Cartography and Geopolitics in the Arctic Region

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ABSTRACT

This paper discusses the relationship between geography and politics; and more specifically, the relationship between sovereign claims and cartography. I introduce the term 'cartopolitics' to describe a particular way of making space real and corresponding with politics that defines contemporary bordering practices in the Arctic region. The paper argues that too often boundary studies assume that socio-political space arises as a result of boundary practices. In contrast, this paper proceeds from a notion that space should precede boundaries in the analysis because, unless space is taken as a natural given and constant background, its 'construction' conditions how boundaries can be established in the first place. In sequence, I argue how the United Nations Convention on Law of the Sea builds on – and requires – a particular spatiality epitomised by so-called modern cartography. This has implications for the way in which sovereignty over space is transferred from a political to a scientific domain, and essentially, it tends to mask the constructed nature of the spatiality given objectivity through the law of the sea.

Geographical knowledge clears the path for commercial enterprise, and commercial enterprise has been in most lands the beginning of civilization (Stanley 1885: 4)

INTRODUCTION

This quote by Henry Morton Stanley illustrates how the study of geography was intimately linked with the growth of the British Empire. He was convinced that the previous "white blank in the old maps" had been proved to contain "unexampled fertility, watered by mighty rivers, which have their perennial sources in deep woody recesses on the flanks of the mountain barriers" (Stanley 1885: 15). His inaugural address to the Scottish Geographical Society, from which these quotes are taken, was delivered during what is known as the 'scramble for Africa' (Pakenham 1992), and the quest to control the resources and trade routes of the world by European empire-states. Recently a similar discourse has resurfaced in the public domain. Headlines such as 'Canada joins rush to the Arctic' and 'The scramble for the seabed' clearly echo imperial histories of European expansion and a particular set of geographical imaginaries.1 The image of the melting ice cap increasing the accessibility to a hitherto 'white blank' on the map, supposedly containing considerable wealth in terms of natural resources, has reinvigorated fantasies of exploration and expansion into terra nullius, and a new (black) gold rush.

The sensationalist discourse was supported by Russia's spectacular planting of a Russian flag on the seabed under the North Pole, symbolically claiming the Arctic region as Russian during their Arktika expedition in 2007. This performance supported the image of the lone (apart from his black entourage) explorer reaching the peak of an African mountain and claiming the surrounding land for Great Britain (or some other empire-state). And indeed the submarine event triggered newspaper articles showing large parts of the Arctic Regions under a Russian flag (Proelss 2009). Now, while in the past territorial claims were often legitimised - and accepted - through military might and symbolic acts performing ownership of land by, for example, erecting markers representing one or another sovereign (Keller, Lissitzyn et al. 1967), the situation regarding the creation of new boundaries in the High North is governed by the United Nations Convention on the Law Of the Sea (UNCLOS). And with the signing of the Ilulissat declaration in 2008 all the Arctic Sea states have confirmed their commitment to this legal framework. Hence, whereas the militaristic echoes of imperial geopolitics from the past have surfaced in the media, the issues seem to be much less controversial on the ground, so to speak. Instead, what is more interesting concerning the situation in the Arctic is the way in which the UNCLOS define the criteria for boundary extension. Through a set of geomorphological conditions defined in the convention, the rights to expand 'marine territory' are determined by scientific measurement; i.e. cartography. That is, the Arctic possibly represents a theatre for cartopolitics rather than conventional geopolitics. By cartopolitics I seek to describe how politics correspond with a cartographically constructed reality of space, and how it is cartography that condition the way in which sovereignty can be tied to a certain understanding of territory.

As such the paper partly follows the agenda set by critical geopolitics in the 1990s (Ó Tuathail 1996; Dalby and Ó Tuathail 1998), but it diverts in terms of methodology by emphasising (cartographic) practices rather than discourse as a way of analysing how space is

I Financial Times August 9 2007; the Economist May 16 2009.

made to condition politics. In that respect I side with Nigel Thrift when he states that the reading of texts "producing the world as discursive construction in a way which has problematic consequences for understanding *how* (and therefore why) geopower is actually practiced" (Thrift 2000: 380). He calls for greater attention to specific material practices such as census taking, map making and so on (Thrift 2000: 382-83).

The aim of this paper, then, is to argue that the way in which sovereign jurisdiction in the Arctic can legitimately be expanded has turned the issue of boundary practices into a question of cartopolitics instead of conventional geopolitics. The term cartopolitics signals an occupation with the way in which cartography establishes a particular spatial reality which conditions the relationship between politics and space; and this peculiar relationship has effects on boundary practices and the way in which sovereignty can be located and defined in spatial terms. To begin, I briefly outline the Arctic as a new arena of geopolitics. Then, I move on to argue that the notion of space should precede the discussion about boundaries in the sense that space conditions how boundaries can be established. Too often, I suggest, boundaries are considered to be constitutive of space, and not vice-versa. In sequence, I discuss the notion of cartopolitics and how cartography establishes a particular spatial reality which allows boundaries to be drawn in a specific way. Following from that, I discuss how the \$76 of the UNCLOS, in effect, turns geopolitics into cartopolitics, and how this raises questions concerning science, nature and politics. Finally, I return to the issue of empire and the role of cartography and geography in expanding the reach of empire-states. The discussion centres on the peculiar role of the Denmark-Greenland relationship in this new geopolitics of the Arctic, and suggests that the substantial issue at stake in these processes is how a particular spatiality is prioritised and used as an 'objective' or scientific criterion for the distribution of political rights to space.

THE ARCTIC AS A NEW ARENA OF GEOPOLITICS

Over the last decade, at least three factors have increased and broadened the political concern with the Arctic: A shrinking ice cap that increases accessibility to resources and potential shipping routes; technological developments facilitating extraction of resources (mostly 'petro') from deep seas; and the ratification of UNCLOS, which has allowed countries to extend their sovereign right to harvest resources into the sea, has put the Arctic back on the political map. This has changed the geopolitics of the Arctic from one being concerned with military security concerns (seen from the perspective of states; from the perspective of the people living in the Arctic it is an altogether different matter) to a place in which exploitation of natural resources and delineation of sovereign jurisdiction have become prevalent.

The two Polar Regions are often treated as being similar and facing similar issues regarding international governance of these places. Whereas Antarctica has been subject to political interest and concern in terms of establishing a legal regime to govern the area as a shared space between potential claimants, the Arctic region has until recently evaded great headlines and great political concern. There are obvious reasons for that. Antarctica is a continent, mostly occupied by penguins, governed by an international treaty and surrounded by sea. The Arctic, on the other hand, is a mediterranean sea covered by ice and surrounded by land occupied by people falling under the sovereign jurisdiction of a state (Osherenko and Young 1989: 12). In effect, the Arctic and the Antarctica are almost mirror opposites, and



^{*}There are a number of ways of defining the Arctic; one is to identify by mean temperatures (the curved line on the map); another is the geographical definition running above 66°33' North latitude (the dotted line on the map).

Source: The University of Texas Perry-Castaneda Library map collection.

 $http://www.arctic.noaa.gov/detect/detection-images/climate-overview-arctic-map.jpg \ (last \ visited \ 10/7/2009).$

the legal concerns with boundaries are also different. In 1959 an Antarctic Treaty was signed with the aim to secure peace, cooperation, and freedom of scientific research. The treaty created a standing organisation with 39 members bound not to seek expansion of their territorial rights in the region (Calvocoressi 2009: 797). In the Arctic, on land, sovereignty issues are (mostly) settled, and so what is disputed in the region today is not questions of territory but questions of extending sovereign rights from established territories into the sea.

The rights in question generally concern two things: The right to control fisheries and harvest resources from the seabed. Whereas most of the Arctic Sea countries (Russia, US, Canada, Norway, and Denmark) are expected to gain economically from potential resource extraction, Denmark represents a peculiar presence in the Arctic region. Denmark is only present in the Arctic through its (post-)colonial relationship with Greenland. I.e. if Greenland declares independence, then Denmark would no longer be an Arctic state. At the same time, all foreign and security policy is ultimately decided from Copenhagen, and this has been a sore point in the relationship between Greenland and Denmark for years. This leads to a paradoxical relationship: For years it has been one common discourse, though not the only one, that the event of Greenlandic independence was a question of resources. If the Greenland economy would grow strong enough to sustain the current standard of living without being subsidised from Copenhagen, then independence would be the popular option. Now, if the expected resources prove to be as promising as some estimates suggest (for example, the US Geological Survey's estimate that the Arctic contains 25% of the world's oil reserves), then Denmark's attempts to ensure a larger continental shelf for Greenland could indeed contribute to the independence of Greenland, and Denmark would lose its status as an Arctic state.

Compared to the situation in the Antarctica, the legal and spatial conditions for boundary practices are very different in the Arctic. Due to its treaty governance, boundary practices in the Antarctica are a question of bi- and multilateral relations between the present countries. The land areas of the Arctic are inhabited and they are already divided between sovereign states. The central area of dispute - the Arctic Ocean - is a maritime area and as such governed by the UNCLOS, which represents the general international legal framework in maritime areas.2 As such, boundary practices represent relations between states and international law, between neighbouring states, and between state governments and the array of organisations representing indigenous people. Among the latter, the Inuit Circumpolar Council has been particularly vocal in voicing the rights and claims of the Inuit population living in the 'High North'. They have questioned the spatiality and assumptions that inform the UNCLOS regime and the ensuing practices of dividing space. I will return to this towards the end of the paper after arguing why 'space' should precede 'boundaries' in the discussion about bordering practices, and discussing how article 76 of the UNCLOS presents a regime of cartopolitics in the Arctic Sea.

2 In that respect it is important to make a distinction between the Arctic Sea states and Arctic states/regions in the context of mining extraction and the resource promise. The latter has been going on for at least a couple of decades (Chaturvedi, 1996, quoting Osherenko, G. and O.R. Young 1989); what is new is the focus on the maritime resources.

THE SPATIAL CONDITIONS OF BOUNDARY MAKING

After the Cold War there was a growing concern with boundaries: First, the idea of a new World Order fuelled by a sense of globalisation was accompanied by a belief that boundaries were of diminishing importance; second, the break-up of states and the resurgence of nonstate nationalism turned the attention towards the changing character of boundaries and a focus on the relationship between identity and boundary practice. These concerns generally share an occupation with different practices that constitute or maintain the boundary, and few have investigated the spatial conditions that make it possible to maintain boundaries in a particular manner. It is a common assumption that (socio-political) space is a result of boundary making. In a classical example from historical sociology, Anthony Giddens emphasised how it was the changing nature of borders from loosely defined frontiers to clearly demarcated boundaries that characterised the development of the modern state (Giddens 1985: 85). Here we get an impression that it is simply a question of drawing and enforcing boundaries against a stable spatial background which decides the character of the territorial space characterising the particular historical configuration of state power. However, as Stuart Elden has argued, "it is the understanding of political space that is fundamental and the idea of boundaries a secondary aspect, dependent on the first" (Elden 2005: 11). This is to say that we have to investigate the spatiality of territory as preceding boundaries instead of taking political space as something that is constituted primarily by the boundary.

The discussion about the role of territory in international relations, largely fuelled by ideas of globalisation, has indeed focused on the role and permanence of boundaries: How they have been transcended, changed and no longer

correspond with people's identities. However shifting the primacy to space instead of boundaries changes the way in which boundaries are conceptualised. Key to this shift is that in discussions of territory, where the emphasis is on boundaries, there is a necessary notion of natural space remaining as a stable physical background against which boundaries can be drawn. And through the demarcation of such boundaries, socio-political spaces are being defined on top of a given natural reality of space. In consequence, approaches that see political space solely as an outcome of boundary practices, by implication assumes the a priori unity of space. And this is the case both with scientific realist approaches maintaining a notion of reality independent of social processes and knowledge production, but it is, indeed, also the case with much social constructivist work concerning boundaries and political space. Yet, if space is not taken as a given background to social practices then it should become obvious why space-formation necessarily precedes boundary-practices and conditions the way in which boundaries can be established.

Bruno Latour has somewhat controversially suggested that the most significant impact of 'the West' in the history of the world is the 'insertion of a unified nature' behind cultural differences (Latour 2002: 11-12). This turns conflicts over space into social or cultural affairs - understood in a narrow sense - while leaving 'the unified space of nature' as an undisputed settlement. Prior to the European Renaissance there were no general, or standardised, measures of space. Generally distance-space was measured in travel time; use-space, such as agricultural land, was measured in functional measures such as the time it took to work the land (carrucates) or the amount of seed required to sow the land (barrels), and so forth. In terms of representing territory, there were no uniform or universal cartographic standard that would bring unity to space. In correspondence, territorial boundaries were often unclear zones and the constitution of the territory did not take place as a result of boundary making, but rather as a result of social ties of allegiance which would tie the land-holding nobility and the church to a sovereign. The territory of the sovereign would then, in principle, vary with the allegiance of landholding subjects. As such, boundary making was secondary to the assemblage of territory through social networks, and there were no uniform measures of space that would allow for boundaries to be drawn or defined in accurate terms (I develop this argument in more detail in Strandsbjerg 2010/ forthcoming).

Hence, the way in which space is made real through cartographic, or knowledge, practices conditions the way in which boundaries can be demarcated. And, the notion of a unified spatial reality requires some notion of abstraction from social practice and the immediate experience of the landscape. With a cartography informed by geometry in the European Renaissance, a system was set up which allowed space to be measured and mapped with reference only to measurement and calculations based on geometry. The same cartographic principles gradually came to be applied whether maps were global, territorial or of household or private property. As the globe was conquered and surveyed, Europeans gradually produced a cartographic image that represented an abstract assemblage of global space. With the abstract knowledge of space provided by the geometric map it became possible to make decisions about spatial partitions and boundaries simply based on a visual representation of space. Without such knowledge it would be necessary to make specific references to known features of the landscape or it would be necessary to travel through the landscape and mark off the boundary directly on the ground. Translated into the geopolitics of boundary making, this means that political organisation of space is as much about defining a particular spatial reality as it is a question of enclosing, territorializing, controlling or otherwise partitioning space.

I have adopted the term cartopolitics to describe how politics correspond with a cartographically constructed reality of space, and how it is cartography that conditions the way in which sovereignty can be tied to a certain understanding of territory. Whereas it is a widespread belief that maps are representations of existing spaces, it is widely established in the literature on the social power of cartography that map making plays a performative role in the constitution of political space (Wood 1992; Harley and Laxton 2001). On a general level cartography, as a specific cultural form mediating space and society, plays a conditioning role for the way in which space is conceived and territory can be produced. On a more specific level, cartography, as a specific spatial knowledge technology, plays an instrumental role for the state in shaping and using territory as a means of control and governance. Historically, the early developments in 'scientific cartography' in early modern Europe allowed state sovereignty to be defined in territorial terms by abstracting the notion of territory from society (Strandsbjerg 2008). The reasoning behind this claim is that when the knowledge and understanding of space is abstracted from its social functionality, it becomes possible to conceive of space as an autonomous category that exists by virtue of itself. To exemplify this, political territories in Medieval Europe were, as a rule, constituted through personal networks of loyalty that brought the possession of various lords within the realm of a territorial ruler. In this system it was near impossible to think of the territory independently of this social network. With the advent of so-called modern cartography, it became possible to represent space as autonomous, and hereby territory took on a more defining role in terms of the boundaries of the state and society.

Crucially, this allowed territorial divisions of areas that were unknown; that is, it enabled a division of territories to be. This was the case with the Treaty of Tordesillas which, in 1494, divided the world into a Spanish and a Portuguese sphere and determined legitimate sovereignty claims of lands yet to be discovered between them. The Tordesillas Treaty set up a system in which territorial claims were based on and legitimised by cartography. The treaty was established in order to find a negotiated settlement between the expanding empires of Spain and Portugal in order to avoid large-scale conflict over the issues of control and legitimate possessions in the new colonies. The treaty divided the world according to a longitudinal boundary in purely abstract terms, meaning that nobody knew exactly where the boundary was running nor what existed on either side of the boundary; but these were issues that, in principle, were going to be solved through cartography. It was only when the Atlantic and the Americas were explored further by the Iberian powers that they realised what lands had come into their legitimate - from their point of view - possession through this treaty. It was, for example, due to the Tordesillas Treaty that Brazil became Portuguese because it was located on the Eastern side of the boundary.

The Treaty of Tordesillas can be said to have institutionalised the primacy of cartography for territorial settlements between competing states. While there is no linear history in the development of the relationship between mapping and politics, Tordesillas stands as a striking historical example of how politics of spatial control came to be mediated through a specific, geometrically based, cartographic regime which turned rightful possession into a question of science and measurement. As such, Tordesillas stands as a striking historical parallel to the current UNCLOS regime, which also prescribes mapping as a way to legitimise claims to terra nullius. In the historical cases of

disagreements between Spain and Portugal, it was common to set up 'juntas' (small scientific committees) from both sides and then meet and discuss the various claims (Lamb 1974). As such it was a matter of negotiation to reach a settlement, but the legal terms of the negotiation were to a large extent defined by the bull Inter Caetera issued by the Pope in 1493 to settle the dispute between the Iberian powers.³ As such the Tordesillas regime can be described as a universal authority (the Pope) issuing directions for how to solve disputes over territory through cartography. I.e. let science and the land speak. In the current UNCLOS regime there is likewise a universal authority (the UN) that describes the principles through which sovereign claims should be settled.

Now, whereas land boundaries could be established based on practical knowledge of the landscape, and thus without an abstracted knowledge of space, it is clear, however, how the abstract knowledge of space presented by the geometric map allows boundaries to be described and enforced as simple coordinates referring to a spatial reality mediated by the map. In practice, boundaries have been described through a combination of spatial features of the landscape and abstract spatial coordinates. In the boundary documents drafted in Paris in 1921 describing the Danish-German border, a combination of spatial points described in longitude and latitude is combined with references to features in the landscape such as Vesterskov Mølle (a mill), or a bridge located west of Skomagerhuset (a house) (Department of State 1968: 3-7). An altogether different issue, however, is boundaries at sea, which cannot be marked by erecting stones, and so forth, and there are no mills, bridges, or mountains which

³ For the relationship between the bulls issued by the Pope and the Treaty of Tordesillas, see Steinberg (2001: 75-86).

could serve as reference points. Whereas Philip Steinberg, in his book *The Social Construction on the Sea* (Steinberg 2001) has argued how social factors of production, use, regulation and representation have constructed the different historical conceptions of ocean space across the globe, I would emphasise the degree to which a particular knowledge of space conditions the possibility of drawing boundaries.

Whereas boundaries at land typically have been concerned with the division of jurisdiction, passage, taxation rights, and identity between different rulers and societies, boundaries at sea have also been about dividing a common sphere from sovereign, or territorial, spheres. It is problematic to talk about territory in the context of the sea, but to an extent the notion of 'territorial sea' can be seen as an extension of sovereign rights on land into the adjacent sea. Up through the 17th century, the notion developed in European 'international law' that a state could claim sovereign rights over the territorial sea, defined in terms of the range of a cannon ball. In 1702, the Dutch jurist Cornelius von Bynkershoek, for example, suggested that the sea was common to all except along the coast where dominion could be claimed by a state as far as a cannon could shoot (McFee 1950: 139-40; Kent 1954). This way of demarcating and measuring a spatial relation resonates with previous practice at land, as discussed before, where spatial measures were conceptualised in terms of functionality. In that respect it mattered less that the range of a cannon ball would vary according to technology and increase over time. It was only with a shift in cartographic and calculation abilities that frontiers, at sea as well as at land, could be turned into fixed lines.

In the Grotian legal system, the sea was divided into a territorial and a common zone. With the ratification of the UNCLOS, however, the seas of the world have roughly been divided according to two sets of boundaries:

territorial sea boundaries; and continental shelf boundaries, or the Economic Exclusive Zone. This legal framework is essentially based on two different spatialities. One is territorial and linked to possession and jurisdiction over parcels of land, and the other is maritime and concerned with how sovereignty based on territorial space can be extended into the sea. Where this is not possible, the sea is constructed as a common sphere (Steinberg 2001). In the following I will analyse how UNCLOS establishes a cartographic regime for geopolitics and what implications this has for the boundary practices of the region.

§76 AND THE ARCTIC SEA

The argument so far has been that the development of cartographic and calculation⁴ ability has allowed boundaries to be established in a way that is abstracted from spatial functionality and particular features of the landscape. This has also, in principle, allowed marine boundaries to be established even if they cannot be marked on the ground. In that respect, marine boundaries only exist on maritime charts, and adherence to the boundaries can only be determined through Global Positioning Systems or similar technologies allowing immediate positioning to take place.

Whereas the basic contours of the world political map has been in place for a long time, Blake noted in the 1980s how the "maritime political map of the world is in its infancy [...] it will be several decades before any accurate world map can be drawn" (Blake 1986: 1). With the ratification of the UNCLOS, which

⁴ The emphasis on calculation has been advocated particularly by Stuart Elden (2010) and Jeremy Crampton (2006; 2010).

has been called a legal constitution for the high seas, a set of conditions for extending sovereign rights into the sea beyond the old territorial sea zone has been established. The UNCLOS introduced the notion of an Economic Exclusive Zone (EEZ) which is tied up with the notion of a continental shelf that designates an area where the state claiming rights over the EEZ gets sovereign rights to harvest natural resources from the seabed, but only very limited control over mobility/passing ships.

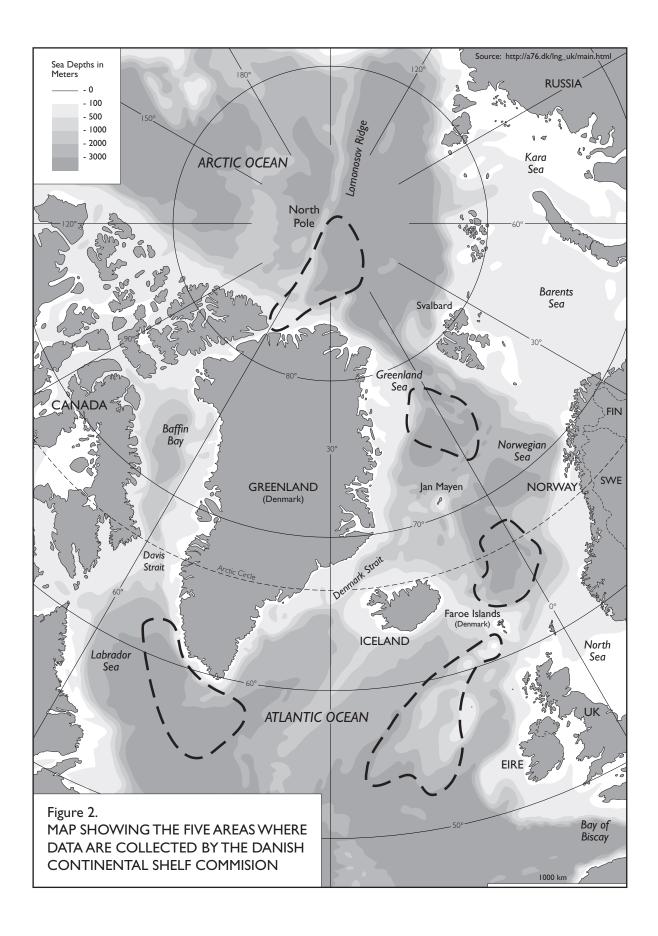
The EEZ takes on a peculiar form in the convention. On one hand, the continental shelf is a purely juridical concept that is defined as a zone extending 200 nautical miles from the baseline defining the legal maritime coastline of the state in question. This means that all states can claim a 200 nm EEZ. At the same time, however, the continental shelf is also defined as geological phenomenon which means that in cases where the 'natural continental shelf' extends beyond the 200 nm defined by 'the juridical continental shelf', then the natural continental shelf can be used as a foundation to extend the sovereign rights of a state beyond the 200 nm. By implication this means that the criteria for extending sovereign rights into the sea are defined purely in 'natural' terms in the UNCLOS. This means that, in principle, the extension of boundaries in the Arctic sea is made a question of scientific measurement. As such, the traditional geopolitics associated with boundary practices has been replaced by a cartopolitics where it is the production of scientific data which determines the legitimacy of territorial or, more precisely, sovereign claims.

The idea of basing boundaries on natural features in the landscape has a long history. It was particularly during the 17th and 18th centuries that the notion of natural boundaries became widespread in Europe (Sahlins 1989). Rivers were often used as boundaries and, in a famous case, the Pyrenees were positioned as

a natural boundary between France and Spain (Buisseret 1984; Sahlins 1989). While the submarine continental shelf is not 'visible' in the immediate encounter with the landscape, the notion that it is somehow possible to rely on natural, objective, features to decide the location of boundaries remains the same. In effect, this notion seeks to dislocate the decision of boundary demarcation from the immediate 'political relationship' between two states and instead draw the boundary decision from the realm of politics into that of science.

Historically the notion of natural boundaries, and the associated notions of specific national spaces or natural quests for lebensraum developed later within the geopolitical tradition, led to a particular politics of space where certain geographical features or domains were seen as natural goals for the state to obtain (Ó Tuathail 1996). The difference regarding UNCLOS is that it provides a legal framework that binds all states to one common legal framework, and as such provides an objective measure of boundary delineation. This is, in a sense, a replacement of geopolitics with cartopolitics. As such, there should be less potential for conflict than in conventional geopolitics of previous eras. The only condition that must be fulfilled, so to speak, is that nature speaks with 'one voice'. That is to say that the scientific measurements must be unambiguous and undisputed. That this is very much an established view appears in a recent editorial comment in Nature Geoscience (vol. 2 May 2009: 309) where it is acknowledged that geology has been politicised, and the suggested response is that only "if the science that underlies its recommendations stands the test of time will the shelves' outer limits established under UNCLOS be globally respected as the one and only valid demarcation line".

In 2003, the Danish parliament ratified UNCLOS and soon after the Greenland and Faroese governments ratified the convention.



Subsequently the Continental Shelf Project was established in order to provide data to back Danish claims to extend sovereign rights beyond the 200 nm EEZ. The Danish effort concentrates on five areas as shown on the map (figure 2).

In the area north of Greenland, there has been 5 expeditions all conducted in cooperation with Canada. In 2007, the LOMROG I expedition was established in cooperation with the Swedish Polar Research Secretariat using the Swedish icebreaker Oden with support from the huge Russian icebreaker let Pobedy.

In 2009, the LOMROG II expedition continued the measurement and data collection of the sea bed north of Greenland, again in cooperation with Sweden, using the same icebreaking vessel. This time a Russian sea surveyor participated as well. The project is expected to be completed with a last expedition in 2011, where the scientific backing, then, should be ready for a claim to an extended continental shelf.⁵

What appears from these mapping expeditions is that there is a high degree of cooperation between countries with potentially antagonistic interests, and as such that the cartopolitical practice in the Arctic remains much more cooperative than the somewhat confrontational discourse that have emerged alongside the efforts to map the Arctic.

Presently most of the Arctic countries are increasing their military presence. Canada's premier, Stephen Harper, has emphatically announced the construction of a new Arctic naval base to defend Canadian sovereignty against Denmark, Russia and other potential intruders. Russia has made similar plans of

strengthening its military presence to be able to protect its interest in the region, which it expects to become its main resource base by 20206, and the US is generally seeking to prioritise 'sea-power' (Giddens 2009: 206). In the recent defence agreement (for the years 2010-2014) the Danish parliament likewise decided to upgrade military capacity in the region and establish an Arctic Command. Speaking against this scenario, the Russian ambassador to Denmark T. Ramishvili recently made a plea to keep NATO out of the region and maintain a demilitarised order and instead keep to the philosophy of the Ilulissat declaration of 2008 (Ramishvili 2009). In the Ilulissat declaration the five coastal countries of the Arctic Sea (the countries mentioned above minus Iceland, Finland and Sweden) articulate a common understanding that governance of the Arctic should be done through cooperation and information sharing. And while Ramishvili's plea might have been driven by a Russian interest to limit NATO's influence in the region, there is, nonetheless, a legal regime to govern the territorial disputes that may arise, and all the Arctic states continuously declare their adherence to UNCLOS.

As such, the evidence of scientific practices suggests that the redrawing of boundaries in the Arctic might be more amicable than the more conventional geopolitical discourse and excited newspaper coverage would imply. That is, however, if science can speak with a single voice and 'natural boundaries' can be agreed upon. Discussing the impact of science on society, Bruno Latour paraphrases Clausewitz's famous dictum: "science is politics pursued by other means" (Latour 1999: 273). And apart

⁵ These sections rely on information from the website of the Continental Shelf Project, http://a76.dk/lng_uk/main. html, and presentation by project leader Christian Marcusten.

^{6 &#}x27;Russia outlines Arctic force plan' http://news.bbc.co.uk/2/hi/europe/7967973.stm, page last updated at 13:06 GMT, Friday, 27 March 2009.

from being an open question whether unambiguous scientific results can be produced, the reliance on a notion of physical space raises at least two sets of problems. First of all, the UNCLOS is concerned with the rights of individual states and their potential rights to make claims vis-à-vis the international community; that is, the high seas open for everybody. In effect, the Commission on the Limits of the Continental Shelf (CLCS) that is giving recommendations based on the submitted claims by individual states is not in a position to deal with disputed or overlapping claims between different states. Consequently, disagreements would have to be settled through negotiation and normal diplomatic procedures, and hence re-opening the gates for conventional geopolitics.

The second issue is more fundamental, in spatial terms at least, and concerns the reliance on a given natural space that simply has to be mapped correctly in order to achieve a peaceful distribution of maritime space in the region. As the statements, such as the one from Nature Geoscience above, suggest the salvation for geology, in order to avoid the dangers of politicisation, is to produce as good a science as possible. This complete reliance on science, however, ignores that any spatial assemblage - reality of space - is always a social construction. And therefore, space is never a natural given but always something that has to be assembled according to various conventions and ideas about what space is. This means that the \$76 of UNCLOS, by implication of its prescriptions for when sovereign jurisdictions can legitimately be expanded, presupposes a particular spatial reality and concordantly a particular way of producing knowledge of space. In this case, UNCLOS presupposes a spatial reality that is empty and abstract; one that can be partitioned and made subject of state jurisdiction independently of people living in, using, and constructing Arctic sea space in a

manner that does not necessarily fit with the cartographic reality of space required by \$76.

THE CARTOPOLITICS OF EMPIRE

And indeed there have been reactions against the quest to decide ownership of Arctic space under international law. Addressing the question of who owns the Arctic, who can traverse the Arctic, and who has rights to develop Arctic resources, the Inuit Circumpolar Council (ICC) published a declaration of sovereignty in the Arctic in 2009, and Patricia Cochran, then chair of the ICC, stated that "[o]ur declaration addresses some of these questions from the position of a people who know the Arctic intimately. We have lived here for thousands and thousands of years and by making this declaration, we are saying to those who want to use Inuit Nunaat [Inuit Homeland] for their own purposes, you must talk to us and respect our rights."7 This clearly speaks to a dissatisfaction among the Inuits with the way in which the bordering practices of the Arctic states tend to be ignorant about the indigenous uses and habitation with and in space.

Central to the declaration is that the Inuits are recognised as a people in legal terms and therefore have a right to self-determination, even if they live across the boundaries of four recognised states. As such they have a right to decide issues of sovereignty, exploitation and use concerning their space of living. Whereas the current regime of territoriality, arising in Western Europe during the 15th century and being consolidated over the following centuries, considers land as territory, and sea as a space to traverse across; as a navigable space,

⁷ April 29 2009 http://northernwaterways.com/news/ ?p=1323.

or a source of resources to support the way of life at land, again, the Inuits have claimed a different conceptualisation, use, and practice of space. "[l]ife in the Arctic is dependent on movement, and that sea ice is integral to this movement. The Inuit have been a nomadic people living in the Arctic since ancient times: their entire culture and identity is based on free movement on the land. Inuit rely on free movement in order to eat, to obtain supplies for traditional clothing and art, and generally to keep their rich cultural heritage alive. Inuit temporarily move out from settlements to harvest resources that are sometimes bartered or traded. This movement takes place on the sea ice that surrounds and connects Inuit communities" (ICC 2008: i). Not only does this emphasise the importance of movement vis-à-vis the notion of parcelling space out into sovereign jurisdiction, it also questions the central division between land space and sea space that informs the current distinction between territorial and maritime boundaries. Especially with regard to the status of ice, which in international law is considered a maritime space, but for many constitutes a very material space which is used to travel across, as a hunting space, and appears to play a somewhat hybrid role in between the dogmatic distinction between solid land space and fluid maritime space.

The 'counter-declarations' published by the ICC clearly raise the issue of spatiality in the context of boundary practices in the Arctic, but the issue becomes even more ambiguous when focusing on Greenland. While being part of the Danish realm (or, indeed, empire), Greenland also represents an autonomous polity with a large measure of autonomy. Combined with the ongoing talk about independence, it is close to representing an Inuit state that is recognised as a semi-autonomous polity in the international political system. The question is whether this status, drawing as it is on a particular spatiality and understanding of the

relationship between sovereignty and space, is compatible with the counterclaims put forward by the ICC? In other words, is it possible to establish a semi-sovereign political entity associated with a particular spatialization of sovereignty with the spatiality informing the ICC's counter statements?

The Danish state indeed represents something of an oddity as an unlikely but working kingdom/empire in the Arctic. The current cartopolitical practices are funded and coordinated from Copenhagen, but were they to be effectuated and were Greenland to be independent, Copenhagen would indeed have paid and made an effort to expand the Danish empire only to see it diminish as a result of Greenlandic independence. Hence, where the current role of geographers and Arctic expeditions seems to mirror and reinvigorate the colonial imaginaries of the 19th century, the game that is being played between science and politics in the Arctic at the moment seems to be somewhat more complicated and less obviously in the service of imperial state hood. A century ago, Lord Curzon was adamant about the service of geography: "from the cloistered alleys and the hallowed groves of Oxford, true to her old traditions, but widened in her activities and scope, let there come forth the invincible spirit and the unexhausted moral fibre of our race. Let the advance guard of Empire march forth, strong in faith of their ancestors, imbued with a sober virtue, and above all, on fire with a definite purpose. The empire calls, as loudly as it ever did, for serious instruments of serious work." (Curzon of Kedleston 1908: 57-58). Today, however, it seems more likely that the role of cartopolitics and bordering practices in the Arctic reinforce a particular notion of statehood based on a particular spatiality; and it is exactly in naturalising this particular spatiality that the real political potential of UNCLOS and the cartopolitical practices in the Arctic are based.

CONCLUSION

During the Second World War, Isaiah Bowman noted, writing the foreword to a treatise on boundaries, that "[b]ack of a boundary are not only national interests and ambitions but a philosophy of international relations" (in Boggs and Bowman 1940: v). This suggest what has been repeated often by constructivist approaches to international relation, namely, that there is nothing self-evident and given about a political organisation of global space based on neatly demarcated territorialized sovereignty. In order to critically interrogate this order, the concept of borders has come under scrutiny. In order to contribute to this debate, this paper has argued that we must start with space, and investigate how particular modes of establishing space as real condition the way in which borders can be effectuated.

Where cartographic and calculation technologies played a particularly important role for the modern development of a sovereign territorial states system (for an overview see Crampton 2009; 2010), cartography - and with this a particular abstract cartographic reality of space - has obtained a crucial position due to the way in which the UNCLOS defines the conditions under which sovereign rights can be extended into the sea. In a fashion that calls on colonial imaginaries of the imperial geographer charting unknown lands in order to pave the way for commerce and civilization, sovereign claims under UNCLOS have become strictly legitimised by geographical- strictly speaking - data. As such it would appear that new, what I have called cartopolitical, practices remain more decisive than the socalled conventional geopolitical discourse and practice in distributing spatial rights between the Arctic states.

However, while the reliance on science in settling Arctic boundaries have provided an 'objective' framework for deciding sovereign

claims, this, at the same time, raises important questions about the spatiality of boundary practices. There is, of course, the practical issue that the prescriptions of UNCLOS are only concerned with the delimitation of a national maritime space vis-à-vis an international, or common, space, and as such, there is still a potential for conflict over boundaries even if 'science' provides unambiguous data. But even more significant, it seems, is the clash over spatial realities that should provide the backdrop of the political organisation of space in the Arctic. While the so-called modern sovereign territoriality relies on a particular notion of abstract and homogenous space, with clear divisions between land and sea space, this spatiality is by no means a natural given. The idea of natural boundaries only serves to disguise the degree to which all spatial settlements, or assemblages, are political, or at least, have political implications. To repeat Latour's argument, the most significant impact of 'the West' in the history of the world is the 'insertion of a unified nature' behind cultural differences (Latour 2002: 11-12). While this has provided a stable spatial background of global space against which cultural differences could be articulated without challenging the spatial reality put together through cartographic and calculable assemblages, it has muted the controversy over spatial reality. And all this points to the significance of interrogating spatial assemblages, or realities, and the role of science and geographers, when analysing new boundary practices of the Arctic.

REFERENCES

- Blake, G. H. 1986. World maritime boundary delimination: the state of play. *International Geographical Unit, meeting on maritime boundaries & ocean resources.* Reading University.
- Boggs, S. W. and I. Bowman.1940. *International boundaries: a study of boundary functions and problems*. New York, Columbia University Press.
- Buisseret, D. 1984. The cartographic definition of France's Eastern Boundary in the early seventeenth century. *Imago Mundi* vol. 36: 72-80.
- Calvocoressi, P. 2009. World politics since 1945. Harlow, Longman.
- Chaturvedi, S. 1996. *The Polar Regions: a political geography*. Chichester, Wiley, in association with the Scott Polar Research Institute.
- Crampton, J.W. 2006. The cartographic calculation of space: race mapping and the Balkans at the Paris Peace Conference of 1919. *Social & Cultural Geography* vol. 7 no. 5: 731-52.
- Crampton, J.W. 2009. Cartography: performative, participatory, political. *Progress in Human Geography* vol. 33, no. 6: 840-48.
- Crampton, J.W. 2010. Cartographic calculations of territory. *Progress in Human Geography* vol. 34, no. 3: 1-12.
- Curzon of Kedleston, L. 1908. The Romanes Lecture 1907: frontiers. Oxford, Clarendon Press.
- Dalby, S. and G. Ó Tuathail. 1998. Rethinking geopolitics. London, Routledge.
- Department of State, U.S. 1968. Denmark Germany boundary. *International Boundary Study*. Washington DC.
- Elden, S. 2005. Missing the point: globalization, deterritorialization and the space of the world. *Transactions of the Institute of British Geographers* vol. 30, no. 1: 8-19.
- Elden, S. 2010. Land, terrain, territory. Progress in Human Geography: 0309132510362603.
- Giddens, A. 1985. The nation-state and violence: volume two of a contemporary critique of historical materialism. London, Polity.
- Giddens, A. (2009). The politics of climate change. Cambridge, Polity.
- Harley, J.B. and P. Laxton. 2001. *The new nature of maps: essays in the history of cartography*. Baltimore, MD, Johns Hopkins University Press.
- Inuit Circumpolar Council, Canada. 2008: The sea ice is our highway: an Inuit perspective on transportation in the Arctic.
- Keller, A.S., O.J. Lissitzyn, et al. 1967. Creation of rights of sovereignty through symbolic acts, 1400-1800. New York, AMS Press, Inc.
- Kent, H.S.K. 1954. The historical origins of the three-mile limit. *The American Journal of International Law* vol. 48, no. 4: 537-53.
- Lamb, U.S. 1974. The Spanish cosmographic juntas of the sixteenth century. *Terrae Incognitae* VI: 51-64.
- Latour, B. 1999. Give me a laboratory and I will raise the world.... In *The Science Studies Reader*, ed. M. Biagioli. London, Routledge: 258-76.
- Latour, B. 2002. War of the worlds: what about peace? Chicago, Prickly Paradigm Press.
- McFee, W. 1950. The law of the sea. New York, J.B. Lippincott.
- Ó Tuathail, G. 1996. Critical geopolitics. London, Routledge.
- Osherenko, G. and O.R. Young. 1989. *The age of the Arctic: hot conflicts and cold realities*. Cambridge, Cambridge University Press.

Pakenham, T. 1992. The scramble for Africa. London, Abacus.

Proelss, A. 2009. Governing the Arctic ocean. Nature Geoscience, vol. 2 (May): 310-13.

Ramishvili, T. 2009. Hold NATO væk fra Arktis. Letter in *Politiken* 16 February.

Sahlins, P. 1989. *Boundaries : the making of France and Spain in the Pyrenees*. Berkeley; Oxford, University of California Press.

Stanley, H.M. 1885. Inaugural address - delivered before the Scottish Geographical Society at Edinburgh, 3rd December 1884. *The Scottish Geographical Magazine*, vol. 1: 1-17.

Steinberg, P.E. 2001. The social construction of the ocean. Cambridge, Cambridge University Press.

Strandsbjerg, J. 2008. The cartographic production of territorial space: mapping and state formation in early modern Denmark. *Geopolitics*, vol. 13, no. 2: 335-58.

Strandsbjerg, J. 2010/forthcoming. *Territory, globalisation and international relations: the cartographic reality of space*. Basingstoke, Palgrave.

Thrift, N. 2000. It's the little things. In *Geopolitical traditions: a century of geopolitical thought*, ed. K. Dodds and D. Atkinson. London, Routledge: 380-87.

Wood, D. 1992. The power of maps. New York, The Guilford Press.