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4 The potential of art and design for renewable economies in the Arctic

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Introduction

In this chapter, we discuss some of the ways in which art and design practices might help to support and develop renewable economies in the Arctic. We use the term Arctic Art and Design (AAD) to refer to contemporary art, design, and media productions aiming to contribute to renewable economies and sustainable development in the particular context of the North and the Arctic. The sustainable development of the Arctic is defined in a variety of ways for different purposes and occasions (Fondahl & Wilson, 2017; Gad, Jacobsen, & Strandsbjerg, 2019; Stephen, 2018; Tennberg, Lempinen, & Pirnes, 2019). The dimensions of sustainability in this context include cultural and social sustainability, which means that the contemporary renewable productions must respect cultural diversity and heritage and must be produced in collaboration with local inhabitants, so that the economic benefits are shared with the region. Various aspects and examples of AAD have been studied in the research projects conducted in the Arctic Sustainable Arts and Design (ASAD) network at the University of the Arctic (ASAD, 2019; Jokela & Coutts, 2018). In this chapter, we use this concept to describe art, crafts, design, and cultural productions that transmit the heritage of Arctic nature and culture. It is not limited to Indigenous art, instead, it also covers non-Indigenous arts and their liminal productions such as industrially produced craft-based products (Jokela, Huhmarniemi, & Hautala-Hirvioja, 2019). We use the concept of AAD to highlight the view of art, design, and crafts as interwoven with one another and as an integrated part of the eco-social culture in the North (Härkönen, Huhmarniemi & Jokela, 2018; Jokela, 2017). The idea follows the concept of *duodji*, which sees Sámi art, craft, and design as the union of expression, production, and way of living (Guttorm, 2015). In addition, the concept of AAD carries the idea of applying arts to societal and economic needs (Huhmarniemi & Jokela, 2019; Jokela, 2013) and combining the methods of socially engaged art and service design (Härkönen & Vuontisjärvi, 2018; Jokela & Tahkokallio, 2015). AAD as the creative renewable economy can be seen as one of the Arctic models of smart specialisation on green economy and as a model to

aim to economic and social resilience in rapidly changing Arctic regions (Giacometti & Teräs, 2019; Woien, Kristensen, & Teräs, 2019).

As industries traditionally associated with the Arctic region, such as large-scale resource extraction and global exploitation of finite natural resources, are increasingly seen as unsustainable, we applaud the move toward more sustainable business practices. We argue that the creative industries, and art and design in particular, can play a central role in developing new, more sustainable business opportunities that benefit the economy while preserving and promoting more local, place-based, and renewable business practices. The underpinning philosophy of AAD is closely related to that of the cultural and creative industries (Hesmondhalgh, 2007) or, as described by Howkins (2001), the creative economies. According to Howkins (2001, pp. 88–117), the creative economy comprises advertising, architecture, art, crafts, design, fashion, film, music, performing arts, publishing, research and development, software, toys, and games, TV and radio, and video games. Writing almost a quarter of a century ago, Landry and Bianchini (1995, p. 4) contended that “the industries of the twenty-first century will depend increasingly on the generation of knowledge through creativity and innovation.” The economic impact of the creative industries has been measured worldwide by United Nations Conference on Trade and Development (UNCTAD, 2018), and in Nordic Arctic countries (Olsen et al., 2016) and has been found to exceed that of the driver industry. The creative economy report by United Nations Conference on Trade and Development (UNCTAD, 2018) concluded: “The creative economy is recognized as a significant sector and a meaningful contributor to national gross domestic product. It has spurred innovation and knowledge transfer across all sectors of the economy and is a critical sector to foster inclusive development.” In this report, both creative goods or products and creative services are subsumed under the term “creative economy.” The discourse of potential of the creative economy started, and still is, mainly connected to urban cities, centers, and innovation hubs.

Few articles and studies have characterised the processes of creative economy development in the Arctic and hardly any of them specialised to the field of art and design (Nordic Councils of Ministers, 2018; Olsen et al., 2016; Petrov, 2014, Petrov, 2016, Petrov, 2017). The discussion is often focused on the challenges creative economies face under limiting factors such as the exploitation of nature at the core of the Arctic economy, population decline, high economic costs due to long distances, and the globalisation of the Arctic region. For example, crafters in Lapland are said to be lifestyle entrepreneurs and microentrepreneurs who give priority to artistic work and hesitate to step into business-oriented work, for example, with the tourism field (Kugapi, Huhmarniemi & Laivamaa, Forthcoming, 2020). Opportunities for renewable economies are hardly discussed, and the material and cultural heritage of the Arctic, commonly connected with Indigenous crafts and the skillful use of natural materials, has not been

recognised as having the potential to make significant contributions to the economy, although we argue that this is now changing.

Our AAD model focuses on the economic potential of renewable natural and cultural resources that are plentiful in the Arctic. The notion of *ecosystem services* (ES) is central to our thinking (Milcu, Hanspach, Abson, & Fischer, 2013). ES focus on the use of nature, its conservation, and its social, cultural and economic relation to the Arctic. In addition to ES, such as water, wood, fibers, and food provisions and their use as new renewable bioeconomy (Teräs et al., 2014), the concept also includes *cultural ecosystem services* (CES), that is, the “non-material benefits obtained through spiritual enrichment, cognitive development, reflection, recreation, education, and aesthetic experiences” (Millennium Ecosystem Assessment, 2005, p. 4). Even when these cultural values are included in ES typologies, cultural, experiential, and other non-material values have generally received less attention compared to monetary and ecological values. Only a few studies, among other Chan, Satterfield, and Goldstein (2012) and Daniel et al. (2012), have paid attention to the cultural aspects of CES.

In this study, we will fill the gap by investigating the potential of art and design as renewable economies using the concepts of CES, and place-making as our theoretical and practical framework. Drawing on some of our own research and development projects, we present four cases that illustrate the ways in which AAD can be a contributor to a creative renewable economy. Our examples are from Alaska (United States), Canada, Finland, and Russia. We will share our experiences and findings and suggest future lines of enquiry.

Cultural ecosystem services and place-based development as conceptual framework

The authors of this chapter have been collaborating on the research and development of wide-ranging themes in AAD for many years. The ASAD research and development network, which was founded in 2011, has been instrumental the development of this innovative work (ASAD, 2019). Since its inception, ASAD has sought to “identify and share contemporary and innovative practices in teaching, learning, research and knowledge exchange in the fields of arts, design and visual culture education” (ASAD, 2019; Jokela & Coutts, 2018b). The organisation is one of the thematic networks of the University of the Arctic that aim to “foster issues-based cooperation within networks that are focused but flexible enough to respond quickly to topical Arctic issues” (University of the Arctic, 2019).

Among ASAD members, there has been emerging an interest in CES, and we believe that in the rapidly changing Arctic, discussions on CES can be used to weigh the balance between the use of nature, its conservation, and the social, cultural, and economic relations in the Arctic. According to the study by Milcu et al. (2013), mobilising CES as binding elements

between social and ecological conceptual constructs is the core idea of the sustainability ideal. Hearnshaw and Cullen (2010) point out that thoroughly accounting for CES will be helpful in balancing primarily economic considerations and facilitate a more inclusive socio-ecological approach by exploring the interactions between social, ecological, and economic processes.

We know that in a global world, all cultural values in art and design may have little direct dependence on ecosystems, but we argue an especially significant relationship between ecosystems and the fulfillment of human needs can be demonstrated in Arctic CES.

We see that CES offer a theoretical and practical framework to think differently about the ways in which creative entrepreneurs may collaborate with communities using local natural, cultural, and social resources. Such collaboration, of course, must be undertaken in a way that is sensitive to and respectful of the unique nature, culture, and heritage of the Arctic and takes into account megatrends such as climate change, globalisation, and urbanisation (Nordic Council of Ministers, 2011; Stephen, 2018.)

In our thinking about AAD, CES are closely connected to place-based strategy, which is also known as place-making and can also be understood as an economic development strategy. It is the practice of using places and a community's capacities to make economic progress (Milone & Ventura, 2010; Vodden, Gibson, & Baldacchino, 2015). Building on existing strengths, this approach focuses on CES and the unique features of particular places to boost existing businesses and create new ones and even attract new investment. According to Daniels, Baldacchino, and Vodden (2015), place-based strategy is a reaction to conventional top-down, single-sector, national-stage development projects. Thus, place-making can also be understood as an identity policy of remote, rural and peripheral places that are centers for their inhabitants.

We are also familiar with the criticism of utilising CES in art and design and in the discussion of the creative economy. Spiritual and aesthetic cultural values are not best captured by instrumental or consequentialist thinking and they are grounded in conceptions of nature that differ from the ES conceptual framework (Cooper, Bardy, Steen, & Bryce, 2016). The different attitudes toward the use of CES can sometimes be quite passionate, since they are tightly bound to human values and behavior as well as social and cultural institutions and economic and political organisations. In the Arctic, they are also bound to Indigenous and non-Indigenous issues and relations.

An important factor is the effect of the diversity of ES to the diversity of Indigenous and non-Indigenous cultures in the North and the Arctic. Ecosystems influence the types of social relations that are established in particular cultures. The social relations in fishing societies, for example, differ in many respects from those in nomadic reindeer herding or non-Indigenous agricultural societies. According to Stephen (2018), the climate crisis has caused changes in harvesting, hunting, and fishing cultures, which has had a wider impact on cultural identities and traditional knowledge. In other

words, the climate crisis has brought about changes in the ecosystems and has had effects on socio-economic and political realities, which has affected the cultures and self-understanding of Arctic Indigenous populations. We argue this is the case in many non-Indigenous communities in the North and the Arctic as well.

Besides material and social relations, Indigenous cultures of the Arctic add spiritual and religious dimensions and values to ecosystems. This calls for a certain cultural sensitivity in approaching Arctic art and design activities. Most often, it is commercial design productions and items that represents identities (for example, clothing) that cause heated discussions on cultural appropriation and exploitation. Visual symbols such as patterns and ornaments have significance in the continuation of cultures and even the sharing of world views (Joy, 2019; Kramvig & Flemmen, 2019; Minnakhmetova, Usenyuk-Kravchuk, & Konkova, 2019; Schilar & Keskitalo, 2018). Thus, seeing Indigenous cultural traditions as an economic resource can cause tensions (Olsen et al., 2019 forthcoming; Smith, 1999). However, if members of Indigenous peoples themselves are participating in the transformation of tradition into contemporary and economic products, then there is less or no criticism. For example, the Sámi people were invited to collaborate in the production of the Disney film *Frozen 2*, which depicts Sámi culture.

In our review of the studies and articles dealing with CES, we have seen that the majority of these articles have been published in ecological journals. From an art and design point of view, this may be a partial explanation for the rather vague discussion of the creative industries or art and design in most of the examined articles. On the other hand, however, art history research has shown that even when the concept of CES is not in use, nature still provides a rich source of inspiration for arts, design, craft, media, and architecture, especially in the Arctic (Mäkikalli, Holt, & Hautala-Hirvioja, 2019). The way nature inspires artists, can be seen to CES.

Besides art, many people find aesthetic, expressive, and emotional values in various aspects of ecosystems. For example, people value landscapes that are known for their beauty or the “sense of place” that includes locally and culturally significant stories and heritage (Hølleland, Skrede, & Holmgaard, 2017; Lindhjem, Reinvang, & Zandersen, 2015). These can all be connected to renewable creative industries because they affect where people choose to go to spend their leisure time or improve their well-being. CES plays an important role in nature, ecological, and cultural tourism and recreation, which is often supported, represented, advertised, and made know by means of the creative industries (de la Barre et al., 2016; Müller & Viken, 2017; Rantala et al., 2019). When considering creative services as art and design products and goods, we see many opportunities for collaborations between art and design and tourism as renewable economies in the Arctic.

The following four case studies will demonstrate how art and design can play a role in cultural sensitive place-based renewable economies based on CES around the North and the Arctic.

Isuma: A lens to Canada's North

Canada is known for its abundance of natural resources and empty wilderness, seemingly ready for the taking. However, basing the economy on resource extraction such as mining and fossil fuel-related industries so prevalent in the Arctic is not sustainable. In order to protect the balanced ecosystems of both humans and non-humans, there is a growing need for the development of alternative and diverse economies more aligned with sustainability, in relation to both the environment and the well-being of communities and culture in the North (Schott, 2016). In many examples, CES literature refers more to recreational or touristic values, rather than a deep engagement with what the concept of culture means (Ihammar & Pedersen, 2017). Meanwhile, in Igloodik, Nunavut, the artist collective Isuma demonstrates the potential of cultural initiatives and renewable economies, using the concepts of ES, particularly CES, and place-making, while honoring their material and cultural heritage (Big River Analytics, 2017).

As Canada's first Inuit video-based production company, Isuma has a surprisingly long history (Kunuk, 2019). Co-founder Zacharias Kunuk began exploring the possibilities of the film almost three decades ago, when he used the profits from selling his traditional soapstone carvings to purchase his first video camera. This technology introduced him to new possibilities of storytelling, highlighting the life and landscape of the North, and in 1990 Kunuk and his collaborators, Paul Apak Angilirq and Norman Cohn, created Isuma Productions.

Since its inception, Isuma has produced a number of feature films, documentaries, TV series, and short films, including *Atanarjuat: The Fast Runner* (2001), *The Journals of Knud Rasmussen* (2006), *Before Tomorrow (Le jour avant le lendemain)* (2008), and *One Day in the Life of Noah Piugattuk* (2019), based on the landscape and stories of the Canadian Arctic. In 2008, they launched IsumaTV, a collaborative multimedia knowledge-sharing platform for Indigenous filmmakers and media organisations, and in 2012 they introduced Digital Indigenous Democracy, an innovative platform linking communities and presenting politics and legal issues within a culturally accessible framework. Based on knowledge and skill sharing, these initiatives feature stories of heritage and contemporary life. They promote interest in the land and people that contribute to the development of CES and related renewable economies through sharing with audiences and preserving for themselves the experiences of society and cultures in the North.

Isuma's films and other media projects are in oral Inuktitut, and like many AAD projects, encourage cultural preservation and resilience. This provides the community Elders with the ability to understand and appreciate the films, while strengthening the development and revitalisation of language and culture. The content on IsumaTV is accessible in over eighty languages, including Indigenous languages such as Cree, Ojibwe, and the Northern Athabaskan languages of the Na-Dene peoples. This contributes

to the restoration of vulnerable languages which are intrinsic to cultural identity and knowledge.

To further this outreach and communication, Isuma has instituted an innovative digital service that brings media access, otherwise unavailable, to small, isolated communities in the Canadian North (Leask, 2016). Isuma productions and other creative Indigenous media activities have fostered interest, especially among northern youth, in educational and training opportunities that support these growing and economically impactful cultural initiatives, and in developing professional practices in video and film production, broadcasting, and related industries. Media education is provided by not-for-profit educational initiatives such as Wapikoni (2019) and Our World (2018) that work with local schools and hold workshops in remote Indigenous communities, encouraging youth to follow their passions while giving them practical skillsets to pursue their ambitions.

As Isuma becomes increasingly recognised in the Canadian North, it is also making an impact internationally. Isuma's *Atanarjuat: The Fast Runner* won Best First Feature Film at the 2001 Cannes Film Festival, and the production company has been recognised by six Genie Awards and numerous other international film awards. In 2019, the collective was selected to represent Canada in the prestigious Venice Art Biennale (Canadian Art, 2017; Sandals, 2019). In addition to the regional economic benefits of the film industry, the stories of the people who have been underrepresented and isolated from national and international conversations are now on the world stage, sharing culture and values, building resilience, and creating and strengthening international and intercultural alliances.

The changing landscape of the Arctic, a theme in many of Isuma's films, is a global topic of growing concern. For the Indigenous residents of the Canadian Arctic, this issue literally hits close to home: living off the land is not only an essential source of sustenance, but also necessary for the preservation of culture, language, and knowledge passed down from one generation to another. Isuma initiatives and the positive responses to their work demonstrate the importance of representing different knowledge systems, worldviews, and attention to cultural sensitivity within the concept of CES (Chan et al., 2012; Lepofsky et al., 2017).

Lapland snow and ice design and art in Finland

The snowy landscape has an important role to play in the local customs and traditions, identities, and cultures in the Arctic. The use of snow and ice in tourism has a long history in Finland, Lapland, and can be found in many forms, starting with snow-related sports. Snow and ice can be seen as ES and winter traditions as CES.

The concept of winter art was introduced in 2003 to describe the artistic features and phenomena related to winter aesthetics in Lapland, considering the cultural changes and opportunities related to the winter: "One manifestation

of this change is the brisk increase in winter festivals, winter theatres, snow and ice sculpting events and snow architecture. At their best these phenomena can be called winter art” (Jokela, 2003, p. 7). Since then, art and design at the University of Lapland and the cold climate engineering department at the Lapland University of Applied Sciences have collaborated with local businesses on a project entitled Lapland Snow Design. The collaboration aimed to create new knowledge, innovations, and practices for the tourism and business sectors that utilised thinking and competence in snow and ice construction technologies (Jokela, 2014, 2019).

Long-term development brought artists, designers, and companies together in order to develop new high-quality products in cooperation with universities and businesses. At the same time, creative services based on the winter ecosystem were developed. The objective was to develop an internationally competitive product to leverage Lapland’s versatile expertise of snow-related technologies and applications in the different services of the tourism industry. Different types of snow and ice environments, collaborative design methods, and marketing concepts were implemented during the project. Besides the development of new design and implementation methods for winter art, another goal was to build regional teamwork capacity and boots place-based thinking. The aim was to develop new and more efficient organisations to expand the applications of winter art in the business sector. One of the key outcomes of the project was the creation of a cluster-type regional network of experts that were able to apply the products in domestic and foreign contexts. The practices were designed to be flexible, so that they could be applied in a variety of environments and tailored to meet the needs of customers in different kinds of services.

Combining tourism and the development of culture-oriented creative industries, winter art, and snow design have contributed to the creative renewable economies in Lapland. Between eight and ten large-scale snow hotels with sleeping rooms, restaurants, bars, chapels, showrooms, and so on and several smaller-scale tourism facilities are built in Lapland every year (Jokela, 2014, 2019). Compared to Sweden, where the Jukkasjärvi Ice Hotel was first built in 1990 and still remains the only ice hotel in the country, in Finland, knowledge and skill in the renewable use of snow and ice was disseminated throughout the region to improve the competence of the local people through educational, participatory, and place-based activities (Gelter & Gelter, 2013).

Crow day, sharing traditions in Siberia, Russia

Today, the vast areas of the Russian North are turning into a complex site of conflict between Indigenous people, local non-Indigenous inhabitants, state-owned and private monopolies (extractive industries), and even tourists (Pashkevich, 2013). In order to ground the very idea of ethical and culturally sensible tourism in the environmentally and culturally fragile

setting of the Russian Far North, the researchers and designers from the Arctic Design School (USUAA), propose a novel understanding of a tourist destination. It is a “laboratory” where innovative solutions to short-term existence in the extreme environment are generated and shaped together by tourists and local inhabitants. As global warming advances, these solutions can be further applied to facilitate adaptation to severe conditions and the development of new lifestyles for longer term visitors and non-Indigenous settlers across the Arctic regions.

In evidence for this vision, this case study presents designers’ engagement with the Indigenous cultural heritage—not ignoring but learning from it, and not blindly preserving traditions but keeping them alive and available for the present and future (Nugraha, 2012). It is centered on an experiment within the AAD educational model: as a part of a master’s course entitled “Regional Design” at USUAA, a student named Alexandra Nikolaeva developed a project, “A Hybrid Tradition: A designer’s renewal of the traditional Crow Day,” a context-sensitive adaptation of the identically named festival of the Ob Ugric people of Western Siberia. The main task was to redefine tourism as a form of mutually beneficial engagement with the land and the people, with an emphasis on inclusive participation. Seen through the CES lens, this case reveals the distinctive ability of the AAD approach to “wrap up” the protection and appreciation of the cultural and spiritual heritage into the “gift pack” of a memorable tourist experience.

Crow Day represents the end of the so-called Winter Year and the arrival of the long-awaited spring, (Golovnev, 1995). The design exploration into the context and structural elements of the celebration began with an investigation of historical materials such as publicly available collections, in-house publications, and catalogues of the archives and museums.

Diverse visual data provided insights into the complexity of human-environment interactions within the traditional culture of Northern and Arctic inhabitants. At the first stage of data analysis, the rites and ceremonies associated with the traditional Crow Day celebration were divided according to their sacredness, which determined their potential for public accessibility and tourist involvement. The three resulting groups were: (1) entirely sacred rituals that are performed by the community, for example, young girls or old women, and cannot be joined or even observed by others; (2) partly sacred rituals where spectators are allowed, but participation is restricted; and (3) open or public rituals where everyone can join the celebration. Accordingly, there were three interactive situations identified: a tourist as a participant, a deliberately invited spectator, and an occasional witness.

At the ideation stage, a cultural basis for design interpretation was proposed: to link the Northern Crow Day with the widely recognised and inter-culturally relevant celebration of New Year. The design outcomes included essential attributes for new and old rituals, such as a stylised New Year Tree, thematic food, a carnival with masks and costumes and a culminating ceremony of making a wish.

In terms of practical implications, the outcomes, namely the designed objects and celebration scenarios, can contribute to shaping the region's multicultural identity by disseminating environmentally and culturally appropriate "best practices" or "know-how" that originated in the heart of the Arctic. In the long run, contextually relevant design explorations can inform the process of developing and inhabiting remote Arctic or Northern territories.

A tourist memento—creating place-based sustainable souvenirs in Alaska

Traditionally, education for tourism has been provided by tour operators, while universities teach or conduct research on tourism from a more theoretical perspective. Given the sensitivity of the Arctic environment and the speed with which it is changing, it is incumbent on Northern universities to become more involved in the process of transmitting knowledge, raising public awareness, and encouraging stewardship of the Arctic. Tourism is an ideal mechanism for this effort.

In order to encourage renewable economies, promote stewardship and raise awareness of the Arctic, a collaborative approach to provide tourism "packages" is proposed.¹ These interdisciplinary solutions are needed to increase knowledge and engagement about sustainable tourism in the Arctic. A model for a designed sustainable tourism should include (1) citizen-engaged environmental observation, (2) place-based sustainable art, and (3) outdoor recreation and leadership.

Citizen-engaged Environmental Observation is a type of knowledge co-production that has received increasing interest as more people become affected in some way by Arctic environmental change (Alessa et al., 2015). Citizen science has proved to be an indispensable means of combining scientific, environmental research with education and public engagement. It has significant potential for engaging the tourism industry that provides a unique platform from which to conduct research in remote Arctic locations. Participants engaged in a sustainable tourism program are well-positioned to collect observational data on environmental change (de la Barre et al., 2016).

Place-based Sustainable Art creates artwork using local materials in the context of place and environment. As Hicks and King (2007) have observed, "Art education is well situated to address environmental problems that emerge at the point of contact between nature and social life." By creating place-based sustainable souvenirs (art), participants can become more fully engaged. Compared to purchasing imported tourist souvenir products, this creative experience promotes positive memories and a sense of deeper connection and meaning. It can be an effective methodology for systematically and purposefully developing art projects about the environment and sustainability.

Outdoor Recreation Leadership enhances the health and wellbeing of people and communities (Brymer, Cuddihy, & Sharma-Brymer, 2012;

Godbey, 2009; Gobster and Buchner, 2010). Outdoor recreational activities are designed to create a learning environment inspiring a passion for guardianship for our ecosystem. It focuses on life-long learning opportunities, stewardship of resources, and collaborative teamwork. A designed sustainable tourism program is fundamental to establishing this resiliency.

However, this project is an experimental “makerspace” introducing a unique approach to sustainable tourism in the Arctic—focusing on being environmentally and culturally responsible while appreciating nature and promoting conservation. We believe that participants will build skills and knowledge in basic biological sciences, understand environmental issues and develop wilderness travel proficiencies. Making a “place-based souvenir” as a part of the sustainable tourism experience will promote a sense of appreciation for the Arctic’s natural environment and play a critical role in terms of renewable economic activity in the region.

Artification of the Arctic tourism and cultural revitalisation

Through analysing the case studies and juxtaposing them with a review of the current literature, we can demonstrate some key points of potential and challenges for art and design in the development of renewable economies in the North and the Arctic.

When using CES, the creative economy has both commercial and cultural value. The AAD model, as the intersection of art and design practices with planning and production, can be used effectively when designing and producing renewable goods and creative services often connected with responsible and sustainable tourism in the North and the Arctic. We recognise that tourism in the Arctic is characterised by a process that Naukkarinen (2012) has described as *artification*. This refers to situations and processes in which something not originally regarded as art is transformed into something that resembles art or is influenced by artistic ways of thinking and acting. According to Naukkarinen (2012), this phenomenon can be found in business, wellness and healthcare services, and academic education and research. We argue that Arctic tourism is a scene for artification when creative and learning tourism are developed in relation to CES and through AAD. For example, this could include nature and northern lights photography tours; wintery, snow and ice experience environments; learning tourism makerspace or slow food design production as well the revitalisation of Indigenous cultures through film productions or festivals (de la Barre, & Broucher, 2013; Gelter & Gelter, 2013; Jokela, 2014; Jokela et al., 2020; Leask, 2016; Urry & Larsen, 2011).

In AAD, CES are understood not as simple products of nature that are utilised for particular economic benefits, but rather, as relational processes that people actively create and express through interactions with cultural ecosystems (Fish, Church, & Winter, 2016). In advancing this viewpoint, AAD approximates to Chan et al.’s (2012) understanding of CES as

experiences and capabilities that arise from human–ecosystem relationships. We argue that through creative industries like art and design, these relationships can be transformed into renewable economies.

Reports from around the world have demonstrated that creative industries generate income through trade and intellectual property rights and create new opportunities, particularly for small- and medium-sized enterprises. Even though the importance of and interdependence between creative economies and cultural services have been consistently recognised, they are often characterised as subjective and difficult to quantify in monetary terms. It is evident that their potential for future development is underestimated by national and regional decision-makers and officials responsible for regional development.

When transformed into renewable AAD products and services, CES must always contribute to the satisfaction of human needs and wants, which necessarily involves subjective considerations. Besides economic value, while being subjective, CES also benefit human capacities by facilitating knowledge, social, and cultural development and, in the Arctic case, revitalisation of local Indigenous and non-Indigenous traditions. We argue that responsible artification can take place through the development of novel renewable products and services through AAD.

From artification toward Arcticification: A risk or an opportunity

Without involving Northern and Arctic people as collaborators, we are faced with the obvious danger of reducing Arctic ecosystems to an exotic resource that benefits external parties rather than Arctic inhabitants. While the North and the Arctic are culturally rich and diverse, *Arcticification* is the tendency to present the Arctic as a cold and snowy destination devoid of human activity. Arcticification has been reinforced by tourism marketing, as presentations of such magnificent landscapes can trigger touristic demand (Rantala et al., 2019). As Chartier (2018) has described, the phenomenon has deep roots in Western art and scholarship, where the Arctic was historically marginalised as the “Imaginary North” —as an empty and horizontal landscape rather than a multi-ethnic, multi-cultural and multi-lingual space with a rich cultural history and diverse living traditions. At the same time, Arcticification is also the social process that has created, on the one hand, new geographical images of Northern Europe as part of the Arctic and, on the other hand, new social, economic, and political relations (Müller & Viken, 2017). In the development and implementation of novel AAD-based renewable economic practices, Arcticification presents an opportunity to introduce these innovations to decision-makers and into the larger social and political discussions on the future of the Arctic and the world.

Today, as insiders, many artists and designers in the Arctic have the agency to reflect and depict the transformations, nature, and culture of

the region (Huhmarniemi & Jokela, forthcoming, 2020). In addition, more research is being conducted on creative industries and the use of art and design in areas such as tourism, which is a growing economic field in the Arctic (Huhmarniemi & Jokela, 2019; Huhmarniemi et al., 2021; Kugapi, Huhmarniemi & Laivamaa, 2020; Miettinen, Sarantou & Kuure, 2019). As our study has shown, AAD and place-based development utilising CES as an economic development strategy are particularly relevant in the North and the Arctic today. When communities, artists, and designers in remote and rural places commit to place-making as a method of economic development, the dual benefit of commercial and cultural development will stimulate the region's prosperity and well-being.

Responsible utilising of CES in AAD calls creative capacity building

Our study has shown that there are various opportunities for innovative applications of AAD in remote and peripheral areas. We agree with Petrov (2014) and Vodden et al. (2015) in arguing that innovation in the creative economy is not restricted to cities and innovation hubs only, but there are certain challenges in the Arctic. According to studies, the Arctic needs to generate more human capital by investing in its people to keep them in the region (Karlsdóttir & Junsberg, 2015; Karlsdóttir et al., 2017; Petrov 2016, 2017). The advent of what is often referred to as the “knowledge economy” necessitates the enhancement of human skills and creativity, which will be a key to the next stage of the development process toward AAD as the creative renewable economy. This calls for novel models for educating artists and designers for the Arctic. Artists with traditional artists training may lack the will and skills to work as entrepreneurs and producers of services, or they don't have enough specific knowledge about the Arctic to apply their skill to particular northern circumstances (Huhmarniemi & Jokela, 2019; Kugapi, Huhmarniemi & Laivamaa, forthcoming, 2020).

We refer that as drivers of the Arctic creative economy, art and design higher education institutions and universities can lay the ground for the formation of multidisciplinary and interprofessional creative clusters, like the Arctic Design Cluster in Rovaniemi, Lapland. The cluster is built around the research and education of the Faculty of Art and Design to boost the regional economy by implementing processes where art, design, creative services, and CES are combined with place-making to exploit existing strengths of the region.

Conclusion

Through the case studies and literature review, this chapter has filled the notable gap in the research connected to art, design, and CES. We argue that identifying, analysing, and using CES as the potential for creative renewable industries; particularly AAD can play an important role in

the future of the Arctic in terms of sustainable economy. Merging CES and AAD with a place-making strategy is a way to exploit the existing strengths of communities to create renewable economies in the rural and remote areas of the Arctic.

As our study has demonstrated, there is no single way to implement the CES approach in the creative economy and art and design. Implementation necessarily depends on local, regional, social and cultural conditions. As the concept of CES is subjective and always linked to society and culture, it is necessary to understand the specific conditions they are operating in. Both identified trends: Artification of Arctic tourism and cultural revitalisation practices and Arcticification as a risk or an opportunity for AAD should be recognised and utilised in responsible way when implementing CES in creative renewable economy in the Arctic. Therefore, art and design as renewable economies must be implemented through culturally sensitive and place-based strategies to respond to the challenges and ensure sustainability in the North and the Arctic. Higher art and design education have an important role to secure creative human capacity and promotion of sustainable future in Arctic.

Note

1. The concept is co-developed by Audrey Taylor, Ph.D., Assistant Professor of Environmental Studies, Department of Geography and Environmental Studies; Herminia Din, Ph.D., Professor of Art Education, Department of Art; and Timothy Miller, Director, Department of Health, Physical Education and Recreation at the University of Alaska Anchorage.

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