

THE DRAGON SPITS FIRE ON ICE: THE ARCTIC AND ANTARCTICA WITHIN CHINA'S NEW SILK ROAD

O DRAGÃO LANÇA FOGO NO GELO: O ÁRTICO E A ANTÁRTIDA NO QUADRO DA NOVA ROTA DA SEDA CHINESA

EL DRAGÓN LANZA FUEGO EN EL HIELO: EL ARCO Y LA ANTÁRTIDA BAJO LA NUEVA RUTA DE LA SEDA CHINO

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ABSTRACT

This paper aims to contribute to increase knowledge about the importance of North and South Poles within China's New Silk Road. The central argument is that there are several logistic and economic issues which explain Beijing's interests in these two regions, less studied in comparison to other areas where China's New Silk Road is more active. The qualitative method, through the hermeneutic analysis, is the methodology supporting this investigation. We argue here that the Chinese maritime New Silk Road does not, and should not, have necessarily to be confined to the Atlantic, Indian or Pacific Oceans. No matter how important these may be, China can and must continue to try to build a polar New Silk Road, also serving as a steersman to other powers that also look for various opportunities in the melting of the ice. However, in any case, the crossing of the Arctic must fully replace the conventional sea routes, which, along with the polar routes, must be understood, by now, and at most, in a perspective of complementarity.

Keywords: China. Arctic. Antarctica. New Silk Road.

RESUMO

Este artigo visa contribuir para aumentar o conhecimento sobre a importância do Polo Norte e Polo Sul no quadro da Nova Rota da Seda marítima da China. O principal argumento reside no facto de que existem vários interesses logísticos e económicos, que explicam o interesse de Pequim nestas duas regiões, menos estudadas em comparação com outras áreas onde a Nova Rota a Seda chinesa é mais ativa. O método qualitativo, através da análise hermenêutica, é a metodologia em que assenta a presente investigação. Acreditamos que a Nova Rota da Seda marítima chinesa não tem, nem deve, necessariamente confinar-se ao Atlântico, Índico ou Pacífico. Por muito importantes que estes sejam, a China pode e deve continuar a esforçar-se por edificar, também, uma Nova Rota da Seda polar, servindo inclusive de timoneiro a outras potências que procuram igualmente oportunidades várias no derretimento do gelo. Contudo, em caso algum a travessia do Ártico deve substituir-se integralmente às rotas marítimas convencionais, as quais, juntamente com as rotas polares, devem ser entendidas, por ora, e quanto muito, numa perspectiva de complementaridade.

Palavras-chave: China. Ártico. Antártida. Nova Rota da Seda.

RESUMEN

Este artículo tiene como objetivo ayudar a crear conciencia de la importancia del Polo Norte y del Polo Sur como parte de la Nueva Ruta de la Seda marítima de China. El argumento principal es que hay varios intereses logísticos y económicos que explican el interés de Beijing en estas dos regiones, menos estudiados en comparación con otras zonas en las que la nueva ruta de la seda china es más activa. El método cualitativo, a través del análisis hermenéutico es la metodología que subyace a esta investigación. Creemos que la Nueva Ruta de la Seda marítima china no hay, y no debe, necesariamente limitarse al Atlántico, Índico y Pacífico. Por importantes que sean, China puede y debe continuar realizando esfuerzos para construir también un polar nueva ruta de la Seda, incluyendo servir como guía a otros poderes que también buscan diversas oportunidades en el deshielo. Por importante que sean, China puede y debe continuar realizando esfuerzos para construir también una nueva Ruta de la Seda polar, sirviendo como un guía a otros países que también buscan oportunidades en la el deshielo. Sin embargo, en caso de que el cruce del Ártico debe sustituir totalmente las rutas marítimas convencionales, que junto con las rutas polares, deben entenderse, por el momento, y en el mejor, una perspectiva complementaria.

Palabras clave: China. Ártico. Antártida. Nueva Ruta de la Seda.

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I INTRODUCTION

Throughout this article we will analyse the contours of the Chinese presence in the North Pole and the South Pole. Harsh continents, and the least known of all by man and by science, the Arctic and Antarctica are not, for now, Beijing's priority target. However, as a result of climate change that has caused the melting of the ice and the consequent possibility of seasonal transit by a significantly shorter sea route between East and West, the Arctic, thus, seems to serve the logistical and strategic ambitions of the Chinese *New Silk Road*. In addition, the North Pole has been gradually regaining a geopolitical and geo-economic importance – after the long years of the Cold War between the Soviet Union and the United States – in a current context in which Humankind needs, more than ever, to securitise its access to energy, mineral and food resources.

Although the South Pole does not provide, in turn, any shortening of distances to the Chinese maritime *New Silk Road*, China has been actively engaged in scientific research in this region which, like the North Pole, seems to hold extraordinary energy, mineral and food reserves. The next years will be promising in that they will enable us to realise whether the ecological imperatives – present in the careful safeguarding of polar ecosystems, while 'untouchable' heritage of Humankind – will tend, or not, to sag vis-à-vis the 'temptation' to explore their so precious resources. 2007 was a particularly symbolic, and simultaneously strange, year, since History seemed to retreat to medieval times, when a 21st century Russia associated a nationalistic pride to a titanium flag immediately placed in the depths of the Arctic. Either a sign, or not, of the times that lie ahead, the International Community is right when it feels alarmed if this is the beginning of the end of the Poles 'sanctuarization', as a sign of affirmation of pragmatism and realism, the struggle for survival and for resources, in a world where the (new) balance of power is unstable, and where the superpower is no longer potent to contain the ambitions of the emerging ones.

We will start by making a brief contextualisation of logic and levers underlying the Chinese incursions in the North Pole and South Pole. As such, we can only allude to the subjects of energy securitisation and of the Chinese maritime *New Silk Road*, without which we would hardly understand the reason for China's interest in the Polar Regions. After all, this article shares the postulate that the melting of the ice may create new and promising economic, commercial, scientific, logistic and even political horizons (since the continuity of the Communist Party in power will depend on China's ability to ensure, among other aspects, its energy and food security in a highly competitive world and where resources will tend to run out). After, we will enter exactly in the analysis of the contours of Chinese involvement and interests in the North Pole (highlighting in particular the importance of Greenland and Iceland)

and the South Pole, where China progresses subtly and gradually, through the construction of scientific stations and revolutionising the toponymy of the region. We argue that the Chinese maritime *New Silk Road* does not, and should not, have necessarily to be confined to the Atlantic, Indian or Pacific, no matter how important these may be. China is undeniably a polar power, being that the coming years will continue to confirm the continuity and even expansion of Chinese dynamism in the two 'last' and inhospitable continents where science and man will be able to harmoniously cooperate and revolutionise. That being said, we believe that the asset of this article lies precisely in showing another facet, less known, of a polar maritime *New Silk Road*, with all that is surprising, benign or dangerous resulting to China and, in a broad sense, to humanity, if science, and the States' energy and economic ambitions want to impose themselves on ecology by putting an end to the sanctuarisation of the Poles.

Convinced that the behaviour of the states, the power or influence are not likely to translate into tangible realities, mathematical formulas, or mere statistics, we assume, from this point, that the use of the qualitative method, through the hermeneutic analysis, is, certainly, the methodology supporting the present investigation. In this sense, it is imperative to penetrate the sphere of subjectivity, i.e. the understanding of causality inherent in the action of the various actors, that reaches us through the analysis of a whole panoply of scientific articles, monographs, theses, among other available sources regarding the subject of this study, in order to try to understand what drives China to act in this or that way.

2 THE RATIONALE: ENERGY SECURITISATION AND THE MARITIME NEW SILK ROAD

The race to the Poles cannot be dissociated from the context that rules today's Chinese foreign policy, namely the importance of energy supply and the emergence of the maritime *New Silk Road* concept.

Starting with the energy security issue, this can be considered, according to Nayoon Lee, "a question of, at the same time, international and national security" (LEE, 2012, p. 1). As Waco Worley suggests, "a country should have, permanently, access to energy resources, taking a minimal risk that these are exhausted" (WORLEY, 2006, p. 2). So, that leads many States to try to better exploit their domestic energy reserves. However, these are not always enough to provide the energy needs of a country, which represents, of course, a source of insecurity for itself. According to W. Worley, "energy insecurity decreases the power and the influence of a State in the international system", and so, "without the appropriate energy resources (domestic or not), States can not become regional, and certainly not, world powers" (WORLEY, 2006, p. 2). In the case of China, an emerging country that shelters a fifth of

the world population, the issue of energy security is even more urgent as the Government moves towards achieving its goals of modernization and collective prosperity. Returning to W. Worley, "since countries need energy to survive", they tend, in an "aggressive" way, to "look for the energy resources that are held by other States", seeking for that purpose, "as many partners as possible" in order to "diversify their sources of energy" (WORLEY, 2006, p. 2).

In its effort of energy securitisation, Xi Jinping's China has a universal vision, based on the promotion of trade as a source of peace among peoples, as well as on the revitalisation of several logistical links at the land and maritime level. The race to the Poles, and in a broad sense, China's assertion while polar power, must be analysed in the context of the Chinese maritime *New Silk Road*, this last understood as an instrument at the service of a 'Grand Strategy', which is based, in turn, on the defence of Chinese national interest and on the pursuit of strategic access, among others, to natural resources, markets and flow and transport routes. Besides the bet on the road and rail links along the land *New Silk Road*, China has invested considerably in the modernisation of its ports, equipping them with intermodal connections and highly sophisticated technology. This effort has not been in vain since Chinese ports are now highly competitive, having been adapted to cope with the increase in the volume of containers traffic, one of the priorities, in fact, of the 11th five-year plan, which reflects the importance of seaport development.

What we are witnessing today is a physical change (in the sense of an increasing modernisation of military means), which is accompanied by an evolution of strategic thinking. Both are, however, in interaction. As China becomes stronger militarily, it will dare 'risk' more because it knows it can then rely on its resources to do so. It would thus be able to gradually move away from its shores to conduct and/ or support military operations in the open ocean. Current events portray a China that is becoming more pragmatic, more secure and confident in itself. In addition, Chinese military strategy has changed its operational thinking on attack submarines, because if once they patrolled near the shore to prevent an invasion, currently they are deployed to more distant waters in order to protect the sovereignty and maritime interests of the nation. This bolder China has – like Russia, India, Iran, the United States, Japan and the European Union – also taken advantage, by sending its patrol vessels to the waters plagued by maritime piracy in the Indian Ocean. But, as pointed out by Struye, "such a presence hides, however, another issue which goes far beyond the struggle against piracy: the domination of communication channels, because through this deployment, one notes there is a tacit struggle among the great powers to control the shipping lanes that go from the Strait of Bab el Mandeb to the Straits of Malacca, arteries of world trade" (STRUYE, 2010, p. 8). Beijing seems to have understood the need

for a powerful naval force to protect the country; that a power that does not understand the importance of the oceans is a power without future; and that power that is incapable of defend its maritime rights will never be a maritime power for very long.

3 CHINA'S INCURSIONS IN THE ARCTIC

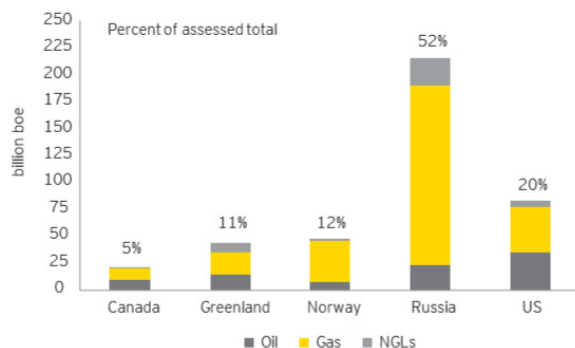
The melting of the ice is worrying from an environmental point of view, but eventually attractive and promising from an economic point of view. In fact, as Vijay Sakhuja points out, "it is believed that the melting of the Arctic ice could create new frontiers for commercial and economic activity", as there are "prospects for new sources of oil and gas that are still unexplored, rich fishing grounds, and a new shipping route from the Pacific Ocean through the Arctic region to the Atlantic Ocean that could cut passage time" (SAKHUJA, 2010, p. 1). Although China does not have, for now, an official strategy for the Arctic, and although this does not constitute a priority in foreign policy or Chinese national interest, the truth is that the promising economic opportunities resulting from thaw are necessarily connected with important political consequences. Let us quote in this respect Jakobson and Lee, according to whom "[the] publicly stated goal of the Communist Party of China (CPC) is to maintain political stability", o que pressupõe "keeping the CPC in power and the socialist system intact" (JAKOBSON; LEE, 2013, p. 4). Now these goals, in turn, are dependent on the ability of the Government to continue to provide economic growth and development to a heterogeneous and huge China. Although aware that it would be dimmer to limit China's strategic interests in the Arctic to just three – because they are too complex and the result of multiple (State and non-State) goals – we believe, however, such as the polar expert Anne-Marie Brady, they gravitate around security, the resources and science and technology. In what concerns security, Brady believes that this includes a traditional dimension and another non-traditional, being that "China has economic, political and military interests in the Arctic" (BRADY, 2014a, p. 3). In turn, when it comes to resources, Brady argues that "China wants access to Arctic minerals and hydrocarbons, fishing, tourism, transport routes and bioprospecting" (BRADY, 2014a, p. 3). And, finally, in terms of science and technology, Brady argues that "access to the Arctic is essential for the roll-out of the Beidou navigational system, China's space science program, and accurate weather forecasting in China" (BRADY, 2014a, p. 3).

Notwithstanding the various estimates (not always consensual) vis-à-vis the existing hydrocarbons in the North Pole, we must quote Kay and Thorup (2014), according to whom "the Arctic as a whole is estimated to contain 412 billion barrel of oil equivalent (boe), approximately 13% of the world's undiscovered oil reserves and 30% of the world's undiscovered natural gas reserves."

Figure 1. Potential Arctic oil and gas resources.

Potential Arctic oil and gas resources

(total assessed resources = 412 billion boe)



Source: EY calculations from US DOE and US GS data

Source: EY Calculations from US DOE and US GS data (2015).

3.1 The importance of Greenland

Talking about Chinese interests in the Arctic also requires an allusion to the case of Greenland. This literally cold and sparsely inhabited island is linked, in geographic terms, to the American subcontinent, although it is, in terms of geopolitics and culture, part of Europe (EYGM, 2013, p. 9). Indeed, its citizens are simultaneously citizens of the European Union, although Greenland is not one of its members. An autonomous part – at the political level – of the Kingdom of Denmark since 1979, Greenland depends, however, on Copenhagen in what concerns, among other aspects, foreign policy, justice and defense issues. But not only – and this is often pointed to as one of the factors that slow down the desired declaration of formal independence: the issue of the subsidies. In practice, Greenland economy has survived, as a result of both its fishing activity, and the “annual aid from Copenhagen (about 482 million euros)”, as shown, among others, in the *Exame* review (GROELÂNDIA..., 2014). It is not surprising, therefore, that the Greenlandic Government searches for, in the possible exploration of the island’s energy and mineral reserves, by foreign investors such as China, a precious aid to achieve full autonomy in what concerns Denmark. It is therefore interesting to monitor the possible contribution that the Chinese (polar) *New Silk Road* might provide at this level, so that Greenland will become a country. For now, such a possibility seems not to be viable yet, in the short and, possibly, medium term, as confirmed by the timid foreign investments on the island.

Despite the existence of a certain overestimation of the Greenland potential within the framework of the Chinese polar *New Silk Road*, Martin Breum explains that “in real terms [...] there are [...] only minuscule Chinese investments in Greenland” (BREUM, 2013). Among the several factors that explain the weak foreign investment

in Greenland, there is no way to deny the influence of climate and geography. In fact, according to Boersma and Foley, “given its geographic isolation, mineral and hydrocarbon extraction projects in Greenland needs to be built almost entirely from scratch, owing to the lack of physical infrastructure to support mining or energy projects” [...] (BOERSMA; FOLEY, 2014, p. 25). Although the thaw, as a result of climate change, can contribute to increased navigability of sea routes that cross the Arctic – an alternative to the congested waters of Suez or Malacca – the climate issue still entails serious and unpredictable risks for international companies. According to Mat Hope, “while the industry has a wealth experience of dealing with disasters in less challenging environments, more research is needed to understand the Arctic’s specific risks” (HOPE, 2014).

To these adverse conditions, we must add the fact that the closest airports are located several hundred kilometers away from the potential places of energy exploration, as well as the fact that the rescue and emergency services are little functional or even non-existent. It is not surprising, therefore, that several international companies continually postpone important investment decisions in Greenland. This is the case, among others, of Maersk Oil, the Scottish Cairn Energy, and Statoil. Despite the climate and the logistical difficulties, according to Johansen “there’s no doubt that many players are rethinking the future. This is not because the oil conjunctures are currently under pressure, as they have, across the board, a future perspective for Greenlandic drilling licenses of 30 to 50 years” (JOHANSEN, 2015). This rethinking of the future implies, according to Boersma and Foley, that it may still take some time until the bet on Greenland begins to produce tangible results. These authors estimate that “commercial oil production in Greenland 20 years from now is realistic, and in a optimistic scenario this may be closer to 10 years” (BOERSMA; FOLEY, 2014, p. 18).

Although China is the world’s largest iron ore producer, its production capacity is not, however, likely to follow the extraordinary internal consumption of this ore, so as for oil and gas, the ‘going abroad’ Chinese policy also includes, of course, the mineral resources. And, here, it should be noted that Greenland has significant deposits of iron ore located in “Isua, Itilliarsuk, and along the Lauge Koch Kyst supracrustal complex in far Northwestern Greenland” (BOERSMA; FOLEY, 2014, p. 23). According to Financial Times, “a Chinese mining company [General Nice] is taking over a planned \$2bn iron ore mine in Greenland, making it the first Arctic resources project to come under the full ownership of China” (CHINESE, 2015). This can be the beginning of a series of major Chinese investments in Greenland minerals, although they are, for now, timid, as explained before. Indeed, as Geology and Ore informs, “the potential for iron resources of the BIF type (Archaean sedimentary and chemical iron deposits) in Greenland is promising, taking

into consideration that a number of deposits are large and that they are located in accessible tracts" (IRON..., 2011, p. 11). Besides, "the recent finding of the huge magmatic iron ore deposits at Isortoq in South Greenland underpins that [...] there still is a potential of finding undiscovered huge iron ore deposits in Greenland" (IRON..., 2011, p.11).

Greenland also has abundant rare earth metals, susceptible to meet about 25% of world needs (ZEILER, 2012). According to Keith Veronese, "the Kvanefjeld deposits [...] contain uranium and rare-earth-metal resources - 2 million metric tons by a conservative estimate, enough to furnish us for at least a decade with the key ingredients for electric-car motors, clean-energy-generating wind turbines, rechargeable batteries, and lightweight alloys" (VERONESE, 2015).

As in the case of iron ore, China is the world's largest supplier of rare earth metals – which are used in the construction of certain equipment such as solar panels, hybrid cars, mobile phones – controlling more than 95 percent of rare-earth-metal exports. However, this may change, as "current projections estimate China's domestic appetite for rare earth metals will top 130,000 metric tons as early as this year, a number exceeding China's current total rare-earth-metal exports" (VERONESE, 2015). It will be difficult for China to continue to provide the world with an affordable supply of these indispensable elements. In this respect, Greenland may play an important role as global supplier. Zeiler considers that "one reason Greenland's ore is so valuable is that it is high in heavy rare earths compared to light rare earths", being that "in general, the heavy rare earths are both less commonplace and in higher demand" (ZEILER, 2012).

3.2 The importance of Iceland

Another crucial point of the Chinese polar *New Silk Road* is Iceland. As Trotman notes, "Iceland has become the first European country to sign a free trade agreement with China, offering hope to the small North Atlantic country for its recession-battered economy and giving Beijing a leg up in its drive for expanded influence in the Arctic" (TROTMAN, 2013). According to Arthur Guschin, "Iceland's economic prosperity is based on three main sectors: fish catching and processing, aluminum and ferrosilicium production, and the use of geothermal energy for heating and electricity" (GUSCHIN, 2015). In a context in which China faces serious ecological problems due, among other aspects, to the overuse of coal as energy source (although highly pollutant), Beijing finds in the industrial application of geothermal energy an interesting opportunity to diversify its sources of energy supply. It is worth mentioning here "the pilot project using Icelandic know-how in China [that] was launched in Xianyang City, in Shaanxi province in 2006" (GUSCHIN, 2015). As a result of its success, susceptible to convert Xianyang

in "the most ecological city in the PRC", the Chinese Government has decided to extend the initiative to the provinces of "Hebei (Baoding City), Shandong, Sichuan and Yunnan, as well as in Tibet and Xinjiang" (GUSCHIN, 2015). This combination and pragmatic cooperation of Chinese investment with Icelandic expertise has also the potential to be successful in other regions of the world that are currently targeted by China's going out policy, which are endowed, also, of a significant geothermal potential.

The fishery sector is another area where China's cooperation and interest in Iceland seem promising, considering the urgency of food security (in addition to the already known energy security) for a China that has to feed about 1 billion and 400 million people. On the other hand, as Esteves notes, "the rise of the Chinese middle class together with a stronger purchasing power in the country indicate that the demand for expensive consumer goods rich in protein, such as quality fish products will increase" (ESTEVEES, 2014, p. 13). According to this author, "consumption in growing market areas, especially among Chinese consumers, is expected to increase by 8,4% by the year 2022 and will be 20,6 kg per person per year" (ESTEVEES, 2014, p. 13). China can become a fundamental partner and investor (besides being a client) within Iceland's fish processing and transformation framework, since although Iceland is a "world leader in the full utilization of fish for food, feed (fishmeal is a strategic, high-priced asset), medicine, and technical uses", the truth is that "the current processing capacity in Iceland is limited" (GUSCHIN, 2015). In addition, the Icelandic fishing fleet is old (with nearly three decades), being that its modernisation is hostage of the huge debts of fishing companies. Chinese investment can be decisive here, therefore, to help Iceland purchasing modern fishing vessels.

Another challenge that the Icelandic fishing industry faces is the need to satisfy demanding markets, such as the Chinese, combining both the supply of large quantities of fish with the quality factor. Now, as Esteves explains, a possible way to increase fish production and the value associated to it, can be precisely that of a greater investment in aquaculture, which notwithstanding its "negative side effects", has been "used extensively in Norway with good results" (ESTEVEES, 2014, p. 13-14). Finally, an interesting cooperation opportunity between Iceland and China has been expressed at the academic level, through education and training programs taught by Icelandic experts to Chinese in the areas of sustainable aquaculture, fishery planning and management.

In what concerns the mineral sector, Harold Newman, reports that "aluminum is Iceland's leading mineral commodity followed by ferrosilicon", being that "the country's domestic production of industrial minerals include cement, crushed stone, pumice, salt, sand and gravel, and scoria" (NEWMAN, 2014, p. 1). The largest share of Chinese investment in Iceland is "the Chinese

National Bluestar Group's purchase of the Norwegian firm Elkem, which owns a ferrosilicium plant in Grundartangi" (GUSCHIN, 2015).

With regard to oil, it should be noted that the company China National Offshore Oil Corp (CNOOC) is the first Chinese upstream company to explore for oil and gas in the Arctic, in the Dreki Area, in a joint partnership with Icelandic Eykon Energy and Norwegian oil and gas company Petoro. According to *The Norwegian Petroleum Directorate*, "the blocks [in the Dreki Area] may hold about 250 million and 500 million barrels of oil", and "large gas deposits of about 100 billion standard cubic metres" (ICELAND..., 2013). Although the Chinese CNOOC is "the major operator of the project" (with a 60 percent share) experts such as Sophie Song stress that "exploring in the Arctic has high operation costs, long payback periods, and requires different extraction equipment than ones used in deep water, as the area has extremely low temperatures and Arctic ice" (SONG, 2014).

In addition to the above, Iceland can play an extraordinary role within the polar *New Silk Road*, due to its strategic position, as an important logistical hub among the East Asian markets and those in Europe and America. The news agency *IceNews* highlights, on the other hand, the fact that "logistics facilities in Iceland could act as key transportation hubs for shipping produce back and forth from Greenland" (RUSSEL, 2013). In this context, *IceNews* identifies some places with high logistical potential in Iceland: "the Ásbrú Enterprise Park, situated in the Reykjanes Peninsula", a peninsula that "has been also noted for holding Iceland's biggest transportation facilities"; being that "Helguvík International Harbor can offer improved services for industrial freighters and oil vessels as well as services for other ships" (RUSSEL, 2013). But there are also other potential logistics hubs in the country, put forward by the Icelandic Ministry of Foreign Affairs: Eyjafjörður, Hvalfjörður and Reyðarfjörður. However, here, as well as the Icelandic fishery industry, foreign investments are required in order to modernise and adapt infrastructures, something in which China may once again be decisive, even because it is in its own interest. It is not, in fact, by chance that Guschin (2015) reports that "commercial shipping through Northern routes offers a broad perspective on the cooperation between Chinese COSCO and Icelandic Nesskip in the segment of container carriage, implementation of energy saving solutions, and reduction of CO2 emissions."

The tourism industry is another promising area. With a growing Chinese middle class and which wishes to know other countries, "more and more Chinese visitors prefer to choose Iceland as their travel destination in recent years" (MORE..., 2014). As an example, China Daily informs that "Iceland saw more than 23,000 Chinese visitors in the first 11 months of [2014], increasing by 49 percent compared with the same period last year" (XINHUA, 2014). Consequently, the Icelandic services sector has sought to adapt to this new reality, namely,

to the growing Chinese enthusiasm for polar tourism. Proof of that, and "in order to have Chinese tourists well informed about Iceland", it is interesting to note that "Icelandic Times magazine has newly launched a Chinese version of the magazine" (MORE..., 2014). It is still curious and interesting to mention here the episode of the failed attempt, in 2011, by the Chinese billionaire Huang Nubo, who wanted to purchase 300 square kilometers of land (i.e. 0,3% of the area of the country) in Grimsstadir, located in the North of Iceland.

Officially, the intention of Nubo would be to put up a golf course, a luxury hotel, an airport and horse-riding facilities. This initiative – which generated a significant concern at the diplomatic level about what were the real intentions behind such an ambitious project – was eventually refused by the Icelandic Government, "with reference to Icelandic laws that make it illegal for a citizen outside of the EU to buy land in the country" (HUANG..., 2015). The lack of clarity of the project, among others, in terms of real involvement of the Chinese Government, and China's subtle attempt of launching, under the pretext of tourism, the control of a significant part of the area of Iceland, have allegedly been important in the rejection of this acquisition. If we think, by analogy, on the initiative of construction of the Nicaragua Channel, on which Rosendo Fraga argues that "no Chinese group makes such a move without the interest or the support of the Chinese Government", then it is possible to speculate about possible strategic, logistics, eventually energy reasons, and of Chinese national interest, which may have been at the origin of Huang Nubo's initiative (HASKEL, 2014).

3.3 The Northern Sea Route: the pros and cons

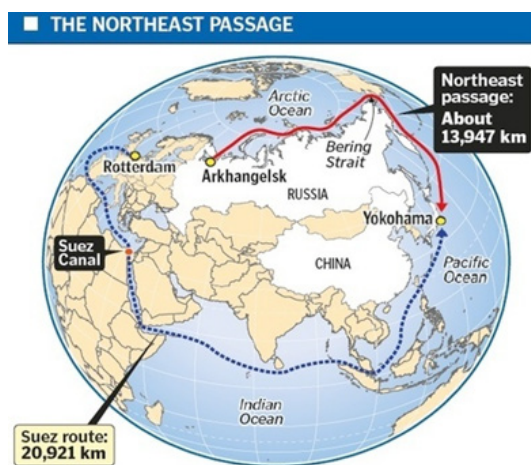
In the context of the Chinese *Maritime New Silk Road*, it does not seem irrelevant to ask what are the potential benefits that the Arctic Ocean will provide to Chinese merchant ships, while alternative sea route (to the traditional route of the Suez) between China and Europe.

The Northeast Passage over Russia's northern coast, more commonly called the *Northern Sea Route* (NSR), is a Russian-legislated shipping lane which has been used for research and exploration purposes, although in recent years the maritime traffic has improved from a handful of vessels to several hundred per year (SASSOON, 2014). In addition to Russia and Norway – precursors in polar navigation – China has shown an active interest and presence in the *Northern Sea Route*, as evidenced by the pioneering trip in August 2013, of the 19,000-ton vessel *Yong Sheng* (held by the Chinese group COSCO), "the first container-transporting vessel which sailed along the Arctic shortcut between Asia and Europe" (STAALSEN, 2013). We must also remember that in 2012 the Chinese icebreaker *Xue Long* (Snow Dragon) became the first ever

Chinese vessel to sail all along the *Northern Sea Route* into the Barents Sea, a historic achievement that would greatly encourage Chinese shipping companies to dare use the *Northern Sea Route* for freight transport between China and Europe (STAALESEN, 2013). Underlying such a venture, there is a certain belief on the part of scholars, such as Li Zhenfu, from the Dalian Maritime University, that “whoever has control over the Arctic route will control the new passage of world economics and international strategies” (apud SAKHUJA, 2010, p. 4).

However, it should be noted that the views on the effectiveness and efficiency of the Arctic sea route do not always seem consensual. Indeed, notwithstanding being unquestionable, as Ossur Skarphedinsson (2011) notes, among others, that “the *New Silk Road* will open for shipping in the Arctic Sea, making shorter the distance between China and Europe”, the truth is that this is, in our opinion, a very reductive (and possibly optimistic) vision to assess the benefits of a potential polar *New Silk Road*. It is important to consider other factors, besides the reduction of the distance in terms of nautical miles that such a route provides, to understand why authors such as Peter Varga, for example, are skeptical with regard to the ‘advantages’ that the Arctic Ocean crossing can bring to Chinese merchant ships in East Asia.

Figure 2. The Northeast Passage



Source: ST Graphics (2015).

Indeed, Varga’s (2013) opinion is that “Arctic shipping will not be economically viable even under ideal conditions” and, therefore, “it is unlikely to attract a major increase in shipping traffic to and from China, the world’s largest economy”. This thesis contradicts that optimistic view which estimates that the use of the so-called *Northern Sea Route* can allow China to save several hundred billion dollars compared to other sea routes, such as those which cross the Suez or Malacca, where maritime piracy and the danger of naval blockade are, of course, risk factors for navigation. Besides the reduction of the journey time in 40% – i.e. 12 to 15 days less than the Suez traditional

route – the use of the *Northern Sea Route* would still allow, according to this conception, to relieve maritime traffic on the Suez canal, as well as in various ports along the conventional sea route linking China to Europe. In the first place, these postulates seem to make sense, but they ignore some technical and scientific aspects that come, in practice, to mitigate this optimistic view of the potential advantages of the Arctic sea route. In a report published in November 2013 by *The Arctic Institute*, entitled *The Future of Arctic Shipping: A New Silk Road for China*, Malte Humpert devalues the importance that certain experts tend to assign to the *Northern Sea Route*.

Humpert (2013) argues that the Arctic sea routes will not be able to compete with the large global trade routes, and will only remain sea routes for seasonal transport, that is, under no circumstances will they only remain channel routes under the Chinese maritime *New Silk Road*. Although Humpert (2013, p. 5) does not deny the reduction of the distance between Europe and Asia that the Arctic sea crossing offers to merchant vessels, the author considers, however, that the imminent construction of a new generation of Ultra Large Container Ships – with approximately twice the length of the currently existing – will offer “vastly improved economy of scale” and “reduce costs to the point where Arctic shipping will not be economically viable even under ideal conditions.” We must add that the fact that there are few ports along the *Northern Sea Route* – which require, besides, a large logistic development – as well as scarce means of rescue and sufficiently advanced sea maps. We cannot forget, of course, the high cost of the acquisition and use of ice-breaking ships, which also contribute, in turn, to take advantage of the use of the polar maritime route over conventional routes.

In the logistics of sea transport, the dimensions of the cargo ship are fundamental, not only because not all ports are equipped of the necessary logistics to receive large vessels, as well as the passage itself through the so-called chokepoints, straits, or Suez and Panama canals, for example, is conditional on the length and width restrictions, among other aspects. But, in the Arctic there are certain obstacles to the transit of large vessels. It should be noted, in particular, the case of the Laptev Sea, where there are two straits that limit the draught of vessels to 12-15 metres, which prevents the new generation of cargo ships to be launched in 2016 – with a length of more than 366m, a beam of more than 49 m and a draft exceeding 15,2m – from using the polar sea route (HUMPERT, 2013). But, although this route allows a reduction (of a few days) in travel time between Europe and China, as we have explained, in practice it turns out to be more advantageous, from an economic point of view, to continue to use the conventional maritime routes (those that exclude the passage through the Arctic), in such a way that, very soon, Ultra Large Container Ships will cross the seas, allowing the transport of more containers, and therefore improving the economy of scale (HUMPERT, 2013).

A final argument, which also contributes to devalue the importance of the Arctic as possible component of the Chinese maritime New Silk Road, has to do with the fact that the Pacific region, when compared to European markets, provides, for now, the bulk of trade with China. In fact, as Varga (2013) explains, “trade with Europe accounted for just 17.1 per cent of the country’s total in 2012, compared to 51 per cent with its neighbours in the Pacific region.” Furthermore, it should be understood that, in the long term, maritime transporting cargo to and from China will tend, according to the author, to “largely shift away from the northern hemisphere to countries in the south, where Africa and Latin America will supply a growing share of China’s commodity needs” because China’s oil imports come mainly from “countries far removed from the Arctic” (VARGA, 2013).

4 CHINA'S INCURSIONS IN ANTARCTICA

Unlike the Arctic, Dean Cheng points out that in Antarctica “no trade routes traverse the frozen seventh continent, nor is this region likely to conceal major strategic weapons systems, unlike the Arctic where the Soviets deployed their ballistic missile submarines under the polar ice cap” (CHENG, 2014, p. 1). On the other hand, although the dynamism of Chinese research in the Arctic is particularly notorious, the truth is that, as Frédéric Lasserre (2010, p. 4) underlines, “Chinese polar science is far more focused on Antarctic research than on Arctic research. The question that immediately arises is: why? We must notice that Antarctica is protected by a series of treaties known as the ‘Antarctic Treaty System’, which regulate relations among States with regard to the South Pole. In practice,

the primary purpose of the Antarctic Treaty is to ensure in the interests of all mankind that Antarctica shall continue forever to be used exclusively for peaceful purposes and shall not become the scene or object of international discord. To this end it prohibits military activity, except in support of science; prohibits nuclear explosions and the disposal of nuclear waste; promotes scientific research and the exchange of data; and holds all territorial claims in abeyance. The Treaty applies to the area south of 60° South Latitude, including all ice shelves and islands (THE SCIENTIFIC COMMITTEE ON ANTARCTIC RESEARCH, 2015).

However, despite the existence of several international agreements aimed at the ‘sanctuarization’ of both the North Pole and the South Pole, this article shares the thesis that China – which is not a coastal State of any of these regions – finds, however, more resistance to dissemination into the Arctic than into Antarctica. This is because, despite all its dynamism and polar incursions in the Arctic, Linda Jakobson and Seong-Hyon Lee (2013, p. 3) explain that “China’s influence in decision-making fóruns

in the region, in particular the Arctic Council, remains weak.” In addition, China’s room for manoeuvre at the North Pole ends up being curious and paradoxically, being prisoner of the position that Beijing has kept on its Asian periphery. In other words, as Jakobson and Lee (2013, p. 3) underline, “China’s insistence on respect for state sovereignty in territorial disputes in its near waters can be expected to deter China from challenging the principles of sovereignty in the Arctic region.” Therefore, in an astute, pragmatic and intentional way (or not, one can speculate), the Chinese official narrative tends to claim that “the Arctic is a part of the global common property” (LIN, 2011, p.14). To this respect, the Chinese Rear Admiral Yin Zhuo made the following comment in March 2010: “The Arctic belongs to all the world’s people, since no nation has sovereignty over it ... China should consider playing an important role in Arctic exploration as it has a fifth of the world population” (apud CHANG, 2010). This claim of ‘moral’ right to resources and space seems to reflect a certain appetite for Lebensraum.

This way of conceiving the Arctic – as property of mankind – finds, however, the resistance, as one would expect, of the so-called *Arctic Council*, consisting of eight Member States: Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russian Federation, Sweden, and the United States of America. In practice, what happens is that China does not have the status of permanent observer in the Arctic Council, which would allow it to receive a formal invitation to attend the Arctic Council meetings in the future. However, “that is the only concrete benefit permanent observers have compared to ad hoc observers [...]. Observers do not have voting rights nor are they allowed to address the ministerial meeting” (JAKOBSON, 2013). To be precise, only the eight Member States mentioned above benefit from a real influence in the management of issues that concern to the Arctic, although China hopes, on the one hand, that the permanent observers can, in the medium or long term, win a voice in the governance of the North Pole and, on the other hand, that it will, itself, integrate this category of permanent observer. There is not, for now, a unanimous receptiveness towards a further integration of China in the framework of the Arctic Council, since, as explained by Kristian Kristensen, from the University of Copenhagen, “China evokes anxiety because no one knows what kind of power China will evolve into over the coming decades, and there is uncertainty and anxiety about the consequences of the melting Arctic ice” (JAKOBSON, 2013).

This being said – and although some Chinese scholars blame the Antarctic Treaty of being “a rich man’s club, in which China has only second-class citizenship” – it is understandable that in the absence of an Antarctic Council – contrary to what happens in the Arctic – Antarctica offers more room for penetration, through a subtle and gradual ‘conquest’ of the land (CHINA..., 2013). In Antarctica, China is discreet, but extremely

active, building polar research stations or revolutionising the toponymy of the region, since little-by-little the Chinese scientists have been assigning names to specific locations in the South Pole. This is a diplomatic battle, with recourse to soft power, with no need to use force, similar, although distinct in nature, to Taiwan's strategy of isolation in Africa and in Latin America, for example, where China tries to persuade and seduce the various countries to adhere to the one-China policy. In Antarctica, although the issue of Taiwan is not put on that board, the Chinese 'ice diplomacy' is similarly able to positioning itself in order to maximise its influence "on the world's last unclaimed piece of land", as Jeremy Bender (2015), among others, calls it. Bender quotes, in this regard, Guo Peiqing, a law professor at the Ocean University of China, according to whom "China's exploration of the continent is like playing chess [...] It's important to have a position in the global game [...] We don't know when play will happen, but it's necessary to have a foothold" (BENDER, 2015).

But "how do States acquire status and influence in Antarctica?", a question that the researcher Anne-Marie Brady raises and to which she proposes the following criteria as an answer:

The quantity, location, and type (all year, or summer-only) of their Antarctic scientific bases ; The quality of their science ; The size of their spend in Antarctica. Budgets can be divided into: operation costs; research funds; Investment in capacity (bases, planes, icebreakers) ; The number of citizens they have in Antarctica ; The level and spread of their engagement ; The number of working papers and new governance initiatives they propose (BRADY, 2014b).

In the specific case of China's presence and involvement in the South Pole, the result is extraordinarily positive if we consider that the inauguration of the first Chinese research station in Antarctica dates back to 1985, several decades after other States have released there their polar research bases. Although a *latecomer*, Beijing seems determined to catch up with other polar powers, so as to gradually fulfill the criteria (mentioned above by BRADY, 2014b) towards a full polar assertion in Antarctica. After all, this Chinese offensive makes perfect sense, considering that in about three decades, more precisely in 2048, "the ban on commercial drilling of resources in Antarctica is due to expire [...], unless the Protocol on Environmental Protection is re-ratified by consensus" (BENDER, 2015). It is therefore not unreasonable to speculate that "if the accord does expire, Antarctica could become the next major source of hydrocarbons on earth" (BENDER, 2015). That said, it should be noted that the considerable investment that China has conducted at the South Pole will enable Beijing to position itself at the forefront of the race to the world's largest reserves of freshwater, as well as to about 200 billion barrels of oil believed to exist there, besides other important marine and mineral resources.

Moreover, "many ordinary Chinese are fascinated with the continent", sendo que "data collected from local travel agencies in South America showed that more than 2,000 Chinese go to Antarctica annually" (CHINA..., 2015). On the other hand, "as the number of visitors increases, Western tourist agencies have opened offices in China to meet the emerging demands" (CHINA..., 2015).

Returning to Brady, and the criteria of assertion of a state while polar power, it does not seem out of place to say that, for now, the Chinese presence and involvement in Antarctica are noted essentially by the amount of transactions and arrangements made, and not as much by their quality. Brady uses Chen Lianzeng's measure of success, to evaluate the progress of China's incursions vis-à-vis other States in the region. In practice, Brady concludes that with regard to the "Number, location, and type of bases: [China is] 3rd after the USA and Russia"; that the "quality of science/ research" produced by China ("based on citation rates, ranking of journal") is "relatively low", while from the quantitative point of view that is "high"; that in relation to the "size of budget (operation costs + research funds + capital investment)", China is "number one"; that in what concerns the "Citizens in Antarctica (Scientists + tourists + fishers)", China occupies the second position "after the United States"; that regarding the "level and spread of engagement", China occupies the third position "after the United States and Russia"; and, finally, that with regard to "working papers/ new governance initiatives/ committee membership and leadership", China has provided a "low level of contribution" (BRADY, 2014b).

The South Atlantic is of crucial importance, not only for its own energy resources, as well as while access route to an Antarctica, which Anne-Marie Brady, who has studied the Chinese polar interests since 2008, does not doubt that "Chinese language materials are very, very clear about China's interest in Antarctic minerals [...]. They believe that many countries in Antarctica are occupying bases not to pursue scientific questions but to invest in long-term strategic interests, including potential access to any resources that may be discovered" (ATKIN, 2015).

Atkin (2015) cites "a 2013 report for the Chinese Arctic and Antarctic Administration obtained from a confidential source", according to which "regardless of how the spoils are divided up, China must have a share of Antarctic mineral resources to ensure the survival and development of its one billion population." This author also reports that the Chinese believe that "a lot of the scientific research in Antarctica is a disguised form of presence that many countries in Antarctica are occupying bases not to pursue scientific questions but to invest in long-term strategic interests including potential access to any resources that may be discovered" (ATKIN, 2015). In this sense, and in a context where other powers such as India, Iran or Russia have also been expressing interest in energy

and mineral resources in Antarctica, it is not surprising that the Chinese have opened, in 2014, their fourth scientific base in the region, even expressing a willingness to build another one in 2015. Taking into account that China lacks petroleum, and its water resources, while significant, are unevenly distributed, inefficiently used and polluted, Chinese interest in Antarctica's natural bounty would seem logical.

Besides the Arctic's potential energy wealth, the Antarctic sector is also promising for the vast quantities of hydrocarbons (gas and billions of barrels of oil reserves), but also of uranium, copper, lead, coal, iron ore, manganese, diamonds and other minerals essential for the economy of medium-sized and great powers (BROZOSKI, 2013). Moreover, let us mention that "the Southern Ocean [...] includes abundant fish stocks", or also that "the continental ice-shelf is a massive reserve of fresh water" (CARAFANO, 2014).

5 FINAL REMARKS

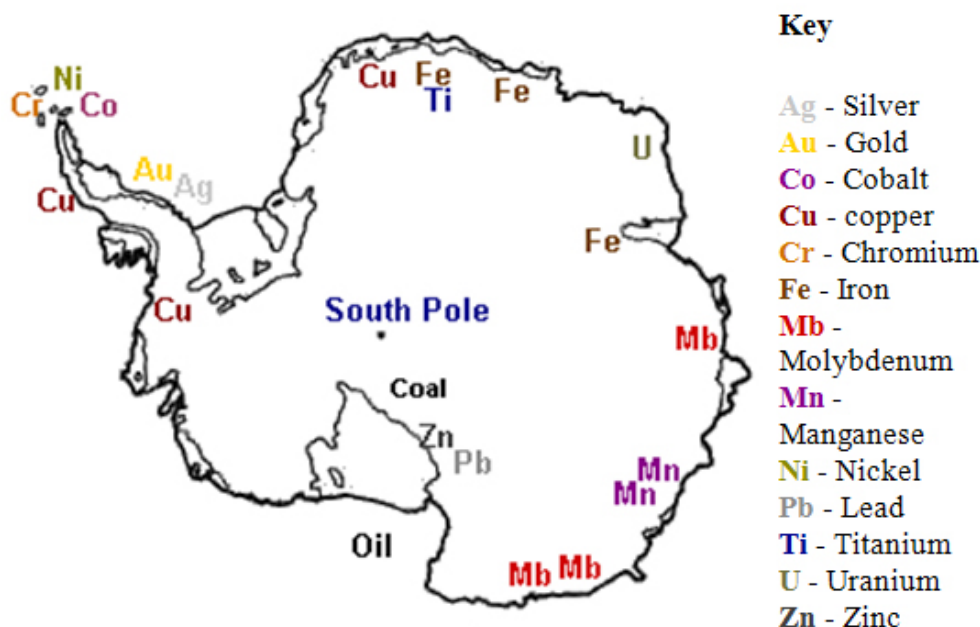
It would be demagogic to state that Chinese politics is merely of a power with a collective project of peaceful rise within the International Community, among other aspects, through trade as a source of peace and prosperity. That is, maybe, Beijing's official position. But we must go further, beyond mere official and institutionalised rhetoric. No matter how discreet, subtle and peaceful the contours of the Chinese going abroad are, the truth is that Xi Jinping's China is both pragmatic and assertive. It would be inconceivable that such a great power from the economic, demographic and territorial point of view, among others, did not care about pressing challenges,

both internal and external. Topics such as food security, alongside the energetic security, or even water scarcity, are national challenges, such as the one China principle. To ignore such factors is to disguise reality.

In this point of view, it will be interesting and promising, among others, from the academic point of view to follow the evolution of China's polar ambitions, a challenge we issue, in fact, to other researchers. The next years will be decisive. Why? Although Antarctica and the Arctic are not certainly priorities at the level of Chinese foreign policy, the truth is that taking into account China's population growth – inevitable and due to the already declared intention of the Chinese Government in making the one-child policy less strict – more mouths need more food and, therefore, they will also generate a greater consumption of energy resources. Africa, Asia, Oceania, the Americas and the European Union will be increasingly smaller faced with an insatiable demand for resources, so all that remains are the unexplored continents, as a result of the ecological constraints: the Arctic and Antarctica. However, my analysis is that the economic imperatives will tend, in the long term, not in the short term, to successively gain ground with regard to ecological issues and to the inherent protection against pole drilling. The message sent by Russia to the International Community in 2007 – when two mini submarines reached the bottom of the Arctic Ocean at 4.2 kilometers deep, planting there a titanium Russian flag – can be subject to multiple interpretations, but it is clear from the realism point of view.

The race to the Arctic has already begun and Russia, which is the Arctic's largest littoral state, and owns the largest fleet of ice-breaking ships worldwide, has

Figure 3. Mineral deposits in Antarctica



Source: Antarctica Information (2015).

already hinted its position. China, in turn, presents itself as a clearly polar state, although with more research stations built in Antarctica than in the Arctic. In the face of the latent tensions between the Arctic Council's vision and the Chinese one regarding the role and the acceptable and expected intervention by States not directly bordering the Arctic, Beijing has every interest in building an official narrative sufficiently ambiguous that legitimises and justifies its polar interests vis-à-vis the International Community. It is already doing it, in fact. Less direct and explicit than Russia, without showing provocative 'flags', the Chinese posture must be of non-confrontation, waiting for the right moment to claim what, after all, Beijing believes being something not only of the Arctic States, but of all Humankind, about which the Chinese, by being one fifth of the world population, have allegedly increased legitimacy to claim 'their part' of the North Pole.

Advised by prominent Chinese academics – such as Guo Peiqing, Li Zhenfu or Han Xudong – the Chinese Government cannot and must not remain indifferent to the richness of the Arctic and Antarctica. This is not the apologia of any revisionism, but only a non-indifference to polar subjects. However, the Chinese Academy suggests that Beijing's diplomacy should be subtle, by 'reassuring' Humankind that its official posture vis-à-vis the polar 'race' is purely academic. That is, China will be, from the official point of view, only interested in studying the effects of climate change and their disastrous consequences, among other... 'academic'... aspects. But, in French we say *Ce n'est pas vrai... On le sait bien...* Or better, it is true, but only a part, since energy resources, fishing – the issue of food security – the ores that exist in the North Pole, as well as the shortening of maritime distance between East and West, by sea, are other reasons, besides the academic and climate issue, that explain the importance of the Arctic to China.

In summary, we believe that the Chinese maritime New Silk Road does not have, nor should it, necessarily to be confined to the Atlantic, Indian or Pacific. No matter how important these may be, China can and must continue to try to build a polar New Silk Road, also serving as a lever and steersman to other powers that also look for various opportunities in the melting of the ice. However, and this may seem paradoxical, we share the view that, despite its ventures and polar incursions, China should continue to focus on conventional maritime routes, for the advantages that these offer vis-à-vis the hypothetical polar maritime alternative. In any case, the crossing of the Arctic must fully replace the conventional sea routes. In our point of view, both the conventional sea routes and the polar ones should be designed in a perspective of complementarity. We don't want with this to exclude the possible seasonal usefulness of a polar maritime route, but for now, in a context of climate and technological future, it seems to be too reckless to draw conclusions about issues which still require, in the short and medium term, more experimentation and maturing.

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