ERS 702 Critical Analysis and Research

Research Profile

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Crafting the story: Exploring the role of emerging narratives of livelihood in ecological economics through land-based artisans and craftspeople.

Introduction

Overall problem context

Human activity has undergone a 'Great Acceleration' in the past 200 years (Steffen et al., 2015), causing globally significant impacts on biophysical systems (Crutzen, 2002; Steffen et al., 2007, 2015). These are attributable primarily to the success in the 20th century of capitalism with its central mechanism of growth, all sustained in the face of mounting evidence of ecological and social degradation (H. Daly & Farley, 2004). However, capitalism has also brought enormous and unprecedented success in the alleviation of poverty and technical innovation (Pinker, 2019), while modern alternatives focusing on non-market and centralised planning have failed, with severe ecological and social impacts (Feshbach, 1995; Gray, 2015; Scruton, 2012). Early and significant acknowledgements that there were limits to the levels of growth that the earth might sustain (Meadows et al., 1972) heralded the beginnings of global attempts to work towards sustainable forms of achieving human wellbeing (Reid et al., 2005; United Nations, 2015; WCED, 1987).

In the mid-20th century, criticisms began to emerge that capitalism's model of economics was based on erroneous assumptions about environmental flows that make continuous growth impossible (Georgescu-Roegen, 1971). Furthermore, modern versions of capitalism, distinct from the political economies of, for instance, Adam Smith and Karl Marx, reflect an over-simplification that does not reflect the complex and interrelated realities of economic life (Daly & Farley, 2004). Polanyi's characterisation of the 'Great Transformation' described an economy 'disembedded' from the social sphere where protectionist social policies culminated in state-delivered welfare (Polanyi, 1957).

The emergence of systems thinking in the early 20th century (e.g., Ashby, 1947; Bertalanffy, 1968; Midgley, 2015) and complexity theory in the 1990s (Kapra, 1997; Levin, 1999) further questioned the simplistic assumptions of growth-based economics and requirements for sustainability. Natural and social systems are complex systems themselves, but many economic questions involve linkages between social and ecological systems (Berkes et al., 2003). A shift towards sustainability requires transformations that fundamentally alter human and environmental interactions and feedbacks (Walker et al., 2004). While there is a large and growing body of literature around resilience and transition in sustainability (Berkes et al., 2003; Folke et al., 2009; Holling, 2001; Ostrom, 2009), there is not a sustained body of work that examines narratives or storytelling and their interaction with people and the environment as a complex adaptive system (Snowden, 2005).

Emerging from natural resource and environmental economics in the 1980s, the interdisciplinary field of ecological economics (hereafter EE) identifies the need for systemic change. It seeks to ground new economic thinking in the dual realities and constraints of our biophysical and moral environments (H. Daly & Farley, 2004), with a cessation or reversal of growth or degrowth as an alternative to the current economy (Kallis et al., 2012). However, recent criticisms of EE have focussed on an increasingly technical approach at the expense of the social and political (M'Gonigle, 1999; Spash, 1999, 2012), but new forms of political economy are required if sustainability transitions are to be achieved (Klitgaard, 2013).

Research Goals and Questions

While numerous studies are exploring the theories, values, and methodology of EE (e.g. Levrel & Martinet, 2021; Plumecocq, 2014; Spash, 1999), much effort so far has concentrated on the macroeconomic level. Post-growth business models lack close examination (Nesterova, 2020), with a gap in understanding how to bring radical ideas into mainstream thinking (Joutsenvirta, 2016). There is an urgent need for such studies to map the transition pathways to post-growth economies. Systemic solutions are required in addition to political-economic strategies to deliver them (Van den Bergh, 2011). However, approaches to operationalising theories and values tend to begin at the macro-level and seek to manage change in the micro-economy perpetuating organisational structures inconsistent with a complexity approach (Taptiklis, 2005). This research will examine the narratives that already exist within place-based livelihoods to explore the potential for understanding the complexity that exists and the potential for transitions to new political economies.

Systems thinking is central to the ontology of EE (Spash, 2012), and I will explore the idea of a theoretical framing of values as emergent patterns, or 'attractors' in a complex system that is the result of interactions or processes that arise between system agents (Meadows, 2009; Stroh, 2015). My research will explore EE values and constraints through systems thinking and the related disciplines of resilience and transition to understand which agents and which processes are necessary and sufficient for the desired patterns to emerge.

To explore this gap, I will review the macro-level values and constraints that have been proposed ((e.g. Levrel & Martinet, 2021; Plumecocq, 2014; Røpke, 2004, 2005; Spash, 1999, 2012)) and use this to develop a framework that an alternative political economy must meet to be consistent. My research will engage with land-based artisans and craftspeople as a mode of production. Using narrative inquiry tools such as Participatory Action Research (Cameron & Gibson, 2020) and SenseMaker (Van Der Merwe et al., 2019) techniques I will explore the narratives and stories around these livelihoods. I will explore the importance of these narratives in transition management for sustainability and examine the idea of a test for emerging narratives against sustainability criteria. I will explore whether a new political economy can be prefigured (Trott et al., 2018) through practice and engagement in this alternative mode of production (Conill et al. (2012) in Kallis et al., 2012).

Key questions will be: (i) how is this alternative mode of production and its emergent political economy consistent with critical values and constraints- the utopia-of ecological economic (ii) What are the characteristics that make them suitable as post-growth livelihoods for transition? ((iii) How are they

organised in collectives or networks, and what vestiges of historical guild organisation remain? ii) Why did historical political economies around craft guilds and distributism fail? (iv) What opportunities exist for a new guild-based prefigurative political to transform local economies?

Significant Original Contributions to Knowledge

I anticipate this research will provide a significant contribution to ecological economic research by supporting a much-needed refocusing of attention on socio-ecological systems (K Kish & Farley, 2021) and filling the gap that exists in political economic strategies (Van den Bergh, 2011), bringing understanding of radical ideas into mainstream thinking (Joutsenvirta, 2016) and operationalising post-growth business models (Nesterova, 2020, 2021)

While ecological economics embraces the complex nature of reality (Spash, 1999), there is little research into the role narratives and storytelling play in understanding how agents interpret and respond to complexity in their environment (Snowden, 2005), nor in the complex adaptive system of the economy. My research will provide a review of the current understanding of the role of narratives in complexity and critically examine storytelling and sensemaking methodologies for applications in ecological economics.

Methodologies for working with emerging narratives include (i) Participatory Action Research which is being explored in Community Economies Research (Cameron & Gibson, 2020) in the Philippines, Australia, and the USA, but the use of this methodology in Ontario for land-based artisans and craftspeople will be an original application; and (ii) SenseMaker, a tool which originated in the field of knowledge management and was specifically developed to explore emergent narrative patterns in complexity (Snowden, 2000), however academic literature describing the tool-set and method is lacking (Van Der Merwe et al., 2019)

Furthermore, the direct relation to the idea of a test for emerging narratives against sustainability criteria and examining the utility of stories in ecological economics is a novel approach. For instance, Lowery et al. (Lowery et al., 2020) call for research to show how community storytelling for and about sustainable rural development is undertaken.

Fit with the objectives, fields, and orientation of the SERS PhD.

This doctoral research is well-positioned to contribute to the overall Research Goals of the School of Environment Resources and Sustainability but particularly Pillar 3 in that it addresses the implications for biophysical limits to growth for the idea of a progressive, globally-connected society. Sustainability can be treated as the language for lasting wellbeing (Gibson, 2017); by researching the gap in knowledge in the socio-ecological consequences of post-growth political economies and their role in transitions to sustainability, this research contributes to that goal.

Doctoral research aims to make a novel contribution to research and demonstrate ability with research skills and, for this SERS PhD, interdisciplinary working. This research also emerges from intersections of existing fields of ecological economics, systems/resilience and thinking, and the practice-based

methodologies of narrative inquiry through participatory action research and the emerging field of sensemaking.

Bodies of knowledge

In the following section, I present a summary of the central bodies of scientific literature that form the core of my research. My research is grounded in the literature of ecological economics as a basis for understanding the interaction between biophysical limits to growth and the delivery of human wellbeing. Closely related is the body of work that makes up systems thinking, complexity, and resilience, which provides a framework and a lens through which to examine socio-ecological relationships as patterns that emerge through the complex interactions of multiple and adaptive agents. Resilience also provides a theory of change through which social-ecological transition can occur. My third body of literature is Narrative Approaches to Sustainability, which explores the importance of narrative and stories of non-rational drivers of change and includes a core part of my data-gathering methods in the literature on Participatory Action Research.

Literature

Ecological Economics

General Background, Core Values, and Constraints

The multidisciplinary field of EE arose from the perceived failure of growth economics and particularly existing disciplines such as environmental economics and natural resource economics, to incorporate social and ecological dimensions within its balance sheets (H. Daly & Farley, 2004; Spash, 1999). An ecological economy can is 'embedded' following Karl Polanyi's vision of the disembedding of the economy from society during the Great Transformation (Polanyi, 1957). Accepting this as a basis for economics means that moral and ethical issues are intrinsically bound up in economic activity (Spash, 1999, 2012). However, criticisms of EE have emerged because of an increasingly technical approach at the expense of the social and political (M'Gonigle, 1999; Spash, 1999, 2012).

Much has already been published around the theoretical and methodological framework for ecological economics (e.g. Levrel & Martinet, 2021; Plumecocq, 2014; Røpke, 2004, 2005; Spash, 1999, 2012) and the requirements for degrowth (see below). However, post-growth business models lack close examination (Nesterova, 2020), with a gap in understanding as to how to bring radical ideas into mainstream thinking (Joutsenvirta, 2016). There is an urgent need for such studies to map the transition pathways to post-growth economies. Systemic solutions and the political-economic strategies to deliver them are required (Van den Bergh, 2011).

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Degrowth

Degrowth within an EE framework is an equitable down-scaling to a steady-state of production and consumption, or society's throughput (Kallis, 2011), that increases human wellbeing and enhances ecological conditions at the local and global level, in the short and long term (François Schneider et al., 2010). The steady-state concerns only material throughput; qualitative changes and innovations in the economic, social, or cultural sphere will still take place (H. E. Daly et al., 1994)

Pathways to degrowth are still fragmented, diverse, and sometimes contradictory but can include (i) 'exit from the economy' alternatives (eco-villages, co-housing, and rurban squats, consumer-producer cooperatives, permaculture, and subsistence organic farming, and alternative non-monetary exchange

systems; (ii) proposals about a different type of associated, multi-level confederation direct democracy; and (iii) more reformist institutional and policy changes at the State level. Woven throughout are themes of redistribution, social security, and a gradual decentralisation and re-localisation of the economy (Kallis, 2011).

However, the possibility of reducing growth without severe implications for the continuance of deeply cherished liberal values and freedoms is contested (Kaitlin Kish & Quilley, 2017). We can understand the current crises as a mismatch between the desire to consume, produce, develop, borrow and employ and the socio-ecological limits to perform all these activities (Francois Schneider, 2010). While lasting ecological sustainability and social equity requires a combination of actions and dimensions (Sekulova et al., 2013) reflecting the complex structure of society, very little exploration of the operationalisation of theory and methods of ecological economics and degrowth has been published (Nesterova, 2020).

There also remains a body of research that contends that environmental solutions without loss of these values can only be delivered by growth and technological innovation. However, this tension will not be explored in this research.

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Alternative Modes of Production and Livelihoods; 'Eco-cultures' and 'Nowtopias'; Land-Based Artisans and Crafts People

Economic production is the transformation of raw materials supplied by an ecosystem into something of value to humans, which requires energy and creates waste. Since both energy, materials, and earth's absorption capacity are finite, alternative modes of value production and attendant political economies are necessary, which include (i) the reduction of material production, (ii) the redistribution of material flows through society (iii) the increase on production of non-material value or the 'psychic flux of human satisfaction' (H. Daly & Farley, 2004, p. 64).

We can look to communities of sustainable degrowth (Kallis et al., 2012) called 'Nowtopias' (Carlsson & Manning, 2010) or 'Ecocultures' (Quilley, 2014) that already reject mainstream values for emerging constraints to production in alternative economies. 'Nowtopias' is a broad category of different attempts to reclaim work back from capitalism, focusing on rejecting wage labour and embracing unpaid work (Carlsson & Manning, 2010). The Transition Movement is an ecoculture that envisions a positive, community-led strategy for 'energy descent' in the model of the Odums' prosperous Way Down (Odum & Odum, 2001). It adopts widespread and sophisticated grassroots initiatives in response to a range of social and technical issues, from social care, through energy systems, food production, local currencies, and the financial system (Quilley, 2014; Seyfang & Haxeltine, 2012).

I will be focussing on researching pre-industrial livelihoods based on direct and local use of available natural resources in the form of land-based artisans and craftspeople: woodworkers (coppiceworkers, bodgers, barrel makers), leatherworkers, basketmakers, and blacksmiths. Many of these remain part of the rural economy today and have been the focus of regular cycles of reinvention in movements such as Arts and Crafts, Hippies, and online woodworkers (Hofverberg et al., 2017). Craft entrepreneurs are part of a movement that celebrates locally made, small-scale artisanal production; their lived experiences provide examples of the potential for collaboration, mutual aid, and resistance, as a challenge entrenched structures and regimes of value. However, it remains an unresearched area (Naudin & Patel, 2020). Like other small, largely home-based businesses, the contemporary craft economy is being championed as an alternative production and consumption practice within unsustainable – environmentally and in terms of human rights – global industrialisation (Luckman, 2015). The idea of local artisans supporting a small farm economy is also proposed as an alternative to the present crises (Smaje, 2020).

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Political Economy/Ecology

Ecological economics has rejected the broader values and assumptions of growth economics and therefore must develop an alternative set of moral and institutional prescriptions, or political economy (M'Gonigle, 1999). Global capitalism has seen an unsustainable increase in complexity at higher levels in the economy at the expense of the local and informal (Quilley & Kish, 2019). It seems clear then that any alternative political economy will necessitate a new relationship to political structures at all but particularly local scales. For instance, Quilley and Zywert identify an emerging political economy of livelihood (after Polanyi, 1957)-i.e., the household, the informal/DIY economy, and the culture and rituals of reciprocation— as a "survival unit' between the market and the state (Quilley & Zywert, 2019)

There were many grassroots, communitarian social innovations (Friendly Societies, Guilds etc.) based on reciprocity and protection in the early modern period (Quilley, 2012). Guilds were local organisations of professional tradespeople, recognised by government, and which maintained trade monopoly rights with regard to fellow citizens and outside competitors and played a central role in the organisation of the political, cultural, social, and economic life of early modern Europe (Lucassen et al., 2008). They worked with an ethic of equality called distributism; often with a strong religious component in Christianity, predominantly Catholicism (Belloc, 1912; Volti, 2012). The guild is an institutional pattern necessary in the process called distributism which is based on the idea that property should be as widely distributed as possible, and business should be local. Distributism is a movement that was re-popularised, at least in literary circles, by G.K Chesterton and Hilaire Belloc in the early 20th century. It can still be seen in some forms in modern movements such as bioregionalism, farmers markets, community-supported agriculture, organic farming, homegrown gardens, local- and slow-food movements, alternative energy, homeschooling, neo-Luddism and worker ownership (Sale, 2008).

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Systems-Thinking, Transition, and Resilience

The emergence of systems thinking in the early 20th century (e.g., Ashby, 1947; Bertalanffy, 1968; Midgley, 2015) and complexity theory in the 1990s (Kapra, 1997; Levin, 1999) further questioned the simplistic assumptions of neoclassical economics and requirements for sustainability. Natural and social systems are complex systems in themselves, but many economic questions involve linkages between social and ecological systems (Berkes et al., 2003). A shift towards sustainability requires transformations that fundamentally alter human and environmental interactions and feedbacks (Walker et al., 2004) and in deeply held values and beliefs, patterns of social behavior, and multi-level governance and management regimes (Westley et al., 2011). Ecological economics as a field recognises the importance of thinking in systems as the heart of its ontology (Spash, 2012). I will use a system thinking approach to explore the idea of ecological economic values as desirable patterns that could emerge from the processes of economic agents. Resilience concepts such as basins of attraction and thresholds are important in determining a pathway for change within local economies. Some patterns or 'archetypes' can also occur repeatedly in a system (Braun, 2002)

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Narrative Approaches for Sustainability

Narrative is the most fundamental means of rendering human existence meaningful (Polkinghorne, 1988). It forms a social-psychological 'infrastructure' (Paschen & Ison, 2014) that provides 'spatiotemporal coordinates for moving through and manipulating the world' (Siri Veland & Lynch, 2017, p. 2). Social knowledge extracted from daily storytelling can point to more universal truths and preferred behaviours (Fisher, 1985). Narrative and storytelling play a significant role in making sense of complex ideas that has provided humans with a distinct evolutionary advantage (Snowden, 2005). Studies of workplace narratives in organisational management literature show they can expose, emphasise and make sense of complexity (Taptiklis, 2005). There is growing interest in studying processes of human sensemaking, as this strongly influences human and organisational behavior and complex system dynamics due to the diverse lenses people use to interpret and act in the world (Van Der Merwe et al., 2019). Challenging dominant social-ecological narratives is often cited as a critical trigger of transformation toward sustainability (Galafassi et al., 2018; Moore et al., 2014).

Academic interest in the role of narrative has increased in the past ten years partly due to an awareness that climate change as communicated through IPPC papers and scientific literature is not broadly understood (S. Veland et al., 2018). From scientific reports and scenario planning to fictional writing, diverse narrative forms have a role to play, as they set conditions for imagined and possible futures (S. Veland et al., 2018). Narratives of imaginary utopian futures are essential in imagining the 'adjacent possible' (Kauffman, 1995). For instance, the works of Ursula Le Guin, William Morris and a 12th Century folk utopia have been used to explore degrowth' imaginaries of hope' (Kallis & March, 2015; Mair et al., 2020).

Methodologies for investigating narratives include Participatory Action Research (Cameron & Gibson, 2020) and Sensemaking tools such as the Cynefin Networks SenseMaker (Van Der Merwe et al., 2019)

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Participatory Action Research

Mid 20th century attempts to disrupt knowledge hierarchies and 'extractive' tendencies of traditional research in the social sciences grew with Paulo Freire's attempts in Brazil to involve research participants in the process (Cameron & Gibson, 2020). Defined most simply, PAR involves researchers and participants working together to examine a problematic situation or action to change it for the better (Wadsworth 1998 in Kindon et al., 2007) and is rapidly becoming a leading paradigm within the social and environmental sciences. PAR is a cyclical process involving both researchers and participants who (i) co-develop context-specific methods for facilitation; (ii) identify an issue or situation in need of change (iii) initiate research that draws on capabilities and assets to precipitate relevant action; (iv) reflect and learn, leading to a new cycle of research/action/reflection (Kindon et al., 2007). PAR can be more than a way of informing policy or improving service delivery. By 'discover[ing] tendencies in the present that provide alternative paths out of the current crisis', it can instead be used as a prefigurative and transformative process (Chatterton et al., 2007). Prefigurative actors take direct action to create

change by building alternatives for being and interacting within chosen transformation pathways (Trott et al., 2018).

These prefigurative applications of PAR are emerging in diverse economies research, part of the Community Economies Research Network (Gibson-Graham, 2006; Gibson-Graham et al., 2015). (Cameron & Gibson, 2020) which emphasises the interdependence of human and non-human lie. Research projects in diverse economies focus on (i) endogenous economic development amongst migrant communities in the Philippines; (ii) participatory mapping with fishing communities in the US NorthEast; and (iii) environmentally sustainable business in Australia (Cameron & Gibson, 2020)

A further adaptation of PAR comes from Participatory Narrative Inquiry or 'Working With Stories'. Participants' raw stories of personal experience are used to make sense of complex situations for better decision making. PNI focuses on the profound consideration of values, beliefs, feelings, and perspectives by recounting and interpreting lived experience. Elements of fact, truth, evidence, opinion, argument, and proof may be used as material for sensemaking in PNI, but they are always used from a perspective and to gain perspective (Kurtz, 2014)

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Sensemaking

Sensemaking is a research approach that aims to explore and understand complex social systems by exploring connections and examining relationships (Van Der Merwe et al., 2019). Several sensemaking research methods exist, including SenseMaker, which was developed by the Cynefin Network specifically regarding complex adaptive systems, and which is used to explore narratives emerging from nursing practice in the Storymaker Project (Taptiklis, 2005)

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