

CONTESTED TERRAINS

(Far) beyond smart specialisation to the foundational economy in Australia?

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Abstract

The concept of Smart Specialisation (S3) as a foundation of regional development has spread far beyond the European Union. In Australia, S3 appeared first in the Hunter Valley in New South Wales, but was applied in its most developed form in the Gippsland region of Victoria. Despite its growing influence, S3 has come in for criticism. In this article, we look at the way that the Foundational Economy (FE) and the related concept of Deep Place (DP) analysis have been promoted as potential answers to these limitations. I question how far FE and DP should be seen as an extension of or an alternative to S3. I look to more extensive approaches that have been put forward.

Key words: Australia; regional development; smart specialization; foundational economy; deep place analysis

JEL codes: R11; R58; O44

Introduction

The concept of Smart Specialisation (S3) as a foundation of regional development has spread beyond its original breeding ground in the European Union (EU). In Australia, S3 appeared first in the Hunter Valley in New South Wales in an initiative launched by the (then) Prime Minister Malcolm Turnbull. However, it was applied in its most developed form in the Gippsland region of Victoria. Despite its growing influence, S3 has come in for criticism, both in terms of its intellectual foundation and practical application in the EU. Its application outside the EU has also come into question. Criticism has focused, *inter alia*, on the limitations of the approach to innovation itself, and with regard to confronting the problems confronting climate change.

In this article, I look at the way that the Foundational Economy (FE) and the related concept of Deep Place (DP) analysis have been promoted as potential answers to these limitations. These have been less developed in the Australian context compared to their origin in the EU, and in particular Wales, but have emerged in a seminar at Royal Melbourne Institute of Technology on S3 and the FE in 2020, addressed by Kevin Morgan from Cardiff University and Lars Coenen from Melbourne University (see Coenen and Morgan 2020, also Fairbrother 2017). In a practical sense, DP was suggested for Muswellbrook in New South Wales (Adamson, 2018), and more generally in the approach of

Spiller (2020). I spent some time outlining and critiquing both FE and DP given their relatively recent arrival in the Southern Hemisphere.

Drawing on recent work from the FE Collective (Russell et al. 2022), I conclude with an examination of how far these approaches deal with problems arising from climate change, given that it is acknowledged that it is an open question as to where FE and DP might sit on a continuum of radical change. I conclude that they may be a necessary advance on standard approaches, but not sufficient to confront the challenges we face.

Smart specialisation (S3)

Earlier work (Weller and Rainnie 2021) examined, in some detail, S3 and its application in Gippsland, Victoria. Here, I concentrate more on the critique of S3 and how FE and DP analysis have been promoted as potential solutions to the problems identified.

The Organisation for Economic Cooperation and Development (OECD 2013) described S3 as a regional policy framework for innovation-driven growth. It was said to be relatively simple as a concept – the concentration of public resources in knowledge investments on particular activities in order to strengthen comparative advantage in existing or new areas. It must ‘transcend three distinct areas’:

1. The underlying role of scientific, technological, and economic specialisation in the development of comparative advantage;
2. Policy intelligence for identifying domains of present or future comparative advantage;
3. Governance arrangements that give a pivotal role to regions, private stakeholders, and entrepreneurs in the process of translating specialisation strategies into economic and social outcomes (OECD 2013: 11)

Smart specialisation was the European Commission’s (EC’s) preferred approach to innovation-led regional growth (EC [2012, 2013]). However, Foray et al. (2011) suggested early on that the policy application of smart specialisation ran ahead of the approach’s theoretical specification.

It is claimed that advocates of smart specialisation differ from those promoting other, earlier versions of regional innovation thinking in at least two ways. They are more sensitive to the role of extra-local networks, external institutions, and multi-scalar institutional arrangements in triggering local innovation, and more willing to resource promising sectors and regions. In smart specialisation approaches, there is also an increased emphasis on leadership and on reconfiguring regional institutions to facilitate the ‘smart’ recombination of assets, unleash entrepreneurial enterprise, and, in the process, solve complex societal problems such as spatial inequality and social (in)cohesion (OECD 2015). The basic tenets of S3 extend the foundational ideas of regional innovation system thinking – namely, that regional competitiveness in a globalised, knowledge-based economy stems from innovation processes; that, in time, innovation-led development will lead to economic convergence among regions; and that state and regional agencies have an active role in nurturing path creation. A commitment to smart specialisation had become a condition of support from EU cohesion funds (Foray 2015).

In Europe, critics have suggested that the application of S3 is stymied by ‘heroic assumptions’ and compromised by inadequate evaluation of its practical expression. According to Marques and Morgan (2018), the ‘heroic assumptions’, in a European context, are:

- First, regional elites will support the innovation-led change process, when in fact they might be more interested in preserving the status quo
- Second, the regional state has the capacity – that is, is ‘smart enough’ – to manage innovation’s networking, discovery, and exploitation processes
- Third, key ‘quadruple helix’ stakeholders will interact cooperatively and learn iteratively, when in fact they might pull in different directions
- Fourth, institutional innovations – typically multi-scalar coordination arrangements – are able to find an efficacious balance between drawing on local knowledge and leveraging the capacity of central government
- Fifth, the limited capacities of local firms to absorb innovation can be overcome. Limited ‘absorptive capacity’ is an issue in peripheral locations where firm networks are not dense enough to build on innovative opportunities.

Grillitsch et al. (2023) argue that in its original formulation, S3 was driven by a limited view of the entrepreneurial discovery process, and needs to go beyond the realm of entrepreneurs and business alone. Elsewhere, I have argued (Rainnie 2021) that the concept of entrepreneurialism itself is both limited and limiting.

In questioning how smart S3 is practised in the EU, Di Cataldo et al. (2020) conclude that the answer is, not yet smart enough. Most S3 strategies contain too many axes of intervention and a limited coincidence with the strengths and weaknesses of the territories in question. Furthermore, in regions with low government quality, S3 policies mostly imitate what neighbours are doing and have a token compliance with EU requirements. The result is strategies that fail to deliver on their promise of mobilising local economic potential (Di Cataldo et al. 2020: 24).

The question of policy mobilities and the difficulties of applying practices developed in one place unproblematically in another are well documented (Peck and Theodore 2015). This is particularly the case when exporting policy from the Global North to the Global South. The ‘heroic assumptions’ may still be applicable but the state and federal governance structures in Australia, and its metropolitan, regional, and remote patterns of development throw up a different set of issues. A critical examination of the application of S3 in the Gippsland region of Victoria (GS3) argued that there is a fundamental disconnect between the discourse of smart regional economic development and the developmental realities of places in non-metropolitan Australia (see Weller and Rainnie 2021). In the case of Gippsland, the narrative of smart specialisation has overlooked local arrangements that arguably were already smartly integrating local and global knowledge. Gippsland Smart Specialisation Strategy in the Gippsland appeared as imposed and contrived, never resonating with actual existing realities and challenges. Most importantly, it is clear that S3 has offered no effective response to the diverging fortunes of regional areas relative to urban centres.

These criticisms notwithstanding, in a generally supportive approach to S3, Coenen and Morgan (2020) argue that research on the geographies of innovation can be improved by engaging with a ‘more capacious understanding’ of innovation and regional development. The aim is to:

...explore how socio-ecological innovation can be introduced in contemporary discussions and practices of place-based smart specialisation policy (Coenen and Morgan 2020: 1)

The authors suggest that, although ostensibly based on an orthodox approach to the definition of innovation embedded within mainstream Regional Innovation Strategies, S3 can be read as holding within it another model. It is claimed that a socio-ecological model can also be discerned. This is important because, under the demands of globalisation and

climate change, an expanded model of innovation is emerging. This may well be another heroic assumption regarding S3, and this becomes more apparent if we examine the issue of S3 and the UN Sustainable Development Goals (SDGs).

S3 and Sustainable Development Goals (SDGs)

In 2021, the EU published a study (Miedzinski et al. 2021) that aimed to reflect on the S3 framework within the context of a detailed examination of transition studies, notably socio-technical transitions, social-ecological resilience, and challenge-driven innovation policy. The study assessed the strengths and limitations of the current S3 framework and made suggestions as to how it might be revisited and strengthened.

The main message from the review was that the framework and methodology needed to be revisited and extended if S3 was to facilitate innovation and systemic change in line with the SDGs. Firstly, S3 needed to explicitly embrace and embed the SDGs at the heart of its conceptual and methodological framework. Second, a renewed framework needs to extend its innovation framework from a narrow technological focus towards a variety of innovations driving wider economic, environmental, and social transitions. Thirdly, the framework and methodology need to expand its theoretical and conceptual foundations to address complex, interconnected, and uncertain societal challenges. The new framework should encourage all regions to re-engage in the vision-building process, with a new focus on sustainability challenges and localising the SDGs (Miedzinski et al. 2021: 2–3).

The original guide to S3 (Foray and Goenaga 2013) put forward four principles to guide the design and process of S3:

- Choices and critical mass
- Competitive advantage
- Connectivity and clusters
- Collaborative leadership

Miedzinski et al. (2021: 51–52) suggested three more overarching guiding principles to give S3 ‘a stronger sense of direction and transformative ambition’:

Shared direction towards the SDGs – SDGs should become a foundational reference, guiding S3 towards an overarching direction of transition.

Whole system transformation towards sustainability – S3: To focus on structural change to foster wider sociotechnical and socio-ecological transitions, which are needed to tackle sustainability challenges.

Responsibility and reflexivity – S3: To explicitly integrate a moral and ethical compass needed to navigate difficult transition choices that balance capturing value for the region with contributing to tackling global and environmental challenges.

Miedzinski et al. (2021: 52) claim that these extra principles could be usefully aligned with the original dimensions, but that they could have significant implications for the notion of competitive advantage. However, although seeking differentiation from other regions remains key, accepting an SDG framework ‘implies a deeper reflection on the motivation and rules guiding regional and interregional competition’.

Generally, it is suggested that in the new and challenging circumstances we confront, faced with ‘grand societal challenges’ such as ecological crises, policymakers have the opportunity to determine the direction of growth by making strategic investments across

many sectors and nurturing new industrial landscapes, which the private sector can further develop (for a critique see Rainnie 2021).

In these new circumstances, and crucially, the purpose of innovation is no longer to be limited to achieving competitive advantage in the marketplace but rather the rationale for innovation is explicitly in response to social needs and informed by ideological norms and values. Innovation is now mindful of the politics, conflict, and contestations that the process can imply (see Coenen and Morgan 2020). Coenen and Morgan examine the FE as an expression of place-based social innovation. The standard approach to place-based regional development is seen to be promoting the attraction of inward investment in competition with similar regions. In spatial terms, this can result in a race to the bottom. In contrast to the zero-sum game, FE is a positive-sum game as all cities and regions have a significant stock of employment in mainstream foundational sectors:

The FE is one example of a more capacious conception of innovation and its fortunes depend heavily on a combination of social innovation in civil society and smart experimentalism in the public sector, particularly from state sponsorship at all levels of the multi-level polity. Although this vision might seem remote from the conventional models of innovation, we would argue that it is already present in the smart specialization policy thinking and practice . . . because the foundational economy furnishes the infrastructure of everyday life . . . it signals what people and places have in common and not what casts them as rivals (Coenen and Morgan 2020).

The critique of S3 is slowly advancing. Miedzinski et al. (2021) push in the direction of incorporating the SDGs, which in themselves are limited in their scope and ambition. Coenen and Morgan (2020) point to FE as a possible next step on the journey. I now look at the strengths and limitations of the idea of the FE and the related DP approach.

Foundational economy

Foundation Economy is based on interlinked ideas concerning social consumption, public policy aims, and care-ful (sic) practise (Bentham et al. 2013, Foundational Economy Collective 2018). Firstly, the well-being of citizens depends less on individual consumption and more on their social consumption of essential goods and services in the FE. Secondly, the role of public policy should be to secure the supply of basic goods and services in a socially responsible way. Socially responsible implies decent wages and conditions for the large number of workers employed in providing foundational goods and services, and, further, that foundational provision should not aggravate the climate emergency. Thirdly, FE breaks with the top-down, technocratic politics of ‘vote for us and we will make the economy work for you’.

Mainstream economic policy, as argued (Calafati et al. 2019), is inherently liberal individualistic, the object is not well-being but economic welfare, primarily dependent on individual income. MacKinnon et al. (2022) point to five limitations with the dominant theoretical frameworks. First, a narrow understanding of the economy as growth measured by gross domestic product (GDP). Second, a fixation with tradeable and competitive sectors of the economy. Third, an over-focus on economically dynamic cities and regions. Fourth, a city centrism that views city centres as principal motors of economic growth. Fifth, the marginalisation of lagging and declining regions leads to an underestimation of their economic potential.

Heslop et al. (2019: 6) argue that ‘what is most problematic about the new industrial policy debate is that it leaves unanswered questions about the fate of the vast majority of people and places that do not figure in the world of mission-oriented innovation policy’. FE thinking challenges mainstream notions of GDP (or regional gross value added). Instead, FE

promotes a zonal approach. This is based on material infrastructure – pipes cables and distribution systems for water, electricity, retail, banking etc. and providential services – education, health, dignified eldercare, and income maintenance. The economy is then thought of as a series of mutable zones comprising:

- The tradeable, competitive economy;
- The overlooked economy – including mundane, occasionally purchased cultural necessities like sofas, holidays, and haircuts;
- The FE – material infrastructure and providential services;
- The core economy of gift and goodwill in family and community.

Foundational thinking puts material context and the collectively determined at centre stage. The primary concern of economic policy in every region and national economy should always be with the adequacy, affordability, and continuous supply of foundational services such as housing, health care, and utility supply as these are the prerequisites for the well-being of every citizen in every household. Foundational liveability is a matter of ensuring the supply of universal basic services for most citizens most of the time (Froud et al. 2018). Heslop et al. (2019: 7) suggest that we can identify a range of movements aimed at finding alternatives to extractive economic models, similar to FE, including local wealth building, re-municipalisation, remutualisation, and sharing economies that provide local services, industries, and community and household resources. The list would also include Universal Basic Services, social guarantee, everyday economy, and so on.

In the Australian context, Spiller (2020) draws a distinction, echoing the FE, between the household services economy, the care and learning economy, and the exports economy, and promotes ‘community wealth building’ reform. Spiller (2020) points out that the household services economy deserves a discrete and substantial focus in the strategy process, and, further, that the caring and learning economy is the biggest employer in most local government areas and regions. For Guinan and O’Neill (2019: 384), ‘community wealth building’ is:

... a local economic development strategy focused on building collaborative, inclusive, sustainable, and democratically controlled local economies . . . community wealth building supports democratic collective ownership of the economy through a range of models. These include worker cooperatives, community land trusts, community development financial institutions, so-called ‘anchor’ procurement strategies, municipal and local enterprise, and – as it is hoped will become increasingly the case – public and community banking. Community wealth-building is economic system change, but starting at the local level.

Mehmood et al. (2020: 455) promote the idea of social innovation to drive sustainable place-shaping practices. Their framework brings together three different ‘lenses’:

... first, transformative learning as an approach to experiential pedagogy, with a focus on education and learning based in local communities and the surrounding places; second, experiencing place through sense-making to help people relate closely to their values and meaning of place; third, regenerative action to reverse and recuperate from the negative impact of humans on the environment and promote place stewardship.

It is now timely, it is argued, to move beyond generic and aggregated concepts around sustainability, resilience, or adaptation. Deeper and more practise-based studies are

needed based on the three lenses outlined. This would allow for more spatially socio-cultural nuanced and deeper investigations of what really brings about social innovation. Furthermore, learning, experiencing, and regenerating emerge out of the physical and social understandings and reactions to places in which people live, work, and visit. We will return to the important question of agency shortly. However, it is important to look more closely at the relationship between FE and the state, as, either explicitly or implicitly, it could be taken to promote a form of Keynesianism that is problematic.

FE and the state

It is acknowledged that the supply side of the FE has been undermined by privatisation and outsourcing, and more generally, financialised firms are not grounded in and tied to a region by ownership, skills, or supply chain. Therefore, to operationalise this approach, in order to avoid inept, top-down approaches, it will be necessary to know more about how places work and what matters to people (Calafati et al. 2019: 18). However, FE relies on a benevolent, well-endowed government in terms of resources and capabilities to orchestrate and coordinate collective action.

Coenen and Morgan (2020: 7) go further and argue that FE is challenged on three counts:

1. Treasuries are averse to raising income tax to provide revenue support for public services such as education, health, and social care;
2. Presupposes that governments are prepared to engage in radical reregulation to raise the social 'ask' of the private firms and public agencies that deliver foundational services;
3. Predicated on active citizenship in as much as citizens are deemed to be willing and able to become co-producers of the essential services that they collectively consume.

It should also be noted that New Public management-influenced approaches to local and regional development have devolved increasing responsibility down to localities whilst retaining control, particularly over purse strings at a national level (Rainnie 2021). In reviewing the Welsh government's initial experiment with the FE, Lang and Marsden (2021) suggest that the government was trying to ride two horses; espousing FE as an experimental element of the Welsh economic landscape, whilst continuing to adopt standard measures of growth in its broader economic policy approach. Instead, Lang and Marsden (2021: 11) argue that any new Welsh spatial plan should start with spatial equality and should challenge existing restricted notions of the agglomerative economy in post-carbonism and post-industrialised transitions. Although community wealth anchoring might be important, it can only be part of a wider sustainable place-making agenda.

MacKinnon et al. (2022) point out that, to date, scarcely any work has been done to define and assess the social infrastructure requirements of economically lagging and declining places that meet the needs of their communities. Heslop et al. (2019) identify three similar lacuna – gender, ecology, and active citizenship. FE is a highly gendered construction, with women disproportionately employed in its low-paid sectors. The implications of gendered work need to be considered as a cause for concern and as an opportunity to address gender-based inequalities. Governance of the FE represents a major challenge, with an important geographical twist. How can weaker economies that lack fiscal, governmental, and civic capacity reorient their activity towards FE? The danger is that the FE simply becomes a gloss over an old argument for vulnerable regions to base economic development on sectors (service and beyond) that have been the target of outsourcing and privatisation and rely on gendered, low-paid insecure labour often

provided by labour-hire firms and financialised not-for-profits. Coenen and Morgan (2020) argue that part of the answer lies in the challenge of experimentalism in the public sector, a sector that looms large in lagging regions and other places that were deemed not to matter. Drawing on Barca (2009) and Sabel and Zeitlin (2012), the approach is based on three principles:

- A clear identification of objectives and standards measured by validated indicators;
- A permanent mobilisation of all interested parties;
- An experimental approach through which collective local actors are given an opportunity to experiment with solutions.

Rather than emphasising the entrepreneurial discovery process, it suggests that prioritisation for development and innovation is based on principles of empowered deliberative democracy.

Morgan (2021) points to the idea of experimental governance (EG), wherein jurisdictional authority abandons the pretence of command and control in favour of a form of multi-level organisation in which framework goals are routinely corrected in the light of the ground-level experience of implementing them. EG is then neither top-down, nor bottom-up. It is a democracy in which legislation is in continuing and close touch with lived experience. It is lived experience of locality upon which DP analysis claims to focus.

Deep place

MacKinnon et al. (2022) conclude that much further research is necessary to inform, evidence, and elaborate the FE agenda:

1. Fuller understanding of the economics of belonging, drawing out the implications of collective, and place-based attachments for the ‘development’ of left-behind places;
2. An understanding of the livelihood strategies and practices of households in the ‘FE’;
3. Specify the currently missing geographies of the FE and the relationships between universality and particularity;
4. Explore connections and alignments between the foundational, tradeable, and overlooked economies.

In a related publication, Tomaney et al. (2021) investigate the former Durham (UK) mining community of Sacriston, seeking a deeper understanding of place. Change, it is argued, has been the order of the day in Sacriston for generations. However, broader changes in the labour market, privatised consumption, shifting cultural attitudes, and the impacts of austerity had shaped social and economic conditions in the village. Older members of the community lamented the loss of a thriving and cohesive village, whilst younger members of the community valued strong community ties and saw the potential to rekindle the more appealing aspects of the past. Arguing against the notion of ‘left behind places’ on the basis that this has the tendency to stigmatise their residents as passive, immobile, and impoverished, it is suggested that:

Loss and decline are an important part of the story, but so too is resilience, a strong sense of community and identity, new opportunities for some and the arrival of new people into the village (Tomaney et al. 2021:2).

Therefore, it is not impossible to develop strong rooted local economies where income circulates locally and wealth, skills, and experience are all retained and built up in the area, in other words, a strong FE based on DP analysis (Tomaney et al. 2021: 9). How far it is possible or indeed desirable to insulate a local economy from wider economic forces, social and political organisations, and structures is a question of central concern. As Heslop et al. (2019: 8) point out, ‘the challenge here is to consider how concerted local action fits into broader flows and networks of global capital’. The suggested is the role of DP analysis (Adamson and Lang 2014).

The approach was developed in Wales to examine two pressing social and economic policy problems. The first was high levels of unemployment in post-industrial communities and the second was moving towards a more sustainable model of the economy, recognising the low carbon imperative and the potential crisis of energy supply and cost. The argument is that these are two elements of the same problem, stemming from the dominant paradigm, neo-liberalism, that is exploitative of both people and the environment. The approach is not anti-capitalist, but rather brings together some of the central Keynesian principles of state economic management, with a heightened concern for poverty eradication and environmental protection. The aim is to identify patterns of economic activity that underpin the welfare and well-being of all members of society, whilst reducing our environmental impact. The approach attempts to locate the issues at a lower (local) spatial level than is generally the case.

Deep Place is based on a model that views social exclusion as the cultural, emotional, and physical results of economic marginalisation and social exclusion from society as a whole. These systemic mechanisms of exclusion prevent the excluded population from engaging with society as fully productive and active citizens. The approach is based on a number of theoretical foundations including *transition theory*, which sees a strong connection between global environmental conditions and local actions. This is based on the necessity of an increasing *reliance* on economic relocalisation as the era of cheap transport fuels ends. The move towards more localised, energy efficient, and productive living arrangements is not a choice, it is an inevitable direction for humanity. Rather than waiting for ecological crisis, DP advocates planning for change and using the implementation of change as a source of employment in innovative responses to climate change. The concept of resilience is mobilised to signify the capability of a community to hold together and maintain functionality despite external shocks and pressures.

This is allied to a notion of Total Place, which is based on public services reform. Rather than basing public services on mainstream and limited notions of Best Value, Total Place is about creating higher public service value in services that better meet the needs of service recipients whilst also improving performance and accountability of service providers. The approach underlines the question – what is the purpose of public service? The approach moves from command and control to an examination of what customers need and whether that is being delivered. This requires close working relationships with all service deliverers and recipients.

However, not everything can be delivered at the local level. Modelling the approach to the UK’s post-Second World War Settlement, there is a call for a New Settlement. This will require a reconfiguration of public services and a major transformation in the roles of the central and local state. The transition will also require citizens and the state to act in unison. The state will also be required to develop green infrastructure and incentivize green consumption patterns, and the citizens will need to embrace a less acquisitive and consumerist lifestyle (Adamson and Lang 2014).

Overall, the approach is based on the reworking of the ‘radical, liberal collectivist spirit of Beveridge and Keynes’, embodied in the FE.

The method is based on reconnecting economically and socially marginalised communities and the individuals who live there with employment opportunities (see

Adamson 2018). This is achieved by examining sectors in the local economy where growth is possible and where lower-level skill sets are required to allow recruitment of unskilled people with low levels of confidence and experience. The approach fosters social enterprises, as well as start-ups, supports existing small businesses, and helps small and medium sized businesses (SMEs) to grow and diversify. Strategies for change also involve cultural change that challenges community peer cultures and develops new aspirational horizons for young people in the community. Deep Place (DP) identifies four critical social domains and promotes change in all four:

- Atmosphere – the feel of a place.
- Sense of identity, fractured or tight-knit.
- Landscape – physical characteristics and how they influence quality of life. Built environment and housing quality etc.
- Horizon – sense of social horizon experienced by residents. Cultural and psychological horizons. Is there social provision that builds bridges to the outside worlds of employment, education, and healthy living.

Implementation of the DP approach requires an adaptive and flexible form of ‘situational leadership’, which requires moves between different models of leadership as circumstances dictate, rather than adherence to a strictly defined leadership approach. It has to be able to promote debate, diversity of responses, and not be afraid of experimentation and failure (Adamson and Lang 2014). This goes well beyond the hugely underdeveloped notions of leadership exhibited in most evolutionary economic geography-influenced place-based analysis (Rainnie 2021). It also seeks to draw on literature on community development that place-based analysis has largely ignored (see for example Bjørn Peterson et al. 2020).

Adamson and Lang (2015) have sought to extend the DP approach into what they describe as the distributed economy. This builds on an understanding that the FE approach attempts to seal local circulation within a geographically defined local economy to maximise the multiplier effect of local expenditure. In this model, the local economy is seen as relatively autonomous but also ultimately dependent on and exploited by the mainstream or external economy. In the distributed model, activity takes place throughout the region. There will be mainstream-orientated concentrations in key localities such as the Central Business District (CBD) but there will also be lower-scale levels of activity distributed spatially throughout the region. These activities are intricately linked and meshed together in a grid-like structure. By harnessing state support for the FE, especially those activities that are conventionally seen as ‘withdrawals’ from the economy, there is potential for increasing growth and employment in the distributed economy. In their DP study, in Tredgar, Wales, (Adamson and Lang 2014) identified what they described as the core sectors of food supply, energy generation and conservation, social care, and e-commerce/e-working as areas with potential for growth in the FE.

However, the problem appears to remain that, as Martynovich et al. (2020) pointed out in their critique of FE, its overall contribution to regional resilience, even when combined with DP analysis, appears to be limited. The results of their Swedish analysis do not suggest that FE is driving general economic growth. Indeed, the danger is that in ‘regions left behind’, the role of FE is to allow the area to shrink with dignity (Martynovich et al. 2020: 29). Hansen (2021) concludes that the FE approach is promising when addressing challenges associated with social polarisation. However, to date, few suggestions have been made as to how the foundational approach would address challenges associated with environmental sustainability. Fundamentally, by not challenging the basic tenets of a capitalist economy, FE is prone to the contradictions identified in the approach of the

Welsh Government. This becomes clear when we examine confronting the challenges of climate change.

FE and environmental policy

Heslop et al. (2019: 10) suggest that there are three lacunae in FE thinking – gender, active citizenship, and ecology. Active citizenship has been addressed to a degree by the EG approach. Sayer (2019) argues that beyond acknowledging the need to address issues of environmental sustainability, FE supporters do not say much about how FE policies might be combined with green policies to rapidly decarbonise the production and consumption of goods and services. In 2022, Russell et al. (2022) were still acknowledging that FE thinking was yet to work out quite how it addressed our multifaceted ecological crises.

Climate change is one of the major challenges to be confronted. On one reading, this could be taken as moving beyond the entrepreneurial state towards what has been recently described as the ‘environmental state’. Hausknot and Hammond (2020: 2) suggest that this can be explained as extending the functional logic of the welfare state from the mitigation of social externalities to the mitigation of environmental externalities. However, the environmental state was never intended to overcome the basic structures of industrial capitalism; instead, it is tied to the paradigm of ecological modernisation, wherein the strategy is to increase the efficiency and effectiveness of environmental management through technological and administrative innovation.

For Koch (2020: 129), the overarching ‘growth imperative’ constitutes a problem, in that the priority of providing economic growth in policymaking can be read as a ‘glass ceiling’ of the environmental state and a structural limit to its capacity to engage in societal and ecological transformation. Koch draws a distinction between an economy orientated towards monetary growth and a post-growth steady-state economy. In the former, state action is largely reduced to the provision of green growth. In the latter, state economic, social, and environmental policies are oriented at minimising matter and energy throughput and maximising sustainable welfare, specifically the provision of sufficient need satisfiers for all people now and in the future. Bailey (2020) points to what is described as the ‘trilemma of the green state’: how to orchestrate degrowth, and maintain the fiscal viability of the state, while also expanding the environmental functions of the state. For Bailey, achieving all three is impossible so long as the state remains dependent on private capital accumulation.

Goods et al. (2015), in developing a conceptual framework to analyse green jobs in the Australian auto industry, examined the theory of ecological modernisation (EM). The authors argued that EM represents a pragmatic environmental policy response whose basic perspective is that environmental and economic aims are compatible. Ecological sustainability, it is suggested, can be achieved within the current political-economic system via technological innovation and environmental management. However, within this admittedly limited framework, there is a divergence between ‘weak’ approaches, which focus primarily on technological solutions, and ‘strong’ approaches, which look to a transformation of existing social, political, and economic institutions, alongside technological innovation. Goods et al. (2015) do acknowledge that proponents of the ‘strong’ approach accept that it faces severe opposition from industries such as the resources sector and associated political and lobby groups. This, as argued, requires a strong state to intervene to manage a ‘just transition’ towards ecologically sustainable strategies.

Sayer (2019) draws on Gough (2017) to suggest that in trying to make FE environmentally sustainable, and in rejecting GDP growth as a goal, it follows that the idea of ‘green growth’ is an absurdity. However, Ian Gough (2017) suggests that there may be a staged approach that could overcome these problems. Gough proposes a three-stage

transitional strategy for sustainable well-being: green growth, recomposed consumption, and post growth (C1, C2, and C3).

CI – coordinated capitalism – the discourse of ecological modernisation, similar to green growth, provides an economic rationality for moving towards environmental sustainability – facilitating concertation or integration across environmental, economic, and social issues. Towards the less radical end of EM.

C2 – reflexive capitalism – shift consumption patterns in a sustainable direction, advocating cuts in high carbon consumption, though without challenging economic growth – towards the radical end of EM.

This is about as far as the environmental state approach can take us. However, neither C1 nor C2 alone or combined will reduce emissions far enough or fast enough to avert catastrophic climate change, so:

C3 – post growth – incompatible with any form of capitalism. Move away from economic integration by free trade, capital mobility, and export-led growth towards a stationary state economy.

John Bellamy Foster (2022, 78–79) also proposes a ‘transitional’ strategy offering an eco-democratic phase to build a broad alliance to demand a world of sustainable human development. The eco-democratic phase would carry out radical reforms, but nonetheless conceivable meaningful forms of struggle in the present context:

1. Emergency plan for reduction of carbon emissions in rich economies by 8–10% per year
2. Moratorium on economic growth coupled with radical redistribution of income and wealth, conservation of resources, and reduction in economic waste
3. Diverting military spending to defence of the planet
4. Creation of alternative energy infrastructure
5. Closing down coal-fired plants and blocking unconventional fossil fuels, e.g., tar sands oil
6. Carbon fee and dividend system
7. Initiatives to aid emerging economies to move towards sustainable development
8. Implementation of principles of environmental justice
9. Adoption of principles proposed in the Peoples' Agreement on Climate Change – Cochabamba, Bolivia 2010.

This would provide conditions for the next eco-socialist phase. It does, however, take us some distance from the application of the FE in any particular place, Total or otherwise. The approaches are not necessarily incompatible but would argue for a Total Place/FE approach being a part of a much more expansive strategy, as Gough's (2017) approach suggests.

Conclusion

Russell et al. (2022) point out that FE has recently been gaining political traction in Europe beyond the academy, whilst acknowledging that it has a distinctly ‘Western Gaze’. However, they argue that the COVID-19 pandemic has driven FE into a distinctively second phase of development, by bringing the necessity of the foundational agenda into sharp

relief. The FE perspective, as argued now, seeks to bring into focus radical social innovations developing ecologically and socially resilient alternatives. FE is now envisaged as functioning much like a modern Beveridge Plan, advancing practicable alternative economics. However, the authors do acknowledge that it is an open question as to where this sits on the broader continuum of radical and transformative change. Furthermore, beyond its Western centrism, FE still displays a relative blindness to unwaged work and needs to acknowledge the knowledge economy, including questions of the production and ownership of data. The problem runs deeper, as it is questionable whether FE is anti-growth, never mind anti-capitalist. It is hard to disagree with MacKinnon et al. (2023) who, in reviewing post-2008 spatial policy in Europe and North America, conclude that despite rejecting elements of globalism and neoliberalism, they have not as yet dislodged the underlying emphasis on growth and competitiveness.

Ray Hudson (2021) has pointed out that capitalist economies are structured around two fundamental contradictions. The first is the social relations of capital, and the second is the 'metabolic rift' between capital accumulation and nature. Arguably, the notions of FE and DP analysis are a contribution to taking orthodox economic development analysis and S3 in the direction of confronting the first contradiction. The question is to what extent they can affect the second. Is it the case, as Hudson suggests, that the impossible may be necessary, but the necessary may be impossible (Hudson 2021: 137).

It would appear that the Coenen and Morgan (2020) approach to extending S3 in the direction of FE might be considered a heroic assumption in two senses. First, the argument that there is hidden within the orthodox approach to innovation in S3 a more radical version that can be stretched to include FE, is debatable. Second, the assumption that, even if FE can be integrated into S3, FE can integrate an effective approach to the challenge of climate change without taking on board radical, if not revolutionary strategies, is equally debatable. Russell et al. (2022) argue that FE can be distinguished from social economy and other diverse economic discourses by a commitment to wider transformation in post-neoliberal economic development. Through exploiting unexpected opportunities in the structures of states at the sub-national level, it is possible to begin developing new approaches to the provision of goods and services.

However, at present, the question of climate change and how to confront it remains at best underdeveloped within the FE framework, as Russell et al. (2022) acknowledge. The implication is that, without a strong state underpinning the approach, FE would simply condemn troubled regions, particularly in Australia, to a future based on low-paid, insecure, highly gendered, and racialised service sector employment (shrinking with dignity).

It is important not to throw the baby out with the bath water. As Hansen (2020) argues, even if foundational thinking does not offer convincing answers to all central regional development challenges, it still holds advantages compared to entrepreneurial, R&D, and high-tech-focused approaches to regional development. The focus on a wider notion of local economy and an incorporation of the important emotional commitment to locality into strategic development are welcome. Developing their analysis of Sacriston in County Durham, England, Tomaney et al. (2023) argue that remaking social infrastructure in left-behind places is realistic but requires 'radical hope'. So, FE is welcome, necessary but not sufficient. In confronting issues of climate change and regional development, a more expansive and extensive strategy incorporating different scalar levels of coordinated action will be necessary. To paraphrase Ray Hudson, necessary but not necessarily impossible.

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