## **Sharing Knowledge: Performing Co-Production as Collaborative Artistic Work**

#### **Abstract**

This article puts forward co-production as a lens for geographical approaches to collaborative knowledge production. Co-production extends understandings of collaboration as temporary, fragile and with multiple spatial forms. Through the example of creative writers' artistic knowledge, co-production is developed as a process of making together that involves intermittent spaces of sharing and cooperation between different actors beyond and across firm organisational boundaries. It is argued that the formal and informal mixing of these actors requires focusing on the micro-spaces of co-production that show how sharing knowledge occurs through forms of emotional work. Drawing on interviews with writers and participant observation of creative writing practices in Bristol, three spaces of co-production are outlined: the workshop, the project and the event. These highlight the geographies of emotions in such co-production, in particular the role of trust which is significant in, but also beyond, face-to-face encounters. The article concludes by pointing to the implications of the research.

**Keywords**: co-production; knowledge; sharing; economy; emotions

### Introduction

The prefix of 'co' is increasingly appearing as an addition to a variety of synonyms for 'making'. The labels of 'co-production' and 'co-design' crop up in organisational vocabularies to cover the cracks of previously integrated processes, from innovation to the provision of public services (Osborne and Strokosch, 2013; Pallet and Chilvers, 2015; Peters et al, 2012; Seybold, 2006). Equally, 'co-creativity' is used to describe digital variants on the entanglements of production and consumption, particularly the 'open' content-producing role of users of Web 2.0 (Banks and Deuze, 2009; Ettlinger, 2014). This article considers what these vocabularies of 'making together' can bring to geographical understandings of collaborative knowledge production. Within economic geography, 'clusters' and 'communities of practice' have been key imaginaries for understanding the complex role of proximities in knowledge production and innovation (Amin and Roberts, 2008; Bathelt et al, 2004; Malmberg and Power, 2005; Wenger, 1999). The fragile nature of these collaborations (Grabher, 2002a; 2002b) continues to be of interest, with increasing focus on temporary events (Bathelt and Schuldt, 2008; Müller and Stewart, 2014; Power and Jansson, 2009); 'projects' (Hansen, 2015; Watson, 2012), 'networks' (Bathelt and Turi, 2011; Grabher and

Ibert, 2014; Lowe et al, 2012; Müller, 2015) and 'intermediaries' (Jakob and Van Heur 2015). Through the example of creative writers' artistic knowledge, I contend that the vocabulary of co-production builds on and extends understandings of collaboration as temporary, fragile and with multiple spatial forms. Specifically, I put forward co-production to focus on the sharing and cooperation between different actors involved in spatial processes of making knowledge.

Such sharing and cooperation has long been understood as vital to knowledge production in artistic and cultural work (Becker 1982). This involves 'webs of socially-coordinated' practices that occur 'both in the workplace and out of the workplace' as a 'response to the insecurities' of cultural work (Scott 2010: 123). Thus, forms of knowledge production take place within a broader 'creative field' beyond the firm-as-workplace such that 'individuals are continuously if intermittently entangled in transactional exchange with one another' (ibid. 121). Co-production foregrounds these intermittent spaces of sharing (or 'transactional exchange') that occur within and beyond the organisational boundaries of the firm. In other words, co-production decentres the firm to put temporary, fragile and in-between spaces at the centre of collaborative knowledge making. The use of the prefix ('co') is indicative of the effort required for joint production between different actors in these spaces; the hard work of holding such differences in common to aid diffusion of 'deviant yet highly innovative ideas' (Cohendet et al, 2014: 931). I show how co-production involves temporary spatial and temporal coordination of writers, critics and funders, through which sharing and cooperation take place to create artistic knowledge. To examine these geographical processes of co-production, I suggest it is necessary to focus on the 'micro-space' (Ettlinger 2003) performances in which sharing occurs through the forms of emotional work (Watson and Ward 2013) demanded by 'formal and informal mixing' (Scott 2010: 123) across organisational boundaries.

This argument is illustrated through a discussion of three micro-spaces of co-production: the workshop, the project and the event. Drawing on interviews and participant observation, I outline how these spaces for producing creative writing are temporarily constructed through the shared practices of the different actors involved. I emphasise how such sharing involves forms of emotional work, particularly the necessity to build forms of trust between participants. Thus co-production involve practices of cooperation between writers, critics and funders, but also therefore includes forms of disagreement, as will noted (Carrincazeaux et al, 2008). The next section puts forward co-production as an imaginary that

extends existing economic geographies of knowledge creation. I then turn to the specifics of artistic knowledge before providing details on the Bristol context and methods. The three sites of co-production are then outlined. The conclusion points to some wider implications for economic geographies of knowledge production.

## **Situating co-production**

In this section, I outline the use of 'co-production' as a descriptor for forms of making together that take place across organisational boundaries. As such, co-production builds on and extends existing research in economic geography that stresses the collective yet often temporary and fragile nature of knowledge creation (Bathelt et al., 2004; Rallet and Torre, 1999). Such scholarship has highlighted the complexity of spatial relations producing and produced through collaboration that cannot be easily reduced to geographical proximity (Boschma, 2005; Grabher and Ibert, 2014; Müller and Stewart, 2014). Grabher (2002a; 2002b; 2004) has emphasised the risky and diffuse, yet simultaneously social and connected, nature of learning. Likewise, any straightforward link between clustering, colocation and the creation of knowledge through 'communities of practice' has been questioned (Amin and Roberts, 2008; Halbert, 2012; Malmberg and Power, 2005; Torre, 2008). Instead, proximity takes a variety of different forms beyond the 'geographical' (Hansen 2015), and co-location is often fluid and informal rather than fixed (Balthelt and Gibson, 2015; Cohendet et al, 2014; Cole and Tomas, 2014). Co-production further accentuates these fragilities by decentring the (organisational boundaries of the) firm as the location and/or vehicle for knowledge creation. By taking actors with different organisational locations as a starting point, co-production illustrates how the individual interests of these actors are at least partially maintained through the shared process of making knowledge.

Such forms of production that involve actors collaborating across organisational boundaries can be seen in a variety of different sectors; for example design, media and public services (Bovaird 2007; Banks and Deuze 2009). Co-production might therefore be understood as a process tied to wider changing organisational structures (Beyes and Steyaert, 2012; Pallett and Chilvers, 2015). Rather than rigidly hierarchical, organisations are increasingly understood to involve messy horizontal practices 'associated with both change and stability' (Pallett and Chilvers, 2015: 148) that are co-produced through the multiple actors involved in the connections between knowing and governing (Jasonoff, 2004). Thus, co-production can be read as both a symptom and a cause of such organisational form, highlighting the significance of user participation in the processes of making a prod-

uct. For example, co-producing as shared processes of making a product across organisational boundaries have been significant to user-centred or participatory approaches to design (Bodker, 1996; Seybold, 2006). This paradigm shift from 'product-centred design towards a service approach' (Meroni and Sangiorgi, 2011: 5) involves the collation of the ideas of individual users to enhance the experience of using a product (Sanders and Stappers, 2008). Similarly, with the production of digital media content, Web 2.0 is defined by how users 'increasingly participate in the process of making media as co-creators of content' (Banks and Deuze, 2009: 420).

Co-production as an increase in the quantity of actors involved in processes of making, particularly through user participation, is said to improve the quality of the product in ways that could not easily take place within existing 'in-house' development (Flowers 2008). This improvement occurs both in terms of the legitimacy and (therefore) the user experience of the product. Co-production is claimed to be a more equitable process of making through the 'democratisation' of innovations (von Hippel, 2006). For example, in relation to the codesign of public services, the suggestion is that collaboration results in a more participatory and thus legitimate product (Demos, 2008; Meijer, 2011). The collaborative production of public services enables providers to 'connect intimately with their users and customers' (Demos, 2008: 11) in ways that produce transformations in understanding, engagement and management (ledema et al, 2010; Sangiorgi, 2011). Similarly with digital media, cocreators benefit from and contribute to the 'openness' of production through the 'sharing' of both content and (therefore) labour (Reagle, 2010; Stalder, 2010). Therefore, through processes of co-production, the claim is that such 'customisation' will result in better overall user experience (Prahalad and Ramaswamy 2004). Co-production then, builds on existing economic geographies of collaborative knowledge production as temporary and fragile, further emphasising the benefits of making together across organisational boundaries. To illustrate the geographies of these decentred processes of production beyond the firm, it is necessary 'to look more closely at the behaviour and practices of economic agents' (Bathelt and Gibson, 2015: 986). To do this, I take the example of the co-production of artistic knowledge introduced below.

# **Artistic knowledge**

Similar to other forms of knowledge, artistic knowledge is a 'justified and interpreted idea (a vision of a new painting), object (a painting) or practice (painting), and exists in the tacit-explicit continuum' (Hautala, 2015: 352). Distinct from other forms, artistic knowledge re-

lies on a greater reflexivity, contingency and open-endedness (Bain, 2005). It can be highly context-specific, involving practices of interpretation that constitute knowledge as both experiential and symbolic (Ewenstein and Whyte, 2009; Sunley et al, 2008). As such it requires elements of knowing that are both 'craft/task based' and 'epistemic/creative' (Amin and Roberts, 2008). In relation to the former, artistic knowledge may have elements of codification but is often highly tacit, existing and passed on through embodied practices (Niedderer and Reilly, 2010). Such craft-based knowledge is built up through sustained engagements over time, through iterations of the same task, and involving face-to-face contact (Sennett, 2008; Banks, 2010). Regarding the latter, the context-specific nature of artistic knowledge requires a high degree of independence, meaning practices that juxtapose variety rather than any straightforward repetition of tasks (Amin and Roberts, 2008). Knowledge is constituted through creative practices that occur via exposure to difference and often the 'absence of complete information' (Sanders and Stappers, 2008: 15). Thus artistic knowledge production occurs in a dynamic between independence and cooperation.

On the one hand, artistic knowledge production often takes place through forms of isolation. Such separation sits in contrast to the prevailing interest of economic geographers in, according to Hautala (2015: 354), 'knowledge centres, proximities and connections'. The disconnections of artistic knowledge production might result from peripheral (urban or regional) location but also from the desire of artists themselves to work as 'hermits' (Grant et al. 2014), seeking independence that reproduces their image as 'alienated and tempestuous' (Bain, 2005: 28). Underpinning this is a suggestion that disconnection can add value to artistic knowledge, for example through facilitating more authentic, original or visionary practices (Hracs, 2015). Such disconnection is also temporal, with the 'dynamic, ephemeral and flexible' (Huggins, 2009: 343) important for the circulation and valuation of artistic knowledge. On the other hand though, forms of cooperation remain important. Partly this reflects how the separation of artists is rarely absolute, with even the seemingly solitary space of the studio entangled in a web of sociality that is suggestive of elements of shared as much as independent production (Sjöholm, 2014). Equally, as with other forms of knowledge creation, social interactions are vital for sharing know-how, building trust and 'communities of practice' (Ettlinger, 2003; Bathelt and Turi, 2011; Banks et al, 2000). For artists, such interactions are often characterised by contradictions and require sustained work (Blessi et al, 2011; Cole and Tomas, 2014; McLean, 2014), at least partly because of the independence of the individuals involved that yields 'collaborative practices that spill

over organisational boundaries' (Amin and Roberts, 2008: 361). This dynamic between the independence of the individual artist and their cooperation within a wider community of practice is captured in two influential spatial imaginaries for how artistic knowledge production occurs.

One is Becker's (1982: x) notion of 'art worlds' that denotes 'the network of people whose cooperative activity, organised via their joint knowledge of conventional means of doing things, produces the kind of arts works that art world is known for.' Through such a tautological definition, Becker's point is that artistic knowledge does not occur in a vacuum; it responds to and is produced through 'networks of cooperation and assistance' (*ibid.* p. xii) that 'may be ephemeral' (p. 1) but nonetheless produce 'patterns of collective activity' (*ibid.*). Similarly framing artistic knowledge production as including but extending beyond the individual artist is Scott's (1999; 2010) notion of the 'creative field'. This 'field' is both a container for 'cues and resources' that provide 'materials for imaginative appropriation by individuals and groups' and a 'canvas on which creative and innovative acts are variously inscribed' (Scott, 2010: 121). Thus, as with the art world, the creative field is an interactive space of both production and consumption. This occurs through 'transacting activity' that 'involves much interpersonal contact and communication [...], most notably intense face-toface interaction among workers in different firms' (p. 122). Scholarship on intermediaries has provided useful analysis of some of these 'routines of interaction between creative economy actors and local or regional government' (Jakob and van Heur 2015: 358; Rantisi, 2014). I put forward co-production to focus on the temporary 'microspaces' of 'bottom-up organisation' (Ettlinger, 2003: 146) through which individual interpersonal interaction occurs 'to diffuse attitudes [and] forms of emotional responsiveness' (Scott, 2010: 122) in the sharing of artistic knowledge. Thus, co-production builds on Watson and Ward's (2013: 2914) call for greater recognition of the 'importance of emotions' in creative work, particularly those involved in building trust (Banks et al, 2000; Ettlinger, 2003; Murphy 2006). The processes outlined below illustrate 'the complex nature of the contexts and spaces' (ibid. p. 2915) of co-production through such emotional work. Before illustrating these microspaces of co-production, I turn to methodology.

# **Researching Creative Writing**

Within the context of artistic knowledge production, I examine practices of creative writing. As Brace and Johns-Putra (2010) argue, the spatial practices of such artistic activity have been neglected by geographers (although see Madge, 2014; Rogers, 2010), at least in

part because writing is assumed to be a solitary practice. Challenging this, Brace and Johns-Putra demonstrate that whilst forms of isolation are important for individual 'inspiration', the geographies of creative writing just as significantly involve forms of shared experience. My research illustrates this through the examples of scriptwriting and performance poetry in Bristol. The local context is important because although Bristol has a vibrant creative scene, support for forms of artistic production has been threatened. There is a strong emphasis on cultural and creative activity by city managers, with Bristol City Council (BCC) stating that among Bristol's unique assets are its creativity, unorthodoxy and innovativeness. This is evidenced by the growth of 'creative industries' which make up more than 12% of all Bristol businesses (Invest in Bristol, 2013), together with the way the city is a 'desirable place for young talent to live and work' (Bristol Cultural Development Partnership, 2011: np). One reason for this has been the support of both commercial and subsidised activity to encourage a diverse ecosystem of creative knowledge production in which 'culture is economically significant but not only of financial value' (ibid.). However, recent reduced financial capacity of BCC means that its ability to support more marginal (and often therefore less commercial) artistic work in this ecosystem, such as creative writing, is decreasing. Rather than providing direct funding, BCC is looking to 'determine the environment in which creativity functions' (Bristol Cultural Development Partnership, 2011: np).

The research presented was conducted over a ten month period within this context of uncertainty for Bristol's creative economy. It analysed three co-productive writing practices in Bristol: Southwest Scriptwriters Group (SSG); two writer development programmes and spoken word open mic nights. 25 interviews were conducted with those involved in creative writing in Bristol. 13 were interviewed on the basis of their self-defined status as writers of either poetry, scripts or, in two cases, both. Of these writers, four were able to support themselves solely from creative writing. With the other nine, two were retired but had been practising writers for several decades, and seven were amateur and had been practising for under five years. The remaining 12 interviewees were constituted by six producers for local arts organisations, five who worked in arts management for local arts organisations and one who worked for BCC. Although not all long-term residents of Bristol, all interviewees had been involved in the Bristol writing scene for at least one year. Whilst there was movement by interviewees between activities, the primary activities of these interviewees was: 6 associated with co-producing scriptwriting through workshops; 5 with writer development programmes; and 14 with performance events. The population charac-

teristics of the sample: 12 were women and eight were under the age of 35 (the rest were aged between 35 and 60).

The questions asked focused firstly on establishing the role of the interviewee in coproducing creative writing in Bristol: for example if and how they participated in workshops, projects and performances, or enabled the distribution of funding/resources and so on. Secondly, questions examined interviewees' perspectives on how the production of creative writing takes place in Bristol to solicit understanding of interpersonal and emotional dimensions. Participant observation of spoken word nights and SSG workshops was also conducted. This involved regular attendance at weekly SSG workshops and spoken word nights over the ten month period. A number of times I contributed to the reading out loud of scripts at the workshops, and I would also speak informally to those participating in both sets of events. The participant observation was therefore essential to the research, helping to inform both the interview sample and the types of questions asked. Regarding the former, whilst those who held positions in organisations such as theatres and BCC were relatively easy to contact, those involved in the more temporary practices of performance poetry would have been difficult to recruit without attending spoken word open nights. With the latter, participant observation provided a sense of the emotional work constituting these temporary co-productive spaces and therefore informed the questions asked. I now outline the three spaces of co-production.

## The Workshop

The first spatial form of artistic knowledge co-production is the workshop. This is classically a site where people work together on a shared problem, as in task or craft-based communities of practice (Amin and Roberts, 2008; Sennett, 2008). With creative writing in Bristol, the workshop was where writers in SSG collectively identified problems and suggested solutions for individual scripts. This spatial modality of co-production involves the interactions between co-location - geographical proximity - and a shared task - cognitive proximity (Boschma, 2005). For SSG, this meant that the workshop was a space for sharing scripts between members. This included scripts written by members and by those outside the group, such as through listening to radio plays or reading published stage dramas. Taking place at the Watershed, a cinema and digital creativity centre on Bristol's old harbour, the workshop space was constituted by a large circle of seats to facilitate discussion. Typically 10-15 people attended, with about half being regulars. There was a variety of amateur and professional practitioners, writing for a mixture of radio, television and film. To air the

scripts, different members (generally the regulars) of the group were assigned characters at the beginning of the session. Such occasions were often the first public appearance of the script, moving the work from the relative isolation of the writer's 'studio' to the workshop. Thus, the workshop illustrated the importance of face-to-face interaction for the coproduction of artistic knowledge, despite the possibilities for feedback and criticism to be given 'virtually' and 'asynchronously' (Grabher and Ibert 2014). In part this was because workshops were an opportunity to air scripts in front of an 'audience' of workshop attendees, and thus mimicked practices of performance.

More significantly though, it was because face-to-face interaction enabled emotional work in the building of trust amongst members (Ettlinger 2003). The process of 'workshopping' the script necessarily involved the writer trusting others to unpick their individual work to enable a shared understanding of the problem. This was a deconstructive act that aimed also to be reconstructive. The guiding principle in this workshopping was that opening something up (or exposing its constituent parts), preferably to a large pool of (knowledgable) actors, meant that it could be put back together for the better (Raymond, 2001; Turner, 2008). From the comments made by writers during my participant observation of the workshops, it was clear that this was felt as a necessary risk for the writer that relied on the trust and understanding of others (Banks *et al*, 2000). Writers would ask each other to 'be kind' in their feedback, and also to 'excuse' unfinished elements. The workshop was thus generally perceived a 'safe' space for experiment, fostering 'feelings that facilitate the emergence of trusting sentiments' (Watson and Ward 2013: 2912). Nonetheless, such exposure of new writing was challenging for the artist as the SSG artistic director (AD), a semi-professional writer with a PhD in creative writing, noted:

"When you begin to write, if you've written something you think, 'great, I've written something.' You're very reluctant to do anything with it because that's kind of like undoing that work you've done. So a real beginner's trait is wanting to protect what she/he has written and not be open to rewriting at all."

In addition to this difficulty for the writer, opening up the script in the workshop was not a clear cut process for the other members. Whilst facilitating a shared approach, a reading of the script did not result in one single interpretation.

Instead, the process of engaging with the problem involved forms of alignment (Amin and Roberts, 2008). Different interpretations of the script had to be brought together to make sense, such that improvements could be made. This was because:

"the feedback we give isn't a neatly packaged statement of what you must give to your script in order to improve it. It's a kind of amorphous mass of conflicting opinions and then the writer needs to decide what is valuable and which parts they are going to choose to accept." (AD)

So sharing knowledge produced different interpretations of the problem that also brought different recommended 'solutions'. This was artistically and sometimes emotionally difficult for the writer, several of whom on occasion were very defensive of their work. As is indicated by the AD, there was a need for a sense of detachment by the artist from their work in order to benefit from the (future) reconstruction offered through shared knowledge in the feedback process. Put another way, the script was required to take on an independence from the writer (Rogers, 2010), such that it became an object or material in its own right, with the writer seeking emotional detachment. This iterative approach to the airing of scripts allowed 'for a more productive view of the concepts of failure, error and adjustment, where these are considered vital to the processes of making, rather than obstacles to be overcome' (Carr and Gibson, 2015: 7). Thus despite the emotional challenges of taking these shared criticisms, artists would bring back scripts to the workshop, after independently addressing the feedback to then seek further refinement.

However, although the process of engaging the problem of the script was collective, this was not without forms of hierarchy, returning to the significance of face-to-face interaction. According to Sennett (2008: 54), in the workshop 'inequalities of skill and experience become face-to-face issues' such that legitimate authority is established 'in the flesh'. From the participant observation, it was clear that those with more experience, particularly of writing professionally, secured greater forms of 'capacity trust', 'based on one's judgement about another's capacity for competent performance in a workplace' (Ettlinger 2003: 146), than fledging and amateur writers. These more experienced individuals were looked to for feedback, comments which often themselves served as a basis for discussion in the workshop. This importance of experience was articulated by the AD:

"It's whether you are able to articulate [your opinion]. Obviously with more experience you are able to tell more about whether it is likely to work in performance or on screen."

Thus, more experience (generally) meant more knowledge, and a greater ability to manipulate and 'codify' that knowledge in a useful way for approaching and solving the problem. However, he did also argue that these differences in experience did not translate into an obvious hierarchy. The AD claimed that everyone understands how stories work meaning that:

"Even the novice, even someone who's not been to a meeting before would be able to say whether your script worked or not. So I would say everybody has a valuable opinion." So sharing a script in the workshop was worthwhile in part because of the differences in knowledge between the members, and it was then down to individual trust and judgement of others as to if and how feedback was incorporated beyond the workshop. Thus, in the workshop as a space for the co-production of artistic knowledge, shared work is performed on individually owned scripts that requires and produces forms of trust built through face-to-face interaction.

### The Project

The second spatial form for the co-production of artistic knowledge is the project. This is a 'temporary organisational arena in which knowledge is combined from a variety of sources to accomplish a specific task' (Grabher, 2004: 104). Whilst temporary, projects are constituted by strong institutional ties and lasting networks 'that provide key resources of expertise, reputation and legitimation' (ibid.). Viewed through the lens of co-production, the temporary structure of the project is achieved through sharing knowledge across institutional boundaries that requires differently located forms of emotional work for the actors involved. That is, in contrast to the apparently spatially contained forms of sharing associated with the workshop, co-production through the project occurs over a variety of sites. This is illustrated through writing projects commissioned by two theatre institutions: the Ferment programme at Bristol Old Vic (BOV) and Script Space at the Tobacco Factory Theatre (TFT). Both were artist development programmes for growing new ideas, but they used different methods to selectively construct these projects. To begin the process of co-production, each programme had to source potential scripts. TFT focused on promotion and crowdsourcing to access scripts (Maskell, 2014), meaning that they received contributions from geographically distant locations:

"The reason we got so many last year was because it went up on the BBC Writer's Room website. So we actually had a couple of dozen plays from all over the world. We didn't want to marginalise local writing, but there is a lot around for local writing, and actually of course the quality went up." (Interview with SL, professional producer, formerly for Script Space)

Thus unlike in the workshop where face-to-face interaction was privileged, virtual collaboration was important for bringing different actors together in the project (Grabher and Ibert 2014). In reaching out to a wider pool, these 'virtual' forms of knowledge transfer over ge-

ographical distance increased the chances of accessing people with a similar cognitive base and expertise (Boschma 2005).

BOV though, utilised geographical proximity, as well as forms of 'virtual' promotion that engendered knowledge transfer over a distance. Thus this involved forms of face-to-face interaction to set up the project, what Boschma (2005: 66) terms social proximity that occurs 'at the micro-level' and involved 'relations between actors' based on 'friendship, kinship and experience'. Such face-to-face interactions were vital to securing forms of capacity trust (Ettlinger 2003). This is described by JD, a semi-professional writer and performer in his twenties who encountered a BOV producer at a performance of his own show:

"The producer was watching it and just gave me her email. Then I met her and then she said we're running this thing, do you have any ideas? And I pitched her this idea, then we just went forward with it, and I've been in with them ever since."

This ad-hoc process of establishing collaboration illustrates the role of informal mixing in the city in co-producing knowledge (Scott 2010), as much as direct solicitation through co-ordinated institutionalised proximities (Cohendet et al, 2014). Without this formation of capacity trust face-to-face, TFT's more institutionalised process of establishing a collaborative project brought with it a more formalised set of gatekeepers determining artistic ability. As SL articulates:

"We wanted to give everyone a chance. We had a first cull which was where I read all the scripts and got rid of ones that just weren't suitable. We had quite a wide remit but some people submitted musicals and bits of novels that just didn't fit."

The scripts that met this initial brief were then put forward to a panel that analysed them to compile a shortlist.

This process of selecting scripts indicated a different location for emotional work in the coproductive space of the project. Rather than through the interactions between artist and producer, selecting scripts involved capacity trust between members of a panel of professionals. However, although these individuals were experienced, SL indicates how selecting scripts could not be an entirely objective exercise; it was dependent as much on the collective feeling of potential that it could become a well executed piece:

"In terms of what we were looking for, it was good writing but really often just something different. We actually had some that weren't that well written but were great ideas." (SL) Thus even for this experienced producer, the sourcing of potential artistic knowledge for projects involved processes of qualitative and emotive judgement, often based on whether

a piece felt like a 'great idea' (Niedderer and Reilly 2010). Once the project was established, the aim was for all actors involved to improve the quality of the writing. Both TFT and BOV offered forms of support to artists to co-produce scripts, but maintained degrees of distance ensuring projects did not take on the potential blockages of institutional forms that can frustrate collaboration and limit learning (Cole and Tomas, 2014). Script Space offered more 'cognitive' support to artists than Ferment, working with writers to develop the script into a rehearsed reading and occasionally full production. The intention was to work together to improve the artist's skills, partly through expert comments on scripts but also via some form of audio-visual dimension. Such 'playback' was important because:

"Lots of people who write plays never get to hear them read out and that was something one of the winning writers said to us." (SL)

So, like the workshop, expertise and the building of forms of trust through shared performance were vital to knowledge production in the project (Watson and Ward 2013). In addition though, co-production through the project also involved less 'cognitive' forms of collaboration; more 'in-kind' support that often lacked strategic coordination.

Ferment predominantly provided this in-kind input, in part through access to rehearsal space but also financial support:

"When I initially wrote the show they gave me a very small bit of development money, about a week's worth [...] even though I spent about two months writing it. They gave me a split on the first gig and they brought me back in October to do a run of it and gave me a split with a guarantee in it. I didn't quite make anymore than my guarantee so I just got that." (JD)

As Amin and Roberts (2008) suggest, epistemic and creative communities involve individuals with high degrees of independence. Therefore providing financial backing was a means of recognising the necessity of this artistic autonomy in co-production, but nonetheless was *felt* as support by artists as JD articulates:

"I don't think you could underrate the fact that they just stepped in and said here's some money, do a show. I think most people don't need much more support than that. They just need money, time, a space and somebody who wants them to do it."

However, whilst this flexibility in co-production did generate artistic knowledge, it was also indicative of some of the insecurities of cultural work (Scott 2010). For BOV each project served as a form of 'instrumental purpose-orientation' (Nowotny, 2011: 19) culminating in a wider Ferment 'portfolio' that could demonstrate to funders that they were producing di-

verse new work. Yet for artists, project work could easily be experienced as exploitation as JD articulated:

"They're manipulating me! I do whatever they say, I would do anything for them. I mean have."

Thus, there is an ambivalence to the benefits of co-production through the project that is indicated by focusing on the (emotional) experiences of artists. Whilst co-production enables greater flexibility of work in order to improve the end product, the flexible structure of the project is differently felt by those involved (Watson, 2012). Therefore, in the project knowledge is shared across locations, requiring different forms of emotional work to co-produce through this flexibility.

### The Event

The third spatial form of artistic knowledge co-production is the event, in which individuals work on different things in the same 'temporary' place. Discussion of events (such as trade fairs and the Olympics) as vehicles for knowledge production and learning has tended to focus on temporary geographical proximity (Power and Malmberg, 2008; Müller and Stewart, 2014). The focus here is on how events are part of wider ongoing organisational ecologies (Grabher, 2004), how they 'endure' through forms of emotional experience and interpersonal interaction. This is because the ephemeral nature of these events is part of wider 'patterns of collective activity' constitutive of the 'art world' (Becker 1982: 1). The event examined here is the spoken word open mic night in Bristol. These were spaces where individuals performed poetry to an audience and involved 'the sharing of an emotional experience with other people involved in the performance' (Watson and Ward 2013: 2909). In Bristol, there were roughly eight different poetry open mic nights operating either monthly or fortnightly. Run as 'informal gatherings of individuals' that involved 'highly explorative local practices' (Cohendet et al, 2014: 929), the performance poetry scene was transient and 'underground'. It was given some stability through the intermediary (Jakob and van Heur, 2015) of Poetry Can, a not-for-profit group raising awareness of poetry, that connected these informal spaces with 'formal organisations and institutions of the upperground' (Cohendet et al 2014: 930) such as BOV's spoken word programme. The opportunity for enduring learning at these events was shaped by the act of performance that enabled artists to 'arrive at an interpretation of what they are doing and what they have done while in the process of doing it' (Cohen et al in Balhelt and Gibson, 2015: 990).

Thus performance in the event involved knowledge creation through 'doing' that was necessarily a shared emotional experience. By definition performance requires both performer and audience, and this inherent co-production was enhanced through the 'fluid participation' (Bathelt and Gibson, *ibid.*) of open mic nights that meant artists moved between these roles. As audience members, artists learnt skills from fellow performers as JB, a young amateur poet who started writing as a result of going to an event, describes:

"These three came along [to a night] and they were right at the heart of the American scene and seasoned pros. It was kind of the best, the cream of the crop, so it was a real privilege to see people that good at their craft [...]. They were incredibly engaging, fantastic poets."

Watching performances was therefore a source of emotional engagement and inspiration, enabling poets to position themselves in relation to others, to learn artistic skills which in turn could be honed through performance. Like the airing of scripts in the workshop, the opportunity to perform was a route to immediate (and emotionally charged) feedback and therefore learning beyond the event, as is positively articulated by LG, a semi-professional poet with about 4 years experience:

"It's easy to work in a vacuum when you're writing and there's no end goal in mind. You might write for a year and realise that you don't have an audience for it. It becomes so disconnected from potential readers. So [performance] is a really good exercise for me and it definitely leaks into the other things that I write, just that exercise of seeing people's reactions in real time is great. If something fails completely you'll know it immediately and you can think about that and take something from it. Sometimes something will really work in performance and you didn't realise that it would, so it works both ways."

However, participant observation indicated that the visceral immediacy of audience feed-back was not always a positive experience, particularly when performers received little or no applause. Thus in providing an immediate indication of the success of a piece, performance was an emotional 'decision situation' in which 'issues and feelings [...] might be aired' (Cohen *et al* in Bathelt and Gibson, 2015: 991).

The apparently temporary nature of the event also offered opportunities for enduring coproduction through 'the serendipitous encounter with like-minded [artists]' (Saval, 2014: 305). Whilst most open mic nights organised the time and space of performance, the degree to which such arrangement held was variable. The more structured nights had a relatively strict running order, as well as a clear spatial separation between the stage and audience. Other nights operated more anarchically through a 'general lack of consensus regarding individual and organisational goals' (Bathelt and Gibson, 2015: 990), as LG describes:

"It's very unorganised and booze-fuelled normally so I guess some people are more drawn to that and some people would really rather there would be more of a format. They would probably stay clear of [our night] just because it is such a comical affair, just the way its run, like not consciously at all."

This 'erratic involvement' and 'indeterminacy of knowledge and methods required to realise organisational objectives' (Bathelt and Gibson, *ibid.*), indicates the role of localised informality in processes generating the 'radical ideas' of artistic knowledge (Cohendet et al, 2014). Such 'organised anarchy' of co-production opened possibilities for further collaboration beyond the event, as JT, a professional poet from the USA who was drawn to Bristol because of its poetry scene, states:

"So things like V and J's new night is because they've met from other nights and they've said 'why don't we do our own night?' It's kind of self-perpetuating in that respect because poets meet and say let's do our own night, and they go off and do that and then other poets will meet at that."

Thus, the absence of definite goals in the event enabled the slack required for further selforganisation and thus enduring production of knowledge (Bathelt and Gibson, 2015; Cohendet et al, 2014).

However, poets were aware that the sort of 'emotive trust' that is 'based on one's personal feelings about others' (Ettlinger 2003: 146) could be problematic for co-production in the event by limiting participation. Although all aiming to be inclusive, nights were recognised to be part of a localised scene:

"It can be really good for the Bristol scene to not become so insular, to think that we've got our own little pecking order happening here and there's no room for adjustments. Some people will drop out and other people will rise, we kind of don't want that ecosystem to be exclusive of all the rest of the country or the world even." (LG)

This problem of insularity was echoed by JD who suggested there was a tendency for the event to be shaped by a small group of like-minded people:

"Often when I've done gigs [...] its just been like, JD and friends have a show, go there now."

Such mobilisation of existing contacts was a result of the balance between emotive trust and capacity trust, where the latter was often predicated on the former: belief in another's capacity for competent performance in work is at least partially based on one's personal feelings about another, which may form in a relationship that develops outside a workplace (Ettlinger, 2003: 146). Such significance of emotive trust did not necessarily omit inclusion of those beyond social networks, but these individuals had to build capacity trust over a longer period of time or were recommended through existing trusted individuals. Thus the shared emotional experience of performance resulted in co-production of knowledge both in and beyond the event.

#### Conclusion

This article has put forward co-production to nuance understandings of collaborative knowledge creation in economic geography. Building on collaboration as temporary and involving a variety of spatial forms (Amin and Roberts 2008), co-production has been outlined as a frame for understanding intermittent spaces of sharing knowledge that occur beyond the organisational boundaries of the firm. I have argued that the temporary spatial and temporal coordination of actors in co-production necessitates focusing on the microspace performances in which sharing takes place through forms of emotional work. To illustrate this, the production of artistic knowledge amongst different actors involved in creative writing in Bristol has been examined. Three spatial forms of co-production were put forward: the workshop, the project and the event. These three forms are illustrative (but not exhaustive) of the way co-production involves emotional work to enable sharing knowledge between different actors. The geographies of emotions in these spaces are complex, occurring through the face-to-face processes of co-production which build both emotive and capacity trust (Ettlinger 2003), as well as through the judgements required to ensure quality when sharing occurs at a distance. I finish with two contributions of this research with respect to advancing existing literature on geographical processes of knowledge production.

The first contribution is in co-production as a way to understand how knowledge production takes place when actors involved have differing interests. Co-production highlights how knowledge creation occurs through spatially and temporally diffuse organisational forms without the 'centre' of the firm. Greater understanding of such processes of co-production is necessary as processes of making are increasingly 'open', both collaborative yet distributed with uncertain implications for the actors involved (Ettlinger 2014). Although economic geography has illustrated the instability of collaborative knowledge processes, in relation to the role of technologies in production in particular, we might see a 'stark contrast between a rich set of technological concepts and a meagre pair of sociological con-

cepts' in communities and networks (Postill, 2012: 178). Co-production therefore provides an additional imaginary that foregrounds difference for economic geographers to understand the temporary, diffuse and fragile nature of collaborative knowledge processes.

The second contribution lies in emphasising micro-spaces of collaboration to understand co-production. These micro-spaces show the significant role of emotions in processes of sharing knowledge (Watson and Ward 2013). The spaces outlined above were constituted by forms of trust between different actors, but also variously forms of apprehension, exhilaration and so on that illustrate the role of passions and emotions in knowledge production. Focusing on such emotions complicates any clear division between face-to-face or collaboration at a distance (such as 'virtually'). As is illustrated by the space of the event, the emotional experience shared in performance endures beyond the face-to-face collaboration. Echoing Watson and Ward (2013), this indicates the necessity to attend to the affective and emotional that constitute 'virtual infrastructures' (Bissell, 2014) in knowledge co-production; the forms of enduring proximity and habitual trust across potential distances and instabilities of making together.

### References

Amin A, Cohendet P, 2004, *Architectures of Knowledge: Firms, Capabilities, and Communities.* (Oxford: OUP)

Amin A, Roberts J, 2008, "Knowing in Action: Beyond Communities of Practice." *Research Policy* 37 (2): 353–69

Bain A, 2005, "Constructing an Artistic Identity." Work, Employment & Society 19 (1): 25–46

Bathelt H, Gibson R, 2015, "Learning in 'Organized Anarchies': The Nature of Technological Search Processes at Trade Fairs." *Regional Studies* 49 (6): 985–1002

Bathelt H, Malmberg A, Maskell P, 2004, "Clusters and Knowledge: Local Buzz, Global Pipelines and the Process of Knowledge Creation." *Progress in Human Geography* 28 (1): 31–56

Bathelt H, Schuldt N 2008, "Between Luminaires and Meat Grinders: International Trade Fairs as Temporary Clusters." *Regional Studies* 42 (6): 853–68

Bathelt H, Turi, P 2011, "Local, Global and Virtual Buzz: The Importance of Face-to-Face Contact in Economic Interaction and Possibilities to Go beyond." *Geoforum* 42 (5): 520–29

Banks M, 2010, "Craft Labour and Creative Industries." *International Journal of Cultural Policy* 16 (3): 305–21

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

Banks J, Deuze M, 2009, "Co-Creative Labour." *International Journal of Cultural Studies* 12 (5): 419–31.

Becker H, 1982, Art Worlds, Berkley, University of California Press.

Beyes T, Steyaert C, 2012, "Spacing Organization: Non-Representational Theory and Performing Organizational Space." *Organization* 19 (1): 45–61

Bissell D, 2014," Virtual infrastructures of habit: the changing intensities of habit through gracefulness, restlessness and clumsiness". *cultural geographies*.

Blessi G, Sacco P, Pilati T, 2011, "Independent Artist-Run Centres: An Empirical Analysis of the Montreal Non-Profit Visual Arts Field." *Cultural Trends* 20 (2): 141–66

Bodker S, 1996, "Creating Conditions for Participation: Conflicts and Resources in Systems Development." *Human–Computer Interaction* 11 (3): 215–36

Boschma R, 2005, "Proximity and Innovation: A Critical Assessment." *Regional Studies* 39 (1): 61–74

Bovaird T, 2007. "Beyond Engagement and Participation: User and Community Coproduction of Public Services." *Public Administration Review* 67 (5): 846–60

Brace C, Johns-Putra A, 2010, "Recovering Inspiration in the Spaces of Creative Writing: Recovering Inspiration in the Spaces of Creative Writing." *Transactions of the Institute of British Geographers* 35 (3): 399–413

Bristol Cultural Development Partnership, 2011, "Bristol's cultural ambition – a new vision for the city". [online] Available at:

<a href="http://www.ideasfestival.co.uk/2011/ideas/%E2%80%9Cbristols-cultural-ambition-a-new-vision-for-the-city%E2%80%9D/">http://www.ideasfestival.co.uk/2011/ideas/%E2%80%9Cbristols-cultural-ambition-a-new-vision-for-the-city%E2%80%9D/</a> [Accessed 14 January 2013].

Carr C, Gibson C, 2015, "Geographies of Making: Rethinking Materials and Skills for Volatile Futures." *Progress in Human Geography* [online first]

Carrincazeaux C, Lung, Y, Vicente J, 2008, "The Scientific Trajectory of the French School of Proximity: Interaction- and Institution-Based Approaches to Regional Innovation Systems." *European Planning Studies* 16 (5): 617–28

Cohendet P, Grandadam D, Simon L, Capdevila I, 2014, "Epistemic Communities, Localization and the Dynamics of Knowledge Creation." *Journal of Economic Geography* 14 (5): 929–54

Cole A, Barbera-Tomas D, 2014, "Negotiating Conventions and Creating Community: The Case of Cartoon and European Animation." *Journal of Economic Geography* 14 (5): 973–93

DEMOS 2008. "Making the Most of Collaboration: An International Survey of Public Service Co-Design." *Demos Report* 23. London: Demos/PwC Public Sector Research Centre.

Ettlinger N, 2003, "Cultural Economic Geography and a Relational and Microspace Approach to Trusts, Rationalities, Networks, and Change in Collaborative Workplaces." *Journal of Economic Geography* 3: 145–71

Ettlinger N, 2014, "The Openness Paradigm." New Left Review 89: 89-100

Ewenstein B, Whyte J, 2009, "Knowledge Practices in Design: The Role of Visual Representations as 'Epistemic Objects'." *Organization Studies* 30 (1): 7–30

Flowers S, 2008, "Harnessing the Hackers: The Emergence and Exploitation of Outlaw Innovation." *Research Policy* 37 (2): 177–93

Grabher G, 2002a, "Fragile Sector, Robust Practice: Project Ecologies in New Media." *Environment and Planning A* 34 (11): 1911–26

Grabher G, 2002b, "Cool Projects, Boring Institutions: Temporary Collaboration in Social Context." *Regional Studies* 36 (3): 205–14

Grabher G, 2004, "Learning in Projects, Remembering in Networks?: Communality, Sociality, and Connectivity in Project Ecologies." *European Urban and Regional Studies* 11 (2): 103–23

Grabher G, Ibert O, 2014, "Distance as Asset? Knowledge Collaboration in Hybrid Virtual Communities." *Journal of Economic Geography* 14 (1): 97–123

Grant J, Hagget J, Morton J, 2014, "Those Hermit Artists: Musical Talent on the Edge of the Continent." In *Seeking Talent for Creative Cities: The Social Dynamics of Economic Innovation*, Ed Grant J (Toronto: University of Toronto Press) pp 119-37

Halbert L, 2012, "Collaborative and Collective: Reflexive Co-Ordination and the Dynamics of Open Innovation in the Digital Industry Clusters of the Paris Region." *Urban Studies* 49 (11): 2357–76

Hansen, T, 2015, "Substitution or Overlap? The Relations between Geographical and Non-Spatial Proximity Dimensions in Collaborative Innovation Projects." *Regional Studies* 49 (10): 1672–84

Hautala J, 2015, "Interaction in the Artistic Knowledge Creation Process: The Case of Artists in Finnish Lapland." *Geoforum* [online first]

Hracs B J, 2015, "Cultural Intermediaries in the Digital Age: The Case of Independent Musicians and Managers in Toronto." *Regional Studies* 49 (3): 461–75.

Huggins R, 2009, "Forms of Network Resource: Knowledge Access and the Role of Inter-Firm Networks." *International Journal of Management Reviews*, August, 335–52

ledema R, Merrick E, Piper D, Britton K, Gray J, Verma R, Manning N, 2010, "Codesigning as a Discursive Practice in Emergency Health Services" *The Journal of Applied Behavioral Science* 46 (1): 73–91

Invest in Bristol, 2013, "Creative media and industries." [online] Available at: <a href="http://www.investinbristol.com/key-sectors-creative-media-industries.php">http://www.investinbristol.com/key-sectors-creative-media-industries.php</a> [Accessed 14 January 2013]

Jakob D, van Heur B, 2015 Editorial: Taking Matters into Third Hands: Intermediaries and the Organization of the Creative Economy. *Regional Studies*, 49, 357–361.

Jasanoff S, 2004, *States of Knowledge: The Co-Production of Science and Social Order* (London: Routledge).

Lowe, M, Williams A, Shaw G, Cudworth K, 2012, "Self-Organizing Innovation Networks, Mobile Knowledge Carriers and Diasporas: Insights from a Pioneering Boutique Hotel Chain." *Journal of Economic Geography* 12 (5): 1113–38

Madge C, 2014, "On the Creative (re)turn to Geography: Poetry, Politics and Passion." *Area* 46 (2): 178–85

Malmberg A, Power D, 2005, "(How) Do (Firms In) Clusters Create Knowledge?" *Industry* & *Innovation* 12 (4): 409–31

Maskell P, 2014, "Accessing Remote Knowledge: the Roles of Trade Fairs, Pipelines, Crowdsourcing and Listening Posts." *Journal of Economic Geography* 14 (5): 883–902

McLean H, 2014, "Cracks in the Creative City: The Contradictions of Community Arts Practice in Toronto." *International Journal of Urban and Regional Research* 38 (6): 2156–73

Meijer, A, 2011, "Networked Coproduction of Public Services in Virtual Communities: From a Government-Centric to a Community Approach to Public Service Support." *Public Administration Review* 71 (4): 598–607

Meroni A, Sangiorgi D, 2011, *Design for Services. Design for Social Responsibility* (Burlington: Gower)

Müller M, Stewart A, 2014, "Does Temporary Geographical Proximity Predict Learning? Knowledge Dynamics in the Olympic Games." *Regional Studies*, June, 1–14

Murphy J, 2006, Building Trust in Economic Space. *Progress in Human Geography*, 30, 427–450.

Niedderer K, Reilly L, 2010, "Research Practice in Art and Design: Experimental Knowledge and Organised Inquiry." *Journal of Research Practice* 6 (2)

Nowotny S, 2011, "Immanent effects: notes of cre-activity" in *Critique of creativity: precarity, subjectivity and resistance in the 'creative industries'* Eds Raunig G, Ray G, Wuggenig U (London: Mayfly books) pp. 9-21

Osborne S, Strokosch K, 2013, "It Takes Two to Tango? Understanding the Co-Production of Public Services by Integrating the Services Management and Public Administration Perspectives" *British Journal of Management* 24: 31–47

Pallett H, Chilvers J, 2015, "Organizations in the Making: Learning and Intervening at the Science-Policy Interface." *Progress in Human Geography* 39 (2): 146–66

Peters, C, Bodkin C, Fitzgerald S, 2012, "Toward an Understanding of Meaning Creation via the Collective Co-Production Process" *Journal of Consumer Behaviour* 11 (2): 124–35

Postill J, 2012, "Digital politics and political engagement" in *Digital Anthropology* Eds Horst H, Miller D (London: Berg) pp. 165–184

Power D, Jansson J, 2009, "Cyclical Clusters in Global Circuits: Overlapping Spaces in Furniture Trade Fairs" *Economic Geography* 84 (4): 423–48

Prahalad C, Ramaswamy V, 2004, *The Future of Competition: Co-Creating Unique Value with Customers (*Boston: Harvard Business School)

Rallet A, Torre A, 1999, Is geographical proximity necessary in the innovation networks in the era of global economy? *Geojournal* 49, 373–380.

Rantisi N M, 2014, "Exploring the role of industry intermediaries in the construction of "Local Pipelines": The case of the Montreal Fur Garment Cluster and the rise of Fur-Fashion connections." *Journal of Economic Geography* 14, 955–971.

Raymond E, 2001, The cathedral and the bazaar: musings on Linux and Open Source by an

accidental revolutionary (Cambridge, Mass: O'Reilly)

Reagle J, 2010, *Good Faith Collaboration: The Culture of Wikipedia* (Cambridge, Mass: MIT Press)

Rogers A, 2010, "Geographies of Performing Scripted Language." *Cultural Geographies* 17 (1): 53–75

Sanders E, Stappers P, 2008, "Co-Creation and the New Landscapes of Design." CoDesign 4 (1): 5–18

Sangiorgi D, 2011, "Transformative Services and Transformative Design." *International Journal of Design* 5 (2): n.p.

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

Scott A J, 1999, The cultural economy: geography and the creative field. *Media, Culture* & *Society*, 21, 807–817.

Scott A J, 2010, Cultural economy and the creative field of the city. *Geografiska Annaler:* Series B, Human Geography, 92, 115–130.

Seybold P, 2006, *Outside Innovation: How Your Customers Will Co-Design Your Company's Future* (Collins: New York)

Sennett R, 2008, *The Craftsman*, (London: Penguin Books)

Sjöholm J, 2014, "The Art Studio as Archive: Tracing the Geography of Artistic Potentiality, Progress and Production." *Cultural Geographies* 21 (3): 505–14

Stalder F, 2010, "Digital Commons." In *The Human Economy*, Eds Hart K, Laville J, Cattani A (Cambridge: Polity) 313–24

Sunley P, Pinch S, Reimer S Macmillen J, 2008, "Innovation in a Creative Production System: The Case of Design." *Journal of Economic Geography* 8 (5): 675–98

Torre, A, 2008, "On the Role Played by Temporary Geographical Proximity in Knowledge Transmission." *Regional Studies* 42 (6): 869–89

Turner F, 2008, From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and the Rise of Digital Utopianism (Chicago: University of Chicago Press)

Von Hippel E, 2006, *Democratizing Innovation*, (Cambridge, Mass.: MIT Press)

Watson, A, 2012, "Sociological Perspectives on the Economic Geography of Projects: The Case of Project-Based Working in the Creative Industries" *Geography Compass* 6 (10): 617–31

Watson A, Ward J, 2013, Creating the right vibe: emotional labour and musical performance in the recording studio. *Environment and Planning A*, 45, 2904–2918.

Wenger E, 1999, *Communities of Practice: Learning, Meaning, and Identity* (Cambridge: CUP)