The European Union’s Relations with Greenland

Magdalena Tomala
Jan Kochanowski University in Kielce, Department of North European Countries, ul. Świętokrzyska 21, 25–369 Kielce

Follow this and additional works at: https://digijournals.uni.lodz.pl/is

Part of the Other Languages, Societies, and Cultures Commons, Political Science Commons, Public Affairs, Public Policy and Public Administration Commons, and the Race, Ethnicity and Post-Colonial Studies Commons

Recommended Citation
DOI: https://doi.org/10.1515/ipcj-2017-0015
Available at: https://digijournals.uni.lodz.pl/is/vol20/iss1/4

This Article is brought to you for free and open access by the Social Sciences Journals at University of Lodz Research Online. It has been accepted for inclusion in International Studies: Interdisciplinary Cultural and Political Journal by an authorized editor of University of Lodz Research Online. For more information, please contact agnieszka.kalowska@uni.lodz.pl.
THE EUROPEAN UNION’S RELATIONS WITH GREENLAND

**ABSTRACT:** Greenland has a special relationship with the European Union due to its link with the Kingdom of Denmark – Greenland’s mother country. As a result, Greenland shares some parts of the EU’s internal market via association agreements. Greenland, has become a meeting place of American, European and Asian interests in the Arctic. It is therefore essential that the EU doesn’t lose the North and keeps strengthening its relationship with Greenland. After having focused its attention on the East and the South, it is high time that the European Union looks further North, notably through a more ambitious Arctic Window in its Northern sphere of influence.

**KEYWORDS:** Greenland, European Union, international relations

**Introduction**

Currently, twenty-eight countries are part of the European Union (EU). However, the EU’s law is not uniformly applied to the territory of all Member States, because some of them have special territories (Ziller, 2007, pp. 51–62). They have special relationships with governments, within which they are located, which in turn implies the need to define their relationship with the EU. Among the countries and territories of the EU, Greenland has a unique status. It is an autonomous part of the Kingdom of Denmark and it is the only one in the history of the organization which decided to leave the Community (Vestergaard, 2013, pp. 1–9).
Over the centuries, the geostrategic importance of Greenland has changed extensively. Initially, the island did not present any great value. Its role was limited to supply the European market with exotic goods (Brańka, 2013, pp. 467–484). Global warming has led to Greenland’s international position coming to the fore. This includes the EU, which until recently had not taken Arctic issues into account. The involvement of the community in this area was determined by geographical factors. Until the mid-1990s, the only Arctic country of the EU was Denmark – and that was only because of Greenland.

For several years, the status of the island has changed in the international arena. The possibility of exploring Greenland has attracted the attention of several world powers, such as: China, the USA and Russia. One can advance a hypothesis that the activity of the international community in Greenland has made the EU realize the need for a stronger interest in this region (Łuszczuk, 2010, pp. 156–182). Therefore, the purpose of this article is to answer the following questions: Does the EU have the right to speak on matters of the Arctic? What goals does it intend to achieve by working together with Greenland? Is it possible to consider the EU’s action to be effective in this area? It seems that in recent years, there is a growing awareness of the importance of Greenland in the EU, although it remains uncertain if this commitment is sufficient.

**Greenland – a strategic partner of the European Union**

Due to global warming, the melting of the Arctic ice area (Kubiak, 2009, p. 14), and the opportunities of extracting energy, raw materials, and rare earth metals, the international community’s interest in the Arctic region is growing. The interests of different countries intersect more and more often in this region. However, the Arctic is one of the last places on Earth whose legal status has not been regulated. Hence, you can observe the intensification of territorial claims, reported by the states – the parties of the Arctic competition – to subordinate these areas. So the question arises about the entities that may lay claim to the Arctic? Does the European Union also have the same rights? The answer to this question is that it is not clear.

There are at least three concepts of the boundaries of the Arctic (Janicki, 2013, pp. 105–107): the Arctic Circle, isotherm
10 degrees Celsius in the month of July, and the extent of the occurrence of trees. In terms of a geo-political view, independently of the aforementioned variants of the boundaries of the Arctic, there are parts that belong to five countries: Russia, Norway, Canada, Denmark and the United States. In turn the isothermal variant should include Iceland. According to the concept utilizing the Arctic Circle, we should also mention Finland and Sweden, but exclude Iceland.

In this context, it is also worth noting the geostrategic importance of Greenland as it is located between North America, Russia and Europe.

From the above, three members of the EU which are also three Arctic countries – Sweden, Denmark and Finland, which can lay claim to this area and two countries (Norway and Iceland), which cooperate with the EU within the framework of the European Economic Area.

It would seem that the natural direction of interest for the EU should be the Arctic, but over the years it remained on the margins of its foreign policy (Tomala, Czarny, 2009). It should be noted that only a part of Finland and Sweden extends into the Arctic Circle. Both of these countries do not have direct access to the Arctic Ocean. On the other hand, Norway borders the Arctic Ocean, but it is not a full member of the EU, and the same applies to Iceland. In fact, only Greenland, which is dependent on the territory of Denmark, gives the EU a mandate to be involved in the affairs of the Arctic.

So why should the EU engage in the issues related to the Arctic Circle? The EU counts itself among the entities that want to take an active part in the discussion on the future of this region (Dośpiał-Borysiak, 2001, p. 1). Reasons for interest in one of the least populated regions of the world should be seen, among others, in the reports of the melting Arctic icecap (Kępka, 2013, pp. 217–218; Kępka, 2009, pp. 116–135; Styszyńska, 2007, pp. 77–91). Changes in the environment of the Arctic imply new ways to use the potential of the island. One of many possibilities is mentioned by K. Kubiak (2011, pp. 105–134) who discusses the emergence of new shipping routes. In the case of Greenland, we are talking about the Northwest Passage, which can be an alternative route in the future to the Panama Canal which is 5000 nautical miles longer. Greenland, due to its strategic location in relation to the Northwest Passage may become an ideal place to create infrastructure for transport
across the Arctic Ocean, such as ports, maritime supervision, and emergency systems (Schymik, 2009, p. 2).

Another reason for the EU’s involvement in the Arctic is the issue of exploiting the rich natural resources present in Greenland (Yenikeyeff, Krysiek, 2007; Kijewski, 2009, p. 283), whose exploitation was previously unprofitable. Industrialized countries are now in a really difficult situation due to the lack of elements necessary to create new technologies. For example, nickel batteries are an essential component of mobile phones, laptops and hybrid cars – they need lanthanum, one of the 17 rare earth metals\(^1\) which are only present in Europe in trace amounts. Currently in Europe, there is a lack of as many as 14 critical raw materials essential for the EU’s industry, they are also hard to find on other foreign markets. The EU Member States are in a very difficult position because they are dependent on the import of many essential raw materials, and nine of them can be found in the possession of Greenland.

Apart from the above mentioned economic issues, it should also be pointed out that global problems may require the presence of an external institution, such as the European Union. These problems especially affect the sensitive circumpolar ecosystem, including the issues, such as environmental protection of the Arctic, the protection of indigenous peoples, the issues related to global warming, and the conservation of resources. As the Commissioner for External Relations and European Neighborhood Policy, Benita Ferrero-Waldner, noted, “The Arctic is a unique and vulnerable region located in the immediate vicinity of Europe” (EurActiv, 21.11.2008). The development of this region will have significant repercussions for the lives of future generations. Therefore, the EU’s actions in this area may be crucial in maintaining a balance between an exploitative policy and the environmental protection of the Arctic.

### The status of Greenland – from colonialism to autonomy

The status of Greenland should be considered in the context of its dependence on Denmark. In literature, there are many classifications of dependent territories (Sobczyński, 2006,

\(^1\) Rare-earth metals are: lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, lutetium, scandium and yttrium.
pp. 253–255). We can distinguish five types of dependence, as defined by the degree of relation between the country and metropolises (Bina, 183, pp. 136–137). These are associated countries, protectorates, colonies, overseas territories and special territories.

Referring to history, the first attempts to colonize Greenland, though unsuccessful, took place as early as the 10th century. The term Colony is commonly applied to each dependent territory, even though its system and the degree of dependence is not specified (Malendowski, 2000, pp. 176–177). Colonialism means a historical phenomenon involving the mastering and maintaining political and economic control by some countries over others in order to exploit them. Thus the colony is considered to be an integral part of a metropolitan country. According to M. Sobczyński (Sobczyński, 2006, p. 317), a characteristic feature in the colonial system is the lack of representation of a metropolis in Parliament. This type of selfdom in Greenland was associated with the era of the Middle Ages. Then Erik the Red (who was Norman), reached the world's largest island, where the climate at that time was radically different to today’s weather conditions. The remaining areas of the island were colonized in subsequent years. The first official mention of Greenland was in 1053, when Pope Leo IX transferred the colonist population of Greenland to the diocese of Bishop Adalbert. In the mid-fourteenth century the Bishop of Bergen – Ivar Bardarson, while visiting the east coast of Greenland, did not meet any colonists. Due to the severe weather conditions, trade with Norway was also declining. The last colonists died out in the second half of the 15th century, which brought the first era of Greenland's colonization by the Europeans to a close. Until now, there has been an ongoing dispute about the cause of the Greenland colonization failure by the Scandinavians. Among many hypotheses, we can list the following: damage to the local environment (mainly arable land), lower and lower temperatures, and an increasing inability to establish good relations with the local people – Inuits.

Then, for about 250 years, Europe’s interest in Greenland declined. Attempts to discover the Northwest Passage took place along the coast of Greenland, the Europeans had contacts with the Inuits, but they [contacts] did not have a permanent character and were not associated with a permanent presence on the island. Due to Greenland’s coastal waters, whalers from England and Scotland more often visited the island.
The era of Danish rule began in 1721. A Danish–Norwegian expedition led by Hans Egede headed out to Greenland in order to establish contacts with previous colonizers of the island. Although the expedition was unsuccessful, the Danes founded a new colony – Good Hope (Godthåb) – today’s Nuuk. With the start of the colonization of the island, the Danes also started a period of the island’s isolation from foreign (not Danish) influence, among others, in trade and settlement. This phase lasted basically until the end of World War II.

After the war, there was no longer a climate conducive to restoring colonial order. The United Nations set itself the objective, among others, which was the full decolonization of the World (The United Nations Charter, Art. 71 point b).

In the UN Charter a term of decolonization appeared which meant the process of liquidation of the colonial system through the granting of sovereignty to dependent territories. Thus began the process of transforming colonies into other forms of political systems whose status bore the hallmarks of a quasi-autonomy and was designed to mask the colonial nature of ruling. Under these provisions on June 5, 1953, Greenland was redefined as a province of Denmark. Therefore Greenlanders sat in the Danish parliament, and all the island’s inhabitants were granted almost the same civil rights as native Danes. Also, it is worth mentioning that Denmark has applied a symbolic intimidation against Greenland for years, which has revealed the dynamics of power in social and political life (Lubowicka, 2013, pp. 257–268; Thisted, 2015, pp. 105–120). Despite introducing the same law in both countries, this symbolic intimidation was a tool to manage its colony, which developed in a different way (Tomala, 2015, pp. 461–478).

At this time Denmark became a member of the European Community, and Greenland also became a part of European integration, despite the fact that in the accession referendum the residents of the Island voted against accession to the EU. Initially, Greenland’s membership in the EEC was associated with the benefits of an economic nature. The island received support from the EEC to the amount of 10–25 million dollars per year for the modernization of infrastructure and the development of education (L. E. Johansen, 1992, p. 34). It was also supported by grants from the European Investment Bank.

Only on May 1, 1979, did Denmark decide to transform Greenland into an autonomous country, with a full internal self-government, and even partial international powers. The issues
related to defense and finance were at the discretion of Denmark. With these new laws that Greenland received, it decided in February 1982, to change the status of the island within the EU and left the organization. On January 1, 1985 it acquired the status of an associated overseas territory of the EU, although its metropolis remained a member of this organization. Greenland’s reason for leaving the EEC was the need to maintain control of its extensive area of fisheries. This move was dictated by the Inuit opposition against the EU’s fisheries policy, according to which the Greenland Seas were open to foreign, European fleets. K. Szwed looks at another aspect as to why Greenland left the European structures. They strongly believed that “Membership in the structures of the EEC was treated as a possible threat to the Inuit’s ethnic identity” (Szwed, 2013, p. 138; Lubowicka, 2011, pp. 76–82). It was feared that the interests of smaller entities would be ignored. Greenlandic Euroscepticism had its source in cultural, social and economic exploitation (Bourdieu, 1986, pp. 241–258). Greenland’s opposition to such EC actions initiated aspirations for independence from both Denmark and the EU.

Until 1982, Greenland was considered to be an integral part of the EU through Denmark, allowing the EU’s vessels to fish in its waters. After Greenland left the EU, the relationship of both parties had to be revised. The document changing the relationship of partners was the Treaty amending the Treaties establishing the European Communities with regard to Greenland, the Treaty of Greenland. It placed great emphasis on the sphere of co-operation and development. In the preamble, there was a reference to “the introduced arrangements for establishing close and lasting links between the Community and Greenland and taking into account the common interests – in particular the needs of Greenland in the field of development”. Moreover, the preamble stipulated that while the status of the Overseas Countries and Territories (OCT) should provide an appropriate framework for relations with Greenland, “it should also provide additional, detailed rules in Greenland”. The protocol on special arrangements for Greenland, which was attached to the Treaty, emphasized that fishery products from Greenland should be duty free and have unrestricted access to the Community market, provided that the Community was granted satisfactory possibilities for access to the Greenland waters under the Fisheries Agreement.

On February 1, 1985, with the Treaty of the Greenland (signed on March 13, 1984 in Brussels) coming into force, the Island was
granted the status appropriate for an overseas territories associated with the Community. The OCT status was already defined in Art. 133 of the Treaty of Rome, where the goal of the association was to promote economic and social development of countries and territories and to establish close economic relations between them and the Community as a whole. In accordance with the principles set out in the preamble to this Treaty, the association served primarily the interests and prosperity of the inhabitants of these countries and territories in a way that leads them to the economic, social and cultural development, to which they aspire. In the case of the OCT their relationship with the Union was perfunctory, limited only to participation in selected programs. The close relationship with the Member State – in this case with Denmark – gave Greenland’s residents the privilege of being a citizen of the EU.

Under the Treaty of Greenland, the provisions of the Treaty of Rome on the OCT were extended to Greenland. In this case Greenland is not a party of the system, as not being a sovereign entity, it is represented by Denmark. The association agreement does not create a separate institutional system which could lead to a mutual dialogue. It grants only unilateral trade preferences for Greenland, incorporating them into the sphere of functioning of the Common Market. Customs duties are introduced on products imported from the Community provided that they are used for development, industrialization and supply Greenland’s budget. In other cases, both the Member States of the European Union, as well as the discussed dependent territory apply the rules under which trade takes place within the EU.

Every few years, the EU reviews relations between the EU and Greenland, placing the changes in protocols to the Treaty of Greenland. The protocol, which was in force between 2001 and 2006 was criticized by the EU, as it simultaneously regulated the two issues: the payment of compensation for the use of fishing resources and budgetary support for the island’s government. It was pointed out that the EU action is uneconomical because the value of the fishing catches was less than the compensation paid by the EU.

The association was important in the 1950’s and early 1960’s during the colonial period, but currently it has begun to lose its essence due to global warming and the forecasts for the occurrence of the rare earth metals and energy resources in the area of the island. Thus the EU considered the geostrategic importance of Greenland in its conclusions of February 24, 2003 on the periodical review of
The Fourth Protocol relating to fishing between the European Union and the Government of Denmark and the autonomous government of Greenland, An agreement recognized that there was a need to broaden and strengthen future relations between the EU and Greenland taking into account the importance of fisheries and the need for structural and sectoral reforms in Greenland. After 2006, the Council decided to base the future relationship between the European Union and Greenland on a comprehensive partnership for sustainable development, including specific fisheries agreement, negotiated according to the general principles and rules applicable to such agreements. It may be noted that the Greenland Treaty took a more prominent form after 2006 when the partnership was signed. It is based on historical, political, economic and cultural ties between the two parties. Provisions of the agreement provide for a consistent EU financial assistance (e.g. 38 million in 2008) intended for the development of several Greenlandic sectors, such as scientific research, education, industry and fishing. In return the EU receives permission to extend its rights to fishing in the waters of the island.

The decision of 2006 (2006/526/EC) on the partnership between the EU and Greenland and the Kingdom of Denmark expired on December 31, 2013. There was again the need for an alignment of the bilateral relations so as to promote a stable and favorable a socially inclusive international order, to pursue common global public purposes, and to defend the vital interests of the Union and extend knowledge of the Union in third party countries and Overseas Countries and Territories.

Currently, the specific objectives of the partnership are determined by the Decision of Council of March 14, 2014 (Journal of Laws EU.L.2014.76.1 the Decision of Council 2014/137/EU). Among the top priorities are: support for Greenland – and co-operation with it – to face the biggest challenges, especially the need for sustainable diversification of the economy, the need to increase the skills of its labor force, including scientists, and the need to improve the Greenlandic information systems in the area of information and communication technologies, contribute to increase the potential of Greenland’s administrative authorities in the formulation and implementation of national policies, particularly in new areas of mutual interest set out in the program document for sustainable development.

The main areas of co-operation in the framework of the partnership include: education and training, tourism and culture;
natural resources, including the raw materials; energy, climate, environment and biodiversity; Arctic issues; the social sector, labor mobility, social security systems, food safety and food security, innovations and researches in areas, such as energy, climate change, disaster resilience, natural resources, including raw materials, and sustainable management of living resources. The indicative amount for the implementation of this decision in the period between 2014 and 2020 is more than 217 million euro.

**Greenland – where the interests of great powers meet**

China, Denmark, the USA, Canada, Australia, the UK and the European Union are all interested in Greenland’s natural resources. Although it has 9 of the 14 rare metals and crude oil, uranium, gas and gold, the lack of infrastructure, manpower, and financial resources make it impossible to begin extraction. It is difficult to acknowledge that the priority for Greenlanders is to increase the presence of a commonwealth on the Island. Their intentions are contrary to this as they aim to recover Greenland’s sovereignty and independence from both Denmark and the EU. As D. Degeorges emphasizes, the biggest challenge for the Greenland nation is “not to become a bad player in the Arctic region” (Degeorges, 2013b). As he points out in order to have all the prerogatives, you cannot have a weak state because the consequences of a poor Greenland policy in the Arctic will be a threat to energy security. To achieve independence, Greenlanders need to build strong state structures and a strong economy, independent from the influence of world powers and multinational corporations (Degeorges, 2013a). The proper selection of the rules governing co-operation with partners is very important here. Interest in Greenland is high, as evidenced by numerous diplomatic meetings conducted by the Greenland authorities. In November 2011, Li Keqiang – then the then Deputy Prime Minister of China had a meeting with Ove Karl Berthelsen, the minister of industry and natural resources. This meeting showed that China was interested in maintaining good relations with Greenland. In April 2012, a similar meeting was held with the participation of South Korea, when the delegation to Greenland was led by the Minister for Lands and Resources, Xu Shaoshi. In June 2013, China’s President Hu Jintao arrived for a three-day visit
to Denmark, although apparently the issues of rare earth metals were not discussed. In the reports concerning Hillary Clinton’s visit to Greenland – one of her first questions related to the rare earth metals.

The world’s most important politicians now ‘beat a path to Greenland’s door’. For example, in September 2013, Greenland was visited by the South Korean President, Lee Myung-bak, and the Kores corporation (Korean Resources Corporation) signed an agreement with a local mining company Nuna Minerals on the joint exploitation of rare earth metals (Degeorges, 2013c). It is not surprising that the former Prime Minister of Greenland, K. Kleist, for many years was under pressure from foreign investors and politicians from the European Union, the United States and China. During his years in office more than one hundred mining licenses were granted. The flagship project, which had been previously mentioned, was to launch iron ore mining by the British company London Mining at a cost of 2.3 billion of dollars and export this raw material to China. Two thousand employees, brought from China, participated in the works near Nuuk fjord. The local community expressed, at this project, their objection in the elections of 2013 because such a large migration meant as much as a four percent increase in the population of Greenland. In addition, the US giant – Alcoa Inc. is planning to open an aluminum factory with thousands of new jobs, but the Americans do not arouse as much cultural concerns as the Chinese who are associated with aggressive investments and economic expansion.2

The above-mentioned examples prove that the world’s great powers, who look to Greenland for resources, are now in competition with the EU. However, the EU itself is not an active entity in the “race for Arctic resources”. It was even proved by K. Kleist, who had difficulty to communicate with the European Commission. The so-called memorandum of understanding intended to ensure the European countries access to Greenland’s resources linked the organization with Greenland. However, Greenlanders were not satisfied with the protracted negotiations and before the election Kleist had threatened by saying to the EU that the countries of the Old Continent would soon lose the possibility of exploitation of the island’s natural resources. As a result of bureaucratic delays at the EU level, Greenland quickly and efficiently concluded a similar

2 China is a major supplier of rare earth metals and dictates prices on world markets.
agreement with China. The only thing that the European Union could do in this situation was to claim the limitation of the Chinese presence on the Island (Degeorges, 2012).

The European Union itself, in order to gain access to raw materials of the island, plans to strengthen mutually beneficial co-operation with Greenland, allowing the combining of infrastructure, investment and building potential with the exploration and extraction of raw materials. In June 2012 in Nuuk, a letter of intent for co-operation in this field was signed on behalf of the European Commission. However, this co-operation is slow, bureaucratic – and at the very beginning is not competitive with the Chinese regime, which makes decisions quickly and does not need consultation in the most important matters. In June 2013, the EU Commissioner for Industry, Antonio Tajani, visited Greenland and sought the possibility of using valuable elements for EU companies. China, who is engaged in intensive negotiations, took firm steps. Despite the concerns of the Greenlandic society about the presence of the Chinese on the island, Greenland maintains a close relationship with this great power (EurActiv, 2013). It may be noted that Denmark understands such a Greenland policy. This was illustrated by the joint meeting of the Minister of Greenland and the Ambassador of Denmark in China. On February 17, 2014, the Danish ambassador Erik Vilstrup Lorenzen and Greenland Foreign Minister Kai Holst Andersen in an interview with “China Daily” pointed out that they started talks with two Chinese companies on mining co-operation in Greenland (a copper company from Jiangxi province). Kai Holst Andersen emphasized that if this co-operation was successful, it would be a good starting point for expanding co-operation with other Chinese companies in Greenland. China promised in exchange access to its market for Denmark and Greenland, and scientific research co-operation with the participation of the Kingdom of Denmark and Greenland (Ningzhu). Currently, about 58 percent of companies engaged in mineral exploration in Greenland come from Canada and Australia. The EU companies account for only 15 percent (including Denmark, Germany, the Czech Republic and the United Kingdom). Although European companies have three-quarters of the operating licenses in Greenland, they have only a few concessions for exploration and actually engage in only a few (The United Kingdom, Germany and Denmark have most of these concessions).
Summary

Summing up the considerations on EU – Greenland relationships, we can draw the following conclusions:

1. The EU’s focus on the effects of climate change and human activities in the Arctic has come rather late in the day. It was only in 2008, when the European Commission presented interests and objectives pursued by the policy of the European Union, and clarified the systematic and coordinated actions to respond to the challenges posed in this region of the world. Through this message, the EU made the first step in the direction of policy towards the Arctic. As stated in the article, the voice of the EU in this case results from the presence of Denmark in the Community and Greenland being a Danish dependent territory.

2. Greenland has the resources of raw materials, extremely valuable for the world powers, which makes the island a valuable trading partner. Today, there is increasing interest in Greenland showed by countries such as China, Korea, and others, which affects the growth of its international competitiveness. The conclusion is that Greenland knowing that it is at the center of many countries’ interest wants to extract the most benefit for itself. Thus there is a change of EU policy in this region aimed at securing the needs of raw materials for Europe.

3. Assessing the resource potential, geologists indicate that one of the world’s largest sources of various raw materials is located in Greenland. Due to global warming, access to them will be cheaper and easier – this will consequently allow us to take advantage of the economic development opportunity in Greenland, so that in the future it may become a sovereign state, independent from both Denmark and EU subsidies.

4. One of the major threats facing Greenland is the proper use of its role as a “crude tycoon”. The need for diversification of countries investing in Greenland should be also be pointed out. It can be assumed that the major projects in Greenland will be largely financed by Asian countries (the threat of monopolization of rare resource management), and therefore cultural and civilizational threats may emerge. Therefore, there is a need to strengthen Greenland’s political relations with the European Union, which is a counterweight to the influence of Asia.


Degeorges, D., *Denmark, Greenland and the Arctic. Challenges and opportunities of becoming the meeting place of global powers*, Royal Danish Defence College, Copenhagen 2013.


The United Nations Charter, Art. 71, Par. b


