Creative Industries Scotland:
Capitalising on Creativity

Report on ESRC grant RES 187-24-0014

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Director's Welcome

This publication represents the activities and initial outcomes of an Economic & Social Research Council (ESRC) Capacity Building Cluster grant: Capitalising on Creativity (RES 187-24-0014), designed to enhance collaborative research and knowledge sharing between creative and cultural industries and higher education institutions in Scotland. Awarded in 2008 to the Institute for Capitalising on Creativity (ICC) at the University of St Andrews, the £1.5 million fund has enabled the involvement of 58 students, academics and associate researchers; the staff and stakeholders of 31 cultural and creative industry organisations; and 12 additional academic and funding organisations in the delivery of more than 65 research projects and outreach activities.

The activities set out in 2008 were designed with the dual purpose of building the capacity of social science research within business and management in the creative industries, as well as building capacity among the creative industries of Scotland. "Capacity" in this sense was seen as productive links between academic and industry partners and networks to work together to create and disperse knowledge in the sector. As an inter-disciplinary and inter-institutional consortium, ICC brings together a range of specialist knowledge in the creative industries: art and design from the Duncan of Jordanstone College of Art & Design, University of Dundee; computer games and interactive technologies from the School of Arts, Media & Computer Games, Abertay University; and music, drama and dance from the Royal Conservatoire of Scotland; in addition to the management specialisms of the School of Management at the University of St Andrews. The consortium thus provides expertise and awareness of business challenges with recognition of the distinctive characteristics of each of the cultural and creative industries.

The structure of the Capacity Building Grant provided for specific forms of knowledge production, each involving industry partners in identifying and helping drive the research, thereby returning benefits to their own organisations and the sector as a whole:

- **Collaborative Awards in Science and Engineering (CASE)**, or **Collaborative Studentships**, are industry-based PhD research projects which address issues central to the long-term strategy or future productivity of the sponsoring organisations. Typically, CASE students spend extensive periods of data-gathering in sponsors' work settings, often facilitating knowledge exchange and networking with employees, while receiving research guidance and academic training from ICC consortium supervisors. [17 studentships awarded]

- **Industry Placements** enable students to work in a sector business on a specific short-term project (of three to six months) which typically adds to, or broadly complements, the substantive theme of the student's doctoral research. [6 placements awarded]

- **Knowledge Transfer Partnerships (KTPs)** are industry-based projects conducted over one or two years by Knowledge Transfer Associates, employees of the academic partner who work full-time with the sponsoring industry partner. Addressing issues of critical relevance to the sponsor, KTP projects involve a jointly managed programme of mentoring, skills training, and research to ensure a two-way flow of knowledge between workplace and research base. [2 KTPs awarded]

- **Business Vouchers** provide small and medium-sized enterprises with short but focussed periods of academic consultancy, worth up to £3,000, accessing expertise relevant to their organisations. Typically the projects help businesses scope the extent of, or potential strategies for addressing, issues of immediate concern [22 vouchers awarded]

- **Impact and Dissemination Events** are activities related to the grant's portfolio of projects, aimed at a variety of academic, industry, policy, and general public audiences.

The variety and richness of the work that proceeded from this grant will be evident in the pages that follow. The debts accrued in such an undertaking are enormous. On the inside cover and in the Appendix, we have attempted to express our gratitude to everyone involved. In particular we would like to thank the sponsoring organisations that have provided financial and in-kind support for the projects mentioned here. Their generosity of time and knowledge has helped considerably in the dissemination of knowledge from industry to academia. I would like to thank my fellow Principal Investigators – Professor Georgina Follett, Duncan of Jordanstone College of Art & Design, University of Dundee; Professor Gregor White, Abertay University; Professor Celia Duffy, Dr. Stephen Broad and Dr. Anna Birch at the Royal Conservatoire of Scotland – for all their help; and all academics, students and organisations for providing such a stimulating research environment. The Institute was helped considerably in its initial stages at the University of St Andrews by former Deputy Principal David Corner, and very ably assisted by Mrs Barbara Porter. Unlike ESRC Centre grants, the Capacity Building Cluster award had no funds for infrastructure support. I am therefore grateful to the University of St Andrews for its generosity in supporting the grant, and the support given it by former Masters of the United College, former Deputy Principal Professor Keith Brown and Professor Neville Richardson. Last but by no means least, a grant involving such a large number of projects, four HE institutions, and 31 cultural and creative industry organisations and more, inevitably placed an enormous demand on administration. As the first point of contact, Mindy Grewar has been unfailing in her support, helpfulness, and good humour and has strongly contributed to all aspects of the grant. Without her, the grant would not have been possible and I am deeply grateful.

Professor Barbara Townley
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Creative and Cultural Industries: A Capitals Framework

The research projects discussed here illuminate various aspects of the workings of the cultural and creative industries, which both the Department for Business, Innovation, and Skills and the Department for Culture, Media, and Sport see as a critical area of growth. In approaching such a broad and inter-disciplinary area, especially where the range of projects pursued is industry-led rather than academically initiated, it seemed important to have an overarching perspective with which to view the area and locate the projects' overall purpose and development. But which? An overall perspective of business, or the disciplinary base of the arts and culture? The phrase "creative and cultural industries" itself illustrates the problem. Pairing "cultural and creative" with "industries" into one phrase evokes the seemingly permanent, hotly contested creativity-versus-commerce debate. It is a pairing suggestive for some of a problematic singular focus on economic benefit and a denial that cultural and creative activities are important dimensions of people's lives, of opportunity, of expression, of development, and of growth. For some it couples the sacred and the profane. A new approach to establishing the value of the cultural and creative industries is needed[1].

It is with this in view, and to demonstrate coherence within the programme, that we draw on the work of the French sociologist Pierre Bourdieu, in particular, the interplay of four capitals – intellectual, social, cultural, and economic – to provide a framework in which the different aspects of cultural and creative industries may be situated[2]. Bourdieu's work offers a theoretically informed route away from that binary representation, transcending the cultural/economic dichotomy that bedevils debate and frequently leads to impasse. This framework is not imposed on the projects themselves or on the approaches taken in research. Such an approach would be stultifying and counter-productive. However, it is suggested as a broader framework with which to map the cultural and creative industries and their ecology in detail, providing for a fuller analysis that can assist practitioners, policy makers and academics in their analyses of the field. Most notably it suggests that the creative and cultural industries cannot provide the economic activity for which they are commonly praised without support for the necessary foundations of intellectual, social, and cultural capital.

Put most simply, it suggests that the creative and cultural industries rely on four types of capital:

- Intellectual capital is in essence the creative ideas that sustain creative endeavour: their sources, their acquisition through formal and informal training, their maintenance and enhancement through the same sources and continuous professional development.

- Social capital is the networks of relationships and the actual and potential resources that are linked to these that may be deployed to learn of employment, project opportunities, funding and finance etc. Taken broadly, it includes not just formal and informal social networks but also the infrastructure that sustains them, both virtual and physical: Although it is well documented that social media can help build new links and possibilities, the physical implications of space and geography must also be salient.

- Cultural capital, the "dispositions" and acquired education, knowledge, qualifications, and the "cultivation of the aesthetic eye", highlights the importance of a knowledgeable audience that has the ability to recognise and deem ideas or creations as being of value. It is the knowledge or appreciation of an artistic or creative product, whether this be a Rembrandt exhibition or a computer game.

- Economic capital, the most familiar to general audiences, takes the form of assets and property rights and is most immediately convertible into money. It highlights the importance of access to finance, be this through private or public funding or sponsorship.

Although as a field the creative and cultural industries deal primarily with symbolic capital – the BAFTA award, critical acclaim, a literary prize, or an exhibition at a national gallery – it is the functioning and interrelationship of intellectual, social, cultural, and economic capital that ensure the creation of that symbolic capital[3].

Each of the four capitals is equally important. Although Bourdieu does not specify the importance of acquisition, maintenance, enhancement, and exchange, all of which accompany the use of economic capital, all capitals are products of an investment strategy and must be maintained and enhanced if they are not to lose value over time. Indeed a more sophisticated analysis might go further and add depreciation into its assessment: What is lost through, and what is the cost of, not building and maintaining capital in all its dimensions?

The differing roles of these capitals are illustrated in Figure 1. Although, necessarily, a degree of licence has been taken with Bourdieu's work, the figure shows how various activities within the cultural and creative sphere may be perceived within this framework. Each capital requires strategies and policies to ensure its creation, reproduction, and accumulation. The development of ideas or new creative content must be generated, its sources identified either in existing resources or in strategies that allow this to develop. Once acquired, capital must be maintained through provision for learning and development, providing a creative environment. And once acquired it must be secured through the creation of property rights. Ideas must also be developed and enhanced, either directly or through strategies of co-creation. With these conditions in place there is then the foundation for intellectual capital, i.e., the securing of a revenue stream based on creative ideas. Building social capital ensures both resources for creative production and an audience or market for it once completed. Again, this reflects the processes of acquisition, through the identification of a variety of networks and network building; maintenance, through their ongoing management; and enhancement, through increasing collaborations. Digital opportunities and strategies, as well as broader infrastructure projects, are part of this social capital development framework.

The acquisition and development of intellectual and social capital is, in turn, dependent on the development of cultural capital, itself reflective of structured socio-economic conditions and broader social provision. An area of good cultural provision in terms of venues, exhibitions or access to digital provision, and an educational environment that encourages and values the cultural and artistic sphere, is the foundation for the acquisition of cultural capital by both potential practitioner and audience. The richer this environment, the more diverse the opportunities for innovative ideas based on the juxtaposition of seemingly contradictory or antithetical notions to produce novel outcomes. Cultural capital also operates in helping organisations identify their unique creative product or service, branding strategies, and in the identification of stratified user groups to differentiate products and services.

Figure 1 **A Capitals Framework**

Capitals/ Strategies	Intellectual Capital	Social Capital
Acquisition	■ Development of new IP content/IP content generation ■ New product/services development ■ Identifying creative talent	■ Identifying and establishing resource and audience networks ■ Network building
Maintenance	■ Managing creative teams ■ Protecting intellectual property rights	■ Collaborative strategies ■ Managing stakeholder relationships ■ Managing dispersed production/ distribution systems
Enhancement	■ Client/user-designer co-production ■ Skills training and development ■ Managing portfolio careers ■ Residencies/placements ■ Knowledge customisation ■ Product/service diversification ■ New product lines/platforms	■ Network development ■ Inter-organisational collaboration ■ Exploiting digitisation for network building ■ Social media strategies
Exchange	■ Licensing agreements ■ Franchise production	■ Creative cities support ■ Local and regional infrastructure and digital support

Economic capital is equally important for cultural and creative organisations, as intellectual, social, and cultural elements of capital need to find purchase either directly through income, or indirectly through securing support for maintained public funding. Broader provision through business support services, access to business skills, and so forth in the support for start-up organisations, for example, is an important aspect of helping to secure initial economic capital; income streams, the maintenance of cash flow, accessing lines of credit with distributors and retail, etc., ensure this is maintained, while planning for organisation and business development and growth ensure it is enhanced.

Just as capital is the product of acquisition, maintenance and enhancement strategies, equally, it is exchanged or traded. As individuals and organisations hold, and have access to, these capitals in different amounts, activity necessarily focuses on 'trading' capital in order to secure more, or other forms of, capital necessary to ensure continued functioning. Hence, an organisation having high cultural capital using this as leverage to ensure continued funding or to secure sponsorship; a city's cultural quarter selling itself as a tourist location; a new games technology being used to secure venture capital; the hiring of a reputed performer to enhance the status of a company.

Cultural Capital	Economic Capital
■ Cultural access ■ Outreach and education programmes ■ Identification of unique product/service	■ Accessing financial support ■ Acquiring business skills for start-ups & business planning ■ SME policy infrastructure and support
■ Access outreach and education programmes ■ Market planning and promotion ■ Client/audience/market analysis ■ Positioning and placement	■ Business support services ■ Accessing credit facilities ■ Developing sustainable businesses ■ Risk analysis ■ Securing cash flow
■ Exchange programmes and international touring ■ Enhancing cultural access ■ Engaging cultural intermediaries ■ Developing brands ■ Identifying new audiences	■ Identifying new business opportunities ■ Accessing venture capital ■ Growth strategies, mergers, and acquisitions
■ Leveraging evaluation and impact metrics and assessment ■ Identifying alternative income streams	■ Divestment strategies

These elements of capital and their interrelationships provide us with a necessary backdrop to all the factors that contribute to a thriving and successful cultural and creative industries sector, as well as help those within the creative sphere understand their assets, value, and potential[4]. Some of their functioning is elaborated in the projects that comprise the focus of the Capacity Building Cluster grant.

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1   Townley, B., Beech, N. and McKinlay, A. (2009) "Managing in the creative industries: Managing the motley crew". Human Relations 62:7, pp. 939-962.

2   Townley, B. (2015). "Bourdieu and Organisational Theory: A ghostly apparition?" In P. Adler, P. du Gay, G. Morgan, and M. Reed (Eds.), Oxford Handbook of Sociology, Social Theory and Organization Studies: Contemporary Currents. Oxford University Press, pp. 39-63.

3   Townley, B. and Gulledge, E. (2015). "The market for symbolic goods: Translating economic and symbolic capitals". In C. Jones, M. Lorenzen, and J. Sapsed (Eds.) Oxford Handbook of Creative Industries. Oxford University Press, pp. 119-134.

4   Townley, B. (2015). "Exploring different forms of capitals: Researching capitals in the field of cultural and creative industries". In A. Tatli, M. Özbilgin, and M. Karatas-Özkan (Eds.) Pierre Bourdieu, Organisation and Management. Routledge, pp. 187-206.

Intellectual Capital

While intellectual capital is often used in the Management literature to mean intangible value or human capital, intellectual capital is used here as shorthand for the "journey" from initial viable ideas to intellectual property. It may be thought of as "creativity", though this is a term Bourdieu does not use, allied as it is with the "heroic artist" depiction of cultural creation dependent on a "muse". The acquisition of intellectual capital focuses on the source of new ideas within the creative sphere. Where do ideas for creative products and services come from? What makes them viable? Established or developed ideas also need to be rejuvenated through maintenance or become more amenable to standardised production through enhancement. "Exchange" describes the translation of "ideas" into intellectual property through the securing of intellectual property rights.

Three of the four projects presented here studied aspects of the search for innovative ideas: Christopher Lowthorpe (page 14) investigated new methods of game generation by developers in the computer games industry when faced with the twin challenges of changing distribution models and consumer habits, and the development of working methods that might sustain this. Sarah Cox (page 18) studied the interplay of design and entrepreneurship in the generation of innovative ideas in specially designed Design Jams, and the degree of symbiosis between the two, often disparate, groups with the same objectives. Saskia Coulson (page 10) examined the role of museum residency programmes both in the generation of ideas and in the presentation of the process of idea generation and development, illustrating how the challenges of design present issues for traditional residency methods. Finally, in a Knowledge Transfer Partnership, Eilidh Young (page 22) examined the issue of exchange, as she sought to understand the essential issue of securing revenue for ideas that are protected, or not, through intellectual property rights and the experience and management of these rights in micro, and small-to-medium enterprises.

Design Residency:
Concept development of new products and services for an emerging design museum

Saskia Coulson
Duncan of Jordanstone College of Art & Design, University of Dundee

Residencies in the context of cultural (specifically, museums and galleries) and the creative industries have rarely been studied. The research that has been done has mainly been conducted on a national level, and has primarily been aimed at examining the importance of state-wide residency campaigns. Such research typically reports findings such as the number of activities provided and number of participants served, and tends to focus on identifying the residencies' social and economic benefits to particular communities or geographical areas. More readily available are reports on residency case studies, although these too are not exhaustive. A recent survey conducted by the International Federation of Arts Councils and Cultural Agencies showed that 89 percent of the 18 arts councils and ministries of culture from all continents supply support for residencies, however only 38 percent of those organisations have conducted evaluations of their residency programmes.

Simultaneously, design is of increasing economic importance and expanded range. Between 2005 and 2010 the number of UK freelance designers increased by 40 percent, with Britain's 65,000 freelance designers part of the 8.4 percent of the population known to be working in the creative industries. Increasingly, design museums, especially new organisations like the V&A

A young visitor plays the *Strawberry Thief* game prototype during an Open Studio session at the V&A Museum of Childhood. Next to the game is a book of the works of William Morris, illustrating the printed fabric that inspired the game.

Visualisation of planned Design Residency Studio in V&A Museum of Design Dundee. (Photo © V&A Dundee/KKAA)

Museum of Design Dundee, work strategically with the creative industries to create new partnerships to foster interdisciplinary exchanges of resources and audiences and build "hubs" to advance professional creativity. This trend has led to a substantial increase in the provision of residencies by cultural and creative organisations aimed at nurturing designers' professional capacities. Such well-known institutions as London's V&A Museum and the Design Museum have established residency programmes.

The expansion of design as a field, however, means that traditional residency structures are not a good fit. A "designer" may be working on anything from a product that will go into mass production to a computer game, stage production, business method, or public service.

Saskia Coulson's doctoral research is comprised of a holistic examination of existing residency programmes, specifically at the Victoria & Albert Museum, paired with an exploration of the development of a new residency model for V&A Museum of Design Dundee. The research demanded an inquiry paradigm that is adaptive to, and can explore, all facets of this diverse project. The theoretical framework selected for this challenge is Dewey's pragmatism, with its facility for application both to the pursuit of individual inquiry and of organisational learning, as well as the view that

through a pragmatic philosophy one may discuss prospective futures.

Pragmatism's aptitude for methodological pluralism means it is adaptable and has relevance in the disparate and complex fields of design. In particular, Dewey's philosophies are relevant and applicable to the way we consider design and conduct design research.

"Design as a concept has expanded quite a lot, but it also means that the notion of a designer-in-residence can't rely on existing residence structures," says Coulson, "so I've been looking at how design is changing existing residency practices throughout the UK and also internationally." Because there are only a handful of design residencies to draw on, she has collected data through a six-month research placement at the V&A Museum in London and by holding consultations, focus groups, and workshops with creative professionals as a method for gathering data and looking at designers' specific needs, particularly in Scotland.

One of the ambitions of the V&A Dundee is to create residencies that will, among their benefits, serve to provide creative professionals with opportunities to connect to businesses where they might develop new products and services, and with educational communities, where they might inspire others. V&A

Dundee accordingly chose to support Coulson – whose background includes a degree in fine art photography from the Glasgow School of Art, an MLitt in Managing in the Creative Industries from the University of St Andrews, and some years working in galleries and art institutions in Copenhagen, New York City, and Glasgow – to study residencies in the creative and cultural industries and help identify the core benefits for both the residents and the museum. For the museum, the research was intended to provide an evidence base on which to build its developing ideas.

"If a museum aims at creating a hub in terms of the professional support of designers and craft makers," she says, "the programme will have an industry focus, but it's still a museum and will need to retain those fundamental principles of a museum residency in the sense of exposing the process to audiences while at the same time creating something that is appealing and that designers want to apply for." Designers, she adds, have a problem that most artists do not: the work they do may be subject to confidentiality agreements and protective intellectual property regimes and as a result, they may not be able to expose their processes to audiences. Also, says Coulson, "They may have other clients so they can't just drop everything to go do a museum residency for six months and show people walking by what they're doing. Those are the kinds of restrictions you have to think about in terms of devising a concept for a new model."

Coulson's wide contextual review of the field led her to classify residencies into three categories. The first she calls the "intramural model", formed on the basis that the resident is given time and resources to develop new creative outputs, an exhibition of new work, or the freedom to explore a specific research subject. This model is centred on the notion that innovation is stimulated by the creative professional working with her or his own ideas, relatively free from external factors that could impede the creative process.

The second category she calls the "interpreter model", and is commonly found in museums and community-based residency projects. In these cases, the resident becomes a conduit through which creativity is interpreted for the benefit of the visitors or participants with whom the individual is engaging. These creative professionals are often required to deliver educational programmes such as school workshops, workshops for teachers, or talks about their work to a variety of different people.

The third and final category she calls the "industry model". This variant is more common in the creative industries, where an organisation will provide support and resources to a creative professional to develop a new product or a new business.

"What you find a lot with these models," she says, "is that they view the designer from a business-focused perspective. These programmes expand the notion of a residency as a catalyst for innovation and enterprise within the designer's practice and, sometimes, within the practice of an organisation." The National Endowment for Science Technology and the Arts *Happenstance* and design firm IDEO's *Start-up-in-Residence* are examples of organisational programmes to which micro enterprises can apply for funding and support.

"As the V&A Dundee is keen on developing a new residency programme specifically tailored to designers, it needs to incorporate the context of design," Coulson says. With insight drawn from research into existing programmes and interviews, Coulson's research includes piloting and testing some of the theoretical concepts she has developed in order to aid this.

Saskia Coulson is due to submit her PhD thesis in 2015.

Placement at the Victoria & Albert Museum

As a supplement to Coulson's field work, she undertook a six-month placement at the V&A in South Kensington, where two studios house residents on six-month rotations. During that period she saw parts of three residencies, including the Glasgow-based ceramicist and contemporary artist James Rigler, who has since gone on to exhibit new work at London Design Festival and Tramway in Glasgow. She also observed the residency process for games designer Sophia George. During George's period of residency, and continued during another three months' production period at the University of Abertay, George created an iPad game, *The Strawberry Thief,* based on a William Morris printed fabric of the same name which she found while studying the Museum's British Galleries.

"It's a great example of how a resident can use heritage to create something quite innovative," Coulson says. At the V&A Dundee, "It will be fascinating to see how designers can create innovative products and services inspired from heritage and collections of Scottish traditional culture." George's game is among the exhibits chosen by V&A Dundee and the Travelling Gallery for their collaborative, nation-wide touring exhibition *Design in Motion* (see page 47).

The ability to observe the evolution of residents' work with the V&A Museum in London was an unexpected benefit of the placement, Coulson found. "It allowed me to collect data on how the residents and activities associated with the residency developed over time, an interesting aspect to the research and one which is arguably disregarded by existing studies on the subject."
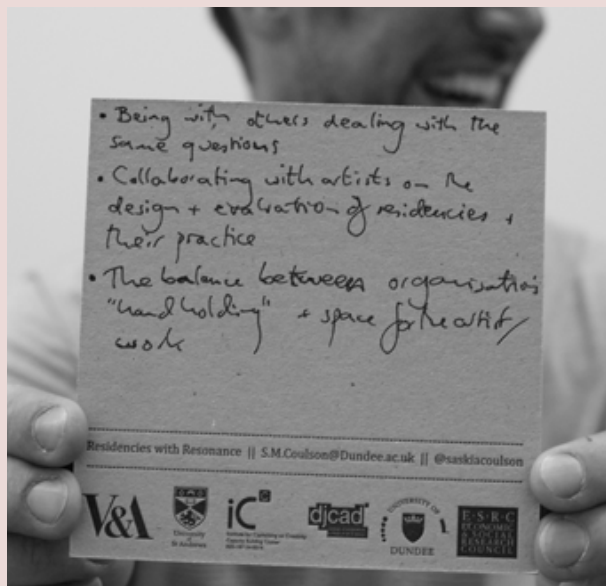
Coulson also relished the opportunity to play an active role in the V&A Learning Department's day-to-day operation of the residencies, including assisting with delivery of many of the events associated with the residency programme. This relationship offered mutual benefits, as in addition to informing her PhD research, the experience led to Coulson organising the first gathering of professionals from across the UK who have experience in producing residency programmes or are considering incorporating a residency programme into their organisations. With sponsorship from ICC and Duncan of Jordanstone College of Art & Design (University of Dundee), she delivered *Residencies with Resonance* in July 2014 at the V&A in London. The workshop featured speakers sharing their experiences of managing a wide range of residency models, with participant discussions focussing on the key challenges and benefits of such programmes.

"As a researcher, being given the opportunity to situate oneself for six-months in such an esteemed museum was tremendous, and my association with the V&A has paved the way for greater opportunities for the PhD research, and for my own career trajectory."

V&A Museum of Design Dundee

Game Design:
Sustainable innovation through recyclable process and adaptive teams

Chris Lowthorpe
School of Arts, Media & Computer Games, Abertay University

Computer game design is a relatively young discipline lacking the ontological inquiry of more established fields such as industrial or graphic design. It is also a field whose practitioners must contend with rapidly changing technology and consumer habits. The most recent of these, the "casual revolution", is a trend toward downloadable casual games that are purchased online and played on mobile phones and handheld tablets in short bursts. These casual games are disrupting an industry that previously relied on complex games that absorbed their buyers for many hours at a time and required high-end, latest-model desktop and laptop computers.

Supported by Denki, a design-led, Dundee-based "digital toy factory" and maker of over 180 games on a range of platforms including digital interactive television, Chris Lowthorpe, who had previously created the games studies curriculum for Norwich University of the Arts, set out to study whether the games design process is experiencing a fundamental shift, and what that might mean for game developers and the long-term sustainability of the medium. He began with the initial hypothesis that the established process for creating high-budget, large-team, "AAA" games was in crisis: unwieldy, profligate, high in risk, low in creativity and innovation, and financially unsustainable. As a corollary, he suspected that smaller independent studios using "agile" development methods, which emphasise fast prototyping, constant internal testing, and rapid iteration and improvement, would be leading the way to a more sustainable future.

To Lowthorpe, "It appeared likely these studios were increasingly placing a higher value on their work and workforce, looking to develop both for the long term, rather than on a project-to-project basis," he says.

Accordingly, he expected to find that these studios were achieving higher levels of creativity, innovation, and sustainability.

He began by asking a series of questions. What exactly is game design? Is it design, development, or both? Is it art or science? Does it bridge the gap – opened during industrialisation – between design and production? Is there an "ideal process" that can be used to find solutions to almost any game design problem? What design processes and philosophies exist and how effective are they? And what might we learn from successful game design processes at both a commercial and societal level? He also hoped to explore the benefits and methods of sharing successful design processes and philosophies and to evaluate whether sharing processes can lead to sustainable innovation, helping ensure the future of the UK game sector in a challenging and changing marketplace. Finally, Lowthorpe hoped to assess Denki's unusually defined design process and philosophy by observing its effects on the team, organisation, and final product.

Despite the industry's relative immaturity, there is substantial literature and discourse claiming to discuss "game design". However, many texts confuse "game design" with "game development" and do not pose ontological questions about these practices; instead they provide purely instructional content that seeks to identify the building blocks needed to create a game. Some texts see the real work of creating games as software development, and treat the elements that are usually perceived as design, such as creativity and aesthetic considerations, as "dressing" to be added at the end of development. In contemporary practice, typically design and development occur concurrently; Lowthorpe distinguished between the two by thinking of game design as a creative act and game development as the implementation of creative acts. There is little academic literature covering these topics. For a literature review, Lowthorpe surveyed a variety of alternatives such as the gaming magazines and industry blogs, and literature from adjacent design disciplines such as software development, the nature of creativity, organisations, teams, and others. These various sources led Lowthorpe to argue that game developers must move closer to their customers and learn new listening and learning skills.

"Both Denki and I reached this realisation at roughly the same time," Lowthorpe says. It led the company to become increasingly interested in an approach based on Lean Manufacturing principles formed in Japan and developed further at the Massachusetts Institute of Technology in the 1980s. Where Lean Manufacturing focused on eliminating waste, modern adaptations focus on gaining traction in

the marketplace by listening to and learning from customers, to validate concepts as they develop into products. Increasingly these "Lean" ideas are being adopted by independent game developers.

In carrying out his research, Lowthorpe followed a reflexive and pragmatic approach in which knowledge is viewed as constructed from and based on the reality of the world it exists in, freeing the researchers from the challenges of pure objectivism. The approach enabled Lowthorpe to build trust with the host organisation he worked with and fostered increased openness regarding access to personnel, documentation, and other resources. Most of his primary research was conducted as a participant observer; as such, he attended and recorded semi-formal progress meetings, internal pitches, and relevant debriefs. These provided entry into the host organisation's social and symbolic world and enabled him to learn the company's internal social conventions, and in particular to document and understand their internal culture and lexicons. His research was further augmented by structured and semi-structured interviews and access to comprehensive documentation regarding both process and outputs.

All of this was valuable material for analysis, but, Lowthorpe says, "not always the whole story". Accordingly, he also participated in ad hoc discussions that took place in more informal social spaces using an approach that views conversation and informal dialogues as a dialectical practice and conviviality in social spaces as a locus of information where contributions to new knowledge and insights often occur. "These environments have provided some key insights."

As his research developed, only one of his original assumptions proved correct: the AAA model was indeed in crisis in the UK. However, the thought that independent studios were forging a more sustainable path was undermined by the number of failing studios despite the new opportunities presented by technological change: "Although many independent game developers in the UK had solved the problem of efficiently making digital games – a problem that had plagued the sector for years – most were not adequately solving the question of who they were making these games for, and how they might connect with or sell to them.

"My research has enabled me to gain a considerable understanding of the benefits and drawbacks of incorporating Lean principles into game design

and development in a bid to achieve increased innovation and more sustainable businesses," he says. "Whether Lean represents the ideal reusable design and development process to ensure long-term sustainability for independent game studios and start-ups remains unclear. However, my research seems to suggest that it represents a step in the right direction."

Over time, further experience showed, however, that, "Fundamentally, the implementation of any prescriptive methodology doesn't really seem to work. It seems to be much more about the interaction and communications between individuals and working the idea of selling into whatever process you use from the beginning."

Since completing his research at Denki and a placement at the digital agency Preloaded in Shoreditch, the "casual revolution" has proceeded apace. "It's reshaped the whole games industry, and the relationships between developers and publishers. Most people don't even need publishers now because they go straight to the source through app stores. There's so much stuff that it's very difficult to gain traction with anything," he says. "For independent studios, gaining visibility among tens of thousands of others is a real problem."

More widely, Lowthorpe believes that the major impact of his work will come from challenging the orthodoxy surrounding current game design practices and development models and from highlighting the commercial futility of continuing to create games without validating either concept or product or paying attention to how and to whom they will be sold.

"I believe the research can start a conversation to help UK game start-ups and young studios reassess their approach to development, ultimately becoming more competitive and sustainable," he says. He also hopes his work will alter thinking at the policy level by highlighting the need to focus more on long-term incubation successes and less on short-term start-up metrics. Finally, Lowthorpe hopes his work also makes a significant contribution to the discipline of game studies, which to date has lacked much discussion of design and development processes.

In 2015 Chris Lowthorpe is due to submit his PhD thesis, and finish a manuscript with Denki Senior Producer Sean Taylor for a book on Lean Game Development, for publisher Taylor & Francis.

Placement with Preloaded

Lowthorpe's six-month placement with applied games studio Preloaded (preloaded.com) focused on the company's development of an educational game, *Fractopia,* for a large US client. The experience provided Lowthorpe with invaluable access to an additional professional studio in which he could explore the possible existence of universal design principles, as well as further develop his research methodology. He also gained insight into the professionalism of the Preloaded studio in terms of its approach to continual learning and refining design processes to achieve sustainable competitive advantage.

As the project progressed, Lowthorpe found that the company's focus shifted to become less about making a design process 'concrete' and more about the ongoing attempt to become a learning organisation, through the deployment of organisation learning strategies, that could identify a 'Preloaded Process' that was constantly refined yet highly adaptive. This evolving process must cope with changing commercial imperatives and also fit the company culture. Research highlighted the differences between working for clients and developing games for purpose, with creating games for entertainment and taking them to market. It also provided rich pickings for evaluating the possible existence of a 'one-size fits all' process."

"This placement has had a huge impact on my PhD research and my personal development as a researcher. In regards to the research it has provided new directions – some that were already becoming apparent at Denki – regarding the importance of embedding learning in game design and development processes," Lowthorpe says. "From a skills perspective, the placement helped me refine the process of interfacing as a researcher in a commercial environment. Due to the company's commercial imperatives and constrained time frames I had to arrange access and interviews at times that had the least impact on my host by being as flexible as possible," Lowthorpe said. However, "As regards support from Preloaded, I couldn't have asked for more transparency and honesty regarding their internal workings. I'm very pleased that the relationship is ongoing and I'm remotely monitoring the development of the multi-player version of the game."

PRELOADED

The role of design in product and service development

Sarah Cox
Duncan of Jordanstone College of Art & Design
University of Dundee

Recent years have seen a growing focus by both policymakers and the academic community on the relationship between design and innovation and on the power of design to drive economic growth. However, with rare exceptions no concerted attempts have been made to explore design as it relates specifically to the entrepreneurial context.

The V&A Museum of Design Dundee supported Sarah Cox to study the relationship between contemporary design and entrepreneurship with the purpose of contributing to our understanding of the potential for design to support innovation and economic growth. Among other areas, the project was intended to investigate the processes by which designers and entrepreneurs explore market opportunities and create solutions to problems and to examine

the way designers and design approaches can influence entrepreneurial opportunity development. To the study of design entrepreneurs, Cox brought an undergraduate law degree from Northumbria University and an MSc from Newcastle University in Innovation, Creativity and Entrepreneurship.

The inspiration for this project is the growing focus on collaborative practices in business as a way of increasing innovation capacity. To create today's complex products, which may incorporate hardware, software, and ongoing services, even a very large company may struggle to find within its ranks the talent necessary to cover such a large array of design areas. Many advocates of "design thinking" present designers as entrepreneurial disruptors, which Cox describes as "Individuals who are able to bring their

(Photo © David Wardle)

skills of problem identification, problem framing, and solution building to any field." This understanding of design and designers, she says, has been a driving factor in focusing the business world's attention on design as a resource for strategic innovation and continuing growth.

A review of the literature in both fields turned up analogous descriptions of the ways in which designers and entrepreneurs explore opportunities. Both groups work by creating, modifying, and iterating potential solutions. However, Cox found no studies that investigate how and whether the approaches of practitioners in the two fields correlate in practice. A further complicating factor is the argument advanced by some design theorists that conceiving design as a problem-solving process fails to adequately convey designers' complex, non-linear approaches. In this view, placing the designer in the role of reinterpreter of the meanings users ascribe to products and services does not always result in readily actionable solutions.

Research shows that entrepreneurs create market opportunities through inductively developing and testing their ideas. Cox therefore hypothesised that designers' explorative mind-set, when coupled with an ability to prototype and visualise potential solutions, is uniquely valuable when harnessed during the opportunity identification stage of the entrepreneurial process.

She began with three research questions:

- How do explorative design approaches contribute to entrepreneurial opportunity development?

- How does design integrate with or influence the process of entrepreneurial opportunity development?

- What are the limitations of design as it relates to this process?

Even though this area has captured the attention of the business world, so far there are few examples of rigorous empirical research that explore the

relationship between design and entrepreneurship. Attempts to amalgamate the substantial but separate bodies of research and entrepreneurship into an integrated theoretical framework are in their infancy. By addressing this gap in the existing literature, Cox aimed to interrogate popular arguments about the role of creativity and different approaches to discovering or creating entrepreneurial opportunities.

"It is only through addressing this gap that we can improve our understanding and engagement with design as an effective contributor to business development and economic growth," she says.

Cox began with the proposition that valuable insights into entrepreneurial opportunity development might be gained by looking at this area through the lens of design. She addresses her research questions through empirical data drawn from three different entrepreneurial programmes that utilise design approaches and tools to support participants' attempts to develop entrepreneurial opportunities.

However, instead of regarding the three programmes, which use design to inform the development of entrepreneurial opportunities, as sources of data she became a participant-observer, collecting data by observing the activities of participants. This approach was selected to ensure that the richness and complexity of each of the individual design-influenced programmes of entrepreneurship might be more fully understood. She also participated in conversations and open interviews throughout the programme, and studied the documentation of the design tools the programmes used and the prototypes that were developed.

This first stage of research was underpinned by a modern hermeneutic methodology that has its roots in the work of Hans-Georg Gadamer and Paul Ricoeur and that has been suggested as particularly suitable for understanding the way in which designers build understanding and construct meaning in the process of searching for the basis of innovative business offerings. That initial stage of participant-observer data collection formed the basis of the more structured approach of the second phase of research involving semi-structured interviews with participants, of the entrepreneurial programme to understand the shared characteristics of their processes of entrepreneurial opportunity development and the influence of the design practices, promoted through the programme, played in these processes. The use of dual methodologies made it possible to both describe and understand the complexity of the processes in question while acknowledging the desire of the researcher to produce findings and theory that can inform future entrepreneurial programmes and research questions.

More widely, Cox hopes that her research will provide the basis for the development of future entrepreneurial interventions such as the increasingly popular entrepreneurial accelerators and business boot camps. In addition, she hopes it will contribute to the growing field of study of the ways in which design can support innovation and growth in the business sphere.

Sarah Cox is due to submit her PhD thesis in 2015.

Placement with V&A Museum of Design Dundee

Cox's experience of a three-month placement with the V&A Museum of Design Dundee involved her in research and conversations that will inform the new museum's Design-Led Business Innovation (DLBI) Strategy for promoting design and company innovation in Scotland. Cox's work included developing and delivering design-led workshops with Scottish-based businesses and creative practitioners to explore their processes of entrepreneurial opportunity development and the barriers and obstacles they face during this process. These workshops further explored the initial findings of a series of consultation events undertaken by V&A Dundee with participants from Scottish industry in 2013. Cox also developed case studies based on interviews with businesses, and presented key findings and recommendations for the consideration of V&A Dundee as it progresses development of its strategy.

V&A Museum of Design Dundee

Visualisation of planned interior, V&A Museum of Design Dundee. (Image © V&A Dundee/KKAA)

Successful strategies for the management, commercialisation and exploitation of intellectual property

Eilidh Young
Knowledge Transfer Associate
Creative Scotland and ICC

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Technology Strategy Board

Current changes in technology and consumer behaviour present a range of challenges for companies in the creative industries, especially in relation to the management of intellectual property (IP). This is especially the case for the small to medium-sized enterprises (SMEs), micro-organisations, and sole traders that constitute the bulk of organisations in this area. Many fail to appreciate the difference between innovating and creating content and using IP to protect it and determine its ownership. While it may not seem worth the effort to consider and formulate an IP strategy, a failure to do so may create difficulties later when innovators try to make management decisions about protecting their creations. From a policy point of view, the management of IP also is an issue because the country's creative industries see limited return on investment despite their enviable reputation, as little of the revenue remains in Scotland.

One reason for Creative Scotland to join ICC in a Knowledge Transfer Partnership was the desire to develop the organisation's IP focus. The project's goals included helping Creative Scotland identify strategies for managing, commercialising, and exploiting IP via a detailed study of practices currently in use in the sector. Eilidh Young, a practicing visual artist with an MLitt in Managing in the Creative Industries from the University of St Andrews, became the KTP Associate. This role involved conducting the research and transferring findings between Creative Scotland, its stakeholders, and ICC.

Young explains, "We were interested in looking at the sustainability of the sector and how in particular SMEs managed their IP." Creative Scotland also hoped that a better understanding would help it direct investment funding more effectively. Accordingly, the research was designed to uncover the IP awareness, ownership, infringement, and enforcement issues which Scottish SMEs face on a daily basis, yet which had not been particularly well studied before.

The project focused on nine sectors of the creative industries: craft/product design, fashion design,

Up Your IP seminar (Photo © Colin Tennant)

Stellar Quines Theatre Company filming of *The List*. (Photo © Robin MacPherson)

computer games, television, film, publishing, music, theatre, and dance. In total, Young conducted more than 120 semi-structured interviews with freelance practitioners, sole traders, and directors of companies both large and small. Among other inquiries, Young sought to establish what understanding these groups had of their intellectual property; what rights of ownership they retain and what they have to give up; and what strategies they use to enforce those rights and stop infringement (a particular concern for SMEs, which find IP rights enforcement difficult).

"There are a lot of comparisons to be drawn across sectors," Young says. While the music, publishing, film and TV industries tend to be highly aware of IP and related issues, other sectors display a real lack of knowledge and engagement. Unsurprisingly lack of funds precludes access to advice; while size is often thought to preclude the need. More interesting was that for young, entrepreneurial companies still in the developmental, or proof-of-concept, stage, IP is a peripheral concern. At that stage, as creatives race to deliver their ideas to market and exploit them before their competitors; feedback and openness is often more valuable than legal protection and secrecy.. For many, running their own company is a lifestyle choice, with IP issues only arising if a product is being industrialised across many retailers.

The findings from the study draw out key examples of IP management and business strategy based on organisations' experience and interaction with the

legal framework surrounding IP. These are intended to help SMEs and microbusinesses to navigate the IP landscape and have been published by ICC under the title *Tales from the Drawing Board: IP wisdom and woes from Scotland's creative industries.* Presented as case studies drawn from creative producers' own experiences, with additional legal commentary, the collection reflects on commonly encountered IP protection instruments such as trade marks, copyright, registered and unregistered design rights and non-disclosure agreements, as well as more sector-specific performing rights, neighbouring rights, and ancillary rights. More broadly, the stories deal with daily issues of IP management, such as IP development and early research, documenting work for protection, partnerships and collaborative working, licensing agreements, developing brand strategy, self-publishing and digital rights management, and handling claims of infringement.

The published research findings will aid Creative Scotland staff in understanding the IP issues in each sector and how best to support each sector's sustainability. For workers in the creative industries, the project illustrates how IP challenges arise and are being addressed across the sectors, and points to resources available from a variety of support services.

As part of its aim is to raise the level of knowledge about, and awareness of, different aspects of IP, the KTP also organised a series of four seminars in 2013 and 2014.

The first seminar, *Strategies for Success,* helped erase that pervasive ignorance about the importance of effective management of IP, and provided legal and business guidance on IP and exporting issues.

Representatives of companies in a range of creative industries related their practical experiences of dealing with IP, and advisors for Creative Scotland, Scottish Enterprise and Scottish Development International (the event's co-sponsors) explained the range of support offered by their agencies. Among the SMEs and industry practitioners who attended were enterprises previously unknown to Creative Scotland, thus helping to extend its engagement with sector participants. The events demonstrated a need for similar events in future which would target specific sectors, and sparked the formation of partnerships to deliver further events.

Up your IP, organised by ICC and Creative Scotland and supported with additional funding from the RCUK Centre for Copyright and New Business Models in the Creative Economy (CREATe), was held in Edinburgh. It aimed particularly at design practitioners to help improve awareness of the IP issues presented by today's marketplaces, to provide advice on IP rights and current legislation, and to consider IP as it could be affected by future innovations. Ideas are free, but protecting them is expensive, and the vast majority of UK designs are unregistered. Choosing which ideas to protect, how, and how to react when an idea is copied are all part of business strategy. Legal advisors frequently recommend protecting IP wherever possible, often because it may be a key asset for attracting funding and investors and negotiating partnerships. However, Richard Clifford, director of the prototyping studio MAKLab advised caution: locking up IP at the prototyping stage may put it out of reach of potential collaborators. Instead, he recommended getting in early and capitalising on ideas first.

Digital Dialogues with Theatre, co-hosted by Creative Scotland and the Federation for Scottish Theatre, with additional funding from CREATe, focused on IP for theatre practitioners. It included presentations from theatre companies involved with digital and live streaming productions, as well as insights from legal professionals on digital rights and digital marketing. Because they coordinate so many varied practitioners – writers, performers, musicians, technicians, set and costume designers, and others – theatrical producers typically juggle many IP rights issues at once, especially as they seek to expand their audiences using digital media. With regard to the latter, speakers agreed that digital technology needs to be embedded

into projects from the beginning rather than bolted on later, and that it's accordingly important to secure IP rights early and anticipate how, in which media, and for how long they may be needed. Practitioners also reported that streaming does not threaten the viability of live theatre but rather reaches new audiences.

Upping Your Game, co-hosted by Creative Scotland and Abertay University in Dundee, with additional funding from CREATe, was a workshop on IP and business models for the video games industry. Featuring speakers from industry, academia, and legal and enterprise organisations, it addressed IP and business sustainability, investment and funding opportunities, and avenues for engaging with other sectors both within the UK and internationally. it was recommended that games companies should make more money out of existing products by, for example, giving them different skins for different markets. The speakers generally agreed that today's games industry requires a much more business and IP-focused mindset than has been typical of Scottish games microbusinesses. However, such businesses face tough choices when they weigh the trade-offs between allocating their scarce resources to IP housekeeping or asset development. The new trend toward interdisciplinary collaboration with other sectors such as theatre, design, health, and education requires early communication to establish trust.

"Our engagement with creative organisations and individuals has strongly increased their awareness and understanding of IP," says Young, "and furthermore has encouraged practitioners to seek out advice from those other services in order to develop their own IP strategies."

The seminar blog postings are available online at http://www.st-andrews.ac.uk/icc/research/ grantprojects/capitalisingoncreativityesrc/ knowledgetransferpartnershipsktps/ intellectualpropertymanagement/

Social Capital

Social capital has functioned in the management literature in the development and analysis of social networks, where researchers identify the role of bridging (linking between positions in a network) and bonding capital (the close ties that may develop within 'nodes' in a network). This is not quite the sense of Bourdieu's use of the term; for him, social capital refers not only to the relationships that might be held but more importantly, the capital that those in a network have which might be called upon and used to serve particular interests. In the cultural and creative industries, the importance of social networks and social capital has long been recognised. It facilitates knowledge about recruitment and job opportunities; and sustains "latent" organisations, where groups of people who have worked together previously on a project, may become reactivated when projects materialise. The role of social capital is also seen in accessing different audiences, especially witnessed in the growing impact of digital social networks and social media, networks which play a critical role in developing both "word of mouth" support and audiences; and in the success of crowd sourcing to develop ideas and crowd funding to finance projects. Issues that arise from an understanding of networks also include the physical and virtual infrastructure that enhances engagement and their effects.

Social capital and networks featured in different ways in four projects. Two projects focused on the types of relationships that sustain creative production. In a KTP project, Michael Franklin (page 26) studied how independent film companies can effectively respond to the disruption brought to the industry by digital technologies, by making greater use of social media in earlier stages of film production, thereby integrating marketing and distribution strategies into the film production process to help ensure their sustainability. Louise Stephens (page 29) conducted a micro study of the interplay of the many elements that make up a single theatrical performance. The two final studies in this section focus more on the role of materials, very broadly defined, that function to create new linkages and networks. Franklin's PhD (page 32) investigated the role of Digital Engagement Metrics, new types of data derived from social networks, to bring about a new configuration of the film production process through facilitating different financial and distribution relationships and arrangements. Maria Maclennan (page 36) bridged the substantial gap between the art and craft of jewellery design and the evidence-based world of forensic science in an examination of the role of jewellery in human remains identification projects, with jewellery helping jewellery designers and investigators develop a common language.

Improving return on investment through digital marketing and distribution of film

Michael Franklin
Knowledge Transfer Associate
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Technology Strategy Board

Digital technologies pose both challenges and opportunities for all the creative industries. In 2010, Creative Scotland established a Knowledge Transfer Partnership with ICC in order to improve return on investment (ROI) in the film industry through digital marketing and distribution. At the time, today's landscape of legal services offering digital streaming and video-on-demand seemed much farther away than it has proved to be. In 2010, Netflix was still a US-only DVD rental outfit just opening its streaming service, but the film industry was eying the music industry's falling revenues and envisioning similar troubles for itself, especially since DVD revenues had begun dropping, with no compensation yet visible from replacement channels such as video-on-demand. The KTP hired Michael Franklin, a film industry consultant with Masters degrees in film studies and the management of film businesses, to address what seemed to be inevitable.

"The music industry was going through changes, and the logic was set out for the film industry to do the same," Franklin says. Since then, the landscape has changed at speed. Now, "It's cheaper to shoot films," Franklin says, but this has exponentially increased competition in a market now transformed by digital entertainment alternatives and by piracy. How the independent film business was going to survive was an open question. The pursuit of an answer would guide Franklin through the KTP to a PhD project, also supported by Creative Scotland, and to conduct a student Placement and Business Voucher projects with several businesses in the Scottish film and media industry.

Franklin's research for the KTP examined how to apply digital technologies such as social media and video-on-demand tools to marketing and distributing feature films in order to improve revenues and viewership figures. His investigation analysed the opportunities offered by an earlier, broader, and deeper digital audience engagement; which strategies work best; and how marketing links to financing, sales, and disintermediated distribution. The project looked at these issues from a number of perspectives. At the macro level, Franklin mapped the management of such activity from a public investor point of view. At the micro level, he looked at the technical arrangements on individual projects for the benefit of micro-businesses and small-to-medium-sized enterprises (SMEs). These queries pertained to specific questions Creative Scotland faced regarding how best to invest government and national lottery funds and to manage the processes required to steward such investments.

He began with secondary research encompassing policy frameworks, industry and trade reports, and academic literature, primarily scholarship that focused on understanding the relationships between digital engagement and audience activity. The literature has determined that online ratings add accuracy to revenue forecasts; noted social learning as an important determinant of movie sales; and established that a large social multiplier exists. Other studies have quantified the feedback effect and predictive power of aggregated blog references, tweeting rates and spread, and overall social word-of-mouth activity as these are eventually reflected in box office receipts.

During the KTP's two-year span, Franklin developed a detailed understanding of the technical, financial, economic, legal and creative aspects of adopting digital business models for marketing and distributing feature films, and observed a variety of SMEs that have benefited from Creative Scotland investments. During that period he conducted a major analytic assessment of the industry marketing, distribution, and overarching business models currently in operation in

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Creative Scotland backs four new film initiatives with £1m

17 May, 2011 | By Wendy Mitchell

EXCLUSIVE: Creative Scotland has unveiled a £1 million investment into new models for film.

Scotland, the UK, and internationally. He also analysed historical Scottish Screen investment decisions, operating procedures, and investment returns in order to identify the criteria for success.

In the past, the kind of data Franklin worked with has traditionally been closely held by distributors or the studios themselves and rarely disclosed to individual filmmakers. But this is another thing that's changing in the industry as filmmakers are beginning to be wary of distribution deals that pay them a small percentage and lock up their work for long periods of time, potentially leaving them unable to exploit that work at opportune moments. "Filmmakers would like to have long careers," Franklin says, "and they want the person who bought their first film to buy their

second." And vice-versa: the success of a later film may spark renewed interest in an earlier work. On a more personal note, Franklin says that despite all these new models and their cold and quantitative metrics, one of the deals he watched happen came down to 12 hours of email back and forth overnight while distributors were trying to bid for a film and the producers were making arguments to convince their financial partners which one to take. "Film is still a really social business."

Overall, Franklin says, "I worked directly on approximately twenty films, piloting new models, and developing best practice for the SMEs that make up the Scottish screen industry provision. Specifically, I contributed to marketing plans and budget designs, developing revenue recoupment models,
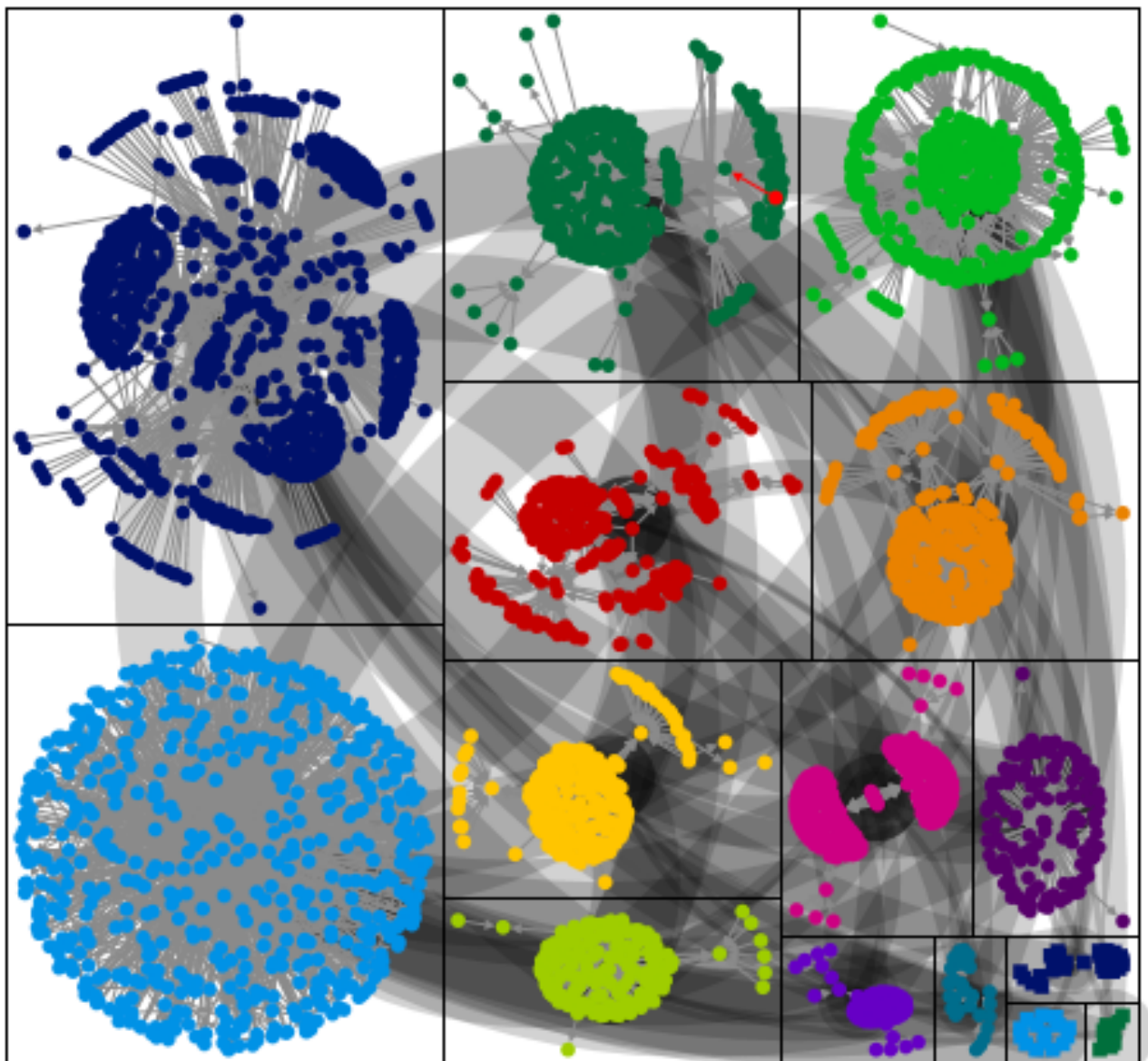
Social network analysis of a media outlet, created with Node XL.

conducting social network analysis and developing digital technology propositions." He also tested the viability of applying the models further and helped disseminate information to support SMEs.

Embedded research with Scottish film production companies highlighted the demand for digitally enabled business model investment and support. Evidence Franklin gathered from the results of an initial pilot was used to support decision-making for investments, driving a ten-fold increase in Creative Scotland funding for marketing and distribution- related projects. As a result, marketing and distribution plans, formerly kept separate, were incorporated into Creative Scotland's flagship fund for film production and exploitation. Franklin's research showed the need for concurrent or integrated funding so that digital models can be employed with the hope that adopting this principle will have long-term benefits for the sustainability of film companies. Disseminating this understanding further, first through direct consultation on 20 film projects, and second to attendees at training workshops, helped improve awareness, as did a variety of projects

teaching people to use digital tools, such as one with the Scottish Documentary Institute aimed at increasing community engagement.

"The ability to learn and test new digital models in a live, well-resourced industry environment gave me the opportunity to be at the cutting edge of innovation in this area," Franklin says. "Access to a wide variety of internationally significant market actors provided me with an extremely rich, fine-grained, and very practical set of skills and experiences. This also translated into a wealth of case data with which to undertake further academic research."

Franklin also took a lead on the marketing and distribution segment of Creative Scotland's response to the review of film policy by the Department of Culture Media and Sport, giving his work an impact on a wider level of economic performance and creative output at the Scottish and UK policy levels. His social video-on-demand work with Distrify was cited in the 2014 *Review of the Film Sector in Scotland,* from BOP Consulting.

The silence of the lamps: Visibility, agency and artistic objects in the play production process

Louise Stephens
School of Management, University of St Andrews
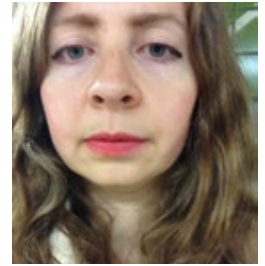
Organisation studies often use performance and theatre as metaphors for the way individuals within organisations behave and interact. Theatre may be used as a management or leadership tool; organisations are analysed either literally or metaphorically as if they were pieces of theatre or types of performance.

Based on her practical experience, Louise Stephens saw a problem with these approaches: "It seems to me that the application of theatre as a metaphor makes a lot of assumptions that we understand what a director's, actor's, or writer's role is." When applying theatre as a metaphor, or speaking of the "performativity" of an organisation, or saying, like Erving Goffman, that everyday life is like a performance, "If we don't understand what a performance is and the complexities within that we are at risk of missing a lot of things we think we understand." A breakdown of what action is involved in the roles of director, actor or writer etc., she proposed, could help not only look in more detail about who or what is agentive in creating work for live performance, but also help understand the nature of performativity itself as applied to organisations.

With the sponsorship of Playwrights' Studio Scotland, which aims to develop and increase access to the work of Scottish playwrights, Stephens set out to study the role of text in the production of a play and the agency of both the text itself and of the other "actors" – not just people but also props, lighting, music, and even the audience – in the network around it. Stephens based her framework on Actor-Network Theory: "breaking down the assumptions about what is causing actions to happen, what agency is, where doing things comes from. There's a whole assertion that Actor-Network Theory makes that agency is a constant cycle of everything mutually modifying everything else as it happens."

A key concept that Stephens drew on was Michel Callon's notion of *agencement,* a French term that has no exact English counterpart; "assemblage" and "arrangement" come close but lack the sense that the constituent elements have their own agency. In the context of her research, Stephens has come to understand *agencement* as "the play text performed in time" or as a "knot of things that are temporarily stable". Theatre is fundamentally both collaborative and ephemeral: All the mutual interpretations and translations that the performers and collaborators
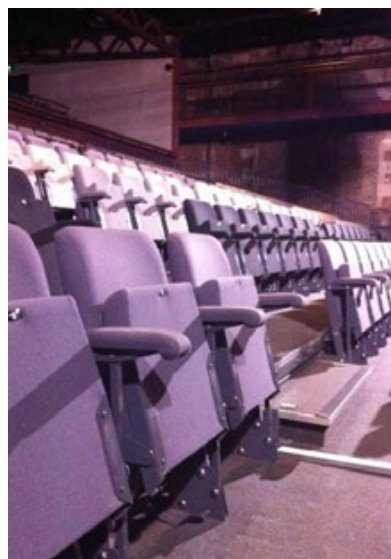
have constructed come together in performance for just one moment that is never exactly repeated. Even if precisely the same group of people returned on a second night to watch the same actors perform the same text, the result would not be exactly the same show, as any live performer knows who has seen a joke evoke uproarious laughter one night and die in silence the next. "Time has passed, people have changed, they can't walk in exactly the same spot. If you peel back the layers, every one and thing is contributing to their own version of events out of the materials available to them." It is the detail of that moment of contribution that Stephens attempted to make visible.

Work in Actor-Network Theory such as Bruno Latour's analysis of door-closers as a way of studying mixing human and automated agency proved highly relevant to Stephens' research: "Everyone who works in theatre understands the huge importance of objects and space in what they're doing, so it seemed like there was already an ontological match between what theatre is and does and this theory, which tries to give us more tools to look at organisations in a way that perhaps we haven't already." She cites as an example what sometimes happens in the rehearsal process: an object – say, a tea set – can be crucial to developing the performance yet may not wind up in the final stage production. The memory of its physical

behaviours and qualities do, however, remain absent-but-present in the actors' minds and so impact upon the performance.

"At the base level we're missing a trick. If we say of an organisation that everyone is performing from a script, my understanding is that performance itself is so much more complex than get a script, read it out, and leave. As a result, if we analyse the contribution of agentive material beings – objects, humans, spaces, all present or absent – that contribute to the creation of actual performances, there we can apply some insights into how organisations perform. How does it affect our understanding of administrative and support roles if we look at an act of creating theatre and see how fundamentally a stage manager actually creates the physical and metaphorical space through marking out the dimensions of the stage on the rehearsal room floor with tape, for example?"

Stephens' research involved following closely the development of two productions, one a large, operatic piece of theatre involving a live orchestra of nine to 11 musicians, six actors, several puppets, a puppeteer, and a director, writer, and composer. The second was much smaller, a pantomime in a small venue of limited capacity that involved four actors and a director (two of whom co-wrote the play). In the second production, each person in the group had more than one job: The

play was written by one of the actors and the director, another of the actors wrote the music, and so on.

"What I found fascinating in looking at both together was seeing the difference in how the audience understood their role in what the play was and how they should respond in different situations," she says. At one point in the pantomime the action called for one of the actors to knock on an invisible door; the sound was provided from backstage as an effect.

"There were a couple of occasions on which the invisible door didn't happen. I find it interesting that the invisible door had to change in some way to accommodate the failures of other parts of the play-creation machine's failure." For example, in one performance, when the actor knocked and there was no sound through a technical error, the actor improvised a line indicating that the door had moved "over here", took a few steps, and knocked again. Two things struck Stephens in particular: "One, the actor had to physically re-adjust where she was in space for the door to appear for the audience, and two, the audience reaction – they loved it when things went wrong, and to laugh at that." Such mistakes made clear that the invisible scenery was created by a collaboration between audience and actors – an agreement as to the rules of the reality in which the performers, the audience and the material co-created the performance. "In both case studies, the audience, though invisible, were integral from the start of the project, both in their actual and imagined form: Those making the play had to give them time to react, position themselves so they would be seen, but also communicate the words in a way they felt gave the audience a journey of understanding through the play experience. In this experience, this imagined as well as the actual audience had a great deal of agency and of power."

On a wider level, if a performance is viewed as simply key actors reading a text, all those "invisible" contributions to the performance, and the agency of the *assemblage* as a whole, will be missed. It is these nuances and invisible processes that Stephens argues organisation studies has failed to note. Yet they have a crucial impact on the way things are understood both within theatre and within organisations.

"The implication for organisations is that when organisations engage in performance, the active participants – the actors – who construct them are both greater in number and in variety than researchers have been encouraged to consider," says Stephens. "The participation of the audience in creating a piece of performance in particular is something that has relevance for organisations in considering the physical and social circumstances in which they are created. Researchers have pushed Organization Studies to consider material matters as part of the fundamental fabric of organisation; this research takes and applies these principles by exploring two performance case-studies to create a more detailed picture of how materiality and agency are linked to performance, as well as who it is who can have agency."

Louise Stephens submitted her PhD thesis in 2014. She is Deputy Literary Manager at the Royal Court Theatre, London.

The assemblage of Digital Engagement Metrics as a market device: The case of independent film

Michael Franklin
School of Management, University of St Andrews

For independent film production companies social media provide a strategic tool by which they can build a community and fan base and reach new audiences as part of film marketing and distribution campaigns. This use of social media need not be delayed until the point where the film is ready for marketing and distribution, but can be adopted at many different stages in the film production cycle, beginning while the film is still in pre-production. Data derived from tracking and analysing such interactions, as well as video-on-demand data trails, are labelled by Michael Franklin as Digital Engagement Metrics, (DEMs) and play an important role in the connections that exist between content, audiences, and other market actors. DEMs weave themselves into financial and legal mechanisms as well as marketing and distribution campaigns, and are thus central in management processes. DEMs intervene influence processes of valuation, calculation, and pricing and also the arrangement of particular networks of distributed people and things. In this sense they help construct markets. The resulting cross-boundary relationships constructed through the social, material, technical, and calculative elements of digital engagement data create, what in the literature is termed, new market assemblages.

In the interests of understanding the industry's responses to the disruption of the film market brought by digital technologies' breaking down of historical norms, Creative Scotland supported Franklin's PhD research. He aimed to examine the role that DEMs play in the market for independent film by examining their influence on films' creative marketing content; the management of the production and release cycle; and the organisation of film companies. Also at stake is companies' financial stability: DEMs may enhance these companies' ability to maintain control of their film rights and intellectual property.

How to understand these developing new arrangements and hybrid versions of established market mechanisms and the various interacting elements, companies, individuals, social networks, and digital creative work is of key importance in

reconfiguring the film market. Franklin began with two research questions:

- How are we to understand this reshaping?

- How do the various elements – companies, individuals, social networks, digital creative work – all interact so as to produce a reconfigured film market?

For a theoretical framework, Franklin turned to market devices, a concept drawn from Actor-Network Theory and social studies of the scientific and financial industries. The term is used to refer to the combination of materials and agencies that mobilise transactions; for example in the case of the Chicago Board Options Exchange[1], Franklin explains, one market device was a formula that, although originally developed by academics, became more accurate over time through usage. In the context of the film industry, market devices are "the things that are needed to make deals happen" – sales estimates, for example. The results, or metrics, of digital engagement (DEMs) – are another type of device, but one so new they are not well understood.

Franklin uses "market device" as a conceptual lens to analyse information passed among different companies involved in the film production process and used to make financial and strategic decisions. For example, advertising companies are comfortable working with data such as the number of Twitter followers an individual or organisation has, or the number of "Likes" a Facebook page has attracted; in the advertising business such metrics typically are part of year-round campaigns that build brand recognition even if they do not spark immediate sales. The film industry more usually builds a campaign to a movie's opening weekend, which in most cases determines the revenue flow for that film's entire life cycle. Further, Franklin says, most of the film industry's actors – producers, sales agents, distributors, even audiences themselves – are not familiar with DEMs' detailed economic import and struggle to understand the significance of these metrics for films' likely success.

Applying the theory of market devices to DEMs is, he says, "something no one has looked at previously". Rather, "All the research on digital engagement tends to be from a marketing point of view, which is very positivistic, correlation-based quants, which is one way of looking at it, but doesn't explain how companies interrelate."

For Franklin, "The key point is that it says you should attribute some agency to materials." By "materials" he means generally "the things that matter", even if the "materials" are something as apparently intangible as a number of followers on Twitter. "It's not just that people decide what happens; the way in which the materials are structured and connected to other things – people, other materials, in this case digital materials – have an impact." You can hear it, he says, in the way people talk: "'This figure means I need to do that', or 'This tells me I can earn this amount of money from this deal or this territory', and so rather than everything being attributed to the people themselves or the companies, or being represented by a final model, there is some construction work in the market going on attributed to these figures."

Using contacts established during his KTP, Franklin gathered field notes from participant observation, documents such as investment proposals and assessments, budgets, and planning, records of deal term negotiations, contracts, and industry tools such as revenue modelling, spreadsheets, and digital analytics, and other data charting the international sales, promotion, marketing and distribution of films. In addition, Franklin took notes of meetings and daily work practices, and saved large amounts of email tracing the life of film projects. From this mass of fieldwork data, Franklin was able to unpack the interdependence of valuation, performance, network creation, and digital materials in market construction. This gave him a clearer understanding of the film market as a dynamic construction and the specific role of DEMs in mediating relationships and securing contracts.

Franklin found that DEMs do not simply evidence technical relationships between variables but play an active, multifaceted role in shaping the market and are used to facilitate many different market connections. The numbers, which market actors take

(Photo © David Wardle)

Perfect Sense (2011) was a co-production of Sigma Films and Zentropa.

to signify audience demand and value, determine how the financing and release of films are configured. As such, they display agency that historically has not been taken into account in analysis of film production. Viewing the market as mobilised by these devices, which are growing in importance over time, exposes the specific ways in which market arrangements come into being and the role they perform. Disruption creates many challenges for the film business, but also offers the prospect that the creation and maintenance of network enrolment via these new digital tools can reassemble the market and restore value.

Michael Franklin is due to submit his PhD thesis in 2015.

[1]   MacKenzie, D. (2006). "Is economics performative? Option theory and the construction of derivatives markets". *Journal of the History of Economic Thought, 28* (1), 29-55.

Placement with Sigma Films Ltd.

A vitally important part of Franklin's fieldwork was live case data from film companies that benefited from Creative Scotland investments. One such company was Glasgow-based Sigma Films, the producer of *Under the Skin* and *Starred Up.* Capitalising on an extremely productive relationship generated through KTP and PhD research over a number of years, Franklin took up a six-month ICC-funded placement to help develop the company's film finance capacities. The work focused in particular on creating a business proposition and investment instruments under the auspices of a new company, Film City Capital. This work was founded on research and analysis of film financing structures, tax initiatives, sales projections, and opportunities to leverage digital technologies for improving returns from the exploitation of intellectual property.

Film City drawing by Davy Scott

Film City, Glasgow

Franklin found the placement to be invaluable to his doctoral studies: "The learning I gained from the placement was fine-grained and nuanced and provides an extremely useful empirical counterpoint with which to rationalise existing industry commentaries and positivistic quantitative research in the field." In addition, "I developed several detailed analyses to support the creation of a film fund and to aid its operation. By having to balance the role of digital media and technology with established concerns of finance plan structuring, sales estimates evaluation, and production management, I obtained a detailed picture of how digital tools are being used as a device for managing uncertainty."

Franklin's placement gave him access to other connected areas, such as industry debates over the future of the film sector in Scotland. "Access to expert information and discussions in this area enabled me to further reflect on the role of digital technology in the wider national, UK and international film industry context with respect to infrastructure in the broader sense," he says. The experience also taught him about raising private equity, tax-efficient financing, and writing for a readership of potential investors.

Forensic jewellery:
A design-led approach to exploring jewellery as a tool to aid forensic human identification

Maria Maclennan
Duncan of Jordanstone College of Art & Design, University of Dundee

Recent years have seen the increased application of craft and design knowledge to anatomically and physiologically-oriented research areas such as prosthetics and new biometric technologies. The result has been a new research culture that marries art, design, craft, science, and the human form, and presents contemporary jewellery design practitioners with a host of opportunities to develop innovative, purposefully-crafted ideas, concepts, and objects.

Separately, the field of forensic human identification is well known, at least in broad outline, to anyone who watches modern TV crime shows or reads detective novels, stretching all the way back to the late 19th century's Sherlock Holmes. Modern forensic science has studied everything from fingerprints and typewriters to textile fibres, bones, and DNA samples, enabling the positive identification of even centuries-old remains, as in the 2012 discovery of Richard III. Jewellery, however, has remained largely ignored.

Supported by the V&A Museum of Design, Dundee, Maria Maclennan, a trained contemporary jewellery designer, set out to explore the potential of jewellery as an identification tool within the practice of forensic human identification. Maclennan sought to study how craft and design practitioners could add value to this field of inquiry which has typically been far removed from craft and design disciplines.

"My background is not scientific" says Maclennan. "Forensic and hard science are all new to me." Her

literature review showed that hers is among the first research to explicitly investigate the potential of using jewellery for forensic identification.

Besides its personal significance, jewellery may have both religious and cultural significance and may be connected to place and geographic region. It may indicate specific relationships and life stages, and physical marks such as personal inscriptions, trademarks, serial numbers, and gemmological markings may help trace its origins and determine a timeline of its movement across continents. Jewellery also, unlike many other items traditionally used in forensic investigation, is durable: the metals and gems used in the vast majority of jewellery allow it to survive extreme external environments such as fire, burial, or drowning. That being the case, even if jewellery does not specifically identify the individual to whom it belongs, it may give investigators many helpful clues.

Because this field has been so little studied, Maclennan had no theoretical framework to draw on; of necessity, her research is exploratory. "There was no body of literature to refer to, no background of research, no real knowledge," she says. "I was basically trying to create a field that didn't really exist and at the same time test whether it's even really relevant and there's a place for it." As a corollary, because there were no existing framework and methodology to draw upon, "The PhD was very cross-disciplinary." Her own area of expertise – design – had to mix with

A marriage of two fields

social science approaches and methods while she investigated the realm of forensic science.

Maclennan's interest in this area developed during her Masters degree work at the University of Dundee, which allowed her to bring in skills and knowledge from other disciplines and apply them to real-world contexts. As part of that work, she collaborated with professionals at the University's Centre for Anatomy and Human Identification to design a forensic jewellery classification system for international police use, to aid faster identification of victims in mass disasters via the jewellery they were wearing. The system helps match ante- and post-mortem descriptions of jewellery to help confirm identity. For Maclennan, the experience opened up a new area to which jewellery designers' skills could be applied.

She began with three research questions:

• What is the potential of jewellery as a tool for identification within forensic human identification?

• What is the role of the craft/design practitioner in developing the new interdisciplinary field of enquiry of forensic jewellery?

• In what ways does extending the field of contemporary jewellery design into forensics affect both disciplines?

Given that Maclennan had no professional scientific training, she investigated jewellery's potential as a new methodological development within forensic human identification research by critically examining the role of the jeweller within this context. As part of her research, she spent a month working with human remains in a South African mortuary as a jewellery specialist and also worked for six months as an ESRC intern designer with the UK's College of Policing. Using the method of reflective practice allowed her to consider simultaneously the wider implications of the perspective of forensics as a viable extension of the field of contemporary jewellery design by participating in peer review-inspired discussions with other jewellers. She captured the resulting insights through conversation, participatory observation, rapid idea generation, and low-fi prototyping techniques inspired by both craft practice and service design.

To explore the field, Maclennan says, "I tried to create hypothetical scenarios where jewellery might be recovered, and created narratives based on what the different scenarios might be." Is the jewellery hand made or mass-produced and sold at Primark? Is it a luxury brand but perhaps purchased second-hand on eBay, or a family heirloom (bearing in mind that the history found may not belong to the person the jewellery was found with)?

"I tried to create these narratives and instances which could be examples of jewellery recovered with the body and guess what the investigating team would go on to do – what might be the process if it's found."

Lacking theoretical writings to consult, Maclennan used visual literacy to supplement narrative interviewing. Together, these helped her gather anecdotal evidence from relevant practitioners surrounding her research hypothesis. She used techniques such as affinity diagramming, knowledge swatching and conceptual jewellery, visual mapping, and the creation of a deck of multi-purpose playing-style cards that were colour-coded by the type of case study.

Adjacent to her PhD research, Maclennan spent three months at the Library of Congress on an International Placement sponsored by the Arts and Humanities Research Council, studying the Library's extensive collection of materials relating to the 9/11 attacks to find relevant case studies. This archive holds articles drawn from more than 10,000 newspaper titles, the majority of it yet to be indexed or made searchable. Especially germane to Maclennan's inquiry was a database created by the New York Police Department that catalogued the jewellery recovered after the buildings collapsed. At the time, the NYPD worked with jewellers such as Tiffany's and gemmologists, hoping to identify victims. In this particular event, more perishable personal effects such as textiles, which have a long and detailed history of forensic expertise, typically did not survive.

"I don't think jewellery could ever be the sole identifier in an investigation," she says, "but it's about a process of elimination and where there's nothing else in a case it's definitely a starting point that provides further avenues for investigation. There are a lot of case studies where an item is taken back to the manufacturer, traced to the point of purchase, and the company will have records." Her work has also touched on other personal decorative items such as eyeglasses, belts, buckles, and other items with metal in them, but, given her background as a jewellery maker, what she calls "décor" has been her primary focus. "The advantage of jewellery in this day and age is that everything is getting more mass-produced," she says. Especially in industrialized wealthy countries like the US, UK, and Germany, "We're losing the ability to identify people based on their clothing and effects, where before they might have been custom-, tailor-, or hand-made." Jewellery, by contrast, is still highly personal with great sentimental attachment, even when it's cheap and mass-produced. "Humans," Maclennan observes, "have strange attachments to inanimate objects. Jewellery seems more alive."

Maria Maclennan is due to submit her PhD thesis in 2016. Currently she is a Research Assistant at the Design Against Crime Research Centre at Central Saint Martins-University of the Arts, London.

Cultural Capital

Cultural capital relates to the knowledge and/or practice of a cultural activity and the recognition of its codes. It takes embodied, material, and institutionalised forms, influencing, for example, how to behave at the theatre, opera, or concert; the ownership and acquisition of works of art; the attainment of certificates or qualifications. As a subject, it has stimulated much debate: how it is acquired; the role of creators in setting stylistic norms; the way audiences participate; the influence of socio-demographic stratification on cultural participation and access; distinctions among social groups according to taste and consumption patterns, including such culturally discriminatory concepts as "highbrow" and "low brow"; distinctions among types of consumer: participants, patron, audience member; professional or amateur; buff or fan. Cultural capital is contested in attempts to widen a canon; or making things 'accessible', introducing works that might be more widely seen or read; or consecrated through such practices as the presentation of awards and prizes. From an organisational perspective, cultural capital helps identify what is unique about a creative product or service, which is in turn the basis of identifying which elements of an audience or market might be most productively engaged with and developing suitable 'branding' strategies.

Five projects focused on cultural capital. Using quantitative data to build new models of understanding, Orian Brook (page 52) studied the "aspatial thinking" which ignores the impact of geography, particularly access to cultural facilities, when considering the influence of socio-demographic trends on accessing and acquiring cultural capital. Bethany Whiteside (page 48), using space in a different sense, explored the range of dance activity within a three-mile radius in Glasgow in order to uncover patterns of social interaction inherent in the six types of dance she encountered, and how this was influenced by the activity of the dance itself. Joanna Bletcher (page 44) investigated the role of museums as cultural intermediaries and their role in building and transmitting cultural capital through the translation of ideas in the presentation of exhibits, and how exhibition practice influences how they are understood. Ben Fletcher-Watson (page 40) researched current best practice in creating and producing performing arts for very young audiences (birth to age three), an art form not aiming to produce audiences of the future but advancing the 'belief that children deserve access to the highest-quality theatre regardless of their age'; this work led, through an industry placement, to the development of a digital app for children's theatre. Sara Schumacher (page 55) investigated the Christian Church's resurgent patronage of the visual arts, illustrating how to be successful, understanding and communicating the underlying theology of church practice is an important aspect of a fruitful art patronage relationship, beneficial to artist, patron and congregation.

'More like a poem than a play': Towards a dramaturgy of performing arts for early years

Ben Watson
Royal Conservatoire of Scotland

In the interests of PhD research, Ben Fletcher-Watson has swung on trapezes and hammocks, had an opera singer open up at full volume two feet from his head, dug into sand, put his hands in wet clay, and been sprayed with water, all as part of attending, with his own daughters, theatrical shows intended for very young children.

Fletcher-Watson's research is a qualitative survey of current best practice in the devising and production of performing arts for very young audiences (birth to age three), including theatre, dance, opera, music, and multi-disciplinary entertainments. Supported by the Scottish children's theatre advocacy organisation Imaginate and the pioneering multi-arts creative organisation Starcatchers, his work has two strands. First is a broad study of Scottish Theatre for Early Years (TEY): how it's made and who makes it. Second is work on a "digital toy" inspired by a TEY production.

Fletcher-Watson puts the origins of TEY in the Nordic countries, from where it spread to Germany, Belgium, and the Netherlands. The idea reached the UK in the late 1970s, where a few radical left-wing companies began creating entertainment for young children as a reaction to didactic state-sponsored educational theatre intended to convey messages such as "don't do drugs". Today, almost every theatre in Scotland offers TEY performances, especially around Christmas, and there are several major companies that specialise in it.

Fletcher-Watson's research on TEY began with the discovery that "no-one's really studied it in detail…. There was no formal dramaturgy," he says. There was however a strong sense of identity among TEY theatre-makers. "All the artists I spoke to said, 'I'm not an educator. I'm an artist first and foremost, and maybe the kids learn something, that's great, but I

don't teach them and don't plan on that.'" Fletcher-Watson recalls that in the theatre of his own childhood in the 1970s and 1980s, "everything had to have a message". Now, he says, he often can't identify the narrative in the shows he sees; instead, artists seek to offer multiple meanings and there are no wrong answers.

Fletcher-Watson aimed to fill the gap in the literature. "I've developed a dramaturgical model for how theatre for the very young is created in Scotland." The model centres on "deserving" as the key aspect of the art-form, meaning a belief that children deserve access to the highest-quality theatre regardless of their age. Artists view children as audiences from birth, not spectators-in-training. Instead of preparing them to watch Shakespeare or Chekhov in the future, TEY productions are intended to engage and delight them in the present. This affects "everything from seating to ticket prices", as Fletcher-Watson notes, "and it defines the entire creative process – you might be offered a carrot to nibble, or find a professional dancer copying your every move. It's about finding new ways to connect with people, often on a really intimate one-on-one level, and putting children in control."

After conducting in-depth interviews with 26 theatre artists, he was surprised to find that their introductions to the TEY field shared a common, but accidental rather than deliberate pathway, beginning with "a kind of conversion experience – a Damascene moment". He charts this pathway as a series of steps:

- Knowing nothing of TEY;

- Finding the genre by accident, for example at a festival, and initially reacting with scepticism;

- Coming out with eyes opened, thinking, 'My God, this can work – the children loved it';

- Investigating more and more, often by playing with their own children or via a residency in a nursery school;

- Creating and performing their first work and making contact with other artists in the field;

- Building a reputation and becoming an advocate.

The process Fletcher-Watson describes is, as he notes, similar to that found in accounts of theological conversions, and results, like those, in "the zeal of the convert". Yet at the same time, the artists involved in TEY feel a lack of respect for their skills, even from fellow artists working for other types of audiences. "People think they're just glorified nannies, that it's easy, that they're just jumping around, rather than seeing them as artists making aesthetically valid works that happen to be for young children," he says.

Icepole by Katy Wilson, 2011. (Image © Neil Thomas Douglas)

"It's a mismatch in their identities. They see themselves as elite, highly trained artists with specialist skills, but even peers who make theatre for older kids can have negative reactions. It's challenging in a professional context when you feel you're constantly being patronised and put down – just as children so often are." Their 'elite' identity is reinforced when artists meet parents who say a theatre experience has continued to resonate for their children for years, as they play out scenes, quote lines, or sing songs.

Very young children pose an intriguing challenge for live theatre. They have physical and intellectual limitations: They can't, or don't know how to, clap, and they haven't learned basic semiotics, such as a rising curtain's indication of the start of a show. As a result, TEY shows often begin outside the theatre proper using a technique Fletcher-Watson calls "narrative bleed". Children may meet the actors, or the foyer may be decorated to create the show's atmosphere and lead down a passage to the theatre. Mysterious objects seen first in the foyer may turn up again in the show. Similarly, the end isn't so formally defined: the actors rarely take bows, for example. "It bleeds out either side of the theatrical moment."

Fletcher-Watson is producing a final report he hopes can be used as evidence with policy-makers and funders to explain the consistent dramaturgical basis and quality of TEY work as it has developed in Scotland. More widely, he hopes for a chance to look at TEY in other countries, to see whether the understanding he has formed applies elsewhere: "I'm reasonably optimistic that it's a generalisable construct. It definitely applies to the shows I've seen from Europe and North America."

More recently, with funding from the Imaginate Ideas Fund and the Royal Conservatoire of Scotland, Fletcher-Watson has been involved with creating a show for an even younger audience: foetuses still 'in production' (along with their pregnant mothers, fathers and wider families). One earlier performance in a deprived area in Wales involved teaching opera and creating personal lullabies. Fletcher-Watson's performance also used live music, but aimed to stimulate other senses too. It began by giving each audience member a chocolate-covered strawberry.

The idea was that seven minutes later – the time when research shows that flavours ingested by the mother hit the bloodstream and then the amniotic fluid – the babies would be experiencing the new flavour and moving around. Combined with gentle lighting, human voices and the strains of live violin, these unborn audience members were encouraged to explore new experiences, but in a safe and welcoming environment. "No-one's made a show before that's aimed at foetuses and the rest of their family too. I haven't found the right form for it yet, but I'm going to keep trying!" It may not be theatre as we usually think of it – but it's definitely engaging, entertaining and innovative.

Scottish Opera's Baby O2 (Photo © Mark Hamilton)

Ben Fletcher-Watson is due to submit his PhD thesis in 2015.

Placement with Hippotrix

During a six-month placement funded by the CBC grant, Fletcher-Watson worked with Catherine Wheels and Hippotrix, a Scottish digital app developer, on the development of a mobile app based on the highly successful Catherine Wheels show for two- to four-year-olds, *White*.

At the beginning of the creative process the developers offered two basic options: to create a supporting app for children who have seen the show, or to tell the same story in a different medium, creating something that children could play even if they never saw the show. Catherine Wheels chose the second option. This meant dropping narrative that would be too complex or potentially boring, while retaining the show's highly stimulating visuals. The game also dispenses with the actors, in favour of enabling its young users to play as though they are the stage characters.

"We call it a 'digital toy' because it's not competitive, you don't complete anything, and there are no levels," says Fletcher-Watson. "You can stay playing in one scene as long as you like or skip it entirely. We've found that very young children absolutely love the first scene, where you tap falling eggs to make noises. Each scene has its individual constituency."

Because he knew the show and its background very well, Fletcher-Watson acted for Hippotrix as in-house researcher for this development. He began by surveying competitors' products and studying what kids can and can't do with an iPad. He found, for example, that it is best to avoid using "shake" as a method of interaction because children may drop the tablet. Similarly, because most children in this age range can't read, or read poorly, the app needed to eschew text directions in favour of voiceover commands or interface design they can figure out, such as a very large play button in the middle of the screen. Fortuitously, Fletcher-Watson's own daughters were the right age when the project began.

This part of Fletcher-Watson's work enabled him to begin to develop a framework of "promising practice" for making digital products for very young children. This includes ensuring that the app is appropriate to users' ages, provides a secure environment, and appeals to adults too. "You need to have the child's carer involved so it's not a digital babysitter," he says. "My framework is leaking out into the ether, and hopefully when it's properly published, it will be useful to people working in the industry." He also hopes that the principles uncovered could be applied to products aimed at other "vulnerable audiences" such as people with autism or dementia. "The overriding aim is always to preserve the dignity of the user as a person with creative potential and aesthetic sophistication – and that is true whether they are a new-born baby or an elderly person with dementia. We all respond to culture."

As a result of his placement with Hippotrix, Fletcher-Watson said, "I have much greater understanding of the creative process behind *White,* a key focus of my thesis. My immersion in the process of app development led me down a more ethnographic route, producing new and rich insights."

In addition, the placement provided Fletcher-Watson with opportunities to develop a wide range of practical industry skills. "I was able to gain experience of almost all aspects of app development: from initial brainstorming to client meetings, from wireframe to capturing assets, from branding and marketing to product positioning. In addition, Hippotrix gave me insights into commercial considerations such as disclosure, ethics, international regulations and law, revenue strategy and business growth."

A video describing the impact of Ben's placement at Hippotrix is available from the ESRC website: http://www.esrc.ac.uk/news-and-events/features-casestudies/case-studies/34053/making-theatre-childs-play.aspx

Fiona Hyslop, Scottish Government Cabinet Secretary for Culture and External Affairs, plays with the *White* app.

hippotrix

Curating innovation:
Exploring exhibition as a method for revealing innovation within design and craft practice

Joanna Bletcher
Duncan of Jordanstone College of Art & Design, University of Dundee

Cultural intermediaries such as museums play an important role in translating ideas and influencing their perception. This role, however, requires such intermediaries to be innovative in their selection and presentation of material for exhibition and to understand the effects of such presentations.

The V&A Museum of Design Dundee supported Jo Bletcher's PhD investigation of how contemporary conceptions of design as innovation challenge traditional approaches to curating within museums and galleries. Exhibitions are an integral part, both intellectually and economically, of the working practices of museums, functioning as both a means for producing and disseminating knowledge and as a

product that can be marketed to potential audiences. Exhibiting design poses a special problem: Designers innovate in many areas besides objects – textile fabrics, packaging, software, architecture, airport security queues, even healthcare services. A key question for design museums is therefore how to capture such a wide range of material and immaterial practices, while simultaneously adapting to modern audiences' changed expectations of participation and engagement.

The V&A Dundee presented a unique opportunity and context in which to study issues of curating design innovation.

Bletcher began with a literature and contextual review to study the landscape of exhibition-making for design. She describes her research as "practice-led", explaining that engaging in curatorial practice allows the theoretical work to emerge through a reflective interaction with a particular context. Drawing on the hermeneutic tradition, she has engaged in cycles of interpretation and reflection, recognising that an exploration of human-made materials and processes requires interpreting something that is already itself an interpretation.

"I draw inspiration from Heidegger, in the way he sees people as embedded in the world rather than separate from it," she says. "Engaging in curating as a creative practice, and my reflections on that practice, inform each other, just as my position in the world informs my understanding and vice-versa." Bletcher's reflective journal includes field notes interspersed with developing theory drawn from other sources, including design theoreticians. Practice remains the key because, "To suggest that you can only look at things from a theoretical perspective and stand outside – I don't believe that's the case." Despite not being a natural writer or blogger, she adds, "Writing has been a vital part of coming to understand the research."

Bletcher's own background is in jewellery design; this research represented new ground. Her main findings are not so much prescriptive as suggestive: "It has

helped me to see how design is framed through exhibitions at the moment and why this might need to change – how we might begin to change and why this is a real challenge."

A key change is a new appreciation of the importance of context. A research project by textile designers Dr Sara Robertson and Sarah Taylor can be seen as an example of how much valuable context can be missed by focusing on the final object, rather than on the values underpinning the process of innovation. Their materially-based experimentation married Taylor's work with light-emitting optical fibres and Robertson's research into temperature-activated colour change systems, with traditional linen fabric and 17th century lace designs held in the National Museum of Scotland collections. Robertson and Taylor created a new responsive textile material, combining printed linen, fibre optics and a knitted copper circuit, which attaches to a small, inexpensive computer known as an Arduino, in order to control subtle colour and lighting changes. "Digital Lace", chosen for V&A Dundee's nationwide introductory travelling exhibition, is the result of a year's work, including an expert workshop, several sampling sessions, much discussion, and perhaps five iterations. Viewing the material alone, says Bletcher, conveys only a hint of the complex, collaborative process that created it.

"When you see this final thing that they've created called Digital Lace, you have no sense of why it

was produced, their motivation for doing it, or how making things together, combining that expertise, helps to develop new knowledge in that area. And so actually exposing the fact that this is an ongoing process, that it's challenging, that they've worked together, and having conversations around that rather than celebrating the new technology that they might have created – that's what I find interesting."

The remainder of Bletcher's PhD work involves creating another exhibition as part of the final submission, as well as finalising the written thesis, which she hopes will bring out the importance of how language and context frame design. The exhibition will aim to be a manifestation of the findings of the research, utilising exhibition as a method both to embody the research itself, and as a means of dissemination.

Although still in the final phases of analysis, Bletcher's research process has revealed that communicating the significance and value of design is deeply rooted in a negotiation between the particular worldviews of the individual, the organisation, and the particular aims of a specific project. Although design is often linked to commercial interests that may lead to it being publicly represented in terms of 'successful outcomes', design curation must address the perspectives underpinning these narratives, balancing celebration with critique, and revealing the interconnected values that underpin practice.

Further, the research has given Bletcher a new appreciation for the makeup of the specific audience an exhibition is trying to reach. This is a developing concern for many museums, which have traditionally considered themselves authorities whose role is to inform and educate the public.

"We are shifting to a 'conversation', engaging with audiences on a different type of level, talking as peers rather than using a form of transmission outwards from the museum." In her own future work, Bletcher says, "I hope I could take that even further forward in revealing people's personal positions and perspectives. As a curator you don't hold all the knowledge, especially in a design context – it's such a diverse field." She adds, "Working on the public presentation of design in the context of an emerging design museum means trying to help disseminate understanding of design much more widely to general audiences as well as academics. It's possible to share knowledge in different ways with different people than standard academic research." She also hopes that her research will contribute to the development of improved understanding of what practice-led research is and can be.

Joanna Bletcher is due to submit her PhD thesis in 2015.

Placement with V&A Museum of Design Dundee and the Travelling Gallery

Bletcher's six-month placement from January to June 2014 involved undertaking curatorial research for an exhibition being developed in partnership between the V&A Museum of Design, Dundee and the Travelling Gallery, which is based at the City Art Centre in Edinburgh. The 'Design in Motion' project aims to raise the profile of V&A Dundee across Scotland, by taking a specially curated exhibition on tour via the Travelling Gallery, a custom-built gallery in a bus.

 "It was enormously helpful for understanding the industry setting, the challenges, opportunities, and everything that goes along with being an emerging organisation." V&A Dundee's permanent home, designed by Japanese architect Kengo Kuma, will open to the public in 2018, and 2014 saw the organisation's small team launch its first community engagement projects. "It's fascinating, because it's still all brand new."

The placement enabled Bletcher to collect primary data on a specific curatorial process and forms one case study for her thesis research. Acting as curatorial assistant embedded her into the working practices of both the Travelling Gallery and V&A Dundee, providing insight into how these organisations collaborate to define and develop innovative strategies for engagement. The experience also illustrated the challenge of trying to provide clear or unambiguous articulations of contemporary design practices (which may be on-going, fluid and resistant to classification), without closing down the potential for multiple interpretations.

This 'real world scenario' provided the research with a tangible context to support the continued development of her thesis, affording a more nuanced understanding of the challenges and opportunities inherent in an industrial setting.

Bletcher was not disappointed. "My placement was hugely beneficial for me, giving me a real sense of context for the research – an emerging museum, the approaches to curation, the challenges and constraints in that kind of environment. Equally, the sponsor got support developing what is their first touring exhibition." She also hopes that the philosophy and theoretical research she brought with her offered a perspective that others might not have had. "It benefits everybody, being able to fund this type of research."

V&A Museum of Design Dundee

The hidden dancers: A sociological analysis of participatory dance activity and practice in Glasgow

Bethany Whiteside
Royal Conservatoire of Scotland

Dance scholarship has tended to focus narrowly on vocational and professional classical ballet and contemporary dance and macro themes of pain, injury, discipline, retirement, and the attainment of the "ideal" dancer's body. Bethany Whiteside has first-person knowledge of that ideal dancer's body: After fifteen years of classical training, studying the Royal Academy of Dance (RAD) syllabus, she reached 18 to realise that her body shape was not right for ballet. "And I wasn't good enough," she says frankly.

Whiteside's background, which includes an MSc in Dance Science and Education from the University of Edinburgh that merged theory and practice, proved ideal, however, in preparation for a sociological study of the many previously largely unstudied types of dance taking place within a three-mile radius in an area of Glasgow. Supported by Creative Scotland, her interdisciplinary research was intended to uncover the variety of dance activities that take place as well as the social micro-relations that characterise the dancing being performed, how these are produced by the dancing itself, and the inherent hierarchy and patterns of social interaction.

Such a study would not have been possible had she not undertaken years of training. Knowing the equipment to bring, being familiar with specific dance positions and the format of classes, and being accustomed to regarding the teacher as the ultimate authority all served to gain Whiteside acceptance by the participants. Her years of vocational training as a dancer and general enthusiasm to move enabled her to surmount large gaps in age and social background: At 28, in the line dancing class she was generally the youngest by a couple of decades and neither Glaswegian nor Scottish; she was able to participate in the Highland dancing class despite one of the younger girls wondering, "Can you do Highland dancing when you're that old?"
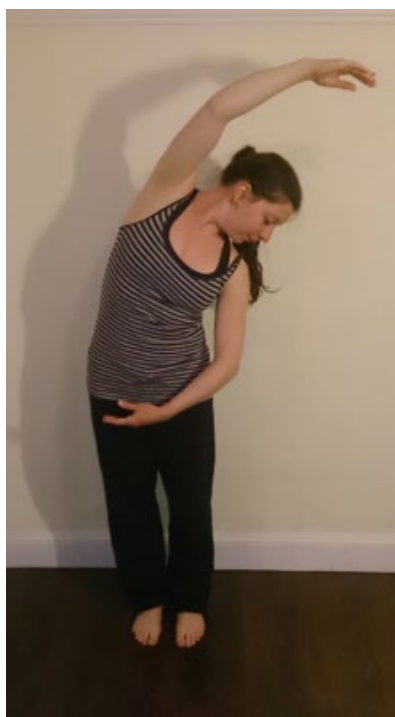
Inclusive Creative Dance

Salsa
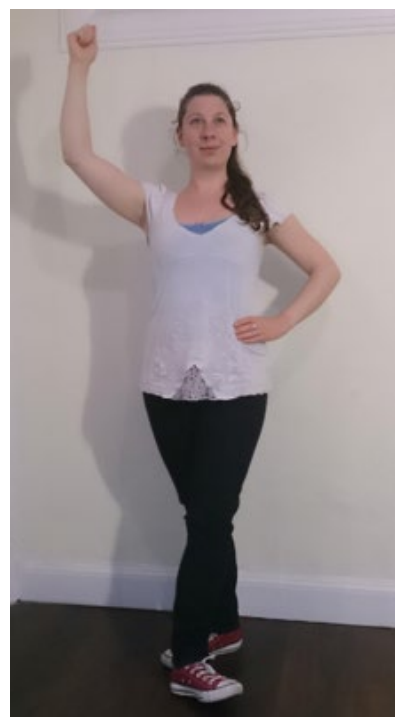
Line Dancing

Whiteside's nine months of research studied six types of participatory dance activity and practice taking place around Glasgow: professional ballet, inclusive creative dance, line dancing and Highland dancing, salsa club and dance in primary education. She chose the method of participant observation in part because a key criticism of previous sociological studies is that they pay little attention to the dancing itself: what and how people move. Given her background, Whiteside was able to participate in five of the six types; the exception was the professional classical ballet class, where to do so was beyond Whiteside's capability and would have been disruptive to the class as a professional working environment.

The research, Whiteside says, "really merged all my previous dance experience and university education. It needed the years of understanding- how people spoke to one another, how they move – certain settings welcomed me because I can point my feet."

Whiteside found the on-the-ground reality of several of the types of dance she studied to be substantially different from their public perception. For example, she says, "Salsa is often viewed in people's minds as having a lot of liberty, flow, and creativity – and yet if you don't abide by certain technical and social etiquette rules you cannot be considered a salsa dancer." Similarly, line dancing is often viewed as little more than a not particularly difficult fitness activity

for white working class women over 50, aerobic rather than technical. And yet she found that, "They were all very protective and proud of the technique of the practice."

To analyse the micro face-to-face interactions Whiteside found in the dance settings she studied, she adopted Erving Goffman's dramaturgical model, which uses the language of the theatre to analyse the experiences of the different groups of people involved.

"The key aim of Goffman's framework is to look at the different types of 'realities' that are in existence – whether they are contradictory, whether they're happening simultaneously, and so within my PhD the big findings concern those 'realities' that either support or maintain or challenge dominant perceptions of dance." Line dancing is a good case in point: "The dominant perception is that it's a bit embarrassing, not very cool, and not difficult to perform, but there's a lot of progression, a lot of different dances and steps, and a lot of focus on getting it right."

In all six cases, Whiteside's findings exposed significant gaps in the sociology of dance literature. In the professional ballet class, the area that has garnered the most attention, she found that the dancers had greater agency than the literature usually affords

Professional Ballet
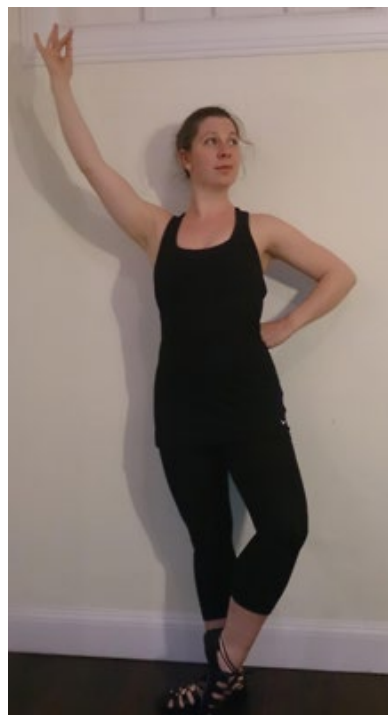
Highland Dancing

Primary School

them. Even though the focus in the class is on preparing for and improving the dance performance, to some degree the dancers, as adult professionals, were allowed the freedom of independent and individual dance performances within the daily ritual. In the inclusive creative dance class, she found the literature rarely includes the voices of either the dance participants with disabilities or the views and opinions of support workers and volunteers. Whiteside's study revealed a tension between the intended "reality" – that the class maintains and increases the standard of dance being performed while focusing on being wholly inclusive – and how the inclusive nature and the varying technical standards across the class both supports and challenges that focus

The technical difficulty of line dancing is frequently underestimated, as already noted; commonly thought of as embarrassing and easy to perform, a notion exacerbated by the ready acceptance of beginners and tourists who wish to participate. Yet the dancing attracts long-term attendees precisely because it is challenging; they develop pride and a sense of achievement as they become more skilled. The salsa club, on the other hand, is rooted in the dancers' support for the dominant 'authentic' "reality", requiring technically correct performance, physical appearance, and adherence to heteronormative etiquette. Whiteside's study of dance education in primary school focused on how dance is taught and learnt. It relies on "key performers", teachers who take on the responsibility based on personal interest and knowledge. Highland dancing is highly formal, rigid, regulated, and technically difficult; involving constant repetition and frequent correction. While "tradition" is used to promote a dance practice with limited public understanding and a confusing history; the regulated "reality" may simultaneously be contributing to the demise of Highland dancing in Scotland.

Bethany Whiteside is due to submit her PhD thesis in 2015.

Thanks to an Overseas Institutional Visit (OIV) award from the ESRC, Whiteside was able to spend one month at Temple University in Philadelphia, which has the oldest dance department in the US. While at Temple, Bethany had the opportunity to present her research to members of the dance faculty, attend and give subject-specific lectures.

Whiteside also hosted a workshop at Temple on the creation of the peer-reviewed student-led journal, the *Scottish Journal of Performance*. Along with Ben Fletcher-Watson (page 40), she served as founding Co-Editor of the journal, which continues to be published by the Royal Conservatoire of Scotland. The students' development of the journal was supported by a grant from the University of St Andrews Centre for Academic, Professional & Organisational Development.

The *Scottish Journal of Performance* editorial team of Katya Ermolaev, ICC students Ben Fletcher-Watson and Bethany Whiteside, and Tom Butler celebrate the launch of Volume 1, Issue 1.
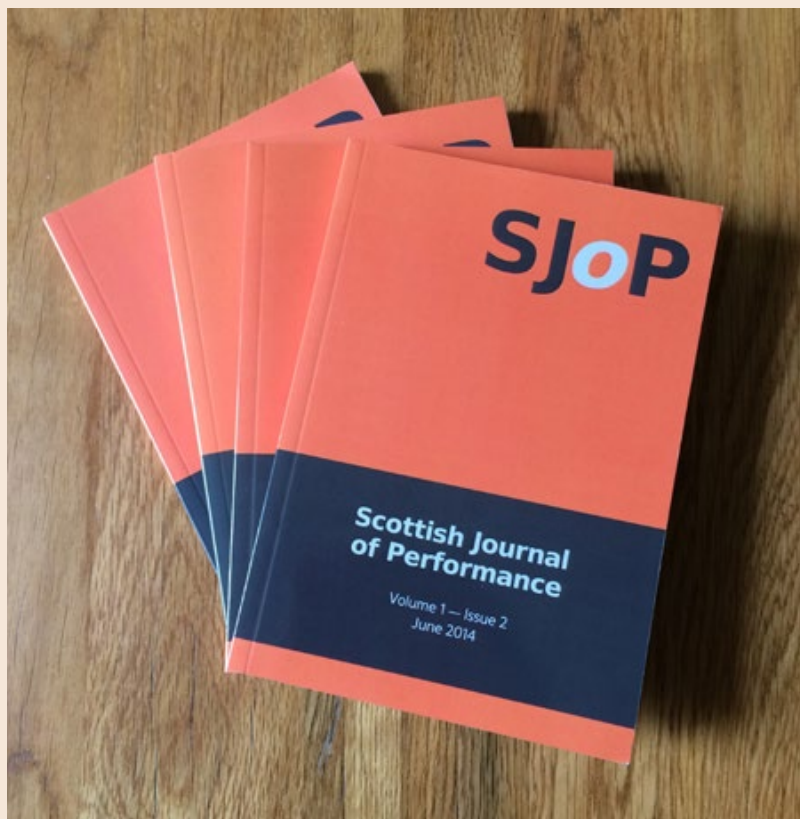
Explaining cultural participation in the UK: A geographical approach

Orian Brook
School of Geography and Geosciences
University of St Andrews

The relationship between demographic factors and cultural activity, access, and understanding is one that is of much concern to policymakers. The literature on the social stratification of cultural consumption explores the social construction of aesthetic judgments and finds that elites maintain their status, in part, by defining what constitutes legitimate culture. What Pierre Bourdieu called an individual's "habitus", that is, the everyday understanding, perception, and patterns of life, is influenced by one's background and environment, including the availability of culture in the local area. A key element that has been rarely studied, however, is the influence of the geographic distribution of both funding and cultural events on cultural participation.

This was the gap found by Orian Brook, whom London's Audience Agency and Scotland's Culture Republic supported to study demographic factors in cultural consumption. "There is all this research that looks at how social stratification drives cultural consumption, but it's slightly obscured the fact that there is huge spatial disparity in where these venues are located. Doesn't that have an impact on who attends?" She adds, "There is a lack of evidence about the relationship between supply and demand in determining cultural participation." She calls it "aspatial thinking".

Having worked in audience research for arts organisations, Brook understands that they are challenged by funders to increase audience diversity. In an early effort to analyse box office data to explore what could be learned by studying arts attendance at different types of venue, "I built this model predicting arts attendance using socio-economic and demographic factors, and looked at errors in the model." It was when she made a map of these errors that she realised that her model had no information on the venues' locations. The academic advice was to build an "accessibility index". For Brook, that was a moment of astonishment and enlightenment: She

realised that none of the substantial sums spent on trying to understand the influences on cultural participation had been allocated to studying the impact of location. Central government funders of culture have historically feared that focusing on ensuring an even geographical spread of funding might lead to what has been termed "the diffusion of mediocrity".

Brook notes that Arts Council England (ACE) describes its responsibility for the arts ecosystem as including artists, venues, and companies – but not audiences. The result, she says, is a lack of theoretical or empirical attempt to analyse the effects of their own investment on geographical variations in levels of cultural participation.

There is a similar pattern of great geographical disparities in funding of the arts at the local authority level. A contributing factor is that although local authorities are (or have been) major funders of culture, urban planners have not been provided with quantitative standards for providing cultural facilities, the way they have for leisure amenities such as parks and libraries. Rather, arts development activity is typically separated from the planning professionals. Culture, for example, was not included in the most recent National Planning Policy Framework. An international survey of cultural policies found that the great majority invested in culture for economic reasons such as creating competitive advantage, generating jobs, and attracting tourism, rather than for the purpose of providing amenities for local residents.

Brook's hypothesis was that geography matters to cultural participation; that besides the traditional sociological explanations of socio-economic status and education levels etc., the cultural facilities provided by the places where people live are influential in whether or not they participate in culture. The literature that incorporates spatial analysis of the use of public facilities provided support for this hypothesis, finding, for example, that distance is highly influential on the levels of use and/or the characteristics of users of open spaces and libraries but also polling stations and healthcare facilities.

However, accessibility is a complex concept. A facility may be nearby and yet still be inaccessible financially, culturally, or physically. Nonetheless, spatial accessibility provides information on opportunity structures. Brook accordingly looked at the influence of access to a venue on whether or not people attend, while incorporating the social stratification already identified by sociological approaches.
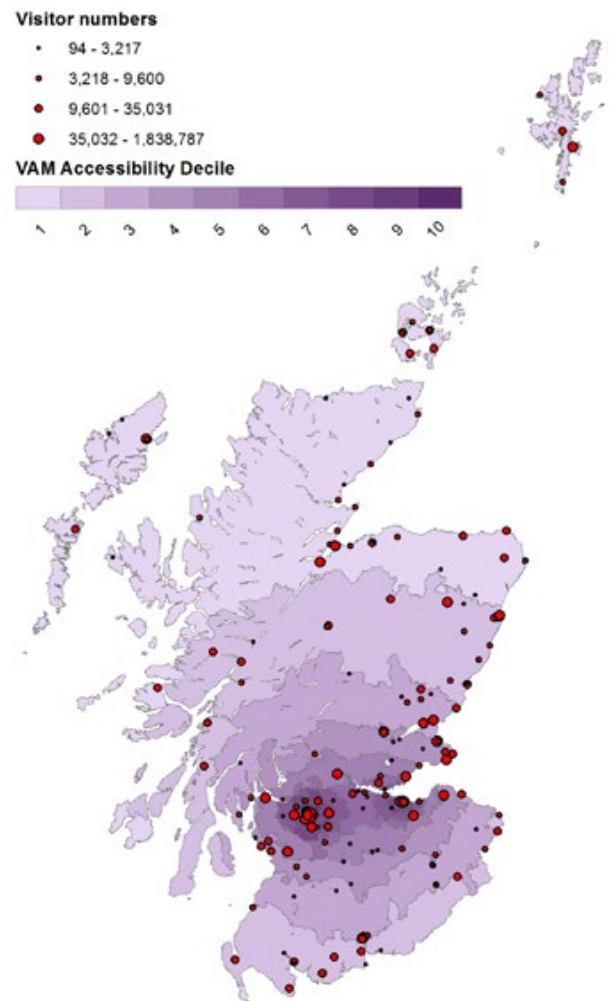
Museums and galleries in Scotland. Visitor numbers according to the Moffat Centre's Visitor Attraction Monitor, and accessibility index
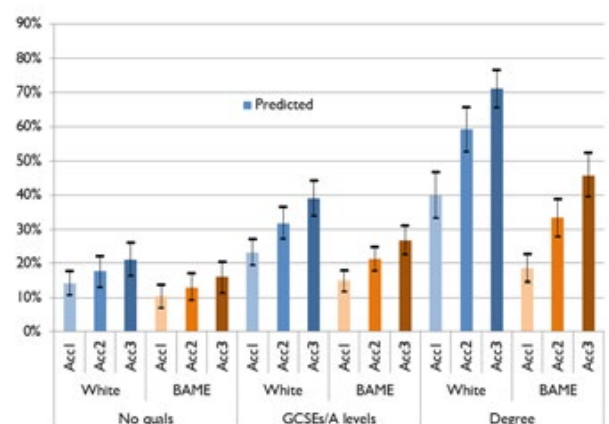
The predicted probability of attending a museum or gallery in London according to the ethnicity and education of respondents, and the access that they have to a venue.

Box offices of necessity collect detailed, accurate data. Brook compared box office records of local opera attendance, which related to almost 100,000 households, to ACE estimates of attendance for opera in the same areas. For each area, she compared the estimated and observed levels of household opera attendance, with socio-economic indicators taken from the 2001 census data. Based on the size of the venue according to the number of tickets it had sold divided by each census output area's distance from the venue, she created an accessibility index for venues presenting opera.

A multiple regression model found that the ACE estimates of opera attendance explained 60 percent of the variation in opera attendances within London, whereas a model using the census variables and accessibility index explained 70 percent. In the latter model, it was evident that, in line with the social stratification sociological literature, education, followed by occupation (but not income), were strongly significant in predicting attendance. However, an area's access to opera venues was an even stronger predictor. Comparing each model's estimates to the observations drawn from the box office data made it clear that the ACE model produced errors in the estimates of opera attendance levels which were clearly related to the access that areas had to opera venues.

Her second method drew on official government statistics from the Department of Culture, Media, and Sport/ACE-commissioned *Taking Part* survey. Brook was given access to the respondents' output areas, a term for the smallest geographical clusters for which census estimates are provided. Because visitor figures were only available for the largest sites and online searches have been found to be robust indicators of population-level concerns (for example by epidemiological researchers), Brook built an accessibility index using the number of Google searches for each museum and gallery in London. This weighting was again divided by each output area's distance from each venue to create the index. Using the output area, the survey respondents were linked to this accessibility index, an index for access to public transport supplied by Transport for London, and the 2007 Index of Multiple Deprivation. As expected from the sociological literature, a logistic regression model predicting museum/gallery attendance within the previous 12 months found that social stratification, in terms of education and, secondarily, occupation, was highly significant.

"What surprised me is the different effects of access for different population groups," Brook says. "People with a degree kept attending as access dropped off, whereas people without did not." In London, she found a complex interaction between ethnicity, education, access, and attendance. As among Whites, attendance among Black, Asian and Minority Ethnic (BAME) respondents increased with better access. BAME people had a lower level of attendance than Whites whether or not they had degrees, but again their reported attendance increased dramatically with better access to facilities. However, BAME respondents with a degree, as well as White respondents without, reported much lower levels of attendance as their access to museums and galleries worsened.

Brook also built a similar accessibility index for museums and galleries in Scotland using data from the Scottish Household Survey and visitor figures collected by Visit Scotland (which proved to be very similar in effect to Google searches). As with the others, this model confirmed the social stratification identified by sociologists but also showed that access to venues, less consistent across Scotland than in London, was also highly influential.

Overall, Brook had two key findings. First, the effect is not linear: those with the poorest access are more likely to attend than a linear trend would predict. This may be an effect of poorer access to other facilities so that residents will make multi-purpose trips to better-served locations. Second, good access predominantly benefits the best-educated but poor access has the greatest impact on the least qualified.

"In the past, arts funders have claimed that cultural participation is all about social class and education, so where they invest makes no difference to audiences. I hope that this research means that they can no longer say this". Instead, her research indicates, policymakers should "take responsibility for the fact that there is a great deal of geographic inequity in how they spend their money." She qualifies, "It doesn't mean that funding should be completely evenly distributed. There are lots of other reasons why it makes sense for that not to be the case, but they need to make that case, and not claim that if people outside London are not attending it is because they lack education, when they are not being given the opportunity to do so."

Orian submitted her PhD thesis in 2014. Currently she teaches at the University of Glasgow School of Social and Political Sciences, and is a researcher on the AHRC's Understanding Everyday Participation: Articulating Cultural Values project led by the ESRC Centre for Research on Socio-Cultural Change, University of Manchester.

Re-imagining the Church as patron: Towards a theological model for faithful church arts patronage

Sara Schumacher
School of Divinity, University of St Andrews

Historically, the Western Christian church was the major patron to the visual arts. The Reformation and the Counter-Reformation fundamentally changed that relationship. In succession, patronage of the arts in the broadest sense of paying artists to produce new work, shifted to the crown, the aristocracy, the emerging middle class, the state through public art, and, eventually, the market through the network of commercial galleries and collectors. Yet, almost unnoticed by outsiders, in the latter half of the 20th century the Church in the UK began reclaiming its role as arts patron, culminating in a 21st-century "renaissance" alongside the rapidly growing interdisciplinary field of theology and the arts.

Little research so far has focused on this resurgence, and what there is has focused on church patronage in England, where the cathedrals in particular have attracted high-profile artists. Accordingly, the starting point for Sara Schumacher, a divinity student, was the desire to discover what lay in the unexplored gap between current theological research and contemporary practice, with a particular focus on urban Scotland.

Schumacher began with three research questions:

- Can theological rationales for the arts be discerned in church arts patronage?
- If so, what are they, and how do they influence arts patronage practice?
- If not, what is motivating this resurgence?

As the project progressed, a fourth question emerged: What are the characteristics of flourishing church patronage practice?

Schumacher's background in professional graphic design and her personal religious practice sparked her initial interest in the project. She began by analysing the way distinct historical narratives and theological approaches to the arts bear on contemporary church practice. The grandeur that many people associate with church buildings and decoration is, she notes,


The Last Supper (© Stuart Duffin RSA 2012)

more commonly a characteristic of Catholicism. Within the Protestant tradition, the Reformation, Schumacher says, "did rupture the relationship between the church and the arts." Particularly for those in the Calvinist tradition, "Any image in the church automatically became idolatry, so you did have a shift of centres for patronage. There was definitely an economic challenge that happened where a lot of artists lost their livelihood."

Alison Watt, *Still,* 2003-04. Oil on canvas, 368 x 368 cm. Installation view, Old St Paul's Episcopal Church, Edinburgh. Photograph: Hyjdla Kosaniuk Innes. Courtesy of the artist; Ingleby Gallery, Edinburgh & Old St Paul's Episcopal Church, Edinburgh.
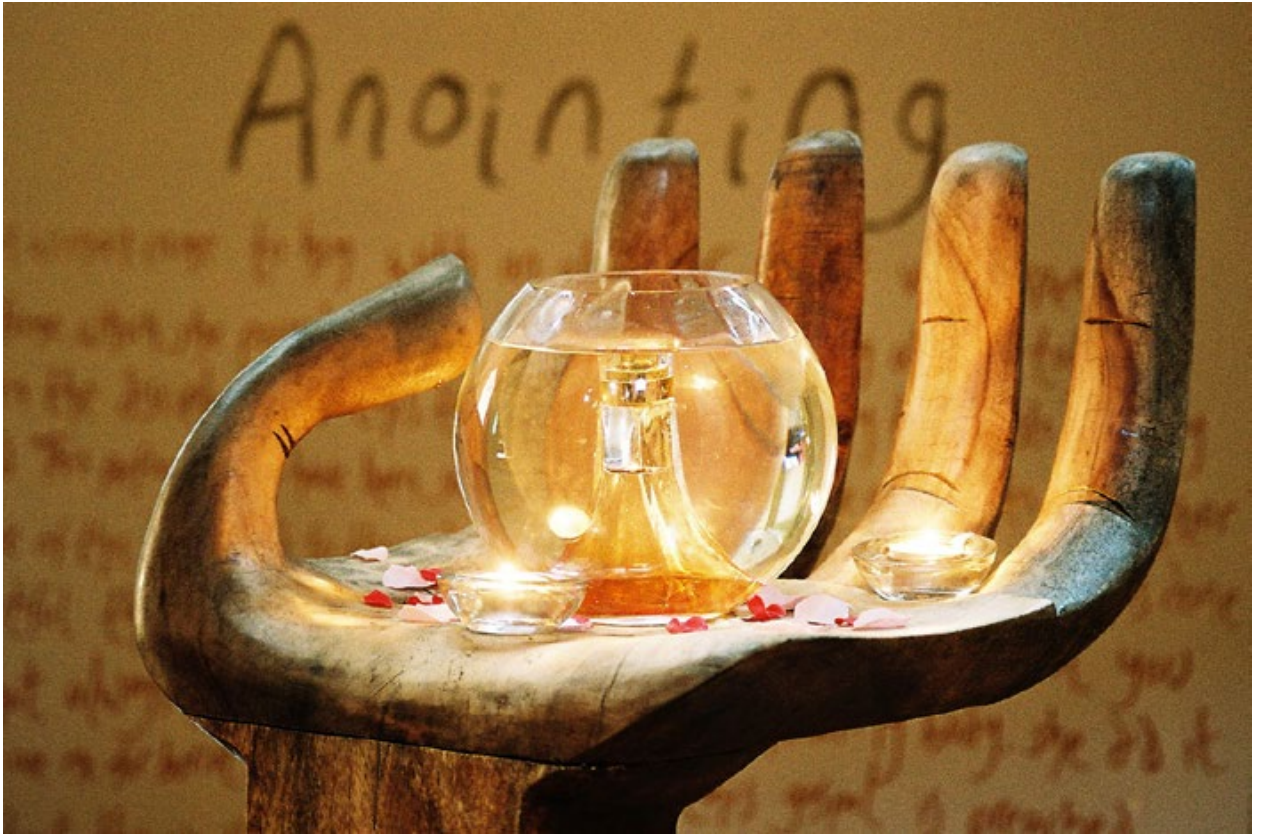
Journey Through Easter, 2012. St Paul's & St George's Church, Edinburgh.

Today, it is easy to overlook art found in Catholic churches on the basis that art has always been there. But in UK Protestant churches, "actually, we're finding it in churches where in their history there has been a rupture, and they are now stepping into a role that's not been part of their history." The results have been visible enough that both the London *Times* and the *New York Times* have run articles asking if the UK is in a renaissance of art in the church. The trend has also been identified by the UK-based organisation Art+Christianity Enquiry (ACE), which supported Schumacher's research.

A legacy of that rupture is a presence in some evangelical Protestant churches, in what Schumacher calls "latent suspicion of the arts". Traditionally, the Bible, the authoritative source, has been interpreted to see art in the church as unfaithful. To make patronage practice faithful, the evangelical tradition has had "to go back to the Bible and find space in the Bible for art to be considered to be faithful. That's the dynamic that's at play." Understanding this transformation is a more complex matter than a stylistic analysis; Schumacher argues that the core driver is theology, even if unconsciously so.

Schumacher believes the modern resurgence can be traced back 70 years ago, when church leaders began engaging with artists such as sculptor Henry Moore to produce work for the church. "I think that was the seed that started to germinate." Since then, a contributing trend has been the establishment of theology and the arts as an academic discipline. Schumacher has found this rather abstract and conceptual academic thinking to be detached from the practice that she saw on the ground. It was this gap that she wanted to explore.

"There hasn't been much research from a theological perspective and not much on modern patronage," she says, noting that there has however been some historical study of the kinds of art being installed in British churches. However, "I am interested in turning that around and asking why it's there in the first place. Theology is what makes a church, and if you don't consider the extent to which that creates space for art to be there in the first place – that's the research that hadn't been done yet." A museum is built to house works of art; a church is not; therefore if art is present it's to serve religious worship. "I think we make a mistake to assume that the church is just a glorified gallery or museum space. The purpose of art is different."

With ACE's help, Schumacher chose four churches as case studies, all based in urban Scotland, and each representing one of four theological traditions: Roman Catholic, Anglo-Catholic, Reformed Church of Scotland, and evangelical Protestant. The selected churches were also identified as exemplars within their tradition and in their patronage practice. Each has either permanently installed a work of visual art in the last ten years or had imminent plans to do so. Schumacher conducted semi-structured interviews with everyone who had decision-making influence about art within each church. She also analysed church documents, such as newsletters and sermons, as well as institutional church records.

Because the purposes of the church are defined by theology (or what is believed to be faithful), the way art is understood within a church's theological self-understanding is a necessary 'boundary' that must be made clear to the artist, because this forms and shapes the work's creation and reception. A flourishing relationship is one that is marked by collaboration and characterised by mutual engagement and dialogue as well as trust and respect. The patron and artist need each other, as each brings different strengths and weaknesses to the patronage process. The artist brings training, gifts, skills, inspiration, and a different way of seeing; the patron can help the artist to see the theological and ecclesial boundaries that a church context brings to the creation of the work. The full

collaborative participation of the artist and the patron, both working to serve the purposes of the church space through the creation of the work of art, in turn serves the congregation who inhabit the space, thus allowing all parties – artist, patron, and congregation – to flourish. Across all four traditions an artistically inclined patron activated the theology or made the opportunity. It was also important that the artists could work with the patrons. The danger, she says, is that avoiding dialogue sets up the artist to fail. "It doesn't demonstrate trust, just lack of engagement." Although artists don't want to be dictated to, they do understand that to be successful the work needs to serve a purpose other than personal expression.

Flourishing patronage practice happens, she concludes, when both artist and patron fully participate. The idea of a "boundary" as a clear articulation of the criteria which are inevitably present may be suitable for wider use, since it is not only churches that have criteria and boundaries. Art commissioned or procured for public spaces such as hospitals, schools, government buildings, or public land, must also work within and for a particular context.

Sara Schumacher will be awarded her PhD in 2015. She now works as Tutor in Theology and the Arts at St Mellitus College, London.

Trading Capitals

For the purposes of clarification, our presentation so far has been on individual capitals, intellectual, social and cultural. The nature of cultural and creative organisations, however, is that they deal with all forms of capital simultaneously and to survive and flourish, they must engage in what Bourdieu refers to as a continuous "economy of practices" in which capitals are traded, particularly cultural and symbolic capital, for others, particularly economic. How they operate and exchange these different capitals, both within their individual fields of art, theatre, film, etc. and between different fields, particularly the economic, and the political in the case of publically funded organisations, shows the complexity of the economy in which they operate.

Six projects studied the interplay of capitals. Emma Flynn (page 60) studied this at the individual level, tracing the experiences of 25 visual artists at a wide range of career stages, identifying how they develop the cultural capital of their practice, the social capital of their networks, and their relationship with galleries, both private and public, to sustain themselves. National cultural organisations are particularly susceptible to a range of demands from disparate stake holders and are, consequently, continuously balancing priorities and resources. Fabiola Alvarez (page 64) investigated the history of the national screen agency, Scottish Screen, to understand the way national cultural agencies may struggle to achieve a balance between demands which stress an increased economic role while still maintaining a strong cultural emphasis. Honor Tuohy (page 67) conducted an ethnographic study of Glasgow UNESCO City of Music, following the fledgling organisation as it tried to build on the symbolic capital of the title it had been awarded to establish a legitimate and sustainable image for itself, leveraging its symbolic and cultural capital for much needed economic resources. Holly Patrick (page 76) studied the different methods used by Dundee Rep Theatre to demonstrate its value to a wide range of stakeholders, including citizens, funders, audiences, and employees, thereby enhancing its legitimacy in order to preserve its cultural capital of world class theatre. In an era where local authority cultural budgets are under increasing strain the demonstration of cultural value is increasingly emphasized; what constitutes culture and how it is valued, the relative weights of capital, are contentious. These issues are examined by Ciaran McDonald and Lorenzo Pergola in their complementary qualitative and quantitative comparative studies of the value the residents of Edinburgh and Dundee attach to culture.

Building careers, negotiating capitals

Emma Flynn
School of Management
University of St Andrews

The tension between art and commerce is frequently discussed but how artists navigate that tension has rarely been studied. Dundee Contemporary Arts (DCA) works with artists at all levels, both as an exhibiting gallery and as a production space for their work, and wanted to understand how artists' careers develop in contemporary visual art and how they thrive – or survive – within it.

The topic interested Emma Flynn, an art graduate with professional experience of working with visual arts organisations, who wanted to know whether such a tension really existed or was merely assumed.

"When you're at art school there's always this talk about, 'You don't need to sell your work to be an artist.'

People wanted to portray that they would never sell commercially because that would be selling out." Yet some artists do achieve great financial success without sacrificing their artistic legitimacy. "I could see the artists I graduated with living as artists and I wanted to understand how they could be an artist and how they fitted into the art world and how they moved that forward," she says.

For her fieldwork, Flynn adopted the life history method common in sociology and anthropology and conducted in-depth interviews with 25 practising visual artists. The stages of their careers ranged from relatively new art school graduates to some with 40 years' experience, and from those successful enough to earn all their living from practice to those who are

Trevor Leat, *The Queen at Falkland Palace* 2012. Falkland Palace, Fife.

Dalziel + Scullion, *Tumadh:Immersion* 2014. Dovecot Studios, Edinburgh.
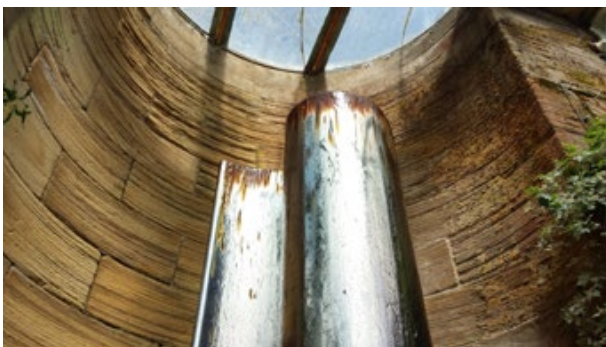
Yorkshire Sculpture Park, West Bretton.

Fiona Watson, *De Re Aedificatoria,* 2014. During Glasgow International 2014. The Pipe Factory, Glasgow.

still working myriad other jobs. All had worked with DCA over the previous decade.

Flynn found that for these artists, a vital resource was their relationships with certain commercial galleries, where the gallerists might find them opportunities, send them to events, and make sure their work was seen and discussed. Public galleries such as DCA may offer an artist a modest fee for showing work and are important in moving careers forward, but rarely show the same artist's work more than once and cannot provide a living.

For a theoretical framework, Flynn began by looking at institutional logics, which seemed an ideal lens through which to understand the competing artistic and commercial imperatives. Researchers in other areas of the creative industries, such as publishing and architecture, have found it useful. But in analysing the field data, she began to realise that institutional logics theory was not a good fit for the individual careers she was studying. Visual artists work with, but outside of, institutions; they are a web of individuals within a network.

At this stage, Flynn found what she argues is a more appropriate framework by returning to the work of Pierre Bourdieu on the creative field and his use of capitals: economic, social, and cultural. Economic capital helped her understand how the commercial aspects of the market contributed to artists' careers, and social capital spoke to the networked nature of artistic careers in the field of contemporary visual art. In Bourdieu's framing, cultural capital may be developed formally, through education, or informally, for example through socialisation and family activities. However, for artists, most of whom have degrees or at least have attended art school, qualifications are of less consequence. "It's what they do in that time and how they develop their practice" that is the significant element of cultural capital. A final rationale for this reframing was Bourdieu's references to the role of class and the concomitant economic and cultural advantages that accrue from growing up in an environment filled with exposure to and appreciation of culture.

"Bourdieu argues that even if you go on to do the same university course as someone who didn't have that background, the ones with greater cultural capital will always have the advantage." But, she says, "I found that with artists, in art school they might be advantaged in different ways." Such advantages might be better writing that translates into more effective grant applications, or having been able to begin developing innate talent at a younger age. "But in the artistic world it's not necessarily an advantage to have a privileged background." Although it might become more so: Whereas previously, the social benefits system might have provided a levelling factor,

Charles Jencks, *Cells of Life* 2003-2010. Jupiter Artland, Kirknewton.

with access to unemployment and housing benefits allowing artists without inherited economic capital to continue working without having a full-time job, changes in the benefits system have considerably changed this.

Economics plays a complex role in these artists' lives and is a sensitive subject. Many are, she says, living "very frugally". Another important factor is the cost of production, as for example, of shipping: One artist Flynn interviewed makes wall-sized works that, labelled and shipped as "art", cost more to send than the artist could ever make back from selling them. Another artist creates small pieces that can be shipped more reasonably and that are embedded on-site in elements such as concrete blocks that can be bought cheaply at any DIY store.

"They don't want to be seen to be changing their work because of money," Flynn says, "but they felt comfortable adapting their work because they still had a choice." By contrast, some of the artists she studied mentioned refusing to service the specific desires of collectors wishing to buy their work. In such cases, she says, "They literally turn down money because it doesn't fit with where they're going with their practice." The term "selling out" wasn't voiced, but, she says, the artists' sensitivity in that area was clear: Only one felt fully comfortable making plain the economic trade-offs he faced. The rest were "a bit more worried" that their choice about what to make should not be represented as driven by collectors or the market but solely by their own artistic criteria.

In terms of economic capital, the artists Flynn studied typically have a mix of income: first and most directly, selling their work; second, arts-related work such as providing the labour to put up a show or installation, working as a gallery assistant, teaching art students, or working with arts organisations in an administrative capacity; finally, non-arts work such as staffing a bar or shop. In the arts related work Flynn noted – and would like to explore further – a gender divide, in that male artists were more likely to provide physical labour mounting installations and women were more likely to serve as gallery assistants. As a knock-on effect, this division gives each group different opportunities: Male artists connect more closely with each other often providing the basis for future invitations to exhibit; female artists meet visitors and work with collectors. "I'm interested in how that may affect them, that they know different sides of the art world," she says.

At the theoretical level, Flynn's contribution is the development of the concept of artistic capital as a sub-category of cultural capital which specifically addresses the nuances of visual arts practice. At the practical level, she hopes that artists and art students, art schools, and organisations working with artists will be able to use her work to understand artistic careers within the framework of social, cultural, and economic capital.

"Art history is full of people talking about artists' practice, but less about their careers," she says. By contrast, her thesis focuses on structuring a career. The fieldwork gives artists a chance to understand how other artists have managed to sustain their art, in some cases over a long period of time.

Emma Flynn submitted her PhD thesis in 2014. Currently she is working as Festival Coordinator, Glasgow International Festival of Visual Art, and Research Assistant, BOP Consulting, Edinburgh

Scotland+Venice at the 53rd Venice Biennale.
Martin Boyce, *No Reflections 2009*. Palazzo Pisani, Venice.
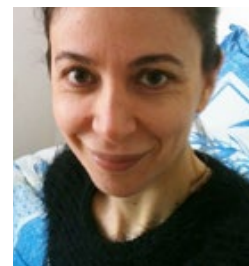Curated by Dundee Contemporary Arts.

Copenhagen, Denmark.

Kate MccGwire, *Evacuate* 2010. Tatton Park Biennial, Cheshire.

The Scottish national screen agency: Justifications of worth

Fabiola Alvarez
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Cultural and creative organisations often experience tensions between the twin mandates of art and commerce: They must answer the demand to produce artistically innovative work while remaining commercially viable. These tensions can lead to conflicts within organisations over priorities, policies, procedures, and personnel.

Scottish Screen (later Creative Scotland) sponsored Fabiola Alvarez to study some of the tensions that arose within the national agency during the years of its existence as it tried to balance support for films of cultural merit with the need to assist the development of film production as a whole.

Scottish Screen was established as a national body for film and television in 1997 by combining four precursor organisations: Scottish Film Council, the Scottish Film Production Fund, Scottish Screen Locations, and Scottish Broadcast and Film Training. Its formation was partly fuelled by the mid-1990s success of several high-profile movies set in Scotland, most notably *Braveheart* (1995), and its early years were significantly affected by Scottish devolution. In 2010, Scottish Screen merged with the Scottish Arts Council to form Creative Scotland. The agency's relatively short history provided Alvarez with a well-defined case study that suited both her background, which included a degree in translation, a Masters degree in film studies, and work in myriad roles in post-production companies, and her interest in studying the question of how businesses make decisions. Alvarez's research data was collected from three sources: organisational documents, film funding applications, and interviews with former Scottish Screen employees and board members, some of whom had also applied for funding as filmmakers and therefore could present views of the organisation from both sides.

Her research was designed to examine perceptions of the agency's function among internal and external stakeholders throughout its history.

Alvarez began with two research questions:

- Were there perceived tensions between the commercial and artistic demands on the role of the former Scottish national film agency and, if so, how were they handled?
- What was Scottish Screen's response to such demands as reflected in agents' accounts and the allocation of funds to film projects?

Studying these required her to address both intra-organisational aspects such as structures and funding allocation decisions, and the external environment within which the agency was created and functioned throughout its history.

For a theoretical framework, she began with institutional logics, based on an expectation that the problems Scottish Screen had over the years of its existence would prove to be traceable to a clear split between cultural and financial approaches: that is, a clash between two competing values.

"When I started talking to people, I realised that this preconception was actually quite wrong, and the things they were fighting about were more nuanced than that." For example, if you had to categorise the people who came from the four organisations that merged to become Scottish Screen, most or all would be classed as "cultural" rather than "commercial". However, when it came to making decisions about which film would be funded, they didn't fall into such neat categories.

"For some, personal knowledge of the director or producer and their work would be very important and factor in, where others would say it was unacceptable to have that as the main criterion for backing something. The role of personal relationships was one thing that created problems in the company because they had differing views of how important it was."

Another contentious issue was how much money and time to invest in promoting Scottish Screen itself.

"For some that was very important; for others what was really important was to get good films made." This issue didn't fall neatly into a cultural/commercial split, but created problems at meetings when it came to the final point of making decisions about how to invest the organisation's money and which projects it was going to support. "At the end of the day they had to come to an agreement and be able to justify the decision because it was public money."

A final source of considerable dissension was an ongoing debate about whether to build a studio in Scotland analogous to Pinewood, Shepperton, or the new Northern Irish studio housing the production of *Game of Thrones.*

Besides these internal sources of contention, a separate difficulty was the inconsistent political environment surrounding the agency. Alvarez divides Scottish Screen's lifetime into three periods whose ends were marked by governmental reviews and major management changes.

Scottish Screen was created by a Conservative government interested in commercial success, but by the time it began operations the 1997 election had installed a Labour government and, in Scotland, a new, more independent devolved status. The new governmental makeup and structure had an entirely different interest in promoting the creative industries.

"It all became about national identity and Scottish culture," she says. "So part of the problem, too, was that the government would make recommendations based on the political climate but not issue strict guidelines, and then it was down to those within the organisation to implement what they saw as their mandate." The resulting tensions took years to resolve: "Probably with the last CEO in 2005 they managed to come to some sort of balance. They would have a balanced portfolio and would back things that would never make it without the help of Scottish Screen but try to be present in films that were going to be clearly more successful." That balance allowed Scottish Screen visibility in festivals but also gave it the latitude to back small and experimental projects. "But it took a long time to get to that place where they were not being criticised by everybody." This was sufficiently true that by the time it was announced that Scottish Screen would become part of the new umbrella body Creative Scotland, there were protests from the same filmmaking community that had earlier been critical.

All of these discovered nuances led Alvarez to realise that her initial framework was too simple. Institutional logics had seemed a good choice because its emphasis on duality seemed suitable for analysing both the art-versus-commerce tension often associated with the creative industries, and the change and resistance that emerged as a feature of the organisation's history during her preliminary review of agency documents. Analysing the nuances became easier when she turned to the work of Luc Boltanski and Laurent Thévenot, whose work identified six "orders of worth", or sources of agreement and disagreement that are not confined to any particular sphere or logic. The advantage of the Boltanski and Thévenot framework is that it allows for analysis that sees the conflict among a variety of different demands. In particular, it identifies industrial demands (that is, concerns with efficiency), domestic (knowledge of the individual, for example an individual film producer's work), civic (the need to demonstrate inclusiveness and appropriate use of public money), inspired (the importance of giving risky but artistic and imaginative ideas support), commercial (the importance of stressing the market and financial aspects of success), and fame (the importance of reputation).

Through this lens it is possible to see that decisions such as which projects to fund or the structure of application procedures can be sources of contention and debate. But this framework also allows the observer to identify the particular frames of justification being used in support of specific policies and procedures. In addition, it provides a view of the kinds of compromise that might be achievable. Therefore, while domestic or inspired demands might conflict with commercial or industrial ones, inspired might be more compatible with civic and industrial.

In other words, an appropriate policy might be one that grants weight to the artistic element of projects as long as that is balanced by sufficient guarantee that public money has been used fairly and procedures are transparent and open.

This framework also allowed Alvarez to identify the nuances encapsulated in creative or artistic and commercial divisions, the former involving elements of inspired, fame, and domestic demands and the latter incorporating commercial and industrial. The emphasis on agents' flexibility with these demands gave Alvarez a better framework for analysing compatibility and conflict that was not limited to the contention of logics. She found it particularly well suited for following interactions in a professional organisation where people often compete to legitimise their varying views.

Alvarez found that rather than the battlefield for contending logics that a purely institutional logics perspective would expect, a plurality of orders of worth exist within a single organisation. As a result, she concluded that implementing measures that respond to these plural demands rather than focusing on the imperative of a single logic gives an organisation a better chance of sustainability.

In terms of wider impact, Alvarez says, "My biggest contribution is to make people aware that the cultural versus commercial tension that seems to be the approach that people researching the creative industries use, needs to be more nuanced."

Dr. Fabiola Alvarez received her PhD in 2014. She is now Research Assistant with the RCUK Centre for Copyright and New Business Models in the Creative Economy, University of Glasgow.

Negotiations of legitimacy: The value of recognition for Glasgow UNESCO City of Music

Honor Tuohy
School of Management, University of St Andrews

Glasgow was named a UNESCO City of Music in April 2008, admitting it to a network of over 60 Creative Cities around the world which aim to promote cultural diversity and sustainable development through the creative industries. In addition to music, there are cities focusing on literature, cinema, gastronomy, craft and folk arts, design, and media arts.

Once Glasgow was awarded the title, the Glasgow UNESCO City of Music (GUCM) charitable trust was created. The organisation sponsored Honor Tuohy to use its emergence as a case study into how a nascent organisation becomes established and, in particular, for Tuohy's research focus, its quest for legitimacy from Glasgow's field of already established music organisations. From 2009 until early 2011, Tuohy's field work base was the GUCM director's office, where, as a participant observer, she collected field notes and other observational data.

Tuohy's own background was relevant to this work: It includes many years of classical piano training and a degree in music. After a period of conducting and teaching in Ireland's County Cork she completed an MLitt in Managing in the Creative Industries at the University of St Andrews.

Tuohy was in a position to conduct a detailed ethnographic study of this new organisation, following it through the early stages of its development into an established body. Using the method of participant observation, she sought to understand how the organisation's members functioned in working to construct the perception of legitimacy through their daily work.

The earliest issues to emerge as Tuohy began her research were related to the emerging organisation's attempt to establish a sustainable role for the GUCM in the city of Glasgow itself. How would other groups

(Photo © Emma Flynn)

potentially affected by the presence of GUCM respond and how would the organisation position itself in an established infrastructure? Who, if anyone, had given the organisation's leaders, who felt a responsibility to represent the music of Glasgow at an international level, the "right" to speak on behalf of all of Glasgow? Further, GUCM leaders wanted the organisation to advance the ambitions and aspirations of those who had originally applied for the Creative City title, and of the city residents on whose behalf the award was claimed. These broad issues all formed part of the work of constructing a legitimate image of the organisation's functioning.

After some initial study, Tuohy had to narrow down these broader questions to serve the process of data collection and reflect the observations she had made of GUCM's social world. Although her academic

focus incorporated the approach of institutional and legitimacy theory, she found it useful to incorporate the theoretical framework that eventually became her guide through the material: Pierre Bourdieu's concept of "symbolic capital". Without the authority of field recognition, organisations' attempts to build other capital, e.g. social, cultural, political, and economic, will fail, endangering their continued existence.

The research questions were finally framed as: How do the members of Glasgow UNESCO City of Music view their organisation's position and its sense of legitimacy within its field, and how do they work to negotiate for the positions they want, or need, in order to advance the organisation?

Tuohy's research method of participant observation was iterative and inductive. She collected data by

(Photo © Martin McCarthy)

(Photo © Liz Leyden)

(Photo © Martin McCarthy)

(Photo © Martin McCarthy)

(Photo © Emma Flynn)

accompanying the director to as many meetings as possible and asking as many questions as there was time for. Her notes were augmented by a personal journal and began with broad themes and gradually became more focused and specific to the issues being researched. It was important to Tuohy that the data should reflect the contradictions observable in real life and that the academic theories should act as a tool to understand and represent the data. Consistent iteration between theory and data was fundamental to her eventual interpretation and discussion.

Three main concepts provided Tuohy's framework for studying these questions: institutional work; organisational legitimacy; and Bourdieu's concept of capital. Institutional work focused on the day-to-day work involved in building the organisation, which although having legitimacy derived from the symbolic weight of a UNESCO title, had to carve out a role and an understanding of what this title meant in practice. Bourdieu's concept of capitals allows for an understanding of how cultural capital in the form of a title was used to build alliances and networks in order to get increased standing and visibility in the city. This alliance of cultural and social capital, however, had to be parleyed into achieving the requisite amount of economic capital in order to ensure the organisation's continued functioning and its ability to deliver projects in order to enhance its standing and legitimacy in the field. Without economic capital, other symbolic capital, and cultural capital in particular, would count for little. The leveraging of

symbolic capital for economic capital, or aspects of social to secure further social and economic capital is a daily, continuous negotiation for those within this and similar organisations.

"There's a direct link between legitimacy, Bourdieu's symbolic capital, and the idea of recognition – that is, what is recognised as valuable and who is doing the recognising," she says.

Ultimately, Tuohy concluded that the characteristic of legitimacy can only be a passing judgment, a temporary consensus, and a momentary evaluation. Legitimacy is a function of the work of the field that is seen in an organisation's attempt to be practical and reflect dominant field-wide values. Although legitimacy is central to people's work, it is not identified in the field, and although the process of legitimation is one that everyone participates in and is responsible for reinforcing, it remains a misrecognised process.

While the scope of her study was limited to a particular organisation in the specific context of time, place, people, and priorities, Tuohy hopes that other organisations having cultural and social capital but few other resources, including economic capital, will be able to learn from this example.

Dr. Honor Tuohy received her PhD in 2014. She is currently teaching music in Ireland.

An exploration of community-based cultural activities in Dundee and Edinburgh

Ciaran McDonald
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In projects funded by the City of Edinburgh Council and Dundee City Council-Leisure & Culture Dundee, Ciaran McDonald and Lorenzo Pergola (see page 73) sought to assess the value of culture in these cities. Although much work has been conducted in the past on valuing culture, this type of research has often followed a quantitative economic framework rather than a more qualitative approach. In pursuing the latter, McDonald's research places an emphasis on ethnographic engagement with residents in order to explore what is represented as 'value' within the context of community-based cultural activities, within communities that are undergoing state-sponsored regeneration due to their SIMD status. SIMD, the Scottish Index of Multiple Deprivation, is a government programme of recognising neighbourhoods with prevailing socio-economic inequalities. Participating in arts activities is seen as reducing such inequalities.

"What I'm interested in is personal experiences – what people get from taking part in cultural activities," he says. "And policy analysis as well."

McDonald's work studies an area, he says, that has often been overlooked by researchers. "Despite community arts and cultural activities being an everyday part of the service delivery of local authorities, there is little evidence on the role of this provision and to what extent this impacts on citizens," he says. "There has been little evidence produced on cultural activities within the context of regeneration neighbourhoods in Scotland."

Studying the cases of regeneration communities, one each in Dundee and Edinburgh, afforded McDonald an opportunity to contribute a novel piece of work that complements existing literature in this field. The immediate spark for the project was the Commission on the Future Delivery of Public Services established

Ardler Complex, Dundee – landscape

by the Scottish Government and independently chaired by Dr Campbell Christie CBE. Colloquially known as "the Christie Commission", this 2011 report recommended urgent, sustained, and radical reform to tackle the persistent, deep-rooted social problems in communities across Scotland and the development of a new collaborative culture within public services in response to the twin, escalating challenges of economic austerity and demographically-induced increasing demand. Politically this led to the Community Empowerment and Renewal Bill being introduced in September 2014, which aims to increase the role communities play in local decision-making.

Both the Commission and Bill have particular resonance with McDonald's research and provoked reflection on the nexus between regeneration and community-based cultural activities. He asked the following broad research questions:

- There is already a large literature on 'community' in public policy but how is this term 'imagined' and 'projected' by the state in providing public arts activities?

- What are the challenges faced by community workers in delivering community-based cultural activities, specifically in regeneration communities, as they negotiate the intersection between policy and practice?

- How do citizens interpret and utilise the community-based cultural activities and in what ways does this correspond with or differ to the objectives of the state?

McDonald's choice of cases for his fieldwork was assisted by the city councils. He selected the Ardler Complex in Dundee and the North Edinburgh Arts Centre, both of which provide a variety of arts and cultural activities throughout the week to local people in areas with comparable social and economic demographics. These settings enabled McDonald to pursue his interest in exploring the ways in which community-based cultural activities are delivered in areas of acute socio-economic inequalities.

To conduct this research McDonald arranged semi-structured interviews with senior officials, community arts organisers and participants of the cultural activities. This qualitative fieldwork was also informed by ethnographic observations and focus groups of citizens in the communities. Derived from an epistemological stance of interpretivism, the collection and analysis of data ran simultaneously to help elucidate and inform a thematic understanding of this research.

Throughout the fieldwork period both communities went through different stages of economic and

Ardler Complex, Dundee – exterior

physical regeneration, presenting challenges for the ways in which arts and culture are interpreted and used at the community level. Overall the findings of McDonald's work indicated that the most valued forms of community-based cultural activities were those that have evolved organically, from the "bottom up", to reflect the interests of the local people. Indeed the respondents themselves displayed a variety of motives for participating, such as learning new creative skills and enjoying the sociable environments of the centres.

Yet perhaps surprisingly there is an evident 'mismatch' between local governments' aims to reduce socio-economic inequalities and the way policies play out on the ground. Focussing on real-world examples, he argues, is necessary to improve the link between the state and citizens, especially with regards to broadening accessibility. In addition to this, he found that there was a strong sense of community ownership and an attachment to place in both cities, suggesting that, "There were more similarities in the community aspects than differences."

Even though the regeneration programmes have brought great changes (both positive and negative) to the communities, McDonald found it was necessary not to forget the social and human aspects of regeneration, such as people being displaced and

traditional ties to an area being lost, which this research reveals. He notes that the Ardler and North Edinburgh Arts facilities provided places where people could go for social interactions, hence why the cultural activities were seen to be so significant and have been given prominence in his study.

The key challenge for policymakers and practitioners, McDonald concludes, is to ensure that the multi-faceted needs of citizens are met and encouraged despite any potential disagreements between citizens and their governing authorities. Ultimately, it is the role of policymakers to effectively provide a practical solution to the challenging influences that result from the public provision of arts and cultural activities.

Given the recent general government emphasis on economic austerity, he argues that this is an important time to demonstrate the wider influence that arts and culture can have on the day-to-day lives of people, particularly those in the urban areas studied here. Indeed the upcoming elections in both the UK generally and Scotland in particular will provide further ample opportunities to critically examine the re-imagining of arts and urban policies, particularly at the juncture where policy meets practice.

Ciaran McDonald is due to submit his PhD thesis in 2015.

Muirhouse, Edinburgh – landscape

Capturing the value of culture as revealed through residential preferences

Lorenzo Pergola
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The value of culture, as well as its scope and definition, has been an object of extensive research and consideration in both the academic and policy-making communities. In projects funded by the City of Edinburgh Council and Dundee City Council-Leisure & Culture Dundee, Lorenzo Pergola and Ciaran McDonald sought to extend the discussion by establishing the value people attribute to culture. They began with the questions: Are there ways to value culture other than in purely economic terms? Is there a more comprehensive way of valuing culture and what it means to people? McDonald (see page 70) chose an ethnographic path. Pergola, drawing on his background in environmental economics, attempted to quantify the value people place upon culture as it emerges as an aspect of choosing which neighbourhood to live in.

In environmental economics, he says, "When you can't capture the importance of something directly you look at the trade-offs people make when they make choices, and measure it indirectly that way." The approach is formally known as "contingent valuation", and is survey-based, although someone with a mathematical mindset might compare it to algebra, where known quantities are used to derive the value of unknown quantities. In environmental economics, contingent valuation is used to measure the value of non-market resources, for example, such as the value of a protected coastal landscape. The unknown for Pergola was how people valued culture; he used the trade-offs they make in evaluating a neighbourhood as the indirect measure.

Pergola's research questions became:

- How important is culture to people when choosing where to live?
- Are people's social and demographic backgrounds – such as their level of education and income, whether they had children and those children's ages – important in making that decision?
- Is the importance people attribute to culture directly linked to how much they use it?

Edinburgh Festival Fringe (Photo © robric77)

The last of those is the least tangible: While some people may never go to their local church, a sense of local culture might still motivate them to oppose attempts to knock it down.

It is an approach which does not find universal favour, especially from some in the cultural sector who feel valuation attempts debase culture, failing to value it because of what it is. "But then I argue that culture's intrinsic importance won't be considered, because it's easy for policy-makers not to think this way, and say instead, 'It's not generating returns, it will be cut' – and that's what's happening in the UK at the moment."

Before Pergola could begin, however, he had to answer a more fundamental question: How do you define culture? This perennial question is rehearsed widely: Is football as deserving of cultural subsidies as opera?

"This turned out to be one of the main themes, though I didn't realise it would be when I started," Pergola says. The answer became one of his most important findings: that the two cities think of culture very differently. Edinburgh, which the world sees as a leading cultural city, tends to the more traditional definition: galleries, museums, performance arts. For the more deprived post-industrial city of Dundee, the definition is more participatory and inclusive, incorporating everything from community centres and community-based activities to restaurants, pubs, and sport. At one of the 12 focus groups Pergola ran to decide what to include, a couple of elderly women spoke passionately about the need to include bingo.

"For them, that's the place where they come together and talk about what happened during the week and share experiences. They see it as the cultural event in the week."

Pergola settled on five categories: community activities such as dance, arts, crafts, children's classes, and bingo; museums and performance arts; libraries; food and drink (restaurants, pubs, cafes); and retail facilities. The last was difficult to constrain, but the final definition was one an Edinburgh resident suggested: "non-High Street independent shops". In other words, the category includes locally owned corner shops that residents visit every day and are centres for local gossip but not Tesco or Asda.

Minnie the Minx, Desperate Dan and Dawg, Dundee, by Tony and Susan Morrow. (Photo © George Clerk)

Similarly, "sports" was limited to community-level sports such as children's groups and excluded the professional level as commercial enterprises.

Pergola designed a questionnaire to survey 1,500 participants whom he interviewed face-to-face on the streets. That methodology meant the survey took a year to complete – but gave him richer data to work from. He discovered, for example, a surprisingly high level of engagement among the people he surveyed.

"It meant I saw face to-face all 1,500 participants filling it in and how they proceeded with each question, and the thinking going on. Sometimes they would ask what a question means and a conversation would start, so there was a bit of a quality study at the same time."

The questionnaire asked respondents to rank five sets of characteristics they would like their ideal neighbourhood to have, if they could create it: appearance and green space; culture and leisure; transport links; proximity to family and friends; community safety and school catchment.

"They all got into it. I was surprised how important it seems to be to people, once you ask them to express a preference, to get it right." The completed surveys were full of scribbles and explanations.

The subsequent analysis revealed differences between the two cities. In Dundee, culture and leisure emerged as the least important of the five categories (16.5 percent) – but it came in very close to safety and school catchment (17.5 percent) and transport (18 percent), both of which are widely known to be important influences on house prices and the desirability of a particular neighbourhood. In Edinburgh, culture and leisure came a close second (22.2 percent) to appearance and green space (22.7 percent), slightly ahead of transport and commuting time (20.7 percent) and safety and school catchment (20 percent), and well ahead of family and friends (14.5 percent). A significant theme that emerged was the importance of the "feel" of a neighourhood, which a participant described as "a mix of how the area looks, the atmosphere, how green it is, and the local culture". Pergola believes the data suggests a "feel bundle", which includes both culture and leisure and appearance and green space. Together, these accounted for over 40 percent of a neighbourhood's appeal.

Pergola found other differences between the two cities. "In a place like Dundee where they've had, for the last 30 years, far more problems of social deprivation and economic stagnation, though it's getting better now, the council is much more aware of culture's social importance for cohesion, for image, for people's confidence, for informing everything that then hopefully will become economic development- they put culture as the basis of it all and things will flourish from improving the local culture." By contrast, he says, "I was assuming it would be more central in Edinburgh policy." It's similar to the disparity in the ideas about what culture is that are displayed by the two cities' residents: "In Edinburgh, culture is something people buy a ticket for. In Dundee, culture is going to the pub for a pint with your mates, bingo, restaurants, food, or being able to go a craft shop and see the guy who made the bowl and buy it if you want – and you know the guy. The social and community interaction is seen as the cultural element, regardless of the actual activity."

Some of that difference is simply explainable: One of the reasons people move to Edinburgh is its cultural offerings. "If you have an initial idea of culture that values those things and you move there for that reason, when you're asked to value culture versus beauty or transport you will put it at the top. Whereas in Dundee, because culture is everything around you, the valuation is lower." The survey rankings made his point: In Edinburgh culture and leisure came second; in Dundee it came last.

Pergola would like to apply the methods developed in this study – "They have the potential to be quite powerful, though they're not fine-tuned enough yet, they're still quite rough" – to sustainability and the environmental sector. He is particularly interested in studying the demand side of energy use, as most policy to date focuses on provision. "Which sides of consumption are most important to people?" he asks. Like the cultural study, answering such questions involves understanding the trade-offs people make.

Lorenzo Pergola is due to submit his PhD thesis in 2015.

Challenging legitimacy in cultural fields: The case of Dundee Rep

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For publicly-funded cultural and creative organisations, justifying their continued existence may be an existential issue. For organisations in general, the management literature typically deals with this kind of question by theorising organisational legitimacy. Legitimacy theory also sheds some light on the complexity of the situation facing publicly-funded cultural organisations, as they engage with the political and economic fields in the interests of securing their funding, by exposing the fact that there may be no independent standard of justification. The theatre, for example, needs to demonstrate the value of its role to gain support from many different constituents.

Dundee Rep Theatre sponsored Holly Patrick to conduct an ethnographic study to improve its understanding of how it and similar organisations justify their existence. An award-winning, non-profit professional cultural organisation, Dundee Repertory Theatre was formed in 1939 as a collaboration between a professional theatre company and an amateur dramatic society. Besides a professional theatrical company, Dundee Rep houses Scottish Dance Theatre, a range of children's and amateur theatre dance classes and companies, and a creative learning department that works with an average of 27,000 participants a year – a striking number for a city with a population of 147,000. It's estimated that some 70,000 people a year attend one or more of Dundee Rep's shows, which attract praise from reviewers well beyond Scotland's borders.

Based in a city with higher unemployment and lower gross weekly pay than Scotland and the UK as a whole, Dundee Rep illustrates the many methods by which such organisations may demonstrate the value of their cultural capital and the role they

play in the community. "The Rep" incorporates a range of different activities, including community theatre, drama therapy, training, and education, into its understanding of its "core activity". Its many stakeholders, such as local government, the theatre community, the arts community, national government, and Dundee's residents, are integral to the cultural and symbolic capital with which it garners political capital among local politicians and government, to enhance or at least ensure its continuing viability and support.

As the theatre receives a relatively large percentage of its total income from public funds, it is vulnerable to political, social, and economic changes that alter the funders' priorities, as well as changes in cultural concerns. Consequently, for Dundee Rep, as for many other similarly-funded arts organisations, establishing and retaining the general perception of legitimacy is crucial.

Legitimacy is not what Patrick originally set out to study. She began instead by attempting to measure the value of the theatre, whether denominated in terms of the theatre's impact on culture or in purely economic terms, such as measuring how much people spend in the city when they visit. She began, that is, with valuation systems, a focus that was popular at the time among policymakers. In London, for example,

large amounts of money were being spent to work out the benefit of London theatres to both the local and the national economy.

Because of the financial pressures of the time, Patrick's earliest results surprised her: "When I talked to local politicians and council members about Dundee Rep and how valuable they thought it was, I expected them to express doubt or not be sure, but they were all incredibly eloquent about justifying why the theatre was valuable and their personal experiences about how great it had been. That was when I started to realise that legitimacy was more about the relational ties that all these different stakeholders have to the organisation and these really valuable relationships they had."

Patrick had not begun with a specific hypothesis for which she sought confirming or disproving data. Rather, hers was an inductive project that proceeded by collecting data through the method of organisational ethnography to see the patterns that emerged.

In this case, as she indicates, the data began to show the importance of even apparently minor community contacts: a child participates in the children's theatre, and shares her passion for the experience with a parent; that parent later becomes a member of the

board of a significant broadcasting organisation and recommends the theatre for a project; the project later generates significant prestige for the theatre; which in turn attracts funding from new sources.

"Massive, huge achievements came out of this tiny innocuous event," she says of real-life cases like that one. "So the idea is that legitimacy is not something that belongs to you but is something that is always occurring and always happening; something which managers can harness, but not something they can create." It is, in other words, a process.

That kind of incident also showed her the problem with what she was trying to do. Managers often do not have the administrative capability or resources to undertake the more traditional kinds of impact assessments – and for theatre-goers and participants those measures may be not only irrelevant but damaging to their appreciation of the experience.

"If you try and rationalise and measure that value using these methodologies that are mostly drawn from economics, then you're almost destroying what it is that you're doing. Because if you ask a child 'What did you love about today's class?' they will tell you. But if the teacher has to fill in a form about the child's grade at the start and at the end – or if you ask theatre goers, how much have they spent on dinner, did they get a taxi – you're changing that cultural experience and making it into something else. So one reason I tried to shift the research was as an effort to make an argument for not rationalising it and fitting it into a box that it didn't fit in but instead looking at other ways you could make that argument for value."

Based on the data she was collecting, Patrick changed course to the research question, How is legitimacy produced at Dundee Rep? She was particularly interested in studying how legitimacy might be seen to emerge over time. Overall, she spent 30 months between 2009 and 2012 observing and interviewing members of Dundee Rep to create a longitudinal study with a timescale unprecedented in the legitimacy literature. The mass of data she collected through participant observation in all the organisational departments and activities of Dundee Rep includes photographs, field notes, interviews, and other documents such as call sheets, programmes, accounts, industry reports, stakeholder strategies, and press reports.

Prior work in legitimacy falls into two camps. The process-based group argues that legitimacy emerges from a process of negotiation between producer and evaluator. The resource-based group argues

that legitimacy is a resource that managers control. Patrick's research concluded that each of these factors plays a specific role in constructing and maintaining the legitimacy of Dundee Rep.

The literature, she says, has always argued that it's the managers who manage legitimacy. However, her inductive field work found otherwise: "It's not so much the managers constructing justifications for the legitimacy of the theatre as the employees themselves in interactions with all the organisation's stakeholders who are developing nascent understandings of the value of the organisation to those people and ways to communicate that to them. And it is the belief in the intrinsic value of art as essential that drives this, even while recognising that artistic values are not always the right thing to put front and centre when talking to a child who's come to see the Christmas pantomime or a prospective participant in drama therapy. What you see in the literature is a thing that happens later than that – managers picking up on these emerging value systems and using them as external justifications for why the theatre is valuable. But actually the justifications come from inside the theatre."

Dr. Holly Patrick received her PhD in 2013 and is now a Visiting Scholar at the University of Technology, Sydney.

Business Vouchers

The ESRC Capacity Building Cluster grant portfolio included Business Vouchers, designed to give small and medium-sized enterprises short but focused periods of academic consultancy, worth up to £3,000, to access expertise relevant to their organisations. Typically the projects helped businesses scope the extent of, or potential strategies for addressing, issues of immediate concern. The vouchers addressed all four types of capital within the Capitals Framework: intellectual capital (the development of new product lines; developing policies to encourage skills development and capacities); social capital (the development of new audiences and markets; marketing communication tools); cultural capital (detailed exploration of companies' unique selling points and positioning in markets); and economic capital (financial evaluation tools for investment decisions).

John Harris, Chief Executive of Red Note Ensemble, receives the first ICC Business Voucher from Scottish Government Minister for Culture and External Affairs, Fiona Hyslop.

Intellectual Capital Vouchers

Dundee Contemporary Arts (DCA)

DCA is a centre for the development and exhibition of contemporary art and culture, providing opportunities for artists to create, and for audiences to engage with, a varied, high-quality programme of activity that benefits the people of Dundee, Scotland and beyond.

Researchers Martin Dowling of the University of St Andrews School of Management and Dr. Iain Henderson of the Edinburgh Business School at Heriot-Watt University conducted three Business Vouchers for DCA. To help it achieve its corporate objectives, the organisation wanted to replace the ad hoc opportunistic system it used to pay staff with a more robust and strategic structure appropriate for the range of employee talents and skills. ICC commissioned Dowling and Henderson, researchers with expertise in human resources and payroll management. In the first project, the pair reviewed existing job descriptions, assessed the types of roles and responsibilities, and suggested a new evaluation format involving six job factors, each with six levels, to be applied to all positions and resulting in a points score for each. The scheme was well received by the DCA.

In 2012 DCA engaged with the research team on a second voucher focusing on a timetable and action plan for implementing the new role evaluation scheme. "We believe this approach to job evaluation will enable us to be more competitive through accurately analysing job criteria and developing a pay structure that offers staff long-term incentives and clear career progression opportunities," said David Stevenson, DCA's Head of Operations.

In 2013 DCA returned to the ICC Business Voucher programme wishing to identify a competency framework for DCA managers, in order to help managers see the links between the managerial and creative aspects of their work and ensure a successful and sustainable managerial structure. Dowling and Henderson facilitated a workshop with DCA managers that illustrated a variety of approaches to competency frameworks and definitions of successful managerial skills and behaviours, and supported initial discussions among the managers that could extend beyond the voucher project through to implementation.

The voucher work led to the development of academic papers for the Chartered Institute of Personnel Management and Development-Scotland's March 2012 conference "Knowledge into Practice"; a 2014 DCA seminar for the MLitt in Human Resources Management programme at University of St Andrews; and a visit to DCA by the St Andrews MLitt in Creative Industries cohort.

DCA
Dundee Contemporary Arts

Pea Cooper Millinery

As one of the few fully-trained milliners in Scotland, Pea Cooper's hats are in demand the world over. She uses vintage and unusual fabrics to create bespoke pieces. She was nominated for International Milliner of the Year in 2009 and Scottish Accessory Designer of the Year 2011. Cooper has collaborated to make hats with some of the best names in the business, including Harris Tweed. Pea Cooper Millinery is based at the Fashion Foundry studio in Glasgow's Merchant City.

An invitation to design millinery for *Showcase: Contemporary Scotland,* a high-profile ballet performance in June 2013, focused the company's attention on the need to enhance key skills for long-term business strategy and audience engagement. Designing for ballet is a niche area of construction not often open to milliners. The company applied to the Business Voucher programme for research support in order to develop its network, analyse its training needs, improve its marketing, and explore design and production for performance.

Paul Tyers and Lauren Bryden from the Royal Conservatoire of Scotland were commissioned to conduct a project with Cooper that began with identifying relevant design networks. The researchers then helped the company establish a collaboration with textile business Bespoke Atelier, which resulted

in the design and production of 10 ballet headpieces that capitalised on the "stage" as a showcase. The project successfully merged academic performance theory and practice with the company's commercial strategy, audience, and resources.

Cooper commented, "I have benefited greatly from working with fellow designers Bespoke Atelier and the Royal Conservatoire of Scotland in this project, particularly from this unusual opportunity to work on the ground with local designers whilst working strategically with academics."

Pea Cooper Millinery

Social Capital Vouchers

art4you Scotland

Based in Balfron, Stirlingshire, art4you Scotland offers classes to participants of all ages and abilities in drawing, painting and other media. Students can discover their artistic side or improve existing skills in the relaxed, creative atmosphere of the art4you studio, located in the inspiring setting of Loch Lomond National Park.

The company applied for an ICC Business Voucher in order to acquire help with developing its business sustainability, including broadening art4you Scotland's network and market, expanding its product range and increasing tourist links within the National Park and beyond. Dr. Charlotte Gilmore, then Lecturer in Cultural and Creative Industries with the School of Management at University of St Andrews, and Researcher Eilidh Cochrane of ICC, were commissioned to conduct the voucher project.

The researchers conducted focus groups and interviews with art4you class attendees and potential tourist partners (hoteliers, cottage rental companies, and the local Tourist Board), in order to explore their attitudes regarding the company's current product offering. They also identified needs for art4you products within the local tourist industry and secondary school markets, and examined means of improving branding, promotion, networking, and expansion of the company's product. The findings of the project were presented to the company in order to inform its future strategies for marketing and promotion.

"This was a valuable experience and project," said Claudia Duncan, proprietor. "We would recommend it to others, especially new start-up businesses, because each meeting and the final outcome were motivators to get the project and ideas growing and it worked as positive encouragement."

art4you.scotland

Glasgow Women's Library

Glasgow Women's Library (GWL) is a registered company and Scottish charity which won the 2013-14 Arts & Business Scotland "Enterprising Museum of the Year" Award, sponsored by Museums Galleries Scotland. It houses a lending library, archive collections, and contemporary and historical artefacts relating to women's lives, histories, and achievements. As part of its planning for relocation to larger premises in the East End of Glasgow, GWL applied for a Business Voucher to help further its plans to engage with the performing arts and the diverse local audience. The project, conducted by Dr. Anna Birch of the Royal Conservatoire of Scotland, resulted in the development of a formal partnership between GWL and RCS in order to plan, raise funds for, and deliver in 2014-2015 a series of live and filmed performances of *Jaw Box,* an adaptation of *A Pageant of Great Women* by Cicely Hamilton. An early success has been the award of £45,000 from Creative Scotland's Lottery Funding for the community production of *Jaw Box*. Birch helped the organisation discover how drama can support its social engagement aims with diverse audiences, and suggested ways in which GWL might capitalise on the outputs of such activity.

A workshop with GWL members led to agreement that a site-specific performance and procession could provide a way to meet a number of the objectives identified in the organisation's engagement strategy. Hamilton's *A Pageant of Great Women* is a women's suffrage play that was performed across the UK from 1909 until the outbreak of war in 1914, and was identified as a script offering the necessary focus and context to meet GWL's goals.

Further workshops included a play reading to explore how the script could be used as a vehicle for participation and engagement, with special attention paid to the needs of multiple learning cohorts and language users. The final production on 7 March 2015 showcased Glasgow women of achievement drawn from the GWL archive and a large-scale procession onto nearby Glasgow Green, a site with recognised importance in suffragette history. Creative Scotland's Lottery funding programme enabled GWL to involve up to 500 local women in various aspects of the production and deliver a variety of social and artistic impacts, including:

• increased confidence and self-esteem for participants;
• increased awareness of and exercising of the right to vote;
• improved support networks for isolated and vulnerable women;
• increased aspirations and engagement with creative activities in Glasgow;
• increased opportunities for employment due to skills development;
• increased awareness of historical landmarks such as women's suffrage and the anniversary of World War I;
• enhanced awareness of social problems in Glasgow, and barriers to participation in the arts;
• development of a performance DVD which can be marketed via creative enterprise activity.

Radge Media
The free monthly culture and listings magazine *The Skinny* has both print editions in Edinburgh, Glasgow, and Dundee and online versions. On all platforms, the business model is free content supported by advertising. Starting as a group of unpaid enthusiasts seven years ago, *The Skinny's* publisher, Radge Media Ltd, now employs 23 staff and freelancers as well as a network of 150 writers, designers, illustrators, and photographers. The magazine prints over 33,000 copies a month, reaching 160,000 readers. The website reaches 85,000 users a month, who collectively visit 150,000 pages.

Radge commissioned a Business Voucher in order to obtain guidance with identifying, developing, and further engaging its digital audience as part of improving its business strategy. This activity would support the company's preparations for appointing a full-time digital manager, in order to better exploit its e-commerce opportunities and improve its competitiveness as a multimedia property in a disrupted marketplace. The researcher identified to conduct the voucher work was Michael Franklin, a PhD student in the School of Management, University of St Andrews, and a former Knowledge Transfer Associate with ICC and Creative Scotland.

The project began with an analysis of the company's current digital capacity and market opportunities, and then considered how business features for the current digital environment could be customised with digital marketing and social network analysis tools. The project resulted in improved capacity for the company to capitalise on future new markets and benefit from an expanded management toolset.

Red Note Ensemble
Red Note is a professional music ensemble dedicated to developing and performing contemporary music to the highest standards. The group performs contemporary classics, commissions new music, and develops the work of new and emerging composers from around the world. The ensemble takes music to audiences around and beyond Scotland via touring, performing in festivals, and staging regular events in Edinburgh and Glasgow. Red Note applied to the ICC Business Voucher programme seeking to better understand its current and potential audiences in order to form a strategy for developing audiences in new venues and communities. Dr. Gilmore took on the voucher research.

Early discussions concluded that Red Note's need would be best served by conducting two voucher projects, one focusing on its peers, stakeholders, and attenders, and the second focusing on non-attenders. In-depth interviews and focus groups revealed each group's reaction to contemporary music in general, to Red Note's positioning within the wider Scottish contemporary music scene, and specifically to Red Note's Noisy Nights events. The project explored new marketing materials and programming formats, finally recommending refocusing the group's marketing and programming strategies and using Noisy Nights to educate and entice audiences into attending Red Note touring events. Red Note also used the findings to supplement additional consultancy it had commissioned from the Edinburgh development agency The Audience Business.

Red Note Ensemble performing beneath a Concorde at the National Museum of Flight, 2011. (Photo © Amelia Jacobsen)

"The research has had a profound effect on how we were thinking about what we were doing. It's a great piece of work and really started discussions at our end," said John Harris, Red Note Ensemble's Chief Executive and Director.

In 2013 Red Note requested additional help to explore audience attitudes and behaviour in relation to social media. In this third project Gilmore conducted further focus group interviews and gathered data that suggested a need to be careful with the use of social media within Red Note's marketing mix, and found positive reaction to the idea of a Red Note mobile app. Related stakeholder workshops were held in 2014 to develop the research findings amongst music specialists and disseminate learning to the wider contemporary arts community.

In all, Gilmore conducted three Business Vouchers for Red Note. The results of the first two were presented at Chamber Music Matters, an international event for the chamber music sector and associated creatives organised by Enterprise Music Scotland, and at the 2011 New Music Scotland conference in Aberdeen. At the University of St Andrews School of Management, her work informed the course design

of an Honours-level module in Advertising and Marketing Communications. In 2013 she accepted a Chancellor's Fellowship at the University of Edinburgh, where she extended the voucher research on music organisations through an AHRC Cultural Value Project (AH/L006278/1), "The enactment of tastemaking in contemporary music".

RED NOTE

Sound Festival

The Red Note vouchers stimulated a project with similar goals for Sound, a promoter and festival of new music in Northeast Scotland. Sound aims to make new music more accessible to audiences of all ages and backgrounds, operating as a network of local and national organisations which jointly deliver a festival each October-November. In 2012 the network included Aberdeen Art Gallery & Museums, Aberdeen Central Library, Aberdeen Chamber Music Concerts, Aberdeen Performing Arts, Aberdeen Sinfonietta, Aden Country Park, BBC Radio 3, BBC Scottish Symphony Orchestra, Braemar community, Braemar Gallery, Cults Parish Church, and Woodend Barn in Banchory.

Sound's motivation for participating in the ICC Business Voucher programme was to gain a clearer understanding of the festival's audiences in order to inform marketing and audience development strategies. Dr. Gilmore was commissioned to conduct the research, again employing a methodology of conducting focus group and in-depth interviews with current and potential audiences across Scotland. These consultations explored the participants' attitudes towards new music, the Sound Festival, flashmob events, workshops, and other interactive promotions. By analysing the data, Gilmore was able to make recommendations to the organisation that addressed potential future venues, development of the Sound Festival programme, and concrete actions for encouraging greater attendance at Sound network events.

"Sound Festival has a good relationship with Red Note Ensemble which is how we came to find out about the ICC Business Vouchers," explained Anne Watson, Audience Development & Education Manager, Sound Festival. "We already had a strong feeling about what the results of the research would be but didn't really have the time nor resources to conduct it ourselves. I thought it would be useful to get an outside perspective as well and use someone – Charlotte – who was not directly connected to the organisation. This also enabled the focus groups to be more direct and honest with their opinions about Sound Festival. As a result we found that the groups gave more critical feedback which is more helpful to us in our development. Most useful was the feedback from non-attenders on how we could better attract them to festival events."

Tron Theatre, Glasgow
The Tron is one of Scotland's leading medium-scale producing and presenting theatres, set in the heart of Glasgow's Merchant City. Housing three performance spaces, rehearsal space, offices, a dedicated workshop space, bar, and restaurant, the building is a vibrant creative hub. It is also home to Tron Theatre Company, which stages its own productions as well as presenting co-productions and collaborations with other leading theatre companies, alongside a busy programme of high-calibre visiting company work.

The company applied to the ICC Business Voucher programme with two aims: first, to develop a comprehensive Public Engagement strategy that would encourage repeat attendance, deepen

(Photo © Martin McCarthy)

audience experience, and attract new audience groups; and second, to develop a business plan with a key objective of increasing self-generated income and lessening the company's dependence on public subsidy.

For the first goal, the Tron commissioned two voucher projects with ICC and Dr. Gilmore. These were conducted along similar lines to the projects with Red Note Ensemble, in that two sets of focus group interviews were held. The first voucher project studied the Tron's existing audiences, including patrons and attenders. The second surveyed non-attenders. Both approaches helped inform the eventual engagement strategy and its priorities. Beginning with the organisation's informal ethos of offering something for all ages and walks of life, the interviews focused further on specific themes, including the attitudes and relationships between the Tron and its audiences and artists; the Tron's perceived positioning; the identification of audience and artist needs to aid development of future repertoire and programme; and consideration of viability of patron and subscription schemes. The two studies resulted in suggestions for means to develop audiences and encourage more frequent attendance.

For the second research need, to develop a business plan, a voucher project was commissioned with Charles Lovatt FRSA, Teaching Fellow in the School of Management, University of St Andrews. There is mounting pressure on subsidised arts organisations to diversify their income streams. As a small organisation with limited resources, the Tron needed to prioritise efforts towards this goal. The project began with an analysis of the Tron's current offerings, which includes professional productions of new writing with an emphasis on world, UK, and Scottish premieres; a receiving theatre for touring productions and for many of Glasgow's festivals including Celtic Connections, Glasgow International Jazz Festival, Glasgow International Comedy Festival, the Merchant City Festival, and Glasgay; and an award-winning bar and restaurant, the Tron Bar.

The project then proceeded with an inventory of business systems and physical resources, a critical review of existing income generation plans and core financial metrics, and an assessment of available opportunities, including food and beverage, merchandise, and intellectual property. The project concluded by identifying strategic options for the organisation.

World Club HQ

World Club HQ is a Glasgow-based company which offers English speakers around the world opportunities to learn language and cultural skills via the internet or mobile devices. The company's first online product provides independent learners, schools, higher education institutions, and businesses with an engaging and exciting complement of resources, including a magazine, series of TV shows, curriculum resources, and collaboration facilities. The company aims to expand its products to focus on other significant language and cultural centres of the world and welcomes partnership opportunities.

World Club applied to the Business Voucher programme in order to receive expert advice in the area of online learning, in order to support its development of innovative e-learning for language tuition. Dr. Jacqueline Archibald, Lecturer in the Dundee Business School at Abertay University, was commissioned to conduct the project.

Archibald began by examining the company's plans for developing its next online module as well as its current website. She also evaluated a number of ready-made educational software packages and mobile applications, recommending those which best suited the company's needs for highly interactive and flexible online educational programming. She also recommended a design for structuring content that would lead learners through effective online experiences. This template has guided the company's further planning for incorporating extensive learning resources into the module.

Said Colin Maclean, Creative Director, World Club HQ, "The Business Voucher project has greatly facilitated the research and development of a key component of our planned programmes, in terms of the technical expertise it has provided and the reduction in development costs it has ensured."

Cultural Capital Vouchers

Fleet Collective

Fleet Collective unites some of Scotland's sharpest talents in the digital media and technology-driven arts. The Dundee organisation provides rented space and support services for a diverse range of artists and digital designers operating in the creative industries sector. The Collective is an experiment in new business practices for the arts which has the objective of increasing the commercial viability of fine art and creative digital-based businesses. The collective's strength is based on the crossover of diverse skills such as combining fine-art sculpture with games coding.

The Collective applied for an ICC Business Voucher in order to gain help with formalising its business and financial models, evaluating its assets, and developing its cultural value. The voucher researcher, Charles Lovatt, began the project by analysing the group's supply-side issues and current offerings. This focused on members' business systems and physical resources, current skills and product offering, client list, and a self-assessment of strengths, weaknesses, and values. A workshop with the Collective's membership involved presenting the findings and facilitating discussions; as a result the Collective was able to reach agreement as to the organisation's core purpose and devise a statement of strategic intent.

Scottesque Ltd

Scottesque designs and makes contemporary clothing using Scottish tartans and tweeds. The company's workshop and online sales are conducted from its Aberdeen boutique, Scottesque Rose Hip & Tutu. Following a period of intense local demand, Scottesque sought research to inform its marketing strategy, to develop the brand domestically, and, in the long term, internationally. A voucher project was designed with ICC and Dr. Gilmore.

The project involved conducting focus group and in-depth interviews with current and potential customers. This work explored the company's current product strengths, clothes buying behaviour, perceptions of the company, attitudes about tartan, and reactions to existing marketing. Analysis of the data resulted in recommendations for the company's future development and marketing of products.

The establishment of a research relationship between Scottesque and ICC informed the latter's successful application for a three-year research project within the Humanities in the European Research Area II project, "Enterprise of Culture: international structures and connections in the fashion industry since 1945" coordinated by Leeds University (more information at http://www.st-andrews.ac.uk/icc/research/grantprojects/theenterpriseofculturehera/).
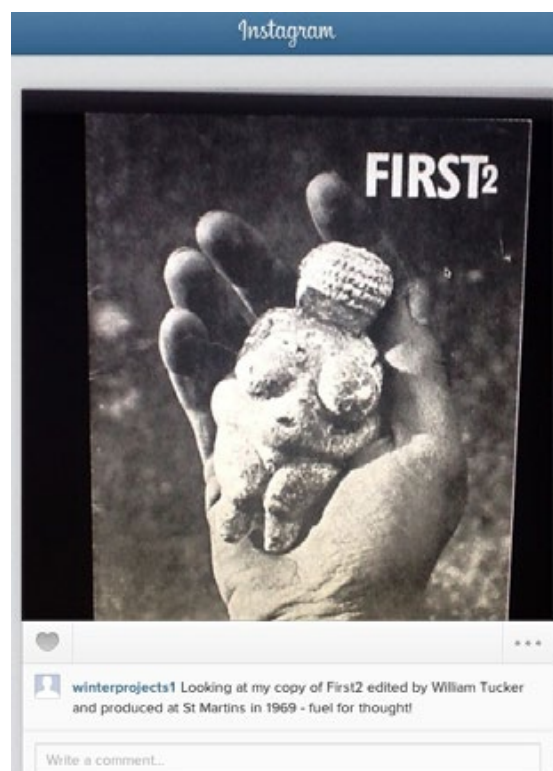
Winter Projects

The core aim of Winter Projects Art and Design consultancy is to work with clients to develop opportunities for artists, designers, and independent curators outside of the gallery context. Services include mapping opportunities for international events/exhibitions; professional networking; tailored visits for arts professionals; and recommendations for commissioning projects. The work is research-based and ideas-led, and informed by each project's individual characteristics. Since its founding, the studio has worked with a number of strategic partners on projects that have helped to develop and expand global networks.

Aiming to develop from an independent consultancy to a sustainable enterprise and commissioning agency with social aims, the company applied to the Business Voucher programme for help rewriting its business plan. Professor Barbara Townley and Melinda Grewar, from the ICC and School of Management, University of St Andrews, met with the company to explore various approaches to business planning and provide linkages to legal and social enterprise resources. The company adopted the nine-step planning model outlined in Alex Osterwalder and Yves Pigneur's book, *Business Model Generation,* and commenced working through the exercises, paying particular attention to three core areas of the business: services (fees); projects and proposals as a means of profile-raising; and specialist publishing such as resources, interpretation,

and information (products). Simultaneously, the researchers conducted an assessment of the capital (intellectual, social, cultural, and economic) resources the company already had that could be invested in the organisation. The result was a new model that includes a mission statement and key outputs to be pursued via three specific delivery mechanisms: "Corridor", Excursions, and Trade. The designer Neil McGuire visually organised these elements in preparation for development of the company's website, which was designed to employ a similar approach to organising content.

The Business Voucher led to the presentation of a paper to the 2013 ESRC Capacity Building Clusters National Conference at Aston University, Birmingham and its publication in the conference proceedings. The paper examines an individual's efforts to start a business and how the "thinking tools" of Pierre Bourdieu aided her understanding of the decisions taken during the start-up process. This voucher project inspired Winter Projects' proprietor, Judith Winter, to begin her own academic career via a studentship with the European Research Council project "Knowing from the Inside: Anthropology, Art, Architecture and Design" at the University of Aberdeen.

In a second voucher project, Winter Projects worked with David Lyons, Lecturer of Media Design, in the School of Arts, Media and Computer Games, University of Abertay, to form a digital communication and

winterprojects1 Winter projects planning visit to Moscow + St Petersburg with the help of curator Julia Tikanova

winterprojects1 Looking at my copy of First2 edited by William Tucker and produced at St Martins in 1969 - fuel for thought!

delivery plan to support the priorities established in the new business model. Lyons helped the company focus its digital goals and current resources and explore other websites and possibilities for working as a gallery without walls, offering products and services for arts professionals. Commented Judith Winter, "The digital world enables more exciting and viable ways to network, trade knowledge and product. It is also important to keep this potential in perspective and not lose sight of the joy of the physical world and human contact".

Solar Bear Theatre Company

Solar Bear uses "therapeutic theatre" techniques to support participants in sharing their personal experiences in relation to mental health in order to extend mental health provision, generate creative and therapeutic benefits, promote participants' recovery, tackle stigma, and support individuals' personal and social development. Dr. Birch of the Royal Conservatoire of Scotland worked with the company to develop its ability to self-evaluate and disseminate its artistic outcomes, presenting the results to the 2011 Scottish Mental Health Arts and Film Festival at the Citizens Theatre. Since the voucher project, Birch has continued to work with Solar Bear in the Conservatoire's Deaf Theatre Actor Training initiative (http://www.rcs.ac.uk/shortcourses/dramaadults/summerschools/deaftheatre.html), which was launched in 2012 and serves students who want to explore theatre-making, pursue formal training and, potentially, enter the theatrical profession. Also part of the research team were Patricia Sullivan, Research Fellow, University of Dundee and freelance qualitative researcher; and Eilidh Cochrane of ICC.

The voucher project was divided into two parts. The first considered the group's self-evaluation framework in relation to mental health outcomes, and the second focused on evaluating the artistic dimensions of the theatre company's work, particularly in terms of the expectations of theatre-making on the part of the funder and the public. For the first part of the project, Sullivan reviewed the marketing and evaluation data from Solar Bear's previous project, conducted exploratory interviews with staff, participants, referrers and external agencies, and devised a self-assessment process and structure which were relevant to the company's stakeholders. Sullivan also provided a collection of resources such as measurement tools, reference papers, and website addresses for additional support in relation to evaluating mental health outcomes.

To study the company's evaluation of its artistic outcomes, Birch and Cochrane observed therapeutic theatre workshops, surveyed relevant literature, reviewed previous Solar Bear funding applications and strategic documents, and interviewed Solar Bear staff, clients, and audiences. The project concluded with a number of recommendations including the use of new performance spaces, continued development of film as a creative output, provision of artists in residence to increase and enhance artistic excellence, and suggestions for effectively disseminating the quality of the company's work.

The Courage To Dream
A Solar Bear Production
Live Drawing by Jenny Soep

Economic Capital Vouchers

Sigma Films

Sigma is the most successful film production company in Scotland. A leading independent European producer of prestigious, quality films that challenge audiences, genres, and conventions, Sigma delivers critically acclaimed work from UK directors such as David Mackenzie *(Young Adam; Hallam Foe)* and Andrea Arnold *(Red Road),* which have been recognised by BAFTA, BIFA and the Cannes Film Festival. Additionally, the company co-produces films with international partners such as Lars von Trier *(Dogville, Manderlay)* and spearheads indigenous production at their Glasgow Film City studios.

Sigma applied for an ICC Business Voucher in 2012 while in the process of marketing the film *Citadel* to distributors around the world. Given that returns from exploiting the intellectual property of film are uncertain and market information concerning rights valuation is opaque, the company sought help with developing a financial model to calculate the value of the film for Sigma as the film's licensor and potential joint distributor. This knowledge would help Sigma negotiate deals and marketing more effectively, and help ensure maximum capitalisation on *Citadel's* potential. ICC commissioned the voucher project with PhD Student Michael Franklin, who was simultaneously pursuing a project to examine the impact of digital on marketing and distribution campaigns in independent film. Franklin's work with Sigma involved developing a revenue modelling tool that can be adapted to new international deals, providing data support for planning marketing and promotion activities, and supplying guidance on leveraging Sigma's digital capacity to drive audience engagement and consumer demand for the film as well as expertise to aid business sustainability.

Sigma applied for a second voucher to address its film investment evaluation data and tools. Seeking to manage the risk inherent in its creative endeavours by diversifying its business model and developing alternative income streams, it required an assessment toolset to evaluate investment propositions creatively and economically. In this second project, Franklin commenced by collecting and analysing market data to inform a proposed move into a new market. The project also involved analysing the company's network development to understand commercial operation in other areas of the film value chain, and exploring opportunities for public and private finance and international sales of specific film rights. The project concluded with recommendations for developing assessment tools to guide investment choices.

Citadel is a Blinder Films and Sigma Films co-production, funded by Bord Scannán na hÉireann/the Irish Film Board, Creative Scotland, Section 481 and UK Tax Credit.

Dissemination: Events and Publications

Events

ICC delivered a variety of activities related to the grant's portfolio of projects, and aimed at a variety of audiences. The following descriptions represent some of the highlights of this programme.

26 October 2010: Launch of ICC Business Voucher Programme and Website

Scottish Government Minister for Culture and External Affairs Fiona Hyslop (pictured above, centre) welcomed creative industry leaders, researchers and academics to the event, and was joined by Principal and Vice-Chancellor of the University of St Andrews, Prof Louise Richardson (above, far left). The Minister launched the scheme by presenting the first business voucher to contemporary music ensemble, Red Note, from Glasgow. The event attracted approximately 60 practitioners, policy makers, academics and students.

24- 25 February 2011: The Global Popular Music Business: National Historical Perspectives, University of St Andrews

An international conference co-hosted by ICC and Business History Unit, London School of Economics, addressing the development of entrepreneurship in the British popular music industry between 1950 and 1975.

21 November 2011: Adding Value: Creativity Applied – Laying the Foundations for Sustainable Growth, Royal College of Physicians of Edinburgh, Edinburgh

This public seminar focused on the Creative Economy, and was co-funded by RSA Media, Creative Industries, Culture and Heritage (MCICH) network. Speakers included Roanne Dods (Deputy Director, Dovecot Foundation; Producer, International Futures Forum; Co-Director, Mission Models Money), Andrew Dixon (Chief Executive, Creative Scotland), Professor Georgina Follett OBE, FRSA (Deputy Principal, University of Dundee), Professor Jeremy Myerson FRSA (pictured below; Director, Helen Hamlyn Centre for Design, Royal College of Art), Professor Chris van der Kuyl FRSE (Chief Executive, Brightsolid), Mark Hogarth (spokesman, Harris Tweed Hebrides), Rob Woodward FRSA (NESTA Board Member and Chief Executive, STV Group plc). One hundred and fifty participants heard presentations by academic and industry leaders on the importance of design and innovation to the Creative Industries. Presentation notes can be downloaded from http://www.st-andrews.ac.uk/icc/newsandevents/newsarchive2011/.
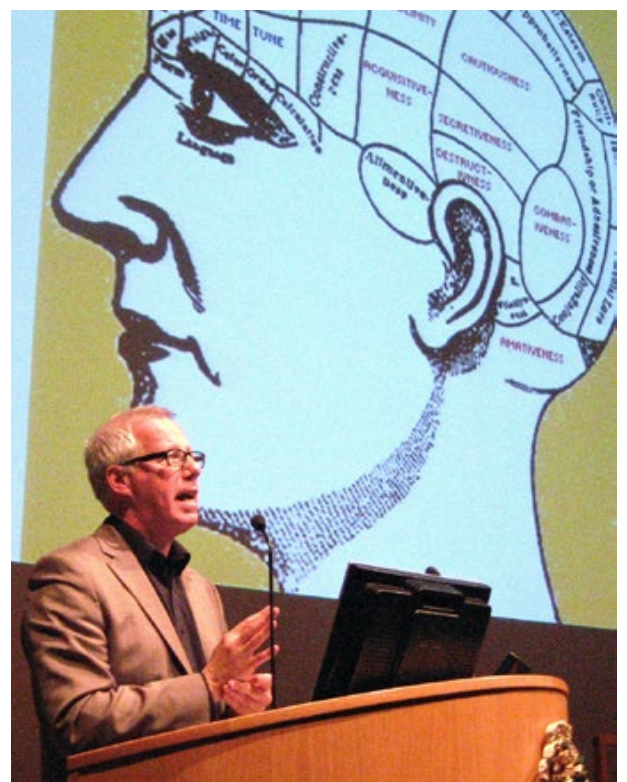
8-9 March, 2012: The Business of Fashion: Historic Perspectives, University of St Andrews.

International conference co-hosted by ICC and Department of History & Welsh History, Aberystwyth University, and School of Management and Languages, Heriot-Watt University. An outcome was a successful collaborative bid for a Humanities in the European Research Area grant, *The Enterprise of Culture: International Structures and Connections in the Fashion Industry since 1945,* coordinated by Leeds University.

December 13-14, 2012: What Price Creativity? University of St Andrews.

International conference co-hosted by ICC and University of Leicester School of Management, addressing the relationship of price and value in the production and attainment of social and public goods. Several conference papers will appear in a special issue of *Journal of Cultural Economy,* to be guest edited by Philip Roscoe and Barbara Townley, of ICC.

23 May 2013: Strategies for Success, Creative Scotland, Edinburgh

This public policy and business orientated seminar helped inform creative industry organisations and development officers within support bodies about the importance of effective management of Intellectual Property (IP). The event was an output of the CBC's second KTP with company partner Creative Scotland. Scottish Enterprise and Scottish Development International co-funded the outreach event and provided legal and business guidance on IP and exporting issues for 50 representatives of Creative Scotland's client organisations, as well as the development staff of the sponsoring bodies.

5 June 2013: Creative Collaborations Research Showcase, The Hub, Castlehill, Edinburgh

This public policy and business orientated seminar was co-sponsored by Design in Action (University of Dundee) and Moving Targets (Abertay University). The event provided a focus on the benefits of collaborative research for public, private, and higher education sectors and included presentations and poster displays by PhD students, KTP Associates and Business Voucher researchers and their company partners. It included an address by John Swinney MSP, Cabinet Secretary for Finance and Sustainable Growth, Scottish Government. One hundred and

twenty SMEs, sole traders, and policy and research individuals attended.

22 October 2013: Create in Fife: Searching for Solutions, University of St Andrews

A public event for creative industries and practitioners, co-sponsored by Fife Council. This showcase of findings from the CBC's Business Voucher and Knowledge Transfer projects was delivered as part of Fife Council's *Think Innovation Week*. Topics included use of social media, human resources, audience development, and intellectual property. Thirty SMEs, sole traders, and policy and research individuals attended.

23 April 2014: Culture, Vibrancy, and the City, Dundee

Public policy and business orientated seminar co-hosted by ICC and Scottish Cities Knowledge Centre (SCKC). The event considered policies and projects relevant to capitalising on creativity in cities, and featured presentations from ICC Director Professor Barbara Townley and PhD students Lorenzo Pergola and Ciaran McDonald. Speakers also represented Creative Scotland, Dundee Leisure and Culture, Dundee Contemporary Arts, and the City of Reykjavik.

16 June, 11 September and 25 September 2014: Up Your IP Seminars

Based on the findings from the Knowledge Transfer Project with Creative Scotland on Intellectual Property (IP), these events provided legal advice and knowledge on IP Rights and presented industry experts discussing the IP issues that arise in today's marketplace. Forty-five practitioners, industry representatives, and academics attended each event. The June workshop, co-sponsored by Creative Scotland, was aimed at practitioners in the design sector; the 11 September event, co-sponsored by the Federation of Scottish Theatres, was directed at creatives in digital and performing arts, and the 25 September event, co-sponsored by the Business Development Office of Abertay University, was delivered to designers and businesses in the games sector. Additional funding was provided by the RCUK Centre for Copyright and New Business Models in the Creative Economy (CREATe).

28 July 2014: Residency Seminar Day, Victoria & Albert Museum, London

This event was organised by PhD student Saskia Coulson as an outcome of her placement with the V&A, and was funded by ICC, the museum, and Duncan of Jordanstone College of Art and Design, University of Dundee. The event attracted managers of artist residencies from creative and cultural organisations in order to share best practice, encourage future residency programme development, and establish a UK network of professional residency managers.

20-21 November 2014: Make:Shift:Do public engagement events, Duncan of Jordanstone College of Art & Design at University of Dundee
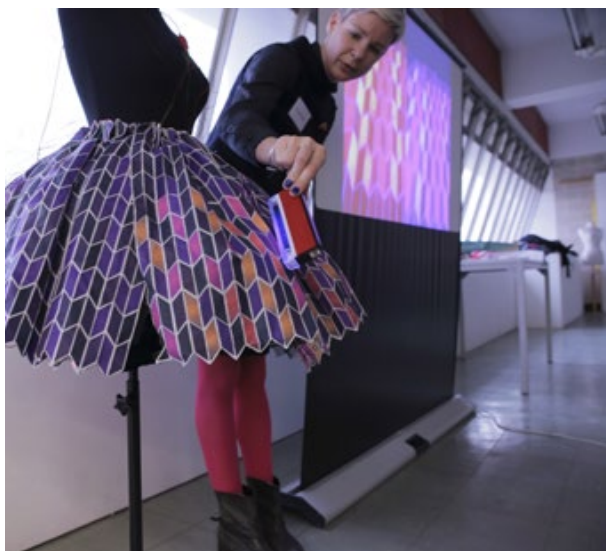
As part of the Crafts Council UK-wide public Festival of Innovation, CASE student Jo Bletcher curated with Dr Louise Valentine an exhibition of new work by students and craft and design practitioners and researchers; talks and demonstrations from leading researchers and makers; and public workshops in smart materials and new technologies. Crafts Council chair Geoffrey Crossick made special mention of the Dundee event to the 280 Make:Shift (London) conference attendees; of the 20 other UK parallel events, Dundee's was the only one referred to.

Other events include:

25 October 2010: The Creative Industries: Space and Place, Glasgow Royal Concert Halls; co-hosted by Strathclyde University

3 March 2011: Collaborations and Networks, Glasgow Royal Concert Halls; co-hosted by Strathclyde University. Speakers' presentations are available to download from http://www.st-andrews.ac.uk/icc/newsandevents/newsarchive2011/

30 September 2011: Research and Knowledge Exchange in the Creative Industries: Impact and Effect, Creative Scotland, Waverley Gate, Edinburgh; co-hosted by Strathclyde University

20 April 2012: Social Media Marketing industry workshop, Creative Scotland, Edinburgh, co-hosted by ICC, Moving Targets, and Creative Scotland

20 March 2015— RSA MCICH Network Festival of Ideas, Edinburgh; public presentations on key cultural and social topics including Creative Industries and Heritage. ICC sponsored a lecture by Pier Luigi Sacco, Professor of Cultural Economics, IULM, Milan and member of European Expert Network on Culture.

Selected Publications

Books

Grewar, M., Townley, B., and Young, E. (2015). *Tales from the drawing board: IP wisdom and woes from Scotland's creative industries.* University of St Andrews: Institute for Capitalising on Creativity. (With additional funding from RCUK Centre for Copyright and New Business Models in the Creative Economy(CREATe).)

Lowthorpe, C. and Taylor, S. (forthcoming). *Lean game development.* Taylor-Francis.

Chapters and Journal Articles

Alvarez, F., Stoyanova Russell, D., and Townley, B. "Screening values: Orders of worth in a national screen agency". *Journal of Management Studies* (under review).

Brook, O. (2013). 'Reframing models of arts attendance: Understanding the role of access to a venue. The case of opera in London'. *Cultural Trends* 22:2, pp 97-107.

Fletcher-Watson, B. (2012). "The Proscenium Press-Gang: participation as tyranny in arts for the very young". In Dalla Rosa, A., & Sacchetti, A. (eds.) *An Idea of Art and Childhood.* Bologna: Artistic International Association Small size (AIASS).

Fletcher-Watson, B. (2013). "Child's Play: a postdramatic theatre of paidia for the very young", *PLATFORM* 7(2), pp.14-31.

Fletcher-Watson, B. (2013). "Towards a Grounded Dramaturgy: using Grounded Theory to interrogate performance practices in Theatre for Early Years", *Youth Theatre Journal,* 27(2), pp.130-138.

Fletcher-Watson, B. (2014). "From stage to screen: adapting a children's theatre production into a digital toy". *The Scottish Journal of Performance* 1:2, pp 37-62.

Fletcher-Watson, B. (2015). "Seen and not heard: Participation as tyranny in Theatre for Early Years". *Research in Drama Education: The Journal of Applied Theatre and Performance,* 20:1, pp 24-38.

Fletcher-Watson, B., Birch, A., Fletcher-Watson, S., and McNaughton, M-J. (2014). "From cradle to stage: How Early Years performing arts experiences are tailored to the developmental capabilities of babies and toddlers", *Youth Theatre Journal* 28 (2) pp. 130-146.

Franklin, M. (2012). "Internet-enabled Dissemination: Managing Uncertainty in the Film Value Chain". In Iordanova, D. and Cunningham, S. (eds.) *Digital Disruption: Cinema Moves On-line.* University of St Andrews Film Studies.

Franklin, M. (2013). "What metrics really mean: A question of causality and construction in leveraging social media audiences into business results". *Participations: Journal of Audience and Reception Studies* 10: 2.

Franklin, M., Searle, N., Stoyanova, D., and Townley, B. (2013). "Innovation in the application of digital tools for managing uncertainty: The Case of UK Independent Film". *Journal of Creativity and Innovation Management.* 22:3, 320-333.

Franklin, M. Stoyanova Russell, D. & Townley B. (Forthcoming). "From marketing to performing the market: the emerging role of digital data". In Mignant, N. Tirtaine, C. and Augros, J (eds) *Film Marketing in a Global Era.* CinEcoSa University of Paris/ British Film Institute Press.

Lowthorpe, C. (2012). "How Does It Feel? Beyond Genre towards Analysis of Experience". *Media Education Journal* 52.

Lowthorpe, C. and Donald, I. (2013). "The Walking Dead: A Transmedia Feast". *Media Education Journal* 53.

Lowthorpe, C., Taylor, S., and White, G. (2013). "Stop just making stuff! Listening, co – creation and sustainability in independent game development". *Participations: Journal of Audience & Reception Studies* 10: 2.

Patrick, H. and Bowditch, C. (2013). Professional Equality: An Analysis of a Social Movement in the Scottish Dance Industry, *Scottish Journal of Performance* 1:1.

Reports

Arts Council England (2014). *The Value of Arts and Culture to People and Society: An Evidence Review.* Cites Orian Brook's research as illustrating the "evidence gap" in understanding how arts engagement, personal behaviours and life outcomes are related.

Chaudron, Stephane (2015). *Young Children (0-8) and Digital Technology: A qualitative exploratory study across seven countries.* Luxembourg: European Commission Joint Research Centre (with input from Ben Fletcher-Watson).

Journal Editing

CASE students Bethany Whiteside and Ben Fletcher-Watson launched a new open-access peer reviewed journal based at the Royal Conservatoire of Scotland, the *Scottish Journal of Performance*. The journal covers historical or contemporary research in theatre, music, film, television, dance, live art or other arenas of performance conducted in or about Scotland. The journal's development was supported by an Innovation Grant from the University of St Andrews. (http://www.scottishjournalofperformance.org)

Conference Proceedings

Bletcher, J., Coulson, S., and Valentine, L. (2013). "Making it happen: the role of design research in an emerging design museum". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.25-33.

Brook, O. (2013). "Relating cultural participation to cultural opportunities using commercial and Government data". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.161-169.

Fletcher-Watson, B. (2013). "Apps for babies: implications for practice and policy". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.58-65.

Franklin, M. (2013). "How worker introduced skills, tools and collaborations can lead to adapted work practices in response to digital disruption". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.125-132.

Gilmore, C. (2013)."The benefits of interdisciplinary relationships: breaking barriers to contemporary classical music". In Clegg BT., Scully J., Bryson, J. (2013). *ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.34-41.

Lowthorpe, C. (2013). "Spaces of possibility: real world research in independent game development". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.117-124.

Maclennan, M. (2013). 'Identity vs. Identification in the 21st Century: The Forensic Use of Jewellery in Disaster Victim Identification'. In Latin, G., Cohen, S., Okechuku, A. and Englezou, A. (eds.) *International Forum for Disaster Victim Identification* (DVI) Meeting Report from the Euroscicon Event, 29 June 2012, London, UK. UK: Honnao Publishing.

McDonald, C., and Pergola, L. (2013). "Managing expectations, retaining independence". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.10-15.

Patrick, H. (2013). "Audiences outside the auditorium: delivering a case award with a Scottish theatre". In Clegg, B., Scully J., and Bryson, J. (eds.) Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013. Aston University, pp.42-49.

Schumacher, S. (2013). "A modern day renaissance: the Christian Church as an unconventional locus for Creative Arts Research". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.16-24.

Townley, B., Grewar, M. and Winter, J. (2013). "Thinking in capital mode", in Clegg BT., Scully J., Bryson, J. (eds) *ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.1-9.

Whiteside, B. (2013). "High kicks, heel stomps and high cuts: performing the data collection". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.50-57.

Young, E., and Berthold, H. (2013). "Evaluating knowledge transfer partnerships: collaborative research between creative Scotland and the University of St. Andrews". In Clegg, B., Scully J., and Bryson, J. (eds.) *Proceedings of the ESRC Research Capacity Building Clusters; National Summit Conference 2013*. Aston University, pp.101-108.

Conference Organising

Two CASE students performed integral roles in academic conference organising during 2014:

- Ciaran McDonald proposed and coordinated a track for the Royal Geographical Society Annual Conference, 26-29 August 2014, London, "Culture and the city: What place do the arts have in our urban spaces?"

- Beth Whiteside was the Co-Conference Host/ Organiser for "Pace, Penalty and Pirouette: The Sociology of Physical Culture", a postgraduate conference held at Glasgow Caledonian University on 13 June 2014, for which Beth received a £1000 event grant from the British Sociological Association.

Presentations

Alvarez, F. (2013). "The role of the Scottish National Screen Agency: Justifications of worth". *CinEcoSa (Cinema, Economie, & Sociétés Anglophones) Conference,* Université de Paris, 25 October 2013.

Berthold, H. and Townley, B. (2014). "For what it's worth: explorations into early-stage IP". *British Academy of Management,* Belfast, September 2014.

Brook, O. (2013). "A Spatial Interaction (gravity) Model of Cultural Consumption in Scotland." *Royal Geographical Society-Institute of British Geographers (RGS-IBG) International Conference,* RGS-IBG Headquarters, London, 27-30 August 2013.

Brook, O. (2013). "Failing to plan for culture: how cultural engagement depends on access to cultural facilities". *Royal Geographical Society-Institute of British Geographers (RGS-IBG) International Conference,* RGS-IBG Headquarters, London, 27-30 August 2013.

Coulson, S. (2013). "Cultivating Innovation: exploring residency practices in a cultural enterprise", *3rd Participatory Innovation Conference PIN-C,* Lappeenranta University of Technology, Lahti School of Innovation, Lahti, Finland, 18-20 June 2013.

Cox, S. and Valentine, L. (2012) "Exploring design-led problem identification and collaborative innovation using the sandpit method". *The Design Research Society Conference,* Chulalongkorn University, Bangkok, Thailand, 1-4 July 2012.

Cox, S., Valentine, L and Follett, G. (2012). "The Innovation Agenda – a Scottish perspective". *The Design Research Society Conference,* Chulalongkorn University, Bangkok, Thailand, 1-4 July 2012.

Fletcher-Watson, B. (2013). "Theatre for Foetuses". *The Cabaret of Dangerous Ideas,* Edinburgh Festival Fringe, 14 August 2013.

Fletcher-Watson, B. (2013). "Towards a Grounded Dramaturgy: using Grounded Theory to interrogate performance practices in theatre for the very young". *International Theatre for Young Audiences Research Network,* Hildesheim, Germany, 22 April 2013.

Fletcher-Watson, B. (2103). "Postdramatic Practices in Theatre for the Very Young", *Theatre and Performance Research Association Conference,* Glasgow, September 2013.

Flynn, E. (2012). "Visual Artists: the Poor Cousin of the Creativity Industries". *The Sixth Art of Management and Organisation Conference,* University of York, September 2012.

Flynn, E. (2012). "Artists' Careers – Painting Patterns of Public and Private Lives in the Art Market". *European Group for Organisational Studies,* Helsinki, 5-7 July 2012.

Franklin, M. (2011). "More Data Less Knowledge? Methodological Problems in Managing Uncertainty in a Digital Age – The case of the independent film business." *Scottish Doctoral Management Conference,* University of St Andrews, 26 May 2011.

Franklin, M. (2012). "The construction of market devices in the independent film industry: cases of changing valuation practices" *What Price Creativity? Conference,* Institute for Capitalising on Creativity, University of St Andrews, December 13, 2012.

Franklin, M. (2013). "Digital Engagement Metrics: the construction of a market device in the UK Film Industry". *British Academy of Management Conference,* University of Liverpool, 10-12 September, 2013.

Franklin, M. (2013). "What metrics really mean: A question of causality and construction in leveraging social media audiences into business results: cases from the UK film industry". *Moving Targets Conference,* Dundee Contemporary Arts, Dundee, 15-16 October 2013.

Franklin, M. (2013). "Investing in digital innovation, marketing and distribution: A public funder's new role in film market construction". *CinEcoSa (Cinema, Economie, & Sociétés Anglophones) Conference,* Université de Paris, 25 October 2013.

Franklin, M. (2013). "Iterative audience engagement: the impact of globalised digital distribution's metrics on independent UK film production and circulation". *23rd International Screen Studies Conference.* University of Glasgow, 28-30 June, 2013.

Franklin, M. (2013). "Social Media Marketing and Analysis to Manage Audience Demand: Case Studies from Independent Film". *Moving Targets Conference,* Dundee Contemporary Arts, October 15-16, 2013.

Franklin, M. (2013). "The role of internet-enabled market devices in managing uncertainty in a disrupted value chain". *Association of Internet Researchers Doctoral Colloquium @ IR.14.0.* Denver, Colorado, October 23, 2013.

Franklin, M. (2013). "The role of new market devices in managing uncertainty in a disrupted value chain: The case of independent film". *EGOS Pre-Colloquium PhD Workshop.* University of Montreal, 3 July 2013.

Franklin, M. (2013). "The role of Para-texts and Digital Engagement Metrics as market devices for managing uncertainty in the UK Film Industry". *Titles, Teasers and Trailers Conference,* Centre for Film, Performance and Media Arts, University of Edinburgh, 22-23 April 2013.

Franklin, M. (2014). "Constructing Multiple Values for Unique Products". *International Valuation as Practice Research Symposium,* Institute for the Study of Science, Technology and Innovation, University of Edinburgh, 14 February 2014.

Lowthorpe, C. (2012). "Game design: Art, science, or secret?" *Digital Shoreditch,* 31 May 2012.

Lowthorpe, C. and Donald, I. (2013). "The Walking Dead: A Transmedia Feast". *Association for Media Education in Scotland conference,* Forth Valley College, Stirling, 1 June 2013.

Lowthorpe, C. and Taylor, S. (2013). "Stop Just Making Stuff! Listening, Co-Creation and Sustainability in Independent Game Development". *Moving Targets Conference,* Dundee Contemporary Arts, October 2013.

McDonald, C. (2013). 'There's more to life than bloody arts': Exploring cultural regeneration in peripheral urban communities in Dundee and Edinburgh – Preliminary Results". *Housing Studies Association Annual Conference,* University of York, 10-12 April 2013; and *Leisure Studies Association Annual Conference,* University of Salford, 9-11 July 2013.

Maclennan, M. (2014). "Forensic Innovations to Solve Investigations". *Forensic Europe Expo,* London, 29 April 2014.

Maclennan, M. (2014). "Crime Scene Analysis and Victim Identification". *EuroSciCon Forensic Forum,* London, 3 March 2014.

M. Maclennan presented additional talks to: National Crime Agency (NCA) Specialist Interest Seminar on Unidentified Bodies and Remains, College of Policing, Ryton, 30 April 2014; Visual Methods Doctoral Training Workshop, London School of Economics, London, 29 January 2014; Knowledge Innovation Network (KIN), Sellafield Ltd Nuclear Reprocessing Plant, 16 January 2014; *British Association for Human Identification (BAHID) 12th Scientific Conference,* Manchester, 7-9 December 2012; *6th European Academy of Forensic Science Conference (EAFS): Forensic Science 2.0.* The Hague, Netherlands, 20 – 24 August 2012; *EuroSciCon International Forum for Disaster Victim Identification (DVI),* London, 29 June 2012; The University of Bath Centre for Death and Society (CDAS) Seminar on Mass Fatalities, Bath, 18 May 2012; The Scottish Institute of Policing Research (SIPR) Workshop on Missing Persons, Dundee, 25 April 2012; *The Investigator Magazine Forensics in Major Investigations Conference,* Leicester, 22 March 2012; *National Family Liaison Coordinator Conference on Disaster Victim Identification (DVI),* Coventry, 13-14 March 2012.

Schumacher, S. (2013). "The Story of the Artist and Church: Past, Present and Future". *Wayfarers Arts Conference,* Devon, England, July 2013.

Stephens, L. (2011). "Actor Network Theory and its applications to promotion of intellectual and cultural capital". *Durham Business School/AIM workshop, Working in the Creative Industries,* 23-24 February 2011.

Whiteside, B. (2013). "'Dance then wherever you may be': Perceptions of 'Scottishness' in Highland Dancing in Glasgow, Scotland". *Sociology of Movement Practice Conference,* University of Glasgow, 22nd June 2013; and *World Congress of Sociology,* International Sociology of Sport Association, Vancouver, June 2013.

Whiteside, B. (2013). "'Concert', 'Social' and 'Sport': Types of Dance/ Types of Realities". New Visions on Dance Conference, Society for Dance Research and Middlesex University, 12 October 2013; and *Interweaving: Connecting Educational Research Within, Across and Between Perspectives.* Moray House School of Education, University of Edinburgh, 4th September.

Whiteside, B. (2014). "Salsa and the City: A Case Study on a Glaswegian 'Community'". *Contemporising the Past: Envisaging the Future Conference,* World Dance Alliance, Angers, France, 6th-11th July 2014.

Young, E., Berthold, H. and Townley, B. (2014). "Intellectual property and copying: The attitudes of creatives". *British Academy of Management Conference,* Belfast, 9 – 11 September 2014.

Awards and Other Achievements

Jo Bletcher, Saskia Coulson, and Dr. Louise Valentine: Best CASE award ESRC Research Capacity Building Clusters, *National Summit Conference,* Aston University, Birmingham, 26 June 2013.

Ben Fletcher-Watson received a grant of £2000 from the Imaginate Ideas Fund to develop a children's theatre production during 2013-14 to test his CASE research. On the strength of this project, he was invited to participate in the Next Generation Program for the ASSITEJ (Association Internacionale du Theatre pour L'Enfance et la Jeunesse) Festival, 23-31 May 2014 in Warsaw.

Emma Flynn, PhD Publishing Prize, *Sixth Art of Management and Organisation Conference,* York, September 2012.

Michael Franklin, Best Paper, Creative Industries Track, *Scottish Doctoral Management Conference,* University of St Andrews, 26 May 2011.

Franklin, M; Searle, N; Stoyanova, D & Townley B. (2013) *"Digital Tools for Management in the Creative Industries: The Case of UK Independent Film". Journal of Creativity and Innovation Management* (22: 3, 320-333): Nominated for journal's best paper of 2013.

ICC Online

Institute website:
– www.capitalisingoncreativity.ac.uk

Highlights of web articles, videos, and blogs related to CBC research.

Orian Brook, CASE student, DCMS invited guest blog:
– http://dcmsblog.uk/2012/04/location-location-location/

Ben Fletcher-Watson, CASE student.
Personal research and industry blog:
– theatreforbabies.tumblr.com
ESRC video on the impact of Ben's placement at Hippotrix:
– http://www.esrc.ac.uk/news-and-events/features-casestudies/case-studies/34053/making-theatre-childs-play.aspx

Guardian Media Network Livechat featuring Ben and international entrepreneurs:
– http://www.theguardian.com/media-network/media-network-blog/2014/jul/07/innovation-r-and-d-startups-live-discussion

Michael Franklin, CASE student.
Personal research and industry blog:
– www.filmbusinessresearch.com

Intellectual Property dissemination event blogs:
– http://www.create.ac.uk/blog/2014/11/18/create-supported-event-calls-on-scotlands-creative-industries-to-improve-on-ip-exploitation/
– http://www.create.ac.uk/blog/2014/10/28/create-event-digital-dialogues-with-theatre/
– http://www.create.ac.uk/blog/2014/07/09/act-early-and-strategically-highlights-from-create-co-sponsored-event-for-design-industry-practitioners/

Chris Lowthorpe, CASE student.
International Business Times interview:
– http://www.ibtimes.co.uk/articles/347349/20120531/uk-games-industry-decline-chris-lowthorpe-university.htm

Ciaran McDonald, CASE student.
Personal research blog:
– http://cultureinthecities.moonfruit.com/
Blog regarding placement with Scottish Government:
– https://www.st-andrews.ac.uk/icc/research/grantprojects/capitalisingoncreativityesrc/casestudentships/dundeeandedinburghcouncils/ciaran2/#internship

Maria Maclennan, CASE student.
Personal research website:
– http://www.mariamaclennan.com/
Online journal related to ESRC internship:
– www.designingthepolice.com
Podcast interview with Maria:
– http://forensicoutreach.com/our-1st-podcast-with-forensic-jeweller-maria-maclennan/
2012 video presentation by Maria:
– http://www.creativedundee.com/2012/03/maria-maclennan/

Holly Patrick, CASE student. Student research blog:
– www.amateur-academic.blogspot.com

Louise Stephens, CASE student. Invited industry blog:
– http://agent160theatre.blogspot.co.uk/2012/02/on-dramaturgy.html

Industry Partners to the Research

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CASE Studentships

Art+Christianity Enquiry
Creative Scotland (creativescotland.com)
Denki Ltd. (denki.co.uk)
Dundee City Council-Leisure & Culture Dundee (dundeecity.gov.uk, leisureandculturedundee.com)
Dundee Contemporary Arts (dca.org.uk)
Dundee Repertory Theatre (dundeerep.co.uk)
The City of Edinburgh Council (edinburgh.gov.uk)
Glasgow: UNESCO City of Music (glasgowcityofmusic.com)
Imaginate (imaginate.org.uk)
Playwrights' Studio Scotland (playwrightsstudio.co.uk)
Scottish Screen (now Creative Scotland; creativescotland.com)
Starcatchers Productions Ltd (starcatchers.org.uk)
The Audience Agency (theaudienceagency.org)
V&A Museum of Design Dundee (www.vandadundee.org)

Student Placements

Hippotrix (hippotrix.com)
Preloaded (preloaded.com)
Sigma Films (sigmafilms.com)
Travelling Gallery (travellinggallery.com)
V&A Museum of Design Dundee (www.vandadundee.org)
Victoria & Albert Museum (vam.ac.uk)

Knowledge Transfer Partnerships

Creative Scotland (creativescotland.com)

Business Vouchers

Art4You Ltd. (art4youscotland.co.uk)
Dundee Contemporary Arts (dca.org.uk)
Fleet Collective (fleetcollective.com)
Glasgow Women's Library (womenslibrary.org.uk)
Pea Cooper Millinery (peacoopermillinery.com)
Radge Media Ltd (theskinny.co.uk)
Red Note Ensemble Ltd (rednoteensemble.com)
Scottesque Ltd (scottesque.co.uk)
Sigma Films (sigmafilms.com)
Solar Bear (solarbear.org.uk)
Sound Festival (sound-scotland.co.uk)
Tron Theatre (tron.co.uk)
Winter Projects
WorldClub HQ (chinaclubhq.com)

Other Partner Organisations

Business Development Office, Abertay University
Business History Unit, London School of Economics
Create in Fife/Fife Council
Department of History and Welsh History, Aberystwyth University
Design in Action AHRC Knowledge Exchange Hub
East of Scotland KTP Centre
Federation of Scottish Theatres
Innovate UK
Moving Targets
RCUK Centre for Copyright and New Business Models in the Creative Economy (CREATe)
RSA Fellows' MCICH Network
School of Management, University of Leicester
School of Management and Languages, Heriot-Watt University
Scottish Cities Knowledge Centre

PhD Supervisors

Prof. Nic Beech, Vice-Principal and Head of College of Arts and Social Sciences, University of Dundee (previously School of Management, University of St Andrews)
Dr. Anna Birch, Royal Conservatoire of Scotland
Prof. Paul Boyle, President and Vice-Chancellor, Leicester University (previously School of Geography & Geosciences, University of St Andrews)
Dr Stephen Broad, Royal Conservatoire of Scotland
Prof. David Brown, School of Divinity, University of St Andrews
Dr Shiona Chillas, School of Management, University of St Andrews
Prof. Chris Dibben, School of GeoSciences, University of Edinburgh (previously School of Geography & Geosciences, University of St Andrews)
Prof. Robin Flowerdew, School of Geography & Geosciences, University of St Andrews
Prof. Georgina Follett, Deputy Principal for Knowledge Exchange in the Creative Arts, Duncan of Jordanstone College of Art & Design, University of Dundee
Prof. Donald Houston, Urban Studies, University of Glasgow (previously School of Geography and Geosciences, University of St Andrews)
Dr. John Kelly, Moray House School of Education, University of Edinburgh
Dr. Kim McKee, School of Geography and Geosciences, University of St Andrews

Dr. Marie Jeanne McNaughton, School of Education, University of Strathclyde
Prof. Louis Natanson, School of Arts, Media & Computer Games, Abertay University
Prof. Mike Press, Duncan of Jordanstone College of Art & Design, University of Dundee
Graham Pullin, Duncan of Jordanstone College of Art & Design, University of Dundee
Dr. Philip Roscoe, School of Management, University of St Andrews
Dr. Dimi Stoyanova Russell, Cardiff Business School (previously, School of Management, University of St Andrews)
Dr. Matthew Sothern, School of Geography and Geosciences, University of St Andrews
Dr. Timothy Stojanovic, School of Geography and Geosciences, University of St Andrews
Prof Barbara Townley, School of Management, University of St Andrews
Dr. Louise Valentine, Duncan of Jordanstone College of Art & Design, University of Dundee
Prof. John Wallace, retired Principal, Royal Conservatoire of Scotland
Prof. Gregor White, School of Arts, Media & Computer Games, Abertay University
Dr. Sandra Wilson, Duncan of Jordanstone College of Art & Design, University of Dundee

Associate Academics and Researchers

Dr. Jacqueline Archibald, Dundee Business School, Abertay University
Dr. Henning Berthold, ICC, University of St Andrews
Eilidh Cochrane, previously, ICC, University of St Andrews
Martin Dowling, School of Management, University of St Andrews
Dr. Charlotte Gilmore, Business School, University of Edinburgh (previously, School of Management, University of St Andrews)
Mindy Grewar, ICC, University of St Andrews
Dr. Iain Henderson, Edinburgh Business School, Heriot-Watt University
Charles Lovatt, School of Management, University of St Andrews
David Lyons, School of Arts, Media & Computer Games, Abertay University
Dr. Nicola Searle, Intellectual Property Office
Mark Sheridan, University of the Highlands and Islands (previously, University of Strathclyde)
Patricia Sullivan, Project Support Consultancy, Dundee

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