

# Creative Graduates and Creative Cities: Exploring the Geography of Creative Education in the UK

Roberta COMUNIAN & Alessandra FAGGIAN



**Roberta COMUNIAN, King's College London, UK**

Roberta Comunian is Lecturer in Creative and Cultural Industries at the Department of Culture, Media and Creative Industries at King's College London. Dr Comunian's work focuses on the relationship between arts, cultural regeneration projects and the cultural and creative industries. Her research has been published in *Urban Studies*, *Regional Studies* and *Cultural Trends*. She is currently leading an AHRC research network exploring the connections between Higher Education and the Creative Economy and has published extensively on the career opportunities and patterns of creative graduates in the UK. She is member of the editorial board of the *Creative Industries Journal* and member of the Research and Evaluation Committee of Creative Skillset (UK). Contact: Roberta.Comunian@kcl.ac.uk



**Alessandra FAGGIAN, Ohio State University, USA**

Alessandra Faggian is Associate Professor at the Ohio State University, AEDE Department and co-editor of *Papers in Regional Science*. Dr Faggian's research interests lie in the field of Regional Economics, Demography, Labor and Education. She published on topics such as migration, human capital, labor markets, creativity and local innovation and growth. She has co-authored over 50 articles, which appeared in *Oxford Economics Papers*, *Cambridge Journal of Economics*, *Regional Studies*, *Papers in Regional Science* and *Journal of Regional Science*. Her work has been highly cited. She is on the editorial board of *Journal of Regional Science* and *Regional Science, Regional Studies*. In 2013 she was appointed by the European Commission as juror to select the European Capital of Innovation 2014. Contact: faggian.1@osu.edu

## ABSTRACT

Increasing attention has been placed on the role of universities in the creative economy. In particular, as more and more cities claim their creative and cultural value, it is important to consider what role universities can play in shaping and fostering this value. Taking in consideration the broader literature about universities' contribution to local and national economies, the present paper focuses on their interconnection with the creative economy and creative industries. Linking the emerging discourses on the creative economy with the one on urban development, we adopt the concept of the creative city as the manifestation of these creative and cultural activities at the urban level. Using student micro-data collected by the Higher Education Statistical Agency (HESA) in the United Kingdom the paper highlights the role of universities in attracting graduates in creative disciplines to study in specific cities and maps their ability to retain this talent and to offer them work opportunities in the creative sector.

**Keywords:** Creative graduates, Creative city, Talent, Higher education, University, Human capital

## 1. INTRODUCTION

The influence of universities on their local areas has been explored from a variety of perspectives. Whilst there is a general acknowledgment of their contribution to the economic, social and cultural development of cities and regions, describing and quantifying this contribution is a challenging task. Various attempts have been made by researchers in different disciplines including economists (Preston & Hammond, 2006), social scientists (Chatterton, 1999) and regional development specialists (Charles, 2006; Cramphorn & Woodlhouse, 1999) and it is now clear that the picture is very complex because of the overlapping synergies, benefits and opportunities created by the HEIs in their local areas. Chatterton and Goddard (2000, p.493) emphasize this by defining HEIs as “repository of knowledge about future technological, economic and social trends and can be harnessed to help the region understand itself, its position in the world and identify possible future directions”.

In this paper we investigate the relevance of the interconnection between universities and their local context with specific reference to the creative economy literature and the concept of ‘creative city’. Initial research in the UK shows that universities are key actors in developing sustainable creative (Arts Council of England, 2009; Noble & Barry, 2008).

A great deal of attention has also been placed by policy makers and think-tanks on the role played by universities (and specifically arts and humanities subjects) in fostering the ‘creative economy’ in the UK (Million +, 2008; Universities UK, 2010). As the creative economy is currently being presented as one of the leading success stories of the UK economy (The Work Foundation, 2008), linking university research to this sector has become strategically important for HEIs, to be able to access funding opportunities

and partnership with local authorities and external organizations<sup>1</sup>.

Examples of collaborations between creative industries, universities and local policy makers are becoming more common and, as a result, the ‘triple helix’ approach is now a reality also within the cultural and creative economy (Comunian, Taylor, & Smith, 2013) .

Alongside this economic development perspective, further literature – mainly from the US – underlines the role of universities in promoting the arts, particularly in relation to engaging students, exploring the practice and boundaries of creativity (Stanford Arts Initiative, 2007) and involving other local communities in creative activities on campus (Cantor, 2005). Recent reports from *Imagining America* also highlights the role played by public engagement of academics in this area (Haft, 2012).

Examples of collaborations between universities and the creative sector are not restricted to the UK and the US. Cunningham et al. (2004) studying the case of the “Creative Industries Precinct Project” within the Queensland Institute of Technology in Brisbane, Australia, shows how universities can provide support for R&D activities in the creative economy. The initiative presents itself as “Australia’s first site dedicated to creative experimentation and commercial development in the creative industries”<sup>2</sup> led by a university. The debate has also become part of a broader international agenda, demonstrated by the international seminar organized by the British Council in Singapore in 2012 with the title “Higher education and the creative industries: UK-Asian perspectives”.

However, while all these contributions recognize the importance of universities knowledge spillovers and collaborations with private and public actors to foster the local creative economies,

<sup>1</sup> In 2011 the AHRC launched a new initiative ‘Knowledge Exchange Hubs for the Creative Economy’ investing over £16m over four years. These hubs ‘will be charged with the task of building new partnerships and entrepreneurial capacity in the Creative Economy and increasing the number of arts and humanities researchers actively engaged in research-based knowledge exchange’ (AHRC press release, 16 August 2011 available at <http://www.ahrc.ac.uk/News/Latest/Pages/boostforresearchersUKCreativeEconomy.aspx> accessed 21/03/2012)

<sup>2</sup> Details on the project and programs offered are available on the QUT Creative Industries Precinct website: <http://www.ciprecinct.qut.edu.au/about>

they seem to overlook the most important role of universities, i.e. as a conduit for bringing potential creative practitioners into a region, educate them and produce high quality 'creative human capital', i.e. young graduates educated in creative and artistic subjects.

In the present paper therefore we aim to explore the relationship between universities and the creative *locale* analyzing the 'production' and retention of 'creative graduates' (i.e. individuals who obtained a degree in a creative discipline such as creative arts, performing arts, design and others). We explore in detail the location and migration choices of these graduates and their connection with the city they live and work in.

## 2. THEORETICAL BACKGROUND: FROM THE CREATIVE CITY TO CREATIVE CLASS AND THE ROLE OF UNIVERSITIES

The concept of the creative city has proved very appealing for academics and policy makers in the last fifteen years (Markusen, 2006; Peck, 2005). However, as Pratt (2008) suggests there is still confusion on the definition and interpretation of this concept.

It is important to recognize that the first formulation of the concept of 'creative city' is to be attributed to the work by Bianchini and Landry (1995). In their contributions, the concept of 'creativity' was presented in its broadest sense, as 'thinking outside the box' and solving everyday problems in 'innovative ways'. It was argued that creativity could assist in regenerating cities.

As the word 'creative' gained popularity, it started being used in different contexts with slightly different meanings. The publication of the DCMS document on 'creative industries' in 1998 and the work by Florida on 'creative class' (2002b), the focus shifted from cultural infrastructures

and consumption of cultural goods to creative production and people. Thereafter, the key to success for cities is seen in attracting and retaining skilled labor as driver for the new "knowledge and creative economy". Florida (2002a, 2002b) suggests that the economic success of a city is determined by the presence of the 'creative class'. The 'creative class' encompasses a wide range of professionals, of which creative industries workers are only a small proportion<sup>3</sup>. The focus is here not on specific industries but on individuals, who have the ability of generating spillovers and innovation within specific regional or urban contexts (Stolarick & Florida, 2006). For Florida the possibility of creating new creative ideas is not confined to people having formal qualification but is instead linked to what they do professionally.

However, critics of the theory (Glaeser, 2005) have highlighted the overlap and strong correlation between the 'creative class' and the well-known concept of human capital. If we focus on the creative workers specifically, this overlap is even stronger. A report by NESTA (2003) has highlighted how creative workers in the UK are a highly educated group (43% having a tertiary qualification or higher degree compared with the average 16% of the total workforce). Thereafter, the term 'creative city' is now often interpreted as a city with a high presence of - or potential to attract - the creative class. There is still a small link with infrastructures, as Florida suggests that, in order to appeal to the creative class, cities should foster a cultural climate, promote diversity, and offer cultural entertainment<sup>4</sup>. The present paper acknowledges the complementary role of these different interpretations of 'creative cities' and argues for a better understanding of the interconnections between the infrastructure and image, "cultural consumption oriented" creative city and the human capital and creative communities, "creative production oriented" creative city. In particular it engages with the need to consider how the cultural and creative assets of

<sup>3</sup> In Florida's own words at the core of the creative class there are 'people in science and engineering, architecture and design, education, arts, music and entertainment, whose economic function is to create new ideas, new technology, and/or new creative content', but also 'the creative professionals in business and finance, law, healthcare and related fields. These people engage in complex problem solving that involves a great deal of independent judgment and requires high levels of education or human capital' (Florida 2002b, p.8).

a city as well as its cultural producers are part of a local arts ecology (Markusen, 2010) and therefore they are involved in a complex set of reinforcing or feedback relations (Comunian, 2011). Within this arts ecology it seems important to consider also the role played by universities.

It is clear that universities are important in building both the physical and human resources infrastructures for the creative city and that they do it in a variety of ways. Although it is impossible to provide a comprehensive list of the ways in which universities contribute to make a city more 'creative', we propose a classification which partially mirrors the definitions of creative city presented above. In particular, we identify two key dimensions of this contribution.

As we know from the literature cities are in competitions with each other in offering their citizen and visitor new cultural experiences. Universities contribute to the landscape of cultural consumption and provision of the city. They are actively engaged in the provision of cultural goods either directly or via collaborations and partnerships with the local cultural infrastructures and communities. Chatterton (1999) underlines that universities have traditionally been well positioned in providing the city with cultural facilities, such as art galleries and theatres, but more recently they have taken this role further including a wider range of cultural facilities, such as music venues, rehearsal spaces and theatres. The cultural opportunities offered by both the city and the universities are often interrelated and self-reinforcing. In many UK cities universities are making new capital infrastructure investments specifically in these areas (i.e. a new theatre The Stage build by the University of Leeds, a new School of Arts at the University of Kent including art gallery open to the public, plans for the John Hansard Gallery based at the University of Southampton to move to the city center as part of new cultural quarter and others).

If we adopt a creative production view and consider the 'creativity' of a city or place in relationship to its ability to produce new innovative creative outputs and being the seedbed of a strong creative sector, universities still play a major role. They do so from two different perspectives: firstly, as providers of knowledge and innovation (mainly in the form of knowledge spillovers) and providers of human capital (in the form of skilled creative workers). In the field of culture and arts & humanities, this innovation and knowledge transfer perspective has been overlooked and only recently some contributions both on the academic (Crossick, 2006; Cunningham, 2004; Taylor, 2005) and policy side (NESTA, 2007) addressed it. The arguments of Asheim and Clark (2001) suggest further that local competitive advantage is linked to the ability of creating new knowledge which is based both on creativity and research and development. Even if authors criticize the 'creative city' argument as dangerous marketing tool underlining the social costs of these policies in terms of gentrification and displacement, they clearly link its possible development to an embedded approach with knowledge development and learning economies.

A relatively under-explored area so far is the role of universities in producing highly skilled creative workers. As Faggian and McCann (2006, 2009) argue the primary role of the university system is being a conduit for bringing potential high quality undergraduate human capital into a region. The benefits of having a highly skilled labor pool far outweigh the benefits generated by knowledge spillovers. Hence, attracting and retaining higher human capital and creative individuals can be seen as a more effective and long-term strategy for local economic development (Mathur, 1999). Florida (2002b) suggests that this higher human capital level has connections also with the kind of urban environment and cultural setting that highly educated individual look for when making a location choice.

<sup>4</sup> This is articulated further in the three Ts indexes: technology, talent and tolerance are the proxy by which the ability of a city to attract creative class can be measured and implemented.

Overall, it is clear that the relationship between HEIs and the creative city – and their contribution to the creativity of various locations is a complex and multi-layered issue. In the present paper, we use the concept of ‘bohemian graduate’ as a key to better understand the connections between these dimensions. In particular, bohemian graduates are relevant to many of these theories and perspectives as they are the means via which universities knowledge and impact can be transferred to the local economies.

### 3. RESEARCH FRAMEWORK AND DATA: THE CREATIVE GRADUATES, LOCATION CHOICES AND CREATIVE CITIES

The literature suggested a clear gap in the relationship between university and the creative city concepts in relation to the attraction (and potential retention) of creative graduates (Ball, Pollard, & Stanley, 2010; Comunian, Faggian, & Jewell, 2011; Faggian, Comunian, Jewell, & Kelly, 2013). Of course, the interconnections between creative human capital and location have been for years a heated terrain of debate for economists (Scott, 2010; Wojan, Lambert, & McGranahan, 2007). Our research does not aim to infer causality but simply to take a snapshot of the location and migration dynamics of creative graduates in relation to a key characteristics (or definitions) of the creative city. We believe this is an important preliminary work to enable future research to investigate further the relationship between these two concepts and their dynamics. In particular we address the following questions:

- (1) Where students in creative subject concentrate to undertake their creative degree? Are these locations ‘creative cities’ and if so in which way?
- (2) How successful are the areas with the best provision of creative courses in retaining their creative graduates?

- (3) What places offer the best opportunities to enter a creative occupation? Are these creative occupations just restricted to few creative cities?

In order to clarify our research framework and the data used in the paper, we need to clarify the concept of ‘creative graduate’ (with consideration also his/her migration patterns) and the data we will use in the paper and the concept and our working definition of creative city.

#### 3.1 Creative Graduates, Location Choices and HESA Data

Creative graduates, i.e. graduates who obtained a degree in a creative subject (creative arts, performing arts, design, mass communications, multi-media, software design and engineering, music recording and technology, architecture and landscape design) can be considered as the intersection between creative class, creative industries and human capital. They are at the core of the creative class (as they aspire to enter cultural and creative jobs) and they are investing in a degree (so aiming to achieve higher level of human capital). The relationship of the concept of ‘creative graduate’ in relation to the creative industries and creative occupations is slightly more problematic. The paper postulates that creative graduates aspire to enter creative occupations (Oakley, 2006). While it might be possible for creative graduates to have other career patterns and opportunities, we assume that having spent three years in developing specific creative skills at higher education level, their first career choice would be to enter a creative occupation<sup>5</sup> (either within the creative industries or in other sectors).

The DCMS framework (2009) is used to identify occupations within the creative industries (through Standard Industrial Classification codes) and creative occupations outside the creative industries (using Standard Occupation Classification codes). Furthermore, it is clear that

<sup>5</sup> We acknowledge that this definition has quite a few limitations (see for further discussion Oakley, 2006) and might not be applicable to other countries but considering that our analysis is set in the UK, this seems to be the most suitable definition to adopt. Therefore, it is important to clarify that ‘creative occupations’ here are not defined as occupations that are creative (this could include for instance scientific inventions and other creative jobs) but as occupation within the creative (and cultural) sector as defined by the DCMS.

the location choices made by creative graduates are important when studying the impact of universities on the creativity of cities, because of the embodied knowledge and skills they possess. Not only they studied a 'creative' subject at degree level, they often combine this with a passion and therefore might be attracted to places which offer a wider range of cultural opportunities. Because of their interest and passion for creative activities, they constitute a 'sophisticated consumer demand' (Porter, 1998) for the local cultural services and hence can become consumers and 'pro-sumers' in local cultural production.

Students are faced with two fundamental migration decisions, one upon 'entering' higher education, the second upon 'leaving' it. When a prospective student decides they want to enroll in a creative course, their first decision is whether to stay in the local area or migrate to study in another city. This is obviously dependent on a series of considerations including the provision of creative courses in their local area.

In reference to creative graduates, our empirical analysis is based on data collected by the Higher Education Statistical Agency (from now on referred to as HESA). Two different datasets are used. Firstly, we employ the 'Students in Higher Education' data stream - which includes 1,723,260 student records for students enrolled in undergraduates courses in 2007 across the 166 British HEIs - to build a picture of the provision of 'creative courses' in the UK. For each student, the survey includes information on personal characteristics (such as age, gender, ethnicity), course characteristics (including subject studied at 4-digit JACS code<sup>6</sup>, mode of studying, i.e. full-time or part-time, institution attended, final grade achieved for finalists) and location of parental domicile (at unit postcode level). According to the JACS codes, 12.24% (29,689) of the students who graduated in 2007 were registered for a 'creative' course either in 'media' (JACS code P) or 'arts and

design' (JACS code W). To present the geography of 'creative' higher education provision in the UK, we analyze the student data at NUTS 1 level, as here the focus is on the critical mass and concentration of institutions and provision at the regional level. Considering that, as Charles (2003) suggests, the regional dimension is becoming more and more important in recent years in defining universities' missions, this geographical level seems the most appropriate.

The UK offers a wide range of courses and degrees for students interested in undertaking creative subjects and degrees. In this geography the role of London as a 'creative capital' cannot be ignored and in fact appears to be dominant, there are other creative cities in the UK whose 'pull effect' on students should not be disregarded.

In exploring graduates location choices after graduation (and their employment patterns) we then combine the 'Students in Higher Education' data stream with the 'Destination of Leavers from Higher Education Institutions' (also known as DHLE) for students who graduated in the year 2007. The DHLE provides us with information on graduate employment between six and eighteen months after graduation. For the academic year 2006/07 information on 332,110 graduates was collected and it included not only the salary and location of their job, but also a brief description of their tasks and the SOC4 and SIC4 codes of their occupation. In the final combined database we had 242,470 'valid' cases (i.e. with no missing information). The location and migration decisions of graduates are presented at NUTS3 regional level. This allows a more detailed view of the local/urban dynamics and helps identifying more clearly where graduates tend to cluster. After graduation, creative graduates are faced with a further location decision: staying in the city where they studied or move elsewhere. One of the main determinants of this decision is the availability of creative jobs both locally and in other locations.

<sup>6</sup> For more information on the Joint Academic Coding System (or JACS) see [http://www.hesa.ac.uk/index.php?option=com\\_content&task=view&id=158&Itemid=233](http://www.hesa.ac.uk/index.php?option=com_content&task=view&id=158&Itemid=233)

The location choice for jobs should therefore reflect the geography of the creative economy, i.e. graduates should be attracted to cities and places able to offer jobs in creative occupations. In this sense, 'creative cities' should have an advantage in attracting them and might benefit from a self-reinforcing virtuous cycle.

### 3.2 Creative Cities: From Definition to Data

As discussed in the literature the definition of the creative city is no univocal and depending on whether authors want to focus on production or consumption, different perspectives and measures are adopted. Therefore, in this paper, we aim to adopt a multiple perspective, to capture these different dimensions of the creative city. In linking the location choices of students and graduates to the creativity of an area, we use the indexes proposed by Clifton (2008) as measures of the 'creative city' phenomenon. Clifton (2008) critically applies a methodology à la Florida to provide insights into the creative class in UK. He proposes three different indexes. It is easy to see that these indexes correspond to diverse interpretations of the creative city and hence allow us to test the relationship between the bohemian graduates' location choices and these interpretations. These are:

(1) **The creative city as city of 'cultural consumption'**: Clifton (2008) 'cultural opportunity index' (i.e. the proportion of employees in the cultural and recreational industries within an area) is used to measure the level of employment in recreational, cultural and entertainment sectors, which is linked to the interpretation of the creative city as a place of cultural consumption (Bell & Jayne, 2004) and the flourishing of tourism and entertainment economies around cities' cultural investments (García, 2005);

(2) **The creative city as city of 'cultural production'**: Clifton (2008) calculates the 'bohemian index' (based on the bohemian index by Florida,

2002a) as the level of employment in artistic and creative occupations using the Standard Occupational Classification 2000 and the DCMS guidelines (DCMS, 2009). The view that a creative city is a place where production activities in the creative economy concentrates is supported by many in the literature (Montgomery, 2005), especially in relation to the study of creative industries and their production systems (Markusen, 2006; Pratt, 2008);

(3) **The creative city as the 'knowledge economy city'**: Clifton (2008) 'creative professional index' is closely related to the concept of 'creative class' (Florida, 2002b) and is linked to the interpretation of a creative city as a place able to attract creative workers and professionals. This interpretation is also shared by Hospers (2003) and Musterd and Ostendorf (2004) in their contribution about the creative cultural knowledge cities.

## 4. RESULTS: STUDYING & FINDING WORK IN THE CREATIVE CITY

The data and results are here articulated in four parts. Firstly, we explore the issue of provision and looks at the spread of courses and students across the UK. We look specifically at regional concentration but also explore the role played by specific institutions in this landscape. Secondly, we introduce our graduate data to highlight the size of our sample and its characteristics. More importantly we consider the mismatch between creative graduates' occupations and entering the creative economy. Thirdly, we consider the geography of creative graduates after graduation. We consider this in two steps, where creative graduates decide to locate (or stay) and where the graduates who find a creative job are located. Considering not only location but also the job opportunity a location might offer. Finally, we consider the relationship between decision to locate by students and the indexes offered by Clifton (2008) to measure the creative city.

#### 4.1 The Geography of University Provision in Creative Subjects

First, using HESA data we have explored the provision of university courses in the UK in the creative subjects. As shown in Table 1, it is clear that the provision is not uniform but highly concentrated. In absolute terms, Greater London and the South East attracted 37% of the total UK number of students in these disciplines in 2007. Greater London on its own accounted for 24%. The North West and Yorkshire follow with about 10%, while last are the North East and Northern Ireland. However, it is clear that these percentages partially reflect the size of the student population of each region.

A different geography emerges when looking at the concentration of creative students as a percentage of the number of students in the region (Table 1, column 5). Though Greater London still shows the highest 'specialization' in creative courses, the role of other regions emerges. The

South West, maybe unexpectedly, has over 13% of students enrolled in creative courses and both the East Midlands and Wales have a percentage of creative students above the national average. Northern Ireland still has the lowest percentage.

It is important to notice that, in certain regions, some 'specialized' institutions dominate the scene. If we look at the geography of the most important universities in terms of absolute number of creative students (Table 2), it is clear that the University of the Arts in London has a dominant role with over 12,000 students enrolled (almost 7% of the national total). Formerly known as the London Institute, this recently established university (it gained university status in 2004) comprises six separate colleges: the Camberwell College of Arts, Central St Martin's College of Art & Design, Chelsea College of Art & Design, London College of Fashion and the London College of Printing. It claims to be the largest university in the field not only in UK but in Europe. While the size might

**Table 1 Bohemian graduates student numbers per UK regions**

Region	Population (Census, 2001)	Total Students	Bohemian Students	% Bohemians in the Region	% Over Total No. Bohemian Students in UK
Greater London	7,172,036	281,905	44,420	15.76	24.00
South East	8,000,550	248,700	23,995	9.65	13.00
North West	6,729,800	189,375	19,605	10.35	10.60
Yorkshire & the Humber	4,964,838	163,555	16,845	10.29	9.10
South West	4,928,458	121,100	15,920	13.15	8.60
East Midlands	4,172,179	111,335	12,545	11.27	6.80
Scotland	5,062,011	164,130	11,235	6.85	6.10
West Midlands	5,267,337	128,270	10,980	8.56	5.90
Wales	2,903,085	93,265	10,365	11.12	5.60
East of England	5,388,154	105,925	10,440	9.85	5.70
North East	2,515,479	78,270	6,560	8.38	3.60
Northern Ireland	1,685,267	37,430	1,840	4.91	1.00
<b>UK Total</b>	<b>58,789,194</b>	<b>1,723,260</b>	<b>184,750</b>	<b>10.72</b>	<b>100.00</b>

Source: HESA (2007)

**Table 2 Top ten ‘creative’ HEIs**

No.	Institution	Region	Total Number of Bohemian Graduates	% National Bohemian Students
1.	University of the Arts, London	Greater London	12470	6.80
2.	University for the Creative Arts	South East	4795	2.60
3.	Middlesex University	Greater London	3800	2.10
4.	Southampton Solent University	South East	3610	2.00
5.	The Nottingham Trent University	East Midlands	3475	1.90
6.	De Montfort University	East Midlands	3395	1.80
7.	The Manchester Metropolitan University	North West	3350	1.80
8.	The University of Central Lancashire	North West	3320	1.80
9.	Birmingham City University	West Midlands	3120	1.70
10.	The University of Salford	North West	3075	1.70

not be comparable with the University of the Arts, the other institutions in the top 10 still educate a considerable number of creative students (more than 3,000 each, which represents about 2% of the total number educated in the UK). The geographical spread is also interesting. Although the top four institutions are located either in Greater London or in the South East, the North West and the Midlands are also well-represented (with three institutions each and a total number of enrolled students around 10,000).

The role of Greater London is clear not only when we look at the absolute number of creative students, but also when we look at the location of smaller but highly specialized colleges. For example in the UK there are 21 higher education institutions whose percentage of students enrolled in creative courses is above 50%, eight of them educate exclusively creative students. Of these highly specialized institutions, ten are based in the Greater London area. This means that in Greater London not only the number of places is larger, but there is also a wider variety of options for students who want to study a creative subject, hence adding to the general feeling of London being a ‘creative city’. It is therefore easier for

Greater London to attract these students and, later on, retain them after graduation.

#### 4.2 Creative Graduates: Data and Occupational Mismatch

In the year 2007 around 12% of students obtained a degree in a creative subject (as defined above). Around another 2% graduated in combined subjects which included a creative component. In absolute numbers, this means that over 33,000 creative graduates were produced by UK HEIs to be allocated to the job market (see Table 3).

As argued before, we are interested in considering the employment patterns of these creative graduates and specifically whether they enter or not creative occupations. As it is clear from Table

**Table 3 Number of graduates in the sample by the subjects they studied**

Subject	No. Graduates	%
Non creative subjects	208,481	85.98
Partially creative subjects	4,299	1.78
Creative subjects	29,689	12.24
Total valid obs.	242,469	100.00

4, there seems to be a considerable mismatch between occupations and qualifications. While the large majority of non-creative graduates (almost 88%) is employed in non-creative industries as expected, only just over half of the creative graduates (50.69%) find a job in the creative industries or in a creative occupation outside the creative industries. If we then look at the total number of creative occupations taken by creative (or partially creative) graduates vs. non-bohemian graduates, we notice that around 60% of the jobs are taken by non-bohemian graduates.

There might be various explanations behind this ‘mismatch’. It is widely acknowledged, for instance, that the creative industries are a very diverse collection of sectors which includes more business service oriented sectors (such as advertising or design), but also some strongly technological driven sectors (such as the game industry or the media sector) which require a wide range of technical skills alongside purely creative ones. Caves (2000) argues that one of the main characteristics of creative industries it is, in fact, this requirement for a very diverse range of skills. This could explain the large number of non-creative graduates employed in the creative industries. As Higgs et al. (2008) argue, however, it is also true that creative skills are employed widely in all sorts of sectors, above and beyond the creative industries sector. Although this would not explain why almost half our creative graduates find a job in a non-creative occupations, it can be argued that some of creative skills mastered

by creative graduates have a wider application in the knowledge economy (Oakley, Sperry, & Pratt, 2008). It is important to understand the relationship of these findings with geography, exploring where creative graduates locate and where creative occupations are concentrated.

#### 4.3 Creative Students’ and Graduates’ Location Choices: Should I Stay or Should I Go?

Now that we have provided a brief description of the provision of creative courses in the UK, it is interesting to turn our attention to the location choices of creative graduates. The DHLE HESA data provide us with information on graduates’ job location between 6 and 18 months after graduation. Although we recognize that this is a relatively short period, it still gives us insights on the ability of regions to retain their creative graduates in the short term. As Figure 1 shows, and as expected, a high percentage of creative graduates choose to work in the London area, followed by Greater Manchester and the South East. The urban environment with its ‘buzz’ is vital for artists (Pratt, 2004a) and city environment offers a wider cultural infrastructure as well as creative networks and informal learning environment for creative practitioners. It also provides a wider range of job opportunities and contracts that is essential for creative graduates to develop their portfolios and make a living. What is interesting, however, is the role of other ‘regional’ hubs such as Cardiff, Leeds and Newcastle. Newcastle – benefiting from the cultural investments taking place

**Table 4 Matching between bohemian graduate and creative occupations**

Graduates	Jobs			
	Non Creative Occupations	%	Creative Occupations	%
Non bohemian	183,168	87.96	25,070	12.04
Partially bohemian	2,700	62.86	1,595	37.14
Bohemian	14,621	49.31	15,033	50.69
Total no obs.	200,489		41,698	

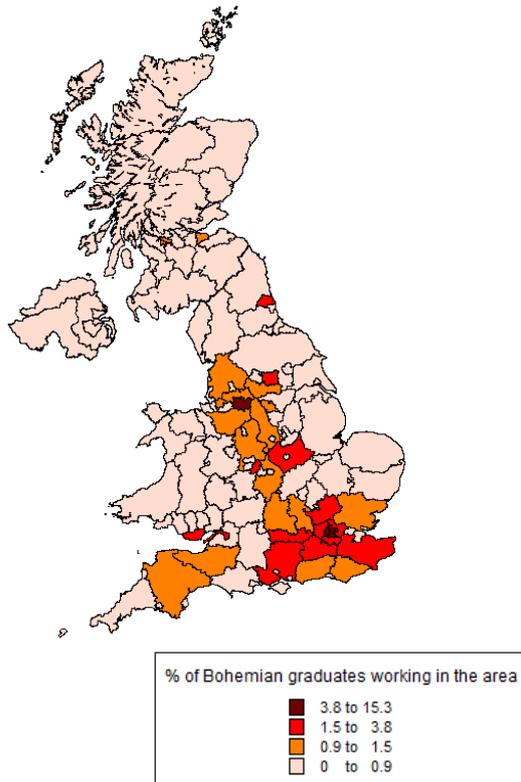


Figure 1. Percentage of creative graduates (over total) working in the area

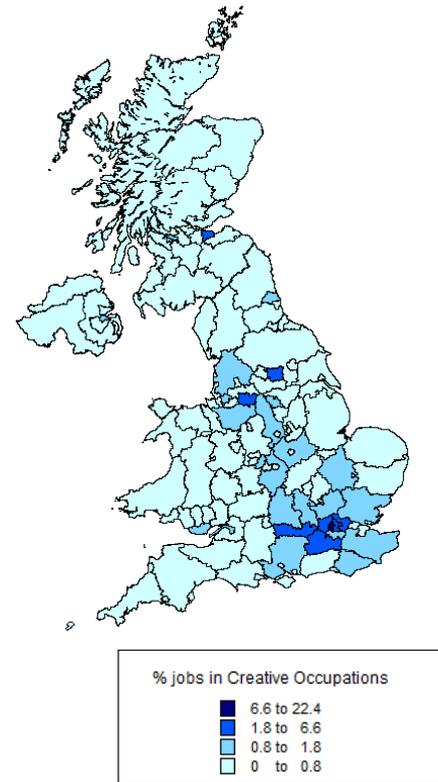


Figure 2. Graduates (over total) working in creative professions

mainly in Gateshead - has been able to develop a strong profile as 'creative city' (Minton, 2003), which can be clearly seen in its ability to attract students in this field. However, the lower profile in reference to creative occupations, highlights the difficulty to create a stronger profile in the creative economy despite the policy rhetoric (ONE North East, 2007)

What Figure 1 does not show, however, is in what kind of professions these creative graduates are employed in. Figure 2 shows the geographical distribution of graduates working in creative occupations (as defined by DCMS 2009). When comparing the two maps, some similarities are clear. The role of London and the South East is confirmed, together with Manchester and Leeds. Two are the main differences emerging from the comparison of Figure 1 and 2. Firstly, Cardiff has less of a concentration of creative

occupations than Bohemian graduates, while the opposite holds for the city of Edinburgh, which benefit from being a recognized center for performing arts and literature. Both cities enjoy a position of cultural capital within their national boundaries and this emerges in the maps, as their surroundings do not present similar profiles. Secondly, creative occupations seem to be even more concentrated in the Greater London area than creative graduates.

To check this, Table 5 presents the top 20 areas in terms of percentage of creative students enrolled in local universities, percentage of creative graduates in the local labor force and percentage of graduates working locally in creative occupations. The West part of Inner London tops all three rankings, even though the percentage (and hence absolute number) of graduates working in creative occupations is more than double the

**Table 5 Creative students, graduates and creative occupations: Top 20 areas**

	<b>Bohemian Students</b>	<b>%</b>	<b>Bohemian Graduates</b>	<b>%</b>	<b>Creative Occupations</b>	<b>%</b>
1.	Inner London - West	10.44	Inner London - West	15.27	Inner London - West	22.39
2.	Greater Manchester South	4.35	Inner London - East	5.46	Inner London - East	6.56
3.	Leeds	4.07	Greater Manchester South	3.81	Outer London - West a	3.88
4.	Outer London - West	3.63	Outer London - West	3.59	Greater Manchester South	3.74
5.	Inner London - East	3.62	Leeds	2.52	Surrey	2.04
6.	North and North East Somerset, South Gloucestershire	3.09	Outer London - East	2.02	Leeds	2.00
7.	Liverpool	3.04	Birmingham	1.98	Berkshire	1.93
8.	Leicester	2.88	Hampshire CC	1.93	Edinburgh, City of	1.88
9.	Sheffield	2.81	Surrey	1.83	Outer London - East	1.85
10.	Southampton	2.60	Tyneside	1.77	Hampshire CC	1.79
11.	Bournemouth and Poole	2.43	Kent CC	1.68	Oxfordshire	1.76
12.	Nottingham	2.41	Bristol, City of	1.61	Tyneside	1.65
13.	Birmingham	2.36	Outer London - South	1.55	Birmingham	1.62
14.	Lancashire CC	2.28	Cardiff and Vale of G	1.54	Hertfordshire	1.62
15.	Surrey	2.17	Hertfordshire	1.53	Glasgow City	1.52
16.	Tyneside	2.17	Berkshire	1.52	Bristol, City of	1.51
17.	Lincolnshire	2.08	Leicestershire CC and	1.52	Kent CC	1.35
18.	Outer London - South	2.03	Glasgow City	1.46	Essex CC	1.29
19.	Brighton and Hove	1.96	Edinburgh, City of	1.41	Cardiff and Vale of G	1.26
20.	Cardiff and Vale of G	1.92	Essex CC	1.38	Leicestershire CC	1.14

percentage of creative students. As such, this area of London appears to be the ‘mecca’ for the creative economy and the best location to get a creative type/artistic job. The other half on Inner London fairs relatively well in terms

of creative job market (both the percentage of creative graduates working there and percentage of graduates working in creative occupations are well above 5%) despite not having nearly as many ‘creative’ universities located there.

A recent report commissioned by London Higher (2005) suggests that “one of the special features of London’s unique higher education landscape is the strong link between the capital’s higher education institutions and businesses and agencies in the creative sector - whether through the depth and variety of related academic teaching and research, or through direct interaction with business and the community” (p.3).

Greater Manchester, on the opposite, ranks second for percentage of creative students trained, but third for percentage of creative graduates working in the local area and only fourth for percentage of graduates working in creative occupations. This seems to suggest that the local labor market for creative jobs is not strong enough to retain all the creative graduates educated by the local universities. This could also be linked to some potential occupational mismatch (Faggian et al., 2013) that might have further implication for the local creative economy.

In general the picture coming out from Table 5 is that creative occupations are a lot more concentrated in fewer areas - with Greater London accounting for over 34% - while higher education provision of creative subjects, despite still being skewed towards Greater London, displays a lower concentration level.

Of all the UK regions, London seems to be the location where employment patterns in the creative economy have been investigated more closely in the last decade. This is mainly due to the work of the Greater London Authority (GLA, 2002, 2004, 2007). A very provocative report with the title ‘London’s Creative Economy: An Accidental Success’ was also produced by the London Development Agency in 2007 (Kneill and Oakley, 2007). The GLA (2007) report highlights that London and the South East are estimated to include 57 per cent of all British creative workforce and that there is a high level of ‘embeddedness’ of

creative occupations within the creative industries with only 31% of creative occupations outside the creative industries (compared to 52% for the rest of the UK).

#### 4.4 Creative Graduates in the Creative City?

The last part of this section explores the relationship between students’ and graduates’ locations and the three measures of ‘city creativity’ à la Clifton (2008) introduced in the previous section, i.e. the Bohemian Index, the Creative Professionals Index and the Cultural Opportunities Index.

It is interesting here to compare how different ‘components’ or understandings of the ‘creative city’ have different connections with the creative graduates presence and location choice.

As Table 6 shows, there is a general positive correlation between students’ location choices (both to study and to work) and the proxies used to identify the ‘creative city’.

However, the size and significance of these correlations do differ. The creativity of a city is more highly correlated to the number of creative graduates and graduates in creative occupations than the number of creative students. This suggests two things. Firstly, city creativity is more likely to influence labor market conditions rather than higher education provision. Secondly, as seen before, the geographies of higher education provision of creative courses and creative jobs are not completely overlapping (and in fact the correlations between CS and the other two measures, CG and GCO, are respectively 0.82 and 0.79, which are lower than the correlation between the two graduates labor market indexes, CG and GCO (equal to 0.98). In other words, cities which have universities specialized in creative courses do not necessarily have a job market dominated by the creative sector. Another interesting result is that the ‘cultural opportunities’ index does

**Table 6 Correlations between creative students' and graduates' locations and indexes of city creativity<sup>7</sup>**

	Graduates' Locations			Creative City		
	<u>CS</u>	<u>BG</u>	<u>GCO</u>	<u>BI</u>	<u>CP</u>	<u>CO</u>
Creative Students (CS)	1.0000					
Creative Graduates (BG)	0.8208*	1.0000				
	0.0000					
Graduates in Creative Occupations (GCO)	0.7909*	0.9873*	1.0000			
	0.0000	0.0000				
Bohemian Index (BI)	0.6913*	<b>0.8250*</b>	<b>0.8225*</b>	1.0000		
	0.0000	<b>0.0000</b>	<b>0.0000</b>			
Creative Professionals (CP)	0.4209*	0.6161*	0.6050*	0.7063*	1.0000	
	0.0000	0.0000	0.0000	0.0000		
Cultural Opportunities (CO)	<b>0.2251*</b>	0.3282*	0.3471*	0.4317*	0.3766*	1.0000
	<b>0.0210</b>	0.0006	0.0003	0.0000	0.0001	

not exhibit a very high correlation with any of the other indexes and especially the measures of students' and graduates' location. The lowest correlation is between cultural opportunities and Bohemian students with a value of around 0.22 and a significant of 0.02. This seems to suggest that when students choose which HEI to attend a Bohemian course other factors (such as University quality) are more important. The consumption of cultural activities is not one of the main determinants of students' location choices. This could be linked to the fact that the cities with a more predominant cultural and entertainment sector are also the ones which are more attractive to tourists or outside visitors, which probably influence the house prices and cost of living and become unattractive to students. Perhaps more surprisingly, the correlations between the index of cultural opportunities and the locations of graduates (either Bohemians or working in creative occupations) are also not very high, although more significant. Without inferring any directional causality, this seems to imply that the concept of creative city as a place for 'cultural consumption' (broadly speaking) is not what Bohemian students and graduates are attracted to. Rather, they think of a 'creative city' as a place of 'cultural production' with a strong knowledge and creative sector.

## 5. CONCLUSIONS

This paper presents a first investigation of the link between the 'creative' higher education provision and 'creative cities'. This is an important issue because it bridges a gap in our understanding of the creative economy as a contextualized production system in which higher education and creative graduates play an important role.

Results suggest a general high degree of concentration in the spatial distribution of both the provision of creative higher education and the creative job market. Especially for the latter, the role of London is dominant confirming recent research on creative industries clusters (NESTA, 2009; Pratt, 2004b). Greater London and the South East of England have a leading role in the UK creative economy also thanks to a self-reinforcing mechanism stemming from the interaction between creative universities and the creative sector. Clearly these areas benefit from historical and infrastructural advantages in the creative higher education provision, and these advantages are well exploited by the local creative production system creating a long-lasting and embedded symbiosis. The fact that creative activities are highly concentrated in few, normally urban, areas raise issues of the role of policy

<sup>7</sup> The data provided by Clifton (2008) are used as percentage over the national figures (using the % or the LQ does not change our correlations as the two measures are proportional to each other). The correlation was only possible for England and Wales, where complete data series were provided.

makers in sustaining more peripheral areas where the creative economy is more of an aspiration than a reality. While creating new courses and infrastructures for creative subjects in old and new HEIs appears to be an easy solution, the issue of long-term sustainability and real job opportunities should be considered (Heartfield, 2005). Furthermore, 'creative city' policies might play a role in increasing local inequality when the need to attract the 'creative class' might clash with the needs of local residents and local artists (McCann, 2007). The literature also suggests that Bohemian graduates are likely to have more temporary, part-time and poorly paid jobs than other graduates and therefore the issue of sustainability and possible polarizations has never been more central (McRobbie & Forkert, 2009). The fact that the number of creative graduates and graduates working in creative occupations is more strongly correlated to the indexes of 'cultural and creative production' rather than 'cultural consumption' is yet another confirmation of the fact that creative universities and the local creative labor market work as an integrated system (although we are not able to infer causality).

The topic of the relation between creative human capital and location remain a contested area of debate (Florida, 2006; Scott, 2010; Wojan et al., 2007). However, our research has provided an initial investigation on the geography of creative graduates in the UK in relation to a key characteristics (or definitions) of the creative city. While this work was a first attempt to highlight the issues surrounding the role of universities in the creative city, our focus was specifically on the role of 'creative graduates' in the defining the contribution to local economies and creative cities. This is obviously a limited perspective that could be expanded and improved by considering the overall role of 'creative' universities in creative cities, including the role of research capacity and academic leadership and partnerships (Powell, 2007). Chatterton (1999) referring to research in

more artistic subjects states that "universities ... are one of the few remaining places where artistic experimentation and integrity is financially viable [...]; and their staff and student populations play a crucial role in sustaining the viability of many local cultural events and facilities". If this is the case, more research needs to be done to fully understand the relationship between higher education and the creative economy.

## REFERENCES

- Arts Council of England. (2009). *Capital case study: The creative foundation, Folkestone - Kent*. London: Arts Council of England (UK).
- Asheim, B., & Clark, E. (2001). Creativity and cost in urban and regional development in the 'new economy'. *European Planning Studies*, 9(7), 805-811.
- Ball, L., Pollard, E., & Stanley, N. (2010). *Creative graduates, creative futures* (pp. Available at [www.creativegraduates.com](http://www.creativegraduates.com) (last accessed May, 2010)). London: Creative Graduates Creative Futures Higher Education Partnership and the Institute for Employment Studies.
- Bell, D., & Jayne, M. (2004). *City of quarters: Urban villages in the contemporary city*. Aldershot: Ashgate
- Bianchini, F., & Landry, C. (1995). *The creative city*. London: Demos.
- Cantor, N. (2005). Collaborations on the creative "campus". Paper presented at the Conference on Campus-Community Art Connections and the Creative Economy of Upstate New York, Cornell University, Ithaca, New York.
- Caves, R. E. (2000). *Creative industries, contracts between art and commerce*. Cambridge, MA: Harvard University Press.
- Charles, D. (2003). Universities and territorial development: Reshaping the regional role of english universities. *Local Economy*, 18(1), 7-20.
- Charles, D. (2006). Universities as key knowledge infrastructure in regional innovation systems. *Innovation*, 19(1), 117 - 130.
- Chatterton, P. (1999). The cultural role of universities in the community: Revisiting the university - community debate. *Environment & Planning A*, 32, 165-181.
- Chatterton, P., & Goddard, J. (2000). The response of higher education institutions to regional needs. *European Journal of Education*, 35(4).

- Clifton, N. (2008). The “creative class” in the UK: An initial analysis. *Geografiska Annaler: Series B, Human Geography*, 90(1), 63-82.
- Comunian, R. (2011). Rethinking the creative city the role of complexity, networks and interactions in the urban creative economy. *Urban Studies*, 48(6), 1157-1179.
- Comunian, R., Faggian, A., & 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., Taylor, C., & 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*, DOI:10.1080/09654313.2013.790589.
- Cramphorn, J., & Woodhouse, J. (1999). The role of education in economic development. *Industry & Higher Education*, 13(3), 169-175.
- Crossick, G. (2006). *Knowledge transfer without widgets: The challenge of the creative economy*. Paper presented at the Lecture, Royal Society of Arts, Goldsmiths University of London: London.
- Cunningham, S. (2004). The humanities, creative arts, and international innovation agendas. In J. Kennaway, E. Bullen & S. Robb (Eds.), *Innovation & tradition : The arts, humanities and the knowledge economy* (pp. 221-232). New York: Peter Lang.
- Cunningham, S., Cutler, T., Hearn, G., Ryan, M., & Keane, M. (2004). An innovation agenda for the creative industries: Where is the R&D? *Media International Australia: Incorporating Culture & Policy*, 112, 174-185.
- DCMS. (2009). Creative industries economic estimates. London: DCMS.
- Faggian, A., Comunian, R., Jewell, S., & Kelly, U. (2013). Bohemian graduates in the UK: Disciplines and location determinants of creative careers. *Regional Studies*, 47(2), 183-200. doi: 10.1080/00343404.2012.665990
- Faggian, A., & McCann, P. (2006). Human capital flows and regional knowledge assets: A simultaneous equation approach. *Oxford Economic Papers*, 58(3), 475-500.
- Faggian, A., & McCann, P. (2009). Human capital, graduate migration and innovation in british regions. *Cambridge Journal of Economics*, 33, 317-333.
- Florida, R. (2002a). Bohemia and economic geography. *Journal of Economic Geography*, 2, 55-71.
- Florida, R. (2002b). *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*, September 15, 2006.
- García, B. (2005). De-constructing the city of culture: The long term cultural legacies of Glasgow 1990. *Urban Studies*, 42(5/6), 1-28.
- GLA. (2002). Creativity: London's core business. London: Greater London Authority.
- GLA. (2004). London's creative sector: 2004 update. London: Greater London Authority.
- GLA. (2007). Working paper 22: London's creative sector: 2007 update. London: Greater London Authority.
- Glaeser, E. L. (2005). Review of Richard Florida's “The Rise of the Creative Class”. *Regional Science and Urban Economics*, 35, 593-596.
- Haft, J. (2012). Publicly engaged scholarship in the humanities, arts, and design. *A Working Guide to the Landscape of Art & Change* (pp. <http://imaginingamerica.org/fg-item/publicly-engaged-scholarship-in-the-humanities-arts-and-design/?parent=442>). Americans for the Arts: Imagining America.
- Heartfield, J. (2005). *The creativity gap*. London: Blueprint, ETP Ltd.
- Higgs, P., Cunningham, S., & Bakhshi, H. (2008). Beyond the creative industries: Mapping the creative economy in the United Kingdom. London: NESTA.
- Hospers, G.-J. (2003). Creative cities in europe: Urban competitiveness in the knowledge economy. *Intereconomics*, September / October 2003, 260 - 269.
- London Higher. (2005). *The creative capital: Exploring London's creative education sector*. London: London Higher.
- 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 - 1940
- Markusen, A. (2010). Organizational complexity in the regional cultural economy. *Regional Studies*, 44(7), 813-828. doi: 10.1080/00343400903365086
- Mathur, V. K. (1999). Human capital-based strategy for regional economic development. *Economic Development Quarterly*, 13(3), 203-216. doi: 10.1177/089124249901300301
- McCann, E. J. (2007). Inequality and politics in the

- creative city-region: Questions of livability and state strategy. *International Journal of Urban and Regional Research*, 31(1), 188-196.
- McRobbie, A., & Forkert, K. (2009). Artists & art schools: For or against innovation? A reply to NESTA. *Variant*, Spring 2009, available <http://www.variant.randomstate.org/pdfs/issue34/nesta34.pdf> (last accessed 20th April 2009).
- Million +. (2008). *Creative futures: Building the creative economy through universities*. London: Million +
- Minton, A. (2003). *Northern soul: Culture, creativity and quality of place in Newcastle and Gateshead*. Published by DEMOS & RICS.
- Montgomery, J. (2005). Beware "the creative class". Creativity and wealth creation revisited. *Local Economy*, 20(4), 337-343.
- Musterd, S., & Ostendorf, W. (2004). Creative cultural knowledge cities: Perspectives and planning strategies. *Built Environment*, 30(3), 189-193.
- NESTA. (2003). *Forward thinking - new solutions to old problems: Investing in the creative industries*. London: NESTA.
- NESTA. (2007). How linked are the UK's creative industries to the wider economy? An input-output analysis. In W. Paper (Ed.). London: NESTA
- NESTA. (2009). *The geography of creativity*. London: NESTA.
- Noble, M., & Barry, T. (2008). *Supporting regional regeneration and workforce development: Establishing a new university centre in Folkestone*. Paper presented at the UVAC Annual Conference Higher Education - Skills in the Workplace: Delivering employer-led higher level work-based learning Royal York Hotel, York
- Oakley, K. (2006). Include us out—economic development and social policy in the creative industries. *Cultural Trends*, 15(4), 255 - 273.
- Oakley, K., Sperry, B., & Pratt, A. C. (2008). *The art of innovation: How fine arts graduates contribute to innovation*. London: NESTA.
- ONE North East. (2007). *Commercial creative industries sector*. Newcastle Upon Tyne: One North East and Culture North East.
- Peck, J. (2005). Struggling with the creative class. *International Journal of Urban and Regional Research*, 29, 740-770.
- Porter, M. (1998). *On competition*. Boston: Harvard Business School.
- Powell, J. (2007). Creative universities and their creative city-regions. *Industry and Higher Education*, 21(6), 323-335.
- Pratt, A. C. (2004a). Creative clusters: Towards the governance of the creative industries production system? *Media International Australia*(112), 50-66.
- Pratt, A. C. (2004b). Mapping the cultural industries: Regionalization; the example of south east England. In D. Power & A. J. Scott (Eds.), *Cultural industries and the production of culture* (pp. 19-36). London: Routledge.
- Pratt, A. C. (2008). Creative cities: The cultural industries and the creative class. *Geografiska Annaler: Series B, Human Geography*, 90(2), 107-117. doi: 10.1177/0042098009103854
- Preston, J., & Hammond, C. (2006). *The economic impact of UK higher education institutions*. London: Universities UK.
- Scott, A. J. (2010). Jobs or amenities? Destination choices of migrant engineers in the USA. *Papers in Regional Science*, 89(1), 43-63.
- Stanford Arts Initiative. (2007). Engaging the arts & creativity. from [http://arts.stanford.edu/assets/ArtsInitiative\\_L2.pdf](http://arts.stanford.edu/assets/ArtsInitiative_L2.pdf)
- Stolarick, K., & Florida, R. (2006). Creativity, connections and innovation: A study of linkages in the Montréal region. *Environment and Planning A*, 38(10), 1799 - 1817
- Taylor, J. (2005). Unweaving the rainbow: Research, innovation and risk in a creative economy AHRC Discussion Paper. London: AHRC.
- The Work Foundation. (2008). *Staying ahead: The economic performance of the UK's creative industries*. London: The Work Foundation.
- Universities UK. (2010). *Creating prosperity: The role of higher education in driving the UK's creative economy*. London Universities UK.
- Wojan, T. R., Lambert, D. M., & McGranahan, D. A. (2007). Emoting with their feet: Bohemian attraction to creative milieu. *Journal of Economic Geography*, 7(6), 711-736.