# Higher Education and the Creative Economy

Beyond the campus

## **Edited by Roberta Comunian and Abigail Gilmore**

ISBN: 978-1-138-91873-3 (hbk) ISBN: 978-1-315-68830-5 (ebk)

First published 2016

# Chapter 9

### Staying and making it in regional creative cities – visual arts graduates and infrastructures for professional development

Abigail Gilmore, David Gledhill and Ivan Rajković

(CC BY-NC-ND 3.0)



### 9 Staying and making it in regional creative cities – visual arts graduates and infrastructures for professional development

Abigail Gilmore, David Gledhill and Ivan Rajković

#### Introduction

This chapter investigates the experiences of creative graduates working in managed artist studio spaces in Manchester in the North West of England. It considers their trajectories and career development after art school and explores their professionalisation, recognition and success in relation to the opportunities provided by studio spaces and the broader arts infrastructure and creative economy in Manchester and beyond. It attempts to understand the relationship between training, teaching and learning within higher education and the strategies and realities of emerging and established visual artists in a regional city. In doing so, it critically examines how creative human capital, mediated by the community of practice offered by a managed studio space, moves through the structural relations of 'town' and 'gown', which impact on the careers and mobility of artist-practitioners and their opportunities for market entry and professional development.

The relationship between universities and creative economies can be understood as a variety of symbiotic activities, which reveal the character and prosperity of places and the people that live and work in and visit them. Research on higher education and its relationship to local creative economies has shown how universities contribute to the infrastructure for arts and cultural provision, for example through museums and performing arts spaces on campus and academic research on arts and cultural activities (Chatterton 1999; Chatterton and Goddard 2000; Powell 2007). They also contribute through the knowledge, training and skills development supported by academic research, teaching and learning that is transferred to places through the mobile human capital of students, graduates and staff (Florida et al. 2010; Comunian et al. 2015; Comunian and Gilmore 2015). The value of this capital to places has not gone unnoticed by policy-makers; indeed, there has been a growing pressure to understand and increase the impact of higher education in relation to the arts sector and the creative economy (Arts Council England (ACE) 2006; Universities UK 2010; Comunian and Gilmore 2014). Recent studies identify the geographic patterns and impact of attracting and retaining 'creative human capital' in specific places (Comunian et al. 2013; Comunian and Faggian 2014), in addition to a longer-term policy interest in the importance of the creative workforce (and its clustering) to local economic

development (Pratt 2008; Florida 2014). In policy terms, the aspiration is that higher education can specifically benefit places through its role in producing the creative capital that, if retained, transforms these localities.

These policy expectations are riven, however, by difficulties, such as oversupply to and retention within local creative economies (Benhamou 2011; Jones 2011). At the same time, there is an expanding critical enquiry into the conditions for creative labour, including pay, entry points, skills and professional development, and the failure of local institutions in supporting and regulating appropriate infrastructure for progression and retention. So while there have been a number of initiatives aimed at enhancing knowledge transfer from higher education and improving skills for the creative economy at a national level, the conditions at a local level often present a fragmented and ill-equipped ecology for emerging visual artists who want to stay and work in places away from the centre of the arts world, the metropolitan capital.

This case study account explores the experiences and journeys of visual artists in a regional city. It draws on empirical research comprising qualitative interviews with emergent and established artists who are part of Rogue Studios, Manchester, whose number include graduates from the Manchester School of Art as well as from art schools elsewhere. We consider the contention that while Greater Manchester is an attractor to creative graduates, ranking second in the UK after London as a location for students taking creative programmes (Comunian and Faggian 2014), it does not yet have a strong enough indigenous infrastructure to retain them, particularly against the magnetic pull of London, to seek career development. It investigates the argument that this is in part due to the privileging by publicly funded institutions of established international artists in their programming (The Confidentials 2014), implicating the city's own cultural policy failure to encourage retention and professional development in the visual arts, despite its long-standing support for creative industries, in particular the music and digital sectors. Through insight into the lived experience of artists in their local creative economies, it explores what attracts and retains creative graduates to Manchester's visual arts world, and the ways in which they bridge their experiences between art school and their emerging futures as professional artists

# Mapping research on creative graduates: the geographies and pedagogies of the creative economy

Literature on the creative economy highlights the importance of understanding the economic geographies of creativity and the value of locating those who work in the creative industries, through 'creative cities' (Bianchini and Landry 1995) and 'creative class' approaches (Florida 2002; Markusen 2006). The role of higher education within these geographies is also investigated through the mapping of university students in the different creative disciplines (Comunian *et al.* 2011) and of skilled graduates and their retention and reward (or lack of reward) within local economies (Florida 2006; Comunian *et al.* 2010; Comunian

*et al.* 2013). Furthermore, by identifying correlations between student location choice, graduate destination and the factors associated with creative cities (cultural consumption and production, employment and retention within creative industries) in relation to the spatial distribution of both creative higher education institutions and the creative job market, it is possible to show how universities intervene in local creative economies through their 'bohemian graduate' output (Comunian and Faggian 2014). The same research also confirms discourses of competitiveness between creative cities concerning the inequalities of this spatial distribution, most notably in the UK between the metropolitan capital and the regions, as well as disparities between supply and demand for creative students to come to, stay and work in the city are unmatched by the opportunities to work in the creative economy:

Greater Manchester ... ranks second for percentage of creative students trained, but third for percentage of creative graduates working in the local area and only fourth for the percentage of graduates working in creative occupations. This seems to suggest that the local labour market for creative jobs is not strong enough to retain all the creative graduates educated by the local universities.

(Comunian and Faggian 2014: 30)

As the costs of the increasingly marketised education sector rise, questions are levelled at the private and public value of creative education and its responsibilities to properly equip graduates to realise their potential in the creative economy. The mass expansion of higher education, from 20,000 students at the beginning of the twentieth century to around 100,000 full-time students in English, Welsh and Scottish universities in 1958–9 and 1.9 million in UK higher education today (Willetts 2013: 24), further exacerbates these responsibilities, as does the changing profile of students, with a decline in those taking arts and humanities subjects, but a continuing under-representation from those of traditionally lower participating socio-economic groups (Willetts 2013). As both undergraduate and post-graduate education move to a model of private good and individual risk, through cuts in public funding and increases in student loans to cover rising fees, there is pressure to demonstrate the employability of graduates, their value to the economy and the value of their own investment in higher education.

Higher education is responding by publishing information on its performance in helping graduates achieve positive destinations and developing curricula to highlight their inclusion of relevant transferable 'employability' skills.<sup>1</sup> A preeminent focus on vocational skills training over critical pedagogies has been identified by some commentators who are concerned that this focus overturns the received conceptualisation of art schools as radical, anarchic spaces with permissive indulgence in experimental aesthetics and critical theory, particularly in post-war 1960s Britain (Frith and Horne 1987; Banks and Oakley 2016). The tensions between the practical and aesthetic obligations of arts schools to their graduates continue to be negotiated along lines of mobility and social class, as the increasing cost barriers to higher education present further challenges both to social mobility and workforce diversity.

Bridgstock and Cunningham (2016) refute the suggestion that there is an erosion of criticality in research into vocationally oriented curricula, emphasising how research that identifies the precariousness of creative work actually highlights the importance of providing appropriate pedagogies for a skilled and entrepreneurial workforce adept at navigating these conditions. However, they also identify a key problem for creative higher education that needs to deliver programmes which raise entrepreneurial capabilities for arts students - that many of those working as creative education lecturers may not have had enterprise training themselves, so may not feel confident or competent in developing these skills in others. In their research mapping the perceptions of creative graduates of their own career success following graduation, they suggest technical creative skills are valued equally in creative and non-creative work by graduates, supporting the thesis that creative occupations and transferrable creative skills are a valuable, embedded component of the broader economy, as proposed by the Creative Trident model (see Higgs et al. 2008). Interestingly, this seems a broader concern in arts education, as similar points are raised by Frenette and Tepper in their chapter in this book on arts graduates in the United States.

Bridgstock and Cunningham's research also suggests interesting distinctions in objective and subjective measures of career success following graduation which are highly tempered by discipline area. In terms of earning-related measures, design and digital graduates earned significantly more overall from creative work than graduates of visual and performing arts programmes; however, graduates of visual and performing arts programmes maintained high ratings on subjective (self-defined) career success, reflecting an identification with 'good work' and important non-economic value associated with creative work found in other studies (Banks and Hesmondhalgh 2009; Oakley et al. 2008). While this provides some comfort that visual arts graduates receive career satisfaction as a return on their investment in creative education, at the same time it supports the observations of others that this is a form of social economy that ultimately mitigates the precariousness of the creative economy. By complying with a 'star system' which rewards only the few (Throsby 2010), that demands continual portfolio and 'cross-over' working to cross-subsidise creative activity (Summerton 1999; Throsby and Hollister 2003; Volkerling 2012) and where the value of artists' work and art works is so contingent on an anomalous and exceptional pricing system (Abbing 2002), it can be argued visual artists are contributing to and reproducing the structural inequalities of their own creative economies.

Oakley *et al.* (2008) identify a number of common characteristics of visual arts graduates in their survey of the field which are relevant here. Firstly, they are loyal to their discipline with over 40 per cent of their sample remaining in the arts and cultural industries following graduation, and a further 20 per cent in the more broadly defined creative industries, albeit in portfolio and multiple-job circumstances as consistent with the archetype above (Oakley *et al.* 2008: 4). Secondly, they are lifelong learners,

with 80 per cent continuing some kind of informal training (ibid.: 5); again, similar dynamics are also highlighted by Frenette and Tepper's chapter in relation to US-based arts graduates. This is conducive to the form of teaching and learning during art school – problem-solving, experimental/inductive and unstructured – which then continues into working life; however, it could also be interpreted as problematic, reflecting a poor initial education in key skill areas. Thirdly, artists clearly distinguish between symbolic work as production and utilitarian production, between arts as a creative activity and creative production as a means to a functional end. It is interesting to consider whether and how this distinction between 'good work' for aesthetic reasons and 'work' for instrumental reasons carries through into decision-making and directions for earned income and for artistic practice.

Research into the geographies of creative work has identified that a number of aspects of these relationships are potentially useful to both higher education and local cultural policy-makers. Understanding of the spatial distribution of creative networks and clusters of artists can illuminate their role in urban regeneration (see, for example, Jacobi's chapter in this book), and there is a growing body of evidence on the impact of artists on economic development (e.g. Markusen 2006; Markusen and King 2003). In terms of location choices of creative artists, they remain 'bound to place' (Oakley et al. 2008: 16), co-locating (sometimes perversely) in more expensive inner-city areas rather than working remotely in cheaper accommodation. This can be partly explained by the wealth of research from cultural and economic geographers identifying the added value of knowledge spill-overs, cluster effects (Knudsen, Florida and Stolarick 2005; Markusen and King 2003) and more informal exchanges of gossip and rumour (Pratt 2005) in localities, which reinforce both supply chain relationships and social ties (Oakley et al. 2008) and the conditions for maintaining communities of practice and knowledge exchange networks (Menger 1999; Wenger 1998).

The case study research presented here combines these critical questions and explores their implications in relation to the experiences of artists in the context of Manchester, a city with a global reputation for popular culture, in particular music and football (Brown *et al.*, 2000). Manchester's cultural strategy has continually emphasised the aim of becoming a leading global creative city in all areas of artistic and cultural production, and these aspirations have been polarised by recent debates about the unequal distribution of arts funding (Stark *et al.* 2013) and the twinned prospects of devolution and a cultural 'Northern Powerhouse' announced within the Autumn Statement that included central government investment in Manchester's arts infrastructure ahead of the General Election in 2015 (HM Treasury 2014).

In the next section we look at the context and recent history of visual arts in the city, before considering the empirical experiences of the Rogue artists in the final section.

#### The Manchester context

Further and higher education in art and design in Greater Manchester is based at three higher education institutions (the University of Bolton, Manchester Metropolitan University and the University of Salford) and over twenty further education colleges. Graduates from these programmes tend to gravitate towards Manchester and Salford city centres and away from the regional towns within the Greater Manchester area, stimulating further demand for studio space (Slater *et al.* 2013). The growth of the studio network in Manchester during the 1980s and 1990s has not been matched, however, by a comparable growth in infrastructure for artist development, despite significant public investment in the two cities' major cultural institutions over the same period.

Routes to commercial success for individual artists are constrained locally in part because of the absence of a significant regional market for contemporary art in the North West, but also due to the lack of opportunity for local representation, exhibition and hence critical endorsement. At the same time there has been a decrease in local authority investment in arts development that might provide the networks for business support (Slater et al. 2013: 12). There is also a tendency to programme in favour of artists from outside the region within the public subsidised institutions and in large-scale, high-profile events such as the Manchester International Festival (Slater et al. 2013: 28; Chavez-Dawson 2005). Although the growth of horizontal 'peer-to-peer' activities and networked 'collectivist' strategies (Gordon-Nesbitt 2012: 8) for professional development have helped to mitigate this comparative lack of investment, the number of artists achieving higher career goals at the national or international level is limited (Slater et al. 2013). This has resulted in the perception of a 'glass ceiling' effect within the region, encouraging the migration of artists towards the South East and exacerbating the tension between the attraction of affordable production space (in the North) and the concentration of commercial opportunities in London.

A number of key organisations established in the 1980s and 1990s form the basis for the current contemporary arts infrastructure. Prior to this, opportunities for Manchester-based artists to exhibit in the city were scarce. Castlefield Gallery was established by members of Manchester Artists' Studios Association (MASA) in 1984 and alternated shows by high-profile established painters and sculptors with North West graduate and postgraduate artists. Buoyed by an international revival of interest in painting in the 1980s at Manchester School of Art at Manchester Metropolitan University (MMU), MASA and Castlefield provided a platform for artists from Greater Manchester that raised standards and extended creative horizons beyond the region. The opening of Cornerhouse (a cross-art form venue with gallery space) in 1985 also brought a wider range of contemporary practice to the city, and meant that artists could start to build networks beyond the confines of the studio groups and exhibit in a professionally curated context. MASA itself opened in 1982, providing a model for other studios in the city, including the Sculptors in Greater Manchester Association (SIGMA), the Cultural Utility Building Ancoats (CUBA) and Bankley Studios and Gallery in Levenshulme - and a former member of MASA went on to set up Rogue Artists' Studios in 1995. While MASA is constituted as a limited company and has charitable status and Bankley Studios became a cooperative in 1998, since 2000 Rogue has been run by a small team of artist administrators on a 'payment in

kind' basis, together with voluntary steering and selection committees, and is constituted as a 'not-for-profit partnership'.

During these decades, the availability of underused light industrial building stock in both outlying and city centre locations meant that genuinely affordable studio space was ample. Studio membership was principally drawn from the fine art programme at MMU, but by the time Rogue opened, the North West was beginning to draw graduate and postgraduate artists from other parts of the UK, attracted by the availability of space and the lower cost of living. At its inception, Rogue absorbed members from a number of smaller studio groups that had either proved difficult to sustain or who had lost their premises to fire (as was the case for CUBA) or termination of lease due to redevelopment, a continual threat to the longevity of Manchester studio groups. Between 1995 and 2000, Rogue and MASA occupied separate floors of Hanover Mill adjacent to Piccadilly Railway Station, creating a critical mass of artists in the city centre. In 2000, the studio group moved to the nearby Crusader Mill, which was mainly occupied by clothing manufacturers at that time. As the recession started to drive these companies out of business, Rogue expanded in response to demand and currently provides studio space for 97 artists over three floors.

These studio groups help make up for the lack of exhibition opportunities available in the city. Rogue hosts annual 'Open Studios' weekend events, during which members can sell directly to the public on a commission-free basis or curate displays of work by students or non-studio members. In turn, local arts schools, their curricula and the practices and research interests of their staff influence local contemporary scenes and approaches. While the fine art department at MMU was a driver for the growing studio network in the 1980s, the introduction of the interactive arts course in 1993 produced a second wave of graduates exploring research-driven, collaborative and interdisciplinary approaches. Enterprising collectives such as the Annual Programme (1995-2000), some of whom were MMU graduates, began to attract wider attention, and visiting lecturers helped to evolve a critical theoretical discourse at MMU previously missing from the creative ecology of the city (Simpson 2001). The professional networks they mobilised set a precedent for the regional infrastructure, where written contextualisation was seen to be as important as production. The use of their own homes as temporary venues extended the DIY spirit of Manchester's music scene into the visual arts. By contrast, independent commercial galleries, such as Comme Ca Art and Philips Art Gallery, supported the promotion of both younger emerging and unrepresented mid-career artists. By the end of the 1990s, some of these factions began to work together with curators and artists from other cities in the North to organise large-scale group shows, taking advantage of the continued availability of disused shops, offices and mills for multi-venue projects, such as artranspennine98, MART 1999 and LMN in 2000 (Shillingford and Lee 2001).

Other artist- and network-led activities have helped to build DIY infrastructure for promotion and professional development, outside of the larger publicly funded institutions, particularly in the early twentieth century. In 2003, the Comme Ça Art Prize and Comme Ça New York broadened the reach of Manchester artists and attracted media attention, and a new wave of independent dealers and small independents, such as Bureau and Untitled Gallery (now Object / A), offered exhibiting and selling opportunities for represented artists. Studio spaces begin to exploit digital technologies to promote and map their present, and magazines, such as *Flux*, included regional and international arts coverage alongside fashion features and national distribution. However, other than local coverage in listings magazine *City Life* (Birch *et al.* 2001) and occasional features in *Art Review* (Simpson 2001) and *Flash Art* (Mulholland 2001), the city still lacked outlets for critical art journalism.

Alongside the increase in the number of galleries after 2000, a rapid diversification of artist-led activity took advantage of the new clubs, bars and cafes based in Manchester's regenerated Northern Ouarter to mount one-off themed projects and exhibitions. At the same time, artists were opening self-funded galleries in short-lived alternative spaces including a living room (Bert and Ganddie Gallery), a porch (Porch Gallery), a plan chest (Floating ip) and a coat pocket (La Galerie Dans Ma Poche). Apartment, the most durable of these ad hoc spaces, combined international guest exhibitors with artists drawn from MMU's postgraduate programme and the studio network. Based in a council flat, Apartment brokered international exposure for its artists and, like many other artist-led projects, subsisted on occasional support from the Arts Council England (ACE) Grants for the Arts scheme. The introduction of more professional development content on university fine art courses and increased arts funding through schemes like Grants for Arts supported the growth of a wider constellation of artist-led studio and gallery associations throughout the Greater Manchester conurbation, for example in Bolton where neo: provides studios and print facilities, an annual open exhibition and an art prize.

The recession of 2008 and cuts to ACE budgets brought about the contraction of the visual arts ecology in Manchester, with venue closures and widespread gallery downsizing or relocation. The cohesion, plurality and enterprise of the early millennium yielded to the reinforcement of divisions between artist-led, commercial and public-funded sectors. Excepting Castlefield Gallery, which has regained its National Portfolio Organisation status and remains active in facilitating grass-roots curatorial and artistic activity (Clayton 2015), the basis for a local ecology capable of sustaining diversity and facilitating upward mobility has somewhat receded. In 2014, the reduction of the commercial sector, compounded by the lack of access to exhibition opportunities in public galleries, gave rise to an Open Letter calling for more support for artists working in the region in exhibition programming and promotion (The Confidentials 2014), meriting a response from the City Council's Strategic Lead for Culture. While the issue of local representation in public galleries is perceived to be a problem throughout the UK (McGregor 2014), tensions between policies which support and represent local artists versus the commissioning of external/international artists remain far from resolved and run parallel to concerns about London-centric commissioning and arts funding, for example in the publication of the ROCC report (Stark et al. 2013; Gledhill 2014).

In 2015, there is a growing recognition within local cultural policy of the value in retaining home-grown creative communities and investment for nurturing conditions for artistic production and distribution locally. However, networking opportunities leading to exposure of work as a means of career progression (Air and a-n The Artists Information Company 2011) are restricted as a result of an oversupply of graduates to the existing infrastructure (Slater *et al.* 2013). In the meantime, artist-led galleries, project spaces and agencies have stepped into the breach, combining often self-taught social media marketing skills and residency programmes to promote emerging talent and provide a much-needed bridge between graduation and establishment.

In terms of artistic diversity, previous distinctions between traditional and expanded practice (Williams 2001) have been ameliorated by larger studio spaces, such as Rogue and Islington Mill in Salford which accommodate a broad range of activity. There is a more consolidated local platform for critical writing than a decade previously, through online journal Corridor8. Contemporary Visual Arts Manchester (CVAM), an ACE-funded association involving both artists and curators, is part of a national network of organisations intended to promote visual art in the regions and also makes a significant contribution to artists' career development prospects. Manchester Contemporary Art Fair provides a market-facing profile for independent galleries. However, the strengthening of the local creative economy has not yet reached the individual artist and entrenched economic precariousness continues to prevail. Of the artists in Greater Manchester who responded to a recent survey, 73.5 per cent do not make a living from their work (Slater et al. 2013: 20) and incomes in fine art are stuck at half the UK national average (Spriggens 2012). As a consequence, artists are often working part-time in service and retail jobs, as attendants in public galleries, or as lecturers in further or higher education in order to subsidise their artistic income (Slater and Lee 2014).

#### **Rogue artists' experiences**

The following sections consider the conditions and factors impacting on artists' professional development and experience post-art school, from the perspective of individual artists based at Rogue studios. The project used an explorative qualitative research methodology, conducting semi-structured interviews with resident artists at Rogue Studios. Questions focused on their trajectories during and after art school, strategies for career and professional practice development and their plans for the future. We also asked about their perceptions of and connections to Manchester, their relationship to the broader arts ecology of the UK and the international arts market, and their attitudes towards art education and cultural policies.<sup>2</sup>

#### During art school

Although most of the interviewees recognise the creative skills they developed in their art schools, the majority felt they did not have enough training on what it means to be a 'practising' artist during their degree programmes. Specifically, the artists felt unprepared for the promotion of their work, as something distinctive in a competitive arts world, and for the practical social aspects of 'networking' with others. Perceptions differed across the sample, however, and some praised the practical education they received at art school, particularly in terms of writing artist statements, grant applications and the use of studio and technical equipment and photography for profiling work. It was artists who graduated before the mid-2000s who were more likely to report having little or no instruction on how to apply for competitions, get funding or organise their first exhibitions, suggesting that changes to art schools curricula may be taking effect.

Professional practice skills training was also accompanied by implicit knowledge on career development, which was crucial to graduates' career expectations. The artists who finished their degrees with little knowledge of the implicit rules of the arts market tended to have an expectation that their work is going to be valued on its own merit, without requiring further action, for example lobbying gallery representatives for exhibitions or making grant applications to research and develop their practice. These graduates were more prone to report feelings of initial disappointment after graduation and to doubt themselves after early rejections. On the other hand, artists who were pushed by their schools to develop strong professional profiles – for example, by putting on external exhibitions as an assessed task before graduating – had a clearer sense of how to approach their development early on, and were generally quicker in gaining wider recognition. Early experiences prior and post-graduation were the optimum formative learning stages for emerging artists for building personal confidence and early success in the art world.

#### Establishing oneself as an artist: trajectories in creative economies

Regardless of their education experiences, all of our interviewees reported intense feelings of crisis and disorientation after finishing art school. Usually, this is a time when they stopped being financed through scholarships, loans and grants and had to suddenly become financially accountable. This presents a common pattern of vulnerability, where going back to live with family, taking jobs unrelated to art and relying on a partner's income are all frequent occurrences. Post-graduation precariousness also influences one's ability to produce art: art-making happens less frequently, often in improvised circumstances (such as in one's living room, which affects the potential scale of work) or at weekends. Unless progressing immediately to a Master's programme, the first couple of years after Bachelor's study marked a much lower volume of making and displaying one's art.

There are many different routes on leaving art school, often with little signposting or prior guidance, and options include postgraduate education, internships, lecturing or teaching, part-time work in other related areas (such as galleries or in consultancy), or leaving the arts completely (Francis 2013). Only a tiny fraction of graduates gain gallery representation immediately after their degree show. For our sample, in many cases the first response was to find a temporary job in a

minimum paid position in a service or trade industry, such as a non-art related office job or (less frequently) in arts-related media industries. Bar work is especially common; this is seen as convenient work for the artist as it is often flexible, leaving enough time for one's art, but is also feared as a 'trap job' (leaving one complacent and less ambitious). Preferred work includes part-time work in art supplies shops, visitor services and other roles in galleries, and art-teaching jobs, in other words arts-related income, broadly following patterns of cross-subsidy seen in other studies (e.g. Oakley *et al.* 2008; Oakley 2009; Throsby and Hollister 2003).

It is possible to differentiate long-term strategies of graduates by examining the relative proportions of their creative and arts-related income to non-creative work (Throsby 2010). For the majority of our informants, the ultimate aim was to become and stay a 'full-time artist', who exclusively earns income by producing original artistic work – the 'good work' as described in the literature above. This is often not immediately possible, however, and requires careful planning and gradual phasing out of 'non-creative' as well as arts-based income, saving and sometimes claiming benefits until an opportunity emerges to switch to being a full-time artist. For those of our interviewees who considered themselves to be in full-time status (four out of seven), this was the main strategy. As Sophie, a sculptor and installation artist, puts it:

I think artists should be very ambitious. I don't think we can rely on other people to hand us things. I've gone out and I've searched for opportunities, exhibitions, commissions. And I tried to be savvy as much as I can about how I make money as an artist, without having to go into employment, to maintain being a full-time artist. Because I know that if I had a part time job, it would destroy any creative cells. You need to be focused full-time.

(Sophie)

Being 'full-time' allows a full commitment to art, both practically and symbolically, and this commitment has a value in itself, even if it comes at the expense of sacrificing some comfort. At the same time, full-time status is seen as precarious in the longer term, as one depends on the steady flow of grants, commissioned work or art sales. Not knowing whether and when money will come often means intermittent periods of getting a grant and becoming really 'thin', while trying to bridge sporadic income by frugal living. As a response to this uncertainty, the preferred alternative long-term strategy is to develop a 'part-time' grounding, backing up one's dedication to producing art with a stable, usually art-related part-time job, such as a teaching position in an art school. This also offers the advantage of continued involvement in art networks and, in the latter case access to resources such as university studio space and technicians.

However, there are fears and constraints attached to continuing relationships between artistic practice, economic necessity and the academy related to the need for doctoral qualifications to gain lectureship tenure, a growing strategy of young artists for financial security. This was viewed by some informants as potentially limiting, distorting one's freedom and inducing a lot of unnecessary stress. One interviewee suggested that the pressure to continue into postgraduate education was raising the bar too high for other developing artists and leading to 'overqualification' of the sector. However, despite these difficulties, it was recognised that postgraduate research can benefit artists by introducing 'the right ideas' of critical theory to articulate their art, with the PhD qualification seen as a guarantor of academic propriety.

In terms of exhibition strategies, our informants differed greatly in planning their first shows. First exhibitions were primarily graduate shows and DIY projects with other emerging artists, but beyond this their pathways become very contingent. It is usually with first shows that one recognises, after art school, the need to stay in an art community in order to be 'displayable' and the importance of networks for getting recognised. As one interviewee put it, 'you need somebody else to confirm your value.' Some managed to sidestep those obstacles by applying 'cold' to group shows under specific themes (usually set in the North West). Some were discovered at Rogue Studios' Open Weekend and invited to contribute to high-profile group exhibitions because they worked with a specific medium or theme (such as paper). Some also used postgraduate study explicitly for professional development, both in terms of developing the distinctiveness of their artistic practice and to gain relevant contacts. One of the more established artists, Mark, founded a group of artists working in film, and was invited to exhibit by a curator of a local gallery who got to know his work during his Master's programme in Manchester.

All of the 'full-time' artists we interviewed had secured public funding for their work at least once, most often from Arts Council England. Several of them had their work commissioned, usually by local or regional galleries or by galleries abroad. Selling work varied depending on the medium used and types of artistic practice, with figurative paintings most likely to be sold to private collectors (and conceptual and experimental art sculpture less likely). The medium and materials used also influences the format of representation and recognition more broadly, sometimes influencing the choice of artistic practice and introducing an economic instrumentalism into artistic and career direction. For example, one conceptual artist who works with temporary materials is considering switching to more durable materials and bigger formats for her next project in order to secure a museum commission.

By contrast, there was a sense that utilitarian approaches should be taken cautiously, and that what was most valuable was original creativity; most of our interviewees believed that they had to develop a distinctive style or perspective, often in critical dialogue with others' ideas, in order to be recognised by curators and funding bodies. Hence most of them narrated their emerging pathways as periods when they were still perfecting the originality of their contribution, and worked hard to create and retain a consistent set of themes and styles with which they wanted to become publicly associated. Conversely, the more established artists report the discouragement they faced when trying to change the approach they became known for, and the pressure to do what they describe as repetition of similar work, at the expense of their own creativity. They describe a need to

walk a fine line between being recognised for a distinctive style and being a brand, or a 'factory', that reproduces things, because galleries will only show what is already recognised as one's personal work.

Finally, some of our informants employed a range of tactics to diversify their profile, by broadening their collaboration with various unorthodox partners and the scope of spaces in which they display their work. John (a conceptual sculptor), for example, had decided early on to exhibit 'wherever' possible and joined a group of similar artists on a long-term group project. The nature of their work (a blend of sculpture, electronic music and science) has enabled them to broaden the scope of spaces where they exhibit, from conventional traditional galleries to disused spaces, from publicly funded regional venues to electronic music gigs and popular science shows. He remains deeply assured that it is possible to find a niche for oneself outside of the conventionally recognised art world. Similarly, Sophie plans to branch out from her successful installation activities to commercial sectors of the music industry and architecture. But as these examples show, the creation of more 'lateral' pathways for display and recognition might be more open to those working in conceptual forms and multimedia, with the more traditional art forms (such as figurative painting) remaining limited to the conventional gallery-based venues as pathways to recognition.

#### Artists' mobility in relation to London, Manchester and other places

All the artists interviewed, and the majority of other Rogue residents, can be roughly grouped into two categories in relation to their trajectories of mobility. The first group grew up in Manchester or other places in the North West, finished a BA at MMU or one of the many art schools in Greater Manchester, and embarked on employment and their artistic development in the city. The second grouping is made up mainly of those from other regions, such as Wales and Scotland, who finished their Bachelor degrees in other regional cities and subsequently moved to Manchester. They were attracted by a sense of a cultural 'buzz' and the rapid artistic development that occurred in Manchester in the mid-2000s. Additionally, some moved to Manchester as a result of other links to the city, such as the presence of extended family or artistic partnerships, or a partner's migration to the North for work. This reflects observations by Comunian *et al.* in this book about the role of mobility (or lack of) as a strategy to enable career progression or to strengthen existing networks and opportunities.

All agreed that London was still a privileged place in the UK art industry. They described it as having the most galleries and museums and, hence, exhibition opportunities, the majority of collectors and commissioning bodies, and the largest networks of tutors and curators that act as crucial gatekeepers for recognition in the art world. Conversely, Manchester was criticised for having too small an artistic scene, that it can become 'cliquey', with a relatively small number of galleries, artistic spaces and collectors, which determines the 'ceiling' for the prices of artistic work. Artists also noted the gap between the well-known reputation of Manchester as a music centre and the lesser known visual arts profile of the city,

reproducing a sentiment about Manchester and the 'North' as on the periphery of the national visual art ecology.

The interviewees shared a common perception of the disadvantages of living in London post-graduation. With the average wage of fine artists in the UK being around £10,000 p.a. (Kretschmer *et al.* 2011: 3) and the prices of housing and studio rent in London being unbearably high, most of their time is dedicated to non-art related employment just to pay the bills. In addition, the art scene is seen as overwhelming, so that even when located in the city, it is hard to find the time and resources to build enduring contacts with galleries and representatives that one can actually capitalise on. Interviewees who aspired to becoming full-time artists preferred to devote more time to actually making art by living outside of London, inventing new ways to achieve recognition that did not revolve around the capital.

Manchester is therefore appreciated as a better site for emerging artists to realise their ambitions to become 'full-time artists', through relatively cheap housing and studio rent (in comparison to the South) and the convenience of an accessible urban infrastructure, with a vibrant art scene of a size that allows for full engagement. Interviewees also highlighted the reputation of the city in the broader UK art scene, and its proximity to other cities with provincial contemporary galleries that can showcase their work. A number of key institutions within the city were also identified as important, including both smaller, independent 'project' or artist-led spaces and more enduring publicly funded galleries that have played a longer role in the city's history of artistic production and display. As discussed above, they appreciated the access to resources and networks provided through enduring relationships with local art schools, and recognised the developing collaborations between higher education and exhibition activities, particularly in relation to the partnership between Castlefield Gallery and MMU providing exhibition and project space at Federation House. However, there was a tacit recognition that the reputations of London art schools and their surrounding networks made a temporary move to London advantageous, particular at Master's level.

However, another characteristic was identified with Manchester: a greater freedom, not only from the financial worries associated with London, but also from the constraints of particular forms of artistic practice and direction that are said to prevail there. This echoes broader regional divides and symbolical geographies in the UK that present Manchester (especially its music scene) as more punk, oppositional and cutting-edge in comparison to the more developed, yet complacent, capital:

I think that a good thing about being in Manchester is that a lot of the trends and a lot of the fashions that people get sucked into in London, because that's how it is orientated, you can kind of ignore it and do your own thing. You don't have to be swept by the tide of fashion. You can say 'well, I am not interested in doing that, just because everyone else is, I am just going to do my own thing'. And I think that has something to do with the North–South divide. I think that is just a bit like 'Fuck you London, we do our own thing' – which was always a big thing in Manchester.

(Anna, conceptual artist)

This DIY regionalism is not just in spite of, but because of, Manchester's disconnection from London's central core of artistic circles and it repositions London: for our interviewees, it is no longer the exclusive centre of their art worlds and residence there is not necessary for career development. They identified the crucial role of the Internet as a platform for developing reputations beyond national borders and increasing opportunities to build careers by sidestepping London. New strategies involved developing stronger bases laterally in smaller Northern towns, which may have specific allocated budgets for regional arts development, and also by developing international presence through thematic shows abroad or touring work or through overseas artists' residencies, particularly in Western Europe, East Asia and the United States.

Within this transcendence of spatial ties, Manchester is positioned more as a production 'base' than as a centre of display and recognition. Particularly for the more established younger artists, there is a consistent gap between these two functions, with the desire to live and make art in Manchester but to exhibit elsewhere: 'You can be in Manchester and be an artist anywhere in the world. I have no interest in exhibiting in Manchester anymore. It's like preaching to the converted' (Sophie).

#### Rogue as a collectivist strategy for professional development

All the interviewees were recommended to Rogue by people they know, whether lecturers they met at local art school or their peers and collaborators. Once in the studio, spaces are usually rented for several years, a residency in Rogue often marking the beginning of a full-time career. Having a dedicated studio space is a further commitment to arts practice, not just because of its functional value but also through the social learning opportunities it provides, which the isolation of home-based work lacks. Rogue's mixture of artists at various career stages and working in different art forms facilitates these roles along with the affordability of its spaces.

Since it is home to some ninety artists of various ages and practices, Rogue often does not act as a single community, and it is unlikely that every artist knows all of their fellow studio members, although most have a sense of sociality with the fellow residents. Close to the circles of art display and critique, networked with local art schools through the relationships with their staff and the professional skills learned while studying, Rogue acts as an alternative 'third space' (Soja 1996) that permits artists to reflect on their shared aspirations and uncertainties. While related to the individual undergraduate and postgraduate experiences and competencies of artists-as-graduates, Rogue allows them to mediate the deadends of other institutional spaces and to mitigate collectively for their shortcomings. Interviewees mentioned the valuable advice they got from more experienced fellow residents along with other collective activities, such as a monthly support group with a number of residents who comment on one another's pieces of work and plans for future projects.

There were other signs that while mutual support is on offer, the experience of an emerging artist is distinctly individual rather than uniform, and that certain qualities of individual entrepreneurialism are strategies for survival. This was manifest in the different views about public funding, which revealed some broader meritocratic appraisals of hard work and individual perpetration. Some, such as Dean, a painter in his late twenties who had not yet achieved commercial success or professional recognition and was without gallery representation, narrated their sense of disappointment in the city curators of the public institutions who failed to support local artists more, in relation to their own personal goals and motivation: 'I am not show driven, I do this for me' (Dean).

Others such as Sophie, who had experienced success early on in the two years since graduation, took a more hard-line approach to self-reliance:

I can only answer it from my perspective ... for me that comes down to teaching yourself how to apply for it, or if you can't do it, find someone who can help you. And ambition and drive. And altogether those things, eventually, if you work hard enough, you'll do it. So don't complain about it, just do it. Just keep going.

(Sophie)

This demonisation of dependency in the contemporary UK can be a strategy for self-preservation, creating a sense of control over the future, and 'a sense of security in an insecure world' (Valentine and Harris 2014: 91). Rogue's place within these individual narratives was predominantly articulated in terms of its visibility and uniqueness in the regional art ecology of the region, and the benefits of being part of a wider community which it offers. These benefits include intelligence on forthcoming career development opportunities, as Rogue residents receive updates on calls for commissions, competitions and grants, get invited to openings of new shows, and generally, gain recognition from the city's wider network of art curators and collectors. In this sense, Rogue residents often feel that Rogue is not just a 'production' space, but also an incubation, promotion and exhibition space that, through the association with membership of a large body of artists, offers more effective routes into the art world, not just in Manchester but at an international level.

#### Conclusions

The experiences of the artists at Rogue studio demonstrate many of the qualities and affordances identified by other research on visual artists finding their way into the creative economy after graduation from arts school. The artists are vulnerable to precarious conditions and dependent on strategies that help them facilitate and subsidise their artistic practice. They benefit to some extent from the increasing inclusion of employability training within higher education curricula, although the application of skills learned during art school are highly contingent on other factors, including implicit knowledge available during art school, their own existing social and cultural capital and the opportunities to achieve early success and recognition. These are in turn dependent on access to particular elements of the visual arts ecology, to exhibition opportunities, and to the social networks and critical discourses of curators, gallery representatives, critics and dealers.

These experiences also reflect the specific affordances of the particular space within the local visual arts infrastructure that Rogue studios offer, through supporting both collectivist and individual strategies and opportunities for representation and recognition. They also provide some commentary, not only on Manchester's status as a creative city (relative to London), but also on aspects relevant to local cultural and higher education policy concerning artistic production for economic development. It seems the priorities here are not solely to subsidise local exhibition opportunities in Manchester, but also to find ways to support artists' own ambitions and individual drive to commit full-time to art-making, while drawing on the existing collectivist strategies and communities of practices which make Manchester a viable place and base for artistic production. The implications of the findings for higher education and its relationship to the creative economy, albeit from a small-scale study, suggest that curricula for professional development, as well as artistic development, would benefit from partnerships with broader artist communities, such as studio spaces like Rogue, during as well as after degree programmes.

#### Notes

- 1. See also Ashton's chapter in this book in relation to the possibilities of work-based learning within higher education settings.
- 2. Our sample consisted of seven emerging and early established visual artists between their late twenties and early forties. They worked in a variety of media, mostly painting, sculpture and film. Three informants were female and four male. All of their names have been changed to preserve anonymity. In addition we have undertaken an analysis of the curriculum vitae of Rogue's residents to provide some general context for these individual narratives.

#### References

- Abbing, H. (2002) *Why Are Artists Poor: The Exceptional Economy of the Arts*. Amsterdam: Amsterdam University Press.
- Air and a-n The Artists Information Company (2011) *The Big Artist Survey*. (Online) Retrieved from http://www.a-n.co.uk\_big\_artists\_survey (accessed 10 June 2015).
- Arts Council England (ACE) (2006) *Arts, Enterprise and Excellence: Strategy for Higher Education.* London: Arts Council England.
- Banks, M. and Hesmondhalgh, D. (2009) 'Looking for work in creative industries policy', *International Journal of Cultural Policy* (Special Issue): 'After the Creative Industries', 15 (4): 415–30.
- Banks, M. and Oakley, K. (2016) 'The dance goes on forever? Art schools, class and UK higher education', *International Journal of Cultural Policy*, 22 (1): 47–57.
- Benhamou, F. (2011) 'Artists' labour markets', in R. Towse (ed.), *A Handbook of Cultural Economics*, 2nd edn. Cheltenham: Edward Elgar.

Bianchini, F. and Landry, C. (1995) The Creative City. London: Demos.

Birch, T., Black, K., Griffin, K. and Vincent, M. (2001) 'Artful lodgers: Manchester studios exposed, *City Life*, 444, 16–28.

- Bridgstock, R. and Cunningham, S. (2016) 'Creative labour and graduate outcomes: implications for higher education and cultural policy', *International Journal of Cultural Policy*, 22 (1): 10–26.
- Brown, A., O'Connor, J. and Cohen, S. (2000) Local music policies within a global music industry: cultural quarters in Manchester and Sheffield', *Geoforum*, 31 (4): 437–51.
- Chatterton, P. (1999) 'The cultural role of universities in the community: reivisiting the university community debate', *Environment and Planning A*, 32: 165–81.
- Chatterton, P. and Goddard, J. (2000) 'The response of higher education institutions to regional needs', *European Journal of Education*, 35 (4): 475–96.
- Chavez-Dawson, J. (2005) *Manchester: Naturally Proactive and Curatorially Inquisitive.* NYARTS (Online) Retrieved from: http://www.nyartsmagazine.com/?p=3431 (accessed 10 June 2015).
- Clayton, E. (2015) 'Postcard from Manchester', Frieze, 171: 25-6.
- Comunian, R. and Faggian, A. (2014) 'Creative graduates and creative cities: exploring the geography of creative education in the UK', *International Journal of Cultural and Creative Industries*, 1 (2): 19–34.
- Comunian, R. and Gilmore, A. (2014) 'From knowledge sharing to co-creation: paths and spaces for engagement between higher education and the creative and cultural industries', in A. Schramme, G. Hagoort and R. Kooyman (eds), *Beyond Frames*. Antwerp: University of Antwerp Press, pp. 141–7.
- Comunian, R. and Gilmore, A. (2015) 'Beyond the creative campus: reflections on the evolving relationship between higher education and the creative economy', King's College London, London. Available at: http://www.creative-campus.org.uk.
- Comunian, R., Faggian, A. and Jewell, S. (2011) 'Winning and losing in the creative industries: an analysis of creative graduates' career opportunities across creative disciplines', *Cultural Trends*, 20 (3/4): 291–308.
- Comunian, R., Faggian, A. and Li, Q. C. (2010) 'Unrewarded careers in the creative class: the strange case of bohemian graduates', *Papers in Regional Science*, 89 (2): 389–410.
- Comunian, R., Gilmore, A. and Jacobi, S. (2015) 'Higher education and the creative economy: creative graduates, knowledge transfer and regional impact debates', *Geography Compass*, 9 (7): 371–83
- Comunian, R., Taylor, C. and Smith, D. N. (2013) 'The role of universities in the regional creative economies of the UK: hidden protagonists and the challenge of knowledge transfer', *European Planning Studies*, 22 (12): 2456–76.
- Confidentials, The (2014) 'Open Letter to City Curators and Exhibition Programmers', *Manchester Confidential*, 24 June. Available from: http://www.manchesterconfidential. co.uk/culture/open-letter-to-city-curators-and-exhibition-programmers (accessed 18 September 2015).
- Florida, R. (2002) The Rise of the Creative Class. New York: Basic Books.
- Florida, R. (2006) 'Regions and universities together can foster a creative economy', *Chronicle for Higher Education*, 15 September.
- Florida, R. (2014) The Rise of the Creative Class Revisited. New York: Basic Books.
- Florida, R., Gates, G., Knudsen, B. and Stolarick, K (2010) 'The university and the creative economy', in D. Araya and M. Peters (eds), *Education in the Creative Economy: Knowledge and Learning in the Age of Innovation*. New York: Peter Lang.
- Francis, A. (2013) Signpost: Stepping Out as a New Artist What You Need to Know and Where to Find It. Carlisle: Susan Jones/a-n: the Artist Information Company.
- Frith, S. and Horne, H. (1987) Art into Pop. London: Methuen.

- Gledhill, D. (2014) *Looking North: The Arts Ecology in Manchester*. Miriad. Retrieved from http://news.miriadonline.info/looking-north-the-arts-ecology-in-manchester/.
- Gordon-Nesbitt, R. (2012) Value, Measure, Sustainability: Ideas Towards the Future of the Small-scale Visual Arts Sector, December 2012, Common Practice. Retrieved from: http://www.commonpractice.org.uk/wp-content/uploads/2014/11/Common-Practice\_Value\_Measure\_Sustainability.pdf.
- Higgs, P., Cunningham, S. and Bakshi, H (2008) *Beyond the Creative Industries: Mapping the Creative Economy in the United Kingdom*. London: Nesta.
- HM Treasury (2014) *Autumn Statement*. London: HMT. Retrieved from: https://www.gov. uk/government/publications/autumn-statement-documents (accessed 24 July 2015).
- Jones, S. (2011) "Too many artists?" Transcript 1 from Too Many Artists: A Public Debate'. Available from: http://marketproject.org.uk/too-many-artists-transcript-part-i/.
- Knudsen, B., Florida, R. and Stolarick, K. (2005) Beyond Spillovers: The Effects of Creative Density on Innovation. Retrieved from: http://www.creativeclassgroup.com/ rfcgdb/articles/Beyond\_Spillovers.pdf.
- Kretschmer, M., Singh, S. Bently, L. and Cooper, E. (2011) Copyright Contracts and Earnings of Visual Creators: A Survey of 5,800 British Designers, Fine Artists, Illustrators and Photographers. University of Cambridge and Bournemouth University. Full report available from: https://microsites.bournemouth.ac.uk/cippm/files/2011/05/ DACS-Report-Final1.pdf.
- McGregor, S. (2014) Homegrown Talent: Who Cares? Axis. (Online) Retrieved from: http://www.axisweb.org/features/news-and-views/the-rant/rant-85/ (accessed 10 June 2015).
- Markusen, A. (2006) 'Urban development and the politics of a creative class: evidence from the case study of artists', *Environment and Planning A*, 38 (10): 1921–40.
- Markusen, A. and King, D. (2003) The Artistic Dividend: The Arts' Hidden Contributions to Regional Development Minnesota. Project on Regional and Industrial Economics, Humphrey Institute of Public Affairs, University of Minnesota.
- Menger, P. (1999) 'Artistic labor markets and careers', *Annual Review Sociology*, 25: 541–74.
- Mulholland, N. (2001) 'Aperto Manchester', Flash Art, 36 (232): 69-71.
- Oakley, K. (2009) 'From Bohemian to Britart art students over 50 years', *Cultural Trends*, 18 (4): 281–94.
- Oakley, K., Pratt, A. and Sperry, B. (2008) The Art of Innovation. London: Nesta.
- Powell, J. (2007) 'Creative universities and their creative city-regions', *Industry and Higher Education*, 21 (6): 323–35.
- Pratt, A. (2005) 'Digitisation and Face-to-Face Interactions: The Example of the Film Industry in London'. Unpublished.
- Pratt, A. C. (2008) 'Creative cities: the cultural industries and the creative class', Geografiska Annaler Series B – Human Geography, 90B (2): 107–17.
- Shillingford, F. and Lee, K. (eds) (2001) Monitor. Manchester: Monitor.
- Simpson, R. (2001) 'Life is good in Manchester', Art Review, LII: 34-7.
- Slater, A. and Lee, K. (2014) *Artists in Greater Manchester*. Manchester: Castlefield Gallery Publications.
- Slater, A., Ravetz, A. and Lee, K. (2013) Analysing Artists Continual Professional Development in Greater Manchester: Towards an Integrated Approach for Talent Development. Manchester: Castlefield Gallery Publications.
- Soja, E. W. (1996) *Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places.* Cambridge, MA: Blackwell.

- Spriggens, T. (2012) *Artist Salary Research* (Online) Available from: http://www.dacs.org. uk/latest-news/artist-salary-research?category=For+Artistsandtitle=N (accessed 10 June 2015).
- Stark, P., Gordon, C. and Powell, D. (2013) *Rebalancing Our Cultural Capital*. Independent report available from: http://www.theroccreport.com.
- Summerton, J. (1999) Artists at Work: A Study of Patterns and Conditions of Work in the Southern Region. Winchester: Southern Arts Board.
- Throsby, D. (2010) *The Economics of Cultural Policy*. Cambridge: Cambridge University Press.
- Throsby, D. and Hollister, V. (2003) Don't Give Up Your Day Job. An Economic Study of Professional Artists in Australia. Strawberry Hills, NSW: Australia Council for the Arts.
- Towse, R. (1995) *Economics of Artist's Labour Markets*. London: Arts Council of England. Universities UK (2010): *Creating Prosperity: The Role of Higher Education in Driving the*
- UK's Creative Economy. London: Universities UK.
- Valentine, G. and Harris, C. (2014) 'Strivers vs skivers: class prejudice and the demonisation of dependency in everyday life, *Geoforum*, 53: 84–92.
- Volkerling, M. (2012) Assessing the Value of Cultural Investment: Towards a New Policy Model, in VII International Conference on Cultural Policy Research, Barcelona, 9–12 July.
- Wenger, E. (1998) Communities of Practice. Cambridge: Cambridge University Press.
- Willetts, D. (2013) *Robbins Revisited: Bigger and Better Higher Education*. London: Social Market Foundation.
- Williams, R. J. (2001) 'Anything is possible: the Annual Programme 1995–2000', in S. Grennan (ed.) Life Is Good in Manchester. Salford: Trice Publications, pp. 7–15.