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Author: Kaitlin Kish

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Artisans of Resilience: Crafting's Role in Community Economic Development in Prince Edward Island

Kaitlin Kish
Cape Breton University
Sydney, Nova Scotia, Canada
kate_kish@cbu.ca

Abstract

The paper investigates the dynamics of the Maker community in Atlantic Canada, drawing on empirical data collected from the rural setting of Prince Edward Island (PEI). It explores how the Maker culture contributes to community economic development, fosters social resilience, and aligns with principles of ecological economics. The study delves into the multifaceted aspects of crafting, emphasizing its role in community building, sustainable resource utilization, and the preservation of cultural heritage.

Keywords: Maker culture, Makers, sustainability, community economic development

Artisans de la résilience : le rôle de l'artisanat dans le développement économique communautaire à l'Île-du-Prince-Édouard

Résumé

Cet article examine la dynamique de la communauté des artisans dans le Canada atlantique, en s'appuyant sur des données empiriques recueillies en milieu rural de l'Île-du-Prince-Édouard (Î.-P.-É.). Il explore comment la culture des artisans contribue au développement économique communautaire, favorise la résilience sociale et s'aligne sur les principes de l'économie écologique. L'étude explore les multiples facettes de l'artisanat, soulignant son rôle dans le renforcement des communautés, l'utilisation durable des ressources et la préservation du patrimoine culturel.

Mots-clés : Culture des artisans, artisans, durabilité, développement économique communautaire

1.0 Introduction

The arcadian landscape of Prince Edward Island (PEI), Canada, has inspired generations of rural Makers (MacDonald, 2016). The island's natural environmental beauty and close-knit communities strongly shape artisan identities and work. This study inquired into the lives and experiences of rural PEI Makers to understand the relationship between their craft and connections to the environment and their communities. The purpose of this study is twofold. The study began as a larger exploration of the relationship between Makers, connection to place, and the role of making for community economic development. The full study includes representation from across Canada, but special characteristics emerged among PEI Makers. This sub-study first explores these characteristics of rural PEI Makers and how they contribute to community economic development (CED). Second, this study aligns with trends in the broader field of CED, emphasizing the need to foster relationships with nature and local communities. By looking at how PEI Makers navigate the terrain of tradition, craftsmanship, and ecological restoration, I aim to contribute to a broader understanding of how making can support CED in Atlantic Canada.

Makers are, very simply, people who make things (Boeva & Troxler, 2020; Garber et al., 2018). Generally, they are defined as people participating in crafting and small-scale production initiatives. This study explores how rural Makers perceive their craft within the context of their personal lives and the well-being of their communities. In doing so, I look at how making contributes to resilience, CED, and reembedding of individuals and communities within their ecological, economic, and cultural contexts.

I begin with a brief literature review of the history and contemporary narratives of making and then present the methods used for collecting and analyzing the interview data. I then present results on the significance of making in participants' lives, the role of community in craftwork, crafting as a connection to place, and how making builds resilient networks of trade and support. From these results, I discuss the implications for embeddedness in place through craftwork culture, aligning making with relational economics, and the interplay of nature connection, place, and CED. I then provide implications of the study for CED and present possible policy approaches for encouraging making within municipal and provincial contexts in Atlantic Canada.

2.0 Literature Review

2.1. Historical Perspective

In the intricately carved artifacts of ancient civilizations, meticulously woven textiles of indigenous cultures, and the finely crafted goods of medieval European guilds, Makers have left a mark on the development of societies worldwide (Adamson, 2021; Ingold, 2013; Johnson, 2002; Taylor et al., 2016). Throughout the history of human civilization, craft has held an enduring position as a foundational pillar of community economies (Barbieri-Low, 2021; De Munck, 2019; Farr, 1997; Hanna, 2011; Hawkins, 2016; Haynes, 2012). It is a practice that transcends mere skill or utility and is instead representative of profound human inclination to create, shape, and connect (Hatch, 2013) and at the heart of human craft is human adaptability. It reflects the innate human capacity to transform raw materials into objects of purpose, as they are needed and to respond to the needs of their

community by producing items to solve problems (Dartnell & Kish, 2021). Their products often hold cultural significance and are generally passed down through generations—a testament to the enduring human desire to not just meet practical need but also express their common identity, culture and creativity through their craft (Macdonald, 2017; Partarakis et al., 2021; Pocius, 1997; Zhang et al., 2022). These habits bring the community and culture directly into the economic core of a society. Because of this, craft and making have historically played a pivotal role in shaping the cohesion and identity of communities (Gibson, 2021; Joubert, 2023; Weibert et al., 2015). The presence of Makers within communities has fostered a sense of pride, belonging, and shared cultural heritage.

For example, the Navajo people, Indigenous to the Southwestern United States, have a rich tradition of silversmithing and jewelry craft (Adair, 1944; Jones, 2020). Navajo jewelry is characterized by intricate silverwork and bright gemstones, which hold deep cultural significance and played a pivotal role in fostering community identity and economic resilience. Silversmithing is deeply intertwined with Navajo heritage, initially learned from Mexican silversmiths called 'plateros' and then passed down through generations through elders (Bishop & Kalman, 2004). This intergenerational transfer of knowledge ensures the preservation of traditional techniques, designs, and cultural symbols. The craft has historically provided a way for individuals to express their Navajo identity and pride, demonstrating cultural and, thus, community belonging. At the same time, it has also been an economic means for many Navajo families, providing economic opportunity linked with their community.

Like Navajo jewelry, craft has often been a driving force behind highly localized and regional economies. Makers produce essential goods and stimulate economic activity by creating markets, generating employment opportunities, and contributing to trade networks. A significant turning point in the history of making in relation to CED was the Arts and Crafts Movement of the late 19th and 20th centuries (Blakesley, 2009). The movement advocated for a return to handcrafted, locally produced goods in response to the dehumanizing effects of mass production during the Industrial Revolution (Morris, 1988; Ruskin, 1851, 1854). This movement was more than just a cultural trend; it was an economic movement against removing the humanized and community element of "things" by reflecting on the significance of a product's aesthetic, economic, cultural, and philosophical value. It emphasized that craft was not just about producing objects but was an extension of cultural values, heritage, and human expression and reminded people that production serves as a means of reviving artistic expression, reestablishing a connection to a crafter's own spirit and to the communities where the craft is produced and to forefront the "joy in labour" (Krugh, 2014).

Most relevantly for this paper, the Arts and Crafts Movement reignited a sense of locality and identity related to producing goods (Paterson, 2018; Tokat, 2017). The movement encouraged local producers to draw inspiration from their surroundings and to use locally sourced materials to produce goods that reflected cultural localities. This helped to foster and reestablish a relationship between members of communities as producers and consumers, helping to combat the alienation associated with industrial production. These themes of localism, authenticity, and connection were direct responses to the dehumanizing effects of mass production and had an enduring legacy on the world of Makers and local production. Some modern Makers participating in the contemporary resurgence of craft resonate with the need for local goods that help to reestablish connections within their community.

2.2. Contemporary Relevance

The resurgence of handicrafts in Canada and the United States mirrors several of the ideals of the Arts and Crafts Movement, with additional contextually specific emphasis on sustainability and a counter-capitalist mentality. Whereas in places such as Agbogbloshie, Africa, making is an integral and essential part of life, where Makerspaces function as beacons for individuals and entrepreneurs looking to lift themselves out of poverty (Khalatbari, 2023; Potter et al., 2019). In the contemporary context, local production a) enhances resilience, b) supports innovation and adaptation, and c) reduces economic disparities.

2.2.1. Enhances resilience. Traditional production and manufacturing often rely on long, complex supply chains that span multiple countries and, in some instances, have become increasingly inefficient (Disney & Lambrecht, 2008; Liu, 2011; Min, 2015). This model is based on the most cost-effective patterns, but not necessarily the best for local community development or environmental sustainability. The global supply chain system is increasingly demonstrated to be fragile, with vulnerabilities exposed through contemporary events such as the pandemic and Russia's attacks on Ukraine (Hamilton, 2021; Simmons et al., 2022). Makers are champions of local production, with goods created within the communities where they are often sold and distributed. By fostering this local production, Makers bolster regional economies with resources that would otherwise be funnelled into international trade and distribution channels (Piper et al., 2023). This preservation of economic resources contributes to mitigating the impact of supply chain disruptions by providing local goods and services. Local producers also tend not to create large amounts of unused stock on shelves, as in mass production, and instead, products are made to order. While this reduces unnecessary resource extraction and production, it also reduces the load and reliance on long and fragile supply networks. Makers also enhance resilience by harnessing technology in ways that help to tailor production to more specific needs. For example, using technology such as 3D printing and open-source design, products can be designed and produced to meet the specific needs of consumers rather than creating one-size-fits-all solutions. This was particularly useful during the COVID-19 pandemic when Makers rapidly produced face shields and ventilator splitters to adapt to local needs (Dartnell & Kish, 2021). This kind of adaptability is a key element of enhancing the resilience of communities (Simonsen et al., n.d.).

2.2.2. Innovation and adaptation. Makers often work in collaborative settings where they share knowledge, skills, and designs among community members locally and online (Braybrooke and Smith, 2020; Nick Taylor et al., 2016). This collective and cooperative approach fosters an environment of collaborative problem-solving where individuals can draw on one another to address challenges. Again, the COVID-19 pandemic exemplified this. Makers worldwide rapidly developed and shared designs for personal protective equipment, ventilator splitters, face shields, and other critical supplies (Belhouideg, 2020). Designs were iterated upon in real-time, demonstrating the power of collaborative innovation and open-source designs. Part of the success of this ability to rapidly adapt and innovate is that local production significantly lowers barriers to entry. Contemporary Maker culture removes barriers to production by providing spaces to learn how to produce and to produce in and connecting with a broader network of Makers through online connectivity. Where traditional manufacturing often relies on substantial capital investment and infrastructure, Makers can create and test prototypes with relatively

moderate resources, particularly within shared Makerspaces and entrepreneurial incubators, such as the Verschuren Centre out of Cape Breton University, which gives start-ups access to highly specialized and expensive equipment (CBC News, 2025). This democratization of innovation has the potential to stimulate local economies and encourage entrepreneurship.

2.2.3. Reduces economic disparities. Makerspaces and local production are inherently inclusive and accessible (Klipper, 2014; Steele et al., 2018). They are generally welcoming of diverse backgrounds and have various ways of encouraging participation from all skill levels. This inclusivity reduces barriers for historically marginalized groups. This is furthered by the Maker community's commitment to open-source knowledge sharing as Makers democratize access to the means of production (Farritor, 2017; Zakoth & Mauroner, 2020). By enabling communities and community members to participate in manufacturing, Makers empower communities economically as local goods are produced, sold, and consumed within the community, with the community's needs as the foregrounding motivation. These relational and equitable approaches to production improve self-sufficiency and reduce dependency on external forces. These processes contribute to a more equitable distribution of economic benefits.

While these historical and contemporary trends of local production are relatively well documented, this study aimed to survey how craft is a vehicle for socially just and sustainable transitions within CED plans for shifting modes of production in Atlantic Canada.

3.0 Methods

Building upon the ideas presented in the literature review, my research in PEI, Canada, sought a deeper understanding of how these aspects materialize and to expose additional insights that emerge within a culture where local production is a shared and central feature. In this methods section, I outline my research approach and the strategies used to uncover patterns and lessons that underlie the interplay between making, local production, and the broader socio-economic and ecological context in PEI. The primary methods used in this research project were open-ended interviews and content analysis.

3.1 Participant Selection

Participant selection for this study followed a snowball sampling approach, a technique commonly used in qualitative research to identify and recruit participants with specific experiences (Parker et al., 2019). The initial call for participants was posted on mMaker Facebook groups, inviting participants to share their experiences of making within their communities. After the interviews, participants were asked to recommend other Makers they knew who might be interested in participating, thus initiating the snowballing process. The primary criterion for selection was that the participants resided in PEI and self-identified as mMakers.

3.2 Interview Process and Data Collection

The interview process involved semi-structured interviews with the selected participants that lasted one to four hours, providing ample time for participants to share their experiences, insights, and stories. Longer interviews generally included tours of their workspaces or demonstrations of their craft. All interviews took place

in the participants' workshops, a deliberate choice to create comfortable and authentic environments for discussion while allowing participants to showcase their work, materials, and processes, enriching the data with visual and tactile elements. All interviews followed a set of standardized questions with contextually specific follow-up questions. While the interviews varied in content, each ended with the same three questions: (1) How does this fulfill you?, (2) To what degree does your craft define who you are?, and (3) What do you value most in life? Before the commencement of each interview, metadata was collected, including participants' names and a brief demographic profile. All identifiable metadata is to remain anonymous and confidential.

3.3 Data Analysis Techniques

The formal method of data analysis was content analysis, a systematic method of analyzing textual, visual, or audio data to identify patterns, themes, and insights. In this study, content analysis was particularly valuable in uncovering recurring themes, sentiments, and nuanced aspects of the participants' narratives and broad backgrounds. To facilitate this analysis, the qualitative data analysis software NVivo was used to facilitate the organization and coding of interview transcripts, which helped with conducting more efficient and systematic data exploration.

3.3.1. Content analysis. When conducting content analysis for understanding and analyzing data, a specific systematic approach is taken. The steps for doing content analysis are outlined below and begin after all data is collected through various qualitative data collections such as interviews, literature searches, audio files, or any other qualitative data set.

- Step 1: Content analysis begins with thoroughly familiarizing oneself with the collected data. In this case, this included the transcription of interviews from the study. Based on familiarizing themselves with the data, researchers should revisit their research objectives and questions that the study aims to address through content analysis. Doing so will confirm whether sufficient data was collected or whether the themes associated with the research objectives were not explored in detail.

- Step 2 (optional): Input all data into content analysis software, such as NVivo or MAXQDA, to assist with organizing, coding, and analyzing the data. This step is useful for large datasets. For this study, all data was inputted into NVivo for analysis.

- Step 3: One of the most critical steps in content analysis is developing a coding scheme that includes the themes and categories relevant to the study's research objectives. While there are no steadfast steps in developing such a scheme, it is important that it is thorough and inclusive of the themes that uncover the research objectives and any additional themes that may have emerged during Step 1. For this project, developing the coding scheme included both the initial themes identified during the project conception phase and involved using NVivo to scan all the data and identify commonly used words and concepts related to the research questions.

- Step 4: Code the data by first coding a small subset of the data (e.g., one or two interview transcripts) to test and refine your coding scheme, ensuring that it captures the complexity of the data. Then begin the systematic coding of data, transcript by transcript. The coder can tag or label text segments

corresponding to specific codes or themes when using the software. Maintaining consistency throughout the coding process ensures the same codes are applied to similar content across all data inputs. As coding decisions are made, it is useful to keep a separate document to detail any coding decisions that might have been done differently and why the final coding decisions were made. It is also helpful to track any emerging patterns throughout the process to explore for analysis later.

- Step 5: The final step is to analyze the coded segments, which can be done manually by looking for patterns, variations, and relationships between coded elements, or the software has several built-in analysis features to look for similar data features. The software enables researchers to quantify the frequency and distribution of specific words, phrases, or concepts within the text to look for prevalent themes. It can also generate visualizations of the patterns within the text for knowledge dissemination. NVivo can also conduct network analysis to explore relationships between entities within the data, framework analysis to organize data according to predefined categories, and geospatial analysis by linking qualitative data to geographic locations; however, these were not utilized in this study.

4.0 Results

In the larger study, participants were categorized into four distinct groups: rural, urban, Makerspaces, and an 'other' category, with some additional aggregation within the categories, as illustrated in Table 2. However, overall, I will focus on the rural PEI participants. Urban participants were all from southern Ontario and were interviewed at the One Of A Kind show in Toronto and or in Windsor. Participants from Makerspaces included those frequenting Makerspaces or attending Maker workshops in the Waterloo region. I have included the NVivo file names for each category in the fourth column of Table 2 and noted the ones with more than one participant in the file with a bracketed number following the file name.

The participants of focus in this paper were rural, all from PEI, who identified as Makers, preppers, and homesteaders. On average, the rural participants were around 68 years old, with a substantial 97.2% that were married or in long-term domestic partnerships and 97.2% having raised children. Most rural participants abstained from using the Internet for commercial purposes or career advancement, with a mere 5.5% managing active Etsy shops and an additional 5.5% marketing their work through personal websites. It is also of note that 36.1% of rural women adopted crafting as a pastime while tending to their children at home and chose not to return to traditional employment.

PEI Makers exhibited heightened enthusiasm for certain themes that evoke less response among their urban counterparts; for example, 22.2% of rural Makers were dedicated to ethical making practices, and 23.7% expressed a strong aversion to multinational corporations, while no urban Makers connected with these themes. Every PEI Maker (100%) actively participated in selling their creations at local and community events, and a substantial 87.8% turned to crafting to cope with mental health challenges, primarily centred around depression and stress.

Table 1. *Breakdown of Participants in the Overall Study*

Category	Participant location	Number of participants (% of total participants)	
Rural	PEI (various)	32 (21%) (9 [5.9%] preppers and/or homesteaders)	PEI 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 21, 22, 24, 26, 28 Preppers and homesteaders: PEI 12, 20, 18, 25 (2), 29, 30, 31 (2)
	Rural Southern Ontario	4 (2.6%)	Rural 18, 20, 26 (2)
Urban	Online	2 (1.3%)	City 14 (2)
	Toronto	34 (22.3%) (21 [13.8%] One Of a Kind)	City 4, 5, 6 (4), 7, 8, 9, 11, 13 OOKS 1 (2), 2 (3), 3, 4, 5, 6, 7, 8 (2), 9, 10 (5), 11 (2), 12
	Windsor	3 (1.9%)	City 10 (2), City 12
Makerspaces	Kwartz Lab members	24 (15.7%) (Significant overlap in the participants. I would see them at various events.)	Makers 1 (11), 2 (7), 3, 4, 5 (4)
	DIYode members		
	Other (workshops at Kitchener Public Library) Metcalf Workshops	49 (32.2%)	No text reference.
Other material and people	Messages boards	These sources were used to get a sense of the culture and design themes/questions.	
	YouTube		
	Facebook groups		City 1 (2), City 2, City 3 – referred to in text as "Culture PEI" or "Make it Kitchener"
	Culture PEI, Kitchener Government	4 (2.6%)	
Total		**152 (100%)**	

Additionally, 100% of urban Makers engaged in minimal bartering and trade activities, whereas 36% of PEI participants were involved in diverse trade relationships within their communities. These exchanges encompassed raw materials, often personally sourced, such as sheep's wool, traded for essential crafting supplies like dyes. Additionally, finished products were bartered for other locally crafted items or regionally produced foods, highlighting the community aspect of PEI Maker economies.

This small-scale trade network fosters a sense of community, and PEI Makers deeply value the bonds they share. They rely on each other for mutual success and often consider fellow Makers as extended family members. For example, two new Maker mothers had received much-needed infant and toddler goods from their Maker community, including toys, blankets, bassinets, cribs, and clothing. This communal support underscores the unique dynamics and strong connections that define PEI Maker culture.

Throughout the coding process, several themes emerged as significant to the initial goals of the study including a) the significant role of making in participant lives, b) the role of community and family in craftwork, c) craft as a path to reconnect with place, d) building resilient networks of trade and support, and e) the role of tradition and innovation in crafting.

4.1 The Significance of Making in Participants' Lives

One clear aspect of the participant experience was the fulfillment and joy they derived from engaging in creative and craftwork. This sentiment was shared among all PEI Makers and communicated in different ways. One said that making plays a unique role in making daily life better, contrasting it with passive activities like watching TV. The impact of making is not limited to adults alone; it also extends to children, with positive implications for their self-esteem. This observation was articulated by PEI 9, who highlighted how children immersed in making deeply engage their hands and minds, forming a powerful connection between their physical actions and mental creativity. This active involvement in crafting was viewed as a significant source of self-worth, nurturing a positive sense of self-esteem in young Makers. They suggested significant benefits in exposing young individuals to craft activities before they reach the age of 12, as it will enhance critical thinking abilities and boost their confidence across various aspects of life.

This relates to the significance of making in educational settings, where participants expressed valid concerns regarding the traditional education system's lack of support for creative and hands-on endeavours, limiting future economic entrepreneurship. Participants put the education system in PEI under scrutiny for neglecting areas like fine woodworking and crafts. A notable observation by PEI 6 underscored the absence of programs focusing on physical and hands-on skills. This criticism reveals a more pervasive issue within education, where certain essential creative expression and problem-solving skills are undervalued. There was a sense among some (36%) that students lack the time and opportunities to engage in creative activities freely. Participants noted that the burden of homework and extracurricular activities leaves children with limited room to explore their creative sides. They asserted that nurturing creativity is crucial for developing well-rounded individuals who can think critically and thrive in diverse settings. However, the current educational framework hinders cultivating creative thinking and hands-on skills. To match the importance of making in the lives of Makers, they suggested significantly more adoption in the educational systems.

Additionally, participants emphasized the importance of cultivating a consumer base dedicated to supporting artisans as an important part of their consumer lives. Artisans found it challenging to compete solely on price in a market oversaturated with craft items and intense competition from cheaper, mass-produced alternatives. Participants underscored the need for consumers who appreciate the narrative behind the product and the craftsmanship invested in its creation rather than focusing solely

on its final appearance. Supporting local and artisanal goods is critical in preserving meaningful craftsmanship and sustaining artisans in a highly competitive marketplace. It gives participants a sense of importance in their work.

4.2 The Role of Community and Family Ties in Craftwork

Central to the experiences of PEI Makers is the importance of fostering robust community bonds for trading, bartering, and dependence. Participants underscore these connections' pivotal role in supporting crafters and building a strong, coherent community. Beyond serving as a market for craft goods, local community ties provide an invaluable sense of belonging and mutual support. Participants provided the prime example of the post-tourist season, where local communities unite and strengthen connections among residents, including crafters. However, tensions occasionally emerge within these close-knit communities, particularly concerning the role of tourists. PEI crafters often rely on tourists as customers, but simultaneously, there is a complex interplay of emotions as some crafters hold mixed feelings about the impact of tourists. The departure of tourists offers a unique opportunity for locals to reconnect and cultivate more authentic community interactions. While tourists are vital for sustaining business, their absence allows for a return to the roots of genuine community bonds.

The participants showed a diverse landscape where women navigate a spectrum of gender roles from the empowered entrepreneur to more traditional roles, such as becoming stay-at-home mothers. For the participants, either choice is equally as empowering as it grants them the agency to prioritize their wants, needs, families, and lives. PEI 11, for instance, shared her journey of transitioning from a demanding job to embracing the role of a stay-at-home mom, a choice she finds deeply fulfilling. She acknowledges that there is no universal approach to defining women's roles within the crafting community, emphasizing the importance of personal agency in such decisions. They see their choices as instrumental in challenging gendered expectations and aspire to inspire the next generation.

4.3. Crafting as a Path to Reconnecting with Place and Nature

The interviews and content analysis revealed that the participant narratives consistently underscore an attachment to their local landscapes, reflecting a prevailing and deeply ingrained theme. Crafters within these communities not only feel rooted in place but also regard their creative work as integral and dynamic components that serve to both preserve and enhance their local culture. As mentioned by the accounts of PEI 2, 3, and 11, this attachment is not a passive one but a reciprocal relationship with the land where they extract to make and give back through their habits and relationships with the land.

The sense of place and identity takes on a unique significance as it intricately intertwines with the products they craft. The artistry of these individuals mirrors the aesthetics, values, and traditions prevalent in their immediate surroundings. This connection is not merely a surface-level nod to the local culture; it is a deep and meaningful entwining of personal identity with community heritage. Additionally, many of the crafters took inspiration from natural spaces, with 83% of them saying that their craft helps them connect with their local environment. This suggests that there is a more profound connection to the natural world, beyond source materials. Nature-based and sustainable crafting practices are seen as a way to restore and

maintain ecological balance, as reflected in participants' recognition that preserving local ecosystems is vital for long-term community well-being.

The data highlights the pivotal role that crafting plays in preserving local culture, traditions, and heritage. Crafters take elements of their surroundings and incorporate them into their work in both design and in the use of local materials. In doing so, they create a bridge that not only links their art to the local environment but also actively contributes to the preservation and celebration of the unique aspects that define their communities.

4.4 Building Resilient Networks of Trade and Support

PEI participants view their local communities as safe havens amidst a rapidly changing world. This perception is rooted in the local geography and the dynamics of these communities, which are regarded as protective elements, instilling a sense of security. The participants viewed their communities as resilient options that provide stability and contrast the unpredictability and turbulence of the broader world, as articulated by PEI 21. These crafters firmly believed their communities can fend off external threats and "free-riders", underscoring the importance of maintaining a well-knit network. This notion of local resilience extends to their crafting practices, serving as a means of sustenance and empowerment, expressed by PEI 22 and 24, who added that the ability to provide for themselves and their families is paramount, often achieved through crafting and the application of traditional skills.

Some of this inclination towards self-sufficiency is related to a lack of confidence in the government's capacity to maintain control in times of environmental scarcity that could result in unforeseen challenges. This skepticism suggests some inclination towards self-protection and safeguarding one's community as driving forces behind the pursuit of self-resilience that comes from Making and preparedness for unforeseen events. Participants, such as PEI 26, highlight the significance of being able to fend off potential threats, further reinforcing their commitment to preparedness.

PEI 3 and 12 suggested that craftwork not only serves as a means of self-employment but also represents a significant source of economic resiliency for both individuals and the broader community. Participants emphasized their reliance on locally sourced materials and inputs, which shortens supply chains and reduces greenhouse gas emissions. They also employed low-tech eco-friendly manufacturing techniques usually run out of their homes. They saw this local economic contribution as instrumental in sustaining the overall well-being of the community and a significant contributor to local economic activities such as craft shows, farmer's markets, and the tourist industry. Participants also accentuated the potential for local businesses and artisans to establish networks and communities that possess the resilience needed to withstand economic, social, or environmental challenges by being more connected to one another and responding to needs as necessary instead of trying to predict community and consumer needs. These collective support systems, rooted in the utilization of local products and services, fortify local economies, simultaneously reinforcing community ties and resilience. Resilient networks facilitate resource sharing, community building, and mutual support, all contributing to the enhanced sustainability of local economies, as underlined by PEI 2 and 11.

4.5 The Role of Tradition and Innovation in Crafting

The data illustrates that participants grapple with finding a balance between traditional crafting techniques and innovative, contemporary approaches, a balance they flag as crucial for ensuring that crafting remains relevant and appealing to modern consumers. PEI 6, for example, noted that younger crafters are moving towards more contemporary techniques, which reflects a shift away from traditional crafting. While the data emphasizes the shift towards contemporary crafting techniques, it also underscores the significance of preserving cultural heritage. Participants recognize the value of tradition in crafting and how it contributes to cultural identity, so much so that in PEI, participants express the importance of attaching narratives and stories to crafted items, preserving the soul of the craft. This framing of the "soul" of the craft aligns with the history with the Arts and Crafts Movement. This indicates that, even as crafting evolves, participants aim to retain cultural and historical significance within their work.

5.0 Discussion

In this section, I look at what the data from PEI Makers contributes to the discussion on making as it intertwines with cultural, ecological, economic, and social dimensions to contribute to a holistic approach to CED. The study demonstrated three key areas for how craft promotes a holistic approach to CED in Atlantic Canada through (1) enhancing sustainability and well-being, (2) contributing to embeddedness in place and reembedded communities, and (3) supporting local economies. While many Makerspaces and Maker groups are designed and emerged from the bottom-up, some policy ideas are then presented for encouraging these groups are still provided.

5.1 Embeddedness of Place and Communities

The most prominent theme that emerged in the results was the significance of making in participants' lives. Making and practicing craft were deeply intertwined with participants' sense of place and identity. Making has been linked with a strong sense of place and connection to the natural environment, local traditions, and cultural heritage by some others (Lange et al., 2021; Leorke & Wyatt, 2019; Weibert et al., 2022), but not extensively. For PEI Makers, there was a connection with the island's unique coastal environment and cultural history, significantly influencing the materials and themes they incorporate into their crafts. This suggests that crafting can help establish stronger relationships with place, enhancing sustainable production. This reinforces the initial objective of the study, which aimed to understand the significance of crafting in participants' lives and the areas in which it enhanced their well-being. The strong connection between craft and place demonstrates how crafting is not merely a hobby but an aspect of participant identities and a possible pathway for enhancing community engagement that is sustainable, community-oriented, and that enhanced local economic development. PEI Makers' sense of place is intricately linked with their commitment to sustainable, nature-based crafting, going beyond eco-friendly materials and instead embodying ecological values in their work. This strengthens the community's overall adoption sustainable development, by more seamlessly integrating ecological and nature-based elements into production.

Crafting was also consistently highlighted as a communal activity that rejuvenates social bonds. Relationships were strengthened through crafting in two ways. First,

when crafting is done together, it is a bonding exercise for those who participate. Crafting circles, workshops, and events provide spaces where community members can gather, interact, and collaborate serving as a bridge that brings together individuals and promotes a sense of belonging with others. Thus, while crafting may have little impact to counteract large scale manufacturing, it contributes to local economic development practices that anchor individuals within a supportive social network, strengthening local well-being and resilience to change. Second, participating in the crafting informal economy people created relationships with one another based on trade and reciprocity. This support of local economic activity reembeds economic transactions into the social fabric of the community and encourages residents to buy and sell within their local economy. The networks formed by PEI Makers with each other, and consumers are built on trust, shared interest, and reciprocal relationships that are social in nature, again re-linking social life with economic activity. Community markets and events were places where people would come together to create physical space for transaction and for community building. The challenge lies in ensuring that crafting initiatives effectively connect and revitalize communities, which involves addressing issues such as inclusivity, accessibility, and sustainable funding for community crafting programs, all of which were problematic in the PEI context. The PEI case highlights the opportunity in promoting community-based crafting programs that enhance social cohesion. By investing in these initiatives, communities can experience a revitalization of social bonds, which can, in turn, contribute to ecological and economic well-being.

5.2 Craft's Nature Connection and Impact on Well-Being

Participants demonstrated that making includes a strong attachment to their local landscapes and communities and has improved their overall well-being. In general, handcraft has been consistently linked with several psychological benefits to both producers and consumers of the products (Cajayon et al., 2017; Graham, 2001; Horghagen et al., 2014; Kim, 2017; Pöllänen, 2015). Crafting has most often been associated with reduced stress and relaxation as participation in things such as knitting or woodworking leads to a state of mindfulness where individuals become intensely focused on the present moment—a state of mind popularly referred to as "flow" (de Devotto et al., 2020, p. 4). Being in an extended state of flow reduces anxiety and improves overall mental well-being (Lynch & Troy, 2021; Peifer et al., 2020). People who participate in handcrafted production develop a sense of accomplishment and pride, which boosts self-esteem and confidence, this is also observed in children. Crafting is also a source of creativity and self-expression, a therapeutic outlet for individuals to communicate and deal with complex thoughts and emotions. More broadly, the drive for mastery improves emotional resilience as individuals overcome challenges and setbacks, teaching people to adapt, problem-solve, and persevere in the face of difficulties. If they can do so, they are rewarded with a sense of mastery and competence, improving confidence and self-esteem. The culture as a whole and the embeddedness in community, strengthens social connections, enhancing a sense of belonging that combats contemporary feelings of isolation, individualization, and alienation from one another and within the means of production.

While craft improves mental health, it has also been linked to enhancing nature connection through material sourcing, drawing inspiration, mindful engagement, nature-inspired design, and crafting within nature, which was supported by this

study. Nature connection is an area of research rooted in ecology and psychology which explores and demonstrates the role nature has on human well-being (Cleary et al., 2017; Richardson et al., 2021). Nature connection is increasingly recognized as a critical part of community and individual flourishing, with research consistently showing that exposure to nature, visually or immersed, can dramatically improve mental health (Mayer & Frantz, 2004; Sanguinetti, 2014). Spending time in natural environments is associated with reduced stress levels, improved mood, and enhanced cognitive function due generally to the restorative and calming qualities of natural settings. These improvements in mental well-being are linked to increased creativity, problem-solving, and self-esteem. In community and local economic development, fostering this nature connection can have a transformative impact as communities prioritizing green spaces, local biodiversity, and access to nature often see improved well-being and enhanced resilience to environmental challenges.

This holds significance within this study as it highlights the dual benefit of handcrafting as a tool for sustainable CED as it functions as both a connector to nature and a way to improve mental well-being; handicraft has deeply rooted psychological benefits that are also positive for the environment. More recent environmental psychology research demonstrates that deeply meaningful changes rooted in self-esteem and community are more likely to lead to long-term changes in sustainable behaviour (Becker, 1973; Burke et al., 2010; Wong & Tomer, 2011). Crafting does this in three ways: (1) connecting with nature as described above; (2) strengthening community bonds and creating a profound sense of belonging, which is associated with reduced conspicuous consumption (Dickinson, 2009); and (3) boosting self-esteem and reducing consumption-driven lifestyles. This study explored these themes among Makers in PEI to see if these themes persisted and what others emerged to learn more about crafting and local production as important pieces of CED.

5.3 Local Production for CED in Atlantic Canada

By its very nature, local production aligns with sustainability principles by minimizing externalities, enhancing resource efficiency, reducing waste and overproduction, promoting high-quality goods, and reestablishing relational exchange. I look more closely at these themes below.

In ecological economics, an economic discipline closely aligned with the principles of CED, a pivotal concept is the idea of externalities—often overlooked costs and benefits that result from economic activities that are not accounted for in traditional economic models (Joan, 1995; van den Bergh, 2010). Environmental externalities associated with production include a wide array of impacts, such as pollution, greenhouse gas emissions, and resource depletion, which stem from the extensive transportation of goods over long distances and the overproduction of goods in anticipation of market demand. Participants recognized that making offers an alternative paradigm for minimizing environmental externalities by shortening supply chains and reducing the ecological toll associated with long-distance transportation. Local production reduces greenhouse gas emissions from shorter supply chains, improves resource conservation by drawing on local resources and materials, and fosters community resilience by strengthening local economies and reducing dependence on external sources.

Overproduction is a pervasive issue in modern economies, largely driven by global supply chains and a culture of 'one-day delivery' that requires items to be

consistently stocked, regardless of actual demand. This has critical environmental implications, most notably excessive waste generation and overconsumption of resources. Global supply chains and centralized production are notorious for overproduction to meet uncertain demand (Fisher et al., 1994; Fu et al., 2006; Popescu & Seshadri, 2013). On the input side, this results in the excessive use of energy, materials, and labour and on the output, it results in significant disposal of surplus goods. In contrast, local production offers a more demand-driven approach to manufacturing as local producers are often deeply embedded in their communities, allowing them to respond directly to local demand. The small scale of local producers also necessitates the most efficient use of resources; thus, creating excess product is not reasonable for their long-term viability.

The prevailing culture of disposability is characterized by short product lifespans, rapid obsolescence, innovation for consumption's sake, and excessive waste generation (Douglas & Prentice, 2019; Fitzpatrick, 2011; Iizuka, 2007). In modern consumerist culture, products are frequently designed and produced with planned obsolescence in mind. This strategy encourages consumers to replace items rather than repair or maintain them, leading to a "throwaway culture" (McDermott, 2016, p. 1; Strasser & Schlich, 2020; Whiteley, 1987). This component of modern economic systems was one of the first to be widely criticized by local producers and Makers who began holding repair cafes and emphasizing the need and empowerment associated with repairing one's goods instead of replacing them. Local producers also challenge this culture of disposability by emphasizing quality over quantity, with goods produced to last and designed for durability. This contributes to an overall elongation of product lifespan, which in turns promotes the conservation of resources and waste minimization.

Reestablishing relational exchange: In ecological economies, relational exchange is an important concept that underscores the significance of relationships in economic transactions in contrast to impersonal and transactional exchange (Coggan et al., 2013; Fontenot & Wilson, 1997; Paulin & Ferguson, 2010). Relational exchange patterns tend to foster greater accountability and build trust within the community that can improve non-market-based exchange, such as bartering and gifting. These outcomes enhance community resilience because, in challenging times, these communities will have strong interdependent relationships that can respond to needs more quickly to weather economic downturns. Relational exchange promotes social inclusion, enhances reciprocity, and builds social capital. It enhances the local economic development of an area, stimulating the economy by furthering the support of local businesses, promoting local economic interdependence and sustainability. The participants demonstrated that a central element of being a Maker is the role of community and family ties for strengthening social resiliency.

5.4 Policy Ideas

Given that making enhances resilience, reduces barriers to entry, reduces economic disparities, enhances well-being, connects individuals to nature, and strengthens communities, it is an integral part of a CED strategy for shifting modes of production. Atlantic Canada's provincial and municipal governments could support the adoption of making to enhance a holistic approach to production for CED that enhances sustainability, community, resilience, and embeddedness of place and communities.

5.4.1. Education. Municipal governments could establish partnerships with local schools and community centers to offer crafting programs for elementary and high school students. Such a program could also include a municipal youth crafting apprenticeship program. Governments could hire local artisans as instructors and pair youth with experienced artisans for hands-on apprenticeships in various crafting fields. Provincial governments should consider integrating craft into the official curriculum of high schools, with curricula developed in collaboration with local Makers and craft organizations. This would also help enhance and promote cultural preservation. Similarly, they could create municipal crafters' mentorship programs that pair newcomers in both the community and in the Maker community, more specifically, with experienced Makers.

Provinces could establish a provincial crafters-in-residence program at universities, especially in times of the year when tourism is at a low. Local crafters could provide workshops, lectures, and mentorship opportunities for students that would grow the culture of making and engaging students within the community. Some Atlantic Canada universities have high international student populations, and programs such as this would help bridge the gap between the university and local communities. Provinces could also establish a crafters' community fund that would allocate funds to promote skill-sharing, collaboration, and community-building through making.

5.4.2. Tourism. To ensure a continued commitment to sustainable tourism, municipalities could develop a sustainable artisan certification program that would offer certification to artisans who meet specific criteria related to sustainability, inclusion, and cultural heritage. This would fend off the encroachment of over-commercialization. A municipal collaborative for sustainable tourism could also facilitate relationships among artisans with an interest in tourism to come up with unique tourism experiences that highlight their craft alongside Atlantic Canada's cultural and ecological heritage. Provincial governments could also develop similar artisan-led sustainable tourism initiatives to showcase rich culture while providing support for local crafters. These approaches would continue to attract and gain income from tourists without compromising cultural and ecological values, which address this study's concerns regarding the impacts of tourism on CED.

5.4.3. *Supporting crafters*. At both levels of government, artisan and crafter development funds could provide financial support to emerging local crafters. This could support attendance at craft shows where community is garnered, upgrade equipment to produce better products, and provide business start-up assistance. Governments could also recognize and award crafters and local producers who have made significant contributions to Atlantic Canada's cultural and ecological heritage, which would provide incentives for growth in the local production.

Governments should also provide market access support and could do so by establishing central hubs for Makers to sell their goods while offering marketing and logistical support. Most municipalities already host several artisan markets, but they often charge high fees for participating, which should be reduced or removed entirely for new crafters and artisans. These markets are often very regional, and Makers would likely benefit from a provincial network to market and connect markets across provinces.

5.4.4. Environmental sustainability. In Atlantic Canada, crafting can play a vital role in promoting eco-friendly practices and responsible sourcing. Governments could once again support certification focused on eco-friendly making. They could also establish an eco-friendly crafting materials procurement support and rebate program that would provide help and incentives for using local and eco-friendly materials, which helps to foster ongoing responsible production. Local Makerspaces would also help with these by stocking local materials. They could also encourage local crafters to integrate nature-based elements and designs into their creations by providing training on techniques and community gatherings in natural spaces to establish stronger relationships with the land.

5.4.5. Economic resilience. Recognizing that Makers help improve resilience over time, municipal governments could launch municipal crafter incubators dedicated to improving the long-term viability of local crafters. Many cities now have local Makerspaces; however, they are often not a part of the city's local economic development plan. To take full advantage of these community spaces, municipalities should support them through their planning and funding initiatives as spaces that support community, entrepreneurship, and local production. Provincial governments could also help establish artisan cooperative programs that would promote collaboration among Makers by offering funding, mentorship, and resource sharing across the network.

6.0 Limitations and Future Research

While this study offers some useful insights into the relationship between craft and CED in PEI, several limiting factors should be considered. The research was based on a relatively small sample of participants, who were recruited primarily through online networks, such as Facebook, and sustained via word-of-mouth referrals within the community. As a result, the sample may not be statistically representative of all rural artisans in PEI. The initial recruitment strategy of Facebook may have excluded certain groups, particularly older artisans and those less technologically inclined. These populations may have distinct perspectives on craft and economic resilience that were not captured in this research.

Additionally, snowball sampling is a practical and effective technique for accessing communities, but it does introduce the potential for sampling bias. Participants are most likely to refer other individuals from within their existing social and professional networks, which can result in a homogeneous sample, particularly in terms of worldview and socio-economic status. Despite these potentials for bias, it was an appropriate strategy for this research, as the craft economy in PEI is largely informally organized and therefore not readily accessible through formal institutions.

The semi-structured interview format also presented trade-offs. While it allowed for rich and narrative-driven data that captured participants' lived experiences, it does not allow for any kind of systematic comparisons across cases in a way that a standardized survey might. However, for a more exploratory study grounded in qualitative traditions, intended to uncover possible areas for research in a more Canada-wide research project, this approach was well-suited for uncovering emergent themes related to the cultural and ecological elements of local craft practices. The goal of the study was not to produce generalizable findings, but to look at how the CED framework might manifest in a grounded context of localized production.

The insights generated provide a valuable starting point for future research, but should be interpreted with caution, considering these limitations. Future research would benefit from a mixed-methods approach that combines qualitative depth with a broader quantitative reach that draws from a more demographically diverse and geographically distributed sample. This would help build a more robust understanding of craft economies in rural Canada.

A natural extension of this work would be a longitudinal follow-up with the original PEI participants to see how their practices, economic indicators, and community relationships have evolved in the wake of the COVID-19 pandemic. The original interviews were conducted before the pandemic, and a follow-up would demonstrate the extent to which craft served as a buffer during times of crisis and how Makers adapted to shifts in consumer demands and supply chain challenges. It would certainly help to illuminate the resilience that craft can bring to a rural community.

A regional comparative study with other rural communities in Atlantic Canada, such as Cape Breton, the South Shore of Nova Scotia, and rural Newfoundland and Labrador, would help to identify common themes for the region of Canada. These comparisons could explore how different histories of craft, settlement, Indigenous influences, and economic structures can shape Maker economies.

This research also suggests that a future study should integrate a gendered lens and examine how caregivers and household economies intersect with craftwork in rural areas. Given the strong presence of women in the study and the repeated connection between making and domestic spaces, further studies could look at how gender influences access to markets and time use.

A more tangential avenue for future research involves the integration of arts-based research methods, such as visual ethnography and participatory mapping of Maker networks, to better capture the affective and spatial dimensions of rural making. These approaches are interesting for documenting the non-monetary value of craft economies, as it can demonstrate the sensory relationships between artisans and their materials, as well as the embedded cultural narratives. If a systems-oriented approach were used, the study could look at how localized craft economies interface with broader rural development infrastructure, such as tourism, municipal policy, and regional innovation networks. Mapping the 'craft ecosystem' in terms of supply chains, educational programs, funding pathways, and regulatory environments could help to provide some actionable insights for community developers who seek to support these sectors to be more resilient.

Currently, a co-developed project with the Cape Breton Centre for Craft and Design and Cape Breton University is beginning to embody some of this approach. The initiative involves producing a video series that profiles local Makers and blends visual storytelling with personal reflections on place and tradition. The stories are intended to showcase technical skill and to bring to the surface the deeper relational values that guide Maker practice.

These possible areas of future research highlight the potential for comparative and creative approaches to deepen engagement with craft as an important part of CED and sustainable rural development in Atlantic Canada and Canada more broadly.

7.0 Conclusion

The study highlighted several central findings that underscore the impact of crafting on the lives of participants in rural Atlantic Canada, and the role crafting can have in CED. Crafting holds significance in participants' lives, serving as a source of fulfillment and satisfaction that transcends the mere act of making. The findings emphasize the role crafting can have in fostering deep connections to place and community. The participants view their work as an extension of their identity, persevering and enhancing cultural heritage and ecological practices. The study also demonstrates the contribution of crafting to building local and sustainable economies. Participants prioritize locally sourced materials, use eco-friendly materials and techniques, and the practice of making as local production enhances the resilience of the community and local economy. The study findings add to the discourse on making, underscoring that it is not merely a pastime but a transformative force that enriches the lives of those who participate, strengthens connections to place, contributes to local economies, and enhances ecological well-being.

The practical implications of these findings hold promise for CED and ecological restoration in the context of Atlantic Canada. Crafting is demonstrated as a bridge connecting economic well-being, ecological practice, and strengthening community bonds while enhancing community and economic resilience. To harness the full potential of making as a part of a just and sustainable transition, there is a need for policies and initiatives that support and promote craft culture. One example municipalities could look to is Make It Kitchener 2.0 in Ontario. While the context for the economic development plan is different, the approach centers on making as a way to foster local economic development. There is also a need to recognize the role of craft in preserving cultural heritage within changing communities. As cities within Atlantic Canada change and grow, including culturally significant approaches to economic development will be important to maintain the unique cultural heritage of the area.

The study points to several areas for future research, most importantly delving into craft practices prevalent in specific regions and in cities. More research is needed on local policies and regulatory frameworks that can encourage or inhibit craft, emphasizing craft as an option for entrepreneurs. Further research could also be conducted on craft practices and well-being related to place and sense-making.

This research suggests that making has the potential to shape not only individual lives but to impact and build entire communities of practice. Craft extends beyond the creation of objects as an act that brings people together, empowers local economies, and fortifies the bonds between communities and the environment. Makers in PEI exemplify the capacity of crafting to foster resilient networks of support and trade as they have embraced self-sufficiency to fortify themselves and their communities against the uncertainties of a rapidly changing world. Their craft extends beyond a hobby and is their pathway to self-reliance, stronger local economies, and empowerment. Crafting is a pathway to resilience and renewal within rural landscapes. The outcomes echo the spirit and resilience of the Arts and Crafts Movement as Makers continue to preserve cultural heritage, support local economies, and weave together resilient communities.

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