Rural Service Hubs and socially innovative rural-urban linkages: A conceptual framework for nexogenous development

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Abstract

Co-locating services has become a common solution to the many longstanding challenges of service access and provision in rural areas. Rural service hubs - which offer two or more services at the same outlet - take many forms, typically responding to triggers for social innovation. Despite their growing ubiquity, however, rural service hubs have been little studied in comparative perspective. This article shifts the lens on service hubs from place-based solutions towards a broader, multi-scalar and multi-level perspective on rural connectivity. We propose a five dimension conceptual framework in contribution to the emerging theorisation of *nexogenous* rural development (Bock 2016): a model for resourceful reconnection beyond place and across rural-urban space. Drawing on examples from Austria, Finland and Wales, we illustrate how diverse service hub models mobilise social innovation, networks, scale and proximity to support service access and provision.

Keywords
Rural development, rural-urban connectivity, services of general interest, service hubs, social innovation.

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Introduction

Service provision and access are emblematic rural challenges (Halseth et al. 2018, Skerratt 2010). Small, dispersed populations and few economies of scale increase the costs of rural services and complicate the logistics. In much of the UK and Europe, these inherent factors have combined with long-term economic and demographic change to lead rural services into decline. Shifting state priorities, changing consumer preferences and efficiency-driven centralisation have further withered localised provision. In response, multi-purpose service 'hubs' have become an increasingly common adaptation.

Service hubs are most simply defined as offering two or more services from the same (physical) outlet. In practice, service hubs vary widely in form and function, and range from locally improvised offers to initiatives enabled by national policy and multi-level governance. Perhaps due to this diversity - yet despite growing ubiquity - rural service hubs have been little studied *as hubs* (e.g. Moseley et al. 2004): that is, as a genre of interventions employing a similar mechanism. In academic and grey literature alike, rural service hubs tend to appear as individual case studies, framed as place-based solutions to localised service decline. In this article, however, we take up the observation that rural service hubs are rarely wholly endogenous: no hub "is an island" (Moseley et al. 2004: 384). In order to provide multiple services, hubs must mobilise resources, actors and networks that are multi-scalar and incorporate rural-urban connectivity. We centre that connectivity in our analysis here, investigating hub formation processes through the lens that Bettina Bock (2016) has termed 'nexogenous' rural development. Bock (2016) recognises that the structural and scalar processes that marginalise rural places - including through service decline - cannot be adequately addressed from within those places. While this echoes a wider paradigmatic shift towards uniting top-down and bottom-up modes of development (e.g. Bosworth et al. 2015, Gkartzios and Lowe 2019), Bock's (2016) explicit call for *reconnection across space* remains under-examined. By taking up the topic, we offer a conceptual framework for rural service hubs that integrates contemporary insights from rural development theory, and enables comparison between hubs and reflection on implementation.

The article proceeds as follows. We begin with an overview of rural services literature and the theoretical approaches that inform our framework. In the following section, we outline the framework across five key conceptual domains: social innovation, networks, scale, proximities, and service access and provision. We then apply these domains to three case

studies, from Wales, Finland and Austria respectively. These cases are presented as illustrative rather than exemplary, and in the following discussion section we reflect on our choice of domains and their explanatory value. Finally, we offer some concluding remarks on future directions for research.

Situating rural services

'Services' is an elastic category, variously defined. In the European Pillar of Social Rights (European Commission 2017), 'essential services' describe those services which all people need for full inclusion in society, namely: water, sanitation, energy, transport, financial services and digital communications. Additional services, including healthcare and postal facilities, are deemed 'services of general interest'. The European Commission (2004: s.3.3) maintains that: "The access of all citizens and enterprises to affordable, high-quality services of general interest … is essential for the promotion of social and territorial cohesion in the European Union." However, the EU has no formalised agreement on what specifically constitutes a service of general interest, nor on the (public or private) mechanisms through which such services should be provided (Fassmann et al. 2015).

The OECD's (2020) *Rural Wellbeing Report* further emphasises the role of quality services, notably ICT, in ensuring rural places are attractive and inclusive. This echoes rural studies literature, where 'services' broadly include local shops and supermarkets, village halls, community spaces and even pubs (e.g. Christiaanse and Haartsen 2017, Markham & Bosworth 2016). Though such services may not be essential *per se*, they often have high visibility within the local economy, and play important social and symbolic roles (e.g. Christiaanse and Haartsen 2017, 2020; Skerratt and Hall 2011). Indeed, recent research suggests that privately-run village shops and cafes can be more significant for local place-making than publicly-funded services such as schools (Gieling et al. 2019, Hillyard 2020).

Critically, low demand, long distances and few economies of scale increase the costs of rural service provision (OECD 2010), with implications for both public budgets and commercial viability. While post-1945 public spending often proceeded in the conviction that services should not be geographically differentiated, a model of blanket provision via single-purpose outlets has now given way to fiscal efficiencies (Halseth et al. 2018). Privatisation since the 1980s (Furuseth 1998, Halseth et al. 2018) and state austerity more recently (Bock 2016) have seen services shift up the urban hierarchy to concentrate in regional and demographic centres (Noguera Tur and Ferrandis Martínez 2014). These processes encourage

a ‘vicious cycle’ of further decline, as fewer services contribute to depopulation and lowered demand, and thence to even fewer services (OECD 2006, Bock 2016). Unsurprisingly, the OECD (2010: 16) identifies “systematic differences in services, availability and quality between rural and urban territories”.

Service provision and access should be distinguished, however. Provision concerns *getting services to people*, and involves finance, governance, logistics and operational delivery; access concerns *getting people to services*, including physical accessibility, availability, affordability and specific user needs. These are interrelated: for example, providers’ efforts to cut costs through centralisation create knock-on effects for accessibility, with longer distances increasing users’ time and monetary costs, and fostering ‘distance decay’, whereby people are less likely to use a service the further they must travel (Stulz et al. 2018). Yet, crucially, how service users (subjectively) perceive accessibility can differ from how planners and providers (objectively) measure provision catchments (Lättmann et al. 2016). Equally, rural populations and geographies are diverse, and accessibility is neither perceived nor experienced uniformly. Accessibility barriers like low capital and limited mobility mean that a lack of local services has disproportionate effects on individuals and groups who cannot access alternatives (e.g. Hamilton 2016, OECD 2010). Thus, ‘poverty of access’ (Gray et al. 2006) entrenches deprivation and deepens social exclusion. In sparsely populated UK areas, for example, declining service availability correlates with residents’ increasing feelings of isolation (Skerratt 2018). By contrast, research in the comparatively densely populated rural Netherlands shows the loss of services to be experienced as reduced choice, and more disruptive for place than people (Christiaanse and Haartsen 2017). As this suggests, facilitative factors like car ownership and connective infrastructures can mean that few local services cause little inconvenience for relatively affluent, mobile residents within commuting zones (Gieling et al. 2019).

Despite these complexities, consensus remains that an inadequate range of services in rural areas “decreases liveability, hinders economic competitiveness, negatively impacts community development capacity, and diminishes the well-being of rural residents” (Halseth et al. 2018: 10). Clearly, however, older models for service provision are neither feasible nor fit for contemporary contexts (Halseth et al. 2018, OECD 2020) and using decline as a lever on resources risks reinforcing an image of rural dependency that overstates the significance of some services whilst overlooking opportunities for innovation.

Social innovation is a potential route forward here. Defined as the "reconfiguring of social practices, in response to societal challenges, which seeks to enhance outcomes on societal well-being and necessarily includes the engagement of civil society actors" (Polman et al. 2017: 4), social innovation has gained increasing prominence as a potential remedy for a range of rural challenges (e.g. Neumeier 2017, Noack and Federwisch 2019, Polman et al. 2017), including service access and provision (Neumeier 2012, Bock 2016). But critics argue that appeals to 'society' may simply mask the abdication of state responsibility (Bock 2016, Ravazzoli and Valero López 2020). In her commentary on the rural turn to social innovation, Bock (2016) emphasises the need for a just, realistic balance between top-down resources and bottom-up forces. This recognition reflects more broadly upon paradigmatic approaches to rural development, to which we now turn.

Reconnecting rural development

In the post-1945 drive to rural modernisation, impetus for rural development lay in an *exogenous* model, which equated 'rural' with 'agricultural' and ascribed rural dependency upon urban growth and national economic trajectories (Gkartzios and Lowe 2019). Because exogenous development was dictated at a distance far from rural communities themselves, dissatisfaction with top-down drives had, by the 1990s, created a swing to bottom-up action. Exemplified by LEADER, the *endogenous* model emphasised development from within, through local action, place-based initiatives and public participation (Gkartzios and Lowe 2019). However, endogenous development is inherently limited by local capacities, and can disguise local power differentials and elite capture (Bock 2016, Gkartzios and Lowe 2019, Shortall 2008).

Contemporary rural studies scholars advocate a *neo-endogenous* development paradigm, which maintains place-based, participatory roots and incorporates multi-level networks and multi-scalar linkages (Gkartzios and Scott 2014, Bosworth et al. 2015). The paradigm acknowledges that rural development cannot be achieved by local action alone, and reflects shifts in governance that conceptualise the state as an enabler, offering 'power to' rather than retaining 'power over' (Shucksmith 2010: 4, Ray 2006). Alive to the complex realities of rural places in an interconnected world, neo-endogenous development is hence a bi-modal hybrid "characterised by dynamic interactions between local areas and their wider environments" (Bosworth et al. 2015: 429), including regional, national and EU-level institutions (Gkartzios and Scott 2014). Yet Bock (2016) questions whether the paradigm

sufficiently addresses the long-term structural processes that marginalise rural people and places. This is difficult for any initiative to achieve (let alone rural services), but Bock's intervention calls useful attention to the need to more closely interrogate, conceptualise and foster forms of connectivity across space, through social innovation that "transcends the boundaries of specific places and even the rural space" (2016: 569).

Bock (2016) proposes a *nexogenous* approach, combining the Latin stems *nexus* (bond) and *nectere* (binding). Glossed as reconnection across space, nexogenous development centres rural-urban connections, the mutual interdependencies of fluid and functional networks, and mechanisms for bridging spatial distance. Intriguingly, she includes a rural service hub amongst her examples and we take up this provocation. Nevertheless, Bock's (2016) theoretical approach is more provocative than prescriptive. In order to apply nexogenous development to service hubs, we combine reconnective principles with existing insights to build a conceptual framework.

A conceptual framework for nexogenous rural services

In the following, we outline a conceptual framework for nexogenous rural services that draws from theory and practice across five inter-linked domains: social innovation, governance, scale, proximity, and service access and provision.

Social innovation is clearly relevant for rural services, as we discussed above. Existing literature details how social innovations emerge and proceed in specific initiatives (e.g. Neumeier 2012, 2017). Taking up a wider comparative lens, we draw upon Neumeier's (2017) pairing of social objectives and social processes, asking to what extent hubs integrate each. By social objectives, we mean that development aims to fulfil well-being and community needs, which may be more or less explicit. Social processes refer to the means through which hubs pursue their objectives, and the extent to which these are open and participatory.

We view nexogenous development as extending, rather than replacing or rivalling, the neo-endogenous approach. We thus incorporate two key neo-endogenous elements: the role of actors in networked *governance*, and the *scale* of development. For governance, we differentiate between horizontal and vertical networks; the former referring to area-based actors, the latter to actors at regional, national and European levels. As Shucksmith (2010) observes, effective development integrates horizontal and vertical actors. Scale is implied here, yet the capacity and resource issues we discussed above necessitate looking beyond which

actors are enrolled, to what they do. Following Bock (2016) and others (Gkartzios and Scott 2014, Bosworth et al. 2015, Ray 2006), we consider how hubs mobilise scale through endogenous capacities and exogenous resources.

Our fourth domain, *proximity*, reflects the spatial lens that characterises nexogenous connectivity. Jones and Woods' (2013) work on 'new localities' helps operationalise Bock's (2016) call for reconnection across space by delimiting the three meanings 'space' can have. Absolute space is defined and distinct, like local authority or municipal boundaries. Relative space is porous, contingent, and often informal, like a functional area or service catchment. Both view space in terms of geographical proximities; by contrast, relational space incorporates forms of connectivity such that places far apart on a map may be 'close' by other means. For example, an agricultural area may have closer relational connections to a major export market than to a nearby regional city. These spatial forms are neither separate nor successive, and Jones and Woods (2013) argue for understanding locality through all three. We adapt their approach by considering how service hubs are embedded in spatial proximities, and in relational proximities.

Because spatial proximities collapse absolute and relative views of space, we reincorporate these as a heuristic in our final domain, *services*. Here, we reprise the distinction between access and provision. Although it simplifies the latter to view provision through an absolute lens, concerns about rural service decline often reference provision in specific villages or municipalities. Access, as we outlined above, is clearly a relative question. In the services domain, we therefore consider how hubs deliver absolute provision, and enable relative access.

The questions we ask for each domain are summarised in Table 1. There are obviously overlaps: social processes, for example, typically involve horizontal actors and mobilise endogenous capacities, while vertical actors contribute exogenous resources through often relational proximities. But as both examples suggest, teasing out the subtleties aids a more textured analysis. Indeed, analysis may reveal weaknesses, as hubs enrol multiple horizontal actors yet have limited endogenous capacities, or are embedded in relational proximities without successfully mobilising exogenous resources. To explore these distinctions in practice, we now turn to our empirical examples, beginning with the methodology behind their selection.

Domain	To what extent does the hub:
Social innovation	• address *social objectives*? • integrate *social processes*?
Networks	• enrol *horizontal actors*? • enrol *vertical actors*?
Scale	• mobilise *endogenous capacities*? • mobilise *exogenous resources*?
Proximities	• embed *spatial proximities*? • embed *relational proximities*?
Services	• deliver (absolute) *service provision*? • enable (relative) *service access?*

Table 1: Summary of domains and key questions in the conceptual framework.

Methodology

The Horizon 2020 ROBUST project (Rural-Urban Outlooks: Unlocking Synergies) used Living Lab (ENoLL 2016) and Community of Practice (CoP) methodologies to investigate rural-urban policy and governance models in eleven European regions (Maye et al. 2018). A CoP is a group of people with a common interest, practice or problem, who share knowledge and experiences to build collective learning. An effective CoP is defined by three elements: mutual engagement; joint enterprise towards a common goal, and a shared repertoire of practices, tools and concepts (Wenger, 1998). There were five CoPs in ROBUST, which focussed on thematic learning through cross-case comparison (Pyrko et al. 2017) and transdisciplinary knowledge exchange activities. Seven regions participated in a CoP on public infrastructures and social services, from which we draw our examples.

The combination of collective learning with non-academic partners and place-based experimentation within ROBUST CoPs invited an adaptive methodology (van Assche et al. 2021) based on reflexivity, interaction, and iteration, rather than a rigidly prescribed linear research design. Flexibility became especially pertinent as, like many social scientists, we experienced the disruptions caused by the COVID-19 global pandemic and needed to quickly adjust our research to emerging circumstances (Rahman et al. 2021). In early 2020, as the then-nascent pandemic was characterised by considerable uncertainty, the public infrastructures and

social services CoP pivoted to develop a corpus of place-based 'good practice' examples that enabled a qualitative case study approach (Flyvberg 2006; Yin 2017) to be adapted to scale and circumstance. We defined 'good practice' as innovative responses to rural service challenges, and specific examples were identified in collaboration with local/regional government partners. To enable CoP participants to pursue place-based interests, the practice example selection process was not formalised (although all cases were internally peer reviewed within the CoP) and specific sub-themes were not initially imposed. The theme of service hubs emerged in a 'grounded' manner, through reviewing, compiling and comparing the cases. Of 27 cases, nine specifically presented forms of co-location (Goodwin-Hawkins et al. 2020). For the purposes of this article, we have refined the cluster to three comparable cases: each explicitly identifying as a hub, and similarly providing food and shopping services.Given that public health restrictions were fast-changing and differed widely across Europe, we implemented a shared, semi-structured template that enabled the rapid collation of topical information in parallel (akin to the 'RAP sheets' developed by Vindrola-Padros et al. 2020) but did not specify the precise methods that researchers 'in the field' (or locked down at home) needed to follow. Data was hence collected through a variable combination of desk-based appraisal, documentary analysis and small-scale empirical research, including a small number of exploratory interviews with key stakeholders, by telephone or online. As methods were locally chosen and individually adapted on the fly, one unexpected benefit was that we were also able to test appropriate methods and learn from each other's successes and failures in reflecting on what to employ next time (Lyndon & Edwards 2021). Nevertheless, although the template enabled broad thematic comparability between examples, the differing methods used to gather data for differing examples reduces the robustness of those comparisons. Acknowledging this limitation, we present the selected examples below as preliminary, and return in our conclusion to discuss future steps for progressing research and validating findings.

In the following sections, we introduce each example, drawing upon the case materials we have collected. Working through the five domains of our conceptual framework, we offer a preliminary assessment of the formation processes for each hub, and comment on their respective strengths and weaknesses. As we have noted, our assessments are partial, and intended as a basis for discussion rather than the rigorous results of systematic evaluation.

From hyper-local provision to funded destination: Cletwr community shop, Ceredigion, Wales (UK)

Cletwr community shop and café opened in 2013 in Tre'r Ddôl, a small village (within a wider parish counting a population of c.650) in the predominantly rural Welsh county of Ceredigion (population c.72,000). The county's largest town has a population of c.20,000 and there is no urban centre within commuting distance. The Cletwr project was initiated after the village garage, which included a shop, closed in 2009. Residents needed to travel almost fifteen kilometres for equivalent services and, despite an hourly daytime bus service, there were concerns about ensuring convenient access to everyday necessities for those without a car. Tre'r Ddôl retained a pub, but the post office, school and chapel had all successively closed, withdrawing social and symbolic anchors and creating a sense of withering place that some also feared would reduce property value.

In response, a group of residents mobilised to re-open the garage as a not-for-profit social enterprise. In 2017, the original garage was replaced with a purpose-designed environmentally sustainable building, funded through a combination of awards from the EU co-financed Rural Development Programme for Wales, the Welsh Government, the UK Big Lottery Fund, Ceredigion Council and the UK-wide Trusthouse Charitable Foundation. The 'new' Cletwr co-locates multiple services alongside food retail, including: WiFi internet access, cash withdrawal, parcel drop-off, mobile library visits, an oil-buying syndicate, and meetings with police and elected representatives. Unfortunately, Cletwr's application for tax-free charitable status was unsuccessful, hence the hub's business model utilises volunteers (around fifty engage either regularly or periodically) to reduce operating costs and keep cafe prices affordable. Paid staff include a community coordinator, tasked with developing Cletwr as a social focal point. Importantly in this respect, Cletwr is a bilingual space (42% of Ceredigion's population speak Welsh), and provides Welsh language resources including books and conversational groups.

Assessing Cletwr against our framework shows good overall performance. Cletwr clearly exemplifies *social innovation*, and can be rated highly for addressing social objectives. Securing basic services and providing a symbolic focal point for the community were key to the hub's inception and remain fundamental commitments. These objectives are enshrined in the not-for-profit social enterprise model, and actively furthered by Cletwr's paid community coordinator. As this suggests, Cletwr also highly integrates social processes in operations and

governance. The hub was conceived through residents' self-organisation, and re-development proceeded through close community consultation. Volunteers are central to everyday operation, with older volunteers able to socialise and 'give back', and younger volunteers supported to learn new skills. Legally, Cletwr is operated as a limited company, but the company is open to all local residents to join; currently, there are forty members, and an elected management board.

These participatory aspects reflect Cletwr's success in enrolling *networks*, especially among horizontal actors. Horizontal engagement has broadened from the initiating group, both organically as the hub has gained momentum and identification, and through intentional efforts to keep local people informed, including notice boards and open meetings. Operations have further engaged local actors, such as growers who supply produce to the shop. Vertical networks are present too, including the democratic linkages represented by MP visits, the national companies supplying goods and services, and multi-scalar sources of funding. The former indicates Cletwr's recognition as a community space and connections with administrative and political officials. Nevertheless, neither regional/national authorities nor service suppliers appear to participate in governance beyond providing enabling funds. We would hence rate Cletwr higher on horizontal than vertical network involvement.

The picture differs when considering *scale*. Despite vertical actors standing at a distance, Cletwr has been notably successful at mobilising exogenous resources, with development incorporating local, national and European funds. Without exogenous resourcing, a purpose-built, high-specification facility would have remained beyond the reach of a community-led enterprise. Yet, crucially, this funding success reflects high endogenous capacities - from an early stage, Cletwr had the advantage of local residents with the skills to identify funding and navigate applications. Although we do not know the extent to which these capacities were buoyed by professional incomers, the prominence of the Welsh language (more commonly spoken in rural areas within the wider region) does indicate strong endogenous identity. Cletwr is aware that capacities could be exhausted, especially those of the elected management board, and long-term sustainability will require succession planning, lest access to finance become a future threat.

Spatial *proximities* triggered Cletwr's initial development, which focussed on the provision of services to a single village. To a certain extent these proximities were symbolic: funding applications downplayed Tre'r Ddôl's relative proximity to two nearby towns (pop.

c.2,000 and c.20,000 respectively), each offering a range of shops and services and easily accessible by car. Although project initiation re-framed these relative service catchments to privilege provision at a hyper-local scale, proximities have shifted somewhat in practice. Increasingly, Cletwr itself has become an attractive meeting place for town residents, and relational proximities have emerged through tourists from further afield. Cletwr's location on the Wales Coastal Path has provided an explicit link to tourism, and services have expanded to include visitor information and several premium locality products. Although the trigger for development was ostensibly a sense of local isolation, Cletwr has become a regional destination. There is a potentially difficult balance here in terms of *services*. Cletwr integrates the regional visitor economy into the locally-oriented business model, by subsidising community activities through cafe sales. But despite volunteer labour, limited buying power means that shop prices remain more expensive than supermarket prices in the towns; we might surmise that Cletwr draws custom out of support over need, and that price-sensitive residents will continue to travel for cheaper options.

Reviving a municipal farmers' market for rural-urban connectivity: Allerleierei, Laßnitzhöhe, Styria (Austria)

Allerleierei is an innovative farm shop and cafe in Laßnitzhöhe, a small municipality (pop. 2,817) about 20km east of Graz, Austria's second largest city. Many residents commute to Graz. Laßnitzhöhe is a historic health resort, accommodating rehabilitation patients and welcoming visitors (especially during weekends) for spa and recreational activities. The municipality is administratively part of the Metropolitan Area of Styria, and belongs to the Hügel- und Schöcklland LAG, which is particularly active in 'Slow Food' initiatives to promote organic and sustainable regional produce.

In 2015-16, the local council redesigned and restored Laßnitzhöhe's main square, and had ambitions to revive a former farmers' market that residents had held in high regard. The newly renovated square was intended to be an attractive and lively environment, enriched by the presence of the market. The original market building had already been replaced by a new community centre with ground floor business space. With support from the municipality, Allerleierei's founding business partners - a local hotelier, a restaurant owner, and an organic fruit and vegetable grower - rented one of the units and offered farmers who had previously delivered to the market an opportunity to sell their products in a newly designed shop. Both the

municipality and Allerleierei applied for LEADER funding for their respective developments, with Allerleierei further assisted by LAG management to prepare the funding applications.

Allerleierei has gradually introduced new suppliers, and now stocks a wide range of high quality food products including fruit and vegetables, dairy products, bread, cereals, beverages, oil-seed products, wine and more. The cafe serves coffee and snacks and there is lunch table service. Allerleierei's product range represents a commitment to seasonal and sustainably produced regional products, ensuring that a large share of the added value remains within the region to benefit local farmers and enterprises. Operations are also based on a circular economy model, with waste reduced by circulating shop produce to the cafe or to the business partner's hotel kitchen and restaurant, and reusable, resource-saving packaging also used. In spring 2021 Allerleierei expanded the business model by becoming a franchisee of the 'AckerBox' system, originally developed in Carinthia. AckerBoxes are shipping containers repurposed to provide regional food and open for self-service shopping and payment 24 hours a day. The Allerleierei AckerBoxes are located in the neighbouring municipalities of Nestelbach and Hart bei Graz, offering customers over 200 regional products and specialties.

Taking into account the five domains of our framework, the following picture emerges. Allerleierei cannot be regarded as a *social innovation* in a narrow sense, as neither social objectives nor processes are explicitly incorporated. Nevertheless, the municipality actively supported the project in order to continue the farmers' market tradition and help revitalise the main square, and support was similarly gained from the LAG. The shop's products enrich the local food supply and the cafe further provides a central social space for residents and visitors. Allerleierei is open all week, with extended opening hours making the shop accessible to commuters and health spa guests and employees. Allerleierei also attracts groups such as Sunday church-goers who stop for a coffee and groceries.

By focusing on regional products, Allerleierei has successfully built up a strong horizontal *network* with around 60 partners from the agri-food, hospitality and commercial trade sectors. This network is crucial to keeping added value within the region as well as ensuring range and quality. Vertical networks also exist, but tend to be derived from the operators' other professional activities (such as gin production). The horizontal focus is mirrored in the *scale* domain. Hügel and Schocklland LAG's 'Slow Food' agenda emphasises high endogenous potential for short food supply chains and quality products, which Allerleierei has mobilised. Accessing exogenous resources posed a skills challenge for Allerleierei's

operators, however, and they required support from the LAG to apply to national funding bodies and EU-level EAFRD and LEADER programmes.

Clearly, spatial *proximity* is central to Allerleierei's regional food offer. The operators aim to increase awareness about regional food and local producers are regularly invited to present their products in the shop and give customers preparation tips. Relational proximities are also present, notably through Laßnitzhöhe's spa tourism market and increasingly via Allerleierei's online shop. These proximities are in turn reflected through *service* provision and access. Allerleierei's prominent position in the town square - within walking distance for about one third of the population - and initial support from the municipality links food provision to Laßnitzhöhe. Yet, the AckerBox concept has also enabled Allerleierei's services to be accessed over a wider spatiality, extending to neighbouring municipalities 2.5km and 8.5km away. As well as distributing access, the 24 hour self-service facilities expand access beyond regular operating hours, and potentially to new users.

When local provision needs national support: Village Shops as Multi-Service Centres pilot, Ministry of Agriculture and Forestry (Finland)

In Finland, many village shops struggle to keep their operations profitable and develop their services, with 30 shops closing each year on average. These closures have considerable negative impacts, especially in sparsely populated rural areas where village shops are often the last remaining service providers. To halt this decline, the Finnish Ministry of Agriculture and Forestry, commissioned by the Sipilä Cabinet (2015-2019), launched a nationwide 'Village Shops as Multi-Service Centres' pilot project in 2019. The project provided eligible shops in sparsely populated areas with a *de minimis* support grant (€11,000 per shop, or €14,000 per shop and car) to maintain and develop their business as a service hub. To qualify for the grant, a shop, besides selling groceries, needed to co-locate at least one of the following services: post services, cash withdrawal, pharmacy services or fuel delivery.

The pilot was the first of its kind in Finland; in neighbouring Sweden, a similar grant has operated since 2016, providing certainty for businesses and facilitating investment. By supporting hub development, the Finnish project aimed to maintain and promote service access in sparsely populated rural areas and, more broadly, support rural vitality, residents' well-being, and create business opportunities. Moreover, the project aimed to ensure that rural services can also cater to large numbers of seasonal residents. Over 200 entrepreneurs applied to participate in the village shop pilot, and approximately 80 shops received support for 2020-

21. The most common reason for a negative decision was the shop's location: only those in sparsely populated areas could meet the conditions for the grant (Voutilainen et al. 2021a).

The Natural Resources Institute Finland evaluated the pilot in 2021, finding positive outcomes for shops' continued operations. In practice, all shops that received support were already offering other services alongside retail, but a significant number used or planned to use the grant to further diversify. Shopkeepers considered the grant especially useful because few limitations were imposed (Voutilainen et al. 2021a). The Finnish Ministry of Agriculture and Forestry has consequently launched a new call for *de minimis* support grants in 2021, with support now extended to village shops in all rural areas in Finland.

Turning to our framework, Finnish village shops offer a mixed picture as *social innovation*. The project does address social objectives, by supporting service retention and incorporating services for health and well-being, notably pharmacy. An interest in the vitality of rural areas also lies behind the legislation. However, the top-down legislation does not integrate social processes - shopkeepers apply for the grants, with little participation from other stakeholders. As this suggests, connections to *networks* are similarly mixed. Individual shops will have their own networks, and grants support engaging some additional horizontal actors, such as pharmacists who have a license to work in the area. Vertical relationships are more notable for service supply: postal services come from the state, and fuel from national or international companies. Some shops are also part of national chains that provide further assistance.

Of course, the legislation is vertical, and this is reflected in *scale*. Shops' mobilisation of endogenous capacities is low to medium. As high closure rates suggest, shops struggle without support; yet the grants have enabled existing shops to grow their capacities and drawn new local entrepreneurs. In a few cases, former shops were re-started. The role of exogenous resources is obviously critical to continuing shops' operations, and further enables shopkeepers to use the grant as they wish - most have hired summer staff, bought a billboard or renewed equipment (Voutilanen et al. 2021a). Other exogenous inputs remain slight, however, such as commissions paid to the shops by co-located postal and pharmacy services (Nyrhinen et al. 2015).

Finally, we turn to *proximities* and *services*. Finland is characterised by long distances that limit spatial proximities, and increase the need for village-based service provision -

although shops also serve other smaller villages that are relatively close by. At the same time, relational proximity is becoming more significant, with multi-locality a growing phenomenon. Finland has a population of 5.5 million and 510,000 holiday homes, with more again used as recreational residences. Between 2015 and 2020, the average number of days spent in a holiday home rose from 79 to 103. The share of people who work remotely from a recreational residence, of all workers for whom remote work is possible, rose from 7% to 43% in the same period. More than half of multi-local residents purchase groceries from shops located near their holiday home at least once a week, providing an important boost to sales in village shops (Voutilainen et al. 2021b). Yet services are moving further away: the average distance from a holiday home to a grocery shop was 13.2km in 2021, up from 12.9km in 2015. Continuing the village shop grant could play an important role in reversing the trend and ensuring future access for multi-local and permanent residents alike.

Discussion

By illustrating the application of our conceptual framework to differing circumstances and locales, our three cases offer insights into hub formation processes and the strengths and weaknesses of operational models. In each of the cases above, we identified and described where the hub sits in terms of our five conceptual domains: social innovation, networks, scale, proximities and services. Table 2 below summarises how we appraise the examples across each domain. We now compare these findings, and reflect on considerations for applying the framework in practice.

Domain	Cletwr	Allerleierei	Village shops
Social innovation			
address social objectives?	High	Low	Medium
integrate social processes?	High	Medium/Low	Low
Networks			
enrol horizontal actors?	High	Medium	Low
enrol vertical actors?	Medium	Medium/High	Medium/High
Scale			
mobilise endogenous capacities?	High	High	Low/medium
mobilise exogenous resources?	High/Medium	Medium	Medium
Proximities			
embed spatial proximities?	High	High	High
embed relational proximities?	High/Medium	Medium	Medium
Services			
deliver (absolute) service provision?	High	Medium/High	High
enable (relative) service access?	Medium	Medium	High

Table 2: Comparison of case studies across the conceptual framework.

Social innovation aims to meet social objectives and integrate social processes. Social objectives are implicit in the supply of food - an everyday essential - across all three case studies. Each hub works to maintain important basic services and, in the case of Cletwr and Finnish village shops, services have been expanded and diversified, including some that contribute to health and well-being or facilitate community cohesion. Although Allerleierei is less explicitly socially oriented, the project's ambitions to continue the traditional role of a farmers' market in Laßnitzhöhe's main square echo commonalities across the cases in the social symbolism of services, and their role in reflecting rural vitality and strengthening local identity. Notably in this regard, all three hubs responded to a 'trigger' event (Neumeier 2012, 2017): Cletwr to localised service closure and the Finnish legislation likewise to a wider pattern of service loss, while Alleleierei emerged from a municipal redevelopment initiative. However, the social processes involved in establishing each hub varied significantly. In both Cletwr and Allerleierei, development proceeded in cooperation with local government, but whereas Cletwr's social enterprise model embedded participatory processes and community consultation, Allerleierei primarily pursued private economic interests. Private enterprise again

predominated among Finnish shops, with top-down legislation presuming service needs rather than directly consulting communities.

As we have argued, the need to reorganise and reinvent rural service provision promotes novel collaborations between enterprise, civil society, third sector organisations and government. Forming and implementing hubs necessitates exchange and cooperation, through networks that incorporate both horizontal and vertical actors. Horizontal linkages ensure that, for example, Cletwr has a plentiful rota of sufficiently skilled volunteers, Finnish village shops can access licensed pharmacists, and Allerleierei has enough local and regional agricultural producers to deliver high quality produce for preparation and sale. In the former, community members themselves have proven critical actors, while the latter has drawn on intermediary organisations, including active LAG support. The LAG's 'Slow Food' agenda was instrumental for building horizontal networks between production and distribution, and the LAG itself played a vital brokerage role in funding acquisition. In both the Finnish and Austrian cases, hub models can attract entrepreneurs - but entrepreneurs also need support to implement new business models in areas where traditional retail is declining. As this suggests, funding and resourcing relationships tend to be most significant in vertical network formation. While in all three cases hub development required financial support from state, federal or EU level (and often a combination), there are differences in the extent to which vertical networks provide momentum and participate in governance. Cletwr, despite significant funding success, has tended to operate at 'arm's length' from funding agencies, whereas in the Finnish case national legislation has more directly driven development through vertical paths. Non-financial forms of hub support at higher spatial levels can also be noted here, like the role of national chains in Finland and political support in Wales.

Network mobilisation overlaps with scale, and hub developments depend on combining endogenous capacities and exogenous resources. Cletwr and Allerleierei differ in terms of their relative remoteness from larger cities, yet both exemplify the role of existing social capital and endogenous capacities in hub formation. Cletwr's governance and operations substantively benefit from local residents' skills, time and energy. Allerleierei draws upon Laßnitzhöhe's identity as a spa town, and the region's endogenous potential for short food supply chains. By contrast, Finnish village shops have often struggled to convert local capacities into sustainable business models, necessitating exogenous intervention. The Finnish pilot shows that government funding can be used to strategically stimulate hub development, without the

government itself needing to become the service provider. There are different threats here, however: just as supporting services in villages across Finland may depend on continuing government interest, Cletwr's long-term sustainability depends on avoiding exhaustion and planning succession. Beyond the vital importance of exogenous resources in funding hub development, the role of exogenous consumers is also marked across all three examples. Integration into national and regional visitor economies, drawing upon attractive local recreational offers, have proven a boon for sustaining local services. Finnish legislation further recognises the bridging capacities of multilocal residents, who provide seasonal demand for village shops, supported by urban salaries.

These comments lead us to proximities. Spatial proximity is a given in all three cases, since the hubs fundamentally exist to provide localised services, often accessible on foot. Yet in both the Cletwr and Allerleierei cases, local proximity may have more symbolic meaning than material - unlike more remote Finnish villages, neither is isolated from larger service centres. Equally, however, the hubs provide opportunities to valorise proximity economies. In Styria, for example, favourable horticultural conditions enable Allerleierei to raise residents' awareness of the quality produce grown nearby. Service hubs may thus help to demonstrate spatially proximate opportunities for added value, rather than simply responding to proximate needs. Across the three cases, relational proximities emerge through connectivity to people and places that would not be categorised as within a simple service area catchment. Cletwr, for example, was founded in direct response to localised concerns, but has evolved into a destination for visitors from much further afield. Similarly, multilocality and emerging possibilities for remote work feed into both the need for and sustainability of village shops in Finland.

Elements of scale and proximity are again reflected in the services domain. We distinguish between provision as an absolute value, and access as it may be relatively perceived. Provision takes on more importance in the comparative peripherality of rural Wales and Finland than it does in the more densely populated Styrian context, and Cletwr and Finnish village shops necessarily co-locate a broader range of services than the food focus at Allerleierei. The Finnish case demonstrates that hubs can be simply and effectively created by widening the range of services available at existing facilities. In all cases, however, provision is linked to a village, and emphasises maintaining services that are materially measurable in walking distance and symbolically affixed to village vitality. Considering the services

provided, the ease by which hubs can be accessed by their intended users is essential. Of course, as has been evident throughout this discussion, the localist ethos proves much broader in practice. In all cases, hubs serve non-resident populations, and are embedded into mobility and consumption flows across an extended area. Successful hubs both serve a purpose and provide an attractive space. Yet, there are potential tensions here between *who* can access a hub and *what* it provides. For example, Cletwr was founded out of concern about service loss, but as the hub has become a visitor destination, premium product ranges have been added and Cletwr has arguably moved closer towards Allerleierei's gastronomy offer. Conversely, while customers for Finnish village shops have poor access to other options, the accessibility of other towns may loom larger in the perceptions of more price conscious Tre'r Ddôl residents.

Our framework provides a structure for comparing hub formation processes and considering how localised rural services can be reconnected into wider spatial, social and economic contexts. Although we have used a rating heuristic for each example across the five domains of our framework, we do not intend to suggest that every hub should aim for benchmarked consistency. Rather, the examples show how different developments may mobilise different domains to achieve their goals. A weakness in one domain may offer room for reflection and improvement, or equally signify that importance lies elsewhere. Further, reading across the domains allows for analysing the subtleties of each development, but these should not be considered in isolation. There are similarities and interdependencies across the domains. Taken together, these domains help to build an interlinked picture of how a hub 'works' that can be used to both reflect on individual cases and to derive good practices.

Conclusion and Future Steps

A neo-endogenous approach is already essential for development in rural and peripheral areas. Regional heterogeneity and residents' different needs continue to require place-based strategies – yet amidst increased cooperation both within and beyond rural areas. Expanding this approach through a nexogenous frame helps reveal spatial linkages – especially those between rural and urban spaces – so that synergies can be identified and strengthened. We have proposed a conceptual framework for nexogenous rural development, with rural service hubs providing a specific example of the framework's application. The five interlinked domains of our framework tease out case-specific subtleties and enable both micro and macro levels of

analysis. In this article, we have shown how service hubs occupy a meso level that reveals connections across and between spaces and scales.

We have used our examples as an initial demonstration of the framework. As we discussed in our methodology, above, the limitations to our data do not allow us to validate findings between examples. Further empirical research is clearly necessary to test our framework across a broader sample and make robust comparisons. We hence conclude by outlining three potential pathways for future research on nexogenous development, as applicable to ourselves as they are invitations to other colleagues.

First, and most broadly, the five interlinked domains in our framework need to be further tested, debated, and refined. Work in this regard should proceed bi-modally, balancing insights from the literature with theory-building through observed practice. Since nexogenous development has emerged to date through rural studies, there are particular opportunities to look to learning beyond the field, such as to the burgeoning literature on innovation ecosystems (e.g. Ritala & Almpanopoulou 2017) and the lively professional practice of service design (e.g. Stickdorn & Schneider 2019).

Second, work to test the framework requires iterating a research design that combines the benefits of adaptive methodology (van Assche et al. 2021) for responding to local contexts and place-based needs with the rigour of cross-case comparison. Methodological discussions have become an unexpected by-product of the COVID-19 pandemic, as social scientists have at once proven adaptive by necessity and found new freedom to experiment, remix and reflect (Rahman et al. 2021). Since we undertook research in early 2020, more rapid methods have been codified in the literature (e.g. Vindrola-Padros et al. 2020) and digital alternatives to classic face-to-face fieldwork increasingly normalised. These ongoing changes offer a productive terrain for tackling the challenges not only in understanding ‘what works’ in rural development, but in differentiating between localised outcomes and scalable or transferable solutions.

Third, and relatedly, as hub implementations abound, there is a need to develop indicators of success. Again, such indicators will need to bridge the specificities of success at a local level with comparable measures of how individual hubs perform within a wider class. The five domains in our framework offer an initial basis for developing these measures. These can in turn be integrated with the research design described just above to create a basis for evaluation.

Although rural communities face numerous pressing challenges, social innovation, entrepreneurship and hyper-local initiatives can and do make important contributions to service design and delivery. When combined with exogenous resources, diverse networks and new digital platforms (Bock 2016, Torré et al. 2021), local capacities can work to effectively re-design services through new models that operate following a substantially different logic compared to classic forms of provision. In this way, developing and implementing innovative, nexogenous solutions offers real potential to contribute to the continued viability of rural areas and the well-being of their residents.

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