Curating the "Third Place"? Coworking and the mediation of creativity

Julie Brown

School of Business, Law and Communications, Southampton Solent University, East Park Terrace, Southampton SO14 0YN, United Kingdom

ABSTRACT

Coworking spaces (CWS) and the associated practice of coworking, have emerged in numerous forms and various urban contexts to critically challenge traditional concepts of the workplace and location of creative work, while simultaneously confronting the way in which creative workers interact with and relate to each other as well as with space and to place. Heralded as a solution to increasingly atomised work patterns, CWS are imagined and presented as spaces of serendipitous encounter, spontaneous exchange and collaboration. Nonetheless, little is known about how coworking positively supports workers and how coworking relates to wider urban transformation processes has been largely un-researched. This paper contributes to a critical discussion through empirical analysis of a project aimed at establishing new creative CWS in city-centre locations across SE England. The study adopts a novel approach using Q-methodology. Motivations for coworking and benefits (or dis-benefits) of co-location are assessed, as is the extent to which coworking facilitates interactional effects and wider neighbourhood interactions. In particular, the role of the CWS manager as "mediator" is explored. Coworker benefits relate primarily to peer-interaction and support rather than formal collaboration. While CWS managers play a key connecting role, also ensuring coworker complementarity and compatibility, the coworker profile (motivations, needs, experiences) ultimately influences outcomes. The study cautions against the use of CWS as "quick fix" urban renewal tools, with little indication that the benefits of coworking reach beyond immediate members or that linkages are easily established between coworkers and local (resident or business) communities.

1. Introduction

Coworking spaces (hereafter CWS), and the associated practice of coworking, have emerged in numerous forms and in various (urban) contexts to critically challenge concepts of the workplace and the location of creative work, while simultaneously confronting the way in which creative workers interact with and relate to each other as well as with space and to place. Heralded as a solution to increasingly atomised and precarious working patterns within the creative industries (McRobbie, 2016), CWS are considered as preferential alternatives to home working or to semi-public "Third Spaces" (Oldenburg, 1989; Florida, 2002)[1] such as cafés or libraries, particularly for young entrepreneurs and independent creative professionals. As Spinuzzi (2012: 401) asserts, for these so called boundaryless workers the irony is that; "the freedom to work anywhere often means isolation, inability to build trust and relationships with others, and sharply restricted opportunities for collaboration and networking."

As "a collective, community-based approach to the organisation of cultural and creative work" (Merkel, 2015: 124), coworking has engendered "high expectations concerning the improvement of the socio-economic conditions of workers" (Gandini, 2015:193). CWS are both imagined and presented as spaces of opportune encounter, open knowledge sharing and spontaneous collaboration (Schmidt et al., 2014; Merkel, 2015). Indeed, they have been termed "serendipity accelerators" (Moriset, 2014:8). Although the uncritical acceptance and "celebratory framework" surrounding coworking has being questioned (Land et al., 2012; Gandini, 2015) very little is actually known about coworking or its purported effects. Despite the global proliferation of CWS, only a handful of academic studies exist and as Gandini (2015) notes, there is little evidence to indicate whether coworking empowers independent creative workers, or whether it reifies particular (precarious) working practices. Whether, or indeed how, coworking leads to forms of positive (social) interaction, knowledge sharing and exchange and/or to mutually beneficial collaborative activity is far from clear. What evidence there is suggests that spontaneous exchanges

Email address: julie.brown@solent.ac.uk, julie.e.brown@gmail.com (J. Brown)

among coworkers are not actually very common (Spinuzzi, 2012; Fuzi et al., 2015; Merkel, 2015; Parrino, 2015) with coworkers typically "working alone, together" (Spinuzzi, 2012). Instead, evidence points towards encounters requiring active mediation or "curation" by CWS managers (Merkel, 2015: 139; Capdevila, 2013; Parrino, 2015) but there has been little systematic analysis.

Further, attention has focused on the internal dynamics and benefits of coworking for creative workers. How coworking relates to wider urban transformation processes has been largely un-researched (Moriset, 2014). In particular, whether coworking ameliorates urban socio-spatial disadvantage by helping anchor local cultural production and support for neighbourhood-based development, or augments inequalities now associated with "creative city" and "creative class" strategies (Florida, 2002/Florida, 2005) has received scant attention, especially in the context of "ordinary" cities.

This paper adds to the emerging body of research on coworking by attempting to shed light on three interlinked questions: First, (how) does coworking support independent creative workers (i.e., what are the motivations for and benefits (or dis-benefits) of coworking)? Second, do benefits accrue between coworkers and wider neighbourhood communities (i.e., does coworking facilitate interactions between creative workers, local residents, businesses or organisations that might support neighbourhood development)? Third, do different organisational/management approaches influence (or not) these outcomes? More specifically, what is the role of the CWS manager?

Rather than their physical design, the complex social functioning of CWS forms the focus of investigation. Results from an empirical analysis of ReCreate, an EU-funded project designed to establish creative industries focussed CWS in small-cities across SE England, are presented and discussed. The study was exploratory, adopting a novel methodology: Q-methodology, supplemented by participant surveys, site observations and CWS manager interviews. The research allowed for insight into the early stage development of different coworking "communities" and the effects of different organisational/management approaches adopted. This research is timely, not least because coworking is entering mainstream urban policy discourse with "top-down" CWS interventions emerging as part of urban "place-making" strategies (Moriset, 2014). Also, independent workers now represent; "the fastest growing group in the EU labour market" (Leighton, 2015: 1). According to Leighton (2015) the decade to 2013 saw numbers increase by 45% to 9 million, a rise that; "represents a major shift in the nature of work and ways of working." (Leighton, 2015: 1).

The paper is organised as follows: Section 2 defines and contextualises coworking, differentiating it from other emerging workplace models; Section 3 reviews coworking in relation to associated urban literatures; The study context and research methodology are described in Sections 4 and 5; and in Section 6 research findings are presented and discussed; Conclusions and some thoughts for future research are offered in Section 7.

2. Background

2.1. The rise of coworking: the new "Third Space"?

Coworking is rapidly becoming a global, predominantly urban, phenomenon particularly among autonomous creative workers, freelancers and micro-businesses. It is described as; "a practice involving shared physical workspace and (often) intentional cooperation between independent workers" (Waters-Lynch et al., 2015: 2; see also Capdevila,

2013; Spinuzzi, 2012). Offering a "Third Space" (Oldenburg, 1989; Florida, 2002)[2] somewhere between the structure of a traditional (office-based) workplace and a coffee shop (Botsman and Rogers, 2011: 169), CWS aim to combine the informal (social) and the formal (productive, functional) elements into a work environment that claims to encourage a range of beneficial interactions (opportunities for socialisation, peer-support/mentoring, professional networking, idea/knowledge sharing and collaboration (Clifton et al., 2016)).

The rise of coworking is attributed to several interlinked conditions (see Waters-Lynch et al., 2015; Clifton et al., 2016) namely; structural changes occurring within (urban) labour markets, including a shift to "knowledge-intensive" work and an acceleration in contingent forms of working (including the "freelancer economy"); and advances in internet and digital technologies which have fundamentally altered the spatial distribution of work (home working, remote and mobile working, etc.). These trends have, it is argued, led to increasing individualism and social isolation of workers (McRobbie, 2016).

Since 2007/8, CWS have proliferated from an estimated 75 worldwide, with numbers reaching 10,000 by end of 2016 and an estimated one million workers now using these spaces (Foertsch, 2017). In Europe, particularly high numbers of CWS are found in the major cities of Berlin, Barcelona, London, Paris, Amsterdam and Milan (Eurofound, 2015). Although it is in the inner areas of major, often termed "creative" cities that concentrations of CWS are typically found (Moriset, 2014; Merkel, 2015), coworking has spread to other types of location including small-cities and semi-urban locations (Fuzi et al., 2015).

2.2. Defining coworking

Coworking is, nonetheless, a nebulous term. It was first coined by Bernard de Koven as; "working together as equals" several years before the first "official" CWS opened in 2005 at Spiral Muse in San Francisco (Cagnol and Foertesch, 2013).[3] Coworking has socio-political foundations, its origins are as a "movement" and "philosophy" (Gandini, 2015: 196) built around the cornerstones (values) of: "collaboration, openness, community, accessibility and sustainability" (Coworking.com, n.d.). Many CWS demonstrate a strong ideological affiliation to this way of working (Colleoni and Arvidsson, 2015), often defining themselves as part of the global coworking community. Coworking has also been described as the physical manifestation of the "open source movement" (e.g., Lange, 2011) and the sharing peer-to-peer "collaborative economy" (Botsman and Rogers, 2011; DeGuzmann and Tang, 2011) as well as showing strong affiliation with (urban) D.I.Y. cultures (Merkel, 2015; Waters-Lynch et al., 2015). As Cagnol and Foertesch (2013) point out, CWS also have strong antecedents in (historic and contemporary) artist workspaces and collectives (also Jones et al., 2009; Moriset, 2014).

As a self-organised, non-competitive, values-driven and communitarian means of addressing work and labour insecurities (Leforestier, 2009; Lange, 2011; Merkel, 2015) coworking, as originally conceived, was less about physical space/design and more an informal means of organising people who shared similar attitudes and values and who wanted to adopt a loose commitment to a shared way of working (e.g., Jones, 2009). As Merkel (2015: 124) points out; "this 'collaborative approach' is always underlined as a distinctive feature that sets coworking apart from other forms of shared, flexible work settings."

---

[1] Contrasting with first places (home) and second places (work).

[3] Foertsch and Cagnol (2013) trace CWS to 42 West 24, New York (1999); Schraubenfabrik (2002) and Hutfabrik (2004), Vienna; LYNfabriikken (2002), Aarhus, Denmark; and The Hub (2005), London.

[2] Conceptual differences between "Third Spaces" and CWS are outlined by Moriset (2014) and Waters-Lynch et al. (2015).

Similarly the theme of "community" is strongly espoused in much of the coworking discourse, with the (social and collaborative) emphasis often framed as "joining a coworker community" (Spinuzzi, 2012; Capdevila, 2013; Gandini, 2015; Waters-Lynch et al., 2015).

CWS have also been conceptualised as serving important place-making and neighbourhood renewal functions (Capdevila, 2013; Moriset, 2014; Merkel, 2015). Emerging as small-scale, independent and (often) not-for-profit initiatives, typically founded and run by local entrepreneurs for use by local workers, many CWS demonstrate; "strong identification with and commitment to their local surroundings" (Merkel, 2015: 134; Lange, 2011) acting as semi-public spaces and providing services such as cafes and community gathering space to help connect and integrate local (resident) and professional communities. Despite being locally embedded, however, many CWS also seek connections to coworker communities in different localities, fostering wider networks and exchanges (Brinks and Schmidt, 2015).

2.3. Evolution of a concept

The coworking concept has now evolved, in many cases shifting distinctly from its socio-political roots (Gandini, 2015). CWS are materialising as large, corporate, for-profit and professionally managed ventures and there are multi-site coworking companies located in major cities.[4] Moriset (2014), for example, has described the hijacking of CWS as a component of interventionist "creative city" strategies (aimed at talent attraction), private–public partnerships and "top-down" policy interventions.

Certainly, very different models of coworking now exist, linked to a growing diversification of CWS (Boboc et al., 2014; Schmidt et al., 2014; Waters-Lynch et al., 2015). These differ, for example, according to the (economic) rationale (of founders and coworkers); espoused coworker values; occupational/industry focus (heterogeneous or more specialised); types of services offered; membership options (P.A.Y.G. to 'member only' weekly/monthly/annual subscriptions); and the importance given to the social and collaborative dimension of the CWS as well as the methods used to enhance these (Merkel, 2015; Parrino, 2015). Moreover, the workers using CWS extend beyond independent workers to include micro-businesses/start-ups who operate from within CWS as well as employees (and freelancers) who work for larger firms located outside the CWS (Parrino, 2015; Foertsch, 2015; Blein, 2016).

These characteristics make systematic comparison of research conducted in different CWS and under different contexts problematic. The lack of definitional clarity has seen CWS conflated in the academic literature with other flexible spaces such as "creative hubs"; "innovation labs"; "incubators"; "accelerators"; and "hacker spaces" (Schmidt et al., 2014), prompting the question as to whether coworking represents a "coherent phenomenon" (Spinuzzi, 2012: 17; Waters-Lynch et al., 2015). Arguably, what still sets CWS apart from other forms of shared workspace remains the centrality of social interactions ("community") and the underlying principle of cooperation (knowledge sharing or "collaboration") as core features (Capdevila, 2014; Waters-Lynch et al., 2015).

3. Review of literature

3.1. Coworking, community and collaboration

Although much of the interest in coworking has been the collaborative and innovative potential associated with open knowledge ex-

change and the "cross pollination" of ideas (Spinuzzi, 2012; Capdevila, 2013, 2014; Parrino, 2015), a review of the conceptual and empirical literature reveals a "duality" between the social and community benefits of coworking on one hand, and the work related and collaborative benefits on the other (Rus and Orel, 2015).

Some authors have emphasised the instrumental nature of coworking, stressing motivations and benefits that include strategic expansion of professional networks related to "reputation construction" and self-publicising, job opportunities and formalised collaborations (Spinuzzi, 2012; Colleoni and Arvidsson, 2015; Gandini, 2015; Blein, 2016); others have stressed community building as the predominant objective of coworking, with work-related collaboration an outcome but not a necessary condition for it (Butcher, 2013; Rus and Orel, 2015). While the "open" and non-competitive nature of coworking has been critiqued (Gandini, 2015), a number of authors have observed interactions that reflect sharing and/or "generalised reciprocity" (Blein, 2016) among coworkers who demonstrate a willingness to provide skills and/or services (Lange, 2011; Capdevila, 2013; Rus and Orel, 2015). Gerdenitsch et al. (2016), for example, determined that interactions typically took the form of work-related social support which increased self-efficacy and positively impacted the work performance of individuals. Indeed, the opportunity for peer-support and for receiving (informal) help and/or critical feedback on projects or ideas from fellow coworkers has, in particular, been found to constitute a main benefit of coworking (Spinuzzi, 2012; Pierre and Burret, 2014; Blein, 2016; Brodel et al., 2015; Colleoni and Arvidsson, 2015; Gerdenitsch et al., 2016). Certainly, joint formal/project collaborations do not appear to be a particularly common outcome of coworking, with knowledge exchanges tending towards the informal and *ad hoc* (Spinuzzi, 2012; Boboc et al., 2014; Brodel et al., 2015; Blein, 2016).

In many cases coworkers appear to place emphasis on social as well as professional exchanges (Brodel et al., 2015; Colleoni and Arvidsson, 2015; Blein, 2016). Coworking is frequently asserted as offering the missing relational component of traditional office working, helping to diminish the isolation, self-motivation and productivity problems independent professionals often struggle with (Spinuzzi, 2012; Boboc et al., 2014; Colleoni and Arvidsson, 2014; Foertsch, 2015; Merkel, 2015; Blein, 2016; Gerdenitsch et al., 2016). Indeed, several studies (e.g., Foertsch, 2015; Brodel et al., 2015; Eurofound, 2014, 2015; Fuzi et al., 2015; Colleoni and Arvidsson, 2015; Gerendisch et al., 2015) have indicated that "sense of community" resonates more highly as a reason for joining a CWS than knowledge exchanges, networking or collaborations. Coworkers may simply benefit from engaging in casual/informal conversations, which may be a precursor to other types of work-related interactions (Spinuzzi, 2012). As Gerdenitsch et al. (2016) note, even the presence of other workers may have a positive impact, via the social "atmosphere". Coworking may also perform different functions and provide different benefits according to the coworker profile. Colleoni and Arvidsson (2015:169), for example, distinguished between "gainers"; young workers with limited work experience who used the CWS to actively build their "social capital" and to learn from more experienced professionals and "givers"; experienced workers who used the CWS primarily for a "sense of community" and to counter isolation.

Distinct, although overlapping, activities have also been observed in different CWS (Capdevila, 2014), with attempts at classifying coworking models (Silicon Sentier, 2009; Spinuzzi, 2012; Boboc et al., 2014; Capdevila, 2014) typically outlining a continuum, ranging from CWS dominated by self-interested individuals seeking cost-based benefits including access to infrastructure and resources; to models where coworkers seek and share knowledge, skills and contacts (the collaborative dimension is less advanced, but joint projects are not excluded); to community-based models where collaboration is premised and mo-

---

[4] WeWork, a US firm, has over 35 CWS globally and has opened an eight-storey CWS in London's Moorgate area, accommodating up to 3000 members (Shead, 2015).

tivated by "exploration rather than exploitation" (Capdevila, 2014: 24). Each model implies a different degree of interaction and level of trust among coworkers and consequently sets different requirements for support (Boboc et al., 2014) – see Section 3.2. Different CWS may therefore attract different types of coworker and result in different types of exchange processes (Capdevila, 2014).

3.2. Being there is not enough

While CWS provide the physical platform within which day-to-day interactions take place among coworkers, there is growing evidence that other facilitative measures may be required to promote and encourage productive exchanges. Spinuzzi (2012) and others (Merkel, 2015; Parrino, 2015) have, for example, observed that many coworkers are simply "working alone, together" (Spinuzzi, 2012:399) and sharing a CWS without much interaction. As Merkel (2015: 128) highlights, "being there" (Gertler, 1995) is simply not enough.

3.2.1. Why does proximity matter?

The role "proximity" in processes of knowledge production and exchange pervades multiple urban literatures (see Moriset, 2014; Parrino, 2015; Brinks and Schmidt, 2015 for discussions related to coworking). The economic geography literature in particular has been concerned with different modes of spatial proximity that; "underpin[s] the joint production, circulation and sharing of knowledge" (Gertler, 2008: 203; Bathelt et al., 2004; Boschma, 2005). The underlying principle being that spatial concentration of actors and (market and non-market) activities facilitates (formal and informal) interaction and exchange (Gertler, 2008).[5] Knowledge production/exchange has, however, tended to be theorised at the firm or "cluster"/neighbourhood or city/region level rather than that of the individual worker (Brinks and Schmidt, 2015), and while the role (and intersection) of other dimensions of proximity (cognitive, social/relational, organisational and institutional) (Boschma, 2005; Torre and Rallet, 2005) are recognised, this literature only partially captures the social mechanisms associated with localised knowledge creation (Cohendet et al., 2014; Pratt, 2014).

Within creative industries research, for example, the tendency towards co-location (or 'clustering') of activities (production and consumption) in particular urban environments (neighbourhoods/"quarters") is not a new or un-researched phenomenon (Scott, 2000; Grabher, 2001; Lloyd, 2004, 2006; Mommaas, 2009; Currid, 2007) nor has it escaped intense policy interest. The distinctive forms of organisation and working practices mean creative industries tend to "*thrive in milieus, networks, clusters, embedded knowledge and informal infrastructures of the city.*" (Banks et al., 2000: 454). Proximity is generally considered to be "driven by the need for cultural producers to swap ideas and contacts, socialise together and trade industry gossip" (Oakley and O'Connor, 2015: 201). Above material resources (such as shared space), co-location provides creative workers with 'symbolic' resources including reputational effects bestowed by being networked into certain arts 'scenes' (Lloyd, 2004; Currid, 2007; Lange, 2011) and acts as a mutual (social) support system, of particular benefit to those at the early stages of their careers (Lloyd, 2004: 369). While acknowledging that the sharing and circulation of "tacit" knowledge requires a high degree of trust developed through face-to-face interactions often within and facilitated by particular localities (e.g., Currid, 2007), this literature does not expand on the mechanisms by which knowledge is exchanged, or what conditions might support these processes (Cohendet et al., 2014; Pratt, 2014).

3.2.2. Social construction of knowledge and communities of practice

The literature on "communities of practice" (CoP) (Brown and Duguid, 1991; Lave and Wenger, 1991; Knorr-Cetina, 1999; Wenger et al., 2002; Amin and Cohendet, 2004; Amin and Roberts, 2008) is germane regarding coworking as it relates practice, in-situ (contextual) learning and the co-constitution of knowledge and emphasises the role of "communities" as central to this process (Brinks and Schmidt, 2015; Capdevila, 2013; Merkel, 2015; Fabbri and Charue-Duboc, 2016). This literature draws attention to the social (relational) process learning at and through work that occurs through interaction and the everyday practices, experiences and rhythms of work that groups of workers share and the norms, common codes and culture which ultimately form over time through ongoing engagement in common projects. Brinks and Schmidt (2015) argue that the key challenge facing independent workers is to form these new "learning communities" in order to access and participate in knowledge practices and networks.

Nonetheless, as Grugulis and Stoyanova (2011) and Capdevila (2013) point out (also Amin and Roberts, 2008), CoP assumes that workplaces represent "coherent and cohesive" communities of workers, who have practised together long enough to develop shared ways of knowing. CWS bring together a diverse mix of individuals (strangers) with distinct and often very different knowledge-bases and experiences and any "communities" formed may be transitory.[6] Novice workers may not be able to learn from more experienced peers, particularly in CWS targeting start-ups or new graduates where there may be a lack experienced workers to consult or observe (Grugulis and Stoyanova, 2011). As intense, often daily, face-to-face interactions may be needed to facilitate the trust required before knowledge can be shared (Lave and Wenger, 1991) this poses another challenge for CWS, which host fluctuating constellations of coworkers who are free to come and go as they wish or to use the CWS as frequently or infrequently as they want.

3.2.3. Role of CWS hosts as intermediaries

The role of CWS "hosts" or managers in "animating" CWS and in promoting facilitated encounters and interactions among coworkers is thus receiving attention (Surman, 2013; Capdevila, 2014; Pierre and Burret, 2014; Liimatainen, 2015; Merkel, 2015; Parrino, 2015; Fabbri and Charue-Duboc, 2016), but there has so far been very little systematic analysis. Merkel (2015) for example, applied the concept of "curation" to the manager role, describing their affective investment; "in facilitating encounters, interaction, collaboration and mutual trust among the coworkers" (Merkel, 2015: 128).[7] She noted that different hosts "create different modes of enrolment" distinguishing the "service provider", who focuses on "facilitating a good work environment"; from the "visionary" who "is concerned with enabling the 'co' aspects of coworking such as communication, community and collaboration among the coworkers" (Merkel, 2015: 128), but does not explore the effects of these approaches on coworkers.

Parrino (2015) meanwhile identified little sociality and a few instances of "one off help" when coworkers only shared a workspace, whereas frequent knowledge exchanges (including network sharing) and recurrent collaborations (primarily of "supplier-customer" type) between coworkers took place when there was a dedicated management approach designed to actively stimulate the "relational po-

---

[5] Different but interlinked spatial approaches include: cluster theory; industrial districts; national/regional spatial innovation systems. Exploration of social and institutional conditions include: 'learning regions' and 'innovative milieu' (see Cohendet et al., 2014).

[7] Note, Merkel (2015: 131) refers to "curation" as "establishing relations by assemblage and interconnections rather than value formation."

[6] Capdevila (2013) has suggested CWS may be more like project-based "collectivities of practice" (Lindkvist, 2005).

tential" (Amin and Cohendet, 2004) among coworkers (see below). Further, Capdevila (2014) found that in CWS where interactions were based around coworker learning and knowledge-sharing, managers needed to mentor individual coworkers and actively promote interactions and community building to help coworkers identify complementary resources, whereas in CWS where the emphasis was the formation of a "collaborative community" focused on intensive (synergistic) collaborations, this required managers to empower members to "self-organise" to reinforce feelings of ownership and collective direction (also Pierre and Burret, 2014). Rus and Orel (2015) have similarly described establishing a "community of work" which is a highly participative but moderated process, while Surman (2013: 193) has stressed the importance of "navigating the balance between the organic and the intentional" which is heavily reliant on the skills and experience of the CWS manager.

Capdevila (2014) concluded that CWS tended towards a particular type of activity, either organically or intentionally, as managers often followed a selection process to ensure member "fit" and/or coworkers themselves would generally leave a CWS if it did not fulfil their particular needs, further reinforcing particular behaviours. Likewise, Liimatainen (2015: 53) determined that both the composition of coworkers ("complementary diversity") and the type of facilitative coordination needed to be managed, as both impacted on the development of the coworker community, and hence the potential for knowledge exchange and/or collaboration. As already indicated, the formation of a coworker "community" likely responds to "organic emergence" and loose facilitation rather than strict control (Capdevila, 2013; Liimatainen 2014; Garrett et al., 2014; Pierre and Burret, 2014; Rus and Orel, 2015) and as Capdevila (2014) and Rus and Orel (2015) note, the active engagement of coworkers and their motivation to exchange knowledge and/or to collaborate are fundamental.

3.2.4. Tools of engagement

In addition to physical space configuration and coworker composition, CWS managers employ a variety of "collaboration tools" (Capdevila, 2013; Pierre and Burret, 2014; Merkel, 2015; Parrino, 2015; Blein, 2016), of which Fabbri and Charue-Duboc (2016) distinguish: *Communication strategies* (web-boards, social media and physical notice-boards), which managers also use to communicate CWS "values" and "community symbolism" Butcher (2013); *Events*, designed to offer a diversity of (formal/informal and internal/external) exchange opportunities; and *Manager knowledge*, including linkages with wider professional networks (including former members); the ability to broker and recommend coworkers to outside clients; and knowledge of how to access resources such as funding. The role of events, in particular, has received attention (e.g., Capdevila, 2013). While internal events (workshops, member lunches and after work meet-us) provide opportunities for coworkers to get to know one another, strengthen "sense of community" (Butcher, 2013) and precipitate coworker knowledge sharing, Capdevila (2013) asserts that external industry events serve different functions: Allowing local and more distant actors to interact, they increase the chances of 'unexpected encounters' and ensure a circulation of knowledge and ideas; they act as a 'market place' for coworkers to show their work to external parties, increasing their visibility and helping identify potential customers and/or collaboration partners and *vice versa;* and they potentially help foster linkages between coworkers and local communities. Martins (2014), however, has questioned the role and relevance of these events, concluding that if particular forms of interaction are required beyond socialising or random networking, this involves active mediation, with people chosen carefully and expected behaviours clearly communicated to all, and "structure rather than chance" (Martins, 2014: 81) is needed to in-

crease the likelihood of useful interactions. While concentrating specific people may be necessary, as Martins (2014) notes, this may challenge and/or cause tension between "openness"/exclusivity as well as between local/non local by engaging people and organisations based outside the neighbourhood, and potentially weakening rather than strengthening local neighbourhood links.

3.3. Beyond the "creative" city?

The growth of CWS has, at least in part, been interpreted as an attempt by an increasing urban precariat (creative) workforce to "reclaim urban spaces" (Merkel, 2015:124), but few studies have explored the wider (socio-spatial) impacts CWS have on their localities, especially in the context of "ordinary" cities.

3.3.1. Geographies of inequality

"Cultural place making" often via planned "recolonisation" of under-utilised (industrial) spaces in inner-city areas by artists and creatives is synonymous with negative displacement processes (of long-term residents and businesses), social exclusion and unplanned gentrification (see Hutton, 2017 for a review). Similar concerns have been raised about "creative city" and "creative class" (Florida, 2002/Florida, 2005) policies which many now consider have deepened class and racial divides and lessened the sustainability of local communities and economies (Kratke, 2012). Particular socio-spatial inequalities stem from the reappropriation of urban public space as a consumption-based amenity landscape for a "creative class" elite (Leslie and Catugnal, 2012), and the expulsion of people and land-uses, including local vernacular culture and identity, as well as marginal creative workers, small firms and smaller arts activities from inner-city areas (Lloyd, 2006; Hutton, 2017). Unanticipated inequalities related to age, gender and ethnicity have also emerged associated with creative industries work practices and workplaces, which also play out in the location of creative work and spatially gendered inequalities associated with home-based working (O'Callahan, 2010; Leslie and Catugnal, 2012; Gerhard et al., 2017).

3.3.2. Revisiting the gentrification debate

A growing body of research contends that gentrification is not an automatic outcome of creative industries development, however, and that it is far more place and context specific than existing literature acknowledges (Gerhard et al., 2017). More equitably distributed benefits and positive social impacts have been observed with bottom-up, grass-roots approaches, typically where non-profit and small-scale local arts mix with small-scale commercial cultural and creative enterprises (Markusen and Gadwa, 2010; Stern and Seifert, 2010, 2013; Grodach, 2011; Silver and Miller, 2012; Grodach et al., 2014; Borrup, 2015; discussed in Oakley and O'Connor, 2015). As a means of organising independent workers, CWS may help "anchor" localised, small-scale and place-specific forms of creative *production* within urban neighbourhoods and so might offer an alternative, more sustainable basis for local development (Merkel, 2015; Oakley and O'Connor, 2015). Nonetheless, most urban neighbourhoods do not contain concentrations of creative workers as larger (creative) cities do (van Heur, 2010) which may limit the potential of CWS. Further, little attention has been paid to the geography of home-based businesses (HBBs) (Mason et al., 2016), and it is assumed they are located in central urban neighbourhoods. In a UK study, Reuschke and Mason (2016) found HBBs were predominantly located in sub-urban and rural areas, thus a potential mismatch may exist between the location of CWS (in central neighbourhoods) and the location of HBBs which, as discussed below, may prevent uptake of CWS and/or involve coworkers commuting in and so prevent wider community benefits (Chuah, 2016).

3.3.3. Neighbourhood linkages or failed connections

The potential connecting role of CWS with urban communities is highlighted in the coworking literature (Waters-Lynch et al., 2015). Merkel (2015) and Capdevila (2013), for example, have conceptualised CWS as "interfaces" between the various creative and social milieu of the city and a means by which local creative workers and other urban communities or interest groups can establish mutually beneficial interactions. In one of the few studies to explore the effects of CWS on locality (also outside the urban core), however, Chuah (2016) found a lack of civic engagement of coworkers and little integration of CWS with the surrounding neighbourhood. Most coworkers commuted into the neighbourhood while local workers commuted out and coworkers had little knowledge of the local environment or interaction with local businesses or organisations. The CWS also struggled to attract members who were highly transient, and felt no compulsion to develop wider community linkages. Moreover, while some CWS may aim to fulfill similar "outreach" functions to community-based arts spaces, Grodach et al. (2014) found that such spaces often failed to realise their ambitions due to a lack of time, funding and/or other resources. Spaces focussing on artist incubation and career building often failed to consider wider community engagement, while spaces striving for community/neighbourhood *and* artist development often struggled to achieve both because they stretch their resources too far. These findings are salient for CWS, many of which are severely resource and budget constrained (Rus and Orel, 2015).

Finally, the urban literature on mixed neighbourhoods has also shown that strategies to co-locate people of different classes and ethnicities have been myopic in the absence of strategies to ensure meaningful interaction (Bridge et al., 2011). Highly educated but economically insecure creative workers tend not to engage with existing community groups and *vice versa*. Often artists locate in marginal neighbourhoods, but this is typically because of inexpensive space rather than desire to mix socially (Lloyd, 2006). Actively building social connections and strong horizontal networks that facilitate connections across professional and residents and public sector actors is stressed in this literature (Stern and Seifert, 2010; Borrup, 2015). Again, these findings are germane for CWS, particularly for emerging "top down" models.

3.4. Summary

The contributions reviewed indicate different and possibly contradictory activities taking place under the guise of coworking, dependent on coworker motivations, although a pattern appears to be emerging of informal peer-support. CWS do not, however, appear to be "natural" spaces for interaction and knowledge exchange, with evidence pointing towards the mediating role of CWS managers, but it is as yet unclear the extent to which the different approaches influence (or not) outcomes. Integrating CWS into the local urban milieu also poses a number of apparent challenges, particularly for securing wider neighbourhood benefits, and which have not been adequately explored in the literature.

4. Study context

The study was undertaken as part of a wider evaluation of ReCreate (funded under EU INTERREG IVa) which aimed to boost local socio-economic development by transforming city-centre premises into CWS aimed at attracting early stage creative start-ups. Part of the remit was to engage and support local residents, communities and businesses

in creative industries activities.[8] Nine CWS were developed across SE England (Bournemouth, Brighton, Eastleigh, Ipswich, Margate, Medway, Sittingbourne) and two in N France. The paper focuses on UK CWS only.

The project allowed for insight into the early stage development of coworking "communities" in different CWS where a number of coworking "models" were developed [see Appendix A: Table A1]. Some CWS were designed to be highly specific to particular sectors, others were flexible to attract and accommodate different sectors. Most considered a variety of temporary membership options, including P.A.Y.G., although a couple catered for permanent members only. Several implemented a strict application process, with potential members requiring to demonstrate specific coworking "values"; others were far more "open". All CWS engaged in some form of "animation", with some coordinating diverse programmes of (social) events for members and the wider local community, "hybrid" events (such as hackathons), public exhibitions as well as hosting industry workshops/seminars, many open to non-members. CWS were also physically very diverse, ranging from closed, office-type units to large, open plan, multi-use spaces. Some had integrated social spaces, cafes, or gallery spaces that could be opened to the public; others had a small kitchen area for members' use only.

5. Methodology

Q-methodology was used, supplemented by a follow-up survey, researcher site observations and interviews with CWS managers. The objective was to investigate participant viewpoints on the benefits (or dis-benefits) they had derived from their coworking experience, as well as to ascertain whether the CWS organisational/management approach had any influence on these outcomes.

Q-methodology integrates qualitative and quantitative techniques to reveal social perspectives (Webler et al., 2009) and is used for exploring shared attitudes and viewpoints on a particular topic. It involves Q-sorting, a method of data collection that ranks (or sorts) a number of subjective (qualitative) statements and then subjects these rankings to factor analysis. This enables the researcher to summarise the unique viewpoints of each individual into a smaller set of factors representing statistically distinctive groupings of common/shared viewpoints. An advantage of Q-methodology is that it requires a small number of participants as it only needs sufficient numbers to establish distinct factors to then be compared against each other (Watts and Stenner, 2012: 72/73).

The Q-sort procedure was conducted online and nineteen coworkers (at least one from each CWS)[9] were each asked to sort a set of 51 statements about coworking, each on an e-card, according to their level of "agreement" (from -6: "strongly disagree" to $+6$: "strongly agree"). Statements were derived from the literature on coworking, interviews with CWS managers and the objectives of the ReCreate programme. The follow-up survey asked participants to comment on statements about which they held the strongest viewpoints, as well as to ascertain motivations for coworking and CWS usage patterns.

The Q-sort data was analysed using PQMethod, a free software application (Schmolck and Atkinson, 2002) and Principal Component Analysis (PCA) was used to identify factors with a varimax rotation used to maximise the differences between factors (Webler et al., 2009). A four-factor solution was ultimately chosen because this loaded at

---

[9] Users were self-selected. An invitation was sent out to members by CWS managers and those willing to participate completed the Q-Sort.

[8] Although beyond the scope of this paper, the project also aimed to develop a cross-border network of support to facilitate enterprise partnerships between UK and French creative businesses.

least two participants onto each factor (accounting for 64% of the variance and with 17 of the 19 participants loading onto these factors). Each of the four factors (called "groups" hereafter) represents distinctive combinations of benefits (or dis-benefits) taken from the ReCreate project [see Appendix B: Table B1; Appendix C: Table C1]. Interpreting the resulting factors is qualitative and requires the researcher to scrutinise the correlating statements that create the factors and to attribute meaning to each factor, enabling them to be summarised into a narrative which describes the 'world view' of the participants who load onto this factor (Webler et al., 2009).

6. Results and discussion

6.1. Profile of participants

The majority of participants were female (63.2%) and university graduates (84.2%). Most classed themselves either as "sole trader" (57.9%), "pre start-up" (26.3%), or "partnership" (5.3%) and none employed other workers. A range of sectors were represented including Fine Arts, Crafts (textile and jewellery design), Graphic Design, Music, Video, Film, Software and Architecture.

6.2. Barriers to coworking

Corresponding with existing findings (e.g., Foertsch, 2015), the majority of participants (89.5%) also worked elsewhere, due to part/full-time work in other (non-creative) paid employment or having a studio or specialist equipment at home and having to carry out particular activities there. The time participants spent in the CWS also varied considerably. A quarter (26.3%) were not regularly coworking, and reasons included the CWS not being open at weekends; the CWS not being as "open" as it used to be; and not being able to afford to use the CWS more often. Regular users on average used the CWS 1–2 days a week (57.2%), although nearly a quarter (21.4%) used the CWS every day (Table 1).

6.3. Motivations for coworking

Motivations for coworking can be grouped into three main categories (Table 2). Firstly, and consistent with other research (Spinuzzi, 2012; Eurofound, 2014; Foertsch, 2015; Brodel et al., 2015; Merkel, 2015; Blein, 2016), coworking was seen to offer a more productive (less distractive) working environment (than home) and was viewed as a way of (physically and mentally) separating home from work, of establishing a more structured working day and providing the flexibility of being able to set one's own work hours, thus aiding work-life balance. Secondly, professionalisation was important, and using a CWS seen as portraying a more business-like image to potential clients and business partners than would be possible when using a cafe or home-office (Spinuzzi, 2012). Thirdly, was the possibility of meeting other "like-minded" workers facing similar work challenges, both as an antidote to the lack of social contact with fellow workers (Boboc et al.,

Table 1
Number of days a week participants typically use coworking spaces.
Source: own data based on 19 participants.

Time coworking (days/wk)	% regular users (% all participants)
7	21.4% (15.8%)
5	14.3% (10.5%)
2	28.6% (21.1%)
1	28.6% (21.1%)
<1	7.1% (5.3%)
Not regularly using	n/a (26.3%)

Table 2
Key motivations for coworking.
Source: own data/survey.

Independence	Professional work environment	Peer support/networking
"Offers an independent space away from domestic responsibilities to focus." (REC2)	"Gives me a networking and business meeting space" (REC6)	"Social interactions...." (REC15)
"Freedom to work normally 8+ hrs. Keep the mess and creativity confined to a workspace." (REC7)	"Having a professional space for meetings." (REC4)	"Peer support." (REC5)
"Work/life balance…" (REC8)	"Somewhere for clients to meet." (REC14)	"Meeting other people […] discussing pricing/marketing techniques with others in the same field." (REC18)
"Gives me some separation between work and home life which helps me better concentrate." (REC11)	"Showcasing my work" (REC 18)	"Interactions with creative people." (REC1)
"…good to separate work and personal life." (REC13)	"…a more professional work space away from my young family." (REC8)	"I can engage with other artists and see how I can get my work out there." (REC3)
"Away from home." (REC19)		"Interaction" (REC13)
"…Having a space to be creative…" (REC18)		"Meeting new people, sharing skills and ideas." (REC17)
"…dedicated working environment" (REC 15)		

2014) and as a means of gaining access to coworker contacts and opportunities for peer support (Spinuzzi, 2012:40; Colleoni and Arvidsson, 2015; Brodel et al., 2015). Contrary to other studies (Spinuzzi, 2012; Capdevila, 2014) cost reduction was not a key driver for using the CWS as this represented an additional cost (to homeworking) for the majority (Eurofound, 2014).

6.4. Q-sort findings

As discussed in Section 5 (Methodology), each of the four "groups" ("factors") has taken a different mix of benefits (or dis-benefits) from their coworking experience, although there is also some overlap among different groups. The constructed narratives associated with each "group" are presented in Box 1.

6.4.1. Social interaction and reciprocal knowledge sharing

Coworking appears to have had particular functional benefits, improving creativity (4 groups) and positively influencing business development (3 groups), as well as helping improve motivation towards (own) work (2 groups). In accordance with existing research (e.g., Spinuzzi, 2012; Brodel et al., 2015), sharing a workspace with people of a "similar outlook or mindset" was strongly indicated as a key benefit by all except for GROUP 4/Reluctant soloists, who had the opposite experience (discussed below). Mutual peer support appears to have been a particular benefit for GROUP 1/Mentees, who were inspired by the other workers sharing the CWS and strongly benefitted from sharing or developing new ideas with them (Spinuzzi, 2012; Brodel et al., 2015; Blein, 2016). This group displayed similarities to the "gainers" identified by Colleoni and Arvidsson (2015), as coworkers were all "novices", new to business and still learning the ropes as well

<div style="border:1px solid">

Box 1. User groups identified by Q-sort exercise.

GROUP 1: "MENTEES" – distinguishing features of the group are the strong benefits obtained from sharing creative ideas and gaining inspiration from fellow coworkers and the collaborative opportunities the mix of different creative activities and projects in the CWS has afforded them. They acknowledge more benefit to their business development from training activities provided than any other group, but they strongly reject any benefits related to any engagement with (wider) local communities in businesses or projects.

GROUP 2: "NETWORKERS" – outward looking and seeking connections, this group gained much from using CWS for formal and informal opportunities to help expand professional networks. They are distinguished by benefitting from training/workshops/events held to develop international connections, but indicate a limit to the usefulness of formal events for meeting "useful" others. Although strongly endorsing the collaborative opportunities afforded by using a CWS, they reject being inspired by fellow coworkers. They also strongly reject that they have been able to engage with local people or (non-creative) local businesses.

GROUP 3: "MOTIVATORS" – highly business orientated, this group is distinguished by endorsing the positive effect that sharing a CWS with people of a similar work ethic has had on their businesses and in strongly endorsing the positive influence of coworking on motivation towards (own) work as well as the influence of the work atmosphere on their creativity. This group similarly rejects statements concerning wider community engagement in creative businesses or projects.

GROUP 4: "RELUCTANT SOLOISTS" – distinguished by emphatically rejecting statements that using the CWS has helped them work collaboratively or that the mix of other creatives using the CWS has facilitated this, while strongly supporting that coworking has helped them work alone. This group strongly benefitted from organised events held in the social spaces to help broaden professional networks, but although strongly supporting the positive effect on personal motivation towards (own) work, they reject any positive benefits to their businesses. This group also rejects any benefits related to wider community engagement in creative businesses or projects.

</div>

as looking to develop/consolidate their own creative practice and thus heavily reliant on others for guidance and help. Even so, coworkers had limited access to more experienced peers, and while the project programme funded a range of professional development activities and dedicated CWS managers, it is unclear whether this adequately filled the gap of experiential learning, or indeed, what the longer term benefits for coworkers might be.

6.4.2. Collaborative aspirations

Findings concerning the benefits of coworking for "collaboration" were mixed. Two groups (GROUP 1/Mentees and GROUP 2/Networkers) indicated this had been a benefit, but as is discussed below, GROUP 4/Reluctant Soloists emphatically rejected any such benefits deriving from their coworking experience. GROUP 1/Mentees acknowledged the collaborative benefits afforded by the "mix" of different creative activities and projects within the CWS, indicating that a

"complementary diversity" (Liimatainen, 2015) of coworkers but like-mindedness of intent were important conditions (Brodel et al., 2015). A level of diversity within CWS may also be important in bridging to other creative fields and an important means by which coworkers make links to work in related sectors (Ettlinger, 2003; Grodach, 2011). Indeed, several coworkers in the study worked across sectors. In the follow-up survey, half the members in this group reiterated that "collaboration" (or future artistic collaboration) had been the key (business, professional or artistic) benefit of coworking:

> *"Meeting other like-minded people, collaborating and sharing ideas in a supportive environment was without doubt the most beneficial part."* (REC18)

> *"I work collaboratively and shared workspaces provide positive disruption and lots of new opportunities….sharing and collaborating creates innovation!"* (REC17)

Group 2/Networkers appear to have particularly benefited from using CWS as a platform to seek out potential collaborations or partnerships; indeed, one group member described the benefits of using the CWS as "a lab for experiments and development" (REC6). This group was driven by exploration, favouring collaboration as a route to creative innovation (Capdevila, 2014) but also appears to have adopted a more "strategic approach" (Gandini, 2015) to network development for this purpose than GROUP 1/MENTEES.

6.4.3. "Serendipitous encounters" between coworkers

There was an apparent limit to "serendipitous encounters" *a propos* informal conversations taking place with other coworkers (in social or workspaces) which did not help to generate "unexpected but important ideas or actions", nor did these encounters facilitate the development new business or creative ideas. This finding supports the notion that a level of "coordinated serendipity" may be needed to catalyse useful interactions (Spinuzzi, 2012; Surman, 2013; Merkel, 2015; Pierre and Burret, 2014; Liimatainen, 2015). Additionally, only one group (GROUP 4/RELUCTANT SOLOISTS) indicated they had met "useful" people at organised events hosted in CWS. In contrast to Capdevila (2013), encounters seemingly did not benefit groups in helping develop new creative or business ideas, or in finding new business clients, and no group felt they had benefitted to any extent from useful feedback on their work. As Martins (2014) suggests, mediation (careful selection of people and expected behaviours) may be necessary to increase the likelihood of useful interactions between coworkers and external parties at such events. Further, as the project preferenced broader (even international) linkages and exchanges over the development of local ones, there was little evidence that events helped strengthen local ties (Martins, 2014).

6.4.4. CWS as "middleground"? Community linkages and development potential

Despite the broader urban development remit of the project, no group appeared to engage with the local resident community, young people, local unemployed or with other local businesses or organisations in their projects of business ventures. As "top-down" initiatives, seeking to attract new creative businesses, there were few extant linkages between the CWS/coworkers and local communities and these findings indicate that these connections are unlikely to happen by chance and need to be pro-actively developed (Grodach et al., 2014). Although several CWS had public or semi-public social spaces (cafes, galleries or community use space), providing potential exchange between co-workers, residents and other groups, this was seemingly not enough to initiate stronger engagement.

6.4.5. Impact of different CWS management approaches

Finally, there was evidence that different management approaches may have facilitated different outcomes. Of interest is that participants drawn from particular CWS mapped onto particular "groups" ("factors"), indicating that those using particular CWS had derived similar benefits (or dis-benefits).[10] The significance of this finding is elucidated below.

First, only participants from CWS8 mapped onto GP4/RELUCTANT SOLOISTS. This group emphatically rejected statements concerning collaborative opportunities of the CWS and responses to the follow-up survey were illuminating:

> *"I did not find the studio space at XXXX a useful space for collaboration because of the design we were in a room by ourselves and the majority of the time* bring *there was [sic] not many other artists there."* (REC10)

Lacking "critical mass" of local creative industries and looking to attract new creative businesses to the area, the CWS struggled to find members and did not generate many benefits for coworkers (Eurofound, 2014; Chuah, 2016). The CWS manager also adopted more of a "service provider" role (Merkel, 2015:128) and there was little evidence they were able to facilitate constructive interactions among coworkers. A lack of coworkers coupled with a design around individual, self contained studios further hindered opportunities for interaction. This is a reminder that the configuration of physical space is an important element in facilitating interactions (Boboc et al., 2014; Liimatainen, 2015; Fabbri and Charue-Duboc, 2016), but also that the most successful CWS are built around existing communities and not *vice versa*. Rus and Orel (2015) similarly observe that in building first and failing to consider the coworker community, CWS often fail to establish a culture and are soon "reduced to providing subsidized office space" (Rus and Orel, 2015: 1034).

Second, only participants from CWS3 mapped onto GROUP 3/MOTIVATORS. In comparison with CWS4, CWS3 was a "residents-only" workspace for 16 designer-makers, which had no closed-off workspaces. The CWS was managed by a local arts charity with an experienced manager (also a creative practitioner) and was the most highly "curated" in the study, adopting a culture supportive to community building, interaction and knowledge sharing around common values. Members underwent a rigorous application and selection procedure to ensure "fit" with other coworkers (work ethic, business aspirations, willingness to input into the community and a desire to work together, in addition to quality of work) and a CWS culture was promoted by the CWS manager via daily interactions and the enactment of CWS values (Butcher, 2013; Merkel, 2015; Blein, 2016). The CWS manager also took up the role of a "knowledge gatekeeper", identifying synergies between coworkers and actively mediating these; acting very much in a "visionary" role (Merkel, 2015:128). This was reported by the CWS manager as a "nurturing environment" with coworkers encouraged to share experiences and skills (e.g., via self-led workshops) and there was a commonality of purpose reinforced by the manager as demonstrated by the following comments:

> *"The mutual support network that has been created between the residents is worth the studio fee alone."* (REC2)

> "*Having a more professional workplace was my main aim in moving here. The wonderful people I share the studios with and the sup-*

portive creative environment we work in is a wonderful, and now essential, added bonus." (REC8)

Although coworkers did not know each other socially or professionally beforehand, the CWS manager described the development of a tight-knit "community" who worked and got on well (socially) together. This had led to an extremely low turnover rate. In the two years since opening, the CWS had been at capacity and only three workers had left: one moving from the area, and two who were not an appropriate community "fit".

Q-Sort findings indicated this group benefitted only marginally from "collaboration". Again, it would appear knowledge sharing was more informal and voluntarily, motivated by personal practice and business development (Blein, 2016). Nonetheless, the CWS manager cited daily occurrences of peer mentoring which had, in some cases, led to creative experimentation:

> "*because of that sharing of knowledge and because of that support, you start to find glassware and metal coming together and textiles and fashion coming together and people teaching each other techniques that they use in their own practice […] and then being able to experiment with these materials with the guidance of someone that already uses them.*" (CWS3 Manager).

The intensive support of the CWS manager appears to have encouraged the mutual trust required for coworkers to undertake joint projects (Blein, 2016), as evidence was given of formal collaborations, such as a fine art painter and interior designer who had worked together to realise a publicly funded arts project. These joint collaborations were, however, described as 'one-off', time-limited projects or partnerships between particular members. It is highly feasible that participants completing the Q-Sort may not have engaged in these types of collaboration and so did not perceive this as a benefit of their coworking experience, although as observed in other studies, these types of formal project collaborations may not, in fact, be very common (e.g., Spinuzzi, 2012; Boboc et al., 2014; Brodel et al., 2015; Blein, 2016). It may also take time for CWS to evolve from an environment where "novice" workers are motivated by informally sharing and exchanging experiences and resources into a more collaborative work environment (Capdevila, 2014; Colleoni and Arvidsson, 2015). Nevertheless, these findings indicate that it is important for CWS managers to understand coworker motivations and expected benefits from coworking, as different intentions and needs likely lead to different outcomes (Capdevila, 2013).

Of further note is that (small) CWS which develop very close-knit coworker communities, such as CWS3, may need to actively implement strategies to ensure the circulation of new workers and knowledge-flows (Capdevila, 2013; Fuzi et al., 2015). Indeed, the issue of succession was discussed by the CWS manager. Altering community dynamics without jeopardising a favourable environment for coworker interactions is, however, potentially challenging (Brodel et al., 2015). Also, who enforces the circulation of new coworkers and at what point coworkers should be asked to leave the CWS, speaks to fundamental issues concerning CWS governance and to inclusion/exclusion, which may be particularly problematic in smaller cities or rural areas where there may be no alternative workspace options available (as was the case with the project locales). Relatedly, if CWS managers select coworkers based on a particular "fit", this also risks exclusion of particular workers which again may have particular implications for smaller urban areas lacking workspace alternatives.

---

[10] This was not the case for GROUP 1/MENTEES which comprised members drawn from 5 different CWS, although GROUP2/NETWORKERS comprised members from only 2 CWS.

7. Conclusions

7.1. Constructing a place of work

Findings reason that workers used CWS to construct a place of work. Motivations for coworking were strongly driven by the "distinct production logics" (Merkel, 2015: 135) of creative work, including the desire to (physically and mentally) separate home from work-life and achieve a better work-life balance as well as having a more productive, professional work environment (than home). The wish to meet and engage with "like-minded" professionals facing similar work challenges was strongly indicated, both as an antidote to professional isolation and as a way to benefit from coworker knowledge and support. As an alternative to home-working, cost reduction was not a factor, as membership charges represented significant additional costs for participants, precluding some from coworking altogether (Eurofound, 2014; Brodel et al., 2015). A key point is that the typical coworking model does not automatically ensure equality of access or opportunity *per se*, and may be prohibitive particularly for those at an early stage in their careers or business development.[11]

The "added-value" of coworking predominantly lay in sharing a workspace with people who had different and complementary experiences, skill-sets and contacts, but who shared similar values and outlooks. Commonality of intent fostered incipient coworker "communities of work" (Rus and Orel, 2015) allowing more fruitful interactions and exchanges to take place. Coworking also performed a vital peer-learning and mentoring function often denied those engaged in distributed creative production (Capdevila, 2013, 2014; Brodel et al., 2015; Parrino, 2015; Fuzi et al., 2015; Gerdenitsch et al., 2016) with CWS acting as spaces for enhancement and concentration of "social capital" (Ettlinger, 2003; Colleoni and Arvidsson, 2015; Gandini, 2015) for coworkers, many of whom had reduced professional networks and few extant opportunities to develop these. Although coworking potentially complements the "missing middle" (Grugulis and Stoyanova, 2011), access only to other novices may limit learning opportunities and indeed longer-term coworker benefits. Finally, while collaboration was actively sought by some coworkers as a route to creative innovation, this was neither a universal motivation nor benefit. A key insight of this study is that coworkers have multiple and diverse intentions (motivations) and different needs and capabilities which strongly influence the types of interactions sought and the type(s) of knowledge exchange activities undertaken. These factors necessitate much better understanding, particularly regarding the requirements for supporting infrastructures.

7.2. Curating the "Third Space"?

The study substantiates growing evidence that the physical co-location of workers alone is insufficient for generating enhanced interactions among coworkers; that spontaneous knowledge sharing does not "just happen" and Olma's (2012) "serendipity machine" is a myth. Following studies by Merkel (2015), Capdevila (2013, 2014), Pierre and Burret (2014), Parrino (2015), Liimatainen (2015) and others, findings support the notion that the different ways in which CWS are "curated" by their managers, that is; in their choice of coworkers and the composition of CWS membership (i.e., ensuring complementarity of skills and capabilities and compatibility of work attitudes or mindsets);

in their promotion and enactment of particular coworking "values" (culture) and coworking practices (behaviours); as well as in their provision of particular (tailored) engagement activities, have significant implications for the types of interactions and exchanges that develop among coworkers and between coworkers and non-coworkers/external parties.

Much like the conductor of an orchestra, CWS managers play a vital, complex and underestimated role, described as a "highly adaptive, reflective and skilled practice" (Surman, 2013). Managers undertake affective work which includes relationship-builder, mentor and knowledge provider (Fabbri and Charue-Duboc, 2014), but often receive very little in the way of training (Pierre and Burret, 2014). This study has demonstrated that conditions for interaction (knowledge exchange/learning and/or collaborations) may struggle to emerge spontaneously without their intervention. Through "conscious and careful" curation (Surman, 2013), managers ensure (and maintain) a necessary level of "coordinated serendipity" (Liimatainen, 2015; Rus and Orel, 2015). Nevertheless, the notion of "curation" pose significant challenges to the perceived "openness" of CWS, risking exacerbating existing labour inequalities and generating new ones, by excluding those who do not 'fit' with the CWS ethos or existing membership, thereby denying them access to industry networks and knowledge and the ability to actively participate in the labour market (Pratt, 2014:12). This may be of particular significance in smaller cities and semi-urban/rural areas, where no alternative workspaces options exist for workers to choose. As CWS become increasingly important strategies for finding and coordinating work, the governance of these spaces is a significant issue warranting attention (Waters-Lynch and Potts, 2016).

7.3. Limits to "top-down" CWS models

The study cautions against the use of CWS as "quick fix" urban renewal tools (Moriset, 2014; Gandini, 2015) noting particular issues for smaller cities seeking to develop CWS as a means of securing local urban transformation. Firstly, looking to attract new creative businesses to their localities, several CWS struggled to find members and were "reduced to providing subsidized office space" (Rus and Orel, 2015:1034). A key challenge, particularly for smaller cities is achieving a "critical mass" of local users both to ensure coworker benefits and also the (financial) sustainability of the CWS (Brodel et al., 2015; Chuah, 2016). A related concern is that CWS in the study largely acted to relocate existing, home-based businesses to city-centre locations, with a potential negative impact on the vitality of the (neighbourhood) areas losing this activity, somewhat redolent of "creative city" Secondly, and despite an explicit engagement remit, there was little indication that the benefits of coworking reached beyond immediate members or that linkages were established between coworkers and local (resident or business) communities. As "top-down" initiatives, there were few extant connections between coworkers and these communities and, as this study suggests, these need to be pro-actively developed as they are unlikely to happen by chance. Given the issues mentioned above, there may also be an inherent tension between the ability of CWS to provide resources and support for the development of their members on the one hand and their "outreach" capabilities on the other (Grodach et al., 2014). Further, tensions may also materialise between "local/non local" if CWS seek to attract creative businesses and engage people and organisations based outside the neighbourhood, which may weaken rather than strengthen local ties and development opportunities, as was the case in the study (Chuah, 2016). Who benefits from CWS is a key issue which needs to be critically assessed if CWS are to form the focal point for future local urban development efforts.

---

[11] Some CWS allow coworkers pay for access with their skills. An implication of this model is that individuals potentially spend much of their time engaged in work for others rather than developing their own businesses.

7.4. Limitations and future study

The study was inductive and explorative as well as novel in its methodology and confined to particular UK CWS at a particular point

Table A1
Typology of RecReate CWS.
Source: Own calculations.

Workspace	Specialisation	Workspace	Social space	Flexibility	Openness	Knowledge sharing activities	Mgt approach
CWS1	Diverse: mix of arts and digital	Open plan, multi-use space	Activity/events/exhibition space, kitchen area, Meeting rooms (can be hired out)	16 member 'pods' and 4 temp 'hot-desks' plus P.A.Y.G. and hireable meeting room (non-members)	Members and P.A.Y.G. users; community use of hired spaces	Internal and external Regular networking events, local community events, exhibitions	Visionary
CWS2	Targeted: primarily digital, creative media and technology (DCIT)	Open plan, multi-use space	Large open plan area to facilitate interactions	No permanent spaces	Open: anyone can use for free; community use of space encouraged	Internal & external Programme of frequent industry and social events	Visionary
CWS3	Targeted: Designer makers only	Individual units but not closed off	Small kitchen area only. (Large separate room can be hired for workshops/events/projects)	16 permanent members units	Members only (application). (Community use of adjacent hired space)	Internal & external Regular practitioner workshops, biannual open studios	Visionary
CWS4	Targeted: Digital only (games, animation, film making)	Open plan	Kitchen area, open plan "collaboration zone"/event space, hireable meeting room	20 permanent member spaces and P.A.Y.G. 'hot desks'	Members and temporary users Inc. P.A.Y.G.	Internal & external Frequent organised industry networking events bespoke workshops and seminars	Visionary
CWS5	Diverse arts-based including performance	Shared, multi-use rooms	Performance and exhibition/showcasing space, cafe	Mainly permanent	Members only (application)	External: Focus on events and showcasing work	Service provider
CWS6	Targeted: Artist and designer makers	Individual, self-contained studios, pod spaces and desk spaces	Kitchen, gallery space, communal areas	Permanent studios, pods and desks plus part-time 'hot-desks'	Members only. Tiered membership options	Internal & External: Talks, workshops, group critiques, group exhibitions, public exhibitions	Visionary
CWS7	Diverse: arts-based plus designer makers	Limited space for studios and workshops	Sofa and kitchen space; commercial gallery space	No permanent; 10–15 'pop-up' spaces	Open to non-members	Internal & external Weekly 'tuttles', Programme of frequent industry and social events	Visionary
CWS8	Diverse: arts-based including designer-makers	Individual studios (closed) and two open plan studio spaces, split over two floors	Tea room and two adjacent rooms to hire suitable for exhibitions/gallery space	Permanent desks and permanent studio space plus 'hot desk'	Member only	Internal & external Organised networking events, regular exhibitions	Service provider
CWS9	Diverse: arts-based	Individual, office-style workspaces	Large cafe/bar and conference/gallery space	Permanent	Members only	Networking and development programmes	Service provider

Table B1
Q Sort factor analysis.

Q Sort	Factor loadings			
	F1	F2	F3	F4
REC1	0.4093	0.2430	**0.5951X**	−0.2325
REC2	0.1354	0.1961	**0.6231X**	0.4671
REC3	0.2504	0.3826	−0.1243	0.3741
REC4	0.3306	**0.6374X**	0.3343	−0.0374
REC5	0.4175	0.1373	**0.7576X**	0.1536
REC6	0.2406	**0.5198X**	0.2802	−0.2703
REC7	**0.6589X**	0.1529	0.0514	0.3389
REC8	0.5921	−0.0336	0.5931	0.1108
REC9	0.3887	0.0286	0.2969	**0.6254X**
REC10	−0.0469	−0.1090	0.0347	**0.7772X**
REC11	0.0791	0.0326	**0.7650X**	0.0888
REC12	**0.6985X**	0.1111	0.2949	0.1317
REC13	−0.3276	**0.7495X**	0.0548	0.1151
REC14	**0.8215X**	0.1487	0.3732	0.0142
REC15	**0.6690X**	0.4636	−0.1729	−0.0481
REC16	**0.6100X**	−0.0029	0.2173	0.2894
REC17	**0.6203X**	0.4958	0.3503	−0.0023
REC18	**0.7158X**	0.1764	0.4045	0.0092
REC19	**0.7741X**	−0.1381	0.3218	−0.0617
% expl.Var.	26	11	18	9

Note: Factor analysis scores for the four extracted factors against each of the sorts completed. Bold numbers highlighted with an X indicate sorts that load onto the respective factor (defining sorts). Rec3 and Rec8 did not load onto any factor.

in their development, therefore the generalisability of findings are limited. Consequently, several issues raised warrant further research. In particular, the forms of interaction, exchange and value creation taking place in CWS, and the types of facilitative infrastructures required to support these, are not well understood. Longitudinal (qualitative and ethnographic) study is needed to chart the development of individual CWS over time and to observe the evolution of coworker "communities" and working practices in different places and under different management/governance conditions. The extent to which coworking represents an alternative for organising creative work, aligned to ideas of social collectivism and worker wellbeing, deserves further explo-

ration. Similarly, processes of value creation and value capturing within CWS need to be unpicked. Finally, how coworking relates to wider (urban) transformation processes deserves much fuller attention. In particular, whether CWS models have the potential to embed localised forms of creative production, and to engage with and/or integrate local community development and the implications for smaller and less urbanised locations warrant urgent exploration. A distinctly trans-disciplinary approach is necessary if we are to respond to these questions and fully understand the nature of coworking and realise its potential.

Funding

8. Uncited reference

Acknowledgments

Appendix A

See TableA1 .

Appendix B

See Table B1.

Appendix C

See Table C1.

Table C1

Factor arrays for the 4 study factors.

No.	Statement	F1	F2	F3	F4
		Factor array			
1	Using the workspace(s) has had a positive influence on my creativity	3	4	6	4
2	Using the workspace(s) has had a positive influence on my business	5	6	6	0
3	Using the workspace(s) has had a positive influence on my motivation towards my work	3	1	5	5
4	Sharing workspace(s) with people of a similar outlook/mindset has had a positive influence on my creativity	6	6	5	−3
5	Sharing workspace(s) with people with a similar work ethic has had a positive influence on my business	2	2	4	−1
6	I have shared my ideas with others in the workspace(s)	5	−1	2	0
7	Using the workspace(s) has helped me work collaboratively	1	5	3	−5
8	The design of the workspace(s) has helped me work collaboratively	−1	−2	3	−6
9	The management of the workspace(s) has helped me work collaboratively	0	1	2	−6
10	The mix of creative workers, activities and projects sharing the workspace(s) have helped me work collaboratively	4	−1	−1	−4
11	The mix of creative activities and projects sharing the workspace(s) have helped me come up with new ideas	1	2	0	1
12	Using the workspace(s) has helped me concentrate and work alone	−1	−6	0	6
13	The design of the workspace(s) has helped me concentrate and work alone	−2	−5	2	3
14	I have been inspired by other artists/creatives who use the workspace(s)	6	−3	3	−3
15	The atmosphere in the workspace(s) is very important for my creativity	1	−2	4	4
16	I use the workspace(s) for meetings with clients and partners	−1	3	3	1
17	I use social space(s) for meetings with clients and partners	−1	2	−1	1
18	Informal conversations in the workspace(s) have led to unexpected but important ideas or actions	2	0	1	1
19	Informal conversations in the social space(s) have led to unexpected but important ideas or actions	3	−2	1	2
20	Social space(s) have helped me to network informally with other artists/creatives	4	4	0	3
21	Organised events held in social space(s) have helped me find new clients	0	−1	−2	−4
22	Organised events held in social space(s) have helped me meet other artists/creatives	3	4	0	5
23	My business ideas have developed after encounters with other people in social space(s)	2	1	−1	−1
24	My creative ideas have developed after encounters with other people in social space(s)	2	0	0	3
25	My network of useful people has grown through participating in/attending organised events in social space(s)	2	1	2	6
26	Using ReCreate space(s) for events, exhibition, workshops or retail has generated useful feedback	0	3	−1	3
27	Using Recreate space(s) for events, exhibition, workshops or retail has led to important (business) contacts	0	2	1	−1
28	Using workspace(s) for events, exhibition, workshops or retail have led to sales	−2	−3	4	−3
29	I have used the workspace(s) for creative projects that have engaged the local community	−3	1	1	2
30	I have been involved in events/creative projects outwith the workspace(s) that have engaged the local community	1	0	1	2
31	My creative activities in the workspace(s) have engaged people from the community in innovative ways	−1	−2	1	1
32	My creative activities in the workspace(s) have engaged people that are new to interactions with art and artists	−2	2	0	2
33	My engagement with people from the local community has led to commercial opportunities for me	0	−4	−1	−2
34	My commercial activities/business ventures have led to community-based projects	−2	−1	−4	−5
35	Non-commercial/community-based projects are as important to me as commercial/business ventures	1	0	−2	4
36	I have engaged local unemployed people in my creative projects/business	−3	−3	−4	0
37	I have engaged local businesses in my creative projects/business	1	−4	−5	−3
38	I have engaged students or graduates in my creative projects/business	−1	0	0	1
39	I have engaged local residents in my creative projects/business	0	−1	−3	1
40	My creative projects have improved the local built environment	−3	−4	−3	−1
41	Training/workshops/events held at the workspace(s) have helped me develop my international networks and connections	−2	5	−2	−2
42	Workshops/events held at the workspace(s) have helped me develop international creative partnerships	−3	3	−6	−2
43	Workshops/events held at the workspace(s) have helped me develop my business plan and growth strategy	4	0	2	−4
44	Retail opportunities within the workspace(s) have helped me develop international creative partnerships	−5	0	−4	−2
45	Retail opportunities within the workspace(s) have helped me develop my international networks and connections	−4	−3	−3	−2
46	Retail opportunities within the workspace(s) have helped me develop my business plan and growth strategy	−4	−5	−1	0
47	International connections I have made through events/workshops/projects/retail opportunities have helped me with product innovation	−6	−1	−2	−1
48	Events/workshops/projects/retail opportunities have enabled me to develop links with international artists/creatives	−4	3	−3	−1
49	International connections I have made through events/projects/retail opportunities have helped me with my business plan and growth strategy	−5	−2	−5	−1
50	International connections I have made through events/projects/retail opportunities have helped me develop an international outlook for my business plan and growth strategy	−6	1	−2	−1
51	My enterprise/project does not really lend itself to international activity	0	−6	−6	0

References

Amin, A., Cohendet, P., 2004. Architectures of Knowledge. Firms, Capabilities, and Communities. Oxford University Press, Oxford.

Amin, A., Roberts, J., 2008. Community, Economic Creativity and Organization. Oxford University Press, Oxford.

Brown, J.S., Duguid, P., 1991. Organizational learning and communities of practice: toward a unified view of working, learning, and innovation. Organ. Sci. 2 (1), 40–57.

Banks, M., Lovatt, A., O'Connor, J., Raffo, C., 2000. Risk and trust in the cultural industries. Geoforum 31 (4), 453–464.

Bathelt, H., Malmberg, A., Maskell, P., 2004. Clusters and knowledge: local buzz, global pipelines and the process of knowledge creation. Prog. Hum. Geogr. 28 (1), 31–56.

Borrup, T., 2015. Creativity in Urban Placemaking: Horizontal Networks and Social Equity in Three Cultural Districts (Doctoral Thesis). Antioch University.

Boschma, R.A., 2005. Proximity and innovation: a critical assessment. Reg. Stud. 39, 61–74.

Botsman, R., Rogers, R., 2011. What's Mine Is Yours. Collins, New York.

Blein, A., 2016. Le Coworking., Un Espace Pour Les Transactions Hors Marché? La Valorisation Des Réseaux Sociaux Pour Travailleurs Indépendants. Réseaux 2 (196), 147–176.

Boboc, A., Bouchareb, K., Deruelle, V., Metzger, J.-L., 2014. Le Coworking: Un Dispositif Pour Sortir de L'isolement ?. SociologieS

Brodel, D., Disho, S., Pibal, F., 2015. Alps-Adria Coworking. Empiric Survey about the Status Quo and Potential of the Coworking Concept in the Alps-Adriatic Region.

Brinks, V., Schmidt, S., 2015. Global knowledge communities in temporary space. In: Paper Presented at Transience and Permanence in Urban Development (TPUD), University of Sheffield, Sheffield, January 14–15.

Bridge, G., Butler, T., Lees, L. (Eds.), 2011. Mixed Communities: Gentrification by Stealth?. Policy Press, Bristol.

Butcher, T., 2013. Coworking: locating community at work. In: Proceedings of the 27th Annual Australia New Zealand Academy of Management (ANZAM) Conference, Hobart, 4–6 December.

Capdevila, I., 2013. Knowledge Dynamics in Localized Communities: Coworking Spaces as Microclusters. Available at SSRN: <http://ssrn.com/abstract=2414121> (accessed 6/6/16).

Capdevila, I., 2014. Different Inter-Organizational Collaboration Approaches in Coworking Spaces in Barcelona. Available at SSRN: <http://ssrn.com/abstract=2502816> (accessed 6/6/16).

Chuah, V., . [SPACE NEEDED]2016. Beyond the Core: The Role of Co-working Spaces in Local Economic Development (Masters Thesis). Columbia University. Available at: https://academiccommons.columbia.edu/catalog/ac:200240 (accessed 1/3/17).

Clifton, N., Crick, T., Fuzi, A., 2016. New Economic Models for, and from, Co-Working. Final Report, NEMODE. RCUK.

Cohendet, P., Grandadam, D., Simon, L., 2010. The anatomy of the creative city. Ind. Innov. 17 (1), 91–111.

Cohendet, P., Grandadam, D., Simon, L., Capdevila, I., 2014. Epistemic communities, localization and the dynamics of knowledge creation. J. Econ. Geogr. 14 (5), 929–954.

Colleoni, E., Arvidsson, A., 2015. La partecipazione dei giovani al mercato del lavoro: il ruolo dei co-working spaces per i giovani freelance. In: Manzo, L.K.C. (Ed.), Mi Generation Il Piano Di Governance Delle Politiche Giovanili Della Città Di Milano. Comune di Milano, Milano, p. 2013–2014.

Coworking wiki, n.d. Getting Started. Available at <http://wiki.coworking.org/w/page/16583957/Space%20Catalyst%3A%20Getting%20Started> (accessed 6/6/16).

Currid, E., 2007. The Warhol Economy: How Fashion, Art, and Music Drive New York City. Princeton University Press, Princeton, NJ.

DeGuzmann, G.V., Tang, A.I., 2011. Working in the "Unoffice". A Guide to Coworking for Indie Workers, Small Businesses, and Nonprofits. Night Owls Press, San Francisco.

Ettlinger, N., 2003. Cultural economic geography and a relational and microspace approach to trusts, rationalities, networks, and change in collaborative workplaces. J. Econ. Geogr. 3 (2), 145–171.

Eurofound, 2015. New Forms of Employment. Publications Office of the European Union, Luxembourg.

Eurofound, 2014. New Forms of Employment Coworking, Spain. Publications Office of the European Union, Luxembourg.

Fabbri, J., Charue-Duboc, F., 2016. Les espaces de coworking. Nouveaux intermédiaires d'innovation ouverte?. Revue Française de Gestion 42 (254), 163–180.

Fabbri, J., Charue-Duboc, F., 2014. Exploring the everyday life of entrepreneurs in a coworking space. In: Presented at XXIII conférence annuelle de l'AIMS, Rennes, 26–28 May.

Foertsch, C., 2017. First Results of the 2017 Global Coworking Survey. Deskmag [online]. Available at <http://www.deskmag.com/en/the-complete-2017-coworking-forecast-more-than-one-million-people-work-from-14000-coworking-spaces-survey> (accessed 23/3/17).

Foertsch, C., 2015. Global Coworking Survey 2015/16. Deskmag [online]. Available at <http://www.deskmag.com/en/first-results-of-the-new-global-coworking-survey-2015-16> (accessed 6/6/16).

Foertsch, C., Cagnol, R., 2013. The History of Coworking in a Timeline. Available at: <http://www.deskmag.com/en/the-history-of-coworking-spaces-in-a-timeline> (accessed)

Fuzi, A., Clifton, N., Loudon, G., 2015. New spaces for supporting entrepreneurship? Co-working spaces in the Welsh entrepreneurial landscape.. In: Proceedings of the 8th International Conference of Entrepreneurship, Innovation and Regional Development, Sheffield, UK, June 18–19. pp. 309–318.

Florida, R., 2002. The Rise of the Creative Class. Basic Books, New York.

Florida, R., 2005. Cities and the Creative Class. Routledge, New York.

Garrett, L.E., Spreitzer, G.M., Bacevice, P.A., 2014. Co-constructing a sense of community at work: the emergence of community in coworking spaces. Acad. Manage. Proc. 1015–1020.

Gandini, A., 2015. The rise of coworking spaces: a literature review. Ephemera 15 (1), 193–205.

Gerdenitsch, C., Scheel, T.E., Andorfer, J., Korunka, C., 2016. Coworking spaces: a source of social support for independent professionals. Front. Psychol. 7, 581.

Gerhard, U., Hoelscher, M., Wilson, D., 2017. Introduction. Inequalities in the creative city: a new perspective on an old phenomenon. In: Gerhard, U., Hoelscher, M., Wilson, D. (Eds.), Inequalities in Creative Cities: Issues, Approaches, Comparisons. Palgrave Macmillan, New York, pp. 3–14.

Gertler, M.S., 2008. Buzz without being there? Communities of practice in context. In: Amin, A., Roberts, J. (Eds.), Community, Economic Creativity, and Organization. Oxford University Press, Oxford and NY, pp. 203–226.

Gertler, M.S., 1995. 'Being there': proximity, organization, and culture in the development and adoption of advanced manufacturing technologies. Econ. Geogr. 71 (1), 1–26.

Grabher, G., 2001. Ecologies of creativity: the village, the group, and the heterarchic organisation of the British advertising industry. Environ. Plan. A 33 (2), 351–374.

Grodach, C., 2011. Art spaces in community and economic development: connections to neighborhoods, artists, and the cultural economy. J. Plan. Educ. Res. 31 (1), 74–85.

Grodach, C., Foster, N., Murdoch, J., 2014. Gentrification and the artistic dividend: the role of the arts in neighborhood change. J. Am. Plan. Assoc. 80 (1), 21–35.

Grugulis, I., Stoyanova, G., 2011. The missing middle: communities of practice in a freelance labour market. Work Employ Soc. 25 (2), 342–351.

Hutton, T., 2017. The cultural economy of the city: pathways to theory and understanding inequality. In: Gerhard, U., Hoelscher, M., Wilson, D. (Eds.), Inequalities in Creative Cities: Issues, Approaches, Comparisons. Palgrave Macmillan, New York, pp. 15–40.

Jones, D., Sundsted, T., Bacigalupo, T., 2009. I'm Outta Here: How Co-Working Is Making the Office Obsolete. Not an MBA Press, Austin.

Knorr-Cetina, K., 1999. Epistemic Cultures: How the Sciences Make Knowledge. Harvard University Press, Cambridge, MA.

Kratke, S., 2012. The Creative Capital of Cities: Interactive Knowledge Creation and the Urbanization Economies of Innovation. John Wiley & Sons, Chichester.

Land, C., Otto, B., Böhm, S., 2012. Creative community or co-mutiny? Practices, positions and political potentials in coworking spaces. In: Presented at 6th Art of Management and Organization Conference, 4th–7th September. University of York.

Lange, B., 2011. Re-scaling governance in Berlin's creative economy. Cult. Unbound 3, 187–208.

Lave, J., Wenger, E., 1991. Situated Learning. Legitimate Peripheral Participation. Cambridge University Press, Cambridge.

Leforestier, A., 2009. The Co-Working Space Concept. CINE Term project.

Leighton, P., 2015. Future Working: The Rise of Europe's Independent Professionals (iPros). Report for the European Forum of Independent Professionals.

Leslie, D., Catugnal, J.P., 2012. Social justice and the creative city: class, gender and racial inequalities. Geogr. Compass 6 (3), 111–122.

Liimatainen, K., 2015. Supporting Inter-Organizational Collaboration in Coworking Clusters: The Role of Place, Community and Coordination (Masters Thesis). Aalto University.

Lindkvist, L., 2005. Knowledge communities and knowledge collectivities: a typology of knowledge work in groups. J. Manage. Stud. 42 (6), 1189–1210.

Lloyd, R., 2006. Neo-Bohemia: Art and Commerce in the Postindustrial City. Routledge, New York.

Lloyd, R., 2004. The neighborhood in cultural production: material and symbolic resources in the New Bohemia. City Commun. 3, 343–372.

Mason, C., Reuschk, D., Syrett, S., Van Ham, M. (Eds.), 2016. Entrepreneurship in Cities. Neighbourhoods, Households and Homes. Edward Elgar Publishing, Cheltenham.

Markusen, A., Gadwa, A., 2010. Arts and culture in urban or regional planning: a review and research agenda. J. Plan. Educ. Res. 29 (3), 379–391.

Martins, J., 2014. Manufacturing encounters: events, social interaction, and neighborhood space in 'Tech City', London. Sociologia Urbana e Rurale 105, 65–83.

McRobbie, A., 2016. Be Creative: Making a Living in the New Culture Industries. John Wiley and Sons, Chichester.

Merkel, J., 2015. Coworking in the city. Ephemera 15 (1), 121–139.

Mommaas, H., 2009. Spaces of culture and economy: mapping the cultural creative cluster landscape. In: Kong, L., O'Connor, J. (Eds.), Creative Economies, Creative Cities: Asian-European Perspectives. Springer, Dordrecht, pp. 45–60.

Moriset, B., 2014. Building new places of the creative economy. The rise of coworking spaces. In: Presented at 2nd Geography of Innovation International Conference, Utrecht, January 23–25. Springer.

Oakley, K., O'Connor, J., 2015. Culture and the City. In: Oakley, K., O'Connor, J. (Eds.), Routledge Companion to the Cultural Industries. Routledge, Abingdon, pp. 201–211.

O'Callahan, C., 2010. Let's Audit Bohemia: a review of Richard Florida's 'creative class' thesis and its impact on urban policy. Geogr. Compass 4, 1606–1617.

Oldenburg, R., 1989. The Great Good Place. Cafés, Coffee Shops, Community Centers, Beauty Parlors, General Stores, Bars, Hangouts, and How They Get You through the Day. Paragon House, New York.

Olma, S., 2012. The Serendipity Machine. A Disruptive Business Model for Society 3.0. Lindonk & De Bres, Amersfoort.

Parrino, L., 2015. Coworking: assessing the role of proximity in knowledge exchange. Knowl. Manage. Res. Pract. 13, 261–271.

Pierre, X., Burret, P., 2014. Animateur d'espaces de coworking, un nouveau métier?. Entreprendre & Innover 4 (23), 20–30.

Pratt, A., 2014. Putting knowledge in (its) place: knowledge transfer/exchange and clustering. In: Working Paper No. 5. Creative Works London, London.

Reuschke, D., Mason, C., 2016. Urban home-based businesses: how distinct are the businesses and their owners?. In: Mason, C., Reuschk, D., Syrett, S., Van Ham, M. (Eds.), Entrepreneurship in Cities. Neighbourhoods, Households and Homes. Edward Elgar Publishing, Cheltenham, pp. 223–248.

Rus, A., Orel, M., 2015. Coworking: a community of work. Teorija in Praksa 52 (60), 1017–1244.

Schmidt, S., Brinks, V., Brinkhoff, S., 2014. Innovation and creativity labs in Berlin. Organizing temporary spatial configurations for innovations. Zeitschrift für Wirtschaftsgeographie 58 (4), 232–247.

Schmolck, P., Atkinson, J., 2002. PQMethod Software and Manual Version 2.11. Available at: <http://www.lrz-muenchen.de/~schmolck/qmethod/> (accessed 6/6/16).

Scott, A., 2000. The Cultural Economy of Cities. Sage, London.

Shead, S., 2015. WeWork Opens Largest UK Startup Space in Tech City. Techworld [online] available at: <http://www.techworld.com/news/startups/wework-opens-largest-uk-startup-space-in-tech-city-3618259/> (accessed 6/6/16).

Silicon Sentier, 2009. La Cantine: Self-evaluation and Assessment of Potential Concept Expansion of the "La Cantine by Silicon Sentier" Innovation Platform.

Silver, D., Miller, D., 2012. Contextualising the artistic dividend. J. Urban Aff. 35 (5), 591–606.

Spinuzzi, C., 2012. Working alone together coworking as emergent collaborative activity. J. Bus. Technol. Commun. 26 (4), 399–441.

Stern, M., Seifert, S., 2013. Cultural Ecology, Neighbourhood Vitality and Social Well-being: A Philadelphia Project. CultureBlocks Final Research Report. SIAP & TRF, Philadelphia.

Stern, M., Seifert, S., 2010. Cultural clusters: the implications of cultural assets agglomeration for neighborhood revitalization. J. Plan. Educ. Res. 29 (3), 262–279.

Surman, T., 2013. Building social entrepreneurship through the power of coworking. Innov.: Technol. Gov. Global. 8 (3-4), 189–195.

Torre, A., Rallet, A., 2005. Proximity and localization. Reg. Stud. 39, 47–59.

Van Heur, B., 2010. Small cities and the geographical bias of creative industries research and policy. J. Policy Res. Tour. Leisure Events 2 (2), 189–192.

Waters-Lynch, J., Potts, J., 2016. The Social Economy of Coworking Spaces: A Focal Point Model of Coordination. Available at SSRN: <http://ssrn.com/abstract=2770874> (accessed 6/6/16).

Waters-Lynch, J.M., Potts, J., Butcher, T., Dodson, J., Hurley, J., 2015. Coworking: A Transdisciplinary Overview. Available at SSRN 2712217 (accessed 6/6/16).

Watts, S., Stenner, P., 2012. Doing Q Methodological Research. Theory, Method and Interpretation. Sage, London.

Webler, T., Danielson, S., Tuler, S., 2009. Using Q Method to Reveal Social Perspectives in Environmental Research. Social and Environmental Research Institute, Greenfield, MA.

Wenger, E., McDdermott, R., Snyder, W.M., 2002. Cultivating Communities of Practice. A Guide to Managing Knowledge. Harvard University Press, Cambridge, MA.