Chapter 13 From Creativity to Enterprise

Christina Slade

Abstract Creative industries sustain the economy in multiple ways. The creative economy is a driver of growth globally. It is critical to the success of the South West of the United Kingdom (UK). Creative industries derive from technological innovation combined with the critical and creative skills developed through the humanities. Taking as a case study creative industries in the South West of England, and a small creatively focussed university, this chapter argues that creativity and the humanities have a distinctive role in the entrepreneurial city region. It addresses the way that Bath Spa University aims to bring together cutting-edge technology with training in arts and the humanities.

Insofar as innovation and entrepreneurship happen in universities, they are generally associated with the so-called STEM subjects of science, technology, engineering and mathematics. This chapter argues for the importance of what has been called STEAM-STEM plus the arts, to use the term originally coined at the Rhode Island School of Design (RISD) in 2008 (RISD 2016). The creative industries are critical engines of growth in the South West region of England centred around the cities of Bath and Bristol. Bath Spa University contributes to that growth with its focus on creativity, culture and enterprise.

Section "The South West of England and the Creative Industries" deals with the creative industries and their role in the South West of England. Section "Bath Spa University and the New World of Work" describes Bath Spa University, its vision and its focus on preparing students for the new world of work. Section "Engaged Research and Creative Practice" gives examples of the creative entrepreneurship of Bath Spa students and staff. Section "Internationalisation" argues for the importance of globalisation in innovation, while Sect. "Policy and the Future" charts some of the difficulties that face a small creative university in the South West of England.

The South West of England and the Creative Industries

The cultural and creative industries, as defined by the British Department of Culture Media and Sport (DCMS) in 2001, comprise:

those industries which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property...

[Creative industries include]... architecture, the art and antiques market, crafts, design, designer fashion, film and video, interactive leisure software, music, the performing arts, publishing, software and computer services, television and radio (DCMS 2001: 5).

This is a broad and ever-expanding group of industries, but one which it is well worth grouping together, if only to emphasise how very different the economies of the twenty-first century developed world are from the industrial and post-industrial economies focussed on production. British Government data confirm that the creative industries are the fastest growing sector in the UK economy, outperforming all other sectors of UK industry (DCMS 2016). In 2014, the UK's creative economy had 2.8 million jobs, consisting of 1.9 million jobs in the creative industries which equate to 8.8% of the total UK workforce (West of England Local Enterprise Partnership (WoE LEP) 2015b). According to the latest figures published by the DCMS, the UK's creative industries are worth a record 84.1 billion to the UK economy in 2014 (DCMS 2016). This growth is three times greater than the wider UK economy. Indeed, the current definition may underestimate the impact. A breakfast cereal, for instance, is counted as food, yet the major part of its value is not the corn or rice flakes but the packaging, branding and marketing—all part of the creative industries. The 'creative economy'—a new measure including the indirect effects of creativity—is designed to capture creativity across the board (DCMS 2016).

Bath and Bristol, respectively, small- and mid-sized cities on the M4 corridor to the west of London, are home to a concentration of creative industries, to four universities and three colleges of further education and to hundreds of highly respected primary and secondary schools. The National Endowment for Science, Technology and the Arts (NESTA 2015) states that eight per cent of the creative economy is located in the South West—the fourth highest percentage behind London, the South East and the East of England. The data also show Bristol to have the highest concentration of creative employment. Bristol and Bath, taken together, have the largest cluster of technological and digital employment in the UK outside of London, with particular strengths in software development, data management and analytics (Tech City 2015). The broader West of England is dominated by micro-businesses. 25–30% of the workforce work as freelancers, in the animation, vfx and games sector (WoE LEP 2015a).

Taken as a whole, the creative industries provide about 15,900 jobs in the Bristol and Bath region, £0.66 billion GVA (gross value added), and have seen 106% growth in productivity since 1999 (WoE LEP 2014). Between 2013 and 2020, employment in the creative and digital sector is forecast to increase by

approximately 21%, equating to the creation of approximately 3200 jobs (WoE LEP 2015b). Yet, when Jonathan Dimson, a McKinsey partner, addressed assembled UK university leaders in March 2015 about the success of such entrepreneurial learning city regions as Birmingham, the low profile of the Bristol–Bath nexus was noted (Dimson 2015). The lack of collaboration and consistent policy in the South West of England is part of the reason for the region's lack of profile in the creative industries. While the South West Local Enterprise Partnership works, as did its predecessor the Regional Development Authority, to foster concerted action, there is a history of lack of cooperation based on deep differences between the two cities.

Bath—Britain's only world heritage city—profited from its hot springs. Romans and then, much later, the Georgians frequented the city for its waters. When it fell out of fashion in the early to mid-nineteenth century, the town's fortunes were on the wane. Sir Henry Cole, who was responsible for the Royal College of Art and for the Great Exhibition of 1851, was a native of Bath. He proposed a series of art schools, which were to be founded in seventeen industrial cities, including Bath, then a faded and genteel watering place. The new art schools were to provide an atmosphere in which vision and drive were nurtured and the platform on which this technical and innovative education of the workforce could be built.

The Bath School of Art provided instruction in 'design for manufacturing'. This bore fruit in the invention of plasticine by its director, William Harbutt, in 1897. He wanted a non-drying clay for his sculpture students. A patent was awarded in 1899, and in 1900, commercial production started at a factory in Bathampton. The Harbutt company continued to produce plasticine in Bathampton until 1983, exemplifying the link between design, education and industry. This nexus, which characterises the creative industries, is not well understood in Bath. Bath's Council includes a partly agricultural region known as Bath and North East Somerset, where there is little awareness of the new forms of creative industry.

The port of Bristol, on the other hand, had been a port since Anglo-Saxon times but grew rich on trade with the Americas. With the industrial revolution, it became a centre of shipbuilding and engineering, then aerospace and now creative industries. These latter have been strongly supported by local government. Groups such as Aardman Animations, the producers of the cartoons Wallace and Gromit and Shaun the Sheep, and the BBC Natural History Unit are now supplemented by a large variety of tech, branding, film and gaming businesses such as Yogscast and Bristol Games Hub. Bristol offers high-speed capacity via fibre optics, in addition to a city-wide WiFi network, a 5G test bed and an experimental radio frequency option. The Mayor of Bristol believes that the city could become a European Creative Hub and has pledged to remove any bureaucratic obstacles holding organisations back. In addition, areas such as the Temple Quarter enterprise zone attract business rate discounts and relaxed planning rules.

Bath Spa University and the New World of Work

Bath Spa University has a distinctive role in its contribution to the development of an entrepreneurial learning city in the region. The university is relatively small, with some 7000 students in programmes ranging from art and design, music, dance, teacher education and the liberal arts, including philosophy, to environmental science and business. It's doctoral and masters programmes in creative writing currently attract students from the USA, Canada, Australia, India, Pakistan and Canada. In art and design, its 150-year history has included notable alumni such as Howard Hodgkin and teachers such as Walter Sickert and Jim Dine. Another predecessor institution of Bath Spa University was the Newton Park Teachers' College established in 1948, from which grew areas of strength in music, environmental science and entrepreneurship.

Bath Spa University's distinctive contribution to the entrepreneurial learning region is in the area of the creative industries. To support this, the university needed global partnerships and an international reach. Our vision was

To be a leading educational institution in creativity, culture and enterprise. Through inspirational teaching and research, we transform students' lives. Based in a world heritage city and connected to a network of international partners, Bath Spa University will ensure that its graduates are socially engaged global citizens (Bath Spa University 2015).

Thus, the university weaves 'cultural entrepreneurship' throughout its programmes—whether creative and cultural, environmental science or business. Innovation within the creative industries is slightly different from innovation in engineering, biotechnology or fundamental science. Markusen (2013) talks of cultural entrepreneurs and their importance in American cities. She argues that artists, designers, musicians and writers enrich a city and enhance the social fabric. Her examples, mainly based in the USA, show the importance of new ways of developing a culturally rich environment. Rather than building more large cultural complexes, a city can encourage cultural entrepreneurs with more subtle measures—relaxing planning constraints, for instance, to allow artists to regenerate urban areas.

According to Markusen, artists and cultural workers have different employment patterns from scientists and engineers.

Artists are many times more likely to be self-employed than are scientists and engineers... In contrast, scientists and engineers experience very low rates of self-employment...Artists are much more likely to have experience in commercial sectors—as employees, contractors, workers, or independent agents—than scientists or engineers are. But they are also more likely to also work—simultaneously and sequentially—in non-profit and public sectors. (Markusen 2013)

Markusen argues that the cultural sector drives innovation differently from engineering and science-based innovation. First, cultural innovation enhances regional growth since cultural innovators are more likely to remain in the regions rather than moving to the metropolis. This holds true in Bath, where the

self-employed artists, musicians and cultural workers do appear more likely to remain than engineering students.

Unfortunately, comments that 'creatives stay' play into the hands of critics who argue that arts-based education is a waste of time. There is a common view that cultural and creative employment is not a real job. In fact, as the statistics quoted in Sect. "The South West of England and the Creative Industries" suggest, the creative industries are driving the economy. The new world of work, as described in the Gazelle Global (2012) report, is no longer purely dominated by work for corporations, for manufacturing, in professions or for major service industry companies such as banks. A university degree is no guarantee of employment in corporations, nor should we expect it to be. The world of work has changed. Engineers, doctors, lawyers and corporations will survive, but much of the work graduates used to do is being digitised away. Creativity is more difficult to replace with technology. The job market is 'hollowing out' (Department of Business, Innovation and Skills, BIS 2013). Roles for which university had been a preparation are disappearing. While some highly paid jobs will survive in banking and corporations, the middle tier is increasingly automated. The creative digital sector will be the growth area. The new workers will be flexible, able to work on demand, bringing skills to bear as and when needed. Portfolio careers will no longer be the exception. Digital skills and entrepreneurial nous will be the hallmarks of success.

Andrew Hugill, Professor of Creative Computing at Bath Spa University, put the point sharply in an interview in 2013 to the BBC World Service, in which he listed the top ten jobs not then existing. In fact, several of the jobs he listed, such as data ecologist, gamification consultant and virtual environment engineer, have since been advertised. His argument was:

Creative people are becoming increasingly tech savvy, and there is a clear requirement already in business for creativity that works seamlessly with technology – these jobs are the next step in the direction many companies are already heading. (Hugill 2013).

Bath Spa University has moved to make such digital literacy a hallmark of our graduate attributes. The new courses in creative computing at undergraduate and postgraduate level supplement the range of courses dealing with media, television, gaming, graphic design publishing and creative music technology, which are already overwhelmingly courses in digital technology and artistic practice. There is no longer any divide between the artist and the computer, between design and the digital. Students must also be entrepreneurial, be able to manage their portfolio careers and to see the opportunities the new world of work offers. The courses are increasingly focussing on preparation for a new world of work, in which lifetime employment is a chimaera.

Digital literacy and entrepreneurial skills alone are not enough. The artistic and cultural skills in which Bath Spa University specialises are fundamental in the new world of work, the move to what has been called 'design-based thinking'. Design-based thinking is described by Rotman (2009) as 'the next competitive advantage'. Other theorists and practitioners emphasise the interplay of inspiration,

ideation and implementation (IDEO 2015). It involves a mix of analytic skills, visualisation, imagination and the ability to put action into practice. It recognises the importance of artistry as fundamental to business. Rather than seeing the cultural and creative skills of artists, musicians and writers as providing a distinctive type of entrepreneurship, this approach argues that design-based thinking is the new paradigm. When Steve Jobs insisted on design for Apple products, he epitomised design-based thinking. Artistic flair and a deep understanding of the psychology and lifestyle of users are more important than technical innovation in Apple's success.

There is one further essential component in preparing students as entrepreneurs: interdisciplinarity. English universities typically continue the pattern of hyper-specialisation of the secondary school advanced level qualifications, offering undergraduates a three-year single honours degree. In effect, students study just one discipline, and while they may be allowed to take suitable electives, any distraction from the core discipline risks a lower grade in the final year since that is based on the single discipline alone. At Bath Spa University, the single honours model still predominates as it does in most universities in the UK. There is little understanding of US-based liberal arts education, where students study across disciplines, or of the Scottish, Australian and New Zealand models where degrees consist of majors in different disciplines.

At Bath Spa University, we are attempting to encourage interdisciplinarity among students. We have brought together the areas of music, creative writing, media, performance, history, English and philosophy with the environmental science and business areas in the new 'College of Liberal Arts'. The college is divided into fields. One is labelled 'Environmental Humanities' and brings together writers (such as Gerard Woodward whose novels fall into what is known as 'ecocriticism') philosophers and biologists. Another, the 'Digital Hub', brings together areas as distinct as music technology and digital writing.

Engaged Research and Creative Practice

Bath Spa University, while small and regional, has a record of engagement. The humanities and arts are, in themselves, central to engagement with communities. The rigorous understanding of history, of literature and of art enhances an understanding of society. Moreover, as the Arts and Humanities Research Council (AHRC 2013) spells out, research in the humanities and arts has immense social impact. Bate (2011) and Belfiore and Upchurch (2013) argue eloquently for the importance of the humanities. Citizens need to understand historical complexity. They need the ability to engage and create imaginative connections.

By connecting researchers with policymakers, research in the arts and humanities can bring new perspectives and evidence to key policy issues and debate, through historical and cross-cultural disciplinary expertise. Bath Spa University staff are contributors to this process. Professor Iftikhar Malik's research on the

cultural and political history of South Asia has formed part of the public discourse in the UK and has been influential in informing British and EU policy and practice in Pakistan. Aminatta Forna, Professor of Creative Writing, is a recent winner of the Wyndham Campbell Prize from Yale. She has explored the personal impact of failed states in a series of novels. Her 2013 novel, The Hired Man, unpeels layer upon layer of the internecine conflict in Croatia, Serbia and Bosnia Herzegovina. Nathan Filer wrote Shock of the Fall (which won the 2014 Costa prize) as a Masters student at Bath Spa. It charts the phenomenology of schizophrenia, using Nathan's experience as a nurse in Bristol.

Students are engaged in drawing on their creative skills across a number of areas. Around the world, 4196 people work for Dyson, just one British technology company achieving global success. Six of their newest recruits are recent creative graduates from Bath Spa University, who, within the last eighteen months, have been selected to work at the firm's Wiltshire-based headquarters. Whether employed as 'junior creatives', 'graduate designers' or 'creative advertisers', all fit the mould of a workforce described by Founder and Managing Director James Dyson as needing to be 'creative, courageous and unconditioned fresh-thinkers'. With its focus on creativity, culture and enterprise, Bath Spa University enables creative-thinking graduates to enter highly successful careers within manufacturing.

But the greatest impact and potential for entrepreneurship lies in the new interdisciplinary spaces in which the digital interacts across the core creative and cultural areas. Jerry Fishenden, a part-time Professor at Bath Spa University, and founding member of the Centre for Creative Computing, created an app called 'London Streets'. The app is designed to draw together historical images of London streets, old maps and images. Using the app, it is possible to stand on a London corner—Smithfield, for instance—and just by swiping a smartphone see how it was ten years ago, twenty years ago, a hundred or, through paintings, hundreds of years ago. The university is negotiating with the local council to develop a commercial app for the streets of Bath—some of the most drawn and photographed in England, and the history of which is a specialisation of the university.

Another Professor of Creative Writing, Naomi Alderman, developed 'Zombies, Run!' an iPhone fitness game and audio adventure, with games studio Six to Start. Funded through Kickstarter, the app received almost five times the funding requested and has regularly topped the rankings in iPhone Health and Fitness apps. The app has been featured in the New York Times and on Britain's television Channel 4 News. Naomi explains that it is her strength in narrative that ensured the app's success. Similarly, Dave Sproxton of Aardman, the creators of animated characters like Shaun the Sheep, talks of the importance of narrative. He tells of a case where professional actors acting out the story line helped resolve how the story would go. Artistry and technology are tied together in innovation in the creative industries.

Creative practice extends well beyond traditional art forms. Staff at Bath Spa are particularly interested in these new forms of art. Illuminate Bath (Head 2010, 2012, 2015) is a research project jointly funded by university/industry/local council. It is a free outdoor festival in which light is projected on Bath's historic buildings. This

research into large-scale, participatory visual artworks includes large screen work via the BSU MediaWall. This is a video wall situated in the Commons building of Bath Spa University. It is approximately 8 m high (7.35 m \times 3.75 m and 0.4 m above the ground) and consists of 30×55 inch HD LCD screens in a portrait format that are used to display multimedia/video/animation using the wall as one giant screen or splitting up into many different screen combinations. Since commissioning in April 2014 and the official launch in June 2014, we have hosted a number of projects from internationally recognised artists such as Julian Opie, Kelly Thompson (Concordia University Montreal), Marilyn Fairskye (Sydney) and James Coupe (Seattle). Other displays have been developed by academics, staff and students, such as work based on a master class with the distinguished sculptor Richard Long. On occasions, local school children have been involved in developing projects. There have been animations, dance performances, virtual paintings, interactive experiences, concerts and computer games.

MediaWall operates as both gallery space and experimental educational research space, viewable by the thousands of BSU students, staff and visitors. Unlike large-scale outdoor projections (viewable only when it is dark), the fact that a wall of this scale is viewable all day presents great opportunities and challenges for artists and scholars to explore their ideas with this impressive digital technology.

A recurring question is how traditional art forms such as opera may adapt to the digital world. Opera has been using digital technologies in stage productions for many years, and there has been digital streaming of live performance from the opera houses into cinemas. However, both of these solutions are merely ways of re-presenting traditional opera. A new form of opera is emerging from the digital world itself. It lacks the ritualised behaviour of a trip to the opera house, but replaces this with an immersive experience that is delivered direct to the individual via the network. Andrew Hugill's online opera The Imaginary Voyage is an example of an immersive networked opera. The opera is built upon 'The Syzygy Surfer' and allows viewers to chart their own narrative passage through a series of songs and images. Each viewer sees a new and completely different work of art.

Internationalisation

Globalisation is as essential to the new world of work as flexibility and interdisciplinarity. At Bath Spa University, we argue that graduates should be 'socially engaged global citizens'. This may appear a daunting aim for a small regional university like Bath Spa. In 2012, when the current vision was articulated, Bath Spa University had fewer international students as a proportion of its total student body than any other English university. This was doubly concerning given that art, creative writing, music, design and philosophy are of their nature globalised. Fashion, for instance, taught at the School of Art and Design, is one of the most globalised of all innovations, with trends moving seamlessly across borders. In a digital world, globalisation is ubiquitous. International connections are vital to the

success of students and of the university as part of the ecosystem of entrepreneurship.

The university's vision of 2012 emphasised internationalisation. The aim was to ensure students had a globalised outlook. In 2012, over 80% of students at Bath Spa came from within the South West region of the UK. While that had great advantages in terms of regional engagement, students lacked the international contacts they would need to work in a globalised world. Now, over 15% of students are of international (including European) background. That makes it possible for all students to develop the international networks necessary for a globally connected entrepreneur. However, recruiting international students is not enough—they need to be integrated into the broader university community. This has been achieved. An I-graduate survey of international students at Bath Spa University shows them among the most likely to have friends from the home country—in this case Great Britain (Archer 2014).

Internationalisation also means British students should study, work and live beyond Britain. Many students at Bath Spa University lacked the financial or cultural capital to enable them to study abroad. This is particularly true of a university such as Bath Spa, where a high proportion of students come from socio-economic backgrounds where international travel was not the norm. As a tool to address this, we introduced the Global Citizenship programme, an extra-curricular course, introducing students to globally recognised speakers and subsidising their study abroad.

Internationalisation is not just about mobility. It is about content, perspective, method and approach. Most academics have their own international networks, but that is in itself not sufficient to ensure an international perspective to the student experience. In order to open up access to global perspectives, I instituted the Global Academy of Liberal Arts (GALA): a network of international liberal arts institutions. Launched in 2014 by Professor Liz Coleman, a former president of Bennington and a TED speaker, GALA uses its networks and partnerships to internationalise student and staff experience. Students can learn virtually across campuses and are able to take courses and get credit across the network. Partners include the Universities of Stockholm in Sweden, Parma and Udine in Italy, The Humanities Research Centre of Utrecht University in the Netherlands, the Russian Presidential Academy of National Economy and Public Administration (RANEPA) Liberal Arts College in Moscow and the School of Form in the University of Social Sciences and Humanities in Poland. In North America, partners include the Tec de Monterrey in Mexico (the top ranked university in Latin America), Claremont College in California, State University of New York (SUNY) Geneseo in New York and the Faculty of Fine Arts at Concordia University in Montreal. In China, there are the Communications University of China and the Beijing Foreign Studies University, while the National University of Taiwan has also joined. In Australia, the Faculty of Creative Industries at the Queensland University of Technology and the Coetzee Centre at the University of Adelaide are partners. The network is formed on the basis of a coincidence of highly reputable undergraduate- and master-level programmes, of research interest and of excellence. Our students travel

within the network to study—this year to Mexico and Beijing as well as Los Angeles, Adelaide and Stockholm. More importantly, as we begin to develop the linkages, there will be possibilities of internships with the partners so that students have the experience of working abroad.

All areas of the university have been engaged, from artistic practice through music to environmental sciences. One of the most successful collaborations, Lost Waters, draws together Concordia in Montreal, Adelaide in South Australia, Beijing, Bath and New York State in a cross-disciplinary investigation of submerged waters. Biologists, environmentalists and artists, students and staff have worked across time zones on art works and debate. Work has been displayed in Montreal, New York, London and on our own MediaWall. The Canadian Research Council has awarded a grant, and other applications are being made.

Research funding is slight when held up against grants in medicine, pharmaceuticals, aerospace and physics. This is partly because costs in the creative industries are not high, the outputs at times niche. Nevertheless, they are global and profoundly cross-cultural, creating understanding, debate and engagement.

Policy and the Future

Bath Spa University is a small creatively focussed university, developing the skills needed for the twenty-first century. Students are very likely to work in portfolio careers, and while many may be successful, the measures of success are not those of the corporate world. Many of those who develop and implement policy remain convinced that the 'arts' do not contribute to the economy and are not wise choices for study. Yet, as we have seen, Bath Spa University students work in industry, such as with Dyson. We need data to demonstrate the impact of our work, we need to support and to develop partnerships, and we must ensure our students and society at large understand the value of their skills.

There are significant areas in which data, governance and policy could support the entrepreneurial possibilities of a university such as Bath Spa University. It is necessary to gather evidence of the impact of the humanities and creative industry research for society. Public private partnerships should be encouraged. There is a need for more government-funded initiatives where significant risk is involved. And local government must foster the creative industries.

The Arts Council England (2014) called for comparative and longitudinal studies that evidence the distinctive value of the arts over other sectors such as sport. Recent Arts and Humanities Research Council (AHRC) funding calls in Britain have focussed on the evaluation of the sector. Bath Spa University is involved in the 'Bristol and Bath by Design' research project that will fund research into the value of design. To take one example from Bath Spa University, Laura Caulfield has established a methodology for articulating and assessing the effect of creative arts interventions (such as painting and drawing, embroidery and stitching, making pottery and music, and writing and performing stories, poems and play) on

prisoners' mental and social behaviour. Developing techniques to evaluate the physical impact of object interaction has important implications not only for arts practice, but also for the manufacturing and design economies.

The entrepreneurial city region requires public–private partnerships. But they are not easy to establish, nor are they readily available in the creative industries. Creative industries are typically very small enterprises. Tales of venture capitalists in Silicon Valley notwithstanding, start-ups are difficult to fund, Mazzucato (2013) is highly critical of UK policy with respect to start-ups, SMEs (small and medium size enterprises) and tax breaks, arguing that government policy needs to encourage longer term investment, not 'take the money and run'. For example, the Corsham Institute in the county of Wiltshire is a public-private partnership in which Bath Spa University is involved. It is a private, not-for-profit group focusing on digital innovation. The sources of funding, including that through the Local Enterprise Partnership, in this case a joint body between Swindon and Wiltshire, are politicised. A successful bid to develop Digital Corsham, a centre in the town aimed to provide education and digital access, has been divisive in the town and has consequently been delayed. Venture capitalists do not look to Wiltshire for cutting-edge technology. We need to drive a change in perception, so that a silicon stately home or a silicon cottage or village are not seen as oxymorons.

Mazzucato (2013) argues that it is simplistic to assume that an entrepreneurial city or region can emerge without government support. She works through cases in detail, arguing that, in spite of the accepted view, private money rarely is the major supporter of innovation. Even Google is based on an algorithm, she points out, developed with public funds. She argues:

"...that targeting resources towards R&D spend, patenting or small firms in isolation misses the point and that similarly waiting for venture capital to do all the heavy lifting is likely to be futile... [We must insist on] the government's role in investing where the private sector will not, in the most uncertain risky areas. ... it has been the state, not the private sector, that has created economic dynamism" (Mazzucato 2013: 21).

The UK has had great success in fostering innovation through Innovate UK and through the Local Enterprise Partnerships. The European Union also has considerable funds available. For small players like us, however nimble, it is very hard work to put together an EU bid. Applications for funds require a bespoke team familiar with EU language and requirements. Other funding streams are not generous and suit the big players much better than institutions like Bath Spa University with limited capacity to write bids. What is more, technology remains seen as a 'big boys' game', meaning expensive engineering. In fact, as we have seen, the creative industries are not like that—they are digital, mobile and regional.

There have been significant successes in the UK. In Birmingham, three universities and local government have come together in a remarkable regeneration of the city centre that will protect and develop innovation space and creative industries. In Bath we have not been so lucky. The Bath and North East Somerset Cabinet have set itself against any increase in student numbers and wishes to revive traditional manufacturing. Bath, a city of 80,000 with around 20,000 students

during term, is no longer attractive for the traditional industries the School of Art so successfully brought to the region in the nineteenth century. Transport, once well provided by canals, is ill- served by the restricted traffic movement of a world heritage city and the distance from the M4. Industry is moving to easier locations.

To take one example, a furniture manufacturer, Herman Miller, decided to sell its factory in Bath over a decade ago. The factory, designed by renowned architect Nicholas Grimshaw in the 1970s, was listed as a heritage building and hence could not be pulled down or greatly altered. However, the site was designated for industrial development. The Bath School of Art and Design is ill suited in its current location, originally built as a domestic science block. It seemed a match made in heaven. After all, the School of Art was brought to the city in the 1850s to encourage industry and succeeded in doing so. Moreover, the listed factory building is suited to the school, although no longer appropriate in style or location to industry. Nicholas Grimshaw himself was enthusiastic, seeing this as the perfect reuse of his fibreglass flexible structure.

When Bath Spa University made an offer in 2015 for the building, the factory had already moved out. The sellers were delighted. However, the local planning authority did not approve the necessary change of use from industry to teaching space. Rational argument was powerless. It was evident that the school would employ more people than the factory. A report from Oxford Economics (2015) showed the dependence of the town on income associated with the universities and students. No other buyers had appeared for the factory in over a decade.

No doubt the impasse will be resolved. Yet the example shows the importance of local government engagement and support for innovation in the creative industries. What are needed are the subtle measures Ann Markusen advocates—relaxation of planning constraints and recognition of the complex ecosystems of creativity.

The theme of this volume is the Entrepreneurial Learning City Region. We know that universities—and the arts and the humanities—are critical components of regional regeneration. In a globalised and connected world, the creative industries drive enterprise across the borders of city and country, and nation and globe. Higher education generates intellectual property, trains the labour market of the future and engages the public in the arts and humanities. Creative practice is essential for understanding the world. We will not solve wars with bigger weapons or tougher sanctions. Nor is the answer to mental illness merely a question of better drugs. We need to develop an understanding, an emotional range to think differently.

References

Archer W (2014) International students 2005–2014: the past is a foreign country. Report of the I-graduate international insight survey of study abroad outcomes. Paper presented at the British Universities International Liaison Association (BUILA) conference, University of Edinburgh Arts and Humanities Research Council (AHRC) (2013) The impact of AHRC research, 2012/2013. http://www.ahrc.ac.uk/documents/project-reports-and-reviews/the-impact-of-ahrc-research/2013-2014/. Accessed Jan 2016

Arts Council England (ACE) (2014) The value of arts and culture to people and society: an evidence review. http://www.artscouncil.org.uk/what-we-do/research-and-data/value-arts-and-culture-people-and-society-evidence-review/. Accessed Feb 2016

Bate J (ed) (2011) The public value of the humanities. Bloomsbury, London

Bath Spa University (2015) Vision statement. https://www.bathspa.ac.uk/about-us/our-vision-values-history-and-people. Retrieved 19 Jan 2016, Accessed Jan 2016

Belfiore E, Upchurch A (eds) (2013) Humanities in the twenty-first century: beyond utility and markets. Palgrave Macmillan, London

Department for Business Innovation and Skills (BIS) (2013) Hollowing out and the future of the labour market BIS report 134. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/250206/bis-13-1213-hollowing-out-and-future-of-the-labour-market.pdf. Accessed Jan 2016

Department for Culture, Media and Sport (DCMS) (2001) Creative industries mapping document. HMSO, London

Department for Culture, Media and Sport (DCMS) (2016) Creative industries economic estimates. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/394668/Creative_Industries_Economic_Estimates_January_2016.pdf.

Dimson J (2015) Global challenges for higher education. Speech presented to Higher Education Funding Council of England (HEFCE) annual conference

Forna A (2013) The hired man. Bloomsbury, London

Gazelle Global (2012) Enterprising futures: the changing landscape and new possibilities of further education. http://www.stow.ac.uk/media/gazelleenterprisingfutures.pdf. Accessed June 2015

Head A (2010, 2012, 2015) Illuminate bath: a bi-annual festival of light projections, installations, performances, workshops. City of Bath, UK, 1–13 Nov 2010, 25–28 Jan 2012 and 3–10 Jan 2015 (show/exhibition)

Hugill A (2013) Top ten jobs that don't yet exist. BBC World Service 'Business Matters' IDEO (2015) https://www.ideo.com/about/#WcYZDZpIiDGUPtBR.99

Markusen A (2013) How cities can nurture cultural entrepreneurs. Policy brief for the Ewing Marion Kaufmann Foundation, presented at the Mayors Conference on Entrepreneurship, Kansas City, MO

Mazzucato M (2013) The entrepreneurial state demos, Open University Million + (2015) Creative futures: ten steps to support the UK economy. http://www.millionplus.ac.uk/documents/reports/Creative_Futures_-_Ten_steps_to_support_the_creative_economy.pdf. Accessed Dec 2015

National Endowment for Science, Technology and the Arts (NESTA) (2015) Is creativity everywhere? The geography of the UK's creative and high-tech economies. http://www.nesta.org.uk/blog/creativity-everywhere-geography-uks-creative-and-high-tech-economies. Accessed Jan 2016

Oxford Economics (2015) The economic impact of Bath Spa University. Oxford Economics, Oxford

Rhode Island School of Design (RISD) (2016) STEM TO STEAM http://stemtosteam.org/. Accessed Jan 2016

Rotman M (2009) The design of business: why design thinking is the next competitive advantage. Harvard University Press, Cambridge

Tech City (2015) Tech nation: powering the digital economy. http://www.techcityuk.com/wpcontent/uploads/2015/02/Tech%20Nation%202015.pdf. Retrieved Jan 2016

West of England Local Enterprise Partnership WoE LEP (2014) Strategic economic plan sector prospectus. http://www.westofenglandlep.co.uk/assets/files/About%20Us/Strategic%20Plan/LEP225%20SEP%20Summary%20AW4_final.pdf. Accessed Jan 2016

West of England Local Enterprise Partnership WoE LEP (2015a) Employment in the West of England 2015 creative and digital

West of England Local Enterprise Partnership WoE LEP (2015b) Local sector skills statement 2016. http://www.westofenglandlep.co.uk/people-and-skills/skills-prospectus-2016. Accessed Jan 2016

Author Biography

Professor Christina Slade commenced her role as Vice-Chancellor of Bath Spa University in January 2012. Bringing with her a wealth of experience from her former roles as Dean of the Schools of Arts and of Social Sciences at City University London, Dean of Humanities at Macquarie University (2003–8) and Professor of Media Theory at the University of Utrecht, Professor Slade is leading the university through a world-class campus development project focused on internationalisation and of public private partnerships. Trained as a philosopher of logic and language, her research has focussed on issues of the media since 1990. Her monograph, The Real Thing: doing philosophy with media (2002), examines the role of reason in the media, while From Migrant to Citizen: testing language, testing culture, (2010) jointly edited with Martina Möllering, looks at linguistic, legal and philosophical aspects of citizenship testing. Her most recent monograph, Watching Arabic Television in Europe: from diaspora to hybrid citizens, was published in 2014.