

COWORKING SPACES AND MID-SIZED CITIES IN PERIPHERAL CONTEXTS: CONCEPTUALISING DEVELOPMENT TRAJECTORIES

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ABSTRACT

Coworking spaces and the creative industries represent a rapidly growing but highly diverse shared economy sector. The paper outlines the types of incremental or radical forms of change developed that lead to industrial–institutional coevolution based on evidence from selected cities in Central and Eastern Europe. The results suggest that CS in peripheral areas are contributing primarily to the path upgrading through local embeddedness of stakeholders. These spaces contribute to refocusing local creative ecosystems by enhancing competitiveness of microclusters. Results suggest that CS in peripheral areas are contributing primarily to the path upgrading through local embeddedness of stakeholders through remote workers and digital nomads. These cases underline replicative entrepreneurship, where local stakeholders gather momentum for a subsequent period characterised by new internal structures and services in the urban setting. Considering the form of change, our results emphasise the importance of reproductive agency based on diverse services to digital nomads and remote workers.

Key words: Central and Eastern Europe; coworking spaces; development trajectories; mid-sized cities; parallel case studies; peripheries

INTRODUCTION

Coworking spaces (CS) embody innovative approaches to work and commerce, epitomising the sharing economy by providing a collaborative environment for individuals and enterprises. These places are progressively bringing together disparate professions or sectors to learn, interact, and share experiences. CSs also promote ‘collaborating independently’ among various populations in one place. Mendez-Ortega *et al.* (2022) contend that CSs are located in close proximity to the cultural

and creative industries (CCI), economic activities such as media, design, architecture, and videogames. Although largely an urban phenomenon, still most popular in metropolitan regions, more and more such venues are positioned in the peripheries, where they tackle a limited critical mass of customers, resulting in a constrained competitive environment (Hölzel *et al.* 2022). Different forms of peripherality, e.g. non-metropolitan cities or rural areas, impact CS formation, resulting in varied local and nonlocal effects, and evolutionary trajectories of CS in peripheral areas compared to the

central regions (Benner 2021). Considering CS in non-metropolitan cities, there is an increasing collaboration among local stakeholders by combining work and leisure activities, thereby stimulating the local creative economy. Local stakeholders in these areas are increasingly engaged in initiatives, networks, and collaborations to participate in community-based activities (Mariotti *et al.* 2023).

Peripheral areas are commonly seen as attractive work settings that offer community-driven places that promote cooperation and knowledge exchange within small clusters. However, there is still limited understanding of how to analyse the different trajectories of CS growth. These growth paths are influenced by path dependence, particularly in peripheral regions. Here, we can draw on the framework proposed by Isaksen and Trippel (2017) for analysing new industrial paths. Additionally, we can adopt the four pillars suggested by Hassink *et al.* (2019) to further develop our understanding of the conceptualisation of new industrial path development in the context of CS. Previous research has primarily focused on interactions between CSs and the local socioeconomic conditions within major cities where CS are prevalent. This study addresses the need for diverse sources of path dependency at different scales in various locations to establish new paths, as suggested by Hassink *et al.* (2019). It specifically focuses on the gap in understanding the sources of path dependence for third places, while considering CS as emerging industries proposed. The gap reflects on diverse types of path development, as proposed by Grillitsch *et al.* (2018), and extended by Blažek *et al.* (2020) in different forms of peripherality. Hence, the paper investigates how third places fit into distinct territorial sizes and how this affects mid-sized cities' local growth paths. The paper examines forms of change, particularly the form and model of path development. The notion of CS path dependence in mid-sized cities should help uncover challenge-oriented regional innovation systems proposed by Tödtling *et al.* (2021).

The growth paths are illustrated in multiple parallel case studies in mid-sized cities, considering the case study research outlined by Thomas (2011). The rationale behind this

step is to investigate the path dependence of CS in cases with different development trajectories. Yet, these cities have industrial culture and heritage as pre-formation, where different actions and processes gathered momentum for structural changes. Mid-sized cities could thus demonstrate how cultural infrastructure and diversification in the CCI create a local buzz or intensification of knowledge networks (Reuschke & Houston 2022). Case studies of Zlín (Czechia), Trenčín (Slovakia), Pécs, and Veszprém (Hungary) have been used in European Capital of Culture (ECoC) bids to promote creative economies. The narrative is set in Central and Eastern European (CEE) countries sharing similar post-socialist development trajectories. However, these case studies differ in critical junctures and coworking phases that affect path development and change in mid-sized cities (Jamal 2018). Thus, the research investigates what are the path dependence sources of CS as emerging industries in mid-sized cities, and how they fit into different territorial scales. These questions assess CS's role in local growth and describe change agency as an interplay between individuals and organisations in development trajectories, particularly in mid-sized cities (Bækkelund 2021).

The paper briefly reviews different forms of peripherality and CS, particularly CS taxonomy and various territorial scales. The subsequent methodological section covers context, data, sample, an analysis for CS conceptualisation of path development in mid-sized cities. The results section describes a path-dependence theory case study that considers coworking evolution and forms of change. The conclusion sums up our main findings and discusses differences in path development in parallel case studies.

SCALE, CENTRE–PERIPHERY RELATIONSHIPS, AND THE CREATIVE ECONOMY

New path development takes place in a differentiated landscape of nested peripheries involving multiple territorial scales. The diffusion of innovations, including new working patterns, takes the general form of a spreading process along the urban hierarchy, followed

by broader adoption in later development phases (Bokányi *et al.* 2022). However, there are notable barriers prior to the successful capture and local embedding of innovation patterns. A wealth of literature has explored both the varied forms and understandings of peripheries in economic geography (Pugh & Dubois 2021), and the mechanisms whereby centre–periphery dichotomies are reinforced. In particular, peripheral regions and cities find it hard to balance specialisation and diversification agendas due to resource scarcity and inadequate critical mass (Lux 2015). Studies on the development of innovative industries highlight that new path creation and cluster development in non-metropolitan peripheries face difficulties even in highly developed economies.

Previous research on the creative economy has identified common weaknesses in adopting CCI as a driving force for regional development. Specific structural issues include the lack of critical mass in small-scale regional ecosystems, the lack of cultural entrepreneurs, weaker network connectivity, lower visibility, and a different community orientation vis-à-vis metropolitan creative ecosystem (van Heur 2010). The existence of embedded creative traditions, knowledge sets, and resources does not necessarily translate into successful creative entrepreneurship. Such problems were exacerbated in post-transition CEE by lower demand, institutional barriers before valorising cultural production, and stronger core–periphery relationships in the urban network. Cultural milieus often exist in a ‘preformation’ developmental phase before path formation, in a relatively undifferentiated space of unexploited potential (Martin & Sunley 2010), or in early development stages characterised by pioneering initiatives, opportunity exploration, and entrepreneurial discovery – ‘undirected motion’ before breakthrough into a more coherent development path.

The risks of disregarding the local context in policy transfer without successful adaptation (Banks & O’Connor 2017) based on narrow, geographically biased readings of creativity (Borén & Young 2012), are highlighted in the limited results of using CS

within the context of top-down ‘quick fix’ urban renewal policies. Large creative projects may fail to connect to local creative milieus, or even suffocate bottom-up initiatives if there is a mismatch of scale between development policies and the peripheral context. These projects may exacerbate external funding dependency and remain sensitive to exogenous shocks (Pálné 2013; Rozentale & Lavanga 2014).

Successful innovative development in peripheral regions thus often involves actor-based, bottom-up solutions encouraging firm-level learning and experience-based knowledge accumulation in local labour markets before more comprehensive, system-based policies centred on RIS and cluster development become viable (Isaksen & Karlsen 2013; Isaksen *et al.* 2018; Lin 2021). Although both approaches are instrumental in the development of new paths, small-scale interventions may be necessary to remove barriers before innovative growth. Cultural entrepreneurs in emerging CCI in their avant-garde phase before consolidation (Gandini & Cossu 2021), tend to fit the previous description. Some constraints, such as a lack of local knowledge spillovers, may be partially compensated for by local cooperation (Grillitsch *et al.* 2018), and collective agency (Nilsen *et al.* 2023). However, cities and regions which fail in path formation may become ‘stuck’ in the avant-garde phase, where the early advantages in culture-based development fail to stabilise into successful cultural economies.

More specifically, the three main strands of academic literature that examine the CCI in the peripheries focus on the significance of culture-based community development, fostering the local creative class, and supporting creative entrepreneurship (Repenning 2022), which can jointly create stable local and regional ecosystems capable of creating new paths. However, a constant tension lies between relatively ‘generic’ CCI tissue enabling the easy integration of peripheral creative economies into global networks, and specialised, competitive knowledge sets that make local creative output specific, locally embedded, and hard to reproduce (Selada *et al.* 2013). Comunian and

Mould (2014) emphasise the relevance of bolstering the local cultural ecosystem to bridge 'the structural gap between the public interventions and specifically the new flagship cultural institutions created and the local creative economy base' (p. 72). Considering local creative economy base, it can be assumed that the role played by CSs in retaining indigenous knowledge workers is intensifying, primarily by fostering cultural entrepreneurship outside of core or capital cities (Akhavan *et al.* 2021).

COWORKING SPACES AND FORMS OF PERIPHERALITY

With the rise of remote work and digital nomadism, CS attract communities of knowledge workers within knowledge-intensive business services (KIBS) in urban settings (Mendez-Ortega *et al.* 2022). These spaces foster collaboration and competition through interdependence between users (coworkers) in social and professional communities (Gandini & Cossu 2021). However, it is uncertain how mutual interdependencies strengthen the community–organisation–space nexus. The uncertainty of interdependencies is reflected in the hybridisation of collaboration and competition in microclusters. Some studies suggest that strengthening communities is achieved through interactive learning transcending local creative ecosystems (Lin 2021; Bednář *et al.* 2023). Bednář *et al.* (2023) suggest that CS represent an urban catalyst with direct (community–organisation) and indirect (organisation–space) effects.

On the other hand, it is worth noting that CS do not have linear development trajectories or one-size-fits-all principles. Furthermore, this fuzziness could be reflected in the combination of designed settings of the place, clashing with the individualistic perspective of users and nurturing competition rather than collaboration (Rozentale & Lavanga 2014). Gandini and Cossu (2021) identified three development phases: the avant-garde phase of social values and communitarian relations, the mainstream phase of economic values and top-down approach, and the resilient phase of economic sustainability and social impact. Therefore, the CS environment could diverge from the sense of community to economic gains and increased

competition, shifting from a bottom-up to the top-down approach. The literature review on the effects of coworking spaces (Vogl & Akhavan 2022) highlighted their impact on urban fabric. This impact differs significantly between metropolitan and non-metropolitan areas, although both affect the local environment. Regarding indirect effects, CS might develop spontaneous aggregations in districts that become hubs of increased interaction and overcrowding. It is worth noting that metropolitan areas are predominant in CS location patterns with local clusters compared to non-metropolitan areas (Howell 2022; Mendez-Ortega *et al.* 2022).

Therefore, CSs increasingly demonstrate spatial economic activities through multi-centre distribution based on socioeconomic patterns concerning proximity, social interaction, and economic performance in regional innovation systems (Mariotti *et al.* 2023). Spatial economic activities shift from metropolitan to non-metropolitan cities that offer developed infrastructure for the CCI (Hölzel *et al.* 2022). This growth can be partially attributed to a related variety of local production systems (Howell 2022). Synergies between subsectors localised in CS cause disorganisation and functional autonomy, horizontal integration, and decentralised control in creative ecosystems (Lin 2021). Both functional autonomy and horizontal integration are getting traction as urban catalysts that attract knowledge workers, businesses, and investors. However, such growth is primarily evident in metropolitan areas, where the scene is already established (Akhavan *et al.* 2021). In their comprehensive analysis of existing research on CS location patterns, Vogl and Akhavan (2022) highlight that small cities are increasingly appealing to CSs due to social and environmental factors. Mid-sized cities offer lower barriers to entry to launch and operate a business, thereby increasing opportunities and capabilities for economic development (Jamal 2018; Lin 2021). While these spaces are not a recent development, they have experienced significant expansion in recent years. Only a limited number of studies have investigated the interactions of CSs within the local socioeconomic context, but there is compelling evidence to suggest

that there is a mutually beneficial relationship between the community, organisation, and space (Gandini & Cossu 2021).

METHODS

The paper uses evidence from selected CEE countries in various national and local settings. The objects of the study are scrutinised along the different phases of the coworking evolution introduced by Gandini and Cossu (2021). The instrumental multiple parallel case studies method outlined by Thomas (2011) is used for path-dependence theory testing. According to George and Bennet (2005), the theory testing case study evaluates the single path dependence theory's validity and scope. This method was chosen to explain the cause-and-effect relationship for the path dependence. The purpose of instrumental case study research is to redraw theoretical generalisations and explain CS in mid-sized cities (Jamal 2018). Thus, theory-testing was used to determine if the sample's empirical evidence supports or contradicts path-dependence.

The rationale for selecting respondents was reflected in their expertise in the development and management of CS, public administration (municipal/regional levels), or running collaborative platforms (creative clusters, NGOs, chambers of commerce). The respondents included in the case studies were chosen by purposeful sampling to select cases that can provide insight into the research question (Cresswell and Poth 2024). Additionally, the cases are bound in place and time, to ensure reasonability in scope of the paper, as suggested by Cresswell and Poth (2024). The sampling procedure was therefore focused on respondents who were highly engaged in the local ecosystem of mid-sized cities. The interview was divided into blocks of questions concerning awareness, establishment, development, collaboration, perception, support, and future directions to address the evolutionary aspect of third spaces in local ecosystems undergoing structural and industrial changes (Gandini & Cossu 2021; Blažek *et al.* 2023; Sotarauta &

Grillitsch 2023). The primary data collected during the interviews were transcribed to ensure that no information was missing for subsequent coding and analysis. The sample comprises 16 interviews to reach theoretical saturation considering development trajectories of CS in parallel cases (Hennink & Kaiser 2022). Additional data was gathered from multiple sources, including reports, surveys, and strategic documents, to obtain data triangulation to support the internal validity of parallel case studies.

The analysis began with open coding, reading data, and creating tentative labels (Alam 2021). The properties of each code were also established (Creswell & Poth 2024). The first step of open coding was investigator triangularity of multiple perspectives, which led to multiple researchers analysing the same dataset. Open coding allowed authors to continuously compare axial coding occurrences and identify relationships between open codes and underlying concepts in path dependence and the coevolution of CS (Benner 2021). The final step was selective coding to establish central categories that connect analytical codes to reflect qualitative research (Alam 2021). Last, we conceptualised the path dependence on and CS in the post-Fordist economy to identify forms of path development in mid-sized cities. This step is based on conditions (preformation), critical junctures (turning points), disruption (change), and form of change and path development (Bækkelund 2021; Benner 2021).

PARALLEL CASE STUDIES OF THE CS DEVELOPMENT PATH IN CEE

The purpose of conducting parallel case studies was to facilitate a thorough examination of the cause-and-effect relationships of path dependence in mid-sized cities, in light of different evolutionary trajectories. The contextual background of these cases highlights post-socialist development and transition from planning to market economies. The cases are characterised by path development forms with resource scarcity and inadequate critical mass for industrial diversification.

As mid-sized cities with a similar socioeconomic transition, Zlín and Trenčín shared a past in the growth of the creative economy. They are located in bordering regions between the Czech Republic and Slovakia, with close ties between regional capitals. Considering the evolutionary perspective, Zlín was focused on shoemaking and related industries as its economic backbone, with the establishment of the Baťa company in 1894 as a major turning point. Shoe manufacturing developed related industries such as machinery and rubber/plastics, while the film industry with marketing emerged as the progressive branch of the creative economy. Trenčín, on the other hand, was primarily focused on fashion with the label of 'city of fashion' in CEE, and heavy industry as a nested-dependent city-region (Jacobs 2017). In the early 1990s, both cities faced similar challenges with industrial output and specialisation, experiencing increasing unemployment rates and depopulation, and becoming peripheries in socioeconomic development. Nevertheless, their development trajectories endured different turns, and Zlín transitioned primarily to mechanical engineering, plastics, and creative industries based on entrepreneurial thinking and industrial culture (Bednář & Grebeníček 2012). On the contrary, Trenčín was a subject of delocalisation in its fashion industry, transitioning to automotive industry, mechanical engineering, and KIBS through the dispersion of industrial knowledge in the city-region (Jacobs 2017). The cultural movements and infrastructure of the city provided a basis for a successful bid for the European Capital of Culture 2026.

Both Hungarian case studies have had to contend with the restructuring of their traditional industries. The contextual background highlights structural changes toward post-Fordist economies. Coal and uranium mining formed the economic backbone of Pécs, while Veszprém was a heartland of the Hungarian chemical industry, both of which declined heavily after 1989, exhibiting structural and network-agglomeration-related deficiencies commonly found in the Old Industrial Regions (Coenen *et al.* 2015). In both cases, the cities turned to tourism and cultural development, with external financial support from the title

of European Capital of Culture (won 12 years apart). However, the two cities have followed considerably different development paths, and their respective knowledge bases have also been reorganised in a different fashion.

Veszprém underwent a heavy restructuring, whereby its chemical industry was mostly displaced through heavy foreign direct investment (FDI) inflows into automotive manufacturing, while its enduring endogenous industries – construction and tourism – have reoriented toward the domestic market. The results of conscious city management and strategic planning have brought a renewed focus to the city's historically embedded cultural assets of the city, resulting in a successful bid for the title of European Capital of Culture, and a series of focused investments in the CCI. Veszprém's knowledge base has retained its legacy in chemical and mechanical engineering as well as ICT, while the University of Pannonia has gradually expanded its knowledge creation and knowledge transfer in the creative sector. However, Veszprém remains primarily a manufacturing hub, with its creative sector playing a growing, but supplemental role.

In Pécs, the closure of mining and the downsizing of smaller manufacturing branches have resulted in path dissolution (Martin & Sunley 2010), and radical de-industrialisation. Pécs has failed to attract considerable FDI inflows and has had to rely on its endogenous resources in the domestic SME sector and post-industrial development to compensate. Therefore, the strategic reorientation of the city has emphasised the rediscovery of its cultural and knowledge creation functions as the seat of Hungary's first university, and main provincial cultural hub. Consequently, development policies have embraced university development, a 'quality of life' growth pole strategy, and the European Capital of Culture 2010 project as an attempt to achieve a scale change in the CCI (Pálné 2013). The rebounding tourism and the consumption effect of a large international university have not generated a corresponding growth in tradeable cultural products and KIBS. While Pécs had significant early-stage advantages in culture-based development, it has been unsuccessful in making the leap from the avant-garde to the consolidation phase,

demonstrating the importance of limited demand, institutional weaknesses, and the enduring relevance of core–periphery in both the Hungarian and European contexts.

The first case study introduces Zlín, which is based on entrepreneurial thinking by the Bata management system, encouraging employees to develop strong business responsibilities. Hence, this preformation reflects on the delocalisation of shoemaking and related industries from the Zlín region. This left a strong basis for industrial culture, primarily industrial knowledge and infrastructure, to shift toward CCI-based diversification. The shoe industry is still present, represented by several SMEs scattered around the Zlín region. However, these companies are primarily design-oriented with developing functional design for shoes that are produced globally. With respect to preformation, the film industry was another major step. This is emphasised by cultural infrastructure and events, primarily the International Film Festival dating back to 1961, which supported the sustainability of the film industry and a local studio (Zlín Film Studios) with global production. The creative economy is reflected in strategic planning, especially the RIS3 strategies that underline the importance of the CCI in Zlín.

Path development of CS in Zlín was affected by several critical junctures. A major change driver in this case was a systematic approach for creative class retention within the triple helix model. Public administration, university, and enterprises created a joint movement to provide infrastructure for the creative class. The university played a vital role in setting of the scene for CS and collaborative platforms by establishing university-led CS. Eventually, an independent CS originated as a spinoff. Hence, the University and Zlín Creative Cluster could be considered a critical juncture for setting a path development through CS. Large-scale urban development projects of historical sites (industrial heritage) are another change driver that sets the scene for CS and indirect effects CS have on enhancing urban attractiveness and transforming public spaces. Visibility, awareness, and the strengthening of community ties through CS resulted in the implementation

of third spaces in development strategies at local and regional levels. On the other hand, this was yet another opportunity to extend the diversity of communities in CS due to the rise of remote work and the relocation of employees from corporate organisations. This led to replicative entrepreneurship of setting up independent and corporate CS in Zlín, and triggered their development trajectory from avant-garde to mainstream phase.

Therefore, it could be summarised that the case of Zlín is moving to a stable state based on reproductive agency (see Table 1). The results suggest that the local creative ecosystem is based on the place-based leadership of the Bata Management System and the triple helix model. The basis of the creative economy provides leadership for replicative entrepreneurship, signifying the critical mass for third spaces. Both the Zlín Creative Cluster (ZKK) and local CS (independent/corporate) provide favourable conditions for path upgrading. Path upgrading in Zlín is linked to diverse stakeholders with the strategic planning toward the creative economy. The stable state reflects the retention of the creative class in the periphery through the nurturing of the CS movement.

In the case of Trenčín, one of the major preformations of CS development, is reflected in the fashion industry and local knowledge in design and manufacturing. However, the process of delocalisation of the fashion industry was also evident in related industries. The industrial culture of the fashion industry and mechanical engineering laid the foundations for the development of KIBS, especially in the electronics and automotive sectors. Hence, the city region has a strong CS awareness, based on the local creative ecosystem. With the label of ‘fashion city’, Trenčín had a path linked with design, manufacturing, and retailing. The rise of the creative economy set the scene for grassroot initiatives with local organisations, building on the legacy of fashion as the preformation. These initiatives led to cultural movements such as the fashion city label resurgence. However, the local buzz of fashion and related industries resulted in a lack of cross-sectoral collaboration between industries and organisations. This preformation is associated with the dispersion of

Table 1. *Zlín case study.*

Preformation	Critical juncture	Path	Path development	Move to stable state
CCI diversification	Retention of creative class	Upgrading	Replicative entrepreneurship	Continued repro agency
Film industry	Corporate coworking		Place-based leadership	
CCI cluster mapping	Creative vouchers (innovation)		Replicative agency	
RIS3 strategies	Regional intermediary ZKK/UTB			
Cultural infrastructure and events	Seasonality			
Uni and faculty of Multimedia	Large scale urban regeneration			
Bata management (industrial culture)	Covid disruption			
Relocation (shoe industry)	Consolidation of CS (university-led) CS in strategies			

Table 2. *Trenčín case study.*

Preformation	Critical juncture	Path	Path development	Path as dynamic process
Fashion industry (local knowledge)	Market distortion	Branching	Change agency	Ability to act at critical junctures
KIBS	Public funds reliance		Institutional work	
CS awareness	ECoC		Maintenance leadership	
Relocation	Covid disruption			
University	Remote working			
Grassroot initiatives	Globally connected			
Cultural movements (regeneration)	Sustainability issues			
Local buzz (lack of cross-sector)	Urban regeneration			

communities and a lower level of mutual interaction in the networks (closed communities). Considering the critical junctures, the most evident is the market distortion in the local creative ecosystem. This juncture is related to public funds reliance, especially in the case of affecting a market in a negative way through public sector interventions. While this develops the local CS market, spaces become less sustainable in the long run. On the positive side, the ECoC bid has visibly intensified the local creative ecosystem and cultural movements, a growing creative

economy, and urban regeneration in declining areas. Nevertheless, the local CS scene is facing challenges of sustainability with respect to its business models and exogenous shocks in the energy and rent markets concerning the critical juncture.

Therefore, the case of Trenčín could be summarised as path branching as the local creative ecosystem adapts to the changing market needs of regional stakeholders (see Table 2). There is a gradual movement of the CS market to new knowledge in the case of being globally connected to association and

the ECoC network. Additionally, this case reflects on new business formation with CS localisation on the periphery to accommodate for expanding remote work and digital nomadism. The local CS market is shifting from risk aversion to more sustainable business models due to exogenous shocks. Change of agency creates new opportunities for stakeholders in the local creative ecosystem. These opportunities developed from the fashion industry and mechanical engineering, building momentum for the expansion of the CCI. This underlines the institutional work of maintaining existing institutions and practices within the creative economy (fashion and related industries) and building on the industrial culture. Hence, the path development in this case reflects on the maintenance leadership of institutions and networks that are based on grass-root initiatives and networks of stakeholders (ECoC). As a mid-sized city, Trenčín has a path as a dynamic process by reacting to critical juncture and by being globally connected in international networks (knowledge flows and best practices). These series of events are stimuli for local buzz within CS market development.

The case of Pécs shows a cultural landscape providing favourable conditions for the development of the local cultural environment. This case is characteristic for modern and diverse cultural movements that represent a bottom-up ecosystem as a major preformation for the CS movement. Additionally, the cultural milieu was a catalyst for CS pioneering in a peripheral city-region. This case is distinctive in the CS development trajectory that mimics those in capital cities in the CEE. The university plays a vital role in cultivating the creative class and its retention in the periphery. The local creative ecosystem provides a higher quality of life along with contributing to the attractiveness of this place. Another preformation is reflected in urban planning initiatives favouring open public spaces for communities.

Considering critical junctures, the case of Pécs shows a growth of CS that is diverse in their nature. Diversity is reflected in the combination of independently run and early-stage corporate (global chains) spaces. However, these spaces are less connected in the local creative ecosystem, forming disconnected communities

that hinder opportunities for networking and collaboration. Like Trenčín, this city has a critical juncture of ECoC that contributed to the CS movement. The label helped mobilise communities to elevate CS development by raising awareness and taking advantage of culture-led urban regeneration. Exposure to ECoC in 2010 indirectly led to the attraction and retention of digital nomads in the periphery. On the other hand, this critical juncture did not contribute to the CS change of scale, especially moving to the mainstream phase. The CS landscape is facing sustainability challenges rooted in the reliance on public funds and limited valorisation of these spaces. The case of Pécs could be considered path extension as the result of gradual adaptation of CS to changing market conditions, and the growth of early-stage corporate coworking in the periphery. This underlines replicative entrepreneurship with a diverse CS typology. Additionally, there is a presence of institutional work to maintain a broader range of institutions and practices to be globally connected and active in the ECoC network to exploit knowledge flows. Pécs is a case of maintenance leadership through collaboration in the bottom-up ecosystem, enhancing the community (bottom-up initiative), organisation (diverse CS), and space (neighbourhoods) nexus. A strong cultural environment maintained from the ECoC bid and urban regeneration initiatives involve local stakeholders in a tight-knit community. Hence, this case is based on the continued reproductive agency of a gradual improvement of the CS market with the move to a stable state. Maintenance leadership was the case of reacting to critical junctures with the reproductive agency that has lock-in effects (see Table 3).

The development trajectory of Veszprém is associated with the ICT industries and their advancement in the city-region on the periphery. Contrary to Pécs, this city has limited, previously hidden cultural functions. However, with the ECoC bid, Veszprém has undertaken strategic diversification of the CCI and effective top-down governance of the creative economy. The bid was also related to the tourism sector setting the stage for CS path development. The development of CCI and place attractiveness boosted the CS movement as a new preformation. Globally connected through the ECoC network, Veszprém

Table 3. *Pécs case study.*

Preformation	Critical juncture	Path	Path development	Move to a stable state
Cultural milieu	Diverse CS typology	Extension	Replicative entrepreneurship	Continued reproductive agency with lock-in effects
Modern art University	ECoC change of scale		Institutional work	
Quality of life	Early-stage corporate coworking		Maintenance leadership	
Open public spaces	Digital nomads			
Bottom-up ecosystem	Globally connected			
Pioneering CS	Sustainability issues			
Static knowledge	Urban regeneration			

managed to broaden the knowledge base in the CCI and seized the opportunity of an entrepreneurial university to enhance the local creative ecosystem. Considering critical junctures, this case is specific due to systematic public investments in the creative economy as a keystone for local competitiveness. This investment also contributed to the attraction and retention of the creative class in the city region considering the outmigration of the creative class within core–periphery relations. What is interesting in this case study is that this disruption created a positive exogenous shock on the CCI with more inflow of knowledge workers to the periphery, relocating from Budapest due to the possibility of remote work, and with an interest in localising in CS. Therefore, the functional broadening of CS operation was a major critical juncture in terms of its expansion in both physical and community aspects. Globally connected Veszprém seized the opportunity for knowledge transfer through the network (ECoC and coworking associations) to develop sustainable business models based on best practices (tacit knowledge dissemination).

Therefore, the case of Veszprém could be summarised as path importation by diversification of the CCI based on cultural traditions, tourism, and the creative economy (see Table 4). The path importation in this case

study revolves around new business models acquired through knowledge transfer and ambassadors of the CS movement within global networks. Furthermore, this path was the result of emerging system-based policies that effectively combined top-down and bottom-up approaches in the CS development. These approaches are reflected in the agency of change with institutional entrepreneurship reflected in the movement of CS from the core to the periphery. Path development in Veszprém revolves around dynamic processes of change agency as a reaction to critical junctures (exogenous shocks).

In summary, the results indicate that both the industrial and institutional levels were prevalent in the coevolution of path dependence in our case studies. The majority of respondents identified that path upgrading was the predominant form of path development. Furthermore, respondents highlighted the role of CS in path upgrading through the change of scale of their operation and refocusing within the industrial level. The change in scale reflects the organisational growth of CS on the industrial level, while refocusing is driven by the new demand and location choices on the institutional level by freelancers and digital nomads.

The majority of respondents felt that CS is going through the phase of consolidation,

Table 4. *Veszprém case study.*

Preformation	Critical juncture	Path	Path development	Path as dynamic process
ICT focus	Change leadership	Importation	Diversification	Change agency with institutional entrepreneurship
Hidden cultural functions	Public investment into CCI		New business models	
Tourism	ECoC		Emerging policies	
CCI diversification	Covid disruption			
University	Changing working patterns			
Coworking movement	Migration			
Broadening knowledge	Knowledge transfer			
	Functional broadening			

suggesting the transition from or between avant-garde (social value) to/or mainstream phase (economic value). Such transition is driven by the top-down logic and coherent neoliberal model competitive markets. Local embeddedness of stakeholders is reflected in both incremental and radical forms of change concerning new business formation and new institutions due to exogenous shocks from the rise of remote work and increasing interest in sharing spaces. What is noticeable here is that local embeddedness plays a vital role in mid-sized cities with more tight-knit stakeholders in the CS movement within the local knowledge of social and business relations. Path upgrading is implied by outreach and increasing competition among CS in local creative ecosystems.

DISCUSSION

In the first step, the paper empirically tested the conceptualisation of industrial–institutional coevolution in path development by Benner (2021). Interestingly, the results reveal that CS in mid-sized cities are contributing primarily to path upgrading. What particularly stands out is the form of change revolving around industrial coevolution. The analysis highlighted the role of CS in path upgrading through the change of scale of their operation and refocusing within

the industrial level. Additionally, the change is linked with local embeddedness playing a vital role in elevating tight-knit communities toward a coherent neoliberal model that highlights the opportunity exploration (Gandini & Cossu 2021). These changes contribute to the shift from social values to economic values in mid-sized cities in a positive type of path development through upgrading. The results provide support for Jamal (2018) that the growth of CS in mid-sized cities is linked with a related variety of local production systems as actor-based sources for path development (Isaksen *et al.* 2018).

The second step was devoted to classifying the path evolution of four case studies in the CEE, based on the conceptualisation of change agency by Bækkelund (2021), as shown in Figure 1. These cases are based on the CCI diversification as one of the major preformations considering sources for the path dependence. Moreover, CCI awareness and the presence of cultural movements provide local buzz for path evolution with the dynamic coupling of local creative ecosystems and global networks as discussed in Reuschke and Houston (2022), and Vogl and Akhavan (2022). The results reflect on the importance of entrepreneurial universities in mid-sized cities, as an agency for path evolution, due to their involvement in CS movement. While the expected finding

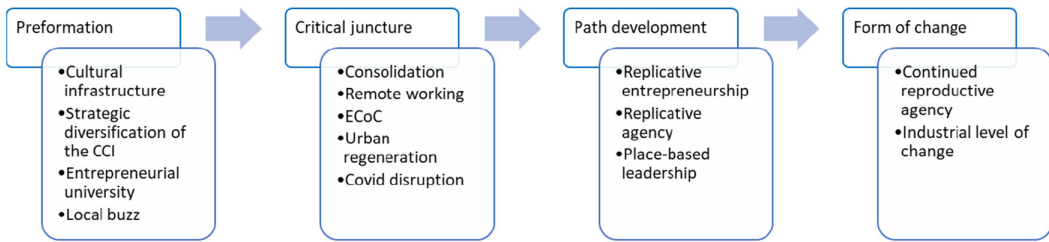


Figure 1. Conceptualisation of path evolution through CS movement in peripheries.

was that the path evolution is based on independent CS, this study showed that corporate CS and shared offices also create a momentum in the case of Zlín and Pécs. Both of these cities experienced urban regeneration projects as critical junctures for collective agency in culture-based development at a system level (Blažek & Květoň 2023). In contrast, Trenčín and Veszprém faced market distortion negatively affecting path evolution. The results reveal that Zlín is the subject of the path upgrading through replicative entrepreneurship in the CCI, with the reproductive agency maintaining an already favourable environment for the sharing economy, as mentioned by Bækkelund (2021). This is similar to the situation in Pécs, where new business models in CS evolved through the continuation of reproductive agency with lock-in effects.

Zlín, Pécs, and Veszprém were identified as cases with path development through CS toward a stable state with a sustainable nexus. These cities are specific due to the consolidation and changing working patterns of CS as additional aspects of the resilient phase discussed by Gandini and Cossu (2021). What stands out is the case of Trenčín, where the change agency was identified with institutional work, maintaining existing CS and institutional practices of independent spaces. Furthermore, the source of path development is illustrated in bottom-up initiatives highlighting the hybrid platforms mixing CS/fablabs/living labs (Repenning 2022). Additionally, this case is characteristic for path as a dynamic process concerning evolution through CS movement, where local stakeholders gather momentum for a subsequent period characterised by change agency (ECoC and remote working). These results provide support for Blažek and Květoň (2023) who discussed the

organisational-level agency focused on new internal structures and services to various companies. Additionally, the results highlight continued reproductive agency based on diverse services to digital nomads and remote workers in CS and shared offices considering regional transformation by Blažek *et al.* (2023).

CONCLUSIONS

The main aim of this paper has been to investigate the sources of path dependence of the CS as emerging industries in mid-sized cities, and to identify path dependence typologies within Central Europe. Furthermore, the investigation reflects on how CS fit into different territorial scales, and implications for local growth paths, outlining both incremental and radical forms of change by Benner (2021). Studies on the development of new innovative industries have shown new path creation and cluster development in mid-sized cities face challenges even in highly developed economies. Previous research has identified common weaknesses in the adoption of the CCI as a driving force of regional development. Large-scale creative projects, particularly 'flagship' initiatives, may fail to connect to local creative milieus, while successful approaches to innovative development often involve actor-based, bottom-up solutions. Few studies have explored the dynamics of CS and their role in the local socio-economic environment.

Taken together, our findings suggest that CS in mid-sized cities are contributing primarily to the path upgrading through local embeddedness of stakeholders and outreach to remote workers and digital nomads by integrating them into local knowledge ecosystems. These spaces contribute to refocus of

local creative ecosystems by enhancing the competitiveness of microclusters (Lin 2021). What particularly stands out in these cases, is the form of change that revolves around industrial coevolution (industrial heritage) and a refocus on the creative economy. The change identified in multiple-parallel case studies is linked to local embeddedness playing a vital role in mid-sized cities with tight-knit communities as a result of the coherent neoliberal model. On the contrary, the negative types of path development are attributed to market distortion caused by public investment and a strong reliance on EU funds. This process hinders real competition on the market for shared spaces and undermines creative entrepreneurship. A crucial aspect of industrial-institutional coevolution is reflected in the globally connected CS market through the ECoC as a catalyst for linking locally embedded communities through global pipelines (Fu *et al.* 2023).

This paper contributes to the field of path evolution of CS in mid-sized cities based on four case studies, primarily by conceptualising preformation, critical junctures, path development, and form of change. The results underline that cultural infrastructure and strategic diversification of the CCI are crucial preformations in path evolution. Furthermore, the paper identified a few critical junctures for local creative ecosystems, such as the rise of remote work and the consolidation of CS to more sustainable and mature spaces. For path development, these case studies underline replicative entrepreneurship and agency, where local stakeholders gather momentum for a subsequent period characterised by new internal structures and services linking KIBS and the CCI. Considering the form of change, our results emphasise the importance of reproductive agencies based on diverse services to digital nomads and remote workers, who are increasingly embedded in CS. Additionally, the movement of CS represents a source for finding new growth paths to face disruptions such as the rise of remote working and freelancing that leads to the hybridisation of these spaces with fablabs, makerspaces, and virtual platforms. Furthermore, evidence has shown that CCI diversification is one of the major

preformations in this path evolution. Hence, CCI awareness and presence of cultural movements provide a local buzz for path evolution. The buzz provides functional broadening of CS as mediators for advancement of the creative economy in mid-sized cities.

The paper has certain limitations considering the investigator bias of the path development perspectives that may influence the results. Another limiting factor is the sample, which includes cities that share similar preconditions for socioeconomic development and core-periphery relationships within the CEE. The results would probably differ if cities with limited cultural infrastructure and industrial culture were included. This could be the case for rural areas, where CS are currently expanding to. Future research should consider the testing of multifaceted aspects of growth paths and core-periphery dynamics.

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