

Coworking Spaces, Proximity, Innovation and the Fourth Space [†]

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Abstract: Coworking spaces—shared work-spaces in which freelancers, entrepreneurs, but also employees ‘work alone together’—are presented as an example of the blurring of spaces within the knowledge economy. These are spaces in which key current issues (digitalization, knowledge flows, flexibility and innovation) play out at the micro level. Post-pandemic, coworking spaces are likely to play a greater role as remote working remains a permanent feature. But how should we reassess their role in the advent of a ubiquitous digital 4th space, and what might this mean for how the role of proximity itself is (re)conceptualized in relation to innovation?

Keywords: coworking; digitalization; innovation; proximity; remote working; digital fourth space; knowledge economy

1. Introduction

In this extended abstract, we briefly develop some of the themes of Hardegger [1] for further discussion from an economic geography perspective and with a particular focus on innovation and the role that proximity plays in its facilitation, both presently and in the advent of a digital fourth space. We use the case of coworking spaces as an example of the blurring of spaces within the knowledge economy and as places where key issues (e.g., digitalization, knowledge flows, and innovation) play out at the micro level.

The idea of the digital “fourth space” is a development of Oldenburg’s [2] delineation of the first place (the home), second place (work) and the social third (cafes, bars, and other “hangouts”) place. See Hardegger [1] for a full description, but the basic premise is that although other authors [3,4] have noted the blurring of these spaces or places within the knowledge economy, they have not conceptualized the merging of the physical “place” with diverse (in all senses of the word) digital communities that manifest themselves in the “fourth space” and which, accordingly, can be much more pluralistic than if they existed only in the “real” world.

2. Proximity and Innovation

Creativity and innovation are established as key competitive weapons in the globalized knowledge economy [5,6]. It is now well accepted that innovative capacity plays a key role in long-term economic prosperity [7,8]. Simultaneously, the literature on economic geography emphasizes the role that knowledge spillovers and agglomeration effects play in generating innovations. These agglomerations are essentially the increasing returns to knowledge that are hypothesized to accrue from collocated activities. This knowledge transfer can be either explicit and intentional (e.g., via brokers, intermediaries or indeed employees) or somehow “in the air” of innovative milieus [9]. Marshall [10] emphasized the role of specialization (of knowledge, skills and physical capital), while Porter [11] simultaneously highlighted cooperative and competitive business environments focused on specific sectors, known as clusters. While these spillovers are conceived as firm- or industry-focused, Jacobs [12,13], Frenken et al. [14] and Florida [15] described agglomeration effects that are people-focused and centered around diversity and variety. These effects are



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not mutually exclusive. Indeed, they can be complementary and reinforcing, leading to increasing returns to innovative activities. To this end, the economic geography literature argues that proximity is important for innovation. Moreover, Boschma [16] proposed that other forms of proximity—cognitive, organizational, institutional and social—can compensate for the more familiar geographical proximity. In turn, geographical proximity can reinforce these other dimensions further. The key underlying mechanism here is that the exchange of tacit knowledge in particular is facilitated by proximity (i.e., knowledge which is not easily codified or directly articulated) [17].

In recent decades, the proportion of people living in urban areas has increased in all parts of the globe, as has their contribution to economic growth. This extraordinary urban growth implies that it is becoming increasingly important for both firms and people to be clustered together, particularly for knowledge economy workers and firms [18]. Moreover, it is also widely acknowledged that the outcomes of knowledge-based activity are becoming spatially more polarized [18–20], such that we now see a “Great Divergence” between high human capital, high innovation places and low human capital, low innovation ones [8].

3. Remote Working and Coworking

Over the previous two decades, the number of self-employed workers, freelancers, and remote workers has risen steadily. In the UK, by 2016, 15% of the workforce was self-employed, while just over 17% were “working mainly or partly away from the premises of the employer” [21]. This relatively gradual upward trend (ibid) has been drastically accelerated by the COVID-19 crisis, precipitating a global “forced experiment” in remote working [22]. Although it is too early to judge how this will play out in the long run, the consensus seems to be that although the “death of the city/death of the office” scenarios articulated early in the pandemic are overstated, there will likely be a significant permanent shift to hybrid (home, office, and other space) working arrangements [23,24]. Indeed, in the UK, the proportion of the workforce reporting that they worked exclusively at home rose from 5.7% in early 2020 (pre COVID-19) to 36.5% in June 2020. Significantly, 50% of new homeworkers reported the preference to work at home “often or always”, even when COVID-19 restrictions permitted a return to “normal” working [22]. It should of course be noted that not all occupations possess the same potential for remote working, particularly those with lower knowledge economy elements. Moreover, such occupations are distributed unevenly across space, meaning that the remote working potential—and by extension the physical and digital infrastructure to support it—will also be uneven [25]. In addition, two individuals with the same occupation may have different personal circumstances that will affect their remote potential, not the least of which being in terms of access to a viable “home office”. Increased remote working over an extended period will have significant second-order effects that need to be understood, such as shifting the demand for travel, leisure, hospitality and retail spending.

In parallel to the steady increase in remote working and the increase in project-based freelance work, a range of collaborative shared workspaces—coworking spaces—has emerged rapidly, in which these individuals can “work alone together” [26]. The lack of a direct employer typically means that these individuals will also be without a dedicated office space, which may also be unnecessary (and indeed prohibitively expensive) for most of their needs. Conversely, full-time homeworking can lead to isolation and the blurring of the domestic and work spheres [27]. This in turn, of course, begs the question as to where else these work activities are being carried out. One option might be to use existing “third places” [2], such as a local coffee shop. Although often convenient, these will inevitably have drawbacks of their own, not least of which being the somewhat random set of encounters to be found therein, and hence the attraction of coworking spaces. The phrase working alone together suggests that although people are not usually explicitly collaborating, there is something happening that is above and beyond mere co-presence. Coworking spaces place their emphasis on community, relationships, productivity and creativity but also provide the freedom to work independently in a non-routine and creative way. There

is evidence that they also function as “micro-clusters” facilitating knowledge spillovers and innovative outcomes [28]. In particular, the work of Clifton et al. [29] confirmed the role of coworking spaces as a context for the exchange of tacit knowledge, facilitated by opportunities for face-to-face interaction. Evidence suggests that these interactions are mainly, but not exclusively, taking place on an informal or untraded interdependency basis (as per Storper [30]). However, these exchanges may not be the primary (or at least explicit) motivation for coworking. Community and other social factors were rated highly by coworkers. Clifton et al. [29] concluded that previous studies had emphasized the community aspect of coworking as largely an end in itself, a partial account of coworking. Their results in general demonstrated greater observed differences regarding the ultimate outcomes of coworking (innovation and productivity) than its outputs (interaction and knowledge exchange). This suggests that variations at the level of the individual are centered upon the translation of outputs into outcomes, rather than the generation of outputs per se. Thus, they argued that the role of the coworking host or facilitator was key.

It is reasonable to suggest that, for the reasons outlined above in relation to isolation and the potential drawbacks of other third spaces, a significant increase in remote working is likely by extension to increase the demand for coworking spaces. Indeed, some regional governments are already anticipating such developments [25]. However, it should be noted that there is also evidence (prior to the COVID-19 crisis) of people meeting to cowork in residential homes, which would apparently run counter to the narrative that coworking is driven by the social isolation of working alone in the “home office”—as emphasized in previous research on coworking spaces—if the individuals taking part are not engaged in their own versions of a shared work environment [31]. These apparent contradictions need further exploration in a post-pandemic but increasingly digitalized landscape.

4. Key Points and Questions Arising

Technology enabling work to take place outside of the traditional second place is, of course, not a new idea (see the “telepresence” of Minsky [32] (i.e., doing something in a different location than the one in which one is physically present and, specifically related to work, and Toffler’s [33] “electronic cottage”). However, these remained the preserve of rather niche activities until the advent of ubiquitous digital technologies. That said, the question remains as to how an emerging digital fourth space will impact (and be impacted by) coworking practices. For example, will we see a divergence between the needs of coworkers with “regular” jobs (and thus routines and hierarchies) versus freelancers and entrepreneurs? Perhaps the former will seek physical coworking spaces as a form of escape from their home organization’s own digital spaces, while the latter group will be more enthusiastic adopters of digital coworking. Anecdotal evidence suggests that in the phase(s) of the COVID-19 pandemic when all office spaces were closed, many coworkers self-organized working alone together sessions via Zoom, taking coordinated coffee breaks and so on. However, in the longer term, the digital version of coworking must seek to offer a previously unavailable “bundle” of activities, rather than merely serving as a pale imitation of its physical counterpart (as per Evans’s 2020 description of online conferences and the early days of online shopping [34]). Over time, existing collaborations and networks that can relatively easily be shifted online will also need refreshing and replacing [24,25]. Demographic differences are also likely, as younger workers will have less existing network capital [35] to draw upon than their more established counterparts, and they may thus seek out additional network-building opportunities either digitally or in the “real” world.

Recently, Waters-Lynch and Duff [36] have noted the physical-digital “hybrid ecologies” present within coworking, but they also concluded that analogous to the adoption of digital enterprise tools like Yammer, Slack, or Microsoft Teams that we see in regular work organizations, these are only the means to an end. There may also be a role for dedicated innovation intermediaries (or digital platforms) in bringing together the demand for solutions and the supply of new ideas that is required if an open innovation [16] ecosystem is to

be successful. We should also not be naive to the democratizing aspects of the fourth space. Just as present networks which are based primarily on physical proximity ala Boschma [6] rarely involve unfettered access to all individuals who happen to be present in any given geographic location, the fourth space will also have inherent barriers that will need to be tackled to reduce digital exclusion. Such barriers could derive from a lack of skills, the constraints of particular areas of employment, a lack of resources more generally, or indeed from explicit gatekeeping from the “owners” of this space.

Returning to the concept of proximity, as noted above, Boschma’s seminal idea [6] is that other forms of proximity can substitute for geographic proximity (and in turn, the geographic proximity stimulates the other dimensions). This in turn begs the following question: given the discussion above, how should we reconceptualize proximity in the light of the fourth space, and what might this mean more generally for the “received wisdom” in economic geography relating to learning, innovation, and the exchange of tacit knowledge? Boschma noted that while it is possible to transmit tacit information over long distances, some face-to-face contact is still required (examples include temporary clusters, epistemic events and the like, as per Maskell et al. [37]).

This brings us to the following key question: post digitalization, within the fourth space, how might this situation change? Does it ultimately make geographic proximity less relevant for innovation, and if so, with what conditions, variations, and caveats? A central point for further research in this respect for coworking and beyond is whether there will be a fundamental reduction (*ceteris paribus*) in the spatial transaction costs [18] of transferring tacit knowledge. Ultimately, is it that co-presence within the fourth space is indistinguishable from “real” proximity (i.e., does this essentially supersede the question above on how a ubiquitous digital fourth space impacts upon the non-geographic forms of proximity)?

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