not depend on its acceptance by States, but rather on its clear and coherent articulation in its legal reasoning (Lowe, 1999, 35). Thus, the principle of integration can also be characterised as a general framework of legal reasoning. The interstitial function of the principle of integration, however, has a direction, a clear objective to achieve sustainable development (Barral, 2012). Since the political objectives of
sustainable development vary with time, place (nationally, regionally, and globally), and issues (climate change, resource development, etc.) (Pram Gad & Strandsbjerg, 2019), the operation of the principle of integration would also be specific to the context (Cordonier Segger & Khalfan, 2004, 106). The principle with such an integrative function operating behind the primary norms relating to resource development at the international law level could be called the “principle of sustainability”. It is submitted that the academic examination of the normative function of the sustainability principle to forge the relevant and evolving norms applicable in the specific context of Arctic mineral resource development towards an integral, coherent whole is now called for, in response to the claim of fragmented nature of the law at issue.

As an initial attempt to articulate the integrative function of the sustainability principle in the context of Arctic mineral resource development, two additional insights should be mentioned. The first is integration at a knowledge level. Because the Arctic represents one of the most rapidly changing natural as well as social environments given the effect of climate change, it is extremely important to take into account the “new norms and standards [that] have been developed [...] [o]wing to new scientific insights and [...] a growing awareness of the risks” (ICJ, 1997, para. 140). The inter-temporal aspect of this statement relates to the establishment of a relationship amongst norms as discussed above (ILC, 2006, para. 475 – 478), whereas the integration of the newest scientific knowledge and societal awareness, as identified through social science and humanities studies, into the sustainability discourse is novel. Of course, these new scientific insights and growing awareness of the risks in the Arctic might already be incorporated into the preferences and expectations of the Arctic community, which form the political objectives of the normative exercise of integration through the principle of sustainability. However, an identification of the newest knowledge as an independent element in the sustainability discourse, it is submitted, should be retained particularly in the context of Arctic resource development (Bertelsen & Justnussen, 2016).

Second, the ILA’s Sofia Guiding Statements and its 2012 report suggest certain international legal institutions, if properly designed for the specific objective, could promote the integration of relevant norms, and cite the EIA regime as “one of the most powerful integrative tools currently available” (ILA, 2012, 864). The ILA focussed on the role of EIA in integrating developmental and environmental concerns in project-level decision-making processes (ILA, 2006), thus, at the factual level of integration in our denomination. However, a closer look at EIA as a legal institution does provide a useful hint in articulating the integrative function of the sustainability principle at the normative level, particularly in the specific context of Arctic resource development.

**Articulating integration through EIA for Arctic resource development**

The international legal regime of EIA is founded on a normative structure that connects the legal institution of EIA with other international procedural norms such as notification and consultation; with substantive international environmental norms such as prevention, due diligence, and precaution; with global environmental norms under, for example, the Convention on Biological Diversity, Climate Change regimes, and the law of the sea (Craik, 2015); with individual rights such as public participation and human rights (Boyle, 2011); and with international financing and investment norms (Vihuales, 2012). The obligation to undertake EIA is firmly situated within the framework of legal principles relating to sustainable development, being enunciated in Principle 17 of the United Nations Rio Declaration on Environment and Development (United Nations, 1992) and in Principle 4.2 of the ILA New Delhi Declaration (ILA, 2002). As such, in addition to being itself a norm of customary international law, the regime of EIA, at the international normative level, can function as a conceptual tool to identify the relevant norms of international law applicable to a particular genre of economic activity or policy and to frame legal reasoning that would potentially integrate the relevant norms of international law in order to pursue the objective of sustainable development. The present case examines Arctic mineral resource development, and the required examination is to articulate the integrative reasoning of the sustainability principle through the normative structure of the Arctic EIA.

The 1997 Arctic EIA Guidelines (Alta Declaration, 1997) and the 2019 Arctic EIA Good Practices (Arctic Council, 2019) are examined to tease out legal reasoning that would provide a general frame or direction towards the integration of relevant norms of international law in Arctic resource development. For such an exercise, as explained above, it does not matter whether the documents at hand are legally binding or not.

First, it is clear that these documents are based on the recognition of “commonality of interests” amongst the Arctic States and their peoples for the need of specific international norms that take into account the unique Arctic natural environment as well as the social and cultural aspects of the peoples in the Arctic. It is particularly noteworthy that the recommended practices for EIA in those documents do not presuppose transboundary harm but are based on the specificity of the Arctic as one and integral region. The 2019 Good Practices document is explicit in its relevance to large-scale economic projects, including mineral resource development. These premises provide a strong rationale for potential normative development that would further constrain State permanent sovereignty in the case of Arctic mineral resource development. Second, the normative structure of recommended Arctic EIA calls for a precautionary approach, particularly because of the scientific uncertainties in relation to Arctic environmental and social baseline criteria. This may be the basis for introducing a precautionary approach in making, interpreting, and applying relevant norms of international law relating to Arctic mineral resource development. At the same time, the normative structure of the recommended Arctic EIA does not enjoin economic development, particularly the economic development of the peoples in the Arctic, unless the international hard-law thresholds of significant transboundary harm would be likely. This may be the basis for the application of the “weaker” version of the prevention principle applicable in the Arctic, similar to the normative structure of domestic EIA (Craik, 2015).

Third, the normative structure of the recommended Arctic EIA emphasises public participation, especially the participation of Indigenous Peoples because it is particularly important in the context of the Arctic to assess the social and cultural impacts as well as to incorporate local and traditional knowledge in the assessment process. The 1997 Guidelines define traditional knowledge as “accumulated knowledge held by Indigenous peoples on the Arctic environment, and the management of its resources for present and future generations.” At the same time, the two documents stop short of explicitly referring to their right to self-determination or any of the specific Indigenous rights arising from such recognition, such as FPIC. Normative importance is attached to the
incorporation of their knowledge, rather than their right to participate in decision-making. The 2019 Good Practices document mentions social impact assessment (SIA), but not in the indigenous-specific context and is somehow detached from rights such as FPIC. Considering the claims by Indigenous Peoples in the Arctic as exemplified in the two declarations by the ICC, as mentioned above, the legal reasoning to integrate human and indigenous rights under international law into the law of Arctic mineral resource development may require further articulation beyond the examination of EIA as a legal institution (Cassotta & Mazzo, 2015; Johnstone & Hansen, 2020).

Conclusion

The Arctic regions are characterised by the fundamental interconnectedness of the economic, social, and environmental pillars of sustainable development; however, the current state of international law of Arctic mineral resource development is fragmented, in the sense that the Arctic-specific normative developments, on the one hand, and the evolving general international legal framework on mineral resource development, on the other, are disconnected, not articulated in a holistic manner. In order to respond to the pertinent call for more synergies amongst those normative developments in the field, this article utilised the methodological approaches employed by the ILC’s work on the “fragmentation of international law” and the ILA’s work on the “principle of integration” as one principle relating to sustainable development. Having identified the legal foundation of such an integrative principle for the sustainable use of Arctic resources, this article demonstrates that sustainability can be posited as an interstitial principle, with a normative force of integration that would function to forge the relevant and evolving norms applicable in the specific context of Arctic mineral resource development towards an integral, coherent whole. The legal institution of Arctic EIA, as developed by the Arctic Council documents, provides a useful tool in articulating the integrative function of the sustainability principle at the international normative level. However, it is distinctly limited in its ability to effectively integrate human and Indigenous rights perspectives into the international law of Arctic mineral resource development.

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