

**‘Boundary-crossing careers and the ‘third space of hybridity’:
Career actors as knowledge brokers between creative arts and
academia’**

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Boundary-crossing careers and the ‘third space of hybridity’: Career actors as knowledge brokers between creative arts and academia

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Abstract

This article examines how boundary-crossing careers influence creative knowledge combination by looking at a group of creative artists whose careers straddle professional arts and academia. Whereas previous research has treated individuals as vehicles for knowledge transmission across intertwined networks, this study emphasizes their active role as knowledge brokers. It examines how work role transitions trigger a dynamic interplay between actors and contexts, and brings about changes in the cognitive frames of individuals and their propensity to connect knowledge across contexts. The study employs Bhabha’s (1994) concept of the ‘third space of hybridity’ to denote the agency space where career actors construct hybrid role identities and engage in knowledge brokering. The analysis identifies two categories of hybrid with different boundary-crossing careers and shows how work role transitions influence the topology of the third space where knowledge brokering occurs. The ‘artist-academics’ whose careers span art and academia concurrently experience recurrent micro role transitions. They are ‘organic’ hybrids operating at the ‘overlapping space’ where knowledge translation and integration occur naturally in everyday work. They are ‘embedded’ knowledge brokers. The ‘artists-in-academia’, who cross over from the art world to academia, experience more permanent macro-role transitions. They are ‘intentional hybrids’ who make conscious efforts to bridge two discrete work domains by creating a separate ‘transitional space’. Their knowledge brokering activities are instrumental in transforming both their own knowledge and that of their work context: they are transformative knowledge brokers. The study advances our understanding of career mobility as a mechanism that facilitates creative knowledge combination by highlighting actor agency and the underlying cognitive-behavioural mechanisms.

Keywords

Boundary-crossing careers, creative artists, hybridity, knowledge brokering, third space

Introduction

Career mobility across organizational and social space has been widely seen as a key mechanism that facilitates creative knowledge combination (Saxenian, 1996; Cattani and Ferriani, 2008). Extant research has focused on social networks forged through career moves as conduits through which knowledge flows from one domain to another (Kleinbaum, 2012; Almeida and Kogut, 1999; Raider and Burt, 1996). Much of the literature has tended to treat career mobility primarily as physical movement of people between contexts, and views individuals as vehicles for the transmission of knowledge across intertwined networks. This study argues that the network knowledge flow perspective does not capture fully the micro-dynamics of creative knowledge combination associated with the movement of people. It neglects the social psychological aspect of mobility and the agency of career actors in breaking down barriers between knowledge domains to achieve creative outcomes. Mobility involves not only movement in physical space but also the capacity to move across socio-cognitive space. Geographers use the concept of ‘motility’ to denote the capacity of actors to be mobile in geographical as well as social space (Kaufmann et al., 2004; Kesselring, 2006). Career theorists recognize the importance of psychological mobility accompanying physical mobility (Sullivan and Arthur, 2006). Knowledge is necessarily situated and does not flow easily across domain boundaries because of differences in perspectives and lack of common understandings and interests (Bechky, 2003; Carlile, 2004). Creative knowledge combination involves integrating divergent perspectives and knowledge that originates from previously separated domains to achieve novelty (Amabile, 1983; Koestler, 1964). It requires the active engagement of actors in overcoming interpretive barriers and reconciling differences in knowledge practices between domains.

This study contributes to our understanding of how career mobility influences creative knowledge combination by highlighting the active role of career actors in knowledge brokering as they move from one work domain to another. It treats career mobility as a boundary crossing process involving work role transitions. It examines how movement in space and time triggers a dynamic interplay between actors and contexts, and brings about changes in the cognitive frames of individuals and their propensity to connect knowledge across spatio-temporal contexts. Work role transition involves the social psychological process of adapting to change in work role requirements or contexts (Nicholson, 1984; Ibarra, 1999). It is not a unidirectional move from one work role to another but involves learning, adaptation and reorientation at the intersection of two previously separated work domains. The unsettled psychological state during the transition can cause a great deal of tension, conflict and ambivalence (Ibarra and Barbulescu, 2010). However, it is also a time of heightened reflectiveness and gives career actors ample opportunity and freedom for reorientation and experimentation by mixing and blending resources from the two previously separated domains. Work role transitions, especially among professional knowledge workers, commonly involve a hybridization process of role-taking and role-making whereby individuals seek to maintain a sense of self-continuity while adapting to new role demands (Ibarra, 1999; Pratt et al., 2006). Knowledge provides a critical resource for adaptation because it is part of individuals’ cognitive interpretive structures and a key dimension for professional group membership identification (Barley, 1989; Gao and Riley, 2009).

Individuals may acquire the perspectives and knowledge associated with the new roles and contexts, and they may also draw on the cognitive frames and knowledge resources acquired from previous work roles in adapting to the new contexts (Ibarra and Barbulescu, 2010; Beyer and Hannah, 2002). As a result, knowledge originated from one domain can be reinterpreted and rearticulated from the viewpoint of another, and prior knowledge can be reconstituted for use in new contexts.

This study argues that career mobility across professional role boundaries can nurture hybrids as knowledge brokers who engage actively in knowledge translation and transformation across domain boundaries. It employs Homi Bhabha's (1994) concept of the 'third space of hybridity' to denote the agency space where career actors construct hybrid role identities and undertake knowledge brokering. The spatial metaphor of 'third space' was first introduced by Bhabha to describe the phenomenon that occurs when different cultural systems come into contact. For Bhabha, hybridity is the 'third space' where actors translate difference and negotiate affinity between cultural discourses for dynamic exchange and inclusion. It is a site of articulation, contestation and transformation between two cultural systems. The concept has been used in a variety of contexts to refer to sites and processes of hybridization that lead to creative combination of ideas and resources that originate from different domains (Moje et al., 2004). It highlights the agentic and creative potential of actors situated at the intersection of social domains, and the newness that emerge from dialogical encounters between heterogeneous social groups. In contrast to the structural network perspective, which treats career actors as conduits for knowledge flows, the third space perspective adopted in this study emphasizes a generative process underpinned by the active engagement of career actors. The study looks at a group of creative artists whose careers and work experiences straddle professional arts and academia. They represent a growing category of mobile creative knowledge workers who work across occupational boundaries and acquire resources from multiple domains to support their careers and knowledge creation activities (Loacker and Śliwa, 2016). The study examines how these individuals negotiate and reconcile differences between artistic and academic modes of knowledge creation in work role transitions, and the third spaces that emerge to connect the two knowledge domains. The empirical evidence is based on interviews with 32 individuals from three London-based research universities.

The analysis identifies two categories of hybrid with different boundary-crossing careers and shows how work role transitions influence hybridization and the topology of the third space where knowledge brokering occurs. The first are the 'artist-academics' whose careers span arts and academia concurrently and experience recurrent micro-role transitions. They are 'organic hybrids' operating at the 'overlapping' space of the two domains where they internalize the cognitive-relational distance between them. Knowledge brokering constitutes an integral part of their routine knowledge creation and dissemination activities: they are 'embedded' knowledge brokers. The second category are the 'artists-in-academia' who cross over from the world of professional arts to academia and experience more radical, macro role transitions. They are 'intentional hybrids' who make conscious efforts to bridge two discrete work domains by creating a separate 'transitional space'. They internalize as well challenge

the knowledge practices of the host context. Their knowledge brokering activities are instrumental in transforming both themselves and their work context: they are ‘transformative’ knowledge brokers. What emerges from the analysis are two distinct types of third spaces with different generative potential.

The study makes a distinctive contribution by broadening the conceptualization of career mobility to examine its social psychological aspect in work role transitions and highlight the agency role of career actors in constructing third spaces of hybridity wherein knowledge brokering occurs. Career mobility is a boundary-crossing process that creates intersecting spaces between social domains. The ‘third space’ perspective enriches our understanding of such intersecting spaces as sites and resources for creative knowledge combination. The rest of the article is structured as follows. The next section presents the analytical framework, followed by the research methods and data. The article then examines the work role transition experience of the two categories of hybrids, and the different ways in which they broker knowledge in their respective types of third space: ‘overlapping’ and ‘transitional’. The article concludes by discussing the theoretical and practical implications.

The conceptual framework

Career mobility and creative knowledge combination: Missing actor agency

Research on career mobility as a mechanism that facilitates creative knowledge combination has largely been dominated by a structural network perspective and focuses on the formation of social networks that enable knowledge to flow from one domain to another. Some authors, notably in Economic Geography, use the concept of ‘unintended knowledge spillovers’ to explain how knowledge travels alongside the mobility of people (Almeida and Kogut, 1999; Song et al., 2003). However, the concept of knowledge spillovers is ambiguous and how knowledge is actually transferred between individuals and firms remains a black box. Others emphasize the blurring of boundaries between firms resulting from employee mobility and the formation of dense professional networks that serve as conduits for the diffusion of tacit knowledge (Saxenian, 1996; Godart et al., 2013). Implicit in this strand of work is the assumption that knowledge combination is a product of interlinked social networks. In other words, it is not the individuals who combine and generate knowledge but the networks flowing through them. Individuals are regarded as ‘passive vessels through which information and knowledge flow unimpeded and unchanged’ (Phelps et al., 2012: 1148). Scholars who examine the influence of career mobility on individual-level creativity also draw heavily on the structural network tradition by showing how boundary-spanning ties accumulated through careers give individuals access to diverse, non-redundant knowledge and thus enhancing their potential for creative idea generation (Perry-Smith, 2006; Sosa, 2011). However, access to diverse knowledge is only a first step to creative knowledge combination. It does not necessarily guarantee that individuals are able and willing to exploit the creativity potential of their positional advantage (Dokko et al., 2014). Theories of creativity highlight the combination of opposites and previously unrelated knowledge as a vital process in the generation of new knowledge (Amabile, 1983; Koestler, 1964). What is

conspicuously missing in much of the literature is the role of career actors in undertaking the complex task of integrating knowledge across domain boundaries to achieve creative results. Moreover, the process through which this occurs and why career actors are motivated to do so remain obscure.

Knowledge is a situated accomplishment and embedded in social practice (Bechky, 2003; Orlikowski, 2002). For knowledge originating from different social domains to be integrated and combined for new use, actors must overcome what Carlile (2004) describes as three progressively complex knowledge boundaries: syntactic (language), semantic (interpretation) and pragmatic (political). Syntactic boundaries refer to knowledge differences created by divergence in symbols, labels and languages. Here the problem of knowledge transfer and combination amounts to being able to match difference across boundaries by using a common syntax or ways of representing knowledge to each other. Semantic boundaries refer to differences in accepted interpretations and meanings amongst actors. At semantic boundaries, knowledge cannot simply be transferred but needs to be translated through perspective-taking so that actors are able to recognize and accommodate differences in interpretations. The creation of shared space for dialogical encounters is necessary for crossing semantic boundaries (Tsoukas, 2009). Pragmatic or political boundaries refer to the differences in interests and assumptions about what constitutes valuable and legitimate knowledge in particular contexts. Knowledge is invested in practice and so is 'at stake' for those actors who have developed it (Carlile, 2002). Knowledge that is developed in one domain may have negative consequences in another. Overcoming pragmatic knowledge boundaries requires actors to transform their own knowledge and reconcile differences in knowledge practices between domains.

The network knowledge flow perspective treats these knowledge boundaries as unproblematic and overlooks the agency role of career actors in overcoming them. In contrast, the analytical framework developed in this study highlights their active role in knowledge brokering. The concept of knowledge brokering refers to the processes and activities whereby individuals use their in-between vantage position to translate, transform and combine knowledge across domain boundaries (Currie and White, 2012; Hargadon, 2002). It is a critical aspect of the creative process in which individuals integrate divergent resources and perspectives to generate something new (Lingo and O'Mahony, 2010)). This study examines how work role transitions in career boundary-crossing influence the cognitive-behavioural orientations of career actors to engage in knowledge brokering. The notion of the 'third space' denotes the zone of movement between established work domains. There career actors break out of domain specific constraints and negotiate knowledge boundaries, exploiting its liberatory potential for creative knowledge combination. In other words, it is the agency space where hybridization and knowledge brokering occurs.

The three facets of careers: work, identity and knowledge

The study conceptualizes careers in terms of their three inter-related facets: work, identity and knowledge. A career can be thought of as a sequence of work roles that an individual experiences over time. While work experiences constitute the primary mechanism through which careers occur, the content and quality of a career reside in the knowledge and perspectives that are acquired or changed as a result of work experiences. Viewing careers as repositories of knowledge, Bird (1994) directs our attention to the effects of career moves and job changes on an individual's opportunity to create and use knowledge in different ways across contexts. Nonaka and Takeuchi's (1995) theory of knowledge creation also stresses the critical role of work experiences across contexts in facilitating knowledge creation.

Work also provides an important context for identity formation and self-expression. Career theorists argue that career growth is related to the degree of congruence between one's career work roles and self-identity (Hall, 1971). The concept of role identity highlights the close linkage between the socially defined elements that underlie a role and an individual's own idiosyncratic interpretation of that role (Stryker, 1980). While roles are social positions that carry with them expectations for behaviour, they are given fuller meaning when individualized by the occupant (Ibarra, 1999). The relationship between role and identity can be considered a duality where role is external to the individual and identity represents the associated internalized expectation that has become part of the self-concept (Barley, 1989).

Knowledge is central to identity because it is part of the cognitive structure of the self and is a key dimension used for group membership identification. Identification induces individuals to acquire the knowledge, interpretive schemas and social codes of the group. In occupational socialization, the acquisition of specific perspectives and vocabularies is pivotal for identity formation and legitimating one's position in the occupational group (Barley, 1989). People construct their professional identities by adopting the appropriate role behaviours, partaking in the community's language games (Boland and Tenkasi, 1995; Astley and Zammuto, 1992) and representing their knowledge in particular ways (Boland et al., 2001). The types of knowledge valued and modes of knowledge creation and articulation are intimately bound up with one's professional identity. Work, identity and knowledge therefore are intimately linked.

Boundary-crossing careers: work role transitions and the 'third space of hybridity'

The term 'boundary-crossing careers' denotes careers and work experiences straddling professional/occupational role boundaries that involve relatively radical role transitions. It highlights the importance of focusing on boundaries themselves, viewing career mobility as a boundary-crossing process, encompassing not only physical (objective) movement but also psychological (subjective) transition between work roles. Career theorists describe the transition as a *status passage* or occupational socialization that invokes significant changes in individuals' identities, cognitive frames and role behaviours (Barley 1989). The transitional

work of career boundary-crossing also has a temporal dimension because it occurs over a time span and individuals' past selves and accumulated knowledge can powerfully influence their adaptive behaviours in the present (Beyer and Hannah, 2002).

Work role transition requires considerable effort on the part of individuals to learn, negotiate and adapt to the new roles and new work contexts. It is not a straightforward, unidirectional move from one work role to another, but often involves a dynamic interplay between the individuals' identities and new role requirements. Nicolson (1984) considers a person's adjustment to role transitions as a kind of personal development in which change is absorbed by a person altering his/her self-identity, cognitive frames, skills and knowledge, or as role development when the person changes the role requirements so that they better match his/her ability, knowledge and identity. There can be different modes of adjustment depending on job conditions but it is not uncommon for changes in both the person and role requirements to occur, which Nicolson refers to as 'exploration'. Ibarra's (1999) work on how professionals adapt to new roles also highlights negotiated adaptation by which they strive to improve the fit between themselves and their new work environment. It shows that individuals use selective learning to construct new customized identities, and some may adopt 'true-to-self strategies' by clinging to their old identities and seeking to transfer to their new roles some of the skills, knowledge and behaviour they had previously acquired. An important insight from the literature is that work role transitions usually entail role identity hybridization. This is especially common among professional and creative knowledge workers who often seek to preserve aspects of their former identities when adapting to new roles. These individuals usually enjoy high work autonomy and are engaged in high novelty jobs which permit the exercise of prior knowledge, skills and established habits in new roles (Nicolson, 1984). More crucially, creative knowledge workers attach great importance to authenticity and seek to maintain some degree of self-consistency and continuity across space and time, while adapting aspects of their identities to match situational demands (Svejenova, 2005).

Hybridization reflects the need to accomplish work role transitions at the boundaries between two domains. It is a means of opening up a 'third space' where individuals can be loosened, momentarily or even perpetually, from the constraints of the established domains for reorientation, redefinition and experimentation. Bhabha (1994) conceived of third spaces and hybridity as being characteristics of encounters between actors from two different social systems. It is the loci where identities and worldviews are negotiated, and the assumed or imposed hierarchy between them are questioned, with the outcome being hybrid identity and perspectives. Bhabha's third space concept directs attention to actors' agency during the moments or processes of transition, and their capacity to challenge the established power structures by constructing alternative positions and worldviews to the dominantly legitimated (Chulach and Gagnon, 2016). It also highlights the 'newness' – new ways of thinking and new practices – that emerges from the encounter in the third space. The concept is therefore particularly useful for illuminating the agentic and creative potential of career actors active in such space during work role transitions. It allows us to zoom in to explore the process and outcomes of hybridization, and the actions undertaken by career actors in constructing and sustaining third spaces.

In this study, the third space denotes an agency space where career actors mobilize the resources originating from the two associated work domains to construct hybrid role identities and overcome knowledge boundaries in work role transitions. Agency can manifest itself in the form of cognitive work at the individual (intra-personal) level and in the form of relational work at the collective (inter-personal) level. Cognitive work refers to self-reflectiveness and the capacity of the human mind to go beyond domain-specific constraints (Bandura, 2001). Work role transitions in career boundary-crossing expose individuals to novel and discrepant situations. This may trigger the development of reflective capacity, enabling individuals to breakout of their old cognitive frames and see things from the perspectives of others. Louis and Sutton (1991) use the phrase ‘cognitive gear switching’ to describe the capacity of actors to operate in more than one cognitive mode, switching between different modes of thinking. The third space is the locus where cognitive gear switching is made possible, and individuals engage in perspective-taking to translate and reinterpret their own knowledge and that of others. Cognitive work enables individuals to overcome syntactic and semantic knowledge boundaries.

Relational work refers to the actions undertaken by career actors to negotiate connectivity between the knowledge and people of the two associated work domains. The authenticity and validity of one’s identity and knowledge often come under serious challenge in radical work role transitions (Ibarra and Barbulescu, 2010). Adjusting to new work settings may be more difficult when people cannot draw on their past knowledge as a resource for present sense-making and identity construction (Beyer & Hannah 2002). People may experience tension and identity threat when past knowledge is devalued or not seen as transferrable or relevant in new roles. This is because the basis for what constitutes legitimate and valuable knowledge varies considerably across contexts, creating the potential for conflict. Carlile (2002) refers to this as a pragmatic or political knowledge boundary. The desire to maintain self-continuity while gaining legitimacy in the host context may prompt career actors to reconcile the differences and negotiate alternative ways of defining legitimate knowledge. Relational work is necessary for overcoming pragmatic knowledge boundaries.

In short, this study posits that boundary-crossing careers can nurture hybrids as knowledge brokers who actively construct third spaces in work role transitions and undertake cognitive-relational work to overcome knowledge boundaries. Hybrids operating in the third space can be effective knowledge brokers because they develop the cognitive ability and motivational orientation to connect the knowledge and people of the two domains with which they identify.

The empirical study

Creative artists as exemplars of boundary-crossing knowledge workers

Creative artists commonly build their work lives by taking on multiple jobs both within and outside the artistic domain in order to manage employment uncertainty and secure resources for their creative projects (Menger, 1999). They are seen as archetypal boundary-crossing

knowledge workers who face acute challenges in constructing their professional identities across multiple work domains and in managing knowledge transferability (Bain, 2005; Baker and Aldrich, 1995). This study focuses on a special group whose careers straddle professional arts and academia: the academic artists. In creative fields such as performing arts, media and design, the flow of people between the practitioner and academic communities is not uncommon. This is due, in part, to the practice-led or practice-based nature of artistic research whereby researchers often work as practitioners to contextualize their research (Niedderer and Reilly, 2010). Moreover, professional artists have historically always played a recognized role on university campuses as 'visitors' or regular faculty members, owing to the practice of learning-by-doing (Adler, 1976). University appointments appeal to many artists as a source of stable employment while providing opportunities for engaging in arts-related work (Bennett et al., 2009). Thus one can find a hybrid mix of people who inhabit the dual professional worlds. They provide a pertinent example for this study because they are particularly revealing of the agentic effort of career actors in overcoming the multiplex boundaries between two contradistinctive knowledge domains in career boundary-crossing.

Despite the frequent movement of people between professional arts and academia, the relationship between the two sectors has been uneasy. This is not only symptomatic of the cultural-cognitive divide between practitioners and academics in general, but also reflects the stark contrast between 'artistic' and 'academic' knowledge production and the long-standing controversy surrounding the legitimacy of artistic (experiential) knowledge in academia (Niedderer and Reilly, 2010). The careers and professional identities of academics and creative artists are rooted in two distinct knowledge production systems. The type of knowledge valued, its process of creation and articulation, and the interface with users/audiences differ significantly. Academic knowledge is analytical and abstract, and is usually articulated and transmitted in texts based on highly specialized language. Within academia, the most highly valued knowledge is produced for the consumption and use by academic peers, and often to the exclusion of lay audiences (Whitley, 2000). In contrast, artistic knowledge has strong experiential and symbolic dimensions (Ewenstein and Whyte, 2007), and is commonly expressed in non-textual forms (e.g. artefacts, performances and exhibitions). Artists derive their professional status and identities from effective communication with the wider, public audience whose response is an important gauge of their success (Perricone, 1990). Individuals working in separate academic and artistic communities can ignore the differences between the two worlds of knowledge. Those operating across the boundaries must reconcile the potential tensions and find ways to connect the two disparate sets of knowledge practices if they are to succeed in their careers. In other words, they need to operate as knowledge brokers. The study examines how these individuals construct third spaces of hybridity in work role transitions and the knowledge brokering activities undertaken.

Data collection

Primary data collection involved semi-structured interviews with 32 artists in drama, music, media arts and design from three London research universities. They were identified by searching the webpages of the relevant departments and examining closely the CVs of the individuals. The sample was purposively selected to include a mix of individuals with different career experiences in academic and practitioner roles. It comprises those who engaged in both activities in parallel (11 cases), and those who started as professional artists but had made career changes to become academics (21 cases). It consists mostly of individuals in their mid- and late-careers at the time of the study. This sample composition introduces a time dimension to the data needed for understanding how individuals' past experience influences their present role behaviours. The time perspective was also facilitated by using the retrospective accounts of the individuals' career histories.

The interviews used a semi-structured questionnaire, focusing on the individuals' employment histories, their work activities as academics and/or creative artists, career/ role transition experience, the influence of practitioner experience on academic work and vice-versa, self-defined role identities, types of research/creative outputs, channels used for knowledge dissemination and engagement with users/audiences. Each interview lasted for about 60-75 minutes. All of the interviews were recorded and transcribed.

Data analysis

The analysis was guided by the broad conceptual framework derived from the literature but firmly rooted in the grounded theory tradition that involves analytic induction and deduction. It went through several stages of iteration by moving back and forth between the data and concepts. It became clear early on that there were significant differences between the role transition experience of those engaged simultaneously in academic and practitioner work, and those who had moved from the practitioner world to academia. For example, the former reported smooth oscillation between the two roles; whereas the latter experienced initial identity threat and tensions. Drawing on Ashforth et al (2000) and Louis (1980), the analysis distinguishes two types of boundary-crossing careers that differ in the magnitude of work role transitions and salience of the boundaries experienced: 'micro' (recurrent and low magnitude) and 'macro' (permanent and high magnitude). Creative artists who pursue dual careers in both academia and professional arts are career boundary 'spanners' who experience micro role transitions. Those who started their careers as professional artists and had made subsequent career changes to become academics are career boundary 'crossers' who experience macro role transitions. To distinguish the two categories, the former is labelled as 'artist-academics' and latter referred to as 'artists-in-academia'. Table 1 shows the disciplinary and career background of the two categories.

Table 1 about here

Having consolidated the two conceptual categories, the second stage examined more closely the individuals' relationships to the academic and practitioner communities, their self-defined role identities and how they reconcile the differences between the work practices and modes of knowledge creation between the two domains. The initial focus was on the 'cognitive' and 'relational' dimensions, but it became apparent that the time dimension was also important. The subsequent analysis focused systematically on extracting exemplary quotes and other evidence pertaining to all three aspects. For the cognitive aspect, it examined the extent to which the individuals' draw on the 'academic' and 'practitioner' cognitive frames in their work (e.g. analytical vs. experiential), the relative importance of theory vs. practice, types of knowledge outputs and modes of knowledge representation (e.g. textual vs. non-textual forms). For the relational aspect, it included any boundary-spanning activities that facilitate the integration of knowledge and collaboration between members of the two communities. And finally, for the time aspect, it extracted interview quotes/incidents relating to the individuals' temporal orientations, their reference to past experience/knowledge and evidence of its use in present work.

Through systematic comparison and revisiting the literature, the final stage involved developing a deeper conceptual understanding of how career boundary-crossing and the salience of boundaries experienced in role transitions influence patterns of hybridity and the ways in which they connect the two knowledge domains. The analysis draws on the concepts of 'organic' and 'intentional' hybridity from cultural studies (Marotta, 2008) to capture the two distinct patterns of role identity hybridization displayed by the artist-academics ('spanners') and artist-in-academia ('crossers'), respectively. The former refers to the natural fusion of two different elements to form a mixture which blurs the boundaries between them; whereas the latter refers to the intentional juxtaposition of two discrete elements that may be oppositional and remain in tension. Both types of hybridity frame a third space but each with its distinct topology, reflecting the different ways in which the individuals connect the two domains and their cognitive-relational work in overcoming the knowledge boundaries. The artist-academics operate at the 'overlapping spaces' of the two domains where they internalize the cognitive-relational distance between them. Knowledge translation and integration occur naturally in everyday work: they are called 'embedded' knowledge brokers. The artists-in-academia make conscious efforts to construct 'transitional spaces' to bridge the two previously separated domains. They harness the cognitive-relational distance between them for more disruptive knowledge combination: they are labelled as 'transformative' knowledge brokers. Figure 1 shows the two types of third spaces wherein the two categories of hybrids operate. The findings are presented in the next section.

Figure 1 about here

Boundary-crossing careers and work role transitions: Two categories of hybrids

Artist-academics as career boundary 'spanners': 'Micro' transitions and 'organic' hybridity

Artist-academics are most commonly found in performing arts and design where many are involved in practice-led or practice-based research. In drama and music, for example, there are many instances of individuals combining dual academic and practitioner roles on an ongoing basis. The sample of 11 comprises of seven in drama, two in music and two in design/visual arts (Table 1). They joined academia relatively early in their careers following the completion of their doctoral studies, with some having worked for a short-time as professional artists before joining academia. Although academia was their primary employment affiliation, all had been engaged in practitioner work simultaneously throughout their careers.

These people had experienced frequent and recurrent micro role transitions in their day-to-day work. The repeated alternation between academic and practitioner roles, and their physical and psychological proximity made the transition relatively automatic. They displayed psychological mobility and cognitive flexibility and were able to slip easily from one role identity to another according to situational demands. An illustration is a professor in Drama (A2) working simultaneously as a theatre director who saw himself as both an academic and a practitioner and pointed out that he was able to 'flip between the two'. Similarly, another vividly described her malleable and shifting role identities: '... you know things shift from year to year... I mean there might be a bit of both [academic-practitioner] and a bit of 'practitioner' and sometimes when I'm locked away trying to finish a book, a bit of 'traditional academic' ...So you know, I move between them as appropriate or necessary ...' (A3).

Role boundary flexibility and permeability enable these individuals to integrate the two identities to create a two-faced one. This is what Pratt and Forman (2000: 31) refer to as 'Janusian integration' whereby individuals seek to exploit the synergistic benefits between them. Many interviewees saw the two roles as equal and complementary, and stressed the career and cognitive benefits of having two different but interconnected work roles. For example, one described how his work in performing arts and academic research 'come together in an organic and interesting way': '...I have a profile in performance and a profile in academic work ...So, but both of those, the mode of producing a performance and the performance itself, and the mode of producing written research and the written research itself, both come together to form that research part of my academic labour' (A5).

Another spoke about the intellectual benefit of switching between the two roles, describing the experience as being like taking 'holidays' from the established mode of thinking and working:

'Well ...when we were talking about how they [the two roles] fit together, they do, sometimes, feel like holidays from each other, so that if I've been writing an article and I'm puzzling over how the argument is going to work or how to articulate the evidence in the right way, it's great to go over to another activity where I can make

everything up. And it's entirely up to me then sometimes when I get kind of glutted on the freedom of that, it's great to go to the rigour and get analytic again in philosophy. So they're very complementary...' (A2).

For the artist-academics, role identity hybridization occurs naturally in everyday work as they integrate their work in academia and creative arts, and oscillate between their academic and practitioner selves. They appear to be in a permanent state of role transition – what Nicolson (1984) describes as exploration. The pattern of hybridity is 'organic' in that the two role identities are incrementally fused to form a mixture in which both are equally important and simultaneously active at any one time. These people blur the boundaries between the two work domains and operate at the 'overlapping' zones.

Artists-in-academia as career boundary 'crossers': 'Macro' transitions and 'intentional' hybridity

The artists who had moved from the practitioner world to academia experienced macro role transitions that involved the crossing of multiple boundaries: physical, psychological and temporal. This is a high magnitude career role transition that involves a change in employment affiliation. In comparison with the artist-academics, their transition experience was less smooth and required greater effort. It involves 'role exit-movement-role entry' and the movement period may take some time (Ashforth et al., 2000). In some cases, the transition may never be complete. Of the 21 interviewees, the majority (17) joined academia in their mid-careers and a small number (4) joined in their late-careers. Although many had previously been involved in part-time university teaching alongside their practitioner work, the critical transition came with full-time appointment and the expectation to engage in research and produce academic outputs. Many reported initial role tension, the discomfort of status loss and devaluation of the knowledge and experience accumulated in their previous careers. For example, a former actress was adamant that she had to start at the bottom of the career hierarchy: 'It was annoying and frustrating that none of my previous professional experience was counted' (P2). Others found themselves 'infantilized' by their academic peers at the beginning because of their inability to theorize or articulate their knowledge in academic language. The following quote vividly illustrates the role transition challenge that they encountered:

'...we were not able to perform as academics because... I had never written a theoretical essay. There was no way I could simply perform this new set of tricks...And I would sometimes ask incredibly naive questions of the seasoned theoreticians and they would look at me as though somehow, how, it was a question of "how could you be so stupid?"...' (P6).

The desire to reduce role tension and validate one's position as a legitimate role-entrant prompted these individuals to learn academic modes of knowledge creation and dissemination. This is especially notable among the mid-career entrants who aspire to become 'proper academics', to put it in their words. For example, a performing artist, at the

early stage of her transition, described herself as a ‘performing person among a whole bunch of textual people’ and stressed the need ‘to start writing books because that’s more recognizable’ (P1). Another in a similar position expressed the desire to work more like an academic: ‘... As a practitioner, I have not formalized my research, I basically do what comes to me.... I need to do more writing. This is normally how stuff is disseminated’ (P3). The desire to become fully-fledged academics is less apparent among those who had joined in their late careers. Some sought to establish themselves by taking on managerial roles (e.g. head of department or teaching programmes) which gave them the credibility without having to comply with full academic role demands.

Despite the variation in their adaptive strategies, the role transition for the majority involved ongoing adaptation and incremental role identity shift. Among those who had been in academia for some time and had become senior academics, their academic identity appeared to become more salient over time. In the interviews, some saw themselves as in transition ‘towards becoming an academic’ or working ‘primarily as an academic’. However, some also revealed that they were perpetually somewhere in between the two worlds – an ambiguous condition of ‘liminality’ (Garsten, 1999). One, for example, saw himself as ‘in neither camp’ and believed that this ‘middle’ position enabled him to negotiate ‘a relatively pain free and easy path into academia’ at a pace that suited him (P8). Another described himself as ‘a slightly weird marginal academic’ because he was not a theoretician (P19). These narratives suggest that they identify themselves as ‘partial’, but not full members of the academic community. By doing so, the artists-in-academia maintain aspects of their practitioner selves and ‘outsider-within’ status.

The apparent shift in these individuals’ role identities entails overlaying an academic onto a practitioner one, with the latter remaining intimately connected to the former in a ‘nested duality’ relationship. The term ‘nested duality’ refers to the shifting relationship between two role identities in terms of their relative importance to the individuals according to the situational contexts and social motives activated (Brewer, 1999). The interviews show that their ‘academic self’ takes precedence when the need for social validation and inclusion is activated. For example, the majority proclaimed themselves as academics in the context of their employment: ‘academic is probably the reality, that’s what my job is...’ (P2). However, the ‘practitioner self’ asserts its dominance on occasions when they seek to differentiate themselves from their academic peers. This was most evident in their cynical attitudes toward the academic language games. One in media arts, who had made a successful transition to become a senior academic, remained critical of what he described as ‘the academic obscurantist style of writing’, and was determined not to be included as one of them. He recounted his attempt to write like an academic by ‘being unclear’ but concluded that ‘I can’t bring myself to do it’ (P9). Here, his past practitioner self was activated and influenced his present behavioural choice.

The analysis suggests that the artists-in-academia’s past practitioner identities continue to influence their present academic work. Their transition to become academics may never be complete. Their hybrid role identities represent an amalgamation and negotiation of their past practitioner and present academic identities. The two identities remain discrete and may be oppositional. They are ‘intentional’ hybrids who actively construct and use the ‘transitional’

space to negotiate their hybridity. The transitional space is where they struggle for recognition and social validation, but it also gives them the psychological freedom to ‘travel’ in space and time, and ‘pick-n-mix’ the resources across spatio-temporal contexts.

Knowledge Brokering in the ‘Third Space of Hybridity’

Both the ‘artist-academics’ and ‘artists-in-academia’ operate in the ‘third space of hybridity’ where they construct hybrid role identities and undertake brokering activities to overcome the knowledge boundaries between the two associated work domains. However, the cognitive and relational work that they undertake to broker knowledge differ, reflecting their divergent boundary-crossing careers and the topology of the third space generated

Artist-academics as ‘embedded’ knowledge brokers in the ‘overlapping’ space:

The artist-academics are career boundary spanners who are simultaneously active in arts and academia, and can be considered as insiders to both worlds. The third space of hybridity is the ‘overlap’ between the two domains where role boundaries are blurred and they internalize the cognitive and relational distance between them. They are able to draw, internally, on the cognitive frames of their academic and practitioner selves in knowledge creation, and externally, they use multiple forms of knowledge representation to engage with members of both communities. Knowledge translation and integration occur naturally and constitute an integral part of their routine knowledge creation and dissemination activities: they are ‘embedded’ knowledge brokers

Cognitive switching and knowledge integration. The artist-academics operating in the overlapping space are able to operate in more than one cognitive mode and display cognitive-switching and Janusian thinking capacities (Louis and Sutton, 1991; Rothenberg, 1976). They often adopt the perspectives of *both* an academic and a creative artist, and move smoothly between analytical and experiential mental structures in their work. For example, the aforementioned drama professor who worked also as a theatre director, described how he enjoyed the ‘pleasures of forming rigorous thoughts and arguments...and enlightenment and understanding’ in academic research. At the same time, he stressed the need to use an ‘aesthetic judgement’ rather than a scientific ‘cognitive’ approach when working among his fellow performing colleagues (A2). To these individuals, combining the different types of knowledge and ways of knowing is entirely consistent with their hybrid selves. In the interviews, they stressed the ‘complementarity’ and ‘equal importance’ of both ‘theory’ and ‘practice’, and the need to find ‘meeting points’ or ‘common grounds’. They saw the integration of ‘thinking’ and ‘doing’ as fundamental to knowledge creation. For example, a professor in music who, for a large part of his academic career was playing music in the professional world, explained the synergistic relationship between ‘theorizing’ and ‘performing’:

‘...the historical study and the performance... Go together, absolutely hand in hand all the time and so that was my tradition as a performer ... Yes so I was playing violin

and playing in orchestras and working with, in the, you know professional world all the time really... It's very interesting that the whole way in which people are now starting to both theorise and think about performance itself is actually to think much more closely about what the nature of that interaction is and as a performer yourself clearly that informs the research and the other way around...' (A9).

The artist-academics' ability to adopt the perspectives of two different others (or selves) facilitates knowledge brokering because it opens up possibilities for self-distanciation and critical reflection. Knowledge is necessarily situated and thus being an insider is critical for perspective taking. However, people's ability to translate and transform knowledge across contexts also requires moments of separation and autonomy (Ackermann, 1996). Artist-academics are capable of momentarily stepping out of the social worlds to which they belong to take on the role of 'different others' and revisit their own experience as if it were not theirs. This enables them to re-articulate the experience to themselves from the perspective of others, and thus making it more tangible and sharable. New knowledge can be created as a result of these individuals' academic selves engaged in 'productive dialogues' with their practitioner selves. A productive dialogue is a joint activity between two speech partners which provides an opportunity for mutual influence and developing shared meaning and new understanding (Tsoukas, 2009). The following interview quote shows how an artist-academic in performing arts reflected on his experience of performing in clubs – the sites of his research and creative practice. There, the synchronicity of the two activities and dialogical encounters between his two selves enabled him to develop an analytical critique of the notion of 'spaces of freedom':

I am very committed to and interested in performing in clubs where actually those contingencies are different... working in clubs is driven very much by research imperatives, so I'll perform in a club because it fits very neatly with the kinds of research I want to do, and then you'll make changes in the work to accommodate the limitations that are imposed by the space, so when you do a performance in a club you will get changed in a toilet or you'll get ready behind a speaker, which I find really exciting actually and interesting, and there are also other limitations... so you know, so there would be an assumption which is clubs are these spaces of absolute freedom, you know, carnivalesque in liberation of, you know, desire and of the body, but actually the limitations are quite striking ... (A5)

Multiple forms of knowledge representation and knowledge co-creation. Knowledge brokering also forms an integral part of the artist-academics' engagement with members of both communities in knowledge creation. The equal status of the two role identities within their hybrid self-conceptions enables the artist-academics to be devoid of prejudice in their encounter with members of both groups. Beech et al (2010) argue that knowledge co-creation through dialogic encounters is only possible when partners meet as equals in shared space with no assumed knowledge hierarchy. The interviews show that artist-academics are skilled at forging dialogical relationships with both academic and non-academic partners. Their frequent encounters with them and the ability to use both academic and artistic

communicative tools facilitate knowledge co-creation. One professor, who worked also as a co-curator in arts development agencies, vividly described how knowledge is generated through dialogues with others and iteration between non-textual collaborative activities and academic writing:

... I have a series of projects which are dialogue works, and which are created as correspondences and that works its way down into the practice of writing itself, ... I mean my writing's in there but it's evolved collaboratively as a dialogue, and in, nearly always events as well, so they've moved between event and publication. ... I'm not really working with the idea that I'm a repository of knowledge, I'm working more with the idea that I'm a respondent and a channel for some things of knowing...' (A7).

This quote also illustrates how artistic-academics use a mix of relational artistic activities (e.g. events and dialogues), in addition to conventional academic writing, to engage with members of both communities. Working across the boundaries of the two communities enables the artist-academics to acquire the languages, interpretive conventions and knowledge representation practices of both. They are 'bi-lingual' and capable of using the communication tools of one community to articulate the knowledge and experience derived from another, and representing their knowledge in multiple forms. They often reframe the same materials in different ways, for example, converting academic textual knowledge into an artistic talk, producing a 'practitioner' edition of a book or a CD. Clark and Karmiloff-Smith (1993) use the term 'representational redescription' to refer to this mental process for representational change whereby the human mind enriches itself by re-representing the knowledge that it has stored in different formats. The ability to do so facilitates knowledge translation and co-creation across community boundaries. For the artist-academics, mixing communication tools and using multiple forms of knowledge representation to engage with both sets of audiences are means of expressing and validating their hybridity. As one said: 'Every single project I do is based on the idea that it must have an academic audience, it must have a general audience, it must have a non-academic audience...' (A4).

The artist-academics' simultaneous engagement in academic research and creative arts, and recurrent work role transitions generate an 'overlapping space' where hybridity is constructed and expressed in everyday work. At the overlap, domain differences are displaced and career actors develop dual cognitive modes and adopt a Janusian approach to knowledge creation. Their capacity for representational re-description of knowledge and generative dialogical encounters with members of both communities enables them continuously to translate and integrate knowledge across domain boundaries. Knowledge brokering is a continuous and situated activity that forms an integral part of their routine knowledge creation and dissemination activities.

Artists-in-academia as 'transformative' knowledge brokers in the 'transitional' space

Unlike the artist-academics who are multiple insiders, the artists-in-academia were outsiders who had learnt to become insiders. They are career boundary-crossers who make conscious efforts to negotiate role transitions and reconcile the differences between two previously separated work domains. To use Simmel's (1994) metaphor, they are the bridges who

connect what was once separated physically, socially and psychologically. Work role transitions place the artists-in-academia, at least for some period of time or even perpetually, in a transitory state of mind in which they oscillate between the past and present, and experience the dilemma of wanting to move on to the new whilst reluctant to let go of the old. The third space of hybridity is the 'transitional space' where ambivalence, fluidity and multiplicity are governing forces. It is similar to the notion of 'liminal space' where the normal rules of everyday life are suspended and the person in transition can be free to restructure cognitions and challenge existing rules (Garsten, 1999). The artists-in-academia in the transitional space both internalize and challenge the knowledge practices of the approached academic community. Knowledge brokering manifests itself at the individual level as they reorient their cognitive frames and make connections between their past and present by means of 'retrospective sense-making' (Weick, 1995). At the collective level, brokering is purposively enacted to negotiate knowledge differences between the two communities and challenge the established knowledge practices in the host academic context.

Cognitive reorientation and knowledge articulation. Those artists who have been in academia for some time are marked by their distinctive capacities to think critically and reflectively about their experience in creative practice, and to articulate the insights derived from their practitioner experience. Active learning in the academic context enables them to reorient their cognitive frames from reliance on old 'habits of mind' (Louis and Sutton, 1991) rooted in experiential knowing to more deliberative modes of thought involving the articulation of knowledge. Knowledge transformation occurs as these individuals use the academic cognitive frame to reinterpret their practitioner experience. Bechky (2003: 321) defines knowledge transformation as a process whereby 'a member of one community comes to understand how knowledge from another community fits within the context of his/her own work, enriching and altering what he/she knows'. For example, a former TV producer described how he started to think about the conceptual issues in relation to the use of a camera as a result of his encounter with academics that stimulated reflective thinking. Whereas in the past the camera was no more than an instrument, it had now taken on new meaning in the academic context that provoked theoretical inquiries:

'... a camera used to be something that you held up to your eye and looked at, and now it's something that you hold like that and you (laughs), you know you look at, so what does that mean when the work is always framed. For example, how is it changing the way in which films are being made which theoreticians have explored but maybe not necessarily knowing kind of as well as I do, you know what the practices were, if they knew it was because they'd interviewed someone but I've actually been on set...' (P4).

The same individual also stated that the academic encounter and reflective process had helped him to develop new ideas for his practitioner work:

'As a result of my being a practitioner and also as a result of the kind of conversations that I've had with X [an academic colleague] and the way that I've reflected on the work that I've made or how my work fits in a kind of, the genre and the ideas that I've been introduced to... I've had an idea for a TV series'.

Cognitive reorientation and temporal oscillation in the transitional space enable the artists-in-academia to draw on their previous practitioner experience as resources for knowledge creation in the academic context. This often involves ‘episodic recollection’ – mentally travelling back in time to relive previously experienced personal events (Tulving, 1972), and retrospective sensemaking (Weick, 1995). For example, a former actress explained how she developed her current research by ‘looping back’ to her own personal experience in acting. The following interview quote vividly illustrates how she used the ‘analytical’ lens of her current academic self to reflect on the ‘embodied’ experience of the child actor self of the past:

‘I was interested in thinking about how our bodies, how did I as a 12 year old know what a sweet spot was on stage. I knew I knew it, but I don’t know how I knew it... ..I just knew it and I wanted to find out a little bit more on what other kind of performance skills we might have in, I mean some have discussed it in terms of muscle memory, but whether there are other kinds of cultural and ways of holding it’ (P2).

Even among those who appear to have made full transitions to become established academics, they remain in the transitional space to some extent and continue to draw on their past practitioner knowledge in their academic work. One in Music, who had been in academia for over a decade, recently published a book on a musical instrument that he was ‘very much immersed in’ in the past. He described the book as ‘research that comes out of my practical experience and is infused by that practical experience at all levels’ (P12). Here, the past practitioner experience is translated and transformed into an academic text – the mode of knowledge representation that affirms one’s academic identity.

The articulation of knowledge derived from reflection upon past experiences enables knowledge that might otherwise has remained in memory and been used tacitly to be re-interpreted and transformed for new use outside its original context. This is a kind of knowledge brokering which Hargadon (2002: 57) refers as ‘intellectual bricolage’ – a process whereby individuals turn the learning of their past into new ideas for other, future contexts. The articulation of knowledge especially when it is not in the precepts and language of the original context is a deliberative cognitive process that requires significant effort on the part of the individuals (Zollo and Winter, 2002). The analysis suggests this is energized by their desire to gain legitimacy in the host context while maintaining a degree of self-continuity. By turning their past practitioner experience into resources for knowledge creation in the present academic context, cognitive connections between the two domains are made and thus easing work role transitions. In the transitional space, different moments of time become simultaneous and ambiguous, and individuals mobilize past knowledge as resources for role performance and identity construction in the present. Temporal hybridity and temporal blending in the transitional space enable the knowledge acquired in disparate times and contexts to be connected and reconstituted for new use.

Negotiating and transforming knowledge practices. The artists-in-academia also exploit the freedom of their position in the transitional space to negotiate the differences between the knowledge practices of the two work domains, and to contest the established knowledge hierarchy in academia that privileges theory over practice. Underlying this is their desire to gain legitimacy and create a more conducive work environments for their hybrid selves. Unlike their artist-academic colleagues, they have not belonged to the academic community from the beginning. Simmel (1950: 403) used the term ‘the stranger’ to describe this kind of ‘insider-outsider’ people who have the objectivity and freedom to ‘treat even their close relationships as though from a bird’s-eye view’. They are more aware of the peculiar rules and habits of academia and also have a degree of freedom not to be totally committed like the full insiders. For example, many were acutely aware of the academic language game but deliberately avoided using academic jargon in their own writing. One talked about the importance of ‘knowledge simplification’ and the need to communicate to a wider audience by ‘getting rid of academic armours and apparatus’ (P11). Another stated that her ‘continued ignorance’ of academic ways of writing was ‘quite helpful’ because it enabled her to write ‘in a way that was accessible’ to practitioners (P1). This purposeful use of ignorance, what McGoe (2012) refers to as ‘deliberate ignorance’, is a subtle rebuke of the academic language game and strategy for exonerating oneself from non-compliance. Some of the artists-in-academia had become skilful linguistic creators, developing hybrid languages as mediational tools. One in performing arts (P3) recounted how he used a ‘sound sketch’ to translate the emotional responses of the audience to his academic colleague. Another described how she bridged the academic and practitioner worlds at a workshop by developing a ‘meta-language’ which combined ‘music, dance and text’ because ‘nothing worked without the other’ (P2). This is similar to what Kill (2013: 30) describes as ‘polyglossic’: a hybridization of languages and meanings that exist in the ‘floating space’ between different languages. These examples illustrate the capacity of the artists-in-academia for imaginative recombination of different ways of knowing that emanates from their ambivalent position of being liminal persons in transition.

Many of the artists-in-academia interviewed saw themselves as ‘bridges’ between the two worlds and enacted brokering roles to facilitate interaction and knowledge co-creation between their academic and practitioner colleagues. For example, one in performing arts mobilized a team of actors, theatre designers, musicians and academic researchers to produce what she described as a ‘half practitioner and half academic’ book - one that was ‘both theoretical and practical’ and combined visual images (colour pictures) with analytical texts. She explained in the interview that she wanted to show that ‘practitioners can be theoreticians and theoreticians can be practitioners’ and that ‘putting them together, you get more, not less’ (P1). She reckoned that the book had made members of both groups more aware of the value of each other’s knowledge. Here, the book is used as a ‘boundary object’ (Carlile, 2002) to bridge knowledge boundaries. It provides a shared context for members from the two communities to learn to embrace each other’s knowledge and perspectives. Carlile (2002) argues that boundary objects can be effective knowledge brokering devices in shifting understanding and facilitating transformation of localized knowledge into novel jointly produced knowledge that transcends each community’s local understandings and interests. The ‘half practitioner and half academic’ book is exemplary.

The transitional space not only enables career actors to bridge knowledge boundaries but also provides opportunities for renegotiating and disrupting the boundaries. The interviews show that in some cases, knowledge brokering was purposively enacted to promote the type of knowledge and modes of knowledge creation valued by their practitioner selves. This is most notable in their efforts to elevate the status of experiential and non-textual forms of knowledge (e.g. audio-visual components) in the host academic context. Although practice-led research has gained acceptance in the creative disciplines, a hierarchical view privileging theoretical/textual forms of knowledge still prevails (Niedderer and Reilly, 2010). Some found this undermining and took actions to challenge it. An illustration is the active involvement of several practitioner-academics in Media Arts in establishing a ‘Practice Committee’ to promote practice work and non-textual forms of knowledge. One stated that they had been working ‘over the years to get a system of recognition of practice work comparable to that of published papers...’ (PA7). In the interview, he emphatically pointed out the pre-eminence of non-textual ways of knowing: ‘...So I’d like to make a claim for exhibits and model making and drawing and diagramming and all that other kind of non-textual kind of stuff, as actually being a way of understanding things in a deeper level...’. This ‘pro-practice’ sentiment was echoed by another who, over the years, had campaigned for and eventually succeeded in establishing an audio-visual PhD programme – one that integrates audio-visual artistic practice with academic writing in the research process and output. He believed that their actions ‘were bringing into question the rigid adherence to a particular sort of analytical knowledge that has been traditionally what academics have done...’ (PA8). These examples indicate the political aspect of knowledge brokering in that brokering activities were used to contest the established knowledge hierarchy and challenge the dominant legitimate view about what constitutes valuable knowledge.

The artists-in-academia generate transitional spaces in career boundary-crossing where times and places become indeterminate and mingle with each other. Hybridity is continuously negotiated and renegotiated in the transitional space. Cognitive re-orientation and temporal oscillation enable these individuals to reconstitute knowledge across spatio-temporal contexts. They also exploit the freedom of their fluid position in the transitional space for experimentation and imaginative recomposition of knowledge. Knowledge brokering is also enacted to shift the power dynamics and assert control over the definition of legitimate knowledge in the host academic context so as to create a more conducive work environment for their hybrid selves. They are transformative knowledge brokers who alter their own knowledge and understanding, and also push others to reconsider theirs. They bridge, as well as unsettle, domain boundaries, and thus open up possibilities for more disruptive knowledge combination.

Discussion and conclusion

Mobility across traditional career boundaries is widely seen as an important mechanism that facilitates knowledge combination and stimulates creativity. However, our understanding of the process through which this occurs has been limited by the dominance of a structural network perspective that overlooks the role of career actors. This study highlights their role as knowledge brokers who actively translate, transform and combine knowledge in work role transitions. The third space perspective directs attention to the in-between movement space in

career boundary-crossing where career actors construct hybrid role identities and undertake brokering to overcome knowledge boundaries. The creative artists looked at in this study, who work across the domains of arts and academia, are particularly illustrative of the agency of career actors in exploiting the creative generativity of their hybridity in the third space. What has emerged from the analysis are two distinct categories of hybrids with different career mobility and work role transition experience. The findings suggest that the process and outcomes of knowledge brokering can vary according to the patterns of hybridity and topology of the third space generated

The artist-academics, whose careers span arts and academia concurrently, experience greater psychological and cognitive ease in recurrent micro-role transitions. They are 'organic' hybrids situated at the 'overlapping space' between the two domains. Psychological proximity and synchronicity of the two roles enable them to draw simultaneously on the cognitive frames of both artist and academic, and adopt a Janusian approach to knowledge creation. To these people, the divide between different types of knowledge (theory vs. practice) and ways of knowing (thinking vs. doing) ceases to have meaning. They engage in ongoing knowledge translation and integration by representing knowledge in multiple forms and dialogical encounters with members of both groups. Knowledge brokering is an incremental process embedded in routine knowledge creation and dissemination that sustains their hybridity in the overlapping space. The artists-in-academia, who cross over from the art world to academia, experience greater psychological barriers in their more permanent macro-role transitions. They are 'intentional hybrids' who make conscious efforts to bridge two discrete work domains by creating a separate 'transitional space' where they can be free from the constraints of the established domains for adaptation and experimentation. Their transition from one world to another may never be complete but involves ongoing hybridization and negotiation. The transitional space is where they re-orientate their cognitive frames and reconcile knowledge differences so as to make the cognitive-relational distance between the two domains tolerable and productive. The knowledge brokering activities that they undertake are more deliberative and instrumental in altering both themselves and their work context. They are transformative knowledge brokers who enable the development of new 'polyglossic knowledge' (Kill, 2013). The 'meta-language' that combines music, dance and text, and the practice-based PhD that incorporates audio-visual and textual knowledge are notable examples.

This study contributes to our understanding of career boundary-crossing as a mechanism that facilitates creative combination of knowledge in three ways. First, it broadens the conceptualization of career mobility to incorporate its social psychological aspect in work role transitions and sheds light on the cognitive-behavioural mechanisms through which mobility influences knowledge combination. Extant research on career mobility, notably in Economic Geography, has tended to focus on physical movement of people between contexts rather than on the interaction between actors, structures and contexts (Kaufmann et al., 2004). Although the concept of 'motility' seeks to address this limitation by incorporating the capacity of the actor to move in social spaces as a component of mobility (Canzler et al., 2008), the cognitive dimension has not been explicitly developed. This omission has meant that how knowledge actually travels and the micro-dynamics of knowledge combination

remain a black box (Hautala and Jauhiainen, 2014). This study takes a step towards opening the black box. It directs attention to psychological mobility associated with career boundary-crossing and the concomitant changes in career actors' role identities and cognitive frames. It shows how interaction between career actors and shifting spatio-temporal contexts, and identity hybridization in work role transitions enable them to break out of domain-specific constraints and develop the cognitive ability to overcome interpretive barriers in combining knowledge across domain boundaries.

Second, by stressing the agency of career actors as knowledge brokers, the study also gives insights into the motivational process that energizes creative knowledge combination. Much of the existing literature has tended to de-emphasize the importance of individual agency in favour of structural explanations of the influence of career mobility on knowledge combination in terms of patterns of relationships that give actors access to diverse knowledge. However, combining diverse knowledge for creative generativity does not automatically occur as a result of structural connectivity, it requires the action of skilled and motivated actors who are receptive to the available diverse knowledge and perceive the benefits of integrating knowledge and perspectives that differ from their own (Dokko et al 2014). The question of why career actors are willing to spend the time and effort required to overcome complex knowledge boundaries begs an answer. This study shows that career boundary-crossing fosters role identity hybridization and induces individuals to engage in knowledge brokering so as to maintain self-continuity and gain recognition as legitimate group members. What this study has demonstrated is that career actors who work across domain boundaries acquire the cognitive resources and have identity-based motivations to connect the knowledge that originates from the two work domains with which they identify.

Third, the study employs the spatial metaphor of a third space to denote the agency space where role identity hybridization and the cognitive-relational work of knowledge brokering occur. It advances our understanding of how mobility generates its own space beyond the fixity of place and time that serves as a site and a resource for creative knowledge combination. The often-mentioned idea that creative contributions take place at the boundaries between existing domains does not tell us much about what goes on at the boundaries or how they are made productive. The notion of the third space regards boundaries as places where divergent perspectives interact to produce hybridity and novelty. The study shows that the third space can be generative and productive because it is a movement space where knowledge originating from different domains can be transposed and reconstituted across spatio-temporal contexts. It is also a navigational space that tolerates ambiguity and gives individuals the freedom to think beyond a set of binaries associated with established domains and the situatedness of the present. The two types of third space identified in the study, 'overlapping' and 'transitional', suggest that there are different ways of breaking down domain boundaries to produce hybridity with varied generative possibilities. Whereas the 'overlapping' space blurs domain boundaries, the 'transitional' space bridges and unsettles domain boundaries. Transitional space appears to offer more scope for actor agency and generative possibilities as evidenced by the transformative knowledge brokering of the artists-in-academia. This is because it is an interstitial passage that buffers actors from the interference of the established domains; whereas those in the

overlapping space are anchored at the intersection and are more constrained by the two closely linked domains. There is less scope for actors in the overlapping space to have what Mead (1934) referred to as 'distance experience' that enables innovative reconstruction. Despite the variation, both categories of career actors demonstrate the creative potential of hybridity in the third space. The Janusian approach to knowledge creation displayed by the artist-academics and the actions taken by the artists-in-academia to challenge the knowledge practices and assumptions in academia are evidential. Janusian thinking is a critical factor in the creative process (Rothenberg, 1976) and disruption of normative practice stimulates the emergence of newness (Kill, 2013).

Although this study is based on the experience of those in creative arts, the findings have wider relevance beyond this particular field. The conventional two-community, polarized view of academic-practitioner relationships (Caplan, 1979; Rynes et al., 2001) overlooks the in-between third space where hybrids operate and create connection between the two poles. Although this space is particularly large and fluid in the creative disciplines owing to the people-centred nature of knowledge creation and dissemination (Crossick, 2006), similar patterns of career mobility and hybrid mix of people can also be found elsewhere. In the scientific and technological fields, 'scientist-entrepreneurs' whose careers straddle academic science and business ventures have been known for some time (Louis et al., 1989; Lam, 2007). In the social sciences and humanities, there are 'scholar-practitioners' who actively engage in advancing both theory and practice (Wasserman and Kram, 2009). Hybridity, both at the individual and institutional levels, is increasingly seen as important for promoting creativity and innovation across growing segments of the contemporary knowledge economy (Klein, 1996). Creative artists can be seen as forerunners of this trend. What this study has shown is that career boundary-crossing and common work experience can erode professional role boundaries and nurture hybrids capable of blending different types of knowledge and ways of knowing for generative knowledge combination.

Moreover, by focusing on the experience of hybrid actors, the study also questions the simplistic binary view demarcating academics and practitioners based on knowledge contents (theory vs. practice) and ways of knowing (analytical vs. experiential) which may have exaggerated the divide and underplayed the common creative experience shared by both groups in knowledge creation. Both academics and artists, amongst other creative and scientific knowledge workers, share many common motivations and goals of which the uppermost is the desire to generate novelty (Moravcsik, 1974). From the viewpoint of those engaged in creative activities, be it producing academic articles or artistic outputs, lecturing or playing music in front of an audience, the boundary between the two types of activity may well be much less distinct than is often assumed by onlookers outside. It is worthy of note that the relative dominance of theory vs. practice, and analytic vs. experiential modes of knowledge creation, both within and across disciplines/professional fields, are a matter of degree and not rooted in polarity. Hybridity in the third space not only challenges the binary knowledge divide between different professional groups but also disrupts the politics of knowledge that tend to privilege one group over another based on knowledge demarcation and hierarchy.

Finally, the nature of the sample calls for some qualifications. The analysis is based on a small sample of individuals who have been successful in developing boundary-crossing

careers. There could be some ‘survivor bias’ (VanderWerf and Mahon, 1997) in that the study has highlighted the positive experience of hybrids but overlooked those who have not been successful in developing hybrid roles or failed to exploit the agentic potential in the third space. Hybrids are subject to two opposing forces and may experience conflict, liminality and estrangement. Marotta (2008: 305) speaks of the ‘tragedy of the in-between subject’ and Park’s (1950 [1937]) work on the ‘marginal man’ sheds light on the dark side of hybridity alongside the positive characteristics. The failure to develop meaningful hybridity could lead to confusion and dilettantism. A more balanced sample to include those who are not successful in combining dual roles or making the career transition would have helped to throw additional light on the conditions that constrain the positive aspects of hybridity. Furthermore, the study was conducted in the context of research universities as the host environment where individuals enjoy high work autonomy with ample opportunities for experimentation and role innovation. Other work contexts may be less permissive and inhibit activities in the third space of hybridity. A study on those who have moved out of academia into the practitioner world could also be illuminating.

Table 1 Interviewee profile

Case code/Discipline	Academic position (at time of study)	Time in academia* (years)	Time in practice** (years)	Career stage (at time of entry to academia)	Career stage (at time of study)
<i>'Artist-Academics'</i>					
A1 Drama	Professor	16-20	16-20	Early	Mid
A2 Drama	Reader	11-15	11-15	Early	Mid
A3 Drama	Professor	11-15	11-15	Early	Mid
A4 Drama	Professor	20+	20+	Early	Late
A5 Drama	Senior Lecturer	<5	<5	Early	Early/Mid
A6 Drama	Senior Lecturer	<5	<5	Early	Early/Mid
A7 Drama	Professor	11-15	11-15	Mid	Mid
A8 Music	Reader	11-15	11-15	Early	Mid
A9 Music	Professor	20+	20+	Early	Late
A10 Design	Professor	16-20	16-20	Early	Mid
A11 Design	Professor	11-15	11-15	Early	Mid
<i>'Artists-in-academia'</i>					
P1 Drama	Senior Lecturer	6-10	NK	Early/Mid	Mid
P2 Drama	Senior Lecturer	6-10	20+	Mid	Mid/late
P3 Drama	Lecturer	6-10	6-10	Early/Mid	Early/Mid
P4 Media	Lecturer	6-10	11-15	Mid	Mid
P5 Media	Professor	16-20	NK	Mid	Late
P6 Media	Senior Lecturer	11-15	20+	Mid	Late
P7 Media	Reader	6-10	6-10	Early/Mid	Mid
P8 Media	Senior Lecturer	11-15	20+	Mid	Late
P9 Media	Reader	11-15	NK	Mid	Mid
P10 Music	Reader	16-20	NK	Mid	Late
P11 Music	Professor	16-20	6-10	Mid	Late
P12 Music	Senior Lecturer	6-10	11-15	Mid	Mid
P13 Design	Reader	6-10	NK	Mid	Mid
P14 Design	Professor	11-15	20+	Mid	Late
P15 Media	Senior Lecturer	11-15	30+	Late	Late
P16 Media	Professor	<5	30+	Late	Late
P17 Media	Senior Lecturer	11-15	30+	Late	Late
P18 Media	Senior Lecturer	<5	30+	Late	Late
P19Media	Professor	6-10	20+	Mid/Late	Mid/Late
P20Design	Professor	11-15	20+	Mid/Late	Late
P21 Design	Professor	11-15	16-20	Mid/Late	Mid/Late

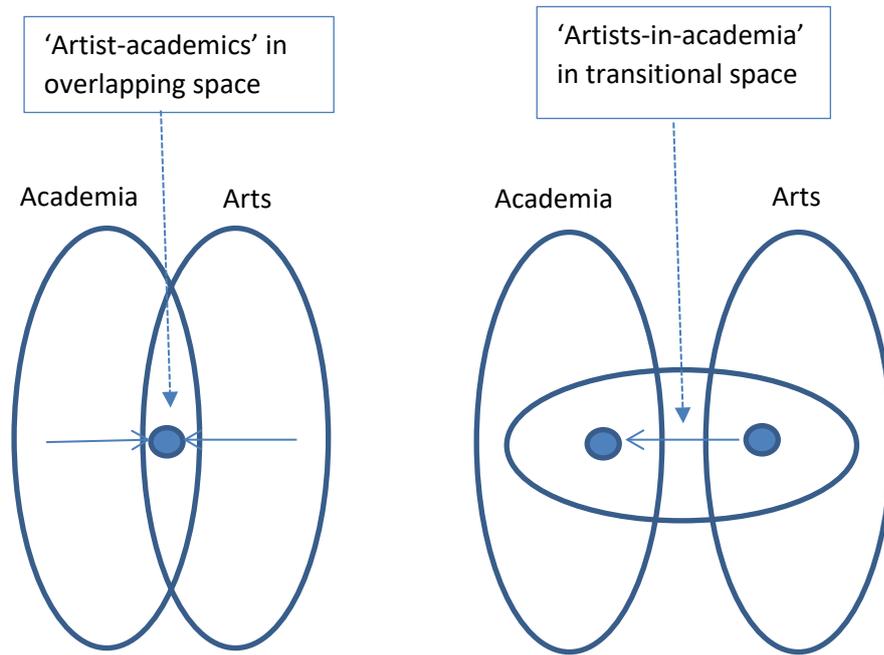
Notes:

* 'Time in academia' refers to the period of full-time appointment.

** 'Time in practice' in the case of the 'artist-academics' is the same as 'time in academia'. For the 'artists-in-academia', it refers to the period working as professional artists prior to full-time academic employment.

NK=not known

Figure 1 Third space of hybridity: ‘overlapping’ vs. ‘transitional’ space



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