Sheffield Hallam University

A Sheffield Hallam University thesis

Contemporary knowledge workspaces: a Lefebvrian case study exploring provider and user perspectives

Ian Ellison

A thesis submitted in partial fulfilment of the requirements of Sheffield Hallam University for the degree of Master of Professional Studies

April 2021

i. Abstract

In this study, participant-led photography was utilised to explore socially constructed notions of 'what mattered about workspace' with providers and users of two very different workspace case studies in London: a new contemporary office space of an established professional services organisation, and a coworking space for ethical business start-ups. The inductive findings were then considered using Lefebvre's spatial triad as an analytic framework.

The study sought to set aside conventional perspectives from the workspace design and management body of knowledge, to explore whether the qualitative visual research technique called participant-led photography, combined with a Lefebvrian reading of the findings, offered insights into how 'knowledge workers' understand, feel about and use their organisational workspaces.

A further aim was to explore ways to practically engage with Lefebvrian thinking. If this were possible, Lefebvre's significant yet esoteric contributions to spatial theory might be better understood and valued more widely in the field of workspace design and management, conceivably benefitting the working lives of many people.

The evidence suggests that this visual research method yields diverse topics and issues not typically surfaced through more traditional workspace design and management research approaches. It shows how intrinsic workspace is to our working lives, and so advocates a stronger link between workspace and organisation theory and practice. It also encourages further application of novel research approaches in the discipline.

By embracing Lefebvre's notion of space as socially produced, the case study evidence also suggests that 'space-making' (foregrounding the management of built facilities) and 'place-making' (enabling communities of people; akin to urban design's 'placemaking') can be regarded as contrasting approaches to the production of knowledge workspace, which can afford qualitatively different experiential outcomes.

Engaging with Lefebvre in this way is less about workspace judgements, and more about opening up possibilities to holistically critique organisational context and appropriateness. Theoretically, by openly inviting engagement with Lefebvre's ideas, it extends workspace theory beyond Cartesian understandings of physical objects in geometric space, toward Kantian notions of workspace as lived experience, acknowledging that the spatial and the social are irrevocably and politically intertwined.

The study demonstrates an opportunity to positively reframe the often-polarised debate surrounding workplace provision. It is exploratory in nature and makes no claims to any universally valid findings. Instead, its contribution is in showing new possibilities through alternative workspace analyses and research approaches.

ii. Declaration

1. I have not been enrolled for another award of the University, or other academic or professional organisation, whilst undertaking my research degree.

2. None of the material contained in the thesis has been used in any other submission for an academic award.

3. I am aware of and understand the University's policy on plagiarism and certify that this thesis is my own work. The use of all published or other sources of material consulted have been properly and fully acknowledged.

4. The work undertaken towards the thesis has been conducted in accordance with the SHU Principles of Integrity in Research and the SHU Research Ethics Policy.

5. The wordcount of the portfolio is 30,679 words (not including bibliography and appendices).

Name	Ian Ellison
Date	April 2021
Award	MProf
Faculty	Sheffield Business School
Director of Studies	Dr Paul Wyton

iii. Contents

iv. Preface

I started this research journey a decade ago. At the time I was as a senior lecturer at Sheffield Hallam University, joining the 2011 cohort of Sheffield Business School's doctoral DBA programme. Initial progress led to a sabbatical in summer 2015 to complete my analysis and produce a draft thesis. Unfortunately, I didn't achieve these aims. In hindsight I had taken the sabbatical too early, my judgement impaired by my eagerness to submit. The following year I left Hallam to develop my own business interests, so I began this research journey within academia and conclude it as a commercial business owner.

Early in the programme I remember the programme leader – the inimitable Murray Clark – suggesting when attempting a doctorate not to move house, start a new job or have any kids. Since 2011, I have moved twice, co-founded a workplace change consultancy, and become the father of a wonderful young girl. One last, determined push to finish at the start of 2020 was almost immediately upended by the coronavirus pandemic and its ensuing personal and professional challenges. It's taken me a long time to come to terms with the fact that Murray was right: you can't have your cake and eat it. Something had to give, and it was the doctorate. Despite years wrestling with a proud ego insisting otherwise, some things are just more important. For me, aspiring to be a half-decent dad sits above everything else, and you only get one shot at some things. So now is not the time for excuses or regret. We are where we are, and this portfolio concludes a decade of unfinished business.

The MProf is offered as an alternative 'exit' from the doctorate: a way to achieve a level seven academic qualification rather than nothing. This move might pre-empt or follow field research and analysis, depending on candidate progress. In my case, it follows, so this thesis presents a coherent research project, complete with contributions to theory and practice. To fulfil the MProf assessment criteria, I identify chapters 2 and 3 as *substantially reworked* LMOT[i] and RDE[ii] assignments respectively, in accordance with requirements. I thank the reader in advance for taking this all on board.

---

[i] DBA assignment two: advanced management module one, which presents the critical evaluation of the subject area – 6500 words.

[ii] DBA assignment three: critical review of the theoretical perspective, research methodologies and methods appropriate – 6500 words.

v. Terminology – workspace and/or workplace?

Workspace and workplace are common and indeed related terms that have different interpretations. They are polysemes – words that have come to have multiple meanings. From a workspace design and management perspective, a typical understanding is of workplace as "a general term for the entire physical environment for work", whereas "workspace [is] the space where the employee sits (mostly) when in the office" (Brill and Weidemann 2001:17). In other words, workplace is *spatial*, a container for lots of different workspaces. Yet from other organisational perspectives, such as organisation development, workplace might be viewed less in spatial and more in *cultural* terms – the enabling *human* working environment. More philosophically, others suggest a *qualitative* difference: "undifferentiated space becomes place as we get to know it better and endow it with value" Tuan (1977:6) – here, place is social space. To confuse things further, because Lefebvre recognises social space as an entirely social product, and, given there isn't a direct French translation for this English notion of 'place', his conceptions of space seem equitable to Tuan's place!

It is important to appreciate these differing interpretations. Consequently, my own use of terminology in this thesis is careful and deliberate. Through this research, I have – like Tuan – come to consider (work)space as 'empty', and (work)place as 'full': place necessarily involves people, whose subesquent actions influence and are influenced by culturally appropraite, socially-constructed meaning. In short, space plus culture equals place. This is what Dourish (2006:299) refers to as the 'layer-cake model', "where 'space' describes geometrical arrangements that might structure, constrain, and enable … 'place' denotes the ways in which settings acquire recognizable and persistent social meaning". Clearly, this isn't the only reading of the interrelationship, but it is the one I have found most useful to embrace in my own professional work.

That said, to keep things as straightforward as possible, and to echo Lefebvre, I have elected to use 'space' and 'workspace' throughout this thesis, up until the point in the analysis where a qualitative difference is warranted according to the research evidence. It then becomes valuable to use space and place, to both highlight differences between the case-settings, and to make the practical contribution of this thesis explicit: 'space-making' and 'place-making' as intentionally different acts of knowledge workspace production.

vi. Acknowledgements

For Violet

I tried to get this done while you were too young to remember. It didn't quite turn out like that, but I hope you'll look back and agree that we still had plenty of fun and adventures along the way…

and for Claire

Thank you for patiently enduring a decade of scholarly narcissism. You're right – the countless hours invested had to amount to something, even if I'm coming home with the Bendy Bully and not the speedboat. Oh well. There's far more to life…

chapter one

introduction

1. Introduction

This chapter introduces the study and provides sufficient context for what follows. It articulates what it is about, why it is relevant and important, and briefly introduces how I conducted research accordingly. It conveys my own interest in this topic, which is reflexively significant, and finally introduces my research position and questions.

1.1   Purpose

This is a study about workspace. More specifically, it considers contemporary office workspace, its provision for, and use by 'knowledge workers': people whose jobs involve handling or using information rather than manual or production work[3]. It is based on qualitative empirical research gathered with seventeen participants in two organisational case-settings, using a visual research method called participant-led photography to promote conversational interview data. It then employs Henri Lefebvre's notions of spatial production and his spatial triad as a means of analysis and critique. Whilst many locate Lefebvre at the nexus of the spatial turn in the social sciences, within workspace design and management disciplines his theories (and more specifically their empirical application) remain – somewhat paradoxically – relatively unknown and undertheorized, save for a minority of architectural literature.

I found this odd enough to warrant further investigation, and subsequently recognised an opportunity for an original research contribution. I found Lefebvre and his perspectives fascinating, and so, became committed to explore whether such esoteric work could offer insights to what is ultimately a practically oriented discipline that impacts the working lives of many. I suspected a Lefebvrian approach might afford a novel way to reframe and critique the seemingly perennial challenge of differing workspace expectations and perceptions, and the often-contested nature of workspace provision and use. However, as Moravánszky et al. (2014:17) note, "taking Lefebvre as a starting point for research and design is thus still an endeavour and an adventure, and an expedition into unknown fields." I can now attest to this: the findings offer fascinating insights that have challenged my own preconceptions of workspace provision, and also potentially challenge other dominant workspace design and management perspectives.

---

[3] Coined independently by Drucker and Machlup in 1960, 2005 Eurostat figures suggested almost half the UK working population is in 'knowledge-based industries' (Greene and Myerson, 2011:19).

1.2   Professional relevance

For over twenty years I have worked in and around the facilities management (FM) profession, part of the built environment industry responsible for the design and management of organisational workspace. First as a practitioner, then an academic, and now as director of a workplace change consultancy, I have spent over two decades working, educating, researching and consulting in and around this relatively young and unsung discipline. Definitions of FM abound, new and old, but "ultimately, the practice of FM is concerned with the delivery of the enabling workplace environment – the optimum functional space that supports the business processes and human resources" (Then, 1999:469). FM and workspace are therefore intrinsically linked, operationally and academically. In my current role I am directly involved with workspace provision: I enable individuals and organisations to make more informed and competent workspace decisions and changes.

This is important, because organizations exist and work gets done in physical space. Furthermore, organizational workspace changes over time, for various reasons. In etymological terms, the enduring notion of 'work' as a location may be an (especially British) derivation from 'works' as "a place or premises in which industrial or manufacturing processes are carried out" (Lexico.com, online). But for many knowledge workers, whose work is dependent on "applying theoretical knowledge and learning in an unpredictable culture of collaboration, exploration, autonomy and initiative" (Greene and Myerson, 2011:19), no longer being tethered to a specific locality means their work activities can occur in a range of locations, within what Felstead et al. (2005) identify as personal, bespoke 'workscapes'. Whatever the organizational context, we tend to associate particular professional roles with the responsibility for workspace decisions: those involved with its provision, including architects, designers and FM, and of course clients – typically senior organisational leaders – making decisions about what should and will be provided.

However, what we don't so readily recognise – and certainly not in the same vein – is that we *all* influence workspace, to varying degrees, in the decisions we make about how we use it. Albeit on a smaller, more human scale – setting a work-setting up as we like it, storing our belongings, displaying pictures of loved ones and so on – whatever helps us work the way we prefer, both individually and in groups. We consciously and unconsciously modify what we often perceive to be 'our' space, for specific reasons, both transiently and more permanently. De Certeau (1984) might consider the former as

organizational *strategies* and the latter personal *tactics* of spatial manipulation. From this perspective, these organizational and personal spatial practices are unavoidably intertwined.

It is at the intersection of these different practices and their resultant consequences where we often learn a great deal about the significance of workspace per se, and also the negotiation and management of spatial outcomes (e.g., Donald, 1994; Halford, 2004; Taylor and Spicer, 2007; Price and Fortune, 2008 etc.). It seems clear then that *workspace matters*. It matters to us as users, to those who provide it, and to organizations. It might matter at different scales, from the individual to the collective, in different ways, for different reasons. But it most definitely matters, sometimes viscerally.

Consequently, the attention that workspace attracts regularly transgresses specific organizations and those responsible for its provision. If provoked or invited, we almost all have something to say about workspace, particularly when we are affected by workplace change. This is clearly evidenced by the ongoing (and often satirical) debate in mainstream media about workspace. For example Burkeman, writing for the Guardian in November 2013, condemned open-plan office design as "devised by Satan in the deepest caverns of hell", basing his argument on peer-reviewed scientific evidence that it negatively affects motivation, stress, and concentration (Kim and De Dear, 2013). Alternatively, Paxman, again writing for the Guardian in September 2014, bitterly denounced open-plan workspace, this time emphasizing power, status and workforce exploitation akin to Baldry's (1999) equally unrelenting academic condemnation framed in Labour Process Theory terms.

Such attacks on contemporary workspace – and on specific design elements like 'open-plan' and 'hot-desking' – don't surprise me. I have witnessed them many times first-hand, and I would be surprised if any workspace or FM professional can't in some way relate to this. But what really fascinates me is the emotional outpouring of ambivalent opinion, for example in the comments that follow articles like Burkeman and Paxman's; in the way workspace 'thought leaders' seem compelled to publicly refute such mainstream critique; or in the way professional discussions regularly become anecdotally contested and far from rational when workspace issues are raised. So, workspace certainly seems to matter, but how do we step beyond this assertion to learn more?

1.3   Theoretical relevance

Workspace providers typically take an objective perspective, seeking to evidence and justify why particular design and management approaches are more beneficial than others, often in economic (efficiency and effectiveness) and cultural (brand expression) terms (Duffy, 2009; Dale and Burrell, 2008). The roots of these contemporary workspace endeavours can be traced back to the 1960s, if not before (Van Meel, 2011; Saval, 2014). Yet at their core remains the problematic of knowledge worker productivity. FM and workspace providers seem perpetually on a quest for the holy grail: to be able to prove their organisational value in positively influencing the diverse and often intangible outputs of this notoriously heterogeneous demographic. Yet whilst productivity in terms of widgets on a production line can be measured easily, it is far harder to evidence meaningful impact when the outputs involve thoughts, conversations and decisions.

More critical workspace perspectives however invoke a range of alternative arguments, often based on very different philosophical (and/or political) positions. Such views articulately expose the need to more fully consider workspace provision (e.g., Kornberger and Clegg, 2004; Taylor and Spicer, 2007; Dale and Burrell, 2008). Acknowledging both perspectives, one can feel like a liminal observer of antagonistic factions. I know many committed workspace professionals who seem to be trying to do the best they can with the knowledge they have. Equally, I regularly witness resistance to workspace change from both professional and academic knowledge workers, trying to do the best work they can too, sometimes with sophisticated arguments to counter contemporary workspace provision.

So, what if there was an opportunity for a bipartisan reframing of this situation? If we could find a way beyond the confrontational duality of right and wrong, where might it take our workspace theory and practice? Two specific contributions help develop this line of thought. First, Elsbach and Pratt (2007:181), through a substantial longitudinal review of physical environment research, eloquently invoke the notion of tensions and trade-offs, demonstrating why no workspace solutions "are exclusively associated with desired outcomes". Further, they conclude that the physical environment serves "aesthetic, instrumental and symbolic functions". The knowledge that workspace has subjective, socially-constructed significance in addition to objective, functional utility is no revelation, but in their capacity as 'organization studies' academics, Elsbach and Pratt confront this perpetually irresolvable interplay by embracing the notion that workspace *simultaneously* facilitates and constrains, *and* underline the gravitas of the

topic, foregrounding it in a prominent mainstream journal while underlining the paucity of research in this area.

The second contribution is a rare voice from the FM academe. Cairns (2002, 2003, 2008, and 2012) argues repeatedly that for a range of reasons FM and workspace knowledge is predominantly underpinned by positivist assumptions which limit understanding and perpetuate "a danger that the results will be seen by readers, if not by the writers themselves, as moving FM knowledge towards understanding of the 'ultimate reality', the philosophy of FM. My fear is that they look at a limited landscape, from a limited perspective, then attempt to draw a map of the world" (Cairns, 2003:99).

Cairns calls for a more ambivalent, tolerant and philosophically informed approach to theorising the built environment. I am as concerned with the level of sophistication of our disciplinary knowledge now, as Cairns began voicing almost two decades ago. More provocatively, I wonder whether many responsible for workspace provision may be myopically fuelling practice which both relies on, and promotes, a predominantly positivist worldview at best, and – far more worryingly – naïve empiricism at worst (Blaikie, 1993). I openly declare this because my research interests lie in opportunities for practical and theoretical change, not just understanding, and this is reflexively significant.

What seems clear is that despite a wealth of specialised workspace design and management research, this body of knowledge appears to remain virtually divorced from more mainstream organization theory (e.g., Taylor and Spicer, 2007; Elsbach and Pratt, 2007). A range of authors from different disciplines cite Mayo's 1920s/30s Hawthorne studies as a seminal reason for this, where their revelations about "human relations … eclipsed the physical environment" and hitherto relegated it to a subordinate role (Sundstrom and Sundstrom, 1986:47; also Baldry, 1997). Early conclusions from the now infamous study, seeking to explore the impacts of physical environmental changes on worker productivity in a US manufacturing work-setting, basically found human factors to be more significant. Consequently, the disciplines of the spatial and the social began to diverge. This became subsequently reinforced by universalistic psychological theories like Herzberg's enduring dual-factor 'motivation-hygiene' theory from 1959, where workspace was positioned as a mere hygiene factor.

Whist I remain sceptical of such a decisive 'origin story' I have found no counter-argument to date, and there seems little doubt that research specifically concerning workspace is underrepresented in organization theory: "During the years 1975–2005,

the more mainstream organizational journals … published only 15 empirical papers that explicitly focused on the role of physical environments in organizations …[yet]… the role that the physical environment … plays on how we think, feel, and work is only becoming more critical." (Elsbach and Pratt, 2007:217). This follows calls from Halford (2004) and Kornberger and Clegg (2004) to 'bring space back in' to organizational studies, echoing the 'spatial turn' which moved through critical and human geography into other more sociologically inclined disciplines, recognising that all human encounters happen in and because of some sort of space: ergo space per se cannot be ignored. Consequently, Taylor and Spicer (2007) evidence a nascent field rich with potential.

There are others, but one intellectual figure seems omnipresent in such work, and in the spatial turn more generally: Henri Lefebvre. There is much about Lefebvre and his work to come. For now, one observation is important: there is a dearth of knowledge about Lefebvre in the built environment arena. Few in the FM academe evidence much awareness, excepting Grimshaw (2004), Cairns (2008) and more recently (and reluctantly) Price and Beard (2013). Architecture, a more historically established discipline than FM, doesn't seem much more acquainted either, bar more 'alternative' and/or intellectual factions (e.g., Till, 2009; Awan et al., 2013; Coleman, 2014).

To summarise, key disciplines responsible for workspace design and management provision appear to be unaware of both the 'spatial turn', and the intellectual and empirical potential of Lefebvre, a key associated figure. Meanwhile, other social science disciplines are developing an increasingly sophisticated spatial awareness. This study aims to help redress this balance and establish a novel link.

1.4   Research position and questions

More studies which aim to utilise Lefebvrian concepts *empirically* to explore the significance of workspace seem long overdue. The fact that I have elected to do this – as someone actively and commercially engaged in the *provision* of workspace – is certainly a rare and potentially unique contribution, to the best of my knowledge. Kingma (2019), who conducts a Lefebvrian analysis of a Dutch office relocation (see section 4.3 for further discussion) has perhaps come closest to my aspirations so far. I am not the first nor will I be the last to use Lefebvre's seminal ideas. He openly invites us to do so, but often his work can be only theoretically referenced or superficially applied. Whether I achieve more here is ultimately for the reader to decide.

At this stage I need to declare my philosophical research position for this study. It embraces a realist ontology and a social-constructionist epistemology: there is a world out there, independent of human experience, but the way we make sense of that world and attribute meaning to it – in socio-spatial terms – is influenced by our subjective engagement with it. The research is therefore interested in not just what is being said by the participants, but also what values and beliefs underpin their perspectives, and why.

Moreover, a Lefebvrian perspective affords opportunities to be inherently critical about the power dynamics evident within the specific case studies, and by reasoned inference workspace theory and practice more generally, in an enlightening and educational way. I discuss this thoroughly in chapter 3, where I also explore Lefebvre's theoretical perspective of 'spatial dialectics', but it is important to know this much here, because this position assumes that no social enquiry can be entirely objective by design or intent.

The philosophical position adopted is not the only one that could have been be chosen, but according to the paradox of epistemic circularity, no position can claim incontestable foundation more than any other (Johnson and Duberley, 2000). What matters most is that I demonstrate how it fits this research. Consequently, I invite the reader to reflect on their position, and to make space to openly consider mine. A researcher's own subjective interest in a topic has a bearing: I am intrinsically involved, and as author my voice is privileged whether I like it or not. Reflexivity on my part is therefore paramount for the authenticity, integrity and credibility of the study.

Given this philosophical research position it is therefore reflexively important to declare why I wanted to undertake this research: because – based on my own academic and professional experience – workspace is as emotive as it is ubiquitous, and workspace design and management provision often seems to fall short of user expectations, despite claimed and/or recognised expertise. This troubles me to the extent that I felt it warranted attention and critique.

Drawing all of these introductory points together, this study seeks to explore a number of interrelated areas, all potentially to inform improved awareness of workspace provision and use. The areas can be captured as four distinct research questions:

1. **How do provider and user accounts of 'what matters about workspace' relate to contemporary knowledge workspace provision and use?**
2. **What can be learnt from a Lefebvrian analysis of empirical workspace data about producing knowledge workspace?**
3. **Does a Lefebvrian theoretical perspective inform the connection between workspace design and management and organisation theory?**
4. **Does a participatory visual research method offer a valuable approach to inform our understanding about the provision and use of knowledge workspaces?**

1.5   Thesis structure

This study has six main sections. Following this introductory chapter that has set the scene, chapter 2 explores relevant literature and academic theory in order to summarise key perspectives for consideration. Chapter 3 presents the research design, from philosophical foundations to practical methods and undertakings. Chapter 4 presents the research findings according to my four-stage analytic sequence. Chapter 5 discusses the findings more critically, assessing professional and practical implications through discussion of the four research questions (above), followed by personal learning reflections. Chapter 6 concludes proceedings, including research limitations and suggested opportunities for further work.

Please note that there are also some substantive appendices which are introduced and justified in section 4.4. To be clear, whilst they do not have to be read to appreciate the findings and conclusions, they do serve to contribute to the authentic whole. The choice is entirely up to the reader.

Finally, it is worth drawing attention here to the pervasive nature of Lefebvrian research. Lefebvre features in each chapter differently: here in terms of interest and intent; in chapter 2 as historical background and academic theory; in chapter 3 through the theoretical perspective of 'spatial dialectics'; in chapter 4 with the spatial triad as 'conceptual apparatus' to analyse case study findings; and in chapter 5 to inform the subsequent critical discussion. Perhaps this pervasiveness is why he has become such a dominant voice in 'spatial turn' discourse.

chapter two

literature review

2. Literature review

This chapter also serves as part 1 of the MProf assessment criteria: a reworked LMOT assignment. The wordcount is 6515 words by requirement.

Accessing all workspace-related literature is nigh-on impossible. The sheer diversity of perspectives and terminology compounds any systematic review technique (Hammersley, 2001). Consequently, to underpin my study this review explores and critiques the differing theoretical treatment of workspace, first from specific workspace design and management discipline, and then from broader organisation theory (organisation theory) positions. As a sense-making heuristic, it then locates dissonant perspectives in positivist, interpretive and critical terms (Prasad, 2005). Echoing Taylor and Spicer (2007), Cairns (2008) and others, I subsequently advocate a more holistic socio-spatial understanding.

To achieve this, there is an opportunity for the workspace discipline to acknowledge and embrace what has come to be known as the 'spatial turn' in the social sciences, where a discipline realises that all human encounters happen in and because of some sort of space: ergo space cannot be ignored. This is somewhat ironic, given the purpose of the discipline. With the spatial turn comes Henri Lefebvre. The final part of this section introduces this underacknowledged intellectual figure, and in particular explores the contribution of Lefebvre's most famous 'conceptual apparatus' (Boano, 2015), his spatial triad, as a precursor to my own justified use. To begin with, the review explores the relevance of workspace to organisation theory.

2.1   Workspace and organisation theory

Organisation theory (organisation theory) can be summed up as the study of organisational phenomena: "an organization includes a collection of people working in concert towards a common goal … the members … comprise a group with a complex and differentiated social structure" (Sundstrom and Sundstrom, 1986:3). Within this straightforward definition there exist myriad practical applications, academic disciplinary perspectives, and philosophical assumptions. The interpretive skills required to embrace such complexity and uncertainty in order to creatively "explain, understand and theorize organisations" cannot be understated (Hatch, 1997:18).

It seems irrefutable that organisational activities must happen within space. Even virtual (i.e., online) actions require those undertaking them to be doing them from somewhere. Space locates and situates everything around us, from the near to the far. It can contain or constrain; it can offer opportunity or freedom. Perhaps it is this pervasive, all-embracing totality, its implicit 'embeddedness' or 'everywhereness' as the material substance of organisations, which has rendered its consideration almost unconsidered or overlooked in many spheres of organisation theory? Crang and Thrift (2000:1) capture this 'given' elegantly, and also the challenge faced: "space is the everywhere of modern thought … the problem is not so much that space means very different things – what concepts do not – but that it is used with such abandon that its meanings run into each other before they have been properly interrogated".

Given 'management guru' Peters' opinion that "space management may well be the most ignored — and most powerful — tool for inducing culture change, speeding up innovation projects, and enhancing the learning process in far-flung organizations", this lack of consideration seems somewhat strange (Peters, 1992:413, cited in Kornberger and Clegg, 2004:1095). Haynes et al. (2000) echo this neglect of workspace issues in general management literature. Taylor and Spicer (2007) credit more specialist (i.e., workspace design and management discipline) studies which *have* considered space as responsible for raising awareness about its impact on management and performance within the broad field of organisation theory. However, such studies typically, they say, regard 'space as distance' in studies about physical workspace arrangements and subsequent outcomes, which (as discussed later) is but one perspective.

Considering the significance of for example culture, communication and change to organisational theory and practice (e.g., Hatch, 1997), one might, like Peters, question the role workspace plays. Does workspace function as a passive stage upon which the actions of organisational actors unfold, or is its role more active? Oommen et al. (2008) note the interdependence of all elements within 'sociophysical systems'. Kornberger and Clegg (2004:1096) offer an excellent grounding to this perspective, echoing Rosen et al. (1990): "space is both the medium and outcome of the actions it recursively organizes: what space is experienced as being limits and enables the possibilities of further social construction within it". Accordingly, the profound significance of 'offices' (as a typical knowledge workspace) is captured by Andrews, of Anderson Consulting: "I used to pay less attention to the relationship between organisational performance and environment but now I've learnt that offices are not a dead asset. They are not neutral. They are either positive or negative." (cited in Bradley & Osborne, 1999:179).

Markus (1993:xix) takes this even further, declaring "buildings are not primarily art, technical or investment objects, but social objects", where power – in terms of freedom and control – plays a central role in their design.

Many in the FM industry openly advocate workspace changes as a catalyst for organisational and/or cultural change (e.g., Bradley & Osborne, 1999; Price & Fortune, 2008). Others caution that workspaces should be positioned as reflections rather than instruments of change for successful effect (Baldry, 1999). So, for example, Haynes et al. (2000) suggest that networked organisational structures are far more likely to succeed within 'new ways of working' workspace environments than hierarchical, because 'open-plan' (in whatever form) represents an egalitarian system of broadly uniform workspace for managers and subordinates alike. What if this does not culturally fit, or is not culturally desired (Hedge, 1982)?

Ultimately, and whatever the specific organisational context, Elsbach and Pratt (2007:217) note an apparently enduring outcome: "In 1981, Franklin Becker … noted, 'The way the physical setting is created in organizations has barely been tapped as a tangible organizational resource' (p.130). Over 25 years later, almost the same statement could be made." It seems clear then that awareness of and perspectives on workspace vary widely, and that despite the contributions of the workspace design and management discipline, a disconnect with wider organisational theory and practice endures. To help explore and subsequently situate different perspectives, this review now explores what might be regarded as 'conventional' workspace design and management wisdom, before turning to more sociological accounts that consider workspace from alternative perspectives.

2.2   'Conventional' workspace wisdom

We can turn to 'the history of the office' to review how knowledge workspaces have been regarded over time. The typical narrative, now fairly well documented and referenced (noting cautiously, like Price (2003), that such 'origin stories' might comprise a mutually reinforcing narrative) typically starts with the industrial revolution as the birth of 'corporate real estate' (Sundstrom and Sundstrom, 1986; Baldry, 1999; Saval, 2014; Haynes et al., 2017). Older office requirements have been cited, including early Italian financial centres, cellular studies in monasteries and universities, and pre-industrial mercantile and naval administration enterprises (Price and Beard, 2013:10). Notwithstanding these precursors, there was a progressive transition during the 19th

century from cottage industries (Sundstrom and Sundstrom, 1986), mercantile counting houses (Saval, 2014) and shared and often collaborative working environments, for example guilds (Myerson, 2014) to larger, singularly owned organisational working environments. From here, epochs of relevant organisation theory can be identified which have actively and passively influenced workspace design (summarised in table 1 below, for brevity).

Yet despite the organisational progress of the 20th century, evidence calls into question how much has changed in material terms to knowledge workspaces since the 1960s, bar furniture design fads and fashion trends. The roots of most current workspace design innovations can be linked to historical predecessors, irrespective of the often-hyperbolic industry promotion seeking to profit from organisations choosing to embrace them. For example, 'new ways of working' (an indistinct term often used by workspace design and management professionals to mean 'activity-based working', 'agile working' or just 'agile' – adopting different work settings most conducive to different tasks; often but not always without an individually assigned desk), despite being heralded in the 1990s (Kingma, 2019) can be evidenced in the non-territorial office experiments of the early 1970s (Van Meel, 2011). Indeed, Usher (2018b) presents 'all the workstyles we have ever loved', suggesting that office workspace essentially fits into fourteen typologies, the majority of which have been around for decades. A good example of this is the controversial workspace provider WeWork: beyond the 'Generation We' coworking brand aesthetic, Chesterfield sofas and free craft beer, WeWork workspace essentially constitutes a 'caves and commons' or 'combi-office' layout first proposed in the 1990s (Van Meel, 2000). Ultimately, it doesn't seem difficult to make the case that, sensationalised case study exemplars or otherwise, knowledge workspace design appears to display a remarkable stability over the past 50+ years.

Perhaps this is because the drivers of workspace design remain remarkably stable too. In the 1990s DEGW, a seminal workspace consultancy also acknowledged for introducing the concept of 'the FM' to the UK from the USA (Price, 2003), articulated the value of organisation workspace in terms of efficiency, effectiveness and expression (Duffy, 2009). A fourth consideration of environment soon followed, and the most recent incarnation also adds ether and energy (Usher, 2018):

- **Efficiency** – getting the most out of a workspace in terms of utilisation, density of occupation and costs

- **Effectiveness** – how well a workspace enables people to do what they need to do, individually and collectively

- **Expression** – the signals a workspace conveys to staff, customers and other stakeholders about an organisation's brand

- **Environment** – the impact a workspace has on the natural environment, including construction materials, energy and utilities and travel requirements

- **Ether** – the positive (and negative) stories people tell about a workspace, often amplified through social media

- **Energy** – how a workspace feels and the ways it influences people's wellbeing

Table 1: Epochs of organisation theory and associated workspace design terminology
(Sources: adapted from Sundstrom and Sundstrom, 1986; Hynd, 2003; Price and Beard, 2013)

Organisation theory & representative people	Focus within working environment	Role of physical environment	Associated workspace design terminology
Classical **Taylor (1911): Scientific management** **Weber (1946): Bureaucracy** **Fayol (1949): Functionalism**	Dehumanised mechanised administration process. Subordination of the individual. Rational and legal authority Individuals as units of production. Measurable, management of resources.	Integral to governance. Means to increase worker and production efficiencies. Afford management command and control.	• Office factory • Clerical factory • White collar factory
Humanistic **Mayo (1945): Hawthorne studies** **Maslow (1943): Need hierarchy** **Herzberg (1959): Motivation-hygiene theory** **McGregor (1957): Theory X and Y**	Human relations social movement. Motivation associated with social aspects of individuals. Emphasis on worker potential and freedom; value human aspects. Satisfy personal needs.	Hygiene factor with no ability to motivate individuals or contribute positively to organisational performance. Relevant only if hampered staff.	• Bull-pen • Corridors of power
Systems **Trist & Balmforth (1951): Socio-technical** **Burns & Stalker (1961): Mechanistic/organic** **Woodward (1965): Functionalism**	Seeking optimal relationships between technical and social organisational elements. Emphasis on individuals, interactions and hierarchical relationships. System parts and interrelationships.	Integral technological component within a holistic, interrelated and interdependent organisational system. Context specific?	• Bürolandschaft • Office Landscape • Workplace democracy • Action Office (I & II) • Cubicles
Culture **(and management literature)** **Drucker (1992): Knowledge organisation** **Handy (1989-94): Knowledge organisation** **Senge (1990): Learning organisation**	Empowerment, participation Speed, complexity, change and transformation. Holistic: people, place, process, technologies, work-styles, work-patterns, learning. Knowledge transfer Exploitation through controlled environment.	Interrelated artefact representing organisational values. Capable of catalysing cultural change(s) and contributing to effectiveness via influence on social aspects.	• Combi offices • Caves and commons • New ways of working • Non-territorial offices • Nomadic working • Task-based working • Flexible (tele)working
Ecology **Duffy (1997): Integrated** **Becker (1995, 2004): Organizational ecologies / Total workplace** **Alexander & Price (2012): Organisational ecologies**	Integration of the socio-spatial: people, process and place. Effectiveness over economy and efficiency. Adaptability.	Capable of influencing individuals and contributing to organisational effectiveness. To be designed according to desired business outcomes and social purpose.	• Organisational ecologies • Activity-based working • Agile working • Need not status

Nonetheless, it can be seen that time and again the fundamentally human drivers of workspace design can become compromised. Significant factors include economically driven 'densification' strategies (Baldry, 1997; Saval, 2014) and both managerialistic and architectural emphases on tidiness and uniformity. We might consider clear desk policies a modern development, but the Business Etiquette Handbook (1965) suggests otherwise.

Donald's (1994) study is further testament here, evidencing FM as equipped (and inclined) to satisfy broad managerial 'top-down' organisational workspace requirements far more readily than the specific needs of individual users. Yet conversely, as early as 1948, design firm Herman Miller were proposing: "the ideal working environment being 'a daytime living room' that would be welcoming and humane" (Kristal, 2013, online). Earlier still in 1930 their first design director declared: "the most important thing in the room is not the furniture – it's the people" (ibid.). Accordingly, in response to the sterile, hierarchical 'bull-pen' layouts of the 1950s[4], Herman Miller's Robert Propst – ironically now remembered as 'the father of the cubicle' – designed 'Action Office', a flexible furniture solution which encouraged and embraced individualism[5] (Propst, 1968; Sundstrom and Sundstrom, 1986; Abraham, 1998; Saval, 2014).

Elsewhere, in 1960s Germany, The Schnelle brothers' Quickborner management consultancy proposed 'Bürolandschaft', a 'socially democratic' open-plan design that retained a human scale, taking care not to compromise a local field of view from any work setting (Sundstrom and Sundstrom, 1986). To once again underline the enduring stability of knowledge workspace design, award-winning Sky Central, opened in 2016 to house 3500 employees on Sky's West London campus, was regarded by the BCO judges to resurrect many Bürolandschaft ideals (Eltringham, 2017).

So, the two workspace design movements of Action Office and Bürolandschaft serve as powerful exemplars embodied with human ideals. Norman Foster's early 1970s Willis building in Ipswich is perhaps the seminal UK example, with its rooftop garden and restaurant, and even community swimming pool, subsequently incarcerated beneath a raised floor in the 1990s to increase workspace efficiency through occupation density

---

[4] The popular television series *Madmen* strives to recreate a late 1950s/early 1960s US example of this working environment meticulously: the secretarial typing pool surrounded by the managers' offices replete with sofas, drinks cabinets and expansive views.

[5] A recent Herman Miller product collection, the 'Living Office', seems positioned as a homage to the work of Propst et al, over half a century later. https://www.metropolismag.com/interiors/workplace-interiors/living-office-action-office-digital-age/ (accessed 28 December 2019)

(Dyckhoff, 2011). It seems that time and again, *efficiency* comes to dominate other organisational drivers and workspace opportunities.

Organizational ecologists might contest the claim that little has changed. Indeed, an ecological perspective goes some way to acknowledging the social construction of workspace (Alexander & Price, 2012). However, the belief endures that organisational outputs can be directly enabled through appropriate workspace design, with users change-managed to adapt accordingly (Becker & Steele, 1995; Becker, 2004). What has undoubtedly changed though, and increasingly rapidly, is the proliferation of technological tools and innovations available to facilitate our work activities (e.g., Kingma, 2019). A full discussion of such technology is beyond the scope of this research, but has collectively afforded both new methods to access, communicate about, collaborate on and share organisational information at an increasing speed[6], and also a transformation in the expectations of both individuals and organisations regarding where, when and how work activities can be undertaken (Coplin, 2013). The phrase 'work is something you do, not somewhere you go' seems to have become the oft-repeated assertion to challenge the enduring post-industrial conception of work.

2.3   Interdisciplinary implications

Noting the critical juncture of the Hawthorne studies between broader organisation and workspace theory (see section 1.3), evidence suggests that since the later 1950s both academic (e.g., Mintz, 1956; Sommer, 1962) and professional (e.g., Propst, 1968, Steele, 1973) research has been contributing to divergent and disparate workspace theory at an increasingly prolific rate (Sundstrom and Sundstrom, 1986). Moreover, Fabbri and Charue-Duboc (2013:117) note – interestingly, referencing FM scholar Price – that scholarly spatial enquiries differ by discipline, asking different questions and yielding different insights: "'Workspace' is a research object that has been studied in various academic fields, such as geography, architecture, design ergonomics, sociology, occupational psychology and semiotics, which is why it is so difficult to apprehend". My own review suggests several overarching workspace literature perspectives can be observed: professional research, professional case-studies, academic FM/built environment research, academic FM/built environment literature

---

[6] Which incidentally, akin to Baldry's (1999) workspace critique, some also take critical exception to in neo-Marxist labour exploitation terms (Case, Lilley, & Owens, 2006; Warren, 2006).

reviews, environmental psychology, and broader organisation theory perspectives (see table 2, with examples, for brevity). The latter is notably more nebulous, corresponding to Elsbach and Pratt's (2007) observation regarding the scarcity of empirical physical environment work in the more mainstream organizational journals.

Considering this landscape, I suggest two critical observations. First, new research in dedicated workplace design and management arenas (sections 1-5 in table 2 below) seems to rarely beyond previously established parameters and perspectives. Second, the majority of such work regards workspace with a broadly functional and deterministic socio-spatial relationship. Taylor and Spicer (2007) critique this 'space as distance' perspective, noting 'materialised power' and 'the lived experience' as important alternatives, thus emphasising the value of socially constructed considerations. This is where the more interpretive and indeed and critical sociological perspectives of sections 6 (and occasionally section 3) become valuable.

As a sense-making heuristic, it is possible to identify three broad philosophical positions within the different literatures. The majority of workspace theory (again, sections 1-5 in table 2 above) assumes, consciously or otherwise, a positivist (Prasad, 2005) position, represented by an objective Cartesian cause-and-effect duality (Cairns, 2008): "architecturally, this Cartesianism is present in the injunction that form follows function"[7] (Kornberger and Clegg, 2004:1095). The pervasive implication is that there are right (and wrong) workspace decisions in relation to intended outcomes.

---

[7] Challenging 'form follows precedent', this became the mantra of early 19th century modernist architects. Skeptics suggest 'form follows finance' subsequently became the dominant narrative with enduring effect (Saval, 2014).

Table 2: Inter-disciplinary workspace literatures (Source: author's own; influences as referenced)

Workspace literature	Notable authors /examples	Features/perspectives	Critique (also below)
1. Workspace Industry/profession	Propst (1968); Herman Miller Duffy (1997); DEGW Also Office of Government Commerce (OGC), British Council for Offices (BCO), Steelcase (2009)	'Best practice' and design guidance; after 'new ways of working' a task-based focus is generally assumed to underpin spatial efficiencies; different lenses on knowledge work typologies, e.g. culture, generations	Self-reinforcing 'expert' rhetoric: assumes there are 'right' ways to do things, benefitting provision; not always peer-reviewed: rhetoric or evidence based? Positivistic 'form follows function' solutions in many cases.
2. Professional case studies (a sub-set of 1.)	Duffy (1997) Myerson & Ross (2003) Myerson & Ross (2006)	Knowledge workspace task/activity typology: 'hive, cell, den, club' Knowledge workspace typology: 'academy, guild, agora, lodge' Knowledge workspace typology: 'narrative, nodal, neighbourly, nomadic'	Glossy 'coffee table' editions showcasing modern workspace exemplars; often positivistic 'form follows function' solutions; can all solutions be reduced to four-component models?
3. Facilities management (and built environment) academia	Markus (1993) [critical outlier] Becker & Steele (1995) Becker (2004) Cairns (2002, 2003, 2008) [critical outlier] Vos & van der Voordt (2001); van Meel (2011) etc Pinder et al. (2009) Alexander & Price (2012)	Typically advocating workspace design with a holistic focus on 'people, process and place', with 'organisational ecology' as a favoured term by some. Feature diverse perspectives. Fundamentally managerialist perspectives, also advocating change management workspace consideration	Balanced between an industry that benefits from workspace provision and a diverse academic community drawing on various multi-disciplinary perspectives. Typically positivist with some interpretivist and very rarely critical content.
4. Literature reviews	Haynes et al. (2000) Heerwagen et al. (2004) De Croon et al. (2005) Price & Fortune (2008) Oommen, Knowles, & Zhao (2008) Airo & Nenonen (2014)	Perspective dependent on overall objective (often health focus leading to workspace critique); requires early identification of bias. Can be part of research/funded initiatives. Useful to assimilate wide workspace perspectives	Few recognise different source methods or perspectives, often resulting in questionable generalized claims. Depending on approach, content can be limited in scope or perspective.
5. Environmental psychology	Sundstrom & Sundstrom (1986) Rapoport (1990) Werner, Altman & Brown (1992) Vischer (2005, 2008) Oseland (2009)	Seeking to understand the socio-spatial interrelationship. Considers topics including personality, motivation, interpersonal and group dynamics, evolutionary psychology, affordances and post occupancy evaluation.	Theoretical position is not always declared. Typically positivist, but some interpretivist content. 'Pseudo-experiments' can feature; variable value when considered critically: notable influence upon other literatures.
6. Perspectives from organisation theory	Gagliardi et al. (1990) Baldry (1997, 1999) Gieryn (2000) Markus & Cameron (2002) Kornberger & Clegg (2004) Halford (2004, 2005, 2008) Felstead et al. (2005) Warren (2006) Taylor & Spicer (2007) Elsbach & Pratt (2007) Dale & Burrell (2008) Kingma (2019)	Reflecting the 'spatial turn' in the social sciences. Interest beyond typical academic specialisms leads to some interesting perspectives. Valuable in bridging between workspace theory and organisation theory. Perhaps only literature which evidences full socio-spatial scope. Various critique of workspace aestheticisation agendas.	Recognises (and typically resists) positivist notions of workspace. Always interpretivist, often toward critical theory. Positions taken can aggressively attack other views/authors, perhaps somewhat hypocritically demonstrating the power and myopia identified.

Yet two very different examples of workspace research demonstrate the polarisation of opinion arising from this Cartesian perspective (noting Elsbach and Pratt's (2007) recognition of tensions). Duffy (1997) famously demonstrates, drawing upon extensive professional experience as a founder of seminal workspace practice DEGW[8], how rethinking workspace layout based upon the extent of user interaction and autonomy offers a range of functional options according to task need. Conversely, Kim and De Dear (2013) are able to conclude from expansive health data that open-plan layouts (which DEGW and others typically advocate at least as part of many workspace solutions) are detrimental to said users, negatively affecting motivation, stress, and concentration.

A minority of environmental psychology (e.g., Vischer, 2005; 2008), FM academic (e.g., Price and Fortune, 2008; Alexander and Price, 2012) and FM literature review (including Airo and Nenonen, 2014) perspectives take a more subjective, interpretivist (Prasad, 2005) stance. Here, the Kantian notion of socio-spatial dualism becomes apparent, implying the socio-spatial relationship is far from objective. In other words, people's meanings bring 'doubly constructed' (Gieryn, 2000) to life, and vice versa. This is also where the more sociological organisation theory work excels, both empirically (e.g., Hatch, 1990; Halford, 2004, 2005; Musson and Tietze, 2004) and more theoretically (e.g., Gieryn, 2000; Smith and Bugni, 2006) exploring how "physical reality seems to recede in proportion as man's symbolic activity advances" (Gagliardi, 1990:10). Perhaps then "the dominant influence of the physical surroundings … is via [their] significance … much more than any direct effects on behaviour" (Berg & Kreiner, 1990:44).

Other sociologists take a more critical stance, usually by theoretically deconstructing the inherent power dynamics present between workspace provision and user consumption (e.g., Baldry, 1997, 1999; Dale and Burrell, 2008). A dominant theme here is how the aestheticization of workspace can be manipulated in order to exert control and influence over both individual worker and community practices, in addition to the commodity value of workspace (e.g. Cairns, 2002; Felstead et al. 2005; Warren, 2006). This is clearly a very different analytic lens to Duffy's original three workplace drivers, or Usher's developed six. Many of such accounts are influenced by Henri Lefebvre's (1991)

---

[8] Dr Francis Duffy CBE's long and auspicious career began decades earlier. Amongst many workspace design and management contributions, he is credited with introducing Bürolandschaft to the UK in the mid 1960s (e.g., Duffy and Wankum, 1966).

highly critical and iconoclastic exposition of space (Gottdiener, 1993; Merrifield, 2000), coinciding with the 'spatial turn' in the social sciences (Dale and Burrell, 2008), addressed next.

Taking stock for a moment, the value here lies not in claiming truth from any given viewpoint, but in pragmatically exploring the landscape. Socio-spatial frameworks have consequently been proposed by a number of authors, many of which resonate with those of Lefebvre (discussed presently; see table 3 for summary). Cairns (2008) similarly calls for an 'ambivalent' approach to theorising workspace. In this respect, empirical work by Halford (2004, 2005), Halford and Leonard, (2006), Musson and Tietze (2004) and Warren (2006) are valuable contributions. Presently, this study also aims to explore and contribute to this perspective, responding to Airo and Nenonen's (2014:27) call for more 'linguistic' and fundamentally social constructionist work to measure "the hidden cultural features behind the evident structures of a workplace".

Table 3: Socio-spatial frameworks: objective and subjective components
(Source: author's own; influences as referenced)

Author (date) designation	Socio-spatial framework components				Comments
	'Objective'	| - - - - - - - - - - - - - - 'Subjective' - - - - - - - - - - - - - -			
Lefebvre (1974/1991) Philosopher / sociologist (Marxist)	Artificial space of reference	Representations of space (conceived)	Practices (perceived)	Spaces of representation (lived experience)	Three elements in a holistic, inseparable social morphology
Gagliardi (1990) Social scientist (org. behaviour, symbolic)		Cultural 'logos' (cognitive experience)	Cultural 'ethos' (moral/ethical experience)	Cultural 'pathos' (sensuous 'felt' experience)	Cultural framework explored in spatial contexts
Elsbach & Pratt (2007) Organisation and management theorists	Instrumental (real)	Instrumental (perceived)	Aesthetic (perceived)	Symbolic (perceived)	Trade-offs can be required between elements
Taylor & Spicer (2007) Social scientists (critical)	Distance	Manifest power relations		Lived experience	'Sociospace' ordered through distance; Lefebvrian corroboration?
Dale & Burrell (2008) Social scientists (critical)		Emplacement (organised space)	Enchantment (perceived?)	Enactment (phenomenological experience)	Lefebvrian resonance, plus link to Bourdieu's doxa/habitus?
Cairns (2008) Facilities management / social scientist	Scientific rational	Instrumental rationality (power)	Aesthetic (emotional)	Process 'phronēsis' (lived experience)	Lefebvrian resonance, plus link to Bourdieu's doxa/habitus?

2.4　The spatial turn

Essentially, a 'turn' is the introduction of a new concept into the existing discourse of a particular academic discipline. Soja (1989:6) articulates the foundations of the spatial turn as the "reassertion of space in social critical theory … [and the] distinctively Marxist geography that eventually arose from this encounter". The implication is that because space is social – all human encounters happen in and because of it, essentially underlining its socially constructed and fundamentally (inter)subjective significance – then space is also therefore unavoidably political. There will always be positions with and without power.

To exemplify this, Rosen et al (1990:71) echo Giddens' (1979) 'structuration theory' in built terms, suggesting "the spatial characteristics of buildings … are both medium and outcome of actions they recursively organize". Former UK Prime Minister Winston Churchill made a strikingly similar assertion in 1943, as he sought to politically influence the rebuilding of the House of Commons: "we shape our buildings and afterwards our buildings shape us"[9]. Cairns (2002:818) attempted to alert the FM and workspace industry to both the significance and conundrum of this notion, explaining: "the physical and social environments contain one another, frame one another and influence the development of one another – but they are not as one", implying an interdependent socio-spatial relationship which is far from objective or deterministic.

Having briefly introduced the notion, there are two points to make. First, the spatial turn continues to influence different sociological disciplines, including organisation theory perspectives more critical of contemporary business practice. These perspectives seem largely divorced from the less critical and more managerialist body of knowledge that workspace design and management theory typically references. The underlying philosophical position of such work serves to further underline this. One might even raise concern that – paradoxically – the field responsible for workspace provision seems almost entirely unaware of the spatial turn. Second, one intellectual figure seems to be consistently associated with it – Henri Lefebvre – so it is in his direction that this chapter now turns.

---

[9] Churchill was debating the rebuilding of the House of Commons following its bombing on 10 May 1941 during the blitz (https://api.parliament.uk/historic-hansard/commons/1943/oct/28/house-of-commons-rebuilding: accessed 30 March 2021)

2.5   Henri Lefebvre

Henri Lefebvre was a French Marxist sociologist and philosopher who lived from 1901 to 1991. He plays a lamentable bit part to other acknowledged philosophical giants of the 20th century for a range of reasons, including academic politics. A handful of scholars have since given him extensive attention, including Shields (1999), Elden (2004), Merrifield (2006), and Stanek (2011). His anglophone influence is therefore overwhelmingly posthumous, as his work is uncovered and translated. Lefebvre's fundamentally active engagement with everyday life in his progression of knowledge saw him debating with the Surrealists and Dadaists, influencing Sartre's work, driving a Parisian taxi, joining the French resistance during the Second World War, wrestling with the French Communist Party, and, as professor at various universities, becoming a key intellectual godfather of the 1968 student generation.

Lefebvre's output was prolific, including at least 66 books, 25 of which were penned after his 65th birthday. One enduring issue though is the challenge of accessing Lefebvre's intellect. According to Merrifield, Lefebvre "blasted out his books jerkily, hastily, nervously" (2006:xxii), resulting in "frequently fascinating, though invariably unsystematic and perplexing" work (1995, p.295). His ideas sought to humanise Marxism and de-scholarise philosophy, demonstrating its everyday, lived relevance. Yet they are presented so esoterically as to be at times practically impenetrable (at least to my intellect). Furthermore, whilst he maintained grand narratives – volume one of *Critique of Everyday Life* was penned in 1947; volume three in 1981 – he constantly drove forwards, reworking and reinventing as he went.

In 1974 Lefebvre penned his 57th book, *La production de l'espace*. Academic politics at the time meant it was ambivalently received and marginalised. Castells, a former assistant in the late 1960s, played a significant role in this but later remarked that Lefebvre "had a genius for intuiting what really was happening. Almost like an artist … he was probably the greatest philosopher on cities we have had" (Merrifield, 2006:xxii). Consequently, it didn't undergo English translation as 'The production of space' (PoS) until 1991, when certain geographers began championing its hitherto under-acknowledged significance, and the spatial turn gathered momentum. It is possible to retrospectively outline three 'waves' of application of Lefebvre's work:

1. **1970s:** Neo-Marxist urban theory, ambivalent and marginalised due to early critique, but included famous geographers Harvey and Soja, accessing Lefebvre's French text directly (Merrifield, 2006).

2. **1990s:** Postmodern (including critical human) geographies, including Shields and Elden, following the 'rediscovery' of PoS. Seminal to the 'spatial turn', but "dominated by one-dimensional readings and marked by conflicting views and claims between different epistemological positions" Moravánszky et al. (2014:5).

3. **Recent years:** Intensifying and wide-ranging application, facilitated by the translation of further key works. Curious and open-minded approaches – a point of departure from which to integrate and develop other ideas through empirical application: "rooted in an undogmatic reading, uses Lefebvre's work as a point of departure for further reflection, and is at the same time more precise and more open than previous phases of reception" (Schmid, 2014:29).

2.6 Lefebvre's spatial triad

In PoS, Lefebvre (1991:26) captures the essence of the spatial turn in one pithy sentence, drawing attention to the inherently political *production* of space, rather than space itself: "(social) space is a (social) product". The brackets, explains Till, "gently savage one of the founding assumptions of an Enlightenment understanding of space" (2009:195). It is worth acknowledging the extent of Lefebvre's ambition here. At the time of writing, Lefebvre was responding to what he regarded as 'complete urbanisation' in the 1970s, transforming all aspects of society and having a planetary reach. He described how the expanding city attacks the countryside, corrodes and dissolves it. Within such cities, he observed the dissolution of sociological and morphological structure at hands of capitalism's financial, commercial and industrial advance. In this way, urban analysis turned from urban *form,* to ephemeral, changing urban *process*. And – thought Lefebvre, evidently – it warranted critique.

Lefebvre's approach seeks to consider this generative activity rather than space per se, to get behind the product and at the socially constructed process. He also notes this is tricky to achieve. In this way Lefebvre acknowledges that we all produce space, and indeed it is this socially constructed production process we need to consider more thoroughly, particularly the power dynamics concealed within. This approach affords a

very different consideration of the relationship between the social and the spatial, which human geographers conceptualise as 'spatiality' (Bondi, 2005).

To articulate this desire to get at the social production of space, through a series of spatial 'prosecutions' (Boano and Hunter, 2012) Lefebvre developed a theory of production over the period between 1968 and 1974 driven by what Toyoki (2004) refers to as an 'epistemological engine', and Boano (2015) a 'conceptual apparatus': the spatial triad. Through this tool Lefebvre claims a holistic knowledge of space, moving beyond ontological 'fields' of distinction – how space is: physical, mental and social – to three modalities, or 'moments' of genesis, their epistemological production processes: how space is known. In section 4.3 I further explore and then develop the use of the triad as conceptual apparatus.

The triad is usually articulated (translating *l'espace perçu*, *l'espace conçu* and *l'espace vécu*) as perceived, conceived and lived space. However, one must not lose sight that space's social production is actually *doubly* designated, or determined, both semiotically (signifying what space is being materially produced) and phenomenologically (how this spatial production happens through experience). This subtlety can seemingly get overlooked or ignored by scholars in their understanding and application. Furthermore, as far is Lefebvre is concerned, these three moments of spatial production are not isolated or indeed isolatable. They are in a perpetual dialectic relationship with each other, cooperating, competing and conflicting; fluid, transient and alive: "The production of space may therefore be grasped analytically as the totality of three dialectically interlinked [semiotic] production processes that mutually imply each other: the production of material goods, the production of knowledge, and the production of meanings. On a more general level, one might state that there are various [phenomenological] ways of accessing social reality: it can be perceived (…using the five senses); it can be conceived and constructed; and it can also be experienced … a contradictory, three-dimensional or triadic unity" (Schmid 2014:31-32).

Shields (2002) offers more practical counsel: "the 'perceived space' ('le perçu') of everyday social life and commonsensical perception blends popular action and outlook but is often ignored in the professional, and theoretical 'conceived space' ('le conçu') of cartographers, urban planners, or property speculators. Nonetheless, the person who is fully human (l'homme totale) also dwells in a 'lived space' ('le vécu') of the imagination ... This 'third' space not only transcends but has the power to refigure the balance of popular 'perceived space' and the 'conceived space' of arrogant professionals and

greedy capitalists." Accordingly, Till (2009:126) counsels architects (as professional providers): "remember that you too use buildings, occupy space… users, you included, are more than abstractions or ideals; they are imperfect, multiple, political, and all the better for it". This is far from a straightforward model to grapple with, and a diagram can help (figure 1):
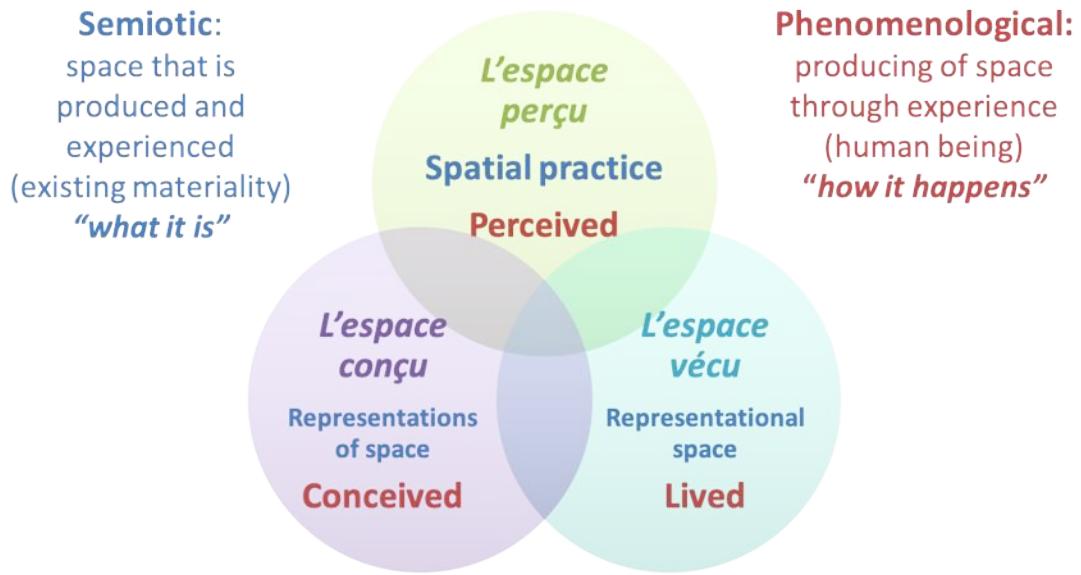
Figure 1: Lefebvre's doubly designated spatial triad
(Source: author's own)

2.7   Dialectic moments

The relationship between these dialectic moments, or 'the trialectic' as Dale and Burrell (2008) put it, echoing Soja (1989), has a bearing on the 'present' spatial outcome, as "these interpenetrations – many with different temporalities – get superimposed upon one another to create a *present* space" (Merrifield, 2000:171). As I will show later, this notion turns out to be critical for the findings of this study and its subsequent contribution to knowledge. Where the conceived dominates over the lived, as is, according to Lefebvre, typically the case in capitalist modes of spatial production, the result is dominant abstract present space. Such conceived production, positioned politically as "true space" by 'experts' (typically those in dominant positions of provision) is set up through the knowledge and authority of modernity and capitalism, and dialectically privileges the conceived moment whilst repressing the lived. The potential

outcome is the alienation of 'inexpert others' (typically those in the dominated position of user consumption) (Carp, 2008).

Alternatively, in situations where "subaltern communities accomplish the physical manifestation of their sociospatial particularities" (ibid:130) one can conceive of an alternative, perhaps more dialectically allied "truth of space", where the appropriation of space for the lived purposes (of users) affords myriad possibilities of differential 'present' space. There are different types of knowledge at work here, 'expert' *savoir*, and 'inexpert' *conaissance* (Lefebvre, 1991). In this respect Lefebvre's discourse tends to pit the provider and the user against each other, and indeed perhaps privilege the lived (Crang and Thrift, 2000). This antagonistic and asymmetrical provider/user perspective can also clearly be seen in recent empirical Lefebvrian research (e.g., Dale and Burrell, 2008; Wasserman and Frenkel, 2011), considered presently in section 4.3.

Spatial production can therefore be seen to present a perpetual power differential between what De Certeau (1984) termed strategies of the dominant, and tactics of the dominated. Considering workspace, strategies are the conceived intentions of providers: how various workspace elements need to work for organisations to benefit. Conversely, tactics are the lived actions of users: how different people respond to workspace elements and behave within the workspace accordingly. The point is that – according to Lefebvre's triad – wherever there are conceived strategies, there will *always* be meaning-making resulting in lived tactics playing out in perceived space. The imposition of particular strategies by the dominant inevitably triggers tactics from the dominated in an attempt to transcend them. In this respect we are all spatial experts – but providers occupy various official, and so privileged, roles on behalf of others, to varying degrees of success. Strategies and tactics can antagonise, or they can mutually benefit each other (figure 2).

One can see many polarised examples of this, where the perceived spatial practice is far from original intent. Phenomenologically, we might for example consider street protests *appropriating* conceived roadways of urban cityscapes, peaceful festivals temporarily *differentiating* otherwise designated farmland, or skateboarders moving through urban landscapes temporarily *appropriating* street furniture to their acrobatic ends (and the resultant re-conception of 'anti-vandal' modifications to prevent such use). By way of a more semiotic example, graffiti is a clear political tactic manifested from the lived space of non-conformist *others*, manifested physically as a spatial practice.
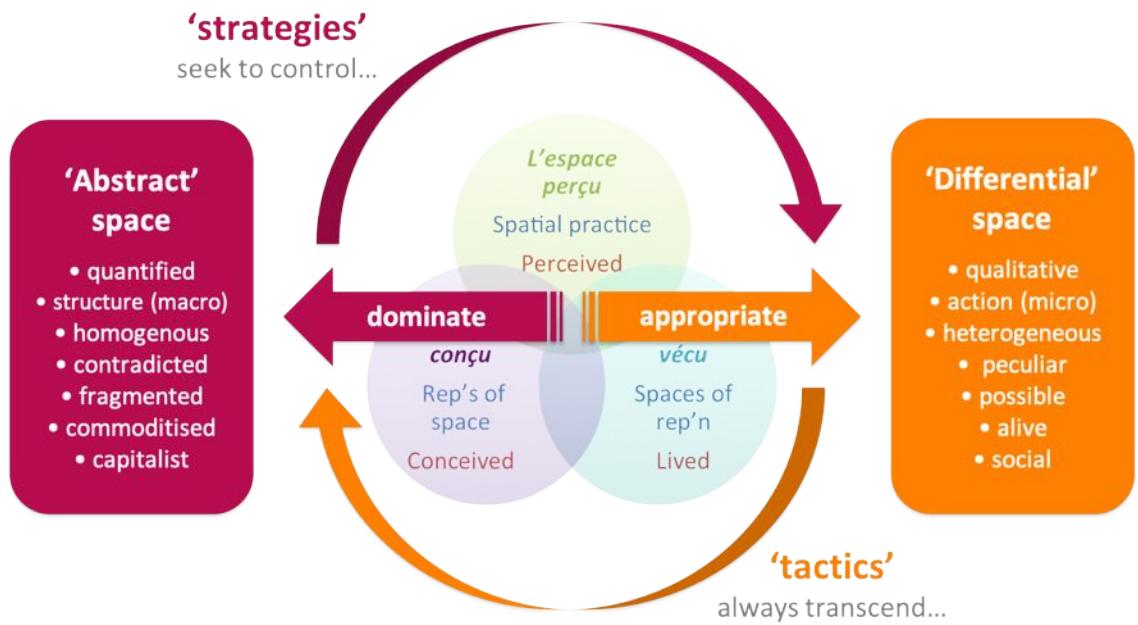
Figure 2: Dialectically contested 'present' spatialities from Lefebvre's triad

Source: author's own, after Merrifield (2000)

2.8   Chapter summary

In summary, organisational workspace has been of varying interest to diverse disciplines since at least the industrial revolution (Saval, 2014), but despite diverse attention it remains under-represented in mainstream organisation theory literature (Elsbach and Pratt, 2007). A more holistic view of workspace affords an appreciation not just of the different areas of spatial research, but also the lines of inquiry and empirical underpinnings typical to each.

Consequently, the majority of workplace design and management perspectives assume a 'form follows function' duality, with cause-effect spatial interactions (Kornberger and Clegg, 2004). This approach could be considered positivistic (Prasad, 2005). There are however alternative perspectives, typically (but not exclusively) from more sociologically inclined elements of organisation theory. These include both interpretive and critical (ibid.) lenses that recognise a socially constructed (Berger and Luckman, 1966) dualism of socio-spatial interplay (Rosen et al., 1990), ranging from symbolic interaction (e.g., Gagliardi, 1990) to materialised power dynamics and subsequent exploitation (e.g., Baldry, 1999; Dale and Burrell, 2008).

A minority of scholars (e.g., Elsbach and Pratt, 2007; Halford, 2008) call for a 'spatial turn' in order to 'bring space back in' to organisation theory. Such discussions commonly feature Lefebvre and his theoretical perspectives. With Lefebvre comes the realisation that there are other ways to consider spatial production; and so that there may be other ways the theorise and problematize knowledge workspace. This realisation, alongside the dearth of knowledge about Lefebvre in the built environment, provide the departure point for this research. Accordingly, the study now turns to the topic of research design.

chapter three

research design

3. Research design

This chapter also serves as part 2 of the MProf assessment criteria: a reworked RDE assignment. The wordcount is 6500 words by requirement.

Doing rigorous social research entails ensuring there is alignment between philosophical assumptions and methodological undertakings. Moreover, philosophical assumptions have practical consequences for both strategies and possible outcome production. This requires scholarly craftsmanship which demonstrates clear, justified and appropriate methodological linkages (Prasad, 2005). The resultant 'framework' needs to be robust.

This section therefore identifies and explores the decisions made according to Crotty's (1998) framework of research design, and the ensuing practical necessities of the chosen approach. Many other frameworks are available (e.g., Saunders, Lewis and Thornhill (2009) provide another frequently cited one) but they all seek to do broadly the same thing, albeit with differing terminology or emphasis. Whilst presented here as a linear narrative, the iterative and often challenging reality of research design is far less straightforward. That said, based on Crotty's (1998) framework this research adopts the following:

- Ontology: Realist
- Epistemology: Social constructionist
- Theoretical perspective: Lefebvrian 'spatial dialectics'
- Methodology: Case study
- Methods: Participant-led photography / active interviews

3.1   Ontology and epistemology

Research philosophy is not optional: it is an indispensable starting point (Blaikie, 1993). Prior to addressing research design, clear assumptions must be outlined, mindful that such categorisations are but useful 'heuristic devices' in a far messier, contested reality (Duberley, Johnson, and Cassell, 2012), and that there are no 'incontestable foundations': all that can be done is to debate a position's respective strengths and weaknesses (Johnson and Duberley, 2000). As Morgan and Smircich (1980:491) state, "all approaches to social science are based on interrelated sets of assumptions

regarding ontology, human nature, and epistemology." So in more straightforward terms, I need to articulate: what is the nature of reality, what can we know about it as a consequence, and what are the implications regarding how we enquire into the social world?

Accordingly, this study embraces a realist ontology and a social-constructionist epistemology, and also reflexively acknowledges the axiological consequences of this position. To explore this position rhetorically, can we conceive of a material world that exists independent of human being? Yes – there is a robust body of geological and other 'natural' scientific evidence that this is the case. However, can we conceive of an intelligible world where meaning exists independently to human interpretation? No – so whilst reality can be considered objectively, 'out there' (Johnson and Duberley, 2000), this study maintains that "meaningfulness is a characteristic of human action, not a characteristic of reality itself" (Phillips and Oswick, 2012:440). This research is therefore interested not just in what is being said by the participants, but also what values and beliefs underpin their perspectives, and why.

Crotty (1998:10) demonstrates precedent that these perspectives are compatible. For instance, Heidegger and Merleau-Ponty "frequently invoke a 'world always already there', but they are far from being objectivists". He further counsels (ibid:57) "the social world and the natural world are not to be seen, then, as distinct worlds existing side by side. They are one human world … already interpreted … at once natural and social" Thus, it is what we make of this *human* reality as actors, and what I, as a privileged actor in my research role, do about it that matters.

This implies that epistemologically, to "know the world" (Denzin and Lincoln, 2008:245) requires that "explanations of social affairs must take account of how social order is fashioned by human beings in ways that are meaningful to them" (Morgan and Smircich, 1980:496), and "In the same way as people belong to groups, they also belong to language and history; they participate in them ... Language, after all, is the game of interpretation" (Blaikie, 1993:65). Another way to term this is the social construction of knowledge, a concept originally attributed to Berger and Luckman (1966), so "although an infinite number of personal interpretations are technically possible in a given situation, our tendency is to resort to fewer but more commonly shared ones" (Prasad, 2005:15). Only through conscious actions like reflexive practice then (Johnson and Duberley, 2003), might we carefully tease out the origins of our declared 'truths'.

3.2 Theoretical perspective

Having established the ontological and epistemological position, a range of theoretical perspectives become available. Depending on the nature of the researcher, such considerations can represent a poisoned chalice. Becoming familiar with these myriad categorisations meant a journey of fascination, insight, confusion, and sometimes paralysis. But recognising the significance of how underlying philosophical assumptions influence how we variously understand and respond to social phenomena, consciously or otherwise, was a revelation.

I established in chapter 2 that seeking to undertake workspace research that embraces the spatial turn necessarily moves beyond the objective ontology and epistemology of positivism. Such 'post-positivist' positioning offers a range of possibilities including interpretive, structural, Critical and 'post' traditions (Prasad, 2005). Yet each tradition rests on different foundations and seeks different potential outcomes. On the one hand I acknowledge the call for more interpretive scholarly research in the field of workspace design and management (e.g., Cairns, 2008; Airo and Nenonen, 2014). On the other, I find ideological resonance with the more critical traditions that reflect a Marxist, emancipatory stance: "critical social researchers subscribe to the view that it is not enough merely to observe the world we live in, merely to understand it; the point is to change it. Otherwise, why be critical?" (Ferdinand et al. 2007:532). This is especially relevant, given that critical perspectives within the workspace literature suggest that issues of power and distorted or marginalized viewpoints are evident but unrepresented, consciously or otherwise, in many accounts of the 'right' workspace solutions (Dale and Burrell, 2008).

The distinction between these two particular traditions is emphasised in Burrell and Morgan's (1979) seminal social paradigms framework, where they position *interpretive* (promoting understanding and regulation) and *radical humanist* (promoting change) organisational analyses as incommensurate. The framework has courted significant controversy over the years. For example, interpretive phenomenology is deemed incommensurate with Critical Theory. These stand out as relevant, given Lefebvre advocated the critical application of his theories, which are in part phenomenologically informed (see chapter 2).

It turns out that doing Lefebvrian research offers a different take on this proposed interpretive/Critical dichotomy. Given Lefebvre was a Marxist, his perspective is unavoidably critical. Whilst clearly not a member of the 'Habermasian' Frankfurt School

of Critical Theory, nevertheless it seems patently clear that his theory and practice sought enlightenment and change. Furthermore, to undertake Lefebvrian research is also to fully embrace social construction. If not, the very notion of '(social) space' as a '(social) product' unravels. And, given that Lefebvre acknowledges the natural world (as a subject of capitalist exploitation) then ontological realism also seems commensurate with Lefebvrian thinking.

Moreover, Lefebvre also affords a suitable theoretical perspective, which he spent a long career developing and refining. This has been called both 'spatial dialectics' (Shields, 1999) and 'dialectic materialism' (Toyoki, 2004), with his ontologically derived spatial triad as the 'epistemological engine' to explore and critically challenge spatial production. The term 'dialectic', which means "enquiry into metaphysical contradictions and their solutions" has a long philosophical heritage, from the ancient Greeks, through Kant, to Hegel, who "applied the term to the process of thought by which apparent contradictions (which he termed thesis and antithesis) are seen to be part of a higher truth (synthesis)" (Oxfordreference.com, 2021). That said, Lefebvre's spatial triad goes beyond thesis-antithesis-synthesis. He refutes the Hegelian notion of the final stage in the process of dialectical reasoning, in which a new idea resolves the conflict between thesis and antithesis. The point of the triad is, through meaningful analysis of real-life situations, to demonstrate an ongoing socio-spatial 'trialectic' interplay – the maintenance of and/or, rather than necessarily a resolution into something new.

Continuing, the terms 'spatial' and 'materialism' both acknowledge the existence of the material, i.e. the grounded, physical reality that everything happens somewhere, and that this has an impact on the thing that is happening. This addresses the main contention of those calling to 'bring space back in' to organisation theory, in that organisation theory tends to assume an almost *aspatial* perspective (e.g., Crang and Thrift, 2000; Halford, 2004). It is worth noting that dialectic materialism is also the name for the Marxist theory (adopted as the official philosophy of the Soviet communists) that political and historical events result from the conflict of social forces and are interpretable as a series of contradictions and their solutions, where the conflict is seen as caused by material needs. In other words, this can be seen as Hegel's thesis-antithesis-synthesis embodied in material terms.

So, long story short, through 'spatial dialectics' Lefebvre offers an ontologically and epistemologically sound theoretical perspective (Toyoki, 2004) that is widely informed by a range of other disciplines (including semiotics, phenomenology and Marxism) but

is ultimately and uniquely Lefebvrian. There seems little doubt that Lefebvre could also be considered a radical humanist. As Merrifield (2000:xxii) states: "I found him refreshingly different from the post Sartrean 'master thinkers' like Foucault, Derrida, and Althusser, more in touch with everyday life and everyday people; Lefebvre spoke to me as a radical person as well as a radical brain" … "Lefebvre was a man of action as well as ideas. He was a Marxist who introduced into France a whole body of humanist Marxism." And yet Lefebvre's spatial triad is also implicitly phenomenological.

Reflecting finally on the call for more interpretive workspace research in a field dominated (consciously or otherwise) by positivism, McAuley et al (2007) make the observation that positivism is pivotal to management by affording 'truths' as doctrine subject to authoritarian exploitation. Indeed, Kincheloe and McLaren (in Denzin and Lincoln 2008:282) advocate *critical enlightenment* as opposed to the 'arrogance' of emancipation, noting: "as many critics have pointed out, no one is ever completely emancipated from the socio-political context that has produced [them]", in a post-millennial multiplicity of "forces that insidiously shape who we are". To me, given such contested contemporary workspace perspectives (see section 1.2), this suggests that raising practical awareness about alternative, more participative and democratic workspace opportunities seems to be a more productive endeavour than launching theoretical polemics, if the aim is to achieve emancipatory ideals.

Consequently, through the theoretical perspective of Lefebvre's spatial dialectics, this study embraces an incidental rather than overt criticality. Blaikie (2007:162) offers further precedent for this approach: "Giddens regarded sociology as an inherently critical discipline in its capacity to undermine ideology and the capacity of dominant groups … in contrast to [Habermasian] Critical Theory, Giddens's form of critique is incidental to, rather than an integral part of, his scheme." In other words, a Lefebvrian analysis of inductive research findings will underpin an attempt to sceptically get "beyond surface truths (i.e. false consciousness or ideology) to encounter 'real' truth" (Prasad, 2005:221). Such truth, for Lefebvre (and so for me through this thesis), lies in the trialectic interplay, for better or for worse.

3.3   Methodology

Having established the philosophical grounding of the research and a commensurate theoretical perspective, the next element to consider is methodology – an appropriate system or approach for undertaking research fieldwork. Moravánszky et al. counsel that

mobilising Lefebvrian concepts should guide research, provide a source of inspiration and be used to develop ideas through "exchanges between theoretical experimentation and empirical research… not to search for catchphrases to decorate a text, but as an instrument of analysis and research" (2014:16). Lefebvre (1991:40) himself suggests that "the perceived-conceived-lived triad… loses all force if it is treated as an abstract 'model'. If it cannot grasp the concrete… then its import is severely limited, amounting to no more than that of one ideological mediation among others."

Such points encourage a methodology that embraces real world phenomena and allow the exploration of lived experience from multiple perspectives. Accordingly, the chosen methodology is case study, defined as "a research strategy that may be employed to develop a rich understanding of a subculture, a person's life, an organization, or a community… The case study approach is particularly appropriate where researchers are interested in understanding the creation of local cultures and the social construction of multiple realities" (Grills, in Ritzer, 2007:1129-1130). Cresswell (1998) outlines that the qualitative approach involves situation(s) bounded by time and place (the unit(s) of analysis); detailed, in-depth data collection involving multiple sources of information (the process of the study); and reporting of context, description and themes (the product or outcome).

The case study methodology has been criticised for lacking the methodological rigor from which to "produce generalisable, reliable, and theoretical contributions to knowledge" despite – paradoxically – extensive use in many academic fields (Saunders, Lewis and Thornhill, 2009:185). It has also been criticised from some social science perspectives for having 'qualitatively positivistic' methodological connotations (Prasad 2005). Flyvbjerg counters this, explaining that case studies are not about the 'vain search' for 'predictive theories and universals', as to claim this invites positivistic critique. Instead, they offer social science "concrete, practical, and context-dependent knowledge" exemplified in 'specific cases' which can serve as a "departure point for praxis" (2001:422). With a focus on 'phronēsis', or practical wisdom, the credibility and robustness of a case study strategy can be further strengthened by principles of good sense, judgement, and prudence. Flyvbjerg (2006) also espouses the values of a qualitative, interpretive case study approach, claiming that from a Kuhnian perspective, exemplar case studies are critical to advancing the social sciences. In other words, case study research of this nature can be extremely valuable and does not need to defend itself in natural science terms.

This is because "...in contrast to natural phenomena, human beings have the capacity to make decisions about their actions, and these decisions have a component of 'free will' which undermines any attempt at explanation and prediction" (Blaikie, 1993:2). The social and the natural are akin to ships, Giddens explains, where: "in large degree the two simply sail on different oceans, however much they might share certain common navigational procedures" (Giddens, 1987:18; in Blaikie, 1993:70). In this vein, professional social enquiry can transform "into a form of practical philosophy, characterized by 'aesthetic, prudential and moral considerations, as well as more conventionally scientific ones' … 'enhancing or cultivating *critical* intelligence'" (Schwandt, in Guba and Lincoln, 2008:273).

Finally, this case study research is qualitative rather than quantitative, defined as 'an array of non-statistical research practices' (Johnson et al. 2006) – in my case emphasising words *and* images in the collection and analysis of data. There are clearly also more pragmatic considerations to address including case selection, access and participant recruitment, data collection and so on, all undertaken and presented in a way that demonstrates rigour to the reader. These are discussed presently, as the chapter turns in a more practical direction.

3.4   Methods

Chapter 1 introduced the research as employing a visual research method called participant-led photography to promote conversational interview data, and articulated a specific research question concerning the value of participatory visual research methods to the workspace design and management body of knowledge. This section explores these methods and justifies their application in more depth. To begin with though, it articulates where my interest came from.

Whilst relatively common in some disciplines (including education and geography), visual methods seem rare in workspace design and management research, and indeed organisation theory (Vince and Warren, 2012). For a practically focused discipline with "aesthetic, instrumental and symbolic functions", as Elsbach and Pratt (2007:181) put it, this might seem odd. Perhaps both of these observations contribute to why one award-winning study[10] captured my imagination: Greene and Myerson's 'space for

---

[10] The article was awarded 'outstanding paper' at the Literati Network Awards for Excellence (2012): http://researchonline.rca.ac.uk/1487/ (accessed 3 January 2020).

thought' research, which used a 'novel graphic tool' in participant interviews, alongside ethnographic observation and focus group data collection. Their deceptively simple, creative approach invited knowledge worker participants to reflectively "describe their mobility in relation to the office by drawing their movements in and around the box" and concurrently explain their doodles (2011:22). The study yielded a new appreciation and typology of knowledge workers based on their workspace mobility requirements and preferences. Consequently, I wondered about similarly incorporating a novel visual approach into my data collection.

During the inevitable immersion in both topical and methodological literature, two further discoveries unfolded. Firstly, I became increasingly interested in the potential contribution of photographic data. For example, Warren[11] undertook a series of workspace aestheticisation investigations in a critical management vein, exploring 'hot-nesting' (in response to organisational 'hot-desking' protocols) using a participant-led photographic technique, curious "as to why, in an office where no one was supposed to have personal desks, there was such an apparent proliferation of personal effects on display" (Vince and Warren, 2012:282). A further unpublished study by Tietze (then of Sheffield Business School) explored the work-life-family balance of homeworkers through participant photographic diaries, yielding rich, otherwise inaccessible insight. Such studies, among others, hinted at the rich and diverse emergent data potential of innovative participant-led techniques.

Secondly, in 2002, The Industrial Society[12] commissioned two then staff researchers, Nathan and Doyle, to undertake a study entitled 'The state of the office: the politics and geography of working space'. Part workspace history, part empirical study, and part design guidance, it is a valuable resource. But of particular interest was an oddly unexplained illustrative appendix of participant photos and associated comments as evidence of lived workspace situations significant to the study participants[13]. My intent then was galvanised towards a participatory visual element of my research. The more I learned, the more a participant-led photographic technique seemed appropriate. The next section outlines this research approach.

---

[11] Incidentally, co-founder of the ESRC funded International Network of Visual Studies in Organizations (www.in-visio.org).

[12] Shortly afterwards rebranded The Work Foundation, a British not-for-profit organisation with interests in the future of work.

[13] I was so intrigued by this study that I tracked Nathan down in spring 2014. He had since gravitated toward urban and spatial economics. Whilst recalling the study, he shed no new light on the peculiarly unacknowledged appendix.

3.4.1 Participant-led photography

Participant-led photography (PLP) is a qualitative method that seeks to explicitly foreground participant subjective perspectives in the co-creation of research data (Vince and Warren, 2012). "Helpful in exploring everyday, taken-for-granted things in… participants' lives", it can unlock culturally encoded meaning through material reality (Rose, 2012:306). Other related terms include photo-voice (Warren, 2005), photo-elicitation (Harper, 2002) and auto driving (Heisley and Levy, 1991), although photo-voice is more typically related to long-term community empowerment initiatives (Rose, 2012). Visual studies have long-established anthropological and sociological roots, with pioneers such as Collier in the 1960s, and photo-elicitation is common in some social science disciplines (Rose, 2012). Yet specific organisation and management studies remain scarce (Strangleman, 2004; Vince and Warren, 2012). This is somewhat surprising given the 'ocularcentric visual culture' of modernity (Rose, 2012). Nonetheless, given the proliferation of smartphone/social-media image use, the dematerialised linguistic and recent spatial 'turns' in sociology (Dale and Burrell, 2008), momentum seems to be gathering for a 'visual turn' (Davison, McLean, and Warren, 2012). Noting the lack of visual studies in the workspace design and management field, this also indicates a contribution opportunity for this study.

Crucially "photography is an ideal medium through which to analyse the importance of space… capturing not only the intended subject of the photograph, but also [an 'inventory'] of contextual information"; "these photographs then set the agenda… where the [empowered] participants will explain why they took the pictures and the meaning and significance they hold" (Vince and Warren, 2012:282;281). Additionally, the technique can be "deployed with the aim of exposing the ways in which social positions and relations are both produced by, and produce, distinct [spatial] experiences" (Rose, 2012:299), affording a critical, sensory perspective with potential Lefebvrian relevance. Thus, rather than photographs being unproblematic 'facts', they become socially constructed subjective windows (Harper, 2002), or representations, potentially evoking different kinds of participant knowledge (Rose, 2012). The images enable consideration of data through, not just within, the image during the collaborative 'event of seeing' (Belova, 2006). Vince and Warren (2012) note the need to preserve, wherever possible, the 'image/text' relationship, and that two key challenges can effectively make or break this technique: ethics and analysis. Both are discussed presently, and I revisit the practical research value of PLP as personally experienced when I address research question 4 in section 5.4.

3.4.2 Interviews as conversations

"Natural scientists can only observe their subject matter but social scientists can converse with theirs" (Blaikie, 1993:117).

As the research design came together, one particular orientation to undertaking interviews resonated strongly. Although perhaps societally "the interview has become a taken-for-granted feature of our mediated, mass culture", a researcher must remain mindful that "the interview is a negotiated text, a site where power, gender, race and class intersect… The interview is a conversation… not a neutral tool… [producing] situated understandings" (Denzin and Lincoln, 2000:633). This means that whilst convenient, valuable and economical, 'pragmatic reflexive' consideration must be given to their validity as 'transparent windows' into the truths of organisational life (Alvesson and Ashcraft, 2012). In other words, interviews are value-laden, negotiated, contextual and fundamentally co-constructed intersubjective exchanges (Fontana and Frey, 2000). To explicate, Kvale (1996) succinctly reframes interviews as '*InterViews*', although such wordplay belies his rigour.

This intersubjectivity made implicit sense to me, and Holstein and Gubrium's (1995) proposition of the 'active interview' resonated most, where the interview parties are necessarily and unavoidably *active.* Here, Kvale's notion of "wandering together with" (1996:4) captured my own reflexive research beliefs and aspirations, where each participant is "necessarily involved in meaning-making work… actively and communicatively assembled in the interview encounter" (Holstein and Gubrium, 1995:4). This was social-constructionism writ large, to be welcomed and embraced: "understanding *how* the meaning-making process unfolds in the interview is as critical as apprehending *what* is substantively asked and conveyed… as it 'prospects' for information" (ibid:4-5).

Thus, subjects should never be considered as epistemologically passive 'vessels of answers'; they are 'always already' mediating, altering, actively making meaning. Accepting the active interview therefore embraces interpretive practice in alignment with an inductive approach (Blaikie 2007): "interview participants can be likened to practitioners of everyday life" thus, the role of the researcher is "to provide an environment conducive to the production of the range and complexity of meanings that address relevant issues, and not be confined by predetermined agendas… a kind of limited 'improvisational' performance… spontaneous, yet structured" (Holstein and Gubrium, 1995:16-17).

For instance, this exert from one conversation provides just how relevant this theoretical discussion is (and also the value of preserving the image/text relationship noted above). It comes from my interview with a participant as we discussed a particular image they had taken of the workspace they had designed. Note the back-and-forth conversational flow evidencing the co-created narrative and understanding, as we both spontaneously consider each other's information:

Researcher: So, hang on a minute… so that is part of [ShareCo], but the fact that it is transient storage, kind of…

Alpha (an ArcCo provider): …negates people's use of it, yeah…

…yeah, because people think it's a storeroom.

So you haven't signposted that this is a quiet area…

…no, but…

…it's just people find it and use it for that thing.

Yeah, and I think signposting everything dumbs everything down. I want people to actually find these spaces.

Discover?

And they do, like you see people have long conversations there but with all this stuff in there, it's not used as much as it should be.

And this, I guess in some ways, is kind of linked to the fact that the bridge is an ideal space for that sort of conversation?

…yeah…

…but because of the restrictions the landlord imposes, this is your solution.

Second best, yeah.

Reflexively, my resonance with Kvale's 'interViewing' didn't mean I wasn't contested. Whilst I sought to promote emergence, I was equally surrounded by interview theory advocating at least some consideration of structure. Every engagement is a precious opportunity to collect valuable research data, after all. Consequently, I conscientiously prepared a framework of 'prompts': conversation starters, outline questions and key reference points (appendix 8.5). Although it was always to hand, it seemed that to genuinely embrace socially constructed emergence, the interviews needed to feel as

natural, non-contrived (although of course an interview is nothing but contrived) and conversational as I could contextually achieve. This meant needing to establish significant trust and rapport to facilitate successful research engagement, and mindful of reflexive self-awareness (Fontana and Frey, 2000) and my own positionality and personality (Moser, 2008). I anticipated that the photos could be tremendously valuable here. Reportedly, images have the 'third party effect' of 'igniting' (Scarles, 2010) easier and enjoyable discussion: the participant and researcher can effectively unite, affording richer contribution (Vince and Warren, 2012). Some describe the effect as like having a mutual friend in the room from the outset to talk to. One semi-structured 'prompt' I did consistently retain though was the question "is there anything you wanted to capture [photographically] but didn't/couldn't?" (Rose, 2012). The usefulness of such a prompt, and indeed the engagement with the visual method, is demonstrated in this response from a PropCo user, Quebec:

> "Something that you couldn't represent was the way that people use the office and this rebelliousness… you'd almost need a time-lapse video showing you how people are moving about... using the areas in ways that probably they weren't meant to be used like people working in the kitchen sometimes… environments that they feel comfortable in."

Ultimately the more unstructured the approach, the higher the risk of critique in terms of both research design and data relevance, due to relying heavily on intuition and 'in the moment' reading. The following advice resonated strongly: "meticulously following steps can lead to a fixation… with method at the ironic expense of creative and critical thinking… doing interviews well entails careful, critical and self-conscious epistemological reflection" (Alvesson and Ashcraft, 2012:250-254). Kvale (1996) also positions interviews as craftwork, to balance the dualism of 'tips and recipes' criteriology against deconstructive 'no-method' relativism. To promote such reflexivity, I resolved to record each conversation for subsequent transcription and analysis, to afford minimal notetaking, maximum engagement, and both in-the-moment and post-reflection.

3.5   Quality, reflexivity and ethics

Irrespective of qualitative approach, three key factors require consideration – quality, reflexivity and ethics. In traditional (i.e. positivistic) scientific studies criteria of reliability, validity and generalisability are typically used to assess the quality of a study. However, as discussed previously, for research methodologies like case study, these criteria

become problematic. Instead, Golden-Biddle and Locke (1993:595) explore the idea of being convincing, which can be achieved by demonstrating authenticity, plausibility, and criticality. Authenticity must evidence that the author has been 'there' in the field and has been genuine to the experience, in effect demonstrating "how members understood the world". Plausibility must enable the reader to make sense of the findings, and "to accept that the findings make a distinctive contribution". Finally, criticality must offer the reader the opportunity "to re-examine [their] taken-for-granted assumptions". Other authors introduce alternative terms. Easterby-Smith et al. (2012), for example, emphasise the need for believability and transparency, which seem broadly commensurate with Golden-Biddle and Locke's authenticity and plausibility. Interrogating criticality more extensively, Johnson et al. (2006) argue for the authenticity of such constructionist, critical research being derived through epistemic reflexivity, accommodation (replacing the notion of generalisability), and catalytic validity (the extent to which the research changes those it studies).

This brings us to reflexivity. According to Bryman and Bell (2007:712) "reflexivity involves a willingness to probe beyond the level of straightforward interpretation (Woolgar, 1988) and to explore how these biases and characteristics affect the research process." They also consider Johnson and Duberley's three different forms of reflexivity, all of which have relevance (2003:713-714):

- methodological reflexivity… involving monitoring the behavioural impact of the researcher's actions on the social setting under investigation and detailing the nature of these effects in research writing;
- deconstructive reflexivity… entailing the researcher questioning their own taken-for-granted beliefs and accepting that there will always be multiple valid accounts of a research project; and
- epistemic reflexivity… retaining the hope that some notion of truth can be attained through consensus based on engagement with research subjects.

Ultimately, the purpose of this thesis to convince the reader as to the quality of the research from these various and important perspectives.

Turning now to ethical considerations, in addition to fulfilling the university's Research Ethics Committee criteria for the study (appendix 8.1), previous field experience sensitised me to the ethical and access challenges of organisational field research (Ellison and Owen, 2010). Furthermore, PLP amplified my concerns, as it necessitates proactive consideration of iconographic data protection and informed consent. Vince

and Warren (2012) advocate a 'responsible photography' charter approach to be built into the communication, briefing and consent activities, which was duly incorporated (appendices 8.3 and 8.4). With PLP, participants actually retain advance control of disclosure through their own image gathering activity, but anonymity must still be respected, not to mention complex copyright laws. Prosser, Clark, and Wiles (2008) offer a range of institutional, legal and pragmatic guidance worth heeding here.

Consequently, consent must be considered as an ongoing collaboration derived through mutual learning (Irvine, 1998), responsive to cultural relativism and sensitivity (Lipson, 1994). Also, "in Kantian terms, researchers have a duty to avoid treating participants as a means to an end, rather than as an end in themselves" (Murphy and Dingwall, 2001:339) both during and after engagement. Given the potentially emergent critical nature of the Lefebvrian analysis, such concerns were and remain paramount to this study. Consequently, Miles and Huberman (1994) present a series of prudent ethical considerations, which are addressed in table 4 below.

Table 4: Ethical considerations (Source: author's own, adapted from Miles & Huberman, 1994)

Ethical consideration	Researcher response
1. Worthiness of the project	The discussion in chapter 1 demonstrates worthiness through all four research questions, particularly given the dearth of Lefebvrian research in the workspace design and management discipline, and the scarcity of PLP studies in workspace and organisational theory.
2. Informed consent	Participants were recruited openly through their typical channels of communication and briefed fully, before consenting to the study.
3. Harm and risk	Participants were aware they could withdraw at any point. As part of the sensemaking process participant summaries were offered, which some took as an opportunity to update or clarify. Reflexive consideration ensured careful selection of any data presented.
4. Benefits	The PLP and interview process offered participants reflective learning opportunities, and learnings and findings were offered to all participants both individually and collectively following analysis.
5. Honesty and trust	Established during group briefing sessions, individual interviews and through general conduct in both case settings. Reflexive consideration of my own positionality underpinned this.
6. Privacy	All interviews were carried out in private, with assurances of confidentiality. Data has been stored securely. Visual images have been modified as required to protect participant identity and data.
7. Confidentiality and anonymity	All cases and participants are anonymised. Images as above.
8. Integrity and quality	Analysis and interpretations have been made based on participant findings, with a reflexive awareness of my privileged voice as author.

3.6   Case study selection and access

Case selection is clearly dependent upon a wide range of factors, both within and beyond the researcher's control. Acknowledging my own workspace interests at the time, and more specifically recognising the need for case-settings to facilitate access to both provider and user perspectives (given research question 1), I was particularly interested in both 'agile'/'activity-based working' (ABW) as a seemingly prevalent workspace design and management solution (Usher, 2018b), and also the rising popularity of coworking workspaces. I have already introduced 'agile'/ABW in chapter 2, acknowledging its significance in the workspace design and management field, although interestingly, Leesman (who claim to be the largest global 'workplace experience' benchmarking service) offer contradictory evidence: ABW only accounted for 4% of workspaces they surveyed over a year from March 2015 – challenging the narrative of ABW as a dominant workspace trend (Leesman, 2016).

Continuing, whilst coworking workspaces are also one of, for example, Usher's (2018b) fourteen workstyle typologies, a little more context is useful here. Whilst commercialised shared office services have been available for decades, coworking arose in the 2000s[14] as an organised 'third space' solution (Rus & Orel, 2015) for independent groups or individuals sharing particular values to gather, work together, share resources, and potentially realise collaborative synergies within the same workspace: "Coworking spaces were intended to become an alternative to working in a classic office or in [a] private home, a new type of workplace infused with values espoused by the open source movement" (ibid:1020). As such they are typically low or non-profit enterprises. Bachmann (2014) recognises their shared identity, equally as a business, network and movement. In addition to the global proliferation of coworking enterprises of this ilk, the 2010s also saw the rise of scaled and commercialised 'coworking' offers to rival traditional shared office services. As previously mentioned (section 2.2), WeWork is the most obvious example of this trend.

I successfully identified and accessed to two case-settings that suited my research aspirations well – one ABW (termed 'agile' by the organisations involved) and one coworking. Both are introduced and explored in chapter 4, but it should be noted here that this research does not seek to make any summative judgement between the cases

---

[14] The origin story is of an ex-Silicon Valley programmer called Brad Neuberg setting up 'Spiral Muse coworking group' in 2005 (Rus & Orel, 2015), consisting of several desks, some sofas and a kitchenette in a women's centre in San Francisco, available to self-employed workers for $100 a month.

(or the workstyles and/or workspaces represented). This is not the point or aim of my Lefebvrian explorations, and frankly it would be like comparing apples and oranges. As a workspace academic, it was clear that interesting examples were everywhere, with myriad contexts and drivers. In this sense, comparison is intended in a comparative case study methodological sense only (Fitzgerald and Dopson, 2009). As previously discussed, no absolute generalisation of findings can be claimed (Saunders, 2012) beyond the organisational settings. My preferences and ultimate choices merely sought differing, relevant and interesting contemporary knowledge workspace types.

There are also sampling methodology implications here, which pragmatically unfolded alongside access negotiations. At a workspace setting level, selection can be described as both purposive and typical case (Saunders, Lewis and Thornhill, 2009). Considering each case setting as homogenous (in terms of similarity of overall workspace) a non-probabilistic sampling approach adopted (Saunders, 2012) afforded willing participants. Given the different provider and user roles, within-setting sampling can be regarded as critical case, affording potential theoretically evidenced parallels (Warren, 2006; Saunders, 2012). Nonetheless, I found guidance regarding participant numbers particularly ambiguous. On the one hand, given "saturation is the key to excellent qualitative work" (Morse, in Saunders, 2012:44) and that saturation typically occurs between six and twelve interviews (Guest, Bunce, and Johnson, 2006), there was at least limited guidance. However this also felt suspiciously positivistic. Although I anticipated some congruence within the data, the study was about allowing the socially constructed lived experiences of individual participants to emerge, saturation or not. I resolved to be methodologically reflexive (Johnson and Duberley, 2003) regarding interview numbers, noting Kvale's (1996) call for intuition too.

3.7   Participant recruitment and briefing

Within each case-setting, workspace providers and users (Dale and Burrell, 2008) were invited through preferred internal organisational communication channels to participate in the research. Thankfully, both cases yielded willing volunteers, through both spontaneous interest in the study, and (as I learned later for PropCo) a little gentle encouragement. The study began with eighteen and ended up with seventeen participants who, like the organisations, have been anonymised:

- **PropCo:** five[15] users and one provider
- **D&BCo:** two providers
- **ShareCo:** six users and one provider
- **ArcCo:** two providers

Informed by Vince and Warren's (2012) 'responsible photography' charter, initial group briefing sessions arranged onsite at PropCo and ShareCo introduced both the study and me as researcher, explaining the scope, purpose, structure and logistics of the research, consciously in lay terms (Giddens; in Blaikie, 1993). Participants were invited to consider "what mattered to them about workspace" by capturing and then electronically sending me a series of smartphone photographs which would form the basis for face-to-face conversations with me to discuss their perspectives. I foregrounded research ethics and confidentiality[16], tasked participants with their photographic data-capture task, discussed 'responsible photography', obtained consent (appendix 8.3), addressed any queries, and provided practical guidance (appendix 8.4).

As far as possible, fully accepting the axiological challenges of formative value-laden qualitative research (Denzin and Lincoln, 2008) I invited participants to capture anything they felt mattered to them in relation to the research topic, and to be as creative (or not) as they liked. Asserting that an image is neither right nor wrong, I hoped they would feel both liberated and enthused. Moreover, the introductory meetings were an exercise in familiarity, establishing direct communication links and, crucially, developing rapport with all participants.

Following briefing, interview arrangements were consciously made within participant's own workspaces, as this also afforded immersion in their 'natural' work-settings, given the case study methodology. In an albeit constrained way, more welcome guest than true member, I sought to participate, in Lefebvrian terms, in 'la vie quotidienne' of the participants' surroundings for as long as possible. Immersion was easier at ShareCo than PropCo, given the differing nature of both cases. I made reflective fieldnotes accordingly and captured several smartphone images myself, mainly in response to

---

[15] Originally six: one withdrew following the briefing session, citing workload pressures.
[16] Interestingly, participants from ShareCo and ArcCo seemed to find the confidentiality concerns almost restrictive, spontaneously discussing ideas of collaborative data capture and visibility. From a research ethics perspective, this required careful reflection-in-action to negotiate.

specific points discussed and indications from participants of missed workspace elements they had intended to capture.

I processed the digital images as I received them. The intention was to print all images in A4 colour format and gain an initial familiarity with content, noting any initial reflections prior to each interview. I anticipated providing tangible 'photo-sets' for participants to lead me through in 'open-viewing' conversations (Vince and Warren, 2012), shuffling, grouping, annotating as they desired. Unfortunately, this aspiration came unstuck – I simply didn't receive many images in time. Excepting one PropCo user, who turned up with their own printed set and sketched on them to exemplify points as we spoke (echoing Green and Myerson's (2011) approach), all image sets were instead available on my laptop screen, with participant engagement ranging from fully 'auto driving' (Heisley and Levy, 1991) with hands-on keyboard use, to dictating the conversational sequence to me.

3.8   Chapter summary

This chapter has explored the research design foundations of the study, establishing Lefebvre's 'spatial dialectics' as an appropriate inherently critical theoretical perspective commensurate with an ontological realist and epistemological social constructionist philosophical position. It has then identified case study as the chosen qualitative research methodology, justifying participant-led photography and active interviews as appropriate research methods, before finally detailing key practicalities concerning case study selection and access, participant recruitment and engagement. The overall aim has been to demonstrate due consideration of design quality and ethical considerations, in order to establish the authenticity, plausibility, and criticality of the research. The discussion now turns to the research analysis and findings.

chapter four

analysis and findings

4. Analysis and findings

This section presents my sensemaking journey and outputs. It introduces both case settings and articulates how I inductively explored the field data to derive 'emic' workspace themes apparent within each case setting. It then considers these themes in 'etic' terms, using Lefebvre's conceptual apparatus, the spatial triad, to explore the 'spatiality' (or socio-spatial relationship) of each case. To do this convincingly, I first explore and justify my approaches to theory development, analysis and sensemaking of qualitative text and image data, and then my application of the triad.

This means that this section begins to directly consider the research questions posed for this study (section 1.4, restated where relevant below). Reflexively I acknowledge, commensurate with the social-constructionist, inductive nature of the study, that this is but one interpretation of the data. Other theoretical positions and indeed researchers might explore the data differently and derive different themes and subsequent perspectives. Again, the purpose of this research is not to claim any universal truths, nor make any summative judgement between the cases.

4.1   Emic and etic theory development

When it comes to qualitative research, Blaikie (1993), Saunders, Lewis and Thornhill, (2009) and others identify three different approaches to new theory development: linear deduction and induction, and cyclic abduction; Blaikie also adds retroduction as a fourth. This study can certainly be considered at least initially inductive, "in which theory is developed from the observation of empirical reality; thus general inferences are induced from particular instances" (Collis and Hussey, 2003:15). That said, how does the subsequent deployment of Lefebvre's triad as a conceptual apparatus shift the emphasis?

For example, does it create the opportunity for retroduction, "observing some phenomenon and then claiming what it was that gave rise to it" (Blaikie, 1993:164), or does it afford abduction, where "known premises are used to generate testable conclusions" (Saunders, Lewis and Thornhill, 2009:145)? Given the triad was only outlined *conceptually* by Lefebvre, and its practical application invited, I would suggest the triad is far from a 'known' (i.e. proven and established) premise, nor does it seem possible to test my conclusions. That is not the nature of this research.

Alternatively, Tracy (2013:21) offers a different and perhaps more practical perspective – that of *emic* and *etic* approaches to qualitative research: 'little-to-big' "emic understandings of the scene … [where] behaviour is described from the actor's point of view and is context-specific" contrast with 'big-to-little' "etic understandings, in which researchers describe behaviour in terms of external criteria that are already derived and not specific to a given culture". In other words, emic meanings emerge from the field, whereas etic meanings involve external theories to determine or frame them.

Maybe the differences between Blaikie (etc) and Tracy's perspectives are subtle – but Tracy's articulation certainly helps recognise the separation between two distinct stages of analysis within this study – first emic, then subsequently etic. Consequently, I have adopted these terms for clarity below.

4.2   Sensemaking – magic or mechanics?

There appears to be far more literature about undertaking qualitative fieldwork than there is on analysis and sensemaking of subsequent data. Concerning the study of the 'lived experience', May (1994) perhaps controversially talks in terms of 'knowing' as being to some degree a 'magic', 'gut feeling' or 'black box' process en-route to acquiring and recognising insightful patterns. Alternatively, Morse (1994) chooses to elaborate beyond May's 'magic', suggesting a sequential, cognitive analysis process including comprehending, synthesising, theorising and recontextualising the data. Mitchell and Charmaz (1998) advocate the identifying and qualitative coding of recurrent themes to facilitate pattern identification. The point, as Tracy (2013) puts it, citing Weick (2001), is not to ask the data 'what is *the* story here?' but rather 'what is *a* story here?'

My own experience resonated with all of these perspectives, to a degree. The approach that best describes my sensemaking journey is the 'constant comparative method' (Tracey, 2013, after Charmaz, 2006). The process was iterative rather than grounded in a pure sense, alternating "between emic, or emergent, readings of the data and an etic use of existing models, explanations and theories" (ibid:184). Whilst I strove through the research design to keep pre-existing theories and perspectives to one side, reflexively, one cannot resist the inevitable influence of a priori awareness.

I had anticipated using qualitative analysis software but ultimately struggled, finding that unless I could maintain visual connections with such voluminous (and visual!) data I began to drown. Instead, I needed to immerse myself in the textual, image and audio

data, to first explore different primary codes, and then synthesize hierarchical codes. This meant variously using different surfaces, flipcharts, white-boards and post-its to enable an inherently manual, iterative sensemaking approach (see figure 4 as an early-stage example). Noting the relative lack of advice around the analytical critique of image (compared to textual) data, I recognise my approach to image analysis as predominantly 'dialogical' (rather than 'archaeological') embodying a "commitment that the social and personal (discursive) meanings of photographs can only be properly attributed by their photographers" (Shortt and Warren, 2019:543). Following the advice to 'ask' a corpus of rich data open-ended questions like 'what is happening here?' (Creswell, 2007; in Tracy, 2013) I considered the following 'questions' for each participant's data:

- What seems to be at the heart of what they value?
- What are their key workspace headlines?
- What discussion points arose from the conversation?
- What reflections or questions have I got (to potentially pursue further)?
- What visual research methods observations can I make?[17]

Despite using a professional transcription service[18], my process also meant immersing myself time and again in the interview recordings, first to rigorously check (and correct) the quality of the commissioned output, then to reflect on content and meaning, often while out walking.

I elected to produce participant summaries using the above questions to explore the data, which promoted focus on salient issues. This both facilitated my constant-comparative coding process (Tracey, 2013) and provided an opportunity to reengage with participants and check understanding. Some seven months since the photo-driven interviews, nine (more than half) of the participants did, supporting the approach and also my sensemaking from their perspective. These participants endorsed, clarified or responded to my reflections in a straightforward manner, typically by email and occasionally by phone. Only one participant undertook to copy-edit their own summary content to be more aligned with their organisation's narrative – something they clearly saw value in doing given their own professional role. A participant summary example is provided as appendix 8.6.

---

[17] In particular, this question maintained a specific focus on research question 4.
[18] After researching the level of the transcription suitable, the conversations were transcribed according to 'intelligent verbatim' guidelines. Full verbatim transcription analysis was beyond the scope and requirement of the study and so the pauses, stutters, 'uhms', 'erms' and 'uh-huhs' of natural conversation were omitted.

Ultimately, from the socially-constructed, co-created interview narratives and their PLP accompanying images, I arrived at a set of hierarchical codes which afforded both independent and comparative accounts of each case-setting, based on 'what mattered about workspace' to all participants. These accounts are presented below, in section 4.6. Later in the analysis phase I used nVivo software briefly to 'cross-check' my coding as I moved from the emergent emic findings towards the etic application of Lefebvre's triad, as a strategy to ensure I wasn't perceiving convenient data patterns.
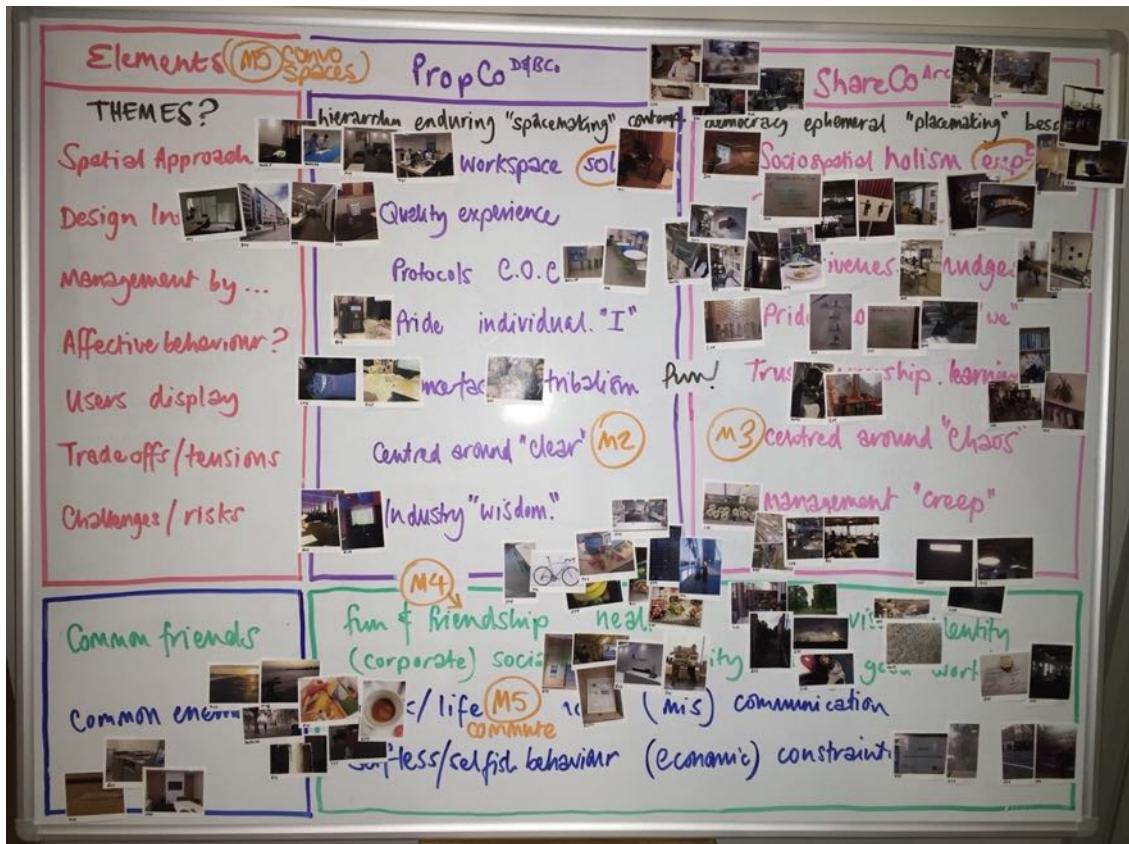
Figure 4: Early example of emic themes and associated PLP images derived from 'constant comparative' sensemaking (Source: author's own, summer 2015)

4.3   Lefebvre's triad as 'conceptual apparatus'

I spent significant time considering how to deploy Lefebvre's 'conceptual apparatus' within my own research. Because this is so integral to the study, both in terms of approach and ultimate findings, it is important to establish how I chose to use the spatial triad and why, in addition to the specific PLP and more general qualitative research considerations discussed above. In some respects, this section is an addendum to both

chapter 2 and chapter 3. As I explain in section 1.5, this is the pervasive nature of Lefebvrian work.

There are now numerous Lefebvrian studies which typically utilise his concepts in one of two ways – theoretically or through application. Moravánszky et al. (2014:16) counsel that mobilising Lefebvrian concepts should guide research, provide a source of inspiration and be used to develop ideas through "exchanges between theoretical experimentation and empirical research … as an instrument of analysis and research". Merrifield (2000:175) rather passionately states that the triad "needs to be *embodied* with actual flesh and blood and culture, with real life relationships and events" to have any significance for our understandings. Indeed, Lefebvre himself (1991:40) maintains that "the perceived-conceived-lived triad … loses all force if it is treated as an abstract 'model'. If it cannot grasp the concrete … then its import is severely limited, amounting to no more than that of one ideological mediation among others".

To inform this workspace-oriented study, three particular empirical applications of Lefebvre warrant specific consideration. First is Wasserman and Frenkel's (2011) aesthetic analysis of the new Israeli Ministry for Foreign Affairs (IMFA). The authors claim the study is the first (to their knowledge) to use all three Lefebvrian spaces in a single organisation (sic), outlining an extensive but rigid approach which considers both providers and users of the IMFA building and workspace. They find an organisation materialised within a clearly abstract, dominated, resisted and contested workspace (resulting in a range of 'culture jamming' appropriation tactics by the users) to the extent that one might wonder how on earth the American Institute of Architects award-winning 'experts' of one of the world's ten most beautiful buildings in 2014 seemed so oblivious to the potential organisational outcomes of their architectural conceptions?! However, the authors mobilise the triad in an analytic fashion which seemingly serves to underline the conflict. In other words, by essentially locking the conceived to the provision and the lived to the user, then critiquing the practiced outcomes, is their conclusion potentially a critical Lefebvrian fait accompli?

Second is a paper by Carp (2008), who notes that conceiving the triad as "an analytical tool for discerning imbalance between abstraction and difference in social space" (akin to Merrifield's 'present' spatialities, see section 2.7) might reveal clues to facilitate greater understanding and interpretation (ibid:130). From an urban planning perspective, Carp introduces the notion of 'ground-truthing' as the "practice of using field observations to interpret, analyse, and verify remotely sensed information about

physical features of an area" (ibid:129). The conceptual (yet spatialised) relationship to Glaser and Strauss' systematic 'grounded theory' methodology appears evident. To do this, Carp mobilises Lefebvre's triad (table 5, below) and – embodying the 'third wave' of Lefebvrian scholarly work (section 2.5) – evidences its utility through a range of empirical applications. Her approach fosters a more educational, holistic consideration of spatial production, including case study analyses, student learning activities and community engagement. As Crang (1999:176) puts it, both acknowledging and critiquing Lefebvre's own positionality: "although there is an implicit drift in Lefebvre's work to privilege lived space – one could read his categories as being about the colonization of the lifeworld – there seem other angles we can draw out. Looking at the categories together offers the chance to think about the reflexive interactions between the various components." Accordingly, Carp appears to deploy the triad in a more neutral way than Wasserman and Frenkel, and her evidence and testimonial to its success catalysed and subsequently shaped my own analytic endeavours (section 4.7 below).

Table 5: Lefebvre's conceptual triad as categories of analysis
(Source: annotated by author based on Carp, 2008:133)

Field	Aspects of triad (Physical space/ *Experience*)		Examples	Human being
	← More Abstract	More Concrete →		
Physical	**S** Spatial practice **Material production**		Routes, destinations, way-finding, modes of transport	My body/ Your body
	P *Perceived space* **Sensed** ('functionally')		*Smelling, seeing, hearing, tasting, touching, moving, attending, dissociating*	↑↓
Mental	**S** Representations of space **Production of knowledge**		Plans, discourses, concepts, methods, models, theories, academic disciplines	My mind/ Your mind
	P *Conceived space* **Thought** ('aesthetically')		*Thinking, reflecting, systematizing, ideating, imagining, interpreting, measuring, categorizing*	↑↓
Social	**S** Representational space **Production of meaning**		Home, graveyard, festival, family farm, office, public monument, Nature, bed	My direct experience/ Your direct experience
	P *Lived space* **Experienced** ('symbolically')		*Living "in the moment," loving, fearing, creating, witnessing, finding intersubjectivity, joining in, recognizing limits, remembering*	

Semiotic: space that is produced and experienced (existing materiality) *"what it is"*
Phenomenological: producing of space through experience (human being) *"how it happens"*

Carp's perspective chimes with a third more recent example from Kingma (2019) who used Lefebvre's triad to explore the outcomes at a Dutch international insurance subsidiary seeking to implement 'new ways of working' (NWW) when they relocated. Kingma's case study was longitudinal, first concerning initial employee sensemaking and response to the implementation, then subsequently shifting "to the appropriation and everyday spatialisation of NWW by the employees" (ibid:390). Interestingly, Kingma identifies NWW as "an organizational design concept of Dutch origin with a global relevance" and as a "material-virtual design solution" comparable to 'activity-based working', "often summarized as bricks, bytes and behaviour changes, indicating the integrated management of spaciotemporal, technological and organizational cultural changes" that the concept involves, and novel in how "technological and architectural [organizational design] dimensions are being integrated, commodified and presented in a systematic way, thus furthering new kinds of social workspaces" (ibid:383-384).

Kingma notes the 'roughly' Lefebvrian resonance of this spatial, technological and cultural 'totalizing' 'unified perspective', conceived as the 'pillars' of NWW. His case analysis identifies flexibilization, virtualization and interfacialization as the dominant perceived, conceived and lived themes of Lefebvre's triad, respectively, noting "in this sense, NWW reflect a paradox in which freedom and flexibility for employees are accompanied by new demands for (self-)management and (self-)discipline" (ibid:403). Like Wasserman and Frenkel (2011), 'culture jamming' resistance tactics were observed, but Kingma (2019:399) stresses "although Lefebvre's lived space is often associated with struggle and resistance … The lived space can also be in harmony with, and a fulfilment of, the conceived space."

These are but three examples, and there are no doubt others of relevance. The key point is that, inspired particularly by Carp's Lefebvrian 'ground-truthing' approach to explore Crang's 'colonised lifeworld', I considered the research data in a similarly analytical (Carp) fashion (figure 5 below). This ultimately meant exploring the data through a four-stage sequence (table 6, below). The stages of this analytic process and their findings are shown and discussed from section 4.7 onwards.

Table 6: Four-stage analytic process applied to data (Source: author's own)

| Stage of analysis	Source data	Focus and purpose
1. Participant themes (emic)	Qualitative participant image and text data	Explore 'what matters about workspace?' participant data to derive thematic content. Explore provider and user perspectives from each case setting **To inform research questions 1 and 4**
2. Spatial triad (etic)	Participant themes in each case setting	Locate and explore the themes from each case setting within the spatial triad according to conceived, perceived and lived 'moments' of spatial production **To inform research question 2**
3. Dialectic interplay (etic)	Participant themes in each case setting	Qualitative exploration of dialectic relationship of the themes within each case-setting (negative conflict, neutral interaction, or positive alliance) **To inform research question 2**
4. 'Present' spatiality (etic)	Dialectic interplay in each case setting	Qualitative assessment of overall state (position and/or trend) of 'present' spatiality of each case-setting (and implications for workspace production) **To inform research questions 2 and 3**
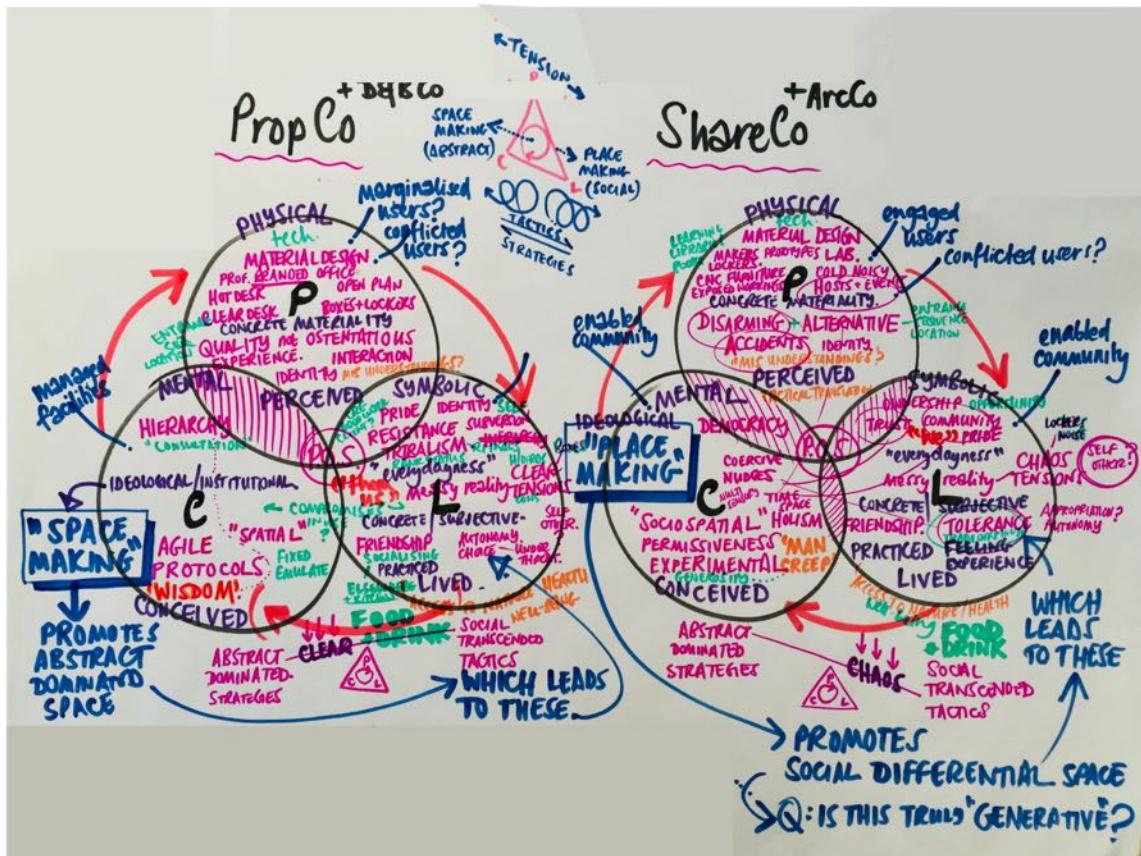
Figure 5: Manual application of Lefebvre's triad to case-setting phenomena – exploring possibilities during iterative sensemaking process (Source: author's own, August 2015)

4.4   A swollen appendix

Before continuing to the findings, some further explanation is required. I typically don't append significant information. Appendices seem most useful for supplementary rather than essential material, and sending the reader on an involuntary treasure hunt back and forth rarely makes for an enjoyable experience. But it is also imperative with qualitative research of this nature to convey the rich case study context and the multiple, diverse lived experience of the participants evident in their rich data[19], not to mention the need to preserve the image/text relationship of PLP (Vince and Warren, 2012). A doctoral thesis would afford the chapter space to do this, but the MProf constraints make this more challenging.

Consequently, I have elected to use appendices as follows. They do not *have* to be read to appreciate the thematic findings and analysis that follows below, but they do serve to contribute to the authentic whole of the study. Appendices 8.7 and 8.9 detail the two cases settings and the four involved organisations in full. Beyond the introductions (section 4.5) I deemed this necessary to show the situated, interrelated nature of the different organisations, their case-setting motivations, and reflexively, my engagement with them. Appendices 8.8 and 8.10 introduce each participant and seek to convey their lived experience authentically, exploring their salient workspace perspectives. Noting Vince and Warren's (2012) prerequisite of maintaining the image/text relationship I present a montage of my own sensemaking narrative (which I acknowledge as reflexively privileged), participant comments that demonstrate significant perspectives, and relevant photographs they used to exemplify their points.

4.5   Case study introductions

I anticipated a protracted search to find willing cases and negotiate access, based on both academic counsel and past experience. Gaining access through organisational 'gatekeepers' can involve careful negotiation, particularly if expectations differ, the research is perceived to be contentious, or the researcher is viewed sceptically (Saunders, 2012). Mindful that overly academic positioning can impede access, I elected to write a blog article (appendix 8.2) explaining my research intent as both a source of accessible information to point interested parties towards, and also a social

---

[19] Some 130+ photos were collected and discussed in interviews amounting to over 900 minutes, ultimately comprising 170,000 transcribed words.

media recruitment platform. I carefully emphasised the mutual learning potential, articulating an interest in organisations willing to learn from the study, aiming to address the 'what's in it for us?' engagement challenge. My initial concerns were short-lived. Whilst the approach garnered interest from various potential participant organisations (and reassuringly in the study design itself) it was my own professional networking that yielded results, subsequently informed by the blog.

Accordingly, I was fortunate to be able to gain access relatively easily to two organisational office-based workspace case-settings (cases), primarily involving four organisations, which have been anonymised as PropCo, D&BCo, ShareCo and ArcCo. I now introduce them briefly here.

4.5.1 Case 1: PropCo (and D&BCo)

The first case study is of PropCo's new London headquarters, designed by D&BCo (figure 6). PropCo is a national UK property consultancy. They had recently relocated their London office to new premises in Midtown, under a typical sole-occupancy tenancy agreement[20]. Their new 'agile' workspace was designed by D&BCo, a workspace design and build organisation based in the North-West, and features hot-desking and clear desk protocols. 'Agile' in this context is synonymous with ABW, in an arrangement where a variety of different work-settings are provided to suit different tasks, and users are encouraged to move around and use them appropriately. This typically also facilitates a lower desk to person ratio and the requirement to share resources, to varying degrees. I gained access to this case through an existing relationship with D&BCo – in my then University role, I had got to know them well through their involvement in a SHU workspace change project and subsequent knowledge partnership. PropCo were initially cautiously interested, and permission to undertake my research was granted after a formal proposal and senior management discussions.

---

[20] Since the fieldwork stage of this study, PropCo has subsequently been taken over by a larger professional services business but retains its own brand and identity. Their head office remains in central London, now in a different location to Midtown.

Figure 6: Montage of D&BCo interior and one PropCo exterior promotional images
© D&BCo and PropCo[21]

### 4.5.2 Case 2: ShareCo (and ArcCo)

The second case study is of ShareCo, designed by ArcCo (figure 7). ShareCo is a coworking organisation in London targeting social innovation and engagement companies, franchised under an international brand[22]. ArcCo is the RIBA award-winning[23] architectural practice that created, designed and launched ShareCo, before handing management responsibilities over and remaining as 'anchor' tenants. Hot-desking and associated enabling behaviours are an inherent part of ShareCo's multi-organisational coworking 'member' community dynamic, but 'agile' or ABW is not foregrounded in their workspace narrative. I gained access to this case through a professional acquaintance at Hallam; two members of ArcCo were delivering a guest

---

[21] To preserve confidentiality organisational names are omitted throughout, but respect of copyright remains.

[22] Since the fieldwork stage of this study, this particular franchise of the coworking brand closed after six years of business, owing to the wholescale renovation of the landlord-owned building it occupied. ArcCo relinquished their anchor-tenant position prior to this and are now based in another coworking enterprise in east London.

[23] ArcCo have won Royal Institute of British Architects (RIBA) sustainability, civic trust, London, and regional (Yorkshire) building of the year awards.

lecture for a colleague, affording an opportunistic introduction. ShareCo's management refreshingly granted access during my proposal visit.
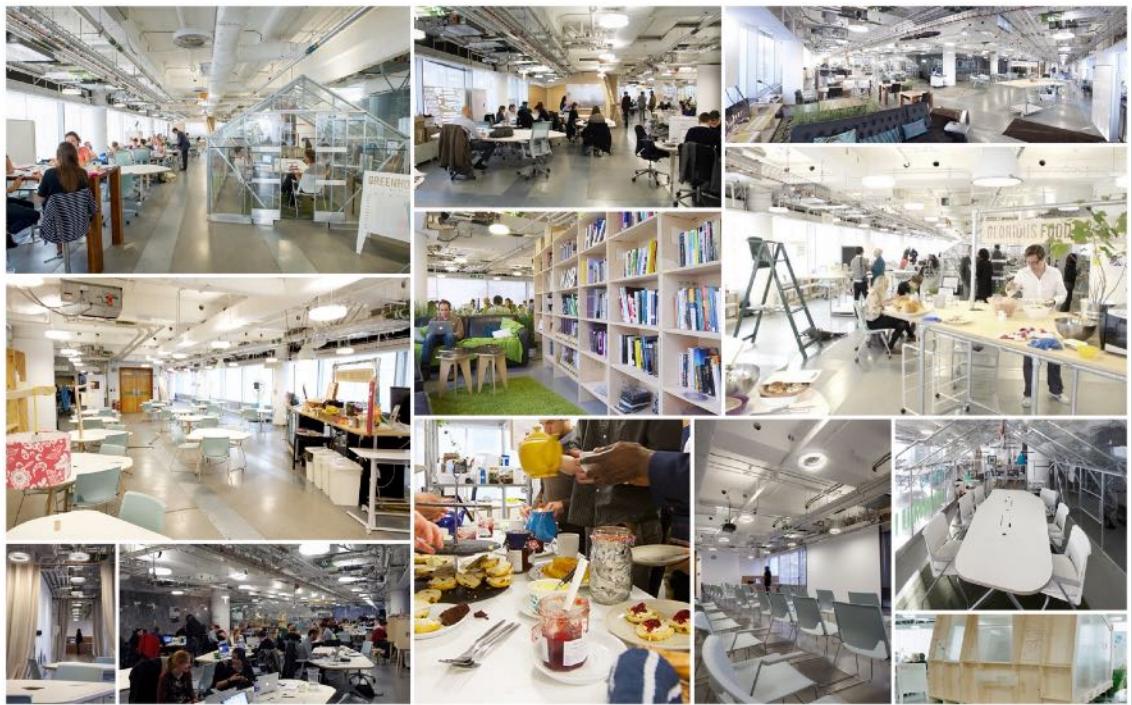
Figure 7: Montage of ShareCo interior promotional images © ShareCo & ArcCo

4.6   Knowledge workspace themes

Through an inductive process using a 'constant comparative' coding method of analysis and sensemaking (Tracy, 2013), *shared* and *specific* themes for both types of participant and also for both case settings were identified. The themes were diverse in nature and considered a wide range of what could succinctly be summarised as functional, symbolic and aesthetic workspace perspectives (Elsbach and Pratt, 2007). Additionally, the themes also more broadly offer evidence regarding the role workspace plays in participant endeavours to work effectively, enjoyably, and negotiate their work-life boundaries. They demonstrate wide-ranging considerations about where and how and with whom work gets done, as well as what participants see as valuable (or not) to their work endeavours, and why. Table 7 provides an overall view of the shared and specific themes, arranged according to the cases and participants. I present this summary first to offer an overall perspective, before exploring each case independently and more thoroughly below. The rich and diverse information that was elicited through a

qualitative visual workspace research approach becomes immediately apparent, serving to inform research questions 1 and 4 (discussed fully in chapter 5):

1. **How do provider and user accounts of 'what matters about workspace' relate to contemporary knowledge workspace provision and use?**
4. **Does a participatory visual research method offer a valuable approach to inform our understanding about the provision and use of knowledge workspaces?**

Table 7: Overall summary of shared and specific case study themes
(Source: author's own)

| Case setting	Participant themes		
	Provider only	**Provider and user**	**User only**
PropCo (and D&BCo) only	• Fixed workspace solutions • Emulating other workspace solutions • Workspace industry constraints • Workspace design process challenges	• Brand affinity • Importance of socializing • Spatial impact of hierarchy • User consultation • Hot-desking and agile pros, cons and rules	• Resistance tactics • Representation of self in workspace • Tribalism • Friendship • Working rituals • Behavioural rituals and symbols
Both PropCo (and D&BCo) and ShareCo (and ArcCo)	• Importance of entrance sequence • Brand value of workspace • Location value of workspace • Compromises and trade-offs of management in use • Spatial generosity • Spatial permissiveness	• Choice of and work location • Autonomy to choose • Food and drink • Links between wellbeing and nature • Negotiating the work/life boundary • Social and environmental responsibility	• (Mis)communication and missed opportunities • Locker and storage functionality • Locker and storage symbolism
ShareCo (and ArcCo) only	• Behavioural workspace nudges • Experimental learning • Flexibility and (happy) 'accidents' • Time/space/social holism • Multi-sensory design elements	• Value in community • Selfless vs. selfish behaviour • Collective vs. personal behaviour • Workspace rhetoric vs. reality • Visual work tools • Visual community prompts	• Being surrounded and connected • Being inspired • Promoting opportunities • Value of learning resources

4.6.1 Case 1: PropCo (and D&BCo)

PropCo evidenced an 'agile' workspace approach conceived with D&BCo to materially reflect PropCo's brand, embodying a discerning quality experience for clearly valued employee and client users alike, managed using protocols authored by D&BCo (and at times PropCo 'chain of command' directives) within what was still a hierarchical, traditional organisation, irrespective of the contemporary workspace design aesthetic. While employee wellbeing was clearly important and prevalent in participant conversations, their endeavours were inherently business focused. Several participant image/text examples bring these characteristics to life:

Papa (a PropCo provider) discusses the entrance sequence and first impressions: "I want anybody who comes in here not to think it's ostentatious but to have a good user experience… As a professional services firm, if you splash the cash and people think this is a bit over the top then they'll be saying 'why are you charging me so much?'"

Papa also underlined the importance of 'agile' rules: "make sure that we're living with the protocols… we have adapted some things, changed some of our rules… they can evolve, but some of those things are now about enforcement."
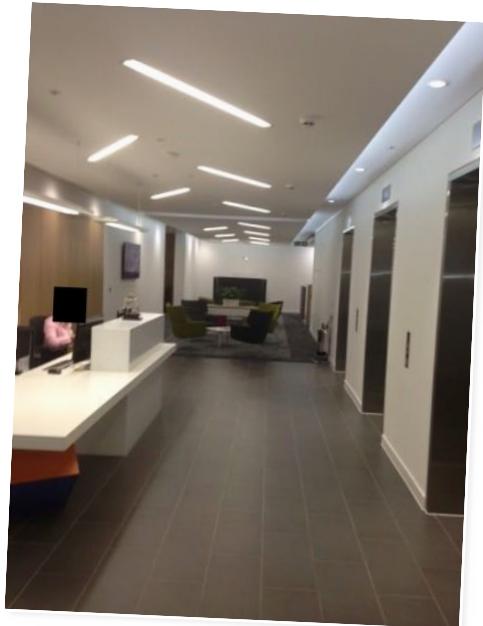
Quebec (a PropCo user) on the other hand challenged 'chain of command' directives: "I also listen to music when I type, although management, the powers that be, decided… in a management meeting we're no longer allowed to do that, which is a bit of a pain."

Whilst exploring another topic, Delta (another PropCo user) deferred implicitly to both hierarchy and tradition: "I don't know, don't ask me that... because I am at the bottom of the pile… it's not normally me suggesting to other people, it's people suggesting to me… I guess we are still a traditional organisation aren't we? I mean it's fancy branding but it's still quite a stuffy old industry."

Bravo (another PropCo user) shared the functional and symbolic importance of desk stuff: "I have my little creature comforts. My PropCo mug is very important. I feel as if I own the space, I'm in business… They keep me operational… Brand affinity. Identity… Reminding myself that I represent the business."

Affective participant responses embodied both organisational pride and individualism. In particular, the users displayed a range of behaviours, including resistance tactics such as tribalism, mischief, to some degree territoriality, and notions of personal identity. An acute awareness was shown regarding trade-offs of PropCo's agile approach, including work continuity, interruption and distraction, coalescing around the clear desk policy (as a hot-desking enabler) likely to soon become more stringently enforced due to increasing headcount. Beyond such organisational accounts, a minority of both providers and users more abstractly considered the inherent challenges of contemporary workspace wisdom including such 'agile' approaches. Table 8 below enriches the summary themes shown above through succinct case narratives, and the following participant comments and photos bring the themes to life:
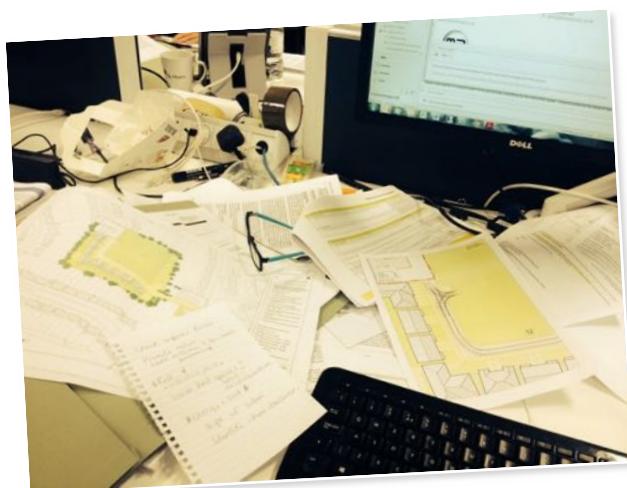

Quebec evidences mischief, tactics, and repercussions: "I've left bits on my desk before and been told to put [them] away… some people embrace that more than others – my whole pod is a little bit naughty… we've all got boxes under our desk and leave stuff out… you'll come in in the morning and there'll be naughty notes (laughter) – it's like being at school!"

Tango (a PropCo user) reflects on leadership feelings about the clear desk policy: "even the senior people on the board, you know, you hear them grumbling every now and then, they know they shouldn't because they know they're setting an example about how this works, but (whispering, smiling) they'll be 'oh god I've got to bloody pack up'… everyone feels it, some people won't admit it (laughing)"

Tango also critiqued certain workspace characteristics more generally, and expanded upon choice and distributed working: "My experience is that open-plan space and hot-desking per se aren't necessarily a good thing for people and the way they work. What works is, if you can give them a choice about the place they work within the building, and give them a sense that they have got real choice and freedom to choose how they want to work and where they want to work."

"Businesses, they pretty much ignore where people work at home or generally out of the office as a whole, we've got a real crunch here… there are days when people come into the office and just can't find a desk… we need to think about how we incentivise people to take the opportunities to work in other places."
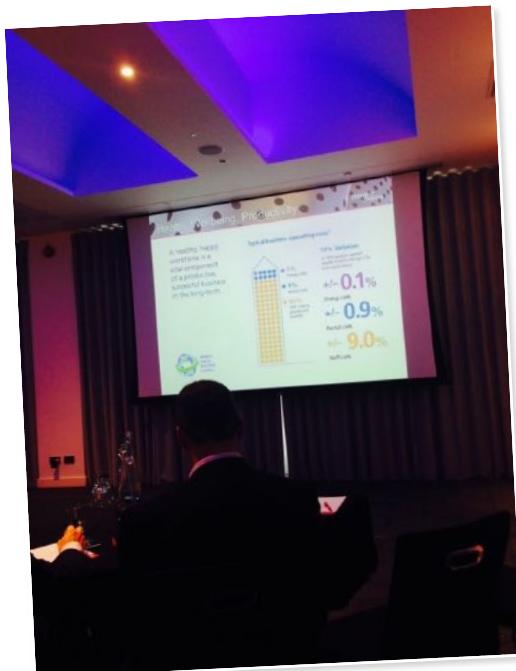
Finally, Romeo (a D&BCo provider) offered a philosophical challenge to the workspace design industry: you know, our profession is constantly trying to fight for the right, or role to own work… place cannot own work… if you build a church, it won't bring you an enlightenment… a bit like collaborative furniture cannot collaborate… as soon as everybody goes from here and you turn out the lights, it does absolutely nothing."

Table 8: Narrative themes at PropCo (and D&BCo) (Source: author's own)

Participant themes at PropCo (and D&BCo)		
Provider narratives about…	**Provider & user narratives about…**	**User narratives about…**
A. How workspace gets done, should be done, and needs to be conceived to achieve organisational outcomes B. The challenges and issues of workspace industry and design perspectives C. The importance of brand, location and the building entrance sequence on user experience D. Compromises, tensions and trade-offs with management and workspace in use E. The value in spatial generosity and spatial permissiveness	F. The link between brand and organisational affinity G. The importance and value of team and client socializing H. The links between organisational hierarchy, workspace arrangement and activity I. The role of user consultation in workspace change J. Agile and hot-desking pros, cons and rules K. Work and personal reasons for locational choices, and the role of autonomy L. The social affordances of food and drink, including their locations M. The importance of health and nature for personal wellbeing N. Negotiating the work/life boundary and workload demands O. Making a difference through social and environmental change	P. How users act in and respond to their given workspace to achieve collective and individual identities through behavioural and symbolic activity Q. How users (mis)perceive workspace intentions and suggest (and enact) alternatives R. How locker and storage solutions are functionally used and symbolically apprehended

4.6.2 Case 2: ShareCo (and ArcCo)

ShareCo, on the other hand, foregrounded a more permissive, democratic ethos. Reflecting the emphasis of coworking for mutual benefit through community engagement, ArcCo sought to enable autonomous users through a range of conceived socio-spatial behavioural nudges. The wellbeing of ShareCo's members was integral to the community endeavour. An integrated socio-spatial design approach sought to disarm preconceived workspace expectations and entrenched behaviours of member and visitor users alike. Again, several participant image/text examples bring these characteristics to life:

Alpha (an ArcCo provider) encouraged both user permissiveness and nudges: "This should be common sense: if it's free, use it, but someone might be coming in and kick you out. It's permissive culture. That leads to creativity, etc... You're using coercive tactics to try and make people to be more quiet or relax more or communicate more and all that kind of stuff"

Echo (another ArcCo provider) further explained nudges: "those little tactics we talk about, are actually quite subtle. .. people don't necessarily comprehend them but that may be good too, you don't want things to be dead obvious."
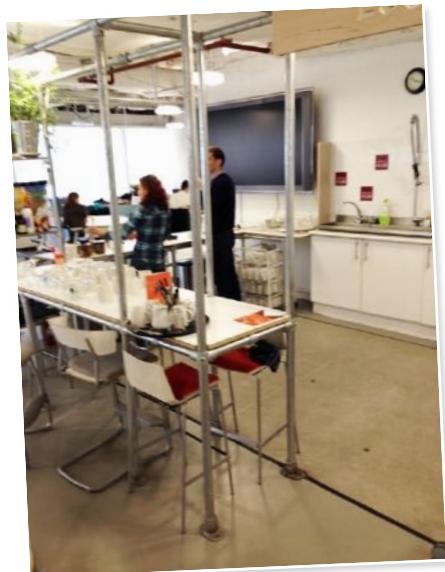
Alternatively, Charlie (another ShareCo provider) foregrounded people and community over workspace: "These kind of like small things actually help more, like personal connections with the space rather than the space itself, because sometimes if you really like everyone around, even if it's a bit noisier or a bit messier you don't mind, because you're like, 'I want to go to the office tomorrow because that person will be there'."

Alpha also explained the value of the entrance sequence to disarm expectations: "The reason it looks so alien when you come in here is to get you out of the frame of mind that you were thinking before. This isn't a typical space, this is a space where something different happens… We wanted to create this slightly odd world inside. That's why you can see the green-house from the ground floor and from the bridge."

67

Affective participant responses embodied a tribal community pride embodied through a range of behaviours and declared values, including ownership, trust, learning and togetherness. Rather than providing workspace protocols, the practicalities and ways of working at ShareCo were conveyed in the stories users shared with each other, and particularly with new members. Tensions experienced by some users and providers were related to the inherent chaos some perceived in the socio-spatial dynamic. A minority of participants also discussed how this bespoke, purposefully experimental workspace was at risk of creeping managerialist practices eroding the carefully conceived socio-spatial system, jeopardising its inherent permissiveness. Again, table 9 enriches the summary themes shown above through succinct case narratives, and the following participant comments and photos bring the themes to life:

Foxtrot (a ShareCo user) evidenced tribalism and community pride: "And when you join a community you try to find likeminded people, people who are crazy, people who give up something in life, people who have the same problems, who have no money but still believe in [their] fucking idea! (laughter)... Sometimes you can share the same problems as well."
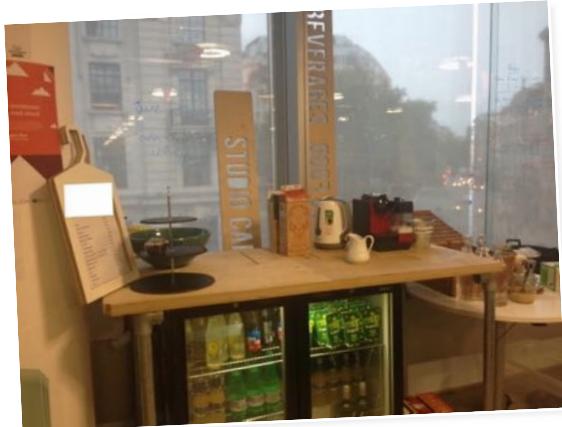
Alternatively, India (a ShareCo user) focused on trust: "What I like about this is that it's based on an honesty box... I couldn't believe it. I guess yeah, I was really surprised and I like it because it's new... and I also feel like it just has a very good kind of vibe. It just shows that we are all here with I guess good intentions?"

Echo tried to articulate how stories, not rules, help people understand ShareCo's unfolding use: "I'm not sure how that started. It just kind of... I remember it happening, and then we told the group about it. I don't know who started it, but then it was... I remember telling people that's what it meant, and now everyone..."

Alpha also linked permissiveness and nudges to ownership and learning resources: "This was one of those programmed, well designed, spaces which are meant to look like accidents… We left empty shelves and it's that invitation – 'this is empty, fill it'… It's kind of magic and exactly the way I imagined it to work"

Echo underlined the experimentation and learning value from ShareCo for ArcCo: "It's also quite interesting to see what evolves and what works, because all of it, equally for us, is also a test bed to see what happens."
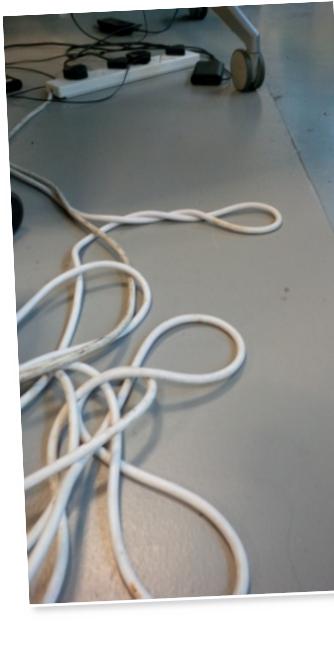
Turning towards frustrations, Zulu (a ShareCo user) explained issues of aesthetic messiness and chaos: "Minor ones, but omnipresent. It's quite petty in a way and it's not really something that inhibits me from doing my work, it's just there, and I'd rather it weren't."

Finally, Alpha took issue with ShareCo's perceived growing managerialism, which had led to new permissive experiments on projects elsewhere: "Currently there is no generosity allowed. In our old office we would give out desk space, seating, everything, free, to people we thought would be useful to work with."

"Another thing we're trying to do in the social justice centre we've just designed we tried to create spaces which, because we're not managing it, if the management are really mean there's no way they can ever get anyone to be charged for a use free space."

Table 9: Narrative themes at ShareCo (and ArcCo) (Source: author's own)

Participant themes at ShareCo (and ArcCo)		
Provider narratives about…	**Provider & user narratives about…**	**User narratives about…**
a. Conceiving workspace holistically, experientially, experimentally, tolerantly and progressively, to learn about and iterate workspace design approaches b. Conceiving coercive behavioural 'nudges' to suggest and afford user behaviours and actions c. The importance of brand, location and the building entrance sequence on user experience d. Compromises, tensions and trade-offs with management and workspace in use e. The value in spatial generosity and spatial permissiveness	f. Achieving and belonging to a community g. Working within a collective, selfless rhetoric and negotiating personal needs and wants h. The importance of visual tools for work tasks and sense of community i. Work and personal reasons for locational choices, and the role of autonomy j. The social affordances of food and drink, including their locations k. The importance of health and nature for personal wellbeing l. Negotiating the work/life boundary and workload demands m. Making a difference through social and environmental change	n. How users perceive opportunity and inspiration in a dynamic of connectivity o. The functional and symbolic value of knowledge facilities like books, libraries and events p. How users (mis)perceive workspace intentions and suggest (and enact) alternatives q. How locker and storage solutions are functionally used and symbolically apprehended

4.6.3 Reflection: five common themes

From the analysis so far, it can be seen that, despite a number of shared participant themes, the overall workspace is very different in each case. This is hardly surprising, given that the organisations and people involved, the workspace designs and the professional contexts are entirely different. What seems interesting though, to the extent that it warrants specific consideration here, is the common ground. The data evidenced five themes, irrespective of case or participant type:

- Work and personal reasons for locational choices, and the role of autonomy
- The social affordances of food and drink, including their locations
- The importance of health and nature for personal wellbeing
- Negotiating the work/life boundary and workload demands
- Making a difference through social and environmental change

Given the original research invitation was for participants to respond to the question "what matters to you about workspace?" these findings are fascinating, and I would suggest important to recognise. On the one hand they are all about the lived experience of working life, and in many respects how workspace design (and to some degree management) seem almost incidental to this – in that there are more substantial work, social and societal issues that are equally foregrounded by many. They seem to talk to what being human in contemporary society is about, and so of associated values and beliefs.

Yet on the other hand, they were derived entirely from an approach they originated from a short, open question about workspace. There is something quite striking about this: ask participants about workspace, and in many cases, they also quite naturally volunteer their thoughts on what they feel is important about work and life. Such accounts of how interrelated workspace, work and life seem to be a very clear, existential demonstration of the intrinsic link between workspace and organisational theory. Again, some participant image/text examples evidence these themes:

Sierra (a ShareCo user) comments on autonomy and choice in with regard to productivity: "There's a lot of effort that I try to go to, to make sure I manage my space and time to be productive… I don't know if it's just productive versus creative, but yeah, it just feels like when I need to be focussed, don't need any interruptions and I know what I'm doing, I just need to deliver it, I need somewhere a bit more tunnel-visiony."
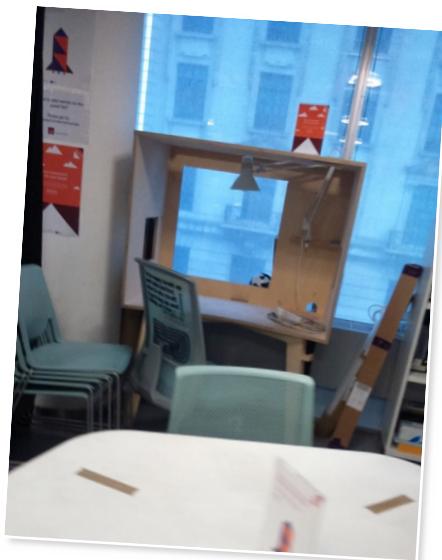
Yankee (another ShareCo user) discusses the socio-spatial value of cakes: "Just by allowing people to bring cakes to the office or encouraging cake making, which I always do on consulting assignments… you actually increase the value of the space. Humanise it."

Bravo (a PropCo user) echoes similar views: "We just had somebody who was really good at bringing people together leave. He was always doing cake bakes for [charity]… and now others have started to do cake bakes. They are very popular."

Delta (another PropCo user) explores food and informal work: "all the youths go for a [team] group fry-up… the fry up is definitely symbolic isn't it, it's not Itsu or whatever; Pret, or anything like that… you are discussing projects like 'what do you think of this?' but at the same time, not really… you can speak freely and a lot of stuff gets solved… it's more talking about talking about work... it's a really good time… I am friends with all these people, but I don't necessarily work with them on anything. So it's a good opportunity for them to talk kind of abstractly about problems."

Whereas Quebec (a PropCo user) talks about the business importance of alcohol and coffee:

"there's a lot of socialising… that's actually with my team, but quite often it's with clients; and we get a surprising amount of work done when we're out, usually drinking or eating or both… you'll realise after a few minutes that actually, people are genuinely talking about their jobs and work-related issues, and yeah – resolving stuff."
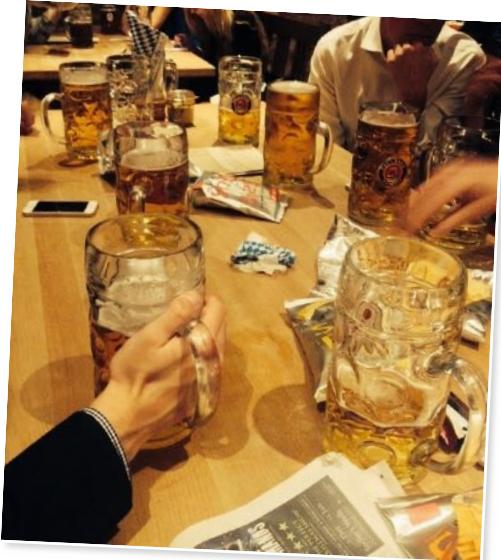
"I just suddenly realised… the one constant thing that's always here… coffee is pretty much the thing that keeps me going… we've got a really fancy coffee machine – the iPad – it's the most revolting coffee in the world but for some reason we all seem to drink an awful lot of it; I think it's just because it looks so cool when you make it, and I'm as guilty as everyone else… style over substance, but it's strong; that's one good thing actually… it's also free, which is very helpful…"

Turning to health and wellbeing, Lima (another PropCo user) focused on natural light, exercise and ideas: "Natural light affects humans, the way it affects the way we are, the way we live… I could never live in London because there is not enough access to sky…"

"Where do you think?… mine has always been running… or just out on the bike..."

Foxtrot (a ShareCo user) also talked about the work-life benefits of running: "I use running to come up with new ideas, to clear my mind, and then through the running with [Yankee] we came up with so many other ideas, so we worked while we were running, but I don't like it when somebody tells me you have to work from nine to five now to produce something. I'm so much more creative when I'm… don't put me in a cage!"

Alternatively, Tango (a PropCo user) linked exercise and family opportunities to work location choice: "I like to try and balance where I work at during the week. My aim is to do one day a week at home, and on those days I like to go out for a cycle… just to sort of make sure I try and get in two bits of proper exercise a week, which helps me sort of get through the week in a reasonably sane way… be home, turn off the computer at six o'clock, and be around the family earlier than I would be otherwise, and just feeling like the week's been broken up."

Quebec talked positively about her work-life boundary and commute: "Planning never sleeps! (laughter)… I clear all my emails usually from the night before on the journey, and I quite like doing it... the second I leave the house it's like: 'Ah, work!' (laughter) … So off I go, marching off… walking up the road, between the front door and the queue at the station, there's a definite transition; send a few texts, then I get to the station and then it's work."

Delta also considered distributed work and the resultant role of PropCo's office: "Workspace is just not the office at all… I don't do any of my genuine work here. In fact if anything I just do admin here… I guess I consider real work when I am solving problems or using my brain, and here I'm not, I am probably writing up what I have already thought."

Finally, Bravo talks of making a positive contribution to society: "For me, it's about making sure that when we go into a workplace, we don't become drones. That we still retain our thinking, feeling sides as human beings, and we're connected to the external community… Small gestures can make a big difference… One of our charities that we support nominated us for the provision of pro bono services, and we won an award"

4.7   Knowledge workspace 'trialectics'

So far, the discussion has featured the thematic findings from the first 'emic' stage of the four-part analysis. As explained above (section 4.3, table 6) the subsequent 'etic' stages in the process engaged Lefebvre's triad as the conceptual apparatus through which to review the data, and ultimately consider the socio-spatial dynamic, or 'spatiality' (Bondi, 2005) of each case. Inspired and informed by Carp's (2008) 'ground truthing' approach of exploring data in terms of the interrelated but identifiably distinct semiotic and phenomenological elements of the triad, I again used a 'constant comparative' approach (Tracy, 2013), moving back and forth between participant data and the inductive themes to consider which aspects of the triad they related to – and as Carp ultimately summarises, the physical, mental and social fields of workspace.

Whilst complex and involved, I also found using Lefebvre's tool in this way enlightening and ultimately rewarding. As Carp attests, the process afforded a pragmatic application of esoteric concepts, resulting in a holistic appreciation of each case. The approach evidenced how the categories of analysis regularly overlapped in the data, testament in itself to the interrelated nature of Lefebvre's triad, and indeed to the fact that (as I had recognised during the PLP discussions) workspace users were as capable of discussing conceptions of space as providers were of discussing perceptions and the lived experience.

As I explored each theme and how it related to Lefebvre's triad in each case setting, I essentially worked through the second (spatial triad) and third (dialectic interplay) stages of the analytic sequence in close alignment. I located each theme on each case's spatial triad visually (figures 8 and 9, below). I then considered the dialectic interplay evident in the themes, acknowledging Lefebvre's fundamental contention with Hegelian dialectics (section 3.2) and recognising, as Moravánszky et al. (2014:16) put it: "the three

'moments' of space production, as theorized by Lefebvre, do not form a synthesis but rather exist in interaction, in conflict or in alliance with each other". In addition to the triad visualisations, this also afforded a visual, colour-coded reinterpretation of the participant themes within each case in this respect (tables 10 and 11, below). This process evidenced, importantly, that the ten themes common to either case might relate to the triad similarly or differently through the participant data.

Accordingly, the insights derived from the etic stages of the analytic process serve to inform research questions 2 and 3 (discussed fully in chapter 5):

2. **What can be learnt from a Lefebvrian analysis of empirical workspace data about producing knowledge workspace?**
3. **Does a Lefebvrian theoretical perspective inform the connection between workspace design and management and organisation theory?**

4.7.1 Case 1: PropCo (and D&BCo)

To bring the necessarily procedural explanation above to life, a good example is user theme R: 'how locker and storage solutions are functionally used and symbolically apprehended'. PropCo users demonstrated awareness of the semiotic *conceived* conceptual requirements of their new storage boxes, in principle. However, they equally evidenced the phenomenological *lived* symbolism of the boxes, as both the erosion of personal identity and cultural tradition, and as expressions of individual containment. Equally, they evidenced quotidian *perceived* semiotic practices and phenomenological functionality in use, including both frustration with and subversion of this 'agile' workspace feature. Accordingly, I considered theme R as demonstrative of all three moments, and so located it centrally on the Venn (figure 8). I also qualitatively viewed the resultant thematic dialectic relationship as 'in interaction', but rich with ambivalence:

Lima (a PropCo user): "All of our stuff goes into those things… and then goes into a locker, and we have this clear desk policy. But that would be my desk if I didn't have a box!… It is what it is, and it's one of those things that it's just part of office life… there was a character to people's desks when people weren't hot-desking… I think it symbolises the passing of a way which is this cluttered desk, I won't say it's for the good or for the bad, it's just different… partly we need that clutter, you know, [it] can tell a story."

Also, Delta, another PropCo user: "I understand why they do the open desk policy and stuff… it works very well, the office looks great… I don't think the workspace is designed for people who work here… it's a disconnect… I guess no one has thought about people actually using it every single bloody day… putting me in a box, inside a box… and then put that box in another box! (laughter)"

Through this analytic process, the PropCo (and D&BCo) case can be seen to demonstrate thematic dialectic relationships which are variously in conflict, interaction and alliance (table 10). This qualitative assessment represented visually, evidences an ambivalent knowledge workspace rich with pros and cons, but with a leaning toward the conceived (figure 8).
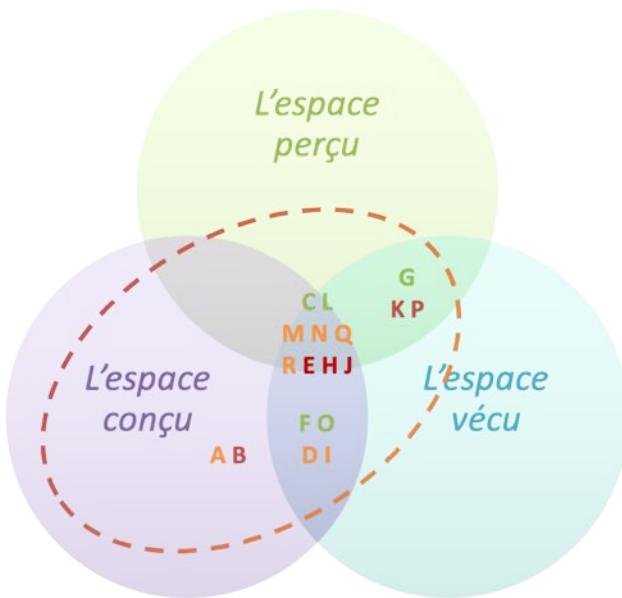
Figure 8: Thematic dialectic relationships at PropCo (and D&BCo) represented visually
(Source: author's own)

Table 10: Thematic dialectic relationships at PropCo (and D&BCo) (Source: author's own)

| Participant themes at PropCo (and D&BCo) in conflict, interaction or alliance		
Provider narratives about…	**Provider & user narratives about…**	**User narratives about…**
A. How workspace gets done, should be done, and needs to be conceived to achieve organisational outcomes	F. The link between brand and organisational affinity	P. How users act in and respond to their given workspace to achieve collective and individual identities through behavioural and symbolic activity
B. The challenges and issues of workspace industry and design perspectives	G. The importance and value of team and client socializing	
	H. The links between organisational hierarchy, workspace arrangement and activity	
C. The importance of brand, location and the building entrance sequence on user experience	I. The role of user consultation in workspace change	Q. How users (mis)perceive workspace intentions and suggest (and enact) alternatives
	J. Agile and hot-desking pros, cons and rules	
D. Compromises, tensions and trade-offs with management and workspace in use	K. Work and personal reasons for locational choices, and the role of autonomy	R. How locker and storage solutions are functionally used and symbolically apprehended
E. The value in spatial generosity and spatial permissiveness	L. The social affordances of food and drink, including their locations	
	M. The importance of health and nature for personal wellbeing	
	N. Negotiating the work/life boundary and workload demands	
	O. Making a difference through social and environmental change	

4.7.2 Case 2: ShareCo (and ArcCo)

Again, through this analytic process, the ShareCo (and ArcCo) case can be seen to demonstrate thematic dialectic relationships which are predominantly in interaction and alliance (table 11). This qualitative assessment represented visually, evidences an ambivalent knowledge workspace rich with pros and cons, but with a leaning toward the lived (figure 9).
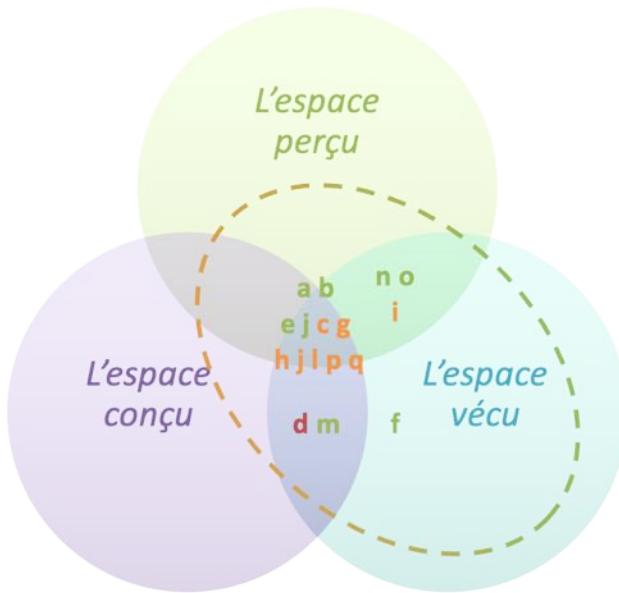
Figure 9: Thematic dialectic relationships at ShareCo (and ArcCo) represented visually
(Source: author's own)

Table 10: Thematic dialectic relationships at ShareCo (and ArcCo) (Source: author's own)

Participant themes at ShareCo (and ArcCo) in conflict, interaction or alliance		
Provider narratives about…	**Provider & user narratives about…**	**User narratives about…**
a. Conceiving workspace holistically, experientially, experimentally, tolerantly and progressively, to learn about and iterate workspace design approaches	f. Achieving and belonging to a community	n. How users perceive opportunity and inspiration in a dynamic of connectivity
b. Conceiving coercive behavioural 'nudges' to suggest and afford user behaviours and actions	g. Working within a collective, selfless rhetoric and negotiating personal needs and wants	o. The functional and symbolic value of knowledge facilities like books, libraries and events
c. The importance of brand, location and the building entrance sequence on user experience	h. The importance of visual tools for work tasks and sense of community	
d. Compromises, tensions and trade-offs with management and workspace in use	i. Work and personal reasons for locational choices, and the role of autonomy	p. How users (mis)perceive workspace intentions and suggest (and enact) alternatives
e. The value in spatial generosity and spatial permissiveness	j. The social affordances of food and drink, including their locations	q. How locker and storage solutions are functionally used and symbolically apprehended
	k. The importance of health and nature for personal wellbeing	
	l. Negotiating the work/life boundary and workload demands	
	m. Making a difference through social and environmental change	

4.7.3 Present spatiality

The data and subsequent analytic stages evidence pros and cons to each case setting, where trade-offs and tensions inevitably exist on a practical, day-to-day basis. Any workspace is designed and managed to generally support groups of people, but these groups comprise various individuals with often specific needs, wants and preferences. For example, some participants at PropCo saw value in the structure of protocols, whereas others didn't; and some participants at ShareCo found value in the lack of structure and sometimes chaotic outcomes, whereas again others didn't. These are the quotidian realities of working life, after all.

But Lefebvre affords a step beyond this, and so the fourth and final stage of the analysis considers the overall socio-spatial *dynamic* of the 'trialectic' within each case, resultant from the dialectic interplay of the different themes. I introduced this concept in section 2.7, noting "these interpenetrations – many with different temporalities – get super-imposed upon one another to create a *present* space" (Merrifield, 2000:171).

The word 'dynamic' is chosen carefully, because it recognises that the spatialities of such lived, multifaceted existential workspaces are subject to change. Merrifield (ibid.) recognises this fluidity, and Watkins (2005:211) notes "it is this process of creation and being, the production of present space rather than the privileging of a singular aspect of space, which needs to be apprehended as fully as possible if a richer understanding of the world is to be achieved". This also informs an opportunity to practically frame and apply Lefebvre's esoteric work.

Considering the cases in this respect, the final stage of analysis makes a qualitative assessment of the present spatiality of each case, informed by *all* the data and analytic stages, regarding how the themes of each case cumulatively represent each of the three 'moments' of spatial production – conceived, perceived and lived – and the *overall degree* to which these moments are in conflict, interaction or alliance. Given their dynamic, *always in production* nature, each workspace case can be considered as a snapshot in time, yet with clues to how the case might trend in future, given current evidence.

Using Lefebvrian terminology, the evidence suggests that PropCo and D&BCo have produced a knowledge workspace whose 'abstract' present spatiality leans toward 'domination' in use. Whilst the data shows the rich diversity of experience and plenty of positivity PropCo's new workspace, it nevertheless tends to favour conceived requirements of provision over the lived experience of users who, whilst conforming,

also consequently display evidence of mischief and tactics as acts of resistance. Moreover, with an increasing need for protocol adherence (due to expected staff headcount increases, and so increased work-setting availability pressures) the *trend of domination* may conceivably *increase* as homogenous spatial practices are enforced, and individual needs become jeopardised and fragmented.

Alternatively, with ShareCo the evidence suggests that ArcCo has endeavoured to produce a 'differential' knowledge workspace whose present spatiality leans toward 'appropriation' in use, and indeed was conceived accordingly; as an experiment designed to celebrate the heterogeneous diversity of lived experience; and to promote individual agency and peculiarities, against a backdrop of community value. Again, while the data shows rich diversity, the evidence of both providers and users struggling to cope with (and resolve) some resultant chaotic situations, along with the creeping introduction of managerialism to establish more control and financial opportunities at ShareCo, suggests that a *trend toward domination* may conceivably *increase* in future.

The assessments of this final stage can be represented visually as a straightforward two-by-two matrix (figure 10 below), showing each case's overall present spatiality, and the dynamic – the *indicative trend*. To be clear, these findings are informed by the data and analytic sequence, but nonetheless qualitative on the part of the researcher and not absolute in any way.

In this respect this model can be considered a novel 'thinking tool' – its value is not in making quantifiable claims of truth, but to raise practical awareness, consider evidence and stimulate discussion. For example, is a given knowledge workspace achieving what it was intended to achieve, how is this impacting the lived experience of the participants and their ability to undertake knowledge work, are there clues regarding how the socio-spatial dynamic is trending, and – perhaps most importantly – what changes might be considered, and why?
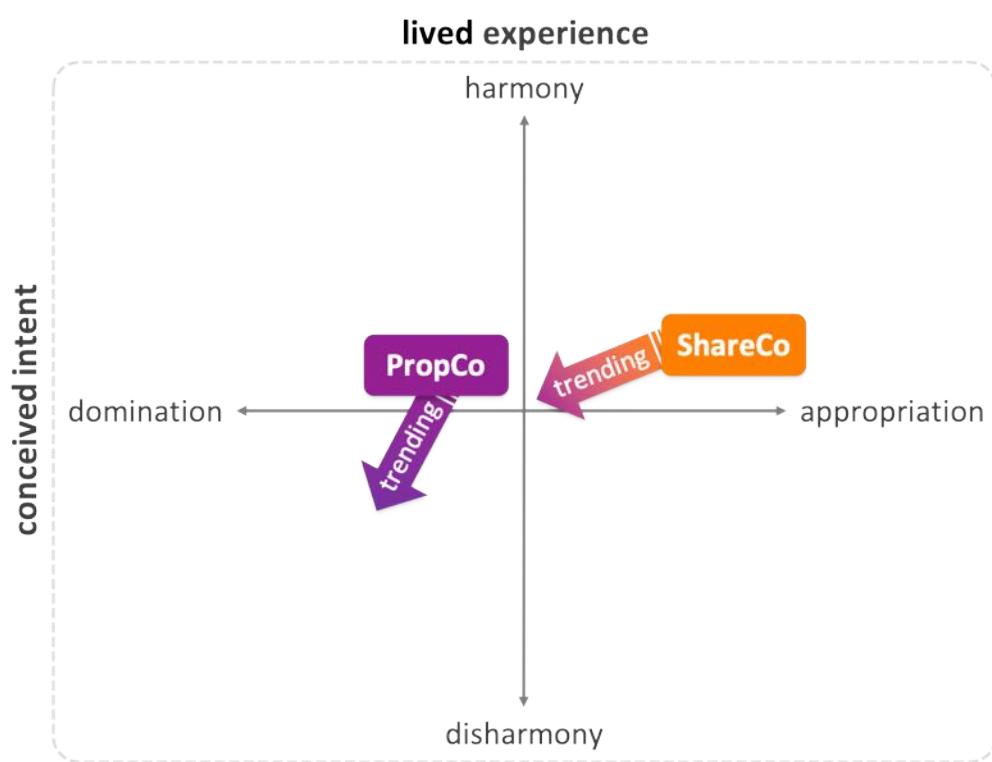
Figure 10: Present spatialities and trending dynamics of PropCo and ShareCo cases
(Source: author's own)

4.8   Chapter summary

This chapter has demonstrated the sensemaking journey and outputs of the research. It has shown how I inductively explored the field data to derive 'emic' workspace themes apparent within each case setting, and subsequently considered these themes in 'etic' terms, using Lefebvre's conceptual apparatus, his spatial triad, to explore the 'spatiality' of each case. This analytic approach shows the rich diversity of knowledge workspaces in use, their resultant trade-offs and tensions (as much as their espoused features and benefits), and also offers clues to how their multi-faceted dynamics might fair in future. Having concluded the exposition of research analysis and findings, the study now turns to specifically address the four research questions posed in chapter 1.

chapter five

discussion

5. Discussion

The voluminous case and user data offer many interesting lines of enquiry and further discussion. However, given the wordcount constraints of this portfolio, this chapter specifically explores areas that address the research questions, which provide a structure to the chapter, before concluding with some personal reflections and learning. I restate the questions here in full for convenience, before taking each in turn:

1. **How do provider and user accounts of 'what matters about workspace' relate to contemporary knowledge workspace provision and use?**
2. **What can be learnt from a Lefebvrian analysis of empirical workspace data about producing knowledge workspace?**
3. **Does a Lefebvrian theoretical perspective inform the connection between workspace design and management and organisation theory?**
4. **Does a participatory visual research method offer a valuable approach to inform our understanding about the provision and use of knowledge workspaces?**

5.1   What matters about knowledge workspace?

The data show that there are wide-ranging things that matter to workplace providers and users. This is patently evident from only seventeen participants in two case settings. Had the study engaged more participants from the four organisations, or sought to explore new case settings entirely, there seems little doubt that other themes may have become inductively apparent. As previously stated, the purpose and design of the study was not to offer any universal or comprehensive truths. Yet it also seems reasonable to suggest that these two specific cases reference more general patterns about 'what matters' observed in both workspace design and management and broader organisation theory literatures. From the literature review (section 2.2) the pervasive workspace drivers of efficiency, effectiveness, expression, environment, ether and energy (Duffy, 2009; Usher, 2018a) are all variously evident within each case's themes. Elsbach and Pratt's (2007) functional, symbolic and aesthetic functions are evident too, and both cases are replete with inevitable tensions and trade-offs.

A number of authors have sought to categorise and critique such functions of workspace design and management. For example, from within FM academe, Cairns (2002) discusses how workspace control (of a management resource), brand and

resource commodity value, and user empowerment and flexibility all variously feature. From a more organisation theory perspective Felstead et al. (2005) recognize how workspaces can be 'made' (i.e., conceived) with visibility, macro (organisational) and micro (user) change agendas, and community benefits (such as encouraging serendipitous encounters, engagement and participation) all in mind. More critically, Halford (2008) exposes the relationship between workspace control and labour process theory, the organisational relevance of the brand commodity value of workspace, and the impacts of empowerment on the 'working selves' of users.

Broadly speaking, these perspectives can be summarised as notions of workspace *control, commodity, change* and *community*; and critical organisation theory tends to critique them (especially control), whereas workspace theory tends to espouse their benefits. All are variously existent in both cases. Furthermore, a Lefebvrian analysis demonstrates that such perspectives are not just a function of conceived space, but of the perceived and lived experience of workspace in use.

Considering PropCo in these terms, change by means of 'agile' flexibility was, somewhat ironically, sought thorough controlling protocols. From experience, this is often the case for 'new ways of working' workspace initiatives. The commodity value of space was clear, from both aesthetic brand conceptions, and the importance of the user entrance experience to convey high organisational quality and standards (but never ostentatiousness). A rhetoric of (and evident desire for) community was equally contested by the reality of incumbent hierarchy, with community activities often taking place *beyond* the knowledge workspace itself.

Alternatively, and again in these terms, ShareCo achieved change as flexibility with no espoused control mechanisms or 'agile' nomenclature. Commodity value was also clear from aesthetic brand conceptions and the importance of the user entrance experience to disarm conventional expectations. Community was both evident in the member activities and friendships, and also in the rich socio-spatial interplay foregrounded through design, where opportunities for social gatherings and intermingling were equally conceived alongside physical workspace features. Nevertheless, examples of control (viewed as pervasive by some) were becoming more evident, as ShareCo's new management sought to introduce procedural structure and business profitability beyond ArcCo's original conceptions.

Furthermore, for all the thematic diversity between users, providers, and the different cases, there was also notable commonality, demonstrating how workspace, work and

life seem inevitably intertwined for knowledge workers. I noted above (section 4.6.3) that this seems to offer a clear demonstration of the existential link, and so the opportunity to establish stronger theoretical links, between workspace and organisation theory. In the spirit of Flyvbjerg's (2001) 'departure points for praxis', I suggest these commonalities offer aspirational opportunities: if more workspace design and management activity could recognise, embrace and enhance them, what socio-cultural and organisational and benefits could become possible?

Finally, whilst the distinction between providers and users is intrinsically part of the research design and question, I have already acknowledged (e.g., Till, 2009) that all workspace providers are also a specific subset of users. More specifically here, because of the nature of PropCo's work, its users could also be considered as workspace providers (for other organisations), and a number of ShareCo users also acted at times as providers, in their capacity as 'member hosts'. So, in these case-settings at least, Dale and Burrell's (2008) distinction can be seen to be something of a false dichotomy, and in actuality perhaps a continuum of possibilities, rather than two absolute positions.

5.2 Producing knowledge workspace: Lefebvrian perspectives

Through a Lefebvrian analysis, it becomes evident how the socio-spatial dynamic, or present spatiality of knowledge workspaces, is a function of both conceived intent and resultant use. Workspaces must at some point be physically built, but they are also always in production, by providers and users alike – 'doubly constructed', in other words (after Gieryn, 2000). Usher (2018a) advocates that workspace provision needs to be permanently 'in beta', as a recognition and critique of a financially rigid capital investment approach that builds and refurbishes new workspaces periodically and infrequently, rather than makes provision to support their evolution over time. Alternatively, Massey (2005), echoing Lefebvre, offers a more subtle and holistic rendering of socio-spatial production through three propositions: space is a product of interrelations, constituted through interactions; space is multiple and contemporaneously plural; and space is always under construction and always in process. Acknowledging workspace provision as one form of (internal) architecture, this "suggests a more complex attitude to the practice of [workspace provision] that allows for its rethinking as part of an assemblage of multi-faceted and heterogeneous practices

of spatial production, more recently calling for a wider reflection on its agency" (Boano, 2015:544).

So, providers and users all use space, and all produce space, just differently. In this respect Lefebvre (1991) identifies two *types* of knowledge here: 'expert' *savoir* and 'inexpert' *connaissance*. Given Cairns' (2008) rhetorical question of whether there might be a more ambivalent approach to theorising the built environment, in Lefebvrian terms, is this where expert and inexpert knowledge forms could become equally valued, to produce less adversarial and more complementary workspace outcomes? Perhaps in theory, but in reality, a power differential remains. Those with the responsibility to conceive workspace have the collective design and management power to underpin De Certeau's (1984) strategies, whilst users (including, ironically, providers at times) exercise their individual power through lived tactics. These are evidently rarely equitable forces. Consequently, a Lefebvrian awareness and understanding exposes a fundamental choice, as exemplified through the two case examples: knowledge workspace can be conceived with *either* abstract space and domination, or differential space and appropriation in mind. Thus, with effort and consideration, the 'trialectic' of a knowledge workspace does not have to be, or indeed become, contested. To shed some of the esoteric language in the spirit of practical understanding and application, I identify and term these alternatives to producing knowledge workspace as 'space-making' and 'place-making'[24].

5.2.1 Space-making and place-making

Space-making foregrounds (consciously or unconsciously) a spatial design focus in lieu of the social, and typically achieves the management of workspace facilities through homogeneous and often prescriptive control measures. As can be seen with PropCo, this doesn't necessarily mean a negative workplace experience for participants, and as Kingma (2019:399) also found, 'new ways of working' can still offer benefits to users and satisfy their expectations: "The lived space can also be in harmony with, and a fulfilment of, the conceived space."

Place-making however embraces a socio-spatial design imperative (e.g., figure 11) seeking permissive enablement of heterogeneous communities. In this knowledge workspace context, 'place-making' resonates with 'placemaking' in an urban planning

---

[24] See section v. for more on my specific use of space/place terminology.

context, as popularised by Jacobs (1961) and others in their critique of and resistance to the dominating urban design strategies they saw as detrimental to American cities in the 1960s. It also recognises the 'generative' capacity of workspace (Kornberger and Clegg, 2004) through often permissive management practices, offering 'loose ends and missing links' (Massey, 2005) and available for Lefebvre's 'counter projects', where room is found for 'encounter': "the directive of architecture, Lefebvre suggests, is to create conditions of possibility for such counter projects via hijacked commissions … propositions delivered in spite, or even in contradiction, of what is expected" (Stanek, 2011:236).

Once again, this distinction is not indicative of judgement of one approach over the other, nor does it indicate a qualitative favouring of either case. Like space-making, place-making also has its pros and cons. It seems, at least at ShareCo, to be more chaotic and harder to preserve. Prescriptive space-making offers rules and protocols, whereas permissive place-making involves grey areas which require judgement to negotiate. When it comes to knowledge workspaces, an awareness of organisational context and appropriateness seems critical to achieving harmony between lived experience and conceived intent.

Figure 11: ArcCo's 'place making' socio-spatial design outcomes © ArcCo

One can only imagine how Lefebvre might challenge such a binary distinction, alongside his implicit positionality to privilege lived space (Crang, 1999). But the point is that if the distinction can be comprehended easily, there is an opportunity to make more informed practical workspace design and management decisions. Reflective awareness on the part of providers to understand things from a user perspective (Till, 2009) opens up generative possibilities. ShareCo is one example, and there are others (Awan et al., 2013). But such examples seem rare, and – noting ShareCo's current dynamic – their ongoing existential production may risk a trajectory of creeping domination. Till (2009) contests such approaches are 'too real' for architects, and Donald (1994) demonstrates that from a workspace management perspective it is often the users who are perceived to be the ones causing the problems by providers. In other words, this is McAuley et al's (2007) positivistic 'truths' as managerialist doctrine subject to authoritarian exploitation writ large in workspace terms. And so, as Lefebvre (1991) indicates, the pervasive forces perpetually favour domination and abstract space, to the extent that for Massey (2005:17) "we have inherited an imagination [of space] so deeply ingrained that it is often not actively thought … an imagination with the implacable force of the patently obvious". Such imaginations she explains, echoing Lefebvre again, are dominated by the politics of modernity, capitalist globalization, and socially constructed hegemonic projects.

5.3   Using Lefebvre to inform the workspace/OT connection

If Lefebvre provides an opportunity to raise the social and political awareness of the workspace design and management discipline, his theoretical perspective equally affords an opportunity to raise the spatial awareness of organisation theory. As I stated in section 1.3, the underrepresentation of space resulted in calls from theorists like Halford (2004) and Kornberger and Clegg (2004) to 'bring space back in' to organisational studies. Taylor and Spicer (2007) evidenced a nascent field rich with the potential to, as Halford (2008:393) puts it, "stop seeing the spatialities of work and organisation as only supporting actors… [and] start taking space seriously as a starting point in its own right". This study demonstrates how Lefebvre can be mobilised to bridge this gap, both theoretically (in terms of the 'spatial turn') and practically (by evidencing the interconnectedness of workspace, work and life).

Moreover, I asked rhetorically in chapter one whether there was an opportunity to step beyond the contested and sometimes confrontational dualities of right and wrong in

workspace theory and practice, and to shift the tone of critique like Burkeman's (2014) (see section 1.2) towards critical enlightenment. In this respect, Lefebvre offers way to qualitatively interrogate Elsbach and Pratt's (2007) tensions and trade-offs. By reframing our thinking from workspace per se, to its moments of production by 'experts' and 'inexperts' alike, the resultant organisational spatialities can be considered not in terms of right and wrong, but in terms of context and appropriateness, or fit. In other words, whether the multifaceted lived workspace experience accords with conceived intent, or not.

There is a further historical point to make here regarding the workspace design and management discipline, and its organisational relevance. Price (2003) explores how formative conceptions of facilities management (FM) moved in the late 1980s and early 1990s from 'expert workplace management' as espoused by the likes of DEGW (Duffy, 1997,2009) towards commoditised service delivery and supply chain management in an increasingly globalised marketplace. Perhaps then the Hawthorne experiments (e.g., Baldry, 1999) are not the only historically divergent path and missed opportunity for a socio-spatial rendering of workspace.

As a consequence, the relatively young and unsung workspace design and management discipline often expresses envy at the gravitas architecture commands within the built environment milieu. Yet conversely, Till (2009) excoriates architecture's institutionalised industry wisdom that limits its own awareness and capability to change. Subsequently, Awan et al. (2011) advocate doing architecture differently through an approach they term 'spatial agency', citing three fundamental convictions: the production of space is a shared enterprise, so professional expertise is about facilitating and enabling collective contribution; social space is dynamic space, meaning its production continues over time, it is generative, and there is no single moment of completion, project plan or otherwise; and, as people live out their lives in social space, it is intractably political.

It seems clear from these convictions that Awan et al. essentially embrace Lefebvrian thinking, and particularly a differential mode of producing space, with appropriation as an aspirational goal, espousing deep-seated ideological differences of this alternative approach to produce more humane outcomes. In other words, they are talking about place-making! Awan et al. evidence a range of successful practitioners and their endeavours that, ironically, feature DEGW as a seminal example, and (unbeknownst to me at the time of my case study engagement in 2014) feature ArcCo as a contemporary

exemplar. To the best of my knowledge, ArcCo wouldn't consider themselves to be part of the workspace design and management discipline. But in spite, or perhaps because of this, they clearly produce innovative, enabling knowledge workspace socio-spatially, with experimentation, learning and iteration in mind. Reflexively, as a workspace professional, this gives me hope that more critically informed and contextually valuable workspace theory and practice is possible in future.

5.4   Using PLP to inform knowledge workspace understanding

The final question to address concerns the value of PLP as a participatory visual research method to inform knowledge workspace provision and use. My limited experience of the approach suggests overwhelmingly that it does, and there are several points worth making to substantiate this view. The first is linked to research question one, in that *this is the very method* which elicited such wide-ranging functional, symbolic and aesthetic concerns (Elsbach and Pratt, 2007) that mattered to the seventeen participants. Such rich and diverse data was elicited through one straightforward question, "what matters to you about workspace?", and the invitation to take a number of smartphone images to inform the answer. I doubt any quantitative approach would have derived such topical breadth so efficiently and effectively, if at all. And I could have adopted an alternative qualitative interview approach, but would it have been as enjoyable or engaging?

The theoretical value of PLP can be acknowledged, including Vince and Warren's (2012) claims that photography is an ideal medium to analyse space; that they did indeed set the agenda, empowering participants to explain the reasons, meaning and significance of their chosen images; and that by "exposing the ways in which social positions and relations are both produced by, and produce, distinct [spatial] experiences" (Rose, 2012:299). Therefore the Lefebvrian relevance is also clear (although equally the Lefebrian analysis undertaken is not necessary to achieve inductive insights from PLP).

A range of more practical benefits are also evident. One ArcCo participant acknowledged the simplicity and effectiveness of the approach, how it had made them revisit some of their previous thinking about ShareCo and its design features, and about their own movement within and use of the workspace. They also noted the way it triggered reflection in the moment about other photos you could have taken, and to develop explanations in the conversation itself:

Echo (an ArcCo provider): "I just took it because I quite liked it, and I knew there was a reason, and actually it's only in some ways when we actually start talking about it that I do start to think about the reasons as well, which is quite nice about this exercise while you're doing it with the photographs."

Another reflected on how the act of taking the photos had led to the dawning realisation about the real value of their workspace, which prompted an additional photoset entitled 'Humans of ShareCo':

Charlie (a ShareCo provider): "so that's what made me realise that actually the space is all about the people. We do need the basics to function, obviously, but I think the people make the space."
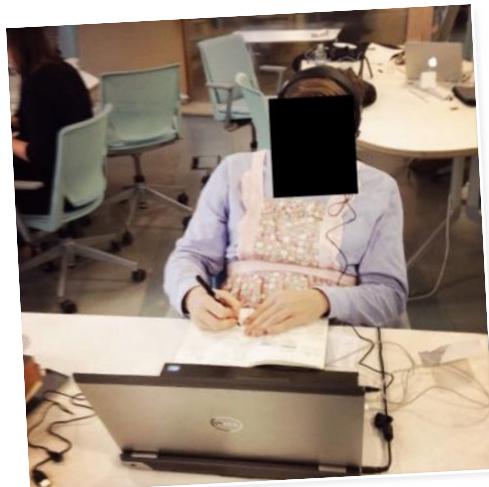
It was clear that some participants also appreciated the speed and immediacy of the approach, in that it offered a quick and immediate way to capture snapshots as prompts for broader conversation – photographs as a medium for the message they sought to convey. However other responses to PLP also became evident. Another ShareCo participant took a more planned approach, seeded at the participant briefing session I gave at the start of my case study engagement:

Zulu (a ShareCo user): "…when you explained what you were doing those were the two things that I was going to take pictures of were light and clutter."

This participant also undertook to approach the task 'properly', with a decent camera, naming each digital image they took: "a deLIGHTful room with a view (sic), bright ideas, chaos 1, chaos 2, health not safety, silencium, soft nooks – cosy but clean, space and colour, stimulation, and warm food". Finally, the staging and presentation of the images by one participant embraced notions of time as well as space, whilst evidencing the encroachment of work into life, to the detriment of other things that mattered, including fatherhood:

Romeo (a D&BCo provider) presented their images as a visual and narrative arc, explaining: "it was a way of actually lifting it beyond the ordinary, but as a way to explain the everyday and ordinary… it's life exaggerated… So actually my day starts with a real sense of wonder… things that I would like to dedicate more time to. So a lot of these slides actually reflect time… You get so little time to do the things that matter. And by that, I mean family, good work… that's why I suppose people try and immerse themselves in… their gadgets that bring their world to life when they're not close to things that matter… they're a way of actually giving us a sense of ourselves somewhere else aren't they?"
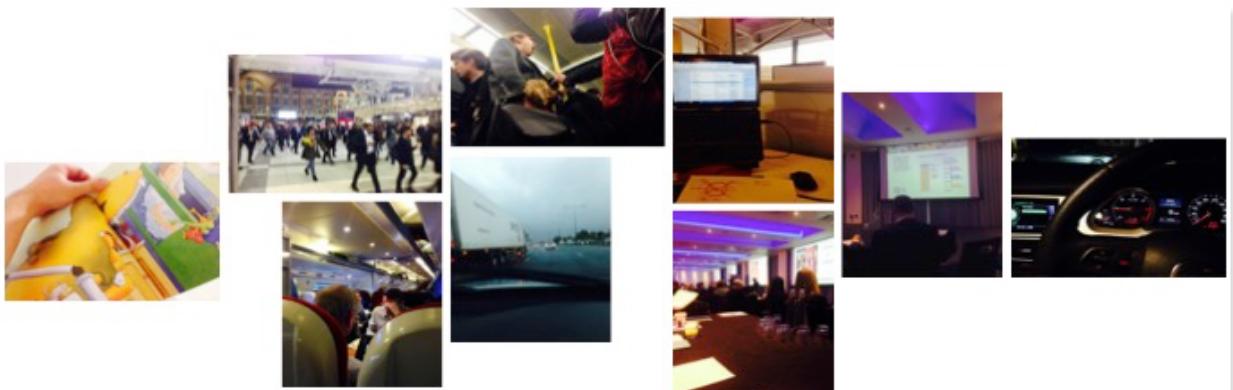
In these differing respects I also found PLP attractive in terms of diversity and inclusion: different participants found ways to adapt the means and the ends to their personal needs. Thus, I concur with Harper (2000) in that rather than the photographs being unproblematic 'facts', they became socially constructed subjective windows. Given the dominance of visual aesthetics in workspace design, it seems ironic that the technique isn't more widely evidenced. I wonder if a significant reason for this the workspace design and management discipline's lack of research methods awareness and capability, alongside (as previously identified in sections 1.3 and 2.3) a dominantly positivistic epistemological approach, consciously or otherwise? Given Airo and Nenonen's (2014:27) call for more 'linguistic' and fundamentally social constructionist work to measure "the hidden cultural features behind the evident structures of a workplace", PLP seems an engaging, fruitful and practically applicable approach, if due attention to the increased ethical and data analysis considerations is given.

5.5   Reflections and learning

As the thesis nears conclusion, and indeed as my intermittent, ten-year research journey draws to a close, this section considers salient reflections and learning. First and foremost, I honestly didn't expect to find and access two knowledge workspace case-settings whose present spatialities (Merrifield, 2000) would turn out to be dichotomous. Reflexively, with more awareness of certain indicators this now seems a little naïve – but then many things seem more obvious in hindsight. Given Carp's (2008) demonstration of how a systematic, analytical use of Lefebvre's triad was practically achievable, this makes the uncovering of these contemporary knowledge workspace examples all the more significant. If the recent years have been about curious and open-minded Lefebvrian approaches (Schmid, 2014), I genuinely hope my own research is regarded in this ilk, especially given the challenges encountered along the way.

My second reflection steps beyond the four specific research questions to consider the relevance of Lefebvre and PLP to each other. What would Lefebvre make of PLP as a research technique, I wonder, given that in PoS he "notes how the privileging of the image has led to an impoverished understanding of space, turning social space into a fetishised abstraction. The image 'kills' and cannot account for the richness of lived experience" Leach (1997:132)? Speculatively, I would hope research like this provides convincing evidence of the empowering nature of photo voice and auto-driving (section

3.4.1), and of the way PLP serves as a mechanism to turn a critical eye back on the practices of spatial aestheticization Lefebvre actively contested.

Finally, some evidence from the start of this research journey offers an opportunity for more personal introspection. My LMOT assignment (a provisional literature review) from December 2011 received the following supervisory feedback: "his belief in open-plan design shines out and it is perhaps interesting the way he disparages those (typically non-FM) who do not share his opinion". Compared to my current thinking and practice – and assuming the observation was valid, which it broadly was – this demonstrates the workspace provider I used to be, utterly convinced about the business value of facilities management (cf. Donald, 1994), and quick to judge non-believers.

Earlier in my career (then an operational facilities manager) I was known to measure success by the amount of 'junk' I could clear from buildings, workspaces and under people's desks into skips. Successful 'visual standards' were measured by straight lines, clear surfaces and cubic metres of 'waste'. Lefebvre has helped me reframe the implications of such actions on the lived experience of the people I was there to enable. I can't change the past, but I can affect the future, and finding professional opportunities to make Lefebvre's esoteric ideas accessible has become important. Consequently, it is primarily due to my consultancy's efforts that the Institute of Workplace and Facilities Management define workplace as social space – a silent nod to Henri Lefebvre – as we encourage the unsung profession to embrace spatial agency, enable communities and enlighten providers. Making Lefebvre accessible can be done.

5.6   Chapter summary

This chapter has used the data and study findings to address the four research questions explained and articulated in chapter one. In summary, providers and users in different knowledge workspaces demonstrate evidence of diverse things (both common and specific) that matter to them, of functional, symbolic and aesthetic relevance. Trade-offs and tensions are apparent, and a Lefebvrian analysis offers a means to move the focus from space per se to its socio-spatial production and interplay. Increased practical awareness of the dynamic, present spatiality of knowledge workspaces affords the opportunity to make more informed design and management decisions, that both recognise the interplay between workspace provision and use, and potentially seek knowledge workspaces conceptions that achieve ongoing harmony with user lived experiences. Increased theoretical awareness informs the mutually valuable connection

between workspace design and management and organisation theory. Such insightful qualitative data about the provision and use of knowledge workspaces can be accessed using PLP as a novel, engaging and effective visual research method. Reflexively, I can see how my own professional practice has been informed by both theoretical and practical insights from this research.

chapter six

conclusions

6. Conclusions

This final chapter succinctly draws the study to a close. It summarises the research in terms of contribution to knowledge and professional implications, then pays customary attention to research limitations and areas for future research.

6.1   Contribution to knowledge

"An abyss has opened up between the theories of space and the empirical world of actions, interactions and understandings, leaving our lived experiences estranged from the conceptions that purport to represent them" (Watkins, 2005:210).

There is a specific body of knowledge about how to design and manage knowledge workspace that has a heritage of over 60 years. However, this literature is largely divorced from wider organisational theory. Where it does make links, it is typically positivistic in focus. Conversely, some organisation theory scholars have identified the absence of space in their field, and make the call to bring space back in, in order to improve both the theoretical understanding and practical performance of organisations. This thesis establishes and informs a connection in this respect. Furthermore, despite such specialist knowledge regarding its design and management, knowledge workspace remains contested, sometimes emotively, with differing 'expert' and layman perspectives on how it should be designed and managed. This is evident in scholarly, professional and media discourses. It is also evident in our quotidian working lives.

With this in mind, this thesis has drawn upon Lefebvre's theoretical perspective generally, and his spatial triad in particular, which despite its 1974 origin is all but absent from the specialist workspace design and management body of knowledge. Lefebvre informs the understanding of workspace as social product, therefore also as inherently political, always in production. By understanding that we all play a role in this production, whether recognised 'expert' providers or layman 'inexpert' users, our perspective can move from workspace as a material outcome to workspace as an ongoing, unfolding lived experience. This shift from material workspace to its socially constructed production offers an alternative way to theorise and understand it. Aspirationally, it also offers hope beyond dualistic and often emotive workspace debates.

Inspired by Carp's (2008) practice of 'ground truthing', a practical analysis technique using Lefebvre's spatial triad as an educational tool, the thesis demonstrates how using

Lefebvre's triad as an analytic research device promotes enlightenment regarding the dialectic interplay between its different moments of spatial production. This provides an opportunity to reframe contested knowledge workspace tensions, trade-offs, rights and wrongs (about how it should and shouldn't be designed and managed) and also to appreciate workspace as an unfolding phenomena. Additionally, by understanding the social construction of a given knowledge workspace more holistically, the dynamic of its 'present spatiality' can be proactively considered – the ways that conceived intents affect the lived experiences of both providers and users, and how such dialectic relationships might trend in future.

In terms of methodological contribution, participant led photography as a means of enquiry is underused in the workspace design and management field, as are other visual research techniques. This seems somewhat ironic, given the intrinsically visual and aesthetic nature of workspace design. By utilising the method to inductively explore prevalent themes within specific knowledge workspace case studies, the thesis demonstrates how a rich, qualitative visual technique affords an enjoyable, revealing and so valuable approach to explore the workspace experiences of our quotidian lives.

6.2   Professional implications

The insights from the study have implications not just for workspace theory, but also its practical provision. Given that the cases evidence data representative of broader perspectives within the workspace design and management field, the research suggests an opportunity to make more informed decisions about design and management intent. Lefebvre's original work is somewhat frustratingly esoteric, as is much subsequent scholarly attention. But with commitment and practice, utilising Lefebvre's triad to better understand the implications of workplace decisions does not have to be. The research derives simplified terminology to emphasise this point, creating opportunities for 'thinking with Lefebvre' more pragmatically and accessibly – the novel present spatiality 'thinking tool' seeks to raise practical awareness, consider evidence and stimulate discussion in this respect.

Accordingly, 'space-making' favours the design and management of knowledge workspaces as facilities, producing abstract, dominated, homogeneous spaces that favour the ends of those who conceive them. Alternatively, 'place-making' foregrounds the socio-spatial awareness of knowledge workspaces as communities, producing differential, heterogeneous spaces with generative potential for user appropriation.

There are clear parallels between 'place-making' and 'placemaking' as originally conceived in the 1960s urban planning arena, inspired by the likes of Jacobs (1961).

Place-making also implies that appropriation doesn't only have to happen through transgressive action, as often seems to be exemplified in Lefebvrian studies. It can be conscientiously foregrounded by workspace design and management intent, with the user in mind. Given the perennial interest in knowledge worker productivity, from workspace and organisation theory alike, this seems to be a good thing. A better awareness on the part of workspace design and management professionals could help (re)establish the organisational value of the discipline, as initially proposed by pioneers in the field approaching forty years ago.

6.3   Research limitations

The study was exploratory in nature, particularly in terms of participant numbers, case numbers and different knowledge workspace types. Without further related research it is hard to ascertain for sure how transferable any of the findings are, or to develop and refine the methodological approach. Furthermore, because Lefebvre only sketched his spatial triad conceptually and invited its concrete application, one cannot know for sure that his concepts are being applied as he intended. Also, from a research design perspective, Dale and Burrell's (2008) distinction between providers and users was found to be problematic and messier in reality. Less opportunistic and more specific case selection could potentially have helped in this respect. Regarding PLP, the predominantly 'dialogical' analytic approach was perhaps somewhat rudimentary and could have been extended to consider other techniques of viewing and analysis.

6.4   Suggestions for future research

From a workspace design and management perspective, there are rich opportunities for both further Lefebvrian and/or PLP (or other visual methods) research. For example, (acknowledging a personal interest in coworking) it could be interesting to compare different coworking spaces, especially with different ideologies. What would a comparative analysis of a commercialised coworking offer (such as WeWork) reveal? Does coworking always tend towards 'place-making'? Are there generalisable attributes that can be identified and emulated? What influences the risks of domination and erosion? These all seem to be worthy avenues for further enquiry.

Alternatively, Lefebvre's triad could be deployed to analyse exemplars of 'generative' knowledge workspaces that demonstrate appropriation by design or through user interventions. This could be extended to historical archival case study analysis, were sufficient data available. For example, Massachusetts Institute of Technology's famous Building 20, dubbed 'the magical incubator', is arguably one of the most important knowledge workspaces of the last century, both in terms of the knowledge outputs that were achieved through unprecedented user appropriation, and because of the rich archival data available (Ellison, 2020).

7. Bibliography

Abraham, Y. (1998, November). Metropolis Feature: The Man Behind The Cubicle. Metropolis Magazine. [Online]. (Accessed: June 2015).

Airo, K., & Nenonen, S. (2014). Review of linguistic approach in the workplace management research. Facilities, 32(1/2), 27-45.

Alexander, K., & Price, I. (2012). Introduction: Space, Management and Organizations. In K. Alexander, & I. Price (Eds.), Managing Organizational Ecologies: Space, Management and Organization (pp. 1-7). New York: Routledge.

Alvesson, M., & Ashcraft, K. (2012). Interviews. In G. Symon, & C. Cassell, Qualitative Organizational Research: Core Methods and Current Challenges (pp. 239-257). London: Sage.

Awan, N., Schneider, T., & Till, J. (2013). Spatial agency: other ways of doing architecture. Abingdon: Routledge.

Bachmann, M. (2014). How the hub found its center. Stanford Social Innovation Review, 12(1), 22-27.

Baldry, C. (1997). The social construction of office space. International Labour Review, 136(3), 365-378.

Baldry, C. (1999). Space – the final frontier. Sociology, 33(3), 535-553.

Becker, F. (2004). Offices at Work: Uncommon Workspace Strategies that Add Value and Improve Performance. San Francisco: Jossey-Bass.

Becker, F., & Steele, F. (1995). Workplace by design: Mapping the high-performance workscape. Jossey-Bass.

Belova, O. (2006). The Event of Seeing: A Phenomenological Perspective on Visual Sense-Making. Culture and Organization, 12(2), 93-107.

Berg, P. O. & Kreiner. K. (1990). Corporate Architecture: Turning Physical Settings into Symbolic Resources. Symbols and Artifacts. Views of the Corporate Landscape.

Berger, P., & Luckman, T. (1966). The Social Construction of Reality: A Treatise in the Sociology of Knowledge. Middlesex: Penguin Books.

Blaikie, N. (1993). Approaches to Social Enquiry (1st Edition ed.). Cambridge: Polity Press.

Blaikie, N. (2007). Approaches to social enquiry: Advancing knowledge. Cambridge: Polity.

Boano, C. (2015). Henri Lefebvre, Toward an Architecture of Enjoyment. Journal of Architecture, 20(3), 544-549.

Boano, C., & Hunter, W. (2012). Architecture at risk (?): The ambivalent nature of post-disaster practice. Architectoni. ca, 1(1), 1-13.

Bondi, L. (2005). Troubling space, making space, doing space. Group analysis, 38(1), 137-149.

Bradley, S., & Osborne, P. (1999). The working environment: Catalyst or constraint?. Journal of Corporate Real Estate, 1(2), 178-190.

Brill, M., & Weidemann, S. (2001). Bosti Associates. Disproving widespread myths about workplace design. Buffalo. Nova York: Bosti Associates.

Bryman, A. & Bell, E. (2007). Business Research Methods. 2nd edn. Oxford University Press.

Burkeman, O. (2013, November 18). Open-plan offices were devised by Satan in the deepest caverns of hell. The Guardian. [Online]. (Accessed: June 2015).

Burrell, G., & Morgan, G. (1979). Sociological paradigms and organizational analysis. London: Heinemann.

Cairns, G. (2002). Aesthetics, morality and power: Design as espoused freedom and implicit control. Human Relations, 55(7), 799-820.

Cairns, G. (2003). Seeking a facilities management philosophy for the changing workplace. Facilities.

Cairns, G. (2008). Advocating an ambivalent approach to theorizing the built environment. Building Research and Information, 36(3), 280-289.

Cairns, G. (2012). Philosophical contradictions in FM. Managing organizational ecologies: space, management and organizations [Routledge Studies in Innovation, Organization and Technology], 94-104.

Carp, J. (2008). "Ground-Truthing" Representations of Social Space: Using Lefebvre's Conceptual Triad. Journal of Planning Education and Research, 28(2), 129-142.

Case, P., Lilley, S., & Owens, T. (Eds.). (2006). The speed of organization (Vol. 19). Liber.

Coleman, N. (2014). Lefebvre for architects. Routledge.

Collis, J., & Hussey, R. (2003). Business Research: Palgarve Macmillan.

Coplin, D. (2013). Business Reimagined: Why work isn't working and what you can do about it. Petersfield, Hampshire: Harriman House.

Crang, M. (1999). Globalization as conceived, perceived and lived spaces. Theory, Culture & Society, 16(1), 167-177.

Crang, M., & Thrift, N. J. (2000). Thinking space (Vol. 9). London: Routledge.

Cresswell, J. W. (1998). Qualitative inquiry and research design: Choosing among five traditions.

Crotty, M., (1998). The foundations of social research: Meaning and perspective in the research process. Sage.

Dale, K., & Burrell, G. (2008). The spaces of organisation and the organisation of space: Power, identity and materiality at work. Basingstoke: Palgrave Macmillan.

Davison, J., McLean, C., & Warren, S. (2012). Exploring the visual in organizations and management. Qualitative Resaerch in Organizations and Management , 7(1), 5-15.

De Certeau, M., (1984). The Practice of Everyday Life, (S. Rendall, Trans.) Berkeley: University of California Press.

De Croon, E., Sluiter, J., Kuijer, P. P., & Frings-Dresen, M. (2005). The effect of office concepts on worker health and performance: a systematic review of the literature. Ergonomics, 48(2), 119-134.

Denzin, N., & Lincoln, Y. (2000). The handbook of qualitative research. Thousand Oaks: Sage.

Denzin, N. K., & Lincoln, Y. S. (2008). Strategies of qualitative inquiry (Vol. 2). Sage.

Denzin, N. K., & Lincoln, Y. S. (2008). The landscape of qualitative research. Sage.

Donald, I. (1994). Management and change in office environments. Journal of environmental psychology, 14(1), 21-30.

Dourish, P. (2006, November). Re-space-ing place: "place" and "space" ten years on. In Proceedings of the 2006 20th anniversary conference on Computer supported cooperative work (pp. 299-308).

Duberley, J., Johnson, P., & Cassell, C. (2012). Philosophies Underpinning Qualitative Research. In G. Symon, & C. Cassell, Qualitative Organizational Research: Core Methods and Current Challenges (pp. 15-34). London: Sage.

Duffy, F. (1997). The New Office. London: Conran Octopus.

Duffy, F. (2009). Building appraisal: A personal view. Journal of Building Appraisal, 4(3), 149-156.

Duffy, F., & Wankum, A. (1966). Office landscaping: a new approach to office planning: layout planning in the landscaped office. Anbar.

Dyckhoff, T. (Director). (2011). The Secret Life of Buildings: Work [Motion Picture].

Easterby-Smith, M., Thorpe, R., & Jackson, P. R. (2012). Management research. Sage.

Elden, S. (2004). Understanding Henri Lefebvre. A&C Black.

Ellison, I. (2020, June). Soul mining. IN Magazine issue 2. [Online]. (Accessed: April 2021).

Ellison, I., & Owen, S. (2010). FM contract relationships: from mobilisation to sustainable partnership. European facility management conference: 9th EuroFM research symposium, 1-2 June. Madrid.

Eltringham, M. (2017, October 4). Top UK workplaces honoured at BCO national awards ceremony. Insight. [Online]. (Accessed: March 2021).

Elsbach, K., & Pratt, M. (2007). Chapter 4: The Physical Environment in Organizations. The Academy of Management Annals, 1(1), 181-224.

Fabbri, J., & Charue-Duboc, F. (2013). The role of physical space in collaborative workplaces hosting entrepreneurs: The case of the 'Beehive' in Paris. In Materiality and space (pp. 117-134). Palgrave Macmillan, London.

Felstead, A., Jewson, N., & Walters, S. (2005). Changing places of work. Palgrave Macmillan.

Ferdinand, J., Pearson, G., Rowe, M. & Worthington, F. (2007). 'A different kind of ethics', Ethnography, 8(4), pp. 519-543.

Fitzgerald, L., & Dopson, S. (2009). Comparative Case Study Designs: Their Utility and Development in Organizational Research. In D. Buchanan, & A. Bryman, The Sage Handbook of Organizational Research Methods (pp. 465-483). Los Angeles: Sage.

Flyvbjerg, B. (2001). Making Social Science Matter: Why social inquiry fails and how it can succeed again. Cambridge: Cambridge University Press.

Flyvbjerg, B. (2006). Five misunderstandings about case-study research. Qualitative inquiry, 12(2), 219-245.

Fontana, A., & Frey, J. (2000). The Interview: From Structured Questions to Negotiated Text. In N. Denzin, & Y. Lincoln, The handbook of qualitative research (pp. 645-672). Thousand Oaks: Sage.

Gagliardi, P. (1990). Artifacts as Pathways and Remains of Organizational Life. In P. Gagliardi, Symbols and Artifacts: Views of the Corporate Landscape (pp. 3-38). New York: Aldine de Gruyter.

Giddens, A. (1979). Central Problems in Social Theory: Action, structure and contradiction in social analysis. Basingstoke: Macmillan.

Gieryn, T. F. (2000). A space for place in sociology. Annual review of sociology, 26(1), 463-496.

Golden-Biddle, K., & Locke, K. (1993). Appealing work: An investigation of how ethnographic texts convince. Organization science, 4(4), 595-616.

Gottdiener, M. (1993). A Marx for our time: Henri Lefebvre and the production of space. Sociological Theory, 11(1), 129-134.

Greene, C., & Myerson, J. (2011). Space for thought: designing for knowledge workers. Facilities, 29(1/2), 19-30.

Grimshaw, B. (2004). Space, place and people: Facilities management and critical theory. Facilities management: Innovation and performance. London: Spon.

Guba, E. G. & Lincoln, Y. S. (2008). Paradigmatic controversies, contradictions, and emerging confluences. The Sage handbook of qualitative research, 8, 255-286. Sage.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. Field methods, 18(1), 59-82.

Halford, S. (2004). Towards a Sociology of Organizational Space. Sociological Research Online , 9 (1).

Halford, S. (2005). Hybrid workspace: Re-spatialisations of work, organisation and management. New Technology, Work and Employment, 20(1), 19-33.

Halford, S. (2008). Sociologies of Space, Work and Organisation: From Fragments to Spatial Theory. Sociology Compass, 2(3), 925-943.

Halford, S., & Leonard, P. (2006). Place, space and time: Contextualizing workplace subjectivities. Organization Studies, 27(5), 657-676.

Hammersley, M. (2001). On 'Systematic' Reviews of Research Literatures: a 'narrative' response to Evans & Benefield. British Educational Research Journal, Vol. 27, No. 5, 2001, 27(5), 543-554.

Harper, D. (2002). Talking about pictures, A case for photo elicitation. Visual Studies, 17(1), 13-26.

Hatch, M. (1997). Organization Theory: Modern, Symbolic, and Postmodern Perspectives. Oxford: OUP.

Haynes, B., Matzdorf, F., Nunnington, N., Ogunmakin, C., Pinder, J., & Price, I. (2000). Does property benefit occupiers? An evaluation of the literature. Occupier. org report, (1).

Haynes, B., Nunnington, N., & Eccles, T. (2017). Corporate real estate asset management: strategy and implementation. Taylor & Francis.

Hedge, A. (1982). The Open-Plan Office : A Systematic Investigation of Employee Reactions to Their Work Environment . Environment and Behavior, 14(5), 519-542.

Heerwagen, J. H., Kampschroer, K., Powell, K. M., & Loftness, V. (2004). Collaborative knowledge work environments. Building research & information, 32(6), 510-528.

Heisley, D., & Levy, S. (1991). Autodriving: A Photoelicitation Technique. Journal of Consumer Research, 18(3), 257-272.

Holstein, J. A., & Gubrium, J. F. (1995). The active interview. Sage publications.

Hynd, M. (2003). A Study of New Work Environments Piloted in Scottish Enterprise National. PhD thesis. The University of Strathclyde, Glasgow.

Irvine, L. (1998). Organizational Ethics and Fieldwork Realities: Negotiating Ethical Boundaries in Codependents Anonymous. In S. Grills, Doing Ethnographic Research: Fieldwork Settings (pp. 167-183). Sage.

Jacobs, J. (1961). The Death and Life of Great American Cities. New York: Random House.

Johnson, P., & Duberley, J. (2000). Understanding Management Research: An Introduction to Epistemology. London: Sage.

Johnson, P., & Duberley, J. (2003). Reflexivity in Management Research. Journal of Management Studies, 40(5), 1279-1303.

Johnson, P., Buehring, A., Cassell, C., & Symon, G. (2006). Evaluating qualitative management research: Towards a contingent criteriology. International Journal of Management Reviews, 8(3), 131-156.

Kim, J., & De Dear, R. (2013). Workspace satisfaction: The privacy-communication trade-off in open-plan offices. Journal of Environmental Psychology, 36, 18-26.

Kingma, S. (2019). New ways of working (NWW): work space and cultural change in virtualizing organizations. Culture and Organization, 25(5), 383-406.

Kornberger, M., & Clegg, S. (2004). Bringing Space Back in: Organizing the Generative Building. Organization Studies, 25(7), 1095-1114.

Kristal, M. (2013, June). An Idea Whose Time Has Come. Metropolis. [Online]. (Accessed: June 2015).

Kvale, S. (1996). InterViews: An Introduction to Qualitative Research Inquiry. Thousand Oaks: Sage.

Leach, N. (1997). Rethinking architecture: a reader in cultural theory. Psychology Press.

Leesman (2016). Activity Based Working. The rise and rise of ABW: Reshaping the physical, virtual and behavioural workspace. [Online]. (Accessed: April 2021).

Lefebvre, H. (1991). The production of space. (D. Nicholson-Smith, Trans.) Oxford: Wiley-Blackwell.

Lipson, J. (1994). Ethical Issues in Ethnography. In J. Morse, Critical Issues in Qualitative Research Methods (pp. 333-355). Sage.

Massey, D. (2005). For space. Sage.

Markus, T. A. (1993). Buildings & power: Freedom and control in the origin of modern building types. Psychology Press.

Markus, T. A., & Cameron, D. (2002). The words between the spaces: Buildings and language. Psychology Press.

May, K. (1994). 'Abstract Knowing: The Case for Magic in Method', in Morse, J. (ed.) (1994) Critical Issues in Qualitative Research Methods. Sage Publications, pp. 10-21.

McAuley, J., Duberley, J., & Johnson, P. (2007). Organization theory: Challenges and perspectives. Pearson Education.

Merrifield, A. (1995). Lefebvre, Anti-Logos and Nietzsche: An Alternative Reading of The Production of Space. Antipode, 27(3), 294-303.

Merrifield, A. (2000). A socialist in space. Thinking space, 9, 167.

Merrifield, A. (2006). Henri Lefebvre: A critical introduction. Abingdon: Routledge.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. Sage.

Mintz, N. L. (1956). Effects of aesthetic surroundings: II. Prolonged and repeated experience in a "beautiful" and an "ugly" room. The Journal of Psychology, 41(2), 459-466.

Mitchell, R. & Charmaz, K. (1998). 'Telling Tales and Writing Stories: Postmodernist Visions and Realist Images in Ethnographic Writing', in Grills, S. (ed.) (1998) Doing Ethnographic Research: Fieldwork Settings. Sage Publications, pp. 228-248.

Moravánszky, Á., Schmid, C. and Stanek, L. (Eds.). (2014) Urban revolution now: Henri Lefebvre in social research and architecture. Abingdon: Routledge.

Morgan, G., & Smircich, L. (1980). The case for qualitative research. Academy of management review, 5(4), 491-500.

Morse, J. (1994). 'Emerging From the Data: The Cognitive Process of Analysis in Qualitative Inquiry', in Morse, J. (ed.) (1994) Critical Issues in Qualitative Research Methods. Sage Publications, pp. 23-43.

Moser, S. (2008). Personality: a new positionality?. Area, 40(3), 383-392.

Murphy, E. & Dingwall, R. (2001). 'The Ethics of Ethnography', in Atkinson, P., Coffey, A., Delamont, S., Lofland, J. & Lofland, L. (eds.) (2001) Handbook of Ethnography. Sage Publications, pp. 339-351.

Musson, G., & Tietze, S. (2004). Places and spaces: The role of metonymy in organizational talk. Journal of Management Studies, 41(8), 1301-1323.

Myerson, J. (2014, March 24). Workspace revolution. (N. Baker, Interviewer) BBC. Radio 4.

Myerson, J., & Ross, P. (2003). The 21st century office. Laurence King Publishing.

Myerson, J., & Ross, P. (2006). Space to work: New office design. London: Laurence King

Nathan, M., & Doyle, J. (2002). The State of the Office: The politics and geography of working space. Industrial Society.

Oommen, V., Knowles, M., & Zhao, I. (2008). Should Health Service Managers Embrace Open Plan Work Environments? A Review. Asia Pacific Journal of Health Management, 3(2), 37-43.

Oseland, N. (2009). The impact of psychological needs on office design. Journal of Corporate Real Estate.

Parker Publishing Company Editorial Staff (1965) Business Etiquette Handbook. New York: Parker Publishing Company.

Paxman, J. (2014, September 12). If I were king for a day, I would ban open-plan offices. The Guardian. [Online]. (Accessed: June 2015).

Phillips, N., & Oswick, C. (2012). Organizational Discourse: Domains, Debates, and Directions. The Academy of Management Annals , 6 (1), 435-481.

Pinder, J., Parkin, J., Austin, S., Duggan, F., Lansdale, M., Demian, P., & Allenby, S. (2009). The case for new academic workspaces. Loughborough: Loughborough University.

Prasad, P. (2005). Crafting qualitative research: working in the postpositivist traditions. Armonk, New York: M. E. Sharpe.

Price, I. (2003). Facility management as an emerging discipline. In Best, R., Langston, C. and De Valence, G. (Eds.). Workplace strategies and facilities management (30-48). Oxford: Butterworth-Heinemann.

Price, I., & Beard, C. (2013). The extended narrotype: adaptation and stasis in spatial evolution. EURAM Conference, 26-28 June 2013, Istanbul.

Price, I., & Fortune, J. (2008). Open plan and academe: pre- and post-hoc conversations. In D. Then, & E. Finch (Eds.), Proceedings of the W070

conference: healthy and creative facilities. CIB publication (315) (pp. 613-620). CIB.

Propst, R. (1968). The office: A facility based on change. Elmhurst, Illinois: The Business Press.

Prosser, J., Clark, A., & Wiles, R. (2008). Visual research ethics at the crossroads.

Rapoport, A. (1990). The meaning of the built environment: A nonverbal communication approach. University of Arizona Press.

Ritzer, G. (Ed.). (2007). The Blackwell encyclopedia of sociology (Vol. 1479). New York, NY, USA: Blackwell Publishing.

Rose, G. (2012). Visual Methodologies: An Introduction to Researching with Visual Materials (3rd Edition ed.). London: Sage.

Rosen, M., Orlikowski, W. J., and Schmahmann, K. S. (1990). Building Buildings and Living Lives: A Critique of Bureaucracy, Ideology and Concrete Artifacts. In Gagliardi, P. (Ed). Symbols and Artifacts: Views of the Corporate Landscape (69-84). New York: Aldine de Gruyter.

Rus, A., & Orel, M. (2015). Coworking: a community of work. Teorija in Praksa, 52(6), 1017-1038.

Saunders, M. (2012). Choosing Research Participants. In G. Symon, & C. Cassell, Qualitative Organizational Research: Core Methods and Current Challenges (pp. 35-52). London: Sage.

Saunders, M., Lewis, P., & Thornhill, A. (2009). Research methods for business students. Pearson education.

Saval, N. (2014). Cubed: A Secret History of the Workplace. New York: Random House LLC.

Scarles, C. (2010). Where words fail, visuals ignite: Opportunities for Visual Autoethnography in Tourism Research. Annals of Tourism Research, 37(4), 905-926.

Schmid, C. (2014) The trouble with Henri: Urban research and the theory of the production of space. In Moravánszky, Á., Schmid, C. and Stanek, L. (Eds.). Urban revolution now: Henri Lefebvre in social research and architecture. Abingdon: Routledge.

Shields, R. (1999). Lefebvre, love, and struggle: Spatial dialectics. Psychology Press.

Shields, R. (2002). Henri Lefebvre: philosopher of everyday life. In Elliott, A. & Turner, B. (Eds.) (2001) Profiles in Contemporary Social Theory. London: Sage.

Shortt, H. L., & Warren, S. K. (2019). Grounded visual pattern analysis: Photographs in organizational field studies. Organizational Research Methods, 22(2), 539-563.

Smith, R. W., & Bugni, V. (2006). Symbolic interaction theory and architecture. Symbolic interaction, 29(2), 123-155.

Soja, E. W. (1989). Postmodern geographies: The reassertion of space in critical social theory. Verso.

Sommer, R. (1962). The distance for comfortable conversation: A further study. Sociometry, 25(1), 111-116.

Stanek, L. (2011). Henri Lefebvre on space: Architecture, urban research, and the production of theory. University of Minnesota Press.

Steele, F. (1973). Physical settings and organization development. Addison Wesley Publishing Company.

Strangleman, T. (2004). Ways of (not) seeing work: The visual as a blind spot in WES?. Work, Employment and Society, 18(1), 179-192.

Sundstrom, E., and Sundstrom, M. G. (1986). Work Places: The psychology of the physical environment in offices and factories. Cambridge University Press.

Taylor, S., & Spicer, A. (2007). Time for space: A narrative review of research on organizational spaces . International Journal of Management Reviews, 9(4), 325-346.

Then, D. S.-S. (1999). An integrated resource management view of facilities management. Facilities, 17(12/13), 462-469.

Till, J. (2009). Architecture depends. Cambridge: MIT press.

Toyoki, S. (2004). Constructive spatial criticism on critical spatial construction. Ephemera: Theory and Politics in Organisation, 4(4), 376-384.

Tracy, S. J. (2013). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. Chichester: John Wiley & Sons.

Tuan, Y.-F. (1977). Space and Place: the Perspective of Experience. Minneapolis: University of Minnesota Press.

Usher, N. (2018a). The Elemental Workplace. LID Publishing Limited.

Usher, N. (2018b, August 28). All the workstyles we have ever loved [Blog post]. (Accessed via Wayback Machine: April 2021).

Van Meel, J. (2000). The European Office: Office design and national context. PhD

Van Meel, J. (2011). The origins of new ways of working: Office concepts in the 1970s. Facilities, 29(9/10), 357-367.

Vince, R., & Warren, S. (2012). Participatory Visual Methods. In G. Symon, & C. Cassell, Qualitative Organizational Research: Core Methods and Current Challenges (pp. 275-295). London: Sage.

Vischer, J. C. (2005). Space meets status: Designing performing workspace.

Vischer, J. (2008). Towards a user-centred theory of the built environment. Building Research & Information , 36 (3), 231-240.

Vos, P., & van der Voordt, T. (2001). Tomorrow's offices through today's eyes: Effects of innovation in the working environment. Journal of Corporate Real Estate.

Wasserman, V., and Frenkel, M. (2011). Organizational aesthetics: Caught between identity regulation and culture jamming. Organization Science, 22(2), 503-521.

Warren, S. (2005). Photography and voice in critical qualitative management research. Accounting, Auditing & Accountability Journal, 18(6), 861-882.

Warren, S. (2006). Hot nesting? A visual exploration of personalized workspaces in a 'hot-desk' office environment. COMPLETE

Watkins, C. (2005). Representations of Space, Spatial Practices and Spaces of Representation: An Application of Lefebvre's Spatial Triad. Culture and Organization , 11 (3), 209-220.

Werner, C. M., Altman, I., & Brown, B. B. (1992). A transactional approach to interpersonal relations: physical environment, social context and temporal qualities. Journal of Social and Personal Relationships, 9(2), 297-323.

appendices

8. Appendices

8.1   SHUREC1 consent from

<mark>NB: signed version by Director of Studies requested from SHU – to update</mark>

Sheffield Hallam University

RESEARCH ETHICS CHECKLIST (SHUREC1)

This form is designed to help staff and students to complete an ethical scrutiny of proposed research. The SHU Research Ethics Policy should be consulted before completing the form.

Answering the questions below will help you decide whether your research proposal requires ethical review by a Faculty Research Ethics Committee (FREC). In cases of uncertainty, members of the FREC can be approached for advice.

Please note: staff based in University central departments should submit to the University Ethics Committee (SHUREC) for review and advice.

The final responsibility for ensuring that ethical research practices are followed rests with the supervisor for student research and with the principal investigator for staff research projects.

Note that students and staff are responsible for making suitable arrangements for keeping data secure and, if relevant, for keeping the identity of participants anonymous. They are also responsible for following SHU guidelines about data encryption.

The form also enables the University and Faculty to keep a record confirming that research conducted has been subjected to ethical scrutiny.

– For student projects, the form may be completed by the student and the supervisor and/or module leader (as applicable). In all cases, it should be counter-signed by the supervisor and/or module leader, and kept as a record showing that ethical scrutiny has occurred. Students should retain a copy for inclusion in their research projects, and staff should keep a copy in the student file.

– For staff research, the form should be completed and kept by the principal investigator.

Please note if it may be necessary to conduct a health and safety risk assessment for the proposed research. Further information can be obtained from the Faculty Safety Co-ordinator.

General Details

(Table cells will expand as you type)

Name of principal investigator or student	Ian Ellison
email address	i.ellison@shu.ac.uk
Course or qualification (student)	DBA
Name of supervisor (if applicable)	DoS: Carol A Taylor Supervisor: Oliver Couch
email address	i.ellison@shu.ac.uk
Title of research proposal	"A critical study of knowledge workspaces: exploring provider and user perspectives"
Brief outline of research to include, rationale & aims (50 words). In addition for research with human, participants, include recruitment method,	Brief outline: an interpretive study, which may become critical dependent upon emergent findings (Prasad, 2005), seeking to explore the lived experience perspectives of both providers and users of 'knowledge worker' workspace (Greene & Myerson, 2011), using a participant-led visual research

participant details & proposed methodology (250 words).	method (Vince & Warren, 2012; Rose, 2012). This research seeks to emergently explore how functional and socially constructed elements of the socio-spatial relationship manifest within the lived-experience of different roles.
	Recruitment method: once resarch settings agreed and access granted via organisational gatekeepers, user participants will be invited to voluntarily participate through an open communication. Providers in each setting will be approached directly and openly invited, possibly with organisational gatekeeper intermediary (there will be less providers than users by default and both perspectives are of value to the research).
	Participant details: Providers include owner, landlord, designer, architect and management roles (including FM). Users are the 'receivers' of provided space (Dale & Burrell, 2008).
	Methodology: Participants invited to collect a series of camera-phone images to form the basis of a participant-led photography interview process (Vince & Warren 2012; Rose, 2012) as the basis for 'image/text' qualitative information.
Will the research be conducted with partners & subcontractors?	**Yes/No** No (If **YES**, outline how you will ensure that their ethical policies are consistent with university policy.) n/a

1. Research Involving the NHS or Social Care / Community Care

Question	Yes/No
1. Does the research involve the NHS or Social Care/Community Care (SC) as defined below? • Patients recruited because of their past or present use of the NHS or SC • Relatives/carers of patients recruited because of their past or present use of the NHS or SC • Access to data, organs or other bodily material of past or present NHS patients • Foetal material and IVF involving NHS patients • The recently dead in NHS premises • Prisoners recruited for health-related research • Participants who are unable to provide informed consent due to their incapacity	No
2. Is this a research project as opposed to service evaluation or audit? *For NHS definitions please see the following website* http://www.nres.nhs.uk/applications/is-your-project-research/	n/a

113

If you have answered **YES** to questions **1 & 2** then you **must** seek approval from the NHS or Social Care under their Research Governance schemes.

NHS https://www.myresearchproject.org.uk/Signin.aspx

If you are undertaking Social Care research in Sheffield you will require a favourable ethical review from a Faculty Committee but must use the Sheffield Council form for this. Full details from http://www.sheffield.gov.uk/caresupport/us/research. For other areas contact the relevant social services department directly for advice on procedures.

NB FRECs provide Independent Scientific Review for NHS or SC research and initial scrutiny for ethics applications as required for university sponsorship of the research. Applicants can use the NHS or SC proforma and submit this initially to the FREC.

2. Research with Human Participants

Question		Yes/No
1.	Does the research involve human participants? This includes surveys, questionnaires, observing behaviour etc.	Yes
Note	If YES, then please answer questions 2 to 10	
	If NO, please go to Section 3	
2.	Will any of the participants be vulnerable?	No
Note	'Vulnerable' people include young people under 18, people with learning disabilities, people who may be limited by age or sickness or disability from understanding the research, etc.	
3	Are drugs, placebos or other substances (e.g. food substances, vitamins) to be administered to the study participants or will the study involve invasive, intrusive or potentially harmful procedures of any kind?	No
4	Will tissue samples (including blood) be obtained from participants?	No
5	Is pain or more than mild discomfort likely to result from the study?	No
6	Will the study involve prolonged or repetitive testing?	No
7	Is there any reasonable and foreseeable risk of physical or emotional harm to any of the participants?	No
Note	Harm may be caused by distressing or intrusive interview questions, uncomfortable procedures involving the participant, invasion of privacy, topics relating to highly personal information, topics relating to illegal activity, etc.	
8	Will anyone be taking part without giving their informed consent?	No
9	Is it covert research?	No
Note	'Covert research' refers to research that is conducted without the knowledge of participants.	
10	Will the research output allow identification of any individual who has not given their express consent to be identified?	No

If you answered **YES only** to question 1, you **must** submit the signed form to the FREC for registration and scrutiny by the Chair. If you have answered **YES** to any of the other questions you are **required** to submit a SHUREC2A (or 2B) to the FREC.

3. Research in Organisations

	Question	Yes/No
1	Will the research involve working with/within an organisation (e.g. school, business, charity, museum, government department, international agency, etc)?	Yes
2	If you answered YES to question 1, do you have granted access to conduct the research? *If YES, students please show evidence to your supervisor. PI should retain safely.*	No
3	If you answered NO to question 2, is it because: A. you have not yet asked B. you have asked and not yet received an answer C. you have asked and been refused access. *Note You will only be able to start the research when you have been granted access.*	A (range of possilble orgs to consider)

4. Research with Products and Artefacts

	Question	Yes/No
1.	Will the research involve working with copyrighted documents, films, broadcasts, photographs, artworks, designs, products, programmes, databases, networks, processes or secure data?	No
2.	If you answered YES to question 1, are the materials you intend to use in the public domain?	n/a
Notes	*'In the public domain' does not mean the same thing as 'publicly accessible'.* – *Information which is 'in the public domain' is no longer protected by copyright (i.e. copyright has either expired or been waived) and can be used without permission.* – *Information which is 'publicly accessible' (e.g. TV broadcasts, websites, artworks, newspapers) is available for anyone to consult/view. It is still protected by copyright even if there is no copyright notice. In UK law, copyright protection is automatic and does not require a copyright statement, although it is always good practice to provide one. It is necessary to check the terms and conditions of use to find out exactly how the material may be reused etc.* *If you answered YES to question 1, be aware that you may need to consider other ethics codes. For example, when conducting Internet research, consult the code of the Association of Internet Researchers; for educational research, consult the Code of Ethics of the British Educational Research Association.*	
3.	If you answered NO to question 2, do you have explicit permission to use these materials as data? *If YES, please show evidence to your supervisor. PI should retain permission.*	n/a
4.	If you answered NO to question 3, is it because: A. you have not yet asked permission B. you have asked and not yet received and answer	A/B/C n/a

115

Question	Yes/No
C. you have asked and been refused access.	
Note You will only be able to start the research when you have been granted permission to use the specified material.	

Adherence to SHU policy and procedures

Personal statement	
I can confirm that: - I have read the Sheffield Hallam University Research Ethics Policy and Procedures - I agree to abide by its principles.	
Student / Researcher/ Principal Investigator (as applicable)	
Name: Ian Ellison	Date: 31/05/2014
Signature:	
Supervisor or other person giving ethical sign-off	
I can confirm that completion of this form has not identified the need for ethical approval by the FREC or an NHS, Social Care or other external REC. The research will not commence until any approvals required under Sections 3 & 4 have been received.	
Name:	Date:
Signature:	

8.2   Case study recruitment article

¶ [work]spatially challenged

Unpicking what we think we know about [work]space and place

~   Home   Empire of me   [work]manifesto   Giants' shoulders
Temple of fame   Queued   ~

This is not just   June 7, 2014
workspace research…

By Ian Ellison ¶ Posted in People, Photography, Research, Workplace, Workspace ¶ 4 Comments

(https://workspatiallychallenged.files.wordpress.com/2014/06/showcase.png)

'Simple camera icon' by Srami8 (2012)

Blimey. What a cracking week. Not only have we had four different Facilities Management (FM) student groups at Sheffield Hallam at once (ever used the analogy that FM is all about juggling (http://www.youtube.com/watch?v=MA5-GDGUBXA)?!) but Wednesday was the milestone I've been working towards pretty much solidly since March. I got double green-lighted to commence the research phase of my doctoral studies. Ka-boom! Chuffed? Excited? Just a little bit. Sometimes I absolutely love what I get to do for a living…

Ready to explore what we think we know about workspace?

So this is where it gets exciting, because now I'm looking for people to get involved in something which should be *really* fascinating. Especially given all the people/place discussions triggered by the recent CIPD/BIFM collaboration announcement (http://www.bifm.org.uk/bifm/news/7163). Not that I shop at Marks & Sparks, but this not just workspace research. Piqued you interest? Splendid. Read on...

What's it all about?

What I want to do has its methodological roots in anthropology and sociology, rather than the environmental psychology-esque studies typical of FM and workspace research. I am interested, as openly and as broadly as I can be, in what *'matters'* when it comes to people and their workspace. That's it. The method I'm planning to use is called 'participant-led photography'. Deceptively simple? You bet.

How's it going to work?

I'm looking to engage with ideally two UK-based organisational settings. One might have its own workspace (or workspaces), with the majority of people all working for one main employer. The other might have more of a co-working setup, where different people from different employers all co-locate within a collective workspace. From these two settings I'm looking for a small number of volunteers. Maybe about ten from each. I'm after both 'providers' and 'users' of these workspaces. By providers I mean some from this list: landlord, owner, architect, designer, FM or senior management. By user, I mean folks who work there regularly in the workspace provided for them.

When I've got my two organisational settings selected and participants recruited, I'm going to come and meet everyone for a short initial briefing. This is where it hopefully gets really fun and interesting. Because I'm going to invite each participant to gather a small collection of photos using their own camera-phones, about, quite literally, *anything they feel 'matters' to them about their relationship with their workspace*. The great thing about photos is that they can't be right or wrong. Participants can be as creative (or conservative) as they like. It isn't about 'good' photos, whatever 'good' actually means. I hope this becomes an interesting, enjoyable experience. Am I going to see pictures about work stuff, or other things entirely? Am I going to see pictures inside buildings or beyond? I have no idea. It's completely out of my hands.

Wow. That's workspace research? Tell me more...

The participants are going to have a few weeks to gather their 'photo-sets' before they ping them over to me for printing. Next, I'll come back to site and meet them again, one at a time, for a short conversation (probably 45 minutes or so) about the photos: *"Why did you take this one? What's significant about it? What's going on in this photo?"* and so on. The conversations might well go wherever, because they are *led* by the participant photographs. It should be fascinating.

These conversations will need to be recorded because after that I'm going to analyse them to 'make sense' of what the conversations tell me about the participants and their relationship with their workspace. Confidential recording of information like this is standard practice for doctoral studies: rest assured, 'research ethics' is serious business for university research like this. Protecting participants so they feel comfortable to talk openly is paramount. The analysis will take a few weeks, after which the plan is to either come back to each participant with a summary of their key points: *"This is how I would summarise the key points from our conversation – would you like to amend or add anything...?"* or, if there is more complicated stuff to talk about, perhaps come back to site for one final round of conversations with some folk.

When is this happening?

This information, or data, will become the basis of my entire doctorate, which I (rather ambitiously) hope to be well on the way with by late 2015. So I'm on a serious timescale, and the research phase I have outlined above needs to happen during the latter half of 2014.

How much effort will volunteers need to put in?

In 'real' terms, it simply involves each participant attending the initial short briefing session, taking the time to gather the photos, ping them to me, meet with me on site to talk about them, then either answer a clarification email or phone chat, or perhaps meet one more time. In total? Maybe 3 hours or so over 5 months, depending on how much fun they start having with the photo-project bit!

What about organisational commitment?

For the organisations involved, it means granting me access to their sites to undertake the research as conveniently and effectively as possible. It means allowing participants to sensibly take camera-phone photos which might be of/in the workplace. We will discuss *'responsible photography'* at the initial participant briefing, covering data protection, ownership and permission, and having other people in shot etc: this is massively important. It means allowing participants the time and flexibility to engage with me. It means, most fundamentally, trusting me to undertake the research ethically, carefully, and conscientiously. My mantra as researcher is *always 'do no harm'*. I'm happy to discuss this at any point. Hopefully this all sounds far more fascinating than onerous, but obviously everyone will have their own opinion.

Why this approach?

Well, after 16 years firstly doing operational FM and managing workspaces, then latterly teaching and researching in the field, I suspect that if we ask typical questions about the people/place relationship, we probably get typical answers. But if we can find ways to allow new information to emerge, we might be surprised and enlightened by what we discover. I'm really excited to be contributing to this fascinating and perennially challenging topic in an innovative way.

Right. We might be up for this. What's in it for us?

Research like this has to be a bit of give and take. Through this approach I will learn a huge amount about a small number if particular perspectives. These probably won't therefore be totally representative of the organisations or topic overall, but I'd be really surprised if there wasn't hugely valuable learning in there to help inform the people/place relationship in the specific organisational settings involved. So, I will happily report and discuss summarised findings with both the volunteers and organisations involved, fully respecting the confidentiality of participants at all times. Moreover, by entering this extended period of work with me, you get my FM/workspace knowledge, experience and enthusiasm for the duration of the research to boot. You never know, this could be the start of something beautiful…

Brilliant. How do I get my organisation involved?

I'm keen to get started as soon as I can. Tweet me @ianellison (https://twitter.com) or email me at i.ellison@shu.ac.uk. Don't forget, I need both 'providers' and users of workspace as my participants. Also, crucially, please think about the 'organisational gatekeepers' – the people who will need to say yes to this before we can crack on. This might be you directly, or it might be a small group of folk.

Remember. This isn't your usual workspace research. I'm trying to innovate and push the boundaries. If your organisation already believes it has all the answers, maybe this isn't for you.

8.3 Participant consent form

Participant consent form

Knowledge workspaces: exploring provider and user perspectives

Please answer the following questions by ticking the response that applies: Yes | No

1. I have attended the briefing, read the information sheet and have had details of the study explained to me   ☐   ☐

2. My questions about the study have been answered to my satisfaction and I understand that I may ask further questions at any point   ☐   ☐

3. I understand that I am free to withdraw from the study at any point, without giving a reason, or decline to answer any particular questions in the study without any consequences   ☐   ☐

4. I agree to provide information to the researcher under the conditions of confidentiality set out in the information sheet   ☐   ☐

5. I am happy to participate in the study under the conditions set out in the information sheet   ☐   ☐

6. I consent to the information collected for purposes of this research study, once anonymised (so that I cannot be identified) to be used for other research purposes   ☐   ☐

Participant's name (printed): …………………………….. Participant's signature: …………….…………….
Date: …………………………….…..
Contact details: ……

Researcher's name: Ian Ellison   Researcher's signature:
Contact details: i.ellison@shu.ac.uk | 07595 933 219 | @ianellison
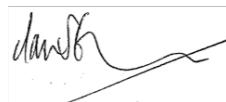
Please keep your copy of this consent form (and the study information sheet overleaf) safe

8.4 Participant briefing document

Sheffield Hallam University | **Sheffield Business School**

Useful information

Knowledge workspaces: exploring provider and user perspectives

Thank you for volunteering to take part in this study about the relationship between people and their workspace. Participation is completely voluntary and you may choose to withdraw from the study at any point.

As either a user or provider of workspace, you have been asked to gather a small set of images using your camera phone. These will form the basis of a conversation with the researcher about what 'matters' to you regarding workspace. This conversation will take place in your usual workplace. Overall, your involvement will include taking pictures, the initial conversation, and then subsequent clarification (either by email, phone or face to face) of the information you provide, where you will also have the opportunity to discuss your participation.

No specific image will be reproduced without permission of the photographer. All research data will be anonymised. When the study is complete, the researcher will be responsible for the information. Raw data will be coded for anonymity, stored securely and not passed to other people without the permission of individual participants. Analysed, anonymised data and findings will be used to produce reports, publications and presentations.

The data collection phase of the study will run from September 2014 to January 2015, with anticipated thesis completion by December 2015. Preliminary findings will be offered in December 2014; final findings from May 2015.

If you have any questions or concerns about the study, during or after, please contact Ian Ellison at any point. If you have any concerns about the researcher, please contact the DBA doctoral course leader at Sheffield Hallam University, Dr. Tracey Coule (t.m.coule@shu.ac.uk).

Things to think about...

you | work

matters | hinders
important | unimportant
helps

space | place

Project timeline

Participants ponder / gather photos	Sep → Oct 2014
Participants send photos to print	mid Oct 2014
Individual photo-led conversations (≈1 hour)	w/c Oct 20 (tbc)
Initial data analysis	Nov → Dec 2014
Initial findings feedback workshop + blog? (tbc)	Dec 2014
Follow up clarification / conversations (≈1 hour)	Dec → Jan 2015
Full data analysis	Jan → Mar 2015
Thesis production	Apr → Aug 2015
Final findings feedback workshop? (tbc)	from May 2015

Participation stages

1. Ponder
2. Capture
3. Discuss — oh hello!
4. Confirm

Responsible photography

Taking pictures can be a personal thing – please ask any people who are the subjects of your photographs for permission to show them (either before or after you take the picture).

You might also need to take care not to photograph anything which invades another person's privacy or contravenes your organisation's confidentiality policy (for example, visible contents of documents or computer screens). Rest assured, identifying features of people or organisations (like faces and logos) can be digitally obscured and you will be given full opportunity to have any of the pictures discussed deleted. In fact, permission will be asked to use each individual picture in any articles or books resulting from the research during the 'interview' meeting, so you will be in full control at every stage.

Other than these common sense precautions, feel free to use your phone's camera anywhere and everywhere for this study for the next few weeks, and try to remember to use it! Hopefully this process will be thought-provoking and enjoyable. Remember, there are no right or wrong photos. Have fun, and thank you once again.

(Guidance adapted from Vince & Warren, 2012)

About the researcher

Ian Ellison is a senior lecturer in facilities management at Sheffield Hallam University. He has been involved in workspace management and design in various ways for much of his professional career. The motivation for this study is to apply a novel research approach to a perennial organisational topic, to potentially learn something new. You are welcome to contact Ian at any point during the study.

i.ellison@shu.ac.uk

07595 933 219 | @ianellison

workspatiallychallenged.wordpress.com

8.5   Interview prompt sheet

Prep+kit 2 recorders ready, iPhone airplane mode, notebook+pen, photos+pen, water

- **Thank you** ☺
- Discussion mainly about photos themselves but also probably a bit about the process of taking
- Was the briefing and the information I provided ok?
- Recorded + confidential (anonymised) + limited notes taken / possible annotations on photos
- Any queries or unanswered question from me at this point… ok to get started?

Warm up | process of taking

- How would you describe the process?
- Did you encounter any challenges along the way? (e.g. doing 'responsible' photography?)
- Did you find yourself doing it gradually, or in one main go?
- How do you feel about your photos?

Photo conversation prompts

- Which photo would you like to start with?
- What's this photo about then? / What is significant (or matters) about this photo?
- Is there anything in this photo that we haven't talked about?
- Is there anything missing from this photo?
- Is there anything you wanted to take a picture of but felt you weren't able to for any reason?
- Are there any other things you might have taken a picture of, in hindsight?
- What helps / hinders / matters / doesn't matter → **you / work / workspace / workplace (overlap?)**

Outro

- What did you think of that?
- How did the conversation feel?
- Any final questions?

Thank you ☺ **I'll be in touch to confirm / clarify / perhaps talk again in a few weeks' time**

8.6 Participant summary example

Alpha, ArcCo provider (interview October 2014, summary June 2015)

Permissiveness, design tactics, management, democracy, empowerment, self-regulation, socio-spatial, reasoning, capacity(?)

Introduction

Alpha is an architect, director and co-founder of ArcCo, a multi-faceted strategy, prototyping and design practice. Alpha designed and ArcCo launched ShareCo under the global franchise banner, now residing in the workspace as an anchor tenant team. He is an unassuming young man: focused, thoughtful and considered. An accomplished, award-winning designer and occasional photographer. He knows ShareCo implicitly – he conceived its workspace. During our conversation it sometimes felt like he was a few steps ahead, patiently waiting for me to catch up.

What seems to be at the heart of what they value?

Alpha exudes a seemingly implicit understanding of the socio-spatial link. His manner, his ideas and his design practice's approach refute any built-environment industry rhetoric of architects forgetting about the ongoing 'lived experience' of their material creations. Perhaps this is in part due to ArcCo's unique relationship with ShareCo. Social-spatial designing however, affords potentially more complex systemic design challenges:
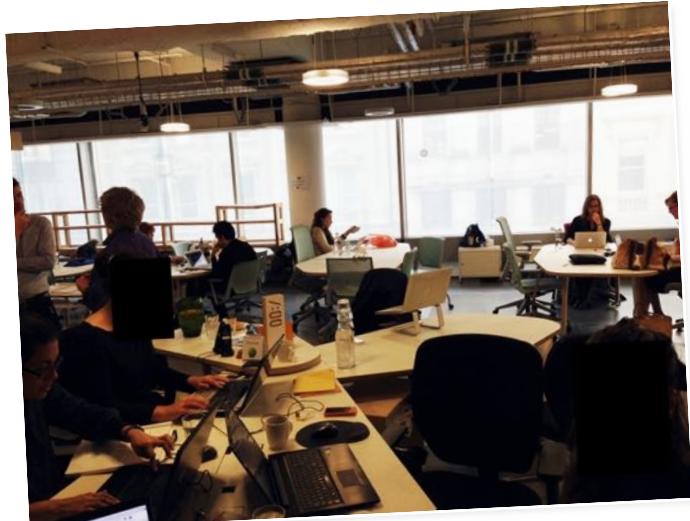
> *"You're not just designing physical space, you're trying to design a whole system"*

Regarding wayfinding and the entrance sequence into ShareCo, toward the 'host' figure":

> *"I wanted a clear path to it so you walk in, 'that's where I go'. Also we had it as a very high desk so they were sat on tall chairs and when you walk up to them you are eye level with them so they don't have to get off their chairs and you're [at] conversational height. It also means that people don't hang around too much. You arrive, you chat, you move on. That for me was a very clear nudge, 'that's where I go, it's obvious'. Right now, because the chairs are uncomfortable, whatever, they want[ed?] a lower desk and now it blends in. They also put a line of tables in front of it so it's become defensive and they're wondering why people don't know where to go when they come in."*

From Alpha's architectural education, everything must have a reason, perhaps in contrast to interior design. Reasons might be hidden; it doesn't mean they aren't there. It frustrates when modifications are made without this awareness:

> *"This a mass generalisation but interior designers do things on visual a lot whereas I'd say architects question why an awful lot more because of the amounts of money involved. At University you are always backing up whatever you do with 'why am I doing this?'"*

> *"So, if you don't understand why some things are important, even though them seem completely off the track, there's intention to those. And if you start getting rid of them then things become ossified and it doesn't work anymore"*

His approach (modus operandi?), certainly for ShareCo and other projects discussed, is all about designing for democratic permissiveness. This ranges from the individual (for example seating choice, invitations to be nosey, visibility of others) to the collective (for example creating excuses to interact, effortless/ non-manageable space utilisation, adoptable accidental spaces). Permissiveness contradicts directive signposting and promotes ownership.

> *"You've got to be permissive"* … *"Finding this excuse for people to interact or excuse for people to snoop around"*

129

Permissiveness: accidental spaces. Ownership. Directions and signposting are "dumb".

"This was one of those programmed, well designed, spaces which are meant to look like accidents" … "…highly creative resolutions to odd spaces" … "We left empty shelves and it's that invitation – 'this is empty, fill it'" … "It's kind of magic and exactly the way I imagined it to work"

"Yeah, and I think signposting everything dumbs everything down. I want people to actually find these spaces"

Learning involves experimentation, prototyping and observing: iterations of designs within a workspace, learnings applied to future projects, for example democratising space for users based on changing management practices at ShareCo:

"If you're sat in there and you're talking loudly you quieten down a bit. So actually it's unintentional hardness works … so there's no point in lining them because it was doing what we wanted it to do in here in a way in which we didn't expect."

"Another thing we're trying to do in the social justice centre we've just designed we tried to create spaces which, because we're not managing it, if the management are really mean there's no way they can ever get anyone to be charged for a use free space."

Hand in hand with permissiveness and learning is the notion of 'spatial generosity': making space for collaboration, mutual gain… potential and opportunity:

"Currently there is no generosity allowed. In our old office we would give out desk space, seating, everything, free, to people we thought would be useful to work with"

130

"For me, that is counter-cultural to what this space should be doing. This should be common sense – if it's free, use it, but someone might be coming in and kick you out. It's permissive culture."

However Alpha's ideals are balanced with commercial acumen. Solutions must be cost effective, working within limits. Visual brand identity (and therefore practice advertisement) are important:

"So whenever anyone takes photographs, whether it's us or the Prime Minister or people doing events, you constantly have this backdrop which is instantly recognisable: weird lights, exposed surfaces and everything white. It's a nice thing which we knew no one could really touch."

"With the thickness of a bit of paint you create something that is kind of iconic in this space."

"It's part of brand. So that's one reason. The other reason is that it means that anything can happen underneath it. It's freeform setting out."

"Anything which makes them go 'oh that's that thing with that thing' which [isn't] negative – perfect, yeah"

What are their key workspace headlines?

'Socio-spatial' workspaces can be designed to suggest ways of behaving. They can embody and suggest feelings. One can consider coercive tactics, behavioural nudges, done in a range of ways, using the purely physical to the social. Whilst coercion has recognisably negative connotations, Alpha's democratic outlook conveys a positivity in his powerful provider role:

"It's that kind of, I keep saying coercive but that sounds really sinister but it is coercive. It's a tactic"

"You're using coercive tactics to try and make people to be more quiet or relax more or communicate more and all that kind of stuff"

There is a significant 'staging' element to ShareCo's design. Creating an 'alien' space to be explored and (re)experienced by members and newcomers alike. This is embodied and symbolised within the workspace to convey a message: workspace is different here. You will get different here. You will work differently here. Is this more than brand? It suggests potential benefits and outcomes:

"The reason it looks so alien when you come in here is to get you out of the frame of mind that you were thinking before. This isn't a typical space, this is a space where something different happens" … "It's not something you would expect to find on the second storey of an office block" … "We wanted to create this slightly odd world inside. That's why you can see the greenhouse from the ground floor and from the bridge"

"We were trying to get that sense that you can change anything, it's a framework that [but?] you can, just freestyle it." … "to show how things worked and give that sense that you could hack stuff"

Alphas design notions involve layers and multi-sensory approaches. The (infamous?) greenhouse, for example, is a meeting room, permissive viewpoint, transparent barrier,

quirky attention-grabbing visual feature within the workspace and building, and an external ShareCo brand signifier. Look, sound and feel (even temperature) can all be considered within design and building constraint limits:

> *"We wanted it to be noisier so all the surfaces are hard so there's a buzz in the space. We wanted it to look a bit more clinical so it felt like you could experiment more. All this kind of stuff." … "We wanted those to give this lab feel"*

> *"When you do look up it's like 'what's going on there?' So it's one thing that does multiple functions"*

Designing socio-spatially also involves thinking about rhythms, flow and notions of time:

> *"We had this thing about the rickety trolley so you announce time just by moving this trolley through the space"*

> *"Table football on a Friday night or any weekday after seven is the place you meet people you wouldn't normally talk to"*

'The watercooler moment' is a well-known design concept for chance interaction, but Alpha's perspective stretches beyond it, seeking to generate reasons (including 'common enemies') and excuses ('common denominators') for people to interact. Slides are 'dumb' for this reason – what is their purpose, save to achieve magazine cover publicity or symbolise 'corporate' (and thus disingenuous?) fun?

> *"The point of these is that it's like detergent on oil: it breaks the surface tension" … "…like ping pong. Any kind of thing that doesn't need you to talk but lets you interact, which then leads to people talking, perfect."*

> *"If you have something like 'oh we have a live dinosaur inside our office' and everyone goes 'wow that's cool'. If everyone has a live dinosaur inside their office then the reason for it has gone. It's pointless"*

What discussion points arose from the conversation?

Partly due to the unique ArcCo/ShareCo context, coupled with his inherently 'socio-spatial' understanding, meant the systemic importance of the workspace management function became an undercurrent to our conversation. Alpha evidenced different facets of this complex issue, from attempts to empower self-regulating users to limit management efforts, to the frustration when changes get made, seemingly without clear reasons.

> *"Management is amazingly important. If you get the wrong management you screw it up. You're not just designing physical space, you're trying to design a whole system"* … *"This is a general round up of how management is incredibly important or understanding intentions of things"*

> *"You want the space to be self-regulating. You want people to clear up after themselves, because it's great for management, who don't have to pay for it"* … *"It's about empowering people to feel like they own the space"*

> *"So I think what's happened is that the management wants to make it more profitable which means that some of these other things get left by the wayside which then makes it not as attractive to new people"* … *"I look at it from the point of view of what I think it should be doing or what people want to happen in the space. There maybe a whole different economic reason why that doesn't work at all"*

> *"I get angry because I don't see the thought behind it. No one tells me the reason why that should be like this and 'I don't want it like that'. Why?"*

> *"For me, that is counter-cultural to what this space should be doing. This should be common sense – if it's free, use it, but someone might be coming in and kick you out. It's permissive culture. That leads to creativity, etc, etc. Yeah, so I don't find it as enabling as it should be."*

What reflections or questions have I got (to potentially pursue further)?

- *How much of Alpha's management critique comes from the heart, despite all his thoughtful consideration? (he designed the space after all!) Is there something more basic in here about (frustratingly) watching people 'mess with your stuff'? The ArcCo/ShareCo context is quite a unique window.*

- *Spatial generosity for ArcCo or anyone else? Has it been solved/improved? Can it be solved?*

- *Where is ShareCo now, several months on? Has the management trajectory continued? Have positions ossified further? What has changed?*
- *Is designing in this 'socio-spatial' mindset way more beneficial, but also more at risk of getting compromised?*
- *When Alpha says 'capacity', what does he mean? Is it size, or is it intent? Or both? Is it more about capability? Capacity to be democratic, to promote permissiveness, to resist control?*

"So, through the design of space, by making it a certain size it gives it capacity to do something"

What visual research methods observations can I make?

Alpha was positive about the approach. It encouraged valuable reflection after a period of time.

At one point he mentioned an image that was missed (ShareCo from the building reception/lobby) – I was able to take this to retrospectively integrate into the study.

Here is nice example of conversational flow showing co-created narrative with this method:

Researcher: So, hang on a minute… so that is part of the Hub but the fact that it is transient storage, kind of…

Alpha: …negates people's use of it, yeah…

**…yeah, because people think it's a storeroom. So you haven't signposted that this is a quiet area…**

…no, but…

…it's just people find it and use it for that thing.

Yeah, and I think signposting everything dumbs everything down. I want people to actually find these spaces.

Discover?

And they do, like you see people have long conversations there but with all this stuff in there, it's not used as much as it should be.

And this, I guess in some ways, is kind of linked to the fact that the bridge is an ideal space for that sort of conversation…

…yeah…

…but because of the restrictions the landlord imposes, this is your solution.

Second best, yeah.

8.7   Case 1 exposition: PropCo (and D&BCo)

PropCo is a property consultancy located in Midtown, London, with seven offices nationwide. The name and 1920s origin are from a founding family background. With a 'UK top 20' reputation as experts in a range of services, they concentrate on their specialisms. Developing ongoing client relationships is paramount, with declared brand values to create, develop, protect, and enhance their client interests.

Previously based in a central London district, PropCo relocated to new office workspace in March 2014 as tenants in a multi-tenancy property, with a landlord relationship affording some informed influence, including for example increasing the shower and changing facilities (within the landlord's demise) for staff wishing to exercise during their commute to work. With 250 staff in the organisation, 125 are based from the London office. The choice of location was deliberate, seeking to balance the desire to convey a professional brand image to existing and potential clients (through location, building and workspace), enable easy access from all directions, and afford an appropriate level of social engagement potential in the local environs for clients and staff alike, all constrained by CRE affordability. A promotional image montage of PropCo's new workspace, as designed by D&BCo is shown below (figure 12). Staff broadly regarded their previous workspace as lacking significantly compared to their new location, despite a more 'lively' neighbourhood. Staff communication and consultation activities were part of the change management and relocation approach.

Whilst a range of workspace management protocols were already introduced, they weren't entirely successful or enforced. The move to Midtown was framed, as is often the case (e.g. Kingma, 2019), as an opportunity to catalyse new spatial practices and supporting staff behaviours. These included combined 'agile', hot-desking and a clear desk arrangement which assumes staff will vacate desks if they are not going to be in use for two hours. A small number of 'anchor' roles (after Greene and Myerson, 2011), including team PAs and specialist CAD workstations are the only fixed locations, with departmental staff aggregating around them in loosely defined team areas. Some staff move around within this setup, others tend to remain relatively static. Working more 'flexibly', including working from both home and client locations, is practiced by many staff according to role, need, desire and to some degree status. The board/executive participate in this arrangement – the only employee designated a permanent office is the HR specialist, not located in London. A locker and storage box system materially enables this approach, supported by appropriately flexible ICT services and electronic

file management. At the time of engagement, desk vacation does not have to be rigidly enforced but is broadly adhered to on a nightly basis. However, the Midtown workspace design had two density options. An increasing headcount later in 2015 will cause desk utilisation increases, so it is likely that protocol enforcement will indeed become necessary to ensure suitable workspace availability for all.
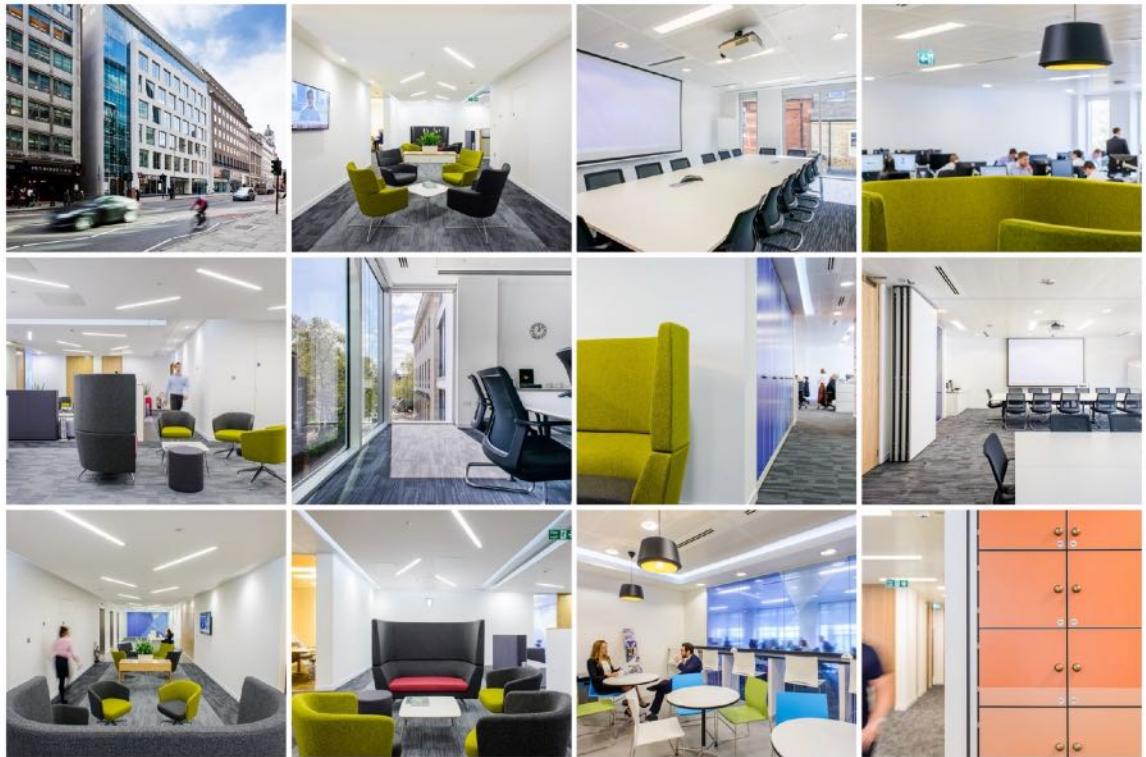
Figure 12: D&BCo interior and one PropCo exterior promotional images
©D&BCo and PropCo[25]

In 2012, before the workplace relocation, a rebranding exercise took place yielding a refreshed brand identity, but not a new organisational name. The founding family origin story was deemed an important cultural heritage signifier. A quality and facilities manager operates under the chief operating officer, performing office management functions, and the front of house client reception function is outsourced to a specialist service provider, coordinating reception, hospitality, and overseeing in-house/client engagement areas. PropCo's location is well served by the London transport system, shops and a wealth of refreshment and entertainment options, day and night. It is also

---

[25] To preserve confidentiality organisational names are omitted throughout, but respect of copyright remains.

very close to a large green area, a historically significant public square of about 40,000m^2 with refreshment, recreation and exercise options. Limited views of this green area are afforded from some office windows and appreciated by staff.

D&BCo were responsible for the internal design and fit-out of the workspace, in close consultation with PropCo and, less formally, other industry/professional associates. Like many design and build organisations, the PropCo workspace has the hallmarks of D&BCo's house style (influenced materially by furniture manufacturer choices) balanced against PropCo's visual brand embodied spatially (see figure 12).

In their own words[26], D&BCo are a design, furnishing and fit-out organisation that "provide their clients with tailored workplace solutions that are delivered though an aligned process of customer engagement (consultancy), creative development and exchange (design and communication), execution (construction and furnishing) and coaching new work styles and workplace relationships (behaviours and protocols)." Founded in the North West in 1995 with recent expansion in London to support a growing client portfolio, their 65 strong headcount have witnessed the UK's FM and workspace industry advance within a cyclical economic climate. The two founding partners lead the business and its culture, sharing senior management responsibilities according to their strengths.

For primarily business development purposes, D&BCo are keen to maintain a 'knowledge' presence in the industry, affording brand recognition and differentiation alongside business development opportunities. This has resulted in the development of a range of 'strategic partnerships' with a collective of organisations (including some clients, like PropCo) who might be considered industry 'thought leaders'. These contribute to periodic business development 'knowledge forums' through both hosting and participation.

Their ethos is one of quality iconic interiors (often using 'brand name' corporate furniture) rather than iconic buildings, which they embody in their own modest accommodation. With an espoused people focus, D&BCo aspire to balance staff and organisational needs. The result is, as seems fairly typical in the workspace design and management industry, tailored variations around an 'activity-based working' theme, conscientiously contextualised to organisational need. Interestingly, D&BCo have a specific modus operandi they seek to undertake to deliver their commissions, which,

---

[26] Personal communication, August 2015.

frustratingly for them, often becomes compromised. In their eyes, client constraints can be a significant inhibitor to achieving perceived best results. Many of the senior staff have been in the organisation and/or industry for considerable years, and have an acute awareness of workspace rhetoric, old and new.

Their role in this study (and reflexively, my relationship with them) requires clarification. D&BCo were the firm successful in winning recent PropCo workspace refurbishment commissions. The relationship initially commenced with PropCo's office in the north west. Subsequently, PropCo had recently hosted two D&BCo 'thought leadership' events in their new Midtown workspace. This was my first exposure to PropCo, firstly as a speaker, then as event chair. My presence at the event was because of a more enduring relationship I had with D&BCo. In 2009 had SHU sought to engage D&BCo, initially in a workspace sponsorship capacity. Protracted discussions exploring mutual gain led to the formal declaration of a 'framework partnership agreement' where, in exchange for a named, branded and sponsored Business School workspace and business engagement area (including design, internal fit-out, change management and marketing activities) the university would continue to collaborate with D&BCo around knowledge, research and mutual business development activities. Consequently, D&BCo were keen to support my research and endorsed my intent to approach PropCo.

Consequently, at the second event I took the opportunity to ask a PropCo Director if they would consider being part of my research, as an organisational case-setting. They were cautiously interested, reflecting, I think, an opportunity to learn independently about their workspace, their desire to be part of the industry knowledge development community (there is further evidence of this through other affiliations, allegiances and activities) and also the strength of their relationship with D&BCo. I outlined my study interests and research intentions to the Director and followed this up with an informative email request. Management team discussion ensued, resulting in me meeting another Director who became my 'gatekeeper' contact, and subsequently a participant in the study. A further management discussion confirmed access agreement, and my contact facilitated the initiation of internal communication and participant recruitment activities.

8.8 Case 1 participant information: PropCo (and D&BCo)

As previously explained (section 4.4), this appendix demonstrates participant voice and exploration of salient themes in a way that preserves the image-text relationship valuable to PLP (Vince and Warren, 2012). This contributes to the narrative whole of the case study approach (e.g. Creswell, 1998; Flyvbjerg, 2006) despite the wordcount limitations of the MProf portfolio.

There are **eight participants** in this case-setting, **three providers**: Papa, Romeo and Victor (the latter two from D&BCo), and **five users**: Bravo, Tango, Quebec, Lima and Delta.

8.8.1 Providers

Papa is PropCo's chief operating officer (COO), in his own words "responsible for spending the board's money". Property and FM falls within his remit, and the relocation of PropCo's London office to Midtown was a "big project". I found Papa professional, attentive, pragmatic and approachable, noting this was also my most senior research conversation, role-wise. He was equally adept and explaining his thematic points and responding to my questions. His patriarchal character reflects his seemingly always-organisational perspective of rational, cost-benefit decision-making with an eye on quality, value for money and client perception of the brand. He intrinsically understood the functional, symbolic and aesthetic roles of PropCo's workspace (e.g., Elsbach and Pratt, 2007) summarising internal workspace design and external and location choice decisions as significant in these respects. In his own words and images:
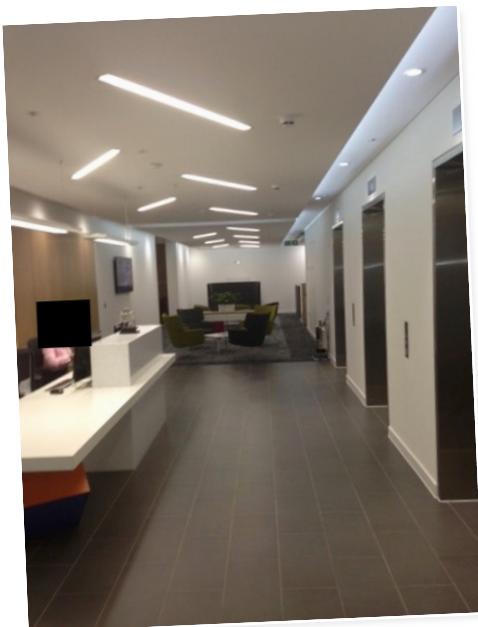
"I want anybody who comes in here not to think it's ostentatious but to have a good user experience" … "As a professional services firm, if you splash the cash and people think this is a bit over the top then they'll be saying 'why are you charging me so much?'" … "There are ways of doing things that are good and appealing" … "We wanted something that was enticing for our clients to come into" … "If they're in our space, they're thinking about us and we've more chance to talk to them" … "I have got nobody in this business who is ashamed to bring a client into this building. They're proud to bring their

client in here" … *"There's plenty of facilities to take clients to, there's plenty of facilities just to go out with your team and that's important"* … *"It's relatively central… it's not that difficult to get to"*
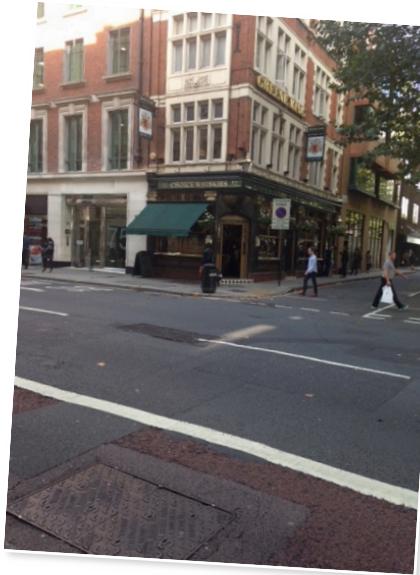
Victor is a mature senior interior designer at D&BCo and was one of the leads on the PropCo commission. Immediately sociable, chatty and anecdotal, he seemed open and thoughtful in the moment. Victor's approach to the research task was to 'become' my client: as D&BCo seek to design for client needs via their operational activities, he reflected on how he works personally, and the role of workspace as part of this. Given the emergent conversational intent, I didn't attempt steering him toward the PropCo commission per se. This afforded an account of work and workspace more broadly, and of a career grafter, negotiating the challenges of work well beyond office hours and location, with health and work/life balance impacts (likely influenced by recent stress-related health concerns):

"So before I get into work there's masses of phone calls, battles" … *"I go through the notepad straight away to remind myself, get in the car and start the phone calls. Then get into work, open the emails and start going through those"* … *"I try to get in early so that all the questions that start when people arrive and start their work, I've had at least half an hour, an hour, to get through the stuff that I need to do."*

"There's all sorts of things like stress that comes into workplace depending what jobs you're at" … *"is it age that's causing that issue, or is it the fact that the stress is compounding a little bit more these days than it used to?"* … *"health, sleep, just wellbeing generally … how*

can I control that?" … "Friday is exhaustion time. That's when you need your rest … I was frustrated at the fact that on Saturday I was getting up late" … "I suppose it's all linked: travel, time, production, information, things going out" … "Are you getting the best work or best job out of it if you are rushing the situation?"

Romeo is D&BCo's workplace consultant: a warm, personable and deliberate frontman responsible for client engagement, who often uses metaphor to convey workspace messages. He is also one of the D&BCo individuals I have known since 2009 (reflexively, it's important to know that we are professional friends). Consequently, our conversation had a different dynamic to many of the others, with a priori awareness of each other's views, sometimes cross-referencing implicitly. That said, much of Romeo's narrative was new to me. It seemed as if he felt comfortable (and/or able) for the first time to reflect frankly on our industry in a way he couldn't/wouldn't with clients; often critical and sage-like. The discussion was positive and challenging, as he articulated a typical day, rather than foreground the PropCo commission specifically, through a storyboarded montage which began and ended with work-life balance joys and pains:

"It was a way of actually lifting it beyond the ordinary, but as a way to explain the every day and ordinary… it's life exaggerated" … "So actually my day starts with a real sense of wonder… things that I would like to dedicate more time to. So a lot of these slides actually reflect time" … "You get so little time to do the things that matter. And by that I mean family, good work" … "that's why I suppose people try and immerse themselves in … their gadgets that bring their world to life when they're not close to things that matter" … "they're a way of actually giving us a sense of ourselves somewhere else aren't they?"
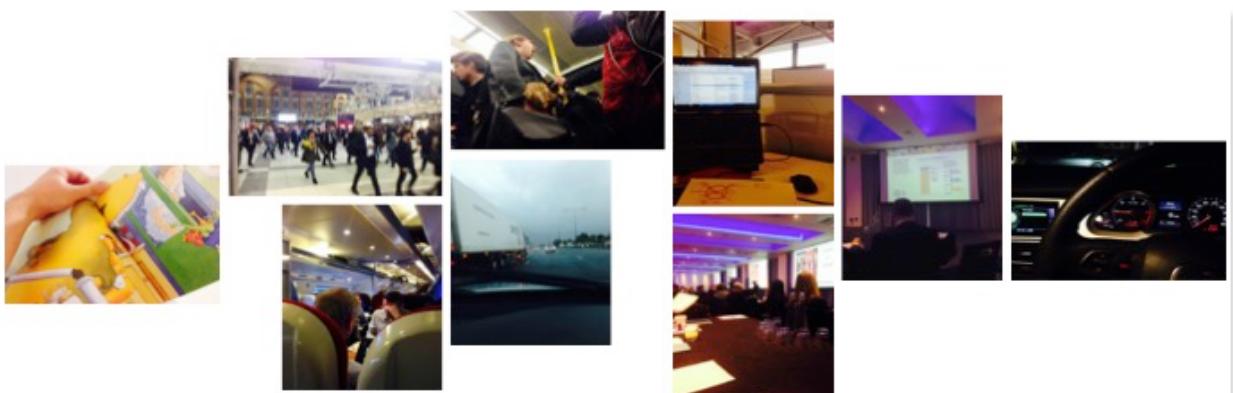
"I'm really happy working with good clients and good people" … "I love the solutions that we create, I love the difference we make when people are passionate about the new worlds that we have created for them" … "it's a hugely privileged position" [but] "if people surround [themselves] by the things that matter" … "and often those things that matter are related to home, family, friends, career, professional standings" … "I've never seen a picture of the office feature on that list" … "you know our profession is constantly trying to fight for the right, or role to own work" … "place cannot own work"…"if you build a church, it won't bring you an enlightenment" … "a bit like collaborative furniture cannot collaborate" … "as soon as everybody goes from here and you turn out the lights, it does absolutely nothing."

In a role which regularly advocates non-territorial and inevitably clutter-free workspace solutions, ensconced in rhetoric espousing how place *could* or *should* own 'work', Romeo's reflections on the placemaking role of material 'stuff' and the intrinsically social nature of space were – reflexively – a refreshing surprise to me.

8.8.2 Users

If Papa is PropCo's patriarch, **Bravo** is very much a matriarchal figure. An affable, animated business manager with marketing responsibilities and social responsibility endeavours at heart, Bravo choreographed PropCo's brand refresh, seeking to balance existing reputation and recognition with future aspirations. A PR-savvy, self-declared 'megalomaniac' with high expectations: "a great believer in being kind to the person, but hard on the facts", she seemed to shrewdly weigh me up before warming into the conversation rich with comedic anecdotes. Her role, organisational commitment and self-imposed work ethic present acknowledged personal compromises around presenteeism[27], and ways of engaging people are clearly important to her. Similar to Victor and Romeo, she sought to capture a typical day through her images, and the workspace discussion broadly covered two themes: PropCo's material identity and her own workspace practices and preferences as she wholeheartedly embraced agile working:

---

[27] There are actually three rarely delineated meanings of this word: (i) employees desiring be present at work, (ii) the perceived need to be seen to be present at work, and (iii) the management expectation that employees need to be present to work effectively (all either physically or virtually). For Bravo, her narrative reflects the first. Progressive organisation theory *and* workspace discourse typically advocate against the latter two.

"For me, it's about making sure that when we go into a workplace, we don't become drones. That we still retain our thinking, feeling sides as human beings, and we're connected to the external community" … *"Small gestures can make a big difference"* …

"One of our charities that we support nominated us for the provision of pro bono services, and we won an award" … *"I'm proud of that, because I come in and it puts a little skip in my step. I'm also very proud of [the PropCo logo] because when I joined PropCo their branding was different"*

"I have my little creature comforts. My PropCo mug is very important. I feel as if I own the space, I'm in business" … *"They keep me operational"* … *"Brand affinity. Identity… Reminding myself that I represent the business"* … *"It's not my personal mug. But most importantly… we wash and we reuse."*

"I can go from being surrounded by the wonderful melee and noisy atmosphere … come into one of these rooms where it's quiet" … *"sometimes I move around to wear the accountant sits. She very cleverly sits around here, and it's a room with a view"* … *"Daylight is so important, I think. That's where we're very lucky here"…"I'm not saying this is nirvana, but it is very easy to be able to work here."*
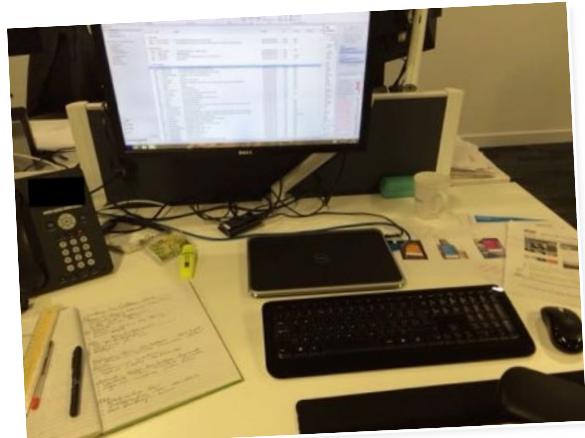
Whilst Bravo recognised her perpetual presence, **Tango**, one of PropCo's directors (also my primary organisational gatekeeper) seemed a consummate mobile tactician. Making workspace and location decisions according to both work and personal health and family requirements wherever possible, he recognised the work-setting variety of his original Building Surveyor career as an inherent factor. Tango was quiet, unassuming and contemplative, offering – like an industry watchman – enlightening perspectives on several enduring contemporary workspace issues as we talked, including the rhetoric

versus reality of hot-desking and 'third-space' working[28], the need to get beyond short-term 'agile' workspace' flexibility constraints, and to think more holistically about the time and place of work; for example the likely reticence of younger employees in big cities to working from home:

"I'm not one of those people where I'd say I'm more productive at home that I am in the office" [but] *"I like to try and balance where I work at during the week. My aim is to do one day a week at home and on those days I like to go out for a cycle … which helps me sort of get through the week in a reasonably sane way … be around the family earlier."*

"My experience is that open-plan space and hot-desking per se aren't necessarily a good thing for people and the way they work. What works is, if you can give them a choice … and give them a sense that they have got real choice and freedom to choose how … and where they want to work" … "It's a two-way contract isn't it, and I think you need to sort of think about how the staff are going to react … 'what can we do as a quid pro quo?' and to me it's about persuading people not to come in to the office at all that day … rather than, if you're going to be out of the office for two hours, having to spend time packing up" … "even the senior people on the board, you know, you hear them grumbling every now and then, they know they shouldn't because they know they're setting an example about how this works, but (whispering) they'll be 'oh god I've got to bloody pack up' … everyone feels it, some people won't admit it! (laughter)"

"Businesses, they pretty much ignore where people work at home or generally out of the office as a whole, we've got a real crunch here … we need to think about how we incentivise people to take the opportunities to work in other places" … "I think one of the big issues in London as well is the younger staff, 'cause housing costs are so

---

[28] The workspace industry typically uses 'third space' to denote alternative, transient and typically unowned work areas between home and office, coffee-shops being the contemporary exemplar. This is qualitatively different to Soja's original use of the term: "a distinctive way of looking at, interpreting and acting to change the spatiality of human life…; a starting place for new and different explorations" (Bondi (2005).

massive, will often be living in a room in a shared house these days, so that's a spare room for me, but if that was my bedroom, I wouldn't want to be working in there."

"If I said 'oh I'm up in Sheffield for something, I'm doing a survey' and if you said to me 'I'm not in but do come and use our [work]space' … I'd just go and get the coffee in Costa … there'd be no reason to do it versus the café … and it just feels comfortable."

Lima is one of PropCo's building consultants, formerly a design engineer, specialising in 'right to light' modelling[29]: digitally assessing the impact of new buildings on incumbent neighbours in terms of illumination. One of the handful of PropCo's 'anchors' (after Greene and Myerson, 2011) with a fixed CAD PC workstation, a role change enabling more agile working practices was imminent. Lima appeared professional and non-judgemental, despite a seeming keenness to discuss specific points. Whilst humorously admitting to being 'press-ganged' to participate at the outset, he seemed to sincerely engage with the process, offering considered perspectives and ruminating in the moment. He was clearly a thinker, with mutually maintained commitments: to his organisation and role, to being a father and individual, to seeking exercise and the outdoors:

"Natural light affects humans, the way it affects the way we are, the way we live" … *"I could never live in London because there is not enough access to sky"* … *"Where do you think?… mine has always been running… or just out on the bike... luckily where I live within two minutes I can be out in the middle of nowhere… and that is where I think things through more often than not"*

… *"I have to have that link into nature… if I didn't that's what I would see... It's not a lot of sky, and the interest comes from human activity."*

---

[29] One of PropCo's declared professional service specialisms (and new to me at the time of research): traditionally, rights to 'ancient lights' common law.

"We spend a lot of time either in the local woods, or we are fairly near the coast as well… wide open spaces of trees… luckily our children are the same" … *"I always need that link"* … *"That's my background on my screen which is a photo I took probably about six months ago while out walking with my family"* … *"It has all of those memories, but it is just a picture of the coppiced wood waiting to be loaded, but I know that that links to bluebells… I know it links to the dinosaur hunting…"*

"I think people [here] actually generally are bought into the idea of trying to create an environment where people feel that they can do, not what they want, but you know, they can feel comfortable at work" … *"All of our stuff goes into those things… and then goes into a locker, and we have this clear desk policy. But that would be my desk if I didn't have a box!"* … *"It is what it is, and it's one of those things that it's just part of office life… there was a character to people's desks when people weren't hot-desking… I think it symbolises the passing of a way which is this cluttered desk, I won't say it's for the good or for the bad, it's just different… partly we need that clutter, you know, [it] can tell a story."*

Quebec is a young mother and associate director. Readily forthcoming, her pragmatic commitment to getting work done while seemingly permanently on the go was tempered with an impish, mischievously confessional quality: gently subversive with clear opinions humorously expressed. Contextually, on the morning of our interview conversation it appears that management meeting updates had been cascaded, including the periodical re-affirmation of a 'no earphones in the office' protocol,

prompting exasperated expressions of their generational misunderstanding, which then compromise her ability to focus within the workspace:

"Planning never sleeps! (laughter)" … *"I clear all my emails usually from the night before on the journey, and I quite like doing it... the second I leave the house it's like: 'Ah, work!' (laughter)"* … *"So off I go, marching off… walking up the road, between the front door and the queue at the station, there's a definite transition; send a few texts, then I get to the station and then it's work"* … *"By the time I get to the station it's absolutely rammed… I always find [it] makes me smile when I get up on the platform and it's ten people deep, but everyone's in their lines"* … *"I'm totally unfazed by being completely squashed in… I don't mind just kind of jostling off people writing an email… I love being on the tube and everything."*

"We also hot desk – another management idea – so we're not allowed our own desks, so we have to clean up every night; I mean, admittedly, my desk does get pretty messy… oh and it's just ridiculous! It really annoys most of us, and we're all such creatures of habit… so none of us can understand the idea [of] hot-desking" … *"I also listen to music when I type, although management, the powers that be, decided… in a management meeting we're no longer allowed to do that, which is a bit of a pain"* … *"Not loud, low, so that if someone says: '[Quebec], something', then I could listen, but I find it cuts out the background noise"*… *"Management… they're quite old school, so I don't think they understand that a lot of us younger lot concentrate better with them in"* … *"I remember we've had that many times since I first started work here, and it gradually picks up again, and then we all get told to take them out."*

Delta, the final of PropCo's participants, is a young man who readily describes himself as "one of the proper old-fashioned building surveyors". Our fascinating, lively conversation was full of similar contradictions. Sharp-witted, opinionated and somewhat irreverent, he seemed equally a contrarian and traditionalist, never shy to explore issues, but keen to underline their insignificance in the grand scheme of things, equally respectful of his organisation and profession. His narrative was therefore somewhat contested, discursively jumping about using his images as steppingstones, which he had printed himself and doodled on accordingly:

"Workspace is just not the office at all… I don't do any of my genuine work here. In fact if anything I just do admin here… I guess I consider real work when I am solving problems or using my brain, and here I'm not, I am probably writing up what I have already thought" … "I understand why they do the open desk policy and stuff… it works very well, the office looks great… I don't think the workspace is designed for people who work here… it's a disconnect" … "I guess no one has thought about people actually using it every single bloody day… putting me in a box, inside a box… and then put that box in another box! (laughter)"

"It's a really good organisation, it's a really good space, it's just slightly missing the trick… and if anything that's just infuriating" ... "High end office spec just simply works, that's done, fair enough. But it's that tiny bit more that's not had the actually genuine thought and time, I don't mean branding… I mean actually tying it into the culture… one, tying it into who we are as a business, and two, into where we are in London."

"Look at everything within a five-minute radius of us. There are so many other places that you could go to effectively work… it's fantastic for clients and we use it massively, but internally I think people would speak a lot freer, and again people would feel less inhibited by their workspace. And I just don't think the whacking great rent that we pay is acknowledged, is fully utilised… a lot of people probably do a lot of good thinking, a lot of good work stuff outside the office… it's not just our organisation, it's like inherent… what's going on? Sort that out!"

Fascinatingly, when I encouraged Delta to venture solutions to his issues, he quickly retreated to status: *"I don't know, don't ask me that... because I am at the bottom of the pile… it's not normally me suggesting to other people, it's people suggesting to me… I guess we are still a traditional organisation aren't we? I mean it's fancy branding but it's still quite a stuffy old industry."*

8.9 Case 2 exposition: ShareCo (and ArcCo)

ShareCo is a coworking space and startup community organisation in central London, "a 12,000 square foot super studio for the new economy" in their own promotional words (ShareCo website, 2015). As introduced in section 3.6, coworking reflects a minority, but growing international movement in workspace design and provision. However, to focus on the workspace design element is only partially representative and risks decontextualisation. In the words of Melissa Marsh at IFMA's 2014 conference in Reading, "coworking describes a social and economic model; physical environments vary". That said, coworking, co-shared, collaborative or cooperative (Myerson, 2014) workspaces offer a radical departure to traditional knowledge worker organisational dynamics, in some ways a contemporary 'knowledge economy' manifestation of craft guilds of previous centuries (ibid.) where scarce, costly resources were pooled for mutual benefit. By eschewing both organisationally owned workspace, and the isolation risks of permanent homeworking, coworking community 'membership' emphasises the value of belonging to a collective over more traditional notions of and benefits from maintaining a single organisation dynamic. Coworking is also qualitatively different to flexible furnished office workspace solutions, of which Regus is perhaps the prime UK example, as the emphasis is upon shared community interest, with narrative generally leaning heavily towards the potential for mutual organisational gain. Long story short, rhetoric frames coworking as qualitatively more than flexible workspace.

Part of a global franchise network of some 80+ locations (at the time of research) ShareCo stands independently as a locally owned business and coworking community, yet embraces the rhetoric of the collective movement of the international brand. Membership emphasises fundamental shared ideals: social enterprise, community benefit, and aspiring to a sustainable future. The brand was founded in 2005, with a tripartite aspiration borne in the wake of new-millennium anti-globalisation sentiment: "serving a movement, building a business, and sustaining a network" (Bachmann, 2014:2). This is embedded in ShareCo's own rhetoric, as much as it has, and indeed continues to present, creative/organisational tensions. In the words of one cofounder of the parent brand, "Everyone has ideas for making the world a better place… But where does one go to make them happen? … We discovered a whole set of people trying to realise good ideas from their bedrooms – lonely, cut off from the world" (ibid.)

ShareCo currently has over 440 members (comprised of individuals and small businesses) utilising a range of different membership options, with (at the time) plans

for 'ShareCo number 2' geographically nearby under consideration. Like PropCo, it occupies a single floor in a multi-tenancy building, accessed via a landlord-managed ground floor reception. The building itself has a central atrium and core containing shared services including lifts, toilets and shower facilities. The transition to ShareCo's demise takes place *beyond* this central area. This is significant, as the imposition of certain landlord rules impacts ShareCo in a range of ways. Security requirements at the building reception create a more officious entrance sequence than might be expected, and seemingly perpetual ShareCo host[30] liaison with the central reception. Noise levels in the building core area needs to be kept to a minimum on all floors, forcing ShareCo's landing area to function only as a thoroughfare rather than a conversation or gathering place. Finally, listed building status requires particular visual requirements, including the permanent presence of grey semi-transparent vertical blinds to all externally facing windows. Similar to Prop-co, hot-desking and associated 'agile' enabling behaviours are an inherent part of ShareCo's multi-organisational member community dynamic.

ArcCo is the architectural practice that created, designed and launched ShareCo in 2011, before handing their 'founder' responsibilities over to an incumbent new management team a year later. ArcCo then remained at ShareCo as 'anchor tenant' members, with their own designated team area. ArcCo are a small architecture design, strategy and prototyping studio that has garnered recent recognition through a series of RIBA awards and other industry/professional accolades. The ShareCo project was a very different aspiration to workspace design per se. Becoming a franchised member of the global network requires business plan approval, that required ArcCo to approach the project holistically as an organisational endeavour, incorporating workspace design and management elements accordingly. The economic constraints of the project had a bearing on the design aesthetic, alongside preferred design practices including the use of customisable CNC-machined 'Opendesk' brand furniture and bespoke fittings – sometimes design prototypes ArcCo are experimenting with. A montage of ShareCo promotional images is below (figure 13). Some of these visual design features have now become synonymous with creative and coworking knowledge workspaces as they have been replicated by others over time (although a detailed exploration of formative design claims is beyond the scope of this study).

---

[30] 'Host' is the typical coworking term for a hybrid role of receptionist, office manager and social connector (etc), intended to be a key workspace *and* cultural enabler for the membership community. See Charlie information in appendix 8.10 below.
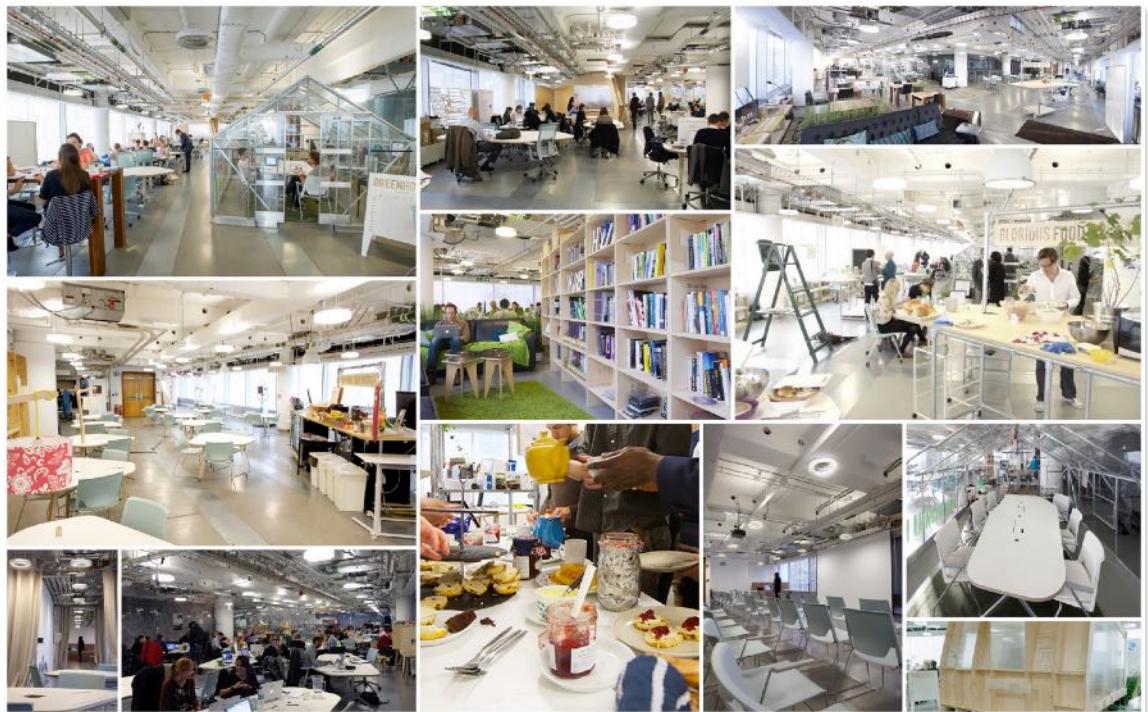
Figure 13: Montage of ShareCo interior promotional images

©ShareCo, ArcCo and associates[31]

This holistic approach to uniting the social and the spatial is evident in ArcCo's promotional language, which specifically references the originally urban design concept of 'placemaking'. At ShareCo this is embodied through both social and workspace design elements. Social elements include for example the host role and regular social events intended to bring the membership community together. Workspace elements include spaces suitable for intermingling and interaction and design features that materially embody and encourage community and honesty practices, often with a distinct lack of apparent ownership or explicit guidance. One might say this is the interactional intent of the now infamous, but still aspirational, workspace 'water-cooler moment' writ large. In the words of the ShareCo brand, "the main idea was to create a place where unlikely allies would meet by serendipity" (ibid.)

My route to ShareCo as a research case was fortuitous. A fledgling coworking initiative in Sheffield was collaborating with an interior design colleague of mine in a different

---

[31] To preserve confidentiality organisational names are omitted throughout, but respect of copyright remains.

university faculty. They had engaged with ArcCo through social media, resulting in one of my ArcCo participants (to be) co-delivering a guest design workshop for my colleague's undergraduate students mid 2014. Given my ambitions to explore two different organisational work-settings, and ideally a coworking environment (see section 3.6) this timely occurrence provided an ideal opportunity. A phone discussion with the other design workshop facilitator triggered interest but reticence, as none of their current projects felt appropriate to them for more independent research. However, the other workshop facilitator, a member of ArcCo, and also ShareCo's initial design and management team, was more conducive. Consequently, I visited ShareCo in July 2014 for the first time to learn more and seek access. Two gatekeeper meetings ensued; firstly with my facilitator contact and a colleague from ArcCo (both who became provider participants in the study) then a spontaneous, hurried encounter with one of ShareCo's management team. Access was surprisingly and refreshingly granted there and then. I was subsequently passed to further members of ShareCo's management team to work with them to engage and recruit potential participants via their preferred internal social media channels.

8.10 Case 2 participant information: ShareCo (and ArcCo)

As previously explained (section 4.4), this appendix demonstrates participant voice and exploration of salient themes in a way that preserves the image-text relationship valuable to PLP (Vince and Warren, 2014). This contributes to the narrative whole of the case study approach (e.g. Creswell, 1998; Flyvbjerg, 2006) despite the wordcount limitations of the MProf portfolio.

There are **nine participants** in this case-setting, **three providers**: Charlie, Alpha and Echo, the latter two from ArcCo, and **six users**: India, Foxtrot, Kilo, Yankee, Zulu and Sierra. However, given ShareCo is a coworking membership collective, there are actually seven separate organisations represented within these nine individuals, and three users also undertake part-time 'member host' roles, effectively switching from user to provider roles some of the time. Consequently the provider/user distinction I originally sought is reviewed in section 5.1.

8.10.1   Providers

Alpha is an award-winning young architect, co-founder and director of ArcCo. Unassuming, focused and considered, Alpha knows ShareCo implicitly – he was instrumental in its design and conception. During our conversation it sometimes felt like he was a few steps ahead, patiently waiting for me to catch up. His manner, ideas and ArcCo's approach refute often-heard industry rhetoric about architects disregarding the ongoing 'lived experience' of their material creations. Perhaps this is in part due to ArcCo's unique relationship with ShareCo, but lessons learnt from ShareCo have clearly been applied at future projects. Alpha exudes a seemingly implicit understanding of the socio-spatial link. However, it also seems clear that such a holistic approach affords potentially more complex systemic design challenges. ArcCo's approach, certainly for ShareCo and other projects discussed, involves designing for democratic permissiveness through coercive tactics, or more subtly put, 'behavioural nudges'. These range from the individual (for example seating choice, invitations to be nosey, and visibility of and to others); to the collective (creating excuses to interact, effortless/non-manageable space utilisation, and adoptable accidental spaces). Such adaptive permissiveness contradicts directive signposting and promotes ownership. The paradox of coercion *for* permissiveness is not lost on him, but where others might more typically conceive of control, for Alpha is to the contrary. He is literally and characteristically an architect, in both senses of the term.

"Management is amazingly important. If you get the wrong management you screw it up. You're not just designing physical space, you're trying to design a whole system" … *"You want the space to be self-regulating. You want people to clear up after themselves, because it's great for management, who don't have to pay for it"* … *"It's about empowering people to feel like they own the space."*

*"This should be common sense: if it's free, use it, but someone might be coming in and kick you out. It's permissive culture. That leads to creativity, etc."* … *"In the [current social project] we've just designed we tried to create spaces which, because we're not managing it, if the management are really mean there's no way they can ever get anyone to be charged for a use free space."*

"You've got to be permissive" … *"Finding this excuse for people to interact or excuse for people to snoop around"…"I think sign-posting everything dumbs everything down. I want people to actually find these spaces"*
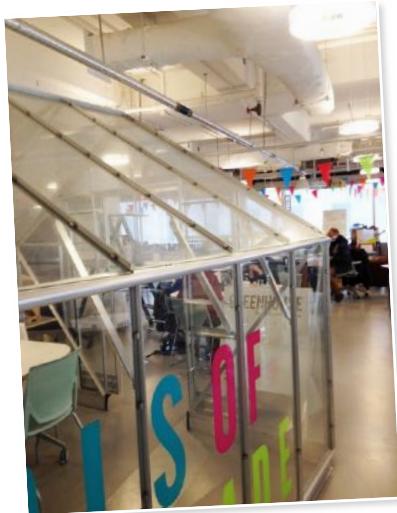
Echo is a member of the ArcCo team with a particular interest in civic and social engagement. She was also my key contact in gaining access to ShareCo; one of the aforementioned university workshop facilitators (appendix 8.9). Echo comes across as a quiet, thoughtful introvert, almost peaceful in the way she engages. Conversation with her is easy, informative and entertaining. Her thoughts and messages unfold gently and sometimes unpredictably as she continues to reflect. Social responsibility and community action, engagement, learning and exchange seem to lie at the heart of Echo's quietly active values – she comes across as a gentle activist. A range of spatial and social initiatives that exemplify this surround her. For example, Echo is part of the

team who run 'Trade School' from ShareCo, an 'open learning space that runs on barter', and is currently interested in exploring how ShareCo can make more of an impact within its local environs. This is not, however, in lieu of business acumen. Having other ArcCo projects present at ShareCo creates exposure and conversation, and Trade School (alongside for example Opendesk and WikiHouse) draws new people in to experience ShareCo. Like others I spoke with at ShareCo, Echo seems genuinely proud of being part of something different. At the heart of this is ShareCo as a community: bringing people together, creating relationships and network links, affording mutually beneficial outcomes. For Echo it seems to be important to be happy at work, and this seems to a large degree to be socially enabled. I was fascinated by the degree of tolerance Echo seemed to exhibit toward ArcCo's conceived permissiveness and the ensuing quotidian happenings at ShareCo, as she observed and learned for future application: reflexively it threw the often dominating operational necessities of my own past FM roles into stark contrast. Bringing community value, tolerance and experimentation together, Echo conveyed ShareCo as having a collective identity (a tribe?) with certain behavioural expectations.

"What makes that happy bit of it, and what makes a good place to work, and I think, well, studies know... if you enjoy where you work more you'll be more productive and happy."

"It wasn't made for us. Because there are elements that just evolve… I don't even know, but there's something about it. It's quite beautiful… I think that's part of maybe the nature of the space. But I also like the way it sits out on, faces out to the world, and I always wonder if people opposite can kind of see it slightly, and that's a little bit of us, of what the weird things might be going on in here."

"It's also quite interesting to see what evolves and what works, because all of it, equally for us, is also a test bed to see what happens" … *"But I feel like some of these things evolve because I think people feel a level of consciousness to each other, like they are thinking about it"* … *"The kind of rules and trust and behaviours of ShareCo"*

Charlie is an open, approachable young woman, originally from Spain. At the time of active research she was one of two full-time 'hosts' at ShareCo. Regarding the 'business, network and movement' brand rhetoric, she is enthusiastic about network and movement, and has worked at, visited, and is knowledgeable about other global franchise locations. Business-wise however, as a member of ShareCo's small management team and necessarily a 'go to' figure for any issues, perceived tensions with her role are evident. These stem from high levels of immediacy and demand, coupled with the more traditional 'front of house' elements of the role, creating what might be considered 'emotional labour'. Charlie's response to this is forthright and activist, a community challenge requiring a community solution. She is passionate about, in her words, the "humans of ShareCo" and casts herself as a 'tummler'[32]. For now, the host role is a means to an end, an access path to a more appropriate community-enabling role[33].

"These kind of like small things actually help more, like personal connections with the space rather than the space itself, because sometimes if you really like everyone around, even if it's a bit noisier or a bit messier you don't mind, because you're like, 'I want to go to the office tomorrow because that person will be there'. So that's what made me realise that actually the space is all about the people. We do need the basics to function, obviously, but I think the people make the space."

"So I'm trying now to bring a bit of art into the space as well – these kind of like random things that are not really, necessarily suitable for an office, right: why would you have a cow? But then for us it was relevant" … "So you know this kind of playfulness – it's actually what makes the space even cooler."

---

[32] Derived from the Yiddish word, a professional comedian or entertainer whose function is to encourage an audience to become more participative, for example at a family wedding.
[33] Comms into 2015 reveal she has changed role and seems much less contested (sort wording)

"But actually what I want to do is also to hack the hosting, because I don't think it's a good position and I think it frustrates everyone. I don't think people can stay in this function for a long time and I think it needs to be changed from the roots"

8.10.2   Users

India is a young human development[34] doctoral researcher, exploring the ShareCo model and how their globally franchised coworking workspaces enable organisations to benefit from collaboration. Originally from Peru, she is engaging, thoughtful, and inquisitive – actually becoming a participant fortuitously, by being nosey about my participant briefing session (an encouraged permissive ShareCo behaviour in action!) Her own research has involved working at different franchise locations (including the UK and Zambia) for both member organisations (she currently works for one of ShareCo's larger anchor tenants) and as a 'member host' whilst undertaking her participant-observational ethnographic study. Our conversation had an immediate academic knowledge-sharing quality to it, different to most others, exploring theoretical ideas together, and vocalising intellectual reflections. An example is India's view on social/material interconnectedness, citing Latour et al's Actor-Network Theory[35].

"The most important thing for me here, the thing that I value the most here is the people" … *"The people is a big part of it, but I'm also interested in the detail, there's different spaces where we have different dynamics and the space enables us to have that kind of dynamic"*
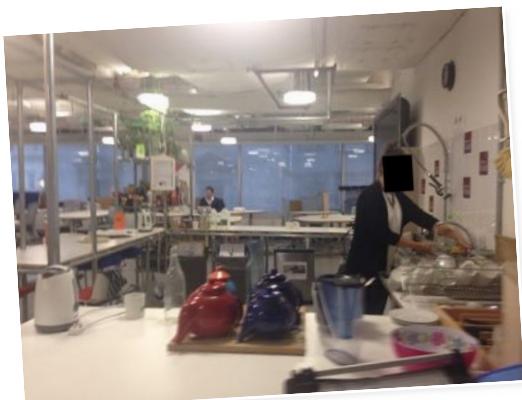
"I had the impression that there was this whole thing about entrepreneurs, and some of them lack in resources, resources as in finance, skills and all of that. And when they come here, they would share all of that, they will benefit from the space, from the people, talking to the people, getting more information" … *"So this whole thing of social*

---

[34] A wellbeing concept from within the field of international development, initially coined by 1998 Nobel laureate Amartya Sen. It concerns expanding choice in order to increase the chance of leading valuable lives. A (controversial?) United Nations inequality adjusted international Human Development Index exists for reference [UN source ref?]

[35] Where everything in the social and natural world exists in constantly shifting networks of relationships (https://en.wikipedia.org/wiki/Actor–network_theory, accessed 14 April 2021).

innovation, social entrepreneurs, I think it's quite [a] unique community" … "I know it is designed, they say themselves, 'for unlikely allies to connect by serendipity', and I think you're going to like that phrase because I love that phrase" … "What they were designing, the shape of the tables and the shape of everything, was designed for that, for people to have to find themselves in a situation where they have to collaborate" … "And I think it does happen. I'm trying to, as part of my research, I'm trying to see how the serendipity happens here"

"I'm definitely looking… and analysing the dynamics happening within this space from the lenses of a world that is not either material or social, but a world that is social material, a world that combines both and is shaped by both" … "Material, social, this kind of division, this kind of dichotomy that I think it doesn't exist."

Foxtrot is friendly, enthusiastic social enterprise entrepreneur, passionate about making a difference to the lives of others, having experienced significant hardship himself. This is exemplified by his current primary venture, an initiative aiming to facilitate disadvantaged people into employment using running (equally a personal passion) as a route to mentoring and skills development. Foxtrot is involved in a range of other freelance activities including producing films, event and project management. He is also a part-time 'member host', transgressing the user/provider boundary, which is undertaken at off-peak times (evenings and weekends) as part of ShareCo's operating model, in exchange discounted membership. Originally from Germany, passion and enthusiasm effuses from Foxtrot to the extent that it is hard to imagine a negative conversation with him. His narrative is one of change, positive challenge, improvement, exploration and opportunity, and of seeking to understand 'why?'. For Foxtrot, change is symbolic of people doing good things together. I found him to be a huge ShareCo advocate. While Romeo (from D&BCo, see appendix 8.8 above) might assert that no-one has a picture of their office on their home mantelpiece, I'm not so sure with Foxtrot!

"When you get out of the lift at nine o'clock you start your day with a quote, inspiration, and you work on your dream during the day and hopefully you'll realise your dream by the end of the day. It's quite something, isn't it?"
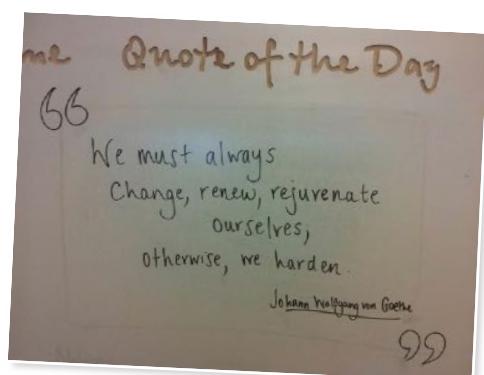
Quote of the Day
66
We must always
Change, renew, rejuvenate
ourselves,
otherwise, we harden.
Johann Wolfgang von Goethe
99

"And when you join a community you try to find likeminded people, people who are crazy, people who give up something in life, people who have the same problems, who have no money but still believe in [their] fucking idea! (laughter)… Sometimes you can share the same problems as well."

"I use running to come up with new ideas, to clear my mind, and then through the running with [Yankee] we came up with so many other ideas, so we worked while we were running, but I don't like it when somebody tells me you have to work from nine to five now to produce something. I'm so much more creative when I'm… don't put me in a cage!"

Kilo is quiet, unassuming, and originally from the Canary Isles. He is part of a small start-up video production company based at ShareCo. He describes himself as shy, and certainly displays a gentle humility, both which seem to belie a confidence and drive to engage and get involved at ShareCo. Originally an 'off-peak' member, becoming a 'member host' afforded wider community connectivity and awareness, including leading a recent Trade School session (a video-editing skills workshop). Consequently, he is something of a disciple, transformed by ShareCo engagement. When we spoke, Kilo had just returned from a part-working holiday in the Canaries, via mainland Spain, so the conversation was rich with memories alongside the challenges of deadlines and work encroaching into holidays. Kilo's photo of some drinking water taps discovered in a peaceful secluded square led to reflexively considering how spaces can be embodied with feeling. In this case, a space surrounded by city bustle, was a peaceful sanctuary that reflectively reminded Kilo of a calm he wasn't feeling himself:

"I didn't really disconnect at all in this holiday" … "Because you never disconnect really" … "Then I walked around the square in the middle of nowhere in the centre of old Barcelona, and [it] kind of felt so peaceful and chilled, and decided to take that picture to

remind me of the moment" … "I'd say it's more about not feeling, starting not to feel stress by that time."

"Well, you obviously have to be willing to get involved, I mean no one is going to force you to, it has to come from you. You know all this came actually when I started hosting here, before that I've always been quite shy, after that, after I started to [force] myself to be a host, I mean when you are hosting here you need to talk to people you need to and right after that I started to join in all these things. I don't know what else to say! (laughter)"
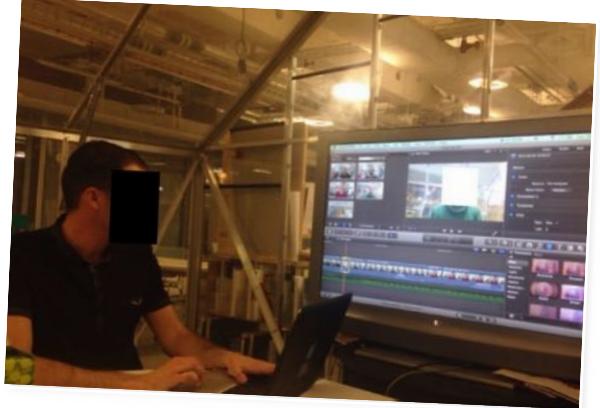
Yankee is a continuous improvement coach and founder of a consultancy specialising in 'Lean' and related organisational improvement methodologies. Originally from Hungary but currently based in London, her role involves substantial international travel, communication and engagement. She is friendly and forthright, keen to engage with the task in hand. When circumstances derailed our initial meeting plans, Yankee immediately offered solutions to resolve the situation. Our rescheduled research conversation was focused and informative, and her workspace points often seemed wedded to the progressive 'Management 3.0'[36] leadership and management methodology she endorses. With her passion for change and declared love of Goldratt's seminal 'Goal' book[37], she came across to me as a passionate organisational guru and consultant. She is also good friends with Foxtrot. They run together, combining fitness, getting outside and the opportunity to collaborate.

"It's very important for me to work in an environment where we can have and customise and create our own visual management dashboards, just to manage what the team is working on, to decorate our office, to have a shared vision, to set up our own time

---

[36] https://management30.com (accessed 14 April 2021)
[37] A management-oriented novel creating a story around Goldratt's 'theory of constraints', co-authored with Cox, first published in 1984 (https://en.wikipedia.org/wiki/The_Goal_(novel) accessed 14 April 2021)

management system, workload management system, KPIs, all that. Also, because I consult on these I encourage companies to do this because this builds better teamwork, better communication, collaboration"

"…which means building companies, workplaces where employees are more engaged, feel happier and can contribute building better products to delight customers" … "I felt that this explains what, for [ShareCo] and for myself, is important: learning, mastery of curiosity, mastering things but also learning new things" … "Interestingly, for example, purpose, so the goal, that is the glue for this community. [To improve] the world is very important for most people here."

Zulu is a young research consultant working, like India, for a ShareCo 'anchor tenant' – a small advisory business that helps organisations consider their social impact. They are one of the larger anchor tenant teams in the workspace, with designated communal desk and storage space. Zulu is an interesting individual: quick, intellectual, and serious, but with a humorous tone; German, but unnoticeable in her accent. Our conversation took place early evening, at the end of a long working day. At first it felt like I was bouncing every statement back at her, questioningly, seeking confirmation. We soon found a more conversational rhythm. Zulu's narrative regularly explored dichotomies, for example clutter/tidiness, or noise/silence, and impact at their inevitable boundary. Her response to the challenges of working within the ShareCo environment seems to be in large part through autonomous action; taking control to make things work for her. This approach created a self-reflective, almost contested undertone throughout the conversation. Issues were significant enough to raise, but then downplayed. It felt like Zulu has strong individual needs and views, but is mindful to temper these, aware of a bigger community context. Zulu was also the only participant to name her images.

"I'll just start with the main theme, I think, that I've just picked up in quite a few of these, which is aesthetics and chaos, which is something that just really stands out to me about any working place" … *"I love that people can write on the windows, I think that's brilliant, and I also think it's good that people can put up posters and things, it's just that it can get a lot"* … *"[whereas my picture is] just contained and it's meant to be, and not just accidental and all over the place and completely out of control"* … *"Like is this healthy for me, psychologically, working in a really busy space?"*

"I feel a bit bad for having been so negative, especially at the beginning about chaotic spaces" … *"Minor ones, but omnipresent. It's quite petty in a way and it's not really something that inhibits me from doing my work, it's just there, and I'd rather it weren't"* … *"Well it's just a bit of tension. It's just I have a very strong preference against it"* … *"No, it's a minor grievance. I'm being so negative! (laughter) I do like this space, genuinely. I'll get onto the positive ones next."*

"I took this as one of the last ones, as like that's a nice Rosetta Stone. It kind of closes everything, because it's still about the space bringing bright ideas, and which things are conducive towards that, and which things aren't, because ultimately that's what I feel my work should be."

At the time of research **Sierra**, the final of this case-setting's nine participants, worked for a ShareCo-based accelerator organisation providing both financial and developmental support to social innovation start-ups. Sierra came across as an individualistic, observant, thoughtful and humorous young man, able to passionately

engage with the task in hand. He conveyed confidence through both a reflective self-awareness of his own strengths and weaknesses, primarily his ability to autonomously manage the difference facets of his role, and also indicating he wasn't shy to be in the limelight, conversing, facilitating, and shaking things up.

Sierra's was the first data gathering research conversation of the study. Immediately easy-going and enjoyable, it endowed faith (and significant relief) in my chosen methods, location and participants:
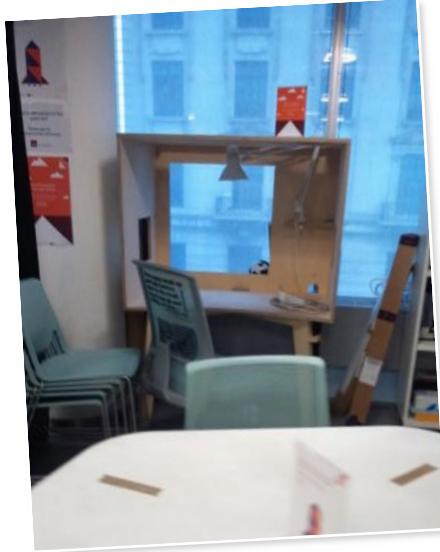
"There's a lot of effort that I try to go to, to make sure I manage my space and time to be productive" … "I don't know if it's just productive versus creative, but yeah, it just feels like when I need to be focussed, don't need any interruptions and I know what I'm doing, I just need to deliver it, I need somewhere a bit more tunnel-visiony."

"Work for me is what I'm producing. What is the end product, what is the actual result, service, what is the thing that you've created?"…"A real big thing for me generally is just to see how can I maintain focus when I need to maintain focus, because I think that allows me to have more play. So if I can be more effective at working then I can enjoy my free time a lot more."

"I like to react in the moment and also I'm quite particular and I like to do things myself. So if they can give me that freedom to be able to do that, that's fine and it just helps, I think"