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Barentsburg and Longyearbyen in times of socioeconomic transition: Residents' perceptions of community viability

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Abstract

Geopolitical interventions since the end of the 1980s—such as the collapse of the Soviet Union, a decline in the activities of state-owned coal companies, and governmental initiatives to increase tourism activities—have affected the community viability of two main settlements on Svalbard: Barentsburg and Longyearbyen. This paper explores how the residents of these settlements (with different cultural backgrounds) perceive the effects of socioeconomic transitions on community viability. The analysis of qualitative interviews with residents of Barentsburg (n=62) and Longyearbyen (n=36) reveals the residents' perceptions of the pace of the transition and the changing community composition. New types of commercial activities, such as tourism, contribute to local value creation and socioeconomic development but come with concerns grounded in community fluctuation, environmental protection, economic prioritisation, and power relationships. Compared to Longyearbyen, Barentsburg has undergone relatively minor demographic and social changes and remains stable in terms of culture, language, and management practices. We conclude that the viability of Longyearbyen and Barentsburg during the transition was affected by community dynamics and fluctuations, social relationships within and between communities, and local institutional practices.

Introduction

In the Arctic, several local communities are affected by multiple changes, including socioeconomic transitions caused by deindustrialisation, geopolitical events, and economic diversification interests. For example, the shutdown of cornerstone industries has dramatic impacts on sociodemographic compositions, community attractiveness, and socioeconomic characteristics, including outmigration (Valestrand, 2016). Moreover, the postindustrial and post-Soviet transition in Northern Europe has led to profound changes in the community structure, namely gender and age composition, work seasonality, and population stability, which have challenged the viability of Arctic communities affected by these changes (Stammler & Bolotova, 2010).

A socioeconomic transition has also been the case for Svalbard's communities (Sokolickova, Meyer & Vlakhov, 2022). Since the end of the 1980s, the communities of Barentsburg and Longyearbyen on the Svalbard archipelago have been experiencing the impacts of the aforementioned transitions, which have been caused by new government and power structures; the restructuring of the two major state-owned coal companies, Store Norske Spitsbergen Kulkompani AS and Trust Arktikugol (henceforth Store Norske and Arktikugol); a reduction in mining operations; and the increase of tourism development (Arlov et al., 2001; Pedersen, 2017; Viken, 2011).

In this paper, we explore elements of Barentsburg and Longyearbyen's viability that were affected in this period of socioeconomic transition. In particular, we study the ways in which the residents of Barentsburg and Longyearbyen perceive the impacts of top-down initiated socioeconomic transition on community viability. A viable community can be described as a one where "people feel that they can stay as inhabitants for a period of their lives, where they find sources of income and meaningful lives" (Aarsæther, Riabova, & Bærenholdt, 2004).

The rationale for our study is further motivated by one of the measures issued by the Norwegian government, that is, the maintenance of Norwegian communities in the archipelago (Ministry of Justice and Public Security, 2016, p. 5). Longyearbyen, as the main Norwegian community on Svalbard, is imposed upon to meet these criteria of maintaining a community (Grydehøj, 2014). In addition, the Norwegian government aims to facilitate a diversified, knowledge-intensive, and sustainable economy (Ministry of Trade Industry and Fisheries, 2019; Misund, 2017), while simultaneously addressing geopolitical stability and environmental concerns (Hovelsrud, Kaltenborn, & Olsen, 2020). The Russian state policy is focused on maintaining the Russian presence in Svalbard over the long term, in accordance with the Svalbard Treaty

(President of Russia Decree, 2020) and to strengthen, diversify, and upgrade its economic activities on the Svalbard archipelago (The Ministry of Foreign Affairs, 2020a). The issues of economic profitability and sustaining a livable community in Barentsburg also play a key role. However, little is known about the role of the local initiatives and interactions in Barentsburg and Longyearbyen to regard to maintaining communities' viability.

In addition to top-down policies, several studies have emphasised the role of local communities and their engagement in transition processes to enable communities to meet the required changes (Avango, Nilsson, & Roberts, 2013; Hacquebord & Avango, 2009; Robertson, Blackwell, & McFarlane, 2017; Vlakhov, 2020). Hence, we aim to examine community viability as a socially constructed phenomenon that is dependent on state policies and targets but also shaped by local initiatives and interactions.

This explorative, community-based study fills a knowledge gap in the viability literature by exploring (1) the residents' perceptions of community viability during a period of transition and (2) community viability in two unusual cases, namely Barentsburg and Longyearbyen. These two settlements are characterised by high community fluctuation, and their development is nationally driven to a large degree. Moreover, the insights from Barentsburg may be particularly valuable for Svalbard's stakeholders, since compared to Longyearbyen, this community has received less attention in the scientific literature and thus, less is known about the socioeconomic impacts of the recent development in this area.

The empirical data are derived from interviews with the residents of both settlements, which were analysed to understand how the residents perceive the impacts of such a socioeconomic transition to different aspects of community development and how those impacts relate to community viability. This study presents a unique analysis of the viability elements from two geographically close settlements in Svalbard by showing how communities with different cultural backgrounds and social structures perceive similar transition processes. Furthermore, the study provides recommendations for stakeholders about the significance of several viability elements for future communities' socioeconomic conditions.

Background: socioeconomic transition

Both Norway and Russia have the long-term ambition of maintaining their presence on the Svalbard archipelago (Grydehøj, 2014; Kaltenborn, Østreng, & Hovelsrud, 2019). The past, present, and future of these communities' development are governed in a top-down manner by the states and their respective ministries (Gerlach & Kinossian, 2016; Viken, 2011).

The Svalbard Treaty (1920) recognises Norwegian sovereignty over Svalbard. The same document ensures equal rights to the nationals of the treaty (of the signatory states) to engage in a wide range of commercial activities. As far back as the 1970s, Svalbard's economic activities were shaped by several politically driven changes. First, several environmental regulations, such as the establishment of major protected areas, were implemented in line with Article 2 of The Svalbard Treaty (1920), which acknowledges Norway's rights and responsibilities to conserve Svalbard's flora and fauna. A notable change in environmental policy came about with the passage of the Svalbard Environmental Protection Act (2001). The inauguration of the state airport in Longyearbyen in 1975 and the publication of White Paper 39 (1974-1975) can be described as events that led to a new period of Norwegian presence on the archipelago. This period was characterised by practicing sovereignty, undertaking a transition from a coal company town

towards a family-oriented community, and establishing new businesses and a new governance model for the company town of Longyearbyen (Arlov, 2003; see also Arlov et al., 2001). Thus, at this point, it had already been concluded that tourism could be developed on the archipelago.

Both settlements have been historically connected to coal mining activities, and the contemporary development of these Arctic settlements is characterised by a nationally driven economic transition from a coal-dominated economy towards one that is more focused on alternative economic sectors, including marine and on-land tourism, research, and other enterprises (e.g. Misund, 2017; Pedersen, 2017; Viken, 2011).

Notably, for both communities of Barentsburg and Longyearbyen, the end of the 1980s served as a tipping point in local development. In Longyearbyen, this transition started in 1988, with the restructuring of Store Norske and the differentiation of its functions to Spitsbergen Travel AS (tourism operations) and Svalbard Næringsutvikling AS (commercial development) (Grydehøj, 2014). For the past 30 years, the number of guest nights in Longyearbyen increased from 17 842 in 1991 (Viken & Jørgensen, 1998) to 162 949 in 2019 (Sokolickova et al., 2022; Visit Svalbard, 2020). After the closure of one of the main mines, Svea Mining, in 2016 and prior to the COVID-19 pandemic restrictions, the tourism industry had become one of the major employers in Longyearbyen (Ministry of Trade Industry and Fisheries, 2019). In 2002, the local government body of the Longyearbyen Local Council was instituted, whose responsibilities are similar to those of other Norwegian municipalities (Hovelsrud et al., 2020). In a new form of community organisation, the governor of Svalbard is responsible for the implementation of Norwegian Svalbard policies, while the Longyearbyen Council can decide on some local issues (Viken, 2011).

Barentsburg has historically been governed by Arktikugol, a state-owned Russian coal mining unitary enterprise, as the town does not have a city council (Gerlach & Kinossian, 2016). The Soviet collapse in 1991 resulted in the decline of state support for Arktikugol, which also pushed the company to orient more towards a market economy (Portsel, 2011). However, compared to Longyearbyen, the economy of the Russian community of Barentsburg is still based on coal production to a greater degree. The gradual phasing out of mining activities has been the core of the Russian Svalbard policy during the last decade (Sokolickova et al., 2022; Vlakhov, 2020). Since the early 2010s, tourism and research activities have been seen as growing economic pillars (Gerlach & Kinossian, 2016). The tourism organisation Grumant was established as a part of Arktikugol rather than as an independent entity. In 2014, a new Russian Research Centre was established in Svalbard. However, the centre happened to be simply an umbrella structure; all the research activities dating back to the Soviet era remained unchanged, and their projects continued as usual.

Conceptual framework

This study is designed to examine how socioeconomic transitions influence local elements of viability. In doing so, this study investigates the perceptions of residents regarding transition impacts in both case communities of Barentsburg and Longyearbyen. In line with Qiong (2017), we define perception as a socially constructed process of attaining awareness, where the process itself consists of three stages: selection, organisation, and interpretation. During the selection stage, we convert the received information into a meaningful experience, and then we structure information into meaningful patterns at the organisation stage. Finally, we attach meaning to the

patterns at the interpretation stage (ibid.) In line with Bjørkan and Eilertsen (2020), we should emphasise that local perspectives and perceptions on a particular change may vary between stakeholder groups and individuals. This argument presents an area of interest for this study. Such differences in perception within and between communities are first described in the results section and then discussed in the discussion in relation to local viability.

Community viability

In this part, we present several definitions of the concept of community viability. For example, it can be conceptualised in relation to the settlement's development and described as a dynamic phenomenon that is influenced by both contextual characteristics and ongoing changes at the national and global levels. Hence, a viable community is referred to as "one that perceives itself as an entity... that wishes to remain its uniqueness, that looks with hope towards the future, and that believes it can make decisions and take action to correct perceived ill" (Weeden, 1985, p. 119).

This conceptualisation of viability is closely connected to the willingness of residents to live in and be part of a specific settlement (Munkejord, 2011; Sørlie, 2009). Studies that have examined the willingness of residents to stay in a specific community have identified several motivation factors. Those factors that also shape viability are subjective and will vary between settlements and even residents within the same settlement. These factors include job opportunities, the local environment, social networks, and place attachment (see also Hovelsrud, Karlsson, & Olsen, 2018; Sørlie, 2009). Recent studies on human development in the Arctic have identified following factors maintaining viability: source of income, the ability to address everyday security needs, and socioeconomic and environmental (Rasmussen, Hovelsrud, & Gearheard, 2014; Aarsæther, Riabova, & Bærenholdt, 2004). Olsen, Nenasheva, Hovelsrud, and Wollan (2021) explored community development in northern Russia and argued that local viability is enhanced by sustained livelihoods, income opportunities, and social capital (e.g. shared perceptions of change, connection to a place, and local values).

Hence, the viability of Arctic communities comprises several elements, such as job opportunities and social infrastructure, and has been affected by multiple changes in political, economic, demographic, environmental, and climatic conditions. Michaelidou, Decker, and Lassoie (2002, p. 606) suggest that "local culture, physiological and psychological well-being, and participation in community affairs" contribute to viable communities.

The viability of a community during a socioeconomic transition is affected by both the entry of a new industry and the decline caused by the exit of an old industry (Brekke, 2015). In particular, the success of the recombination of the existing knowledge and competences of the local inhabitants, as well as the technology and resource usage within the community for the development of the new path emerging from the transition process, reflects the effects of the transition on community viability (Brekke, 2015).

In this study, we aim to understand specific elements of local viability that have been affected by socioeconomic transition by approaching our case settlements as local communities. The literature usually defines a local community as a socially constructed unit that is formed by social interactions within (but not necessarily) a geographic area (Haugen & Villa, 2016). The members of the community, or the "locals", are not a static phenomenon, especially in today's globalised world, which allows people to be attached to several places (Olsen, Hovelsrud, & Kaltenborn, 2020).

Case communities

The Svalbard archipelago is home to approximately 3000 people who live in five settlements, namely Longyearbyen, Ny-Ålesund, Barentsburg, Pyramiden, and Hornsund (SSB, 2020). The two most populated communities that are experiencing a period of socioeconomic transition were selected for this study, namely the Norwegian community of Longyearbyen and the Russian community of Barentsburg (Fig. 1).

The community of Longyearbyen is characterised as an administrative and transportation hub on the archipelago that offers sufficient services and houses multiple businesses. Moreover, Longyearbyen is becoming increasingly international (SSB, 2019). Svalbard is not a part of the Schengen area, and the residents from any treaty country may stay/live/work there without a visa, as long as they can support themselves (Hovelsrud et al., 2020). Statistics Norway reports that while the number of Norwegian residents in Svalbard has been stable over the last few years, the number of foreign citizens in Longyearbyen and Ny-Ålesund has increased from 293 in 2009 (1st January) to 731 in 2020 (SSB, 2020). Currently, Longyearbyen has approximately 2400 residents and an average residence period of seven years (SSB, 2016, 2019), which means that it can be described as an international and transit community (Olsen, 2020; Olsen et al., 2020).

The population of Barentsburg has decreased since the end of the Soviet era, when the number of residents in Russian settlements was two times higher than that in Norwegian settlements (i.e. 2407 in the former and 1125 in the latter) (Portsel, 2020). The population of the Russian community of Barentsburg is approximately 500 people (SSB, 2016, 2020). This is a rather homogeneous community populated by Russians, Ukrainians, and other post-Soviet Russian-speaking national groups (Table 1).

Maintaining the status quo and denying non-Russian actors access to the local grounds have been the consistent policy of the Russian state, as Barentsburg is viewed as the Russian flagship in the archipelago and the cornerstone of the Russian presence in the Western Arctic (Sokolickova et al., 2022). Thus, the community remains Russian-speaking and governed by Russian state bodies, which effectively controls the local community composition from the mainland through the contract preapproval scheme, that is, no person (except a few researchers) can come to live in Barentsburg without a job offer from Arktikugol (*ibid.*).

The economic activities of Arktikugol, including tourism, adhere to Norwegian laws and regulations, including strict environmental laws (Grumant, 2020). Arktikugol is a member of the Svalbard tourism network, Visit Svalbard, which is based in Longyearbyen (ibid); however, the majority of the tourism activities of Arktikugol are currently strategically oriented towards the Russian domestic market and only sparsely supplemented by activities for other nationalities (Grumant, 2020).

In general, both settlements, originally company towns that were dominated by extractive industries, have been making strides towards developing a viable community image but at different paces. However, such a change is imminent due to market economic conditions, and both communities have adapted to the Arctic postindustrial transition.

Materials and methods

This qualitative, explorative study adopts the case study methodology to investigate a contemporary phenomenon, namely community viability, in depth (e.g. Yazan, 2015). Following constructivist perspectives, the knowledge in this study is derived from

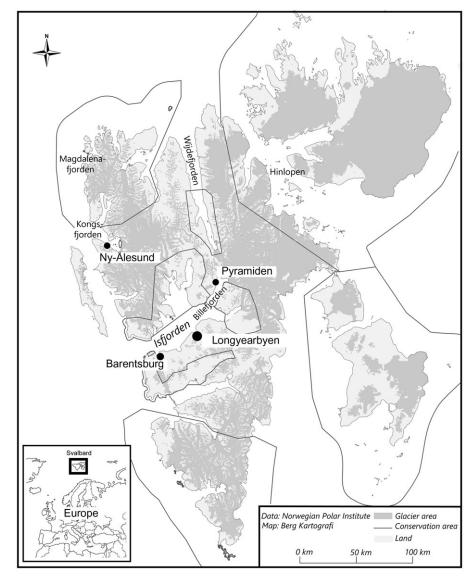


Fig. 1. A map of the case study areas. The case study communities of Longyearbyen and Barentsburg are located close to each other.

interviews with residents in two case communities, namely Longyearbyen and Barentsburg (Figs. 2 and 3).

By studying the perception of the socioeconomic transition, we believe that such knowledge, to a certain extent, can be used in other settlements that experience a socioeconomic transition. However, due to the nature of the case settlements and the nationally driven transition, we would argue that our cases can be categorised as *unusual* in that, according to Yin (2014, 52), they deviate from everyday occurrences.

To establish a baseline on community trends, to develop a research protocol and to explore the period of socioeconomic transition, data were collected from several sources. Since 2017, the authors have been visiting the case communities; they have been monitoring the local development through the publications, media, and webpage updates of the organisations and public bodies active in the archipelago; and they have been participating in several meetings, workshops, and conferences.

The primary data were collected by the first two authors during several field trips made to the case communities (in 2017 and 2018) using observations of sites and semistructured and unstructured

interviews with the residents of Longyearbyen and Barentsburg (Table 2). The interviewees held in Longyearbyen were of a diverse nature and involved residents concerned about local decision making, those employed by the tourism industry and the local municipality, and residents engaged with nongovernmental organisations (NGOs). The interviewees in Barentsburg included residents employed by Arktikugol and those working in the mining industry and supporting areas, as well as in the social sphere and tourism industry, plus researchers and employees of contracting organisations. Several of them were interviewed twice (in follow-up interviews); however, these were counted as one interview.

The interview guides covered topics related to contemporary developments in the settlements, including changes in the settlement and those made to the surrounding environment, understanding the changes (including the transition) and possible implications for the local communities and their current and future economic development. The interviewees were selected to ensure diversity in viewpoints based on the length of their residence in the settlement, occupation, level of involvement in local decision

Table 1. Main characteristics of the case study communities.

Community characteristics	Longyearbyen	Barentsburg
Settlement type	The transportation, administrative, and business hub for Svalbard	Primarily focused on coal mining, with tourism and research as side activities
Demography	2300 inhabitants from over 40 countries; over 30% are foreigners	458 inhabitants: Ukrainians, Russians, Tajiks, and Armenians
Employment	Tourism, research and education, public sector, and different social services. Few coal mining-related activities	Mining and related activities (including social services) and tourism (both run by Trust Arktikugol); research activities (run by several entities on the Russian mainland)
Transport linkages with the mainland	Year-round cargo shipping delivery from Norway and air transportation with Norwegian airports	Cargo shipping from Russia (via Murmansk) and Germany; air transportation via Longyearbyen and mainland Norway; charter flights to Moscow six times a year for personnel rotation and some cargo services
Important historical facts	 1906: Establishment of Longyearbyen 1916: Establishment of Store Norske 1989: Reorganization of Store Norske and spinoff of tourism 2002: Establishment of local governance 2016: Closure of the Sea mining. Mine 7 remains. 	1912: Establishment of coal mine in the area by Dutch companies 1931: Establishment of Arktikugol and transfer of ownership to the Soviets 1990s: Drastic reduction of state subsidies to Arktikugol and closure of Pyramiden (1998) 2011: Arktikugol starts developing its own tourism infrastructure 2013: Launch of branded tours for Russian and international tourists



Fig. 2. Longyearbyen, September 2021. Photo credit: First author.

making, and nationality. Some of the interviewees were recruited prior to the fieldwork, while a snowball technique was used during the fieldwork when we asked potential interviewees for suggestions for more interviewees.

Most of the interviews were audio recorded, and detailed notes were taken in the native language (Norwegian, Russian, English) when recording was not possible. The interviews were conducted without an interpreter assistant, as some of the authors speak Russian and Norwegian. For citation purposes, parts of the transcribed interviews were translated into English. We applied a participant number system to secure the anonymity of the interviewees.

To capture and operationalise the elements of community viability, based on the insights from the interviews, the transcribed interviews were thematically analysed using the software programme NVivo. We applied a stepwise coding method for data systematisation and moved from codes to more general and theory-inspired themes (Saldana, 2015).

A code, according to Bazeley and Jackson (2013, p. 70), represents an abstract identification of an event or object. The codes used in this study were descriptive and developed in two steps to capture the essence of the empirical material. First, the authors identified a set of predetermined categories that covered the topics



Fig. 3. The slogan "Our goal is communism" displayed in front of the renovated multistory residential building in Barentsburg. Photo credit: Second author.

from the interview guide and the results of earlier studies published by authors (Olsen, Carter, & Dawson, 2019; Olsen et al., 2020; Olsen et al., 2021). Then, the codes were identified inductively through the screening of the empirical data and close dialogue between the authors. Generally, using such a thematic stepwise analysis helps to identify patterns in qualitative data (Braun & Clarke, 2006).

The following section is structured based on the themes that arose from the empirical data analysis, in which we describe the perceived impacts of the socioeconomic transition on different aspects of local communities. Furthermore, in the discussion section, we describe the relation of those aspects to community viability.

Results

This section describes how residents perceive the impacts of socioeconomic transition and what aspects of the community have been affected by those impacts. We start this section by describing the residents' perceptions in relation to two main impacts, namely *new types of commercial activities* and *new perspectives inherent in the transition*. Then, we describe whether and how those impacts affect aspects of community development trends; more precisely, we refer to the *community dynamics*, the residents' understanding of the *locals' identities*, and the *social relationships* within the community and between the settlements. The latter are grouped under two categories, namely the *notion of community* and *cross-community interactions*.

Perceptions on impacts from transition

New types of commercial activities

The residents of both communities, Barentsburg and Longyearbyen, typically refer to the end of the 1980s as the start of the transition period. For example, when referring to the transition in

Longyearbyen, one of the interviewees described it in the following way:

The changes started as a result of the restructuring of Store Norske, a decline in coal mining operations, and the opening up for private ownership; the facilitation of new business activities increased tourism, research, and education. (L8)

In Barentsburg, the changes made after the collapse of the Soviet Union in 1991 led to drastic reductions in state-provided subsidies and were followed by the gradual phasing-out of the coal mining industry; furthermore, the economy transitioned towards tourism and other alternative industries:

We were invited here to build something new because everyone in Moscow realizes that subsidizing coal mining cannot last much longer; it costs too much. However, we [Russia] need to continue being here in Svalbard, [\dots] and tourism looks perfect from all points of view. It requires no major investments but secures quick cash. (B6)

Since 2013, the transition towards tourism and other postextractive activities has been at the core of the development strategy for Barentsburg and has attracted dozens of new residents who work in new areas of the local economy, typically the service industry:

I was invited to come and work here $[\ldots]$; what fascinated me most was that we were going to build something completely new, something where I could build whatever I wanted. (B22)

As such, for decades, the employment, demography, and organisation of the communities of both settlements depended on the coal mining industry alone. Currently, the tourism industry (or other related services), both in Barentsburg and Longyearbyen, is described as businesses that provide employment opportunities to residents on the archipelago. One of the interviewees in Longyearbyen described this in the following way:

Table 2. Types of interviews and interviewees in Longyearbyen and Barentsburg.

Community	Number of interviewed residents
Longyearbyen (L1–L36)	 19 personal semistructured interviews on predefined topics and questions 17 personal unstructured interviews with predefined topics only
Barentsburg (B1–B62)	62 personal semistructured interviews (including follow-ups) on predefined topics

One must also understand that 10, 20, or 30 years ago, it was just coal mining, and everyone was... very positive. Now, the largest industry is tourism. You may like it or not, but it is a very important industry if people are going to live here. (L2)

The development of tourism in Longyearbyen was described by the interviewees as a source of life and a contributor to local value creation. Hence, the residents expressed that the socioeconomic transition has influenced their income sources and jobs, as many new businesses were established while coal mining was downsizing.

Challenges and concerns during the transition

The residents in both settlements stressed that the transition towards growing tourism was accompanied by several concerns and new challenges. One of the interviewees in Longyearbyen underscored that "a balance between the tourism and environment has been discussed in white papers, which say that ambitious environmental targets should be maintained" (L12). Referring to the growth of cruise tourism, another interviewee observed that "it is difficult to find a balance between experiencing [tourism] and protecting [the environment]" (L22). As such, the discussions about tourism development were grounded in sustainability and local capacity perspectives. Opinions varied among the residents of Longyearbyen, with some noting that tourism comes with challenges and others suggesting that tourism is a growing sector that offers several opportunities and co-benefits to residents.

Challenging conditions include the lack of infrastructure and limited port capacity, especially during the summer period when cruise vessels approach communities, pressure on the natural environment, and social wear and tear. One of the residents put forward an interesting thought: "Longyearbyen, as a community, has little capacity and [scarce] facilities for passengers. It is not suitable for such a large number of tourists" (L33). However, the possibilities for infrastructural improvement lead to a new question, as stated by one of the interviewees: "Should we use money to build infrastructure for the tourist industry or for local needs, for example, a school?" (L18). Hence, according to one of the interviewees, local engagement is critical with regard to planning the future of the tourism industry: "The majority [of community members] should be involved with the development of the visitor management system. We need this joint discussion about tourism growth" (L7).

In Barentsburg, two strong and opposing opinion groups exist. The first one, a transition group, supports the tourism development, while the second one, a conservative group, is in favour of coal mining activities. However, one can observe a gradual shift towards the Longyearbyen-like attitude towards tourism:

When I first came here, I was sure that the mine would always be the most important thing and that tourism was a waste of time. Then, I started to change my opinion; the guys are really nice, and I didn't want to risk my life in the mine anymore. So I came to them and said, "You're progressive, I'd like to work with you." (B40)

The Longyearbyen example is used both as a guideline and a warning, and Barentsburg residents realise that following the Norwegian path blindly can lead to an unwelcome situation, which one of the interviewees described in the following way: "Well, I wouldn't like to live in a town like Longyearbyen; they're now all about tourism [...] At least here it's much quieter and more predictable" (B40). In Barentsburg, the points of view towards what constitutes the ultimate goal of the tourism transition differ radically. The people within the "transition group" (mostly those responsible for tourism development) perceive the postindustrial, tourism- and research-based image of Barentsburg as the ideal image:

The coal reserves are thin, and we need to invent something new. $[\dots]$ The Norwegians are now doing tourism and research, and we need to do the same; we have even better conditions here. (B11)

People who settled there before the transition started (mostly those working in the mining industry) typically perceive it as a process as distant from them as possible and think of it as a non-viable idea of the new generation: "I know nothing of this sort [...] I'm a miner, I don't care for tourists at all. They're doing some nice stuff, but that's for people coming from Moscow and St. Petersburg" (B35). The research activities of the Russian academic organisations create another point of attraction for new residents: "New faces appear at the research station, looking fresh and smart, [...] and I have the impression that it's really developing now" (B22).

To date, no uniform opinion of the future exists within the community, and even though the "transition party" grows in numbers, the coal industry still prevails, as it is supported by new groups of people who are rehired every couple of years and share the "industrial" point of view. However, since the official company policy has been focusing on transition, the idea as such became known in the community, and the discussion of the future is now a part of the local discourse:

Well of course I've heard [...] that tourism is developing, and the mine is not. We discuss it sometimes, especially when they're hiring new people, and we see that tourism attracts more and more people. (B28)

The fact that the Arktikugol in Barentsburg (and consequently, the state) still owns everything in the town means that most residents continue to think of income from tourism as belonging to the company's owners' (and even local managers') cash profits rather than as a source of revenue that can aid the community directly:

It's so typical, these earnings go directly to [personal names]'s pockets. We see no trace of it; they're boasting huge profits, but $[\dots]$ we live in the same rotting houses and only hear fairy tales at public events. (B24)

However, this opinion has started to change since the tourism department has begun to communicate their values with the community, namely focusing on upgrading the urban environment and developing social services. As one interviewee observed, "Well, I have noticed some positive changes; for example, they've installed new lampposts, which is way better, and they're bringing fresh fruit and dairy more often, which is nice for my kids" (B9).

Community aspects affected by the transition impacts

When our interviewees compared the Svalbard communities with the respective societies in Russia and Norway, they usually emphasised their uniqueness and how many elements function differently. One of the interviewees in Longyearbyen expressed this notion as follows: "It is a totally different type of community... because there are so many foreign citizens and a short residence

time" (L8). Another notable difference was described by one resident in the following way:

We have a great advantage here in Svalbard, as we have no county level. When we have a case for discussion in the local council, we have a direct channel to the Norwegian Parliament. (L11)

The interviewees in Barentsburg also pointed to many notable differences in community organisation, primarily citing the population structure, residence time, and governance model: "We're nowhere near a normal community. [...] Young unmarried males spend all their time underground or in a bar, counting the days before they can leave for the mainland" (B17) and "The company owns everything here; we're living here like one would in a youth camp, doing only what's allowed, and they make decisions regarding our lives from Moscow" (B29).

Community dynamics

Often, the residents of Svalbard cannot refer to Barentsburg or Longyearbyen as their native homes, as they only spend a part of their lives on the archipelago. Our interviewees located in Longyearbyen reported having moved there a few months, years, or decades ago. Some did so because of a job opportunity, while others moved to study, and yet others relocated with their families. Some intended to move for a short period of time only, of which a proportion either stayed longer or tended to return. One of the residents mentioned that "Almost everyone who has been living in Svalbard for a few years says that they were supposed to live here for one season [before returning to the mainland]" (L11); however, they continue to reside there.

The unique wildness of Svalbard and the opportunity to do something different attract people to relocate to Svalbard. As described by one interviewee, "I came because of the job opportunity to work in a very special area" (L7). Some residents now call Longyearbyen home. Those who have lived there longer remember a period of few fluctuations in the community's development. One of the interviewees who had resided there for more than a decade described the changes in the community dynamics in the following way: "I do not recognize the town anymore. When Store Norske was here (governed the town), it was more or less stable. Now the community changes every 2–3 years" (L28). Another one mentioned that he had lost count of all the "goodbye" parties he has attended (L15).

Interestingly, one of Barentsburg residents expressed the same feeling using nearly those exact words:

The town as it was when I came here 10 years ago and the present-day Barentsburg are two absolutely different settlements. Everyone and everything are new now, and I don't even care to remember all the newcomers. They change every year. (B16)

The changes in the demographic situation and community fluctuation are also attributed to establishing new businesses that attract seasonal workers; as a result, one interviewee perceived that "the community is more dynamic, with people moving in and moving out" (L19). Another observed that this fluctuation affects local preparedness and search and rescue (SAR) operations that are organised by a local NGO; therefore, recruitment to the organisation is always an ongoing process (L6). Another resident referred to the closure of Svea Mining and mentioned that changes in the community also affect other aspects associated with the archipelago's development:

The changes in the local community are difficult to summarize, but among the 400 employees in Store Norske, 80% were commuters. I think the flight

schedule was based on these commuters. Not long after Svea Mining closed, *Norwegian* [a flight company] stopped its Wednesday flights [\dots] it affects the tourism industry. (L11)

The average residence time in Barentsburg is approximately two years, as most people are hired for short-term contracts that can be extended no more than two times. Some interviewees noted that this practice originates from Soviet Svalbard policies, which does not encourage people to develop a strong sense of identity with foreign lands:

The company is still afraid of looking too European, too foreign-like [. . .] That's why they wouldn't keep people here for more than four or five years, so that they don't become too Norwegian. They did that during the time of the Soviets, and they're still doing that now. (B4)

If a person wants to stay in Barentsburg for a longer time period than mentioned in their contract, they do not have the liberty to act on this wish; rather, the outcome depends on the extent of their value to the community and to which they comply with the general set of unspoken rules:

We have this stupid Soviet policy of 'no one is irreplaceable'; if you cross some lines, or if they don't like you for some reason, you'll be quickly sent off to the mainland even if you're super smart and useful. (B18)

Interestingly, people have started to feel offended by such policy: "This is such a Soviet style; I came to Barentsburg to live and work here. I'd like to achieve something, but they tell me that I must be evaluated every half a year in order to get my contract extended" (B18). Thus, the creation of a new town image has also sparked questions about local identities, which were virtually nonexistent previously. During recent years, one has been able to observe a clear shift in the social policy of Trust Arktikugol, which started permitting employees to bring their spouses and children with them to Barentsburg, thus working towards a more "normal-like" image of the town; as a result, more people have started to feel at home in the town, which contributes to identify building: "It all changed when I was allowed to bring my family here. Before that, it was more like serving a prison sentence; now I live a full life with my loved ones here" (B44).

The "locals"

Community fluctuation has implications for the understanding of the term "locals". When applied to the members of the studied communities, this term means different things, since both communities are characterised by short residence times. One of the interviewees recalled that "back in 1997, I was asked by a miner whether I was a tourist. I told them that I had been living in Longyearbyen for 5 years. He replied that I was still a tourist" (L15). However, this perception has changed. Today, a local resident in Longyearbyen is one who has resided there for a few months. In addition to the locals, Longyearbyen is frequented by visitors who are afflicted by *Svalbardbasillen* or the Svalbard virus (e.g. former residents or seasonal workers), namely those who tend to return. One interviewee noted that "I come here each summer; I have *Svalbardbasillen*" (L36).

The same attitude exists in Barentsburg, with people quoting the attraction of the north, which plays an important role in making life decisions. A relevant saying by the Soviet poet Robert Rozhdestvensky, which is engraved on a central building in Barentsburg, is often quoted by the locals (Fig. 4).

In numerous cases, people return to Svalbard after a break due to being "Svalbard-sick". One interviewee from Barentsburg recounted, "I spent a year away and then came back here. I just can't live without the north anymore; I need it in my life" (B14).



Fig. 4. Part of the poem Arctic Illness by Russian poet Robert Rozhdestvensky on a building wall in Barentsburg. The poem translates as "... So wherever you end up traveling, on the brink of any spring, you will rave about the polar routes, you will see snowy dreams" (Skaftun, 2020). Photo credit: First author.

Opinions differ depending on the residence time. Those who describe themselves as locals in Barentsburg are typically its long-term residents who have spent more than five years in the archipelago: "I started feeling at home after my second polar night spent here; it kind of came naturally" (B14). However, short-term contract holders, who usually reside there from one vacation to another, note that "I spend 10 months here in the mine, then go home for 2 months, then am back here for 10 months—and that's enough" (B8). Another important reason for coming to Barentsburg is to escape from the aftermath of a critical life event and start a new life here; such people tend to develop strong ties to the settlement: "I'll be frank with you: I came here because my marriage fell apart and I couldn't stand it any longer there. So, I live here now. I have no other home" (B51). The interviewees in Longyearbyen had similar reflections (L24).

Social relationships

Social relationships within the community are a topic of concern for many residents in Longyearbyen. On the one hand, the residents describe Longyearbyen as a community made up of inclusive and helpful people. One of the residents expressed this notion in the following manner: "People get to know each other faster; they are calmer and more relaxed" (L27). Another resident also underscored that "If you post on Facebook that you need help with something, people will respond" (L19). Longyearbyen is also described as a community with skilled people and strong level of engagement. When talking about local development, one of the interviewees mentioned that "Longyearbyen is known to have many people with a high level of engagement and strong ideas and those who have a clear vision of how things should be done" (L12).

On the other hand, the community is becoming more "divided"; according to one of the interviewees, "it has become more polarized since many immigrant groups keep more to themselves" (L19).

One interviewee estimated that among the 2000 residents, approximately 800 are non-Norwegians; the respondent added that the children of immigrants who grew up in Longyearbyen did not receive Norwegian citizenship (L34). The notion of a common culture is changing in Longyearbyen, and it is no longer described as a "typical" Norwegian community by the residents. As such, this aspect was reflected by our interviewees, who noted that social relationships are changing due to community fluctuation, seasonality in operations, and increasing internationalisation.

The situation in Barentsburg is similar to a certain degree, except that the residents share the same language, namely Russian. Even though the Barentsburg residents previously belonged to different post-Soviet states and held different passports (with Russian nationals being a statistical minority and the Ukrainians dominating in numbers), the shared past and the shared language act as strong unifying factors: "We're all Russians here because it's a Russian town, that's why" (B8); "Come on, we were all born in the Soviet Union . . . we're not different; we have everything exactly the same as in Moscow and Donetsk" (B9). The locals identify themselves predominantly as Russians, partly because Trust Arktikugol, their main employer, is a Russian company, partly because everyone speaks Russian, and partly because the Russian identity is the main idea behind the town's brand. As one resident stated, "I used to be a Soviet citizen. Then, I became a Ukrainian and intended to stay so; but then I came here and determined that I'm a Russian once more. It's a nice mix, but I like it" (B41). It is interesting and illustrative to note that even the 2014 Russia-Ukraine military conflict did not affect local attitudes much; in contrast, the solidarity of the community during that period was quoted as being a powerful identity-building factor:

When they were bombing our homes [...], we were like one person here, helping and supporting each other. Russians, Ukrainians, Armenians...

all alike. Because everyone understood that we were not responsible for the war, that we were on the same side. (B51)

However homogeneous it is in terms of language and culture, the Barentsburg community is polarised in other ways, most remarkably by the kind of industry to which different local residents belong. The "traditional" industries, namely coal mining and technical and utility support services, are significantly opposed to "new", "soft", and "progressive" industries such as tourism and research; these industries are deemed to be of less value: "Those tourism people know no real life; their distractions do not earn us any money. This is just some playground compared to real mine business" (B24). It seems that such attitudes often result from misunderstandings, as Arktikugol has no immediate plans to close the mine altogether; however, many miners and technical workers are still afraid of losing their jobs and being replaced with tourism employees:

We lived and worked happily, but then the tourism guys came and everything changed [\dots] I don't like it. I'm a professional metalsmith, and I'd like to continue working here. (B27).

Another factor is the difference in lifestyles, which can even cause envy towards the "new" businesses: "They're walking our streets as if that's OK, and they're looking so nice and fresh and Moscow-like, while we continue to work in the mine, risking our damn lives" (B22). However, the proportion of people who approve of tourism and other postindustrial sectors is growing, as the company has clarified that the tourism industry is here to stay and is also responsible for the town's development. One interviewee observed as follows:

I admit that I didn't like them at the start, because they're just different, coming from the capitals. However, I grew to accept that, and I see that they're doing a lot for the town, and I think it's great that we're developing. (B51)

As one can see, the role of tourism in the town's future is increasingly perceived and understood by the ever-growing number of locals, which is quickly making it an established and familiar industry for the community.

Cross-community interactions

The transition period started at the end of the 1980s, when the two settlements had almost no social interactions. The situation has changed since the collapse of the Soviet Union, and all contemporary development is characterised by greater interactions between the communities as the borders become increasingly blurred. Such interactions are institutional and administrative in nature; they include cultural exchanges, the circulation of knowledge, SAR cooperation, the offer of tourism products in both settlements, and local mobility.

Historically, the populations of Norwegian and Soviet (and later, former Soviet) residents dominated Svalbard. Cross-community interactions have existed throughout history and were minimised during the Cold War but have not completely disappeared since Longyearbyen serves as an infrastructural hub for air transportation, which provides a year-round connection with the mainland. Barentsburg is still connected to Longyearbyen, which serves as a transportation, tourism, and SAR hub on the archipelago. Barentsburg residents and visitors have to pass through Longyearbyen to reach Barentsburg from other destinations. Tourism-based transport options are either based in Longyearbyen or approach Longyearbyen as the main destination in Svalbard before eventually going on to Barentsburg. The tourism

network company Visit Svalbard, which includes Arktikugol as one of its 70 members, is based in Longyearbyen. The governor of Svalbard, who plays a central role in SAR operations and preparedness in Svalbard, has allocated the main assets in this regard to Longyearbyen. However, according to one of the interviewees, in cases of accidents or emergencies, the two settlements are helpful neighbours:

Those who live in the north $[\ldots]$ know they need to help each other, and I think it develops a special culture. Then, you help each other, you are neighbors. In addition, we can notice it here as well $[\ldots]$ There might be some political disagreements, but it does not affect it [the ability to help each other]. (L4)

The residents of Barentsburg describe their connection to Longyearbyen as twofold. On the one hand, as each of them has to travel through Longyearbyen prior to arriving in Barentsburg, they depend on certain services and institutions established in Longyearbyen, such as the Norwegian post and banking systems or fresh goods supplies. Even though the Barentsburg residents do not routinely visit Longyearbyen, they are aware of the happenings in their neighbouring community and its offerings, and they would rather use the opportunity to visit: "I've been there a couple of times. They organize shopping visits from time to time, and I've taken this chance. I haven't been to Norway before and would like to try it myself" (B31). However, the Barentsburg residents typically consider their town to be more or less independent from Longyearbyen and would rather regard the Longyearbyen residents as neighbours:

Well, yes, we use their airport and it's truly nice, but that's more or less it; we live our separate lives, we don't communicate very much. Basically, we have our little Russia here, and they have their little Norway there. (B7)

On the other hand, the residents of Barentsburg value cultural and knowledge exchanges with a neighbouring settlement. The tradition of official contact (specifically, annual sports and cultural exchanges) between the two communities has a long history, and the Russian Consulate, which is located in Barentsburg, plays an important role in sustaining this framework: "We visit each other every six months to play volleyball and sing some songs, and our consul general visits their governor every week from what I know" (B46). Ordinary residents are also happy maintaining good relationships with neighbours and value grassroots-level contacts:

When they come here or we come here, I truly feel we're so much alike. We work, we drink, we have fun. Therefore, it's truly cool to meet someone 'from the other side' and maybe become friends [...] And you know, it's important to know that you're not alone here in the north and that you can help each other if need be. (B7)

While some East–West resentment is inflicted by conservative media, it remains rare, as personal contact and relationships are valued to a greater extent: "They're saying on TV that the Norwegians are our enemies, but nobody here believes it. We live in the same conditions here; we have nothing to quarrel about" (B19).

Discussion

In this section, we first discuss how residents perceive the impacts of socioeconomic transition on both communities and how those perceptions differ within and between the communities of Barentsburg and Longyearbyen. Then, we elaborate on the residents' perceptions of several aspects that shape local viability.

Table 3. The elements of community viability.

Elements of viability	Significance for case communities	Impact on community viability
Community dynamics	Barentsburg: stability in terms of nationalities, language, and culture Longyearbyen: diverse in terms of nationalities	A high level of community dynamics may weaken community viability as residents miss social ties. This is the case in Longyearbyen, while Barentsburg has undergone relatively minor demographic changes
Length of the residence for becoming local	Barentsburg: stable with slight increase Longyearbyen: has reduced from several years to few months	Length of the residence period and fluctuation affects the sense of the community belonging. Stability in the residents period in Barentsburg reflects positively in local viability
Social relationships within the community	Barentsburg: two groups of residents, one of them supports tourism Longyearbyen: general perception that tourism has a greater role for local development	Different types of skills are needed for new commercial activities. In Longyearbyen, this has attracted international workers. However, these new communities do not integrate the same way as the initial Norwegian community; therefore, there is this perception of segregation. In Barentsburg, some people move from mining to the tourism
Interactions between communities	The mobility of residents between the communities takes place on almost a daily basis. Barentsburg is more dependent on Longyearbyen because of transportation, SAR, administration	Strong symbolic borders persist between the two communities; the residents of the two communities perceive each other as different groups with disparate strategies and futures, and what is good for one settlement does not necessarily have to be introduced in the other

Perceptions of the impacts: pace and controversy

Our empirical findings illustrate that the residents in both Barentsburg and Longyearbyen refer to the end of the 1980s as the beginning of the socioeconomic transition, which, among others factors, led to a decrease in coal mining operations and to a more diverse economic and social landscape. Since the establishment of Barentsburg and Longyearbyen, the coal mining industry has played a dominant role in economic, social, cultural, and physical development (Della Bosca & Gillespie, 2018).

First, the socioeconomic transition and the pace of mining phase-out occurred at a faster pace in Longyearbyen than in Barentsburg. The transition period in Barentsburg is expected to last for some time, with no immediate plans for mine closure (Arcticugol.ru, 2020). The reasons for this may be a longer tourism history in Longyearbyen (because of a political will) compared to that in Barentsburg, and a strong political will to cease coal mining (Hovelsrud et al., 2021). Our empirical data indicate that the residents of Barentsburg perceive the old system to be robust and resilient, and they do not think the system will be replaced by another one any time soon. In particular, our analysis indicates that in Barentsburg, several transition processes have been inspired by Longyearbyen. In Longyearbyen, tourism has been a politically driven intention for the past decades and started prior to the transition processes described herein; conversely, in Barentsburg, tourism became a consequence of this transition. Barentsburg, for example, followed Longyearbyen's path in regard to tourism by learning from the Norwegians' mistakes and borrowing their best practices.

Second, there is *controversy* regarding perceptions of tourism development within and between the communities. Tourism development comes with concerns that, according to our interviewees, are grounded in environmental concerns (protect vs. explore), social concerns (stability in population vs. high fluctuation), questions about economic investments (investments in the tourism infrastructure vs. infrastructure for local needs), and stakeholders who benefit from this development. The local involvement in tourism development differs between the settlements. There is relative scarcity of the "tourism" subcommunity within Barentsburg; most processes are linked to just a handful

of active individuals who are still included in the Arktikugol contract scheme that allows the termination of any contract within one day, which makes their say in strategic development rather limited. Tourism in Svalbard is organised through the Svalbard tourism network, which can also be characterised by engaged individuals (Olsen et al., 2020). Because of this tourism network, Longyearbyen has many opportunities for creating community bonds by involving newcomers. However, a high level of residence fluctuation can simultaneously jeopardise the established relationships within the network (Viken, 2011).

Theoretical contribution: elements of community viability

Our analysis reveals elements of community viability during a period of socioeconomic transition in two unusual local communities. These elements comprise community dynamics, the notion of being local, and social relationships within and between communities. Table 3 presents these elements and highlights the differences among them between the two case communities.

Our analysis aligns with previous studies that argue that Longyearbyen is becoming more international as the population of non-Norwegian workers increases and that the Norwegian language misses its dominant position (Pedersen, 2017). It is argued by Grydehøj (2014) that Norway no longer directly controls who lives in Longyearbyen and what work is carried out there. A weakened community identity (due to high fluctuation and possible polarisation) challenges the viability of the Longyearbyen community in particular, despite the economic advantages that the new businesses offer.

In contrast, Barentsburg has undergone relatively minor demographic and social changes, and our analysis indicates that the willingness of residents to continue living there, particularly in terms of the time spent in Barentsburg, increased during the transition period. We attribute this fact primarily to the strategic renewal of the mining company and the regulatory changes, which allow for longer residence periods. Barentsburg's population, despite the local fluctuation, has remained more or less stable in terms of culture, language, and management practices, even though the population structure (in terms of gender and age groups) is rather unbalanced and reminds one of a fly in–fly out

settlement (Sokolickova et al., 2022). In fact, given that the Barentsburg population was much higher at the end of the Soviet era and that it has reached a stable point in the last decade, we assume that it can benefit from better preconditions for community growth due to available infrastructure, as opposed to Longyearbyen, which, according to a white paper on Svalbard, faces challenges in maintaining local infrastructure (Ministry of Justice and Public Security, 2016).

The paternalist approach of the Russian state ensures the stability of the community in times of turbulence, which can easily prove effective, that is, the events of the COVID-19 pandemic. However, the need for modernisation and diversification is perceived at all levels, including the local one; the abovementioned positions between two "parties" within Barentsburg are an example of this internal drive. People living in the town realise that "mining is not the only option" and that other possibilities do not necessarily mean the end of the Barentsburg that they are used to. The growing number of cases of people who change their job from mining to tourism while in Barentsburg is a good illustration of this process. Arktikugol exists in a kind of political loop (i.e. the company is tasked with keeping the Russian presence in Svalbard no matter what; thus, it cannot risk the destruction and unpredictability of tourism as the political consequences would be too severe), while Barentsburg residents do not. Therefore, the unprecedented grassroots transition is already happening, which is creating a discrepancy between the local community level and political decision making.

Conclusion

Our analysis contributes to further development of the community viability framework by identifying several elements of community viability during a period of transition. We argue that a socioeconomic transition introduces new dynamics within a community, changes the identities of its locals, and restructures the social relationships. In our case, economic restructuring redefined the local coal company, which used to be the main employer, and its status. While this shift in Longyearbyen resulted in an increased number of companies belonging to growing industries, the state-owned coal company in Barentsburg went through a period of strategic renewal to meet the new demand inherent to the transition. Arktikugol started implementing a diversification strategy by entering the tourism industry and facilitating additional research activities from the Russian mainland (Gerlach & Kinossian, 2016). Hence, both communities reacted to the decline of coal mining activities by finding new economic opportunities in alternative sectors. While the transition in Longyearbyen was accompanied by the establishment of new companies, the industry structure of Barentsburg remains unchanged and continues to be characterised by a main company serving as the conductor of the Russian Arctic presence strategy.

The community viability of both settlements is influenced by geopolitical interventions. However, we conclude that the interplay among community fluctuations, demographic composition, and local institutionalisation practices codetermines the viability of Longyearbyen and Barentsburg. Hence, we argue that local perceptions of change are important to understand when studying/governing community viability.

Practical implications

Our analysis reveals that both top-down policies and social interactions in settlements shape community viability. Here, we elaborate on the significance of two factors that may affect further community development and viability, namely employment opportunities and a need for predictable development conditions.

Much of the development is connected to emerging employment opportunities and how they should be managed. In fact, employment in different industries is a vital factor that affects local viability in both communities. The Norwegian and Russian governments' common goal is to diversify the local economy in the post-coal era. We agree with Moxnes (2008) argument that good job opportunities with higher salaries and lower taxes are important elements in maintaining a family-based community. However, we argue that predictability in work opportunities and enabling conditions for foreign citizens in Longyearbyen are also important elements, especially in a diverse industry such as tourism. The employment conditions in Barentsburg remain quite stable, and the local residents list only possible general changes in the Russian Arctic policy as a potential threat to their jobs; they do not mention local-level factors, thereby making it possible to argue that stable work conditions are an important factor in local identity and community development.

A need for predictable economic and social conditions in the case communities is discussed herein. Predictability in the context of the local economy refers to the regulations and laws that shape business development on the archipelago. The tourism industry serves as an illustrative example. The development of the tourism industry is one of the major topics for discussion in both communities. Prior to the travel limitations implemented due to the COVID-19 pandemic, the tourism industry continued to grow despite the strict environmental laws applicable to it. However, those regulations set certain limitations both for the area of operation and the types of activities (Hovelsrud et al., 2021) and were perceived by the other treaty parties (e.g. Russia) as an excuse to limit business opportunities (The Ministry of Foreign Affairs, 2020b).

In Barentsburg, tourism is viewed as just one of the possible development strategies, along with research, fishing and—notably—mining; the Russian state, as the main decision-making body of the community, leaves multiple windows of opportunity open for itself. The necessity of maintaining its presence in the archipelago is more important for Russia than following the postindustrial development path (Arcticugol.ru, 2020); thus, political implications appear to be of higher importance than local community development.

The overall result is still hard to predict; the power to make strategic decisions remains with the state and the company, which means that some sudden future changes in the political agenda could easily derail the unpredictable postindustrial transition process, as may happen in the Russian Arctic (Vlakhov, 2020).

Study limitations and recommendations for further research

Despite the above-presented contributions and implications, this study has two main limitations. The first limitation is associated with the time period of the data collection, while the second relates to the rapidity of the changes and the archipelago's future. The empirical data for this study were collected prior to the Norwegian government announcing that it no longer wished to subsidise coal mining; this decision concluded the period of commercial coal extraction in Svalbard (except for Mine 7) by the Norwegians. Hence, the empirical data do not fully cover the community's perceptions of the postcoal period.

Since 2017, the community of Barentsburg has been steadily shifting towards postindustrial sectors, and mining activities have been reduced to a comparative minimum (Sokolickova et al., 2022); the local community has experienced rapid changes in terms

of population structure and local identity, while mining-related groups have been shrinking and thinking about their futures. In contrast, these changes took place in Longyearbyen many years previously. Although mining operations continue to function in Barentsburg, the growth in tourism has brought about new challenges and opportunities for attracting foreign tourists, and the speed of the community's response to these challenges needs to be measured separately.

Given the *rate of changes* in the governance system, community dynamics, and environmental changes, the elements that comprise community viability could have been reshaped during previous years. The impacts of the COVID-19 restrictions are not addressed in the study. Compared to other Norwegian destinations, Longyearbyen was the worst affected (Malmo & Andreassen, 2020). However, the travel restrictions to Svalbard in 2020 clearly reveal certain differences in how those challenges were managed and addressed by both communities based on government priorities and local initiatives (Malmo & Andreassen, 2020; Volkov, 2020).

In regard to the future of the archipelago development, little attention has yet been paid to Svalbard's position in regard to the opening of the Trans-Polar Route (Bennett, Stephenson, Yang, Bravo, & De Jonghe, 2020) and an increase in the level of fishing-related shipping (DNV-GL, 2016). A plan for the establishment of crab and fish landing facilities was presented in Barentsburg in 2020 (Ylvisåker, 2020). However, such fish landing facilities are still absent because of a lack of regulations (Ministry of Justice and Public Security, 2016). More recently, the Norwegian government proposed banning heavy fuel oil for all ships sailing in Svalbard's waters (The Ministry of Climate and Environment, 2020). This ban has been partly implemented for Svalbard and will have additional implications on the types of vessels (especially overseas cruise vessels) that can sail to/from the case communities.

Hence, post-transition perspectives regarding Svalbard's use of its natural resources versus environmental protection and the global stress caused by crises such as COVID-19 and climate change present important future research possibilities. Questions that remain to be addressed include how will the ongoing changes affect viability in the long term and to what degree will Barentsburg follow the same development path as that of Longyearbyen?

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