



Working paper
Translation, Negotiation, Advocacy: the REACT
challenge

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Introduction

About the report

This working paper has been written twelve months into the REACT Hub's four-year plan. It reflects on the achievements of the first year of the REACT collaboration and identifies the conceptual, theoretical and practical challenges that have emerged so far. It is the first of a series of papers that reflect on the development of the REACT Hub.

What is REACT?

REACT is one of four Knowledge Exchange Hubs established and funded by the Arts and Humanities Research Council (AHRC). The collaboration is led by the University of the West of England and Bristol digital media centre Watershed, in collaboration with the Universities of Bath, Bristol Cardiff and Exeter. REACT was established in 2012.

What does REACT do?

REACT's overarching aim is to develop new models for knowledge exchange (KE) that position Arts and Humanities research within innovative practice in the creative economy. REACT achieves this by funding collaborative R&D projects that bring together creative companies and academics working in the arts and humanities.

REACT's core delivery model to support these collaborations is iShed's Sandbox. Sandbox was developed in 2008 by iShed, part of Watershed. The inaugural Media Sandbox supported six companies from across the South West to develop early stage digital media ideas. Now in its fourth year, 19 companies have participated in Media and Theatre Sandboxes, creating games, apps, installations and software. REACT sub-contracts iShed to use the sandbox approach in its Knowledge Exchange projects. REACT Sandboxes differ from those run by iShed in the past because they comprise creative companies and academics.

REACT Sandboxes explore questions pertinent to the creative economy, such as what digital technologies might offer the heritage, publishing and documentary media industries. These challenges comprise the themes for each of REACT's Sandboxes. These are Heritage (2012), Books&Print (2013), Future Documentary (2013) and Objects (2014). Collaborative projects in these Sandboxes develop prototype products or services. The teams are provided with access to creative and technical expertise, academic research, PR support, business advice from leading industry experts, IP and legal advice, and a cohort of other creative businesses and academics with which to share learning and skills. To take part in a Sandbox, participants must first attend an Ideas Lab event to meet other potential applicants, establish a collaborative partnership, and devise an application to REACT.

The REACT collaboration has already connected with 153 creative businesses across the region in Ideas Labs. Of these, 40 creative businesses came from Devon/Cornwall and 30 from Wales. Of all the collaborations formed at Ideas Labs, 60 submitted bids to REACT. Of these, 26 Creative companies have been funded as core partners across Heritage and Books & Print Sandboxes, Strategic Funds and HEIF projects. Of the 24 projects included 25 academics from 5 Universities and 13 disciplines including History, English, Modern Languages, Geography, Journalism Archaeology, Sociology, Film Studies and Theatre. These academics collaborated with 26 Creative companies including theatre producers, street game designers, app developers, film-makers and artists.

How does the REACT collaboration work?

A team comprising the Hub Director, Executive Producer, two Producers, a Knowledge Exchange Fellow and an administrator work to implement the day-to-day running of the Hub. This team is based at the Pervasive Media Studio in Watershed, Bristol. The projects the Hub funds are supported centrally from this space. REACT Producers are integral to supporting ideas development, offering advice and creative input to the development of these projects.

This team works with the partner organisations to carry out REACT activities. In each partner university there are REACT co-Directors who oversee the delivery of the REACT collaboration in their Higher Education Institution (HEI). The Universities of Cardiff and Exeter have also funded posts specifically to develop regional relationships with REACT collaborators and the research development offices at other partner Universities have also dedicated staff time to REACT. These team members help manage the collaboration across the region.

The REACT collaboration is underpinned by an ethos of openness, generosity and experimentation. This approach informs decision-making processes, management structures, research methods, evaluative systems and how funded collaborations are asked to work. This model of working, outlined in more detail in this document, has been developed from the expertise of Watershed and specifically prior experience with the development of the Pervasive Media Studio and past Sandbox projects (Warburton, 2010, Warburton, 2011).

Watershed has run the Pervasive Media Studio since 2009 in collaboration with the Universities of the West of England and Bristol. Here academics working in technology, media and practice led research are co-located with creative businesses and artists. They jointly explore the development of new ideas in an atmosphere of open innovation, and co-production. The success of Pervasive Media Studio, where Studio residents attributed £528,971 worth of business and funding to their presence in the studio in 2012/13, suggests that the media innovation sector and Higher Education research can mutually support one another to create value.

What will the outcomes of this work be?

The REACT collaboration would like to see new products or services emerge from funded projects. These outputs will interrogate challenges facing the creative and cultural industries, and society more broadly. These outputs will come from collaboration that unlocks the value of knowledge from both the creative and research sectors.

REACT aims to support innovation. Innovation for REACT emerges from a process of applying digital technologies in new ways, finding new combinations of ideas and creating new opportunities in the creative economy. This creates the conditions for on-going relationships between partners to further exploit their project in the future. This innovation will help to sustain and advocate for the value of working together in this way. This means running the collaboration in an open, fluid and responsive way, derived from the model at work in the Pervasive Media Studio (Warburton, 2011).

REACT is also developing a network of expertise as a direct result of its activities. The network comprises creative companies, academics, researchers and other individuals that can derive mutual benefit from working together in the future. It brings together existing networks attached to the collaboration partners, and brings new participants from the events and projects run by REACT itself. This network will be a space for expertise and opportunities to be shared, and generate both dissemination of academic research and innovation in the creative economy. It is a key outcome of REACT's work.

REACT also wishes to change the operational cultures in Higher Education Institutions (HEIs) and creative sector businesses to produce agile, contemporary systems that can respond to the changing nature of knowledge and creative practice in the twenty-first century. This is REACT's culture change

agenda. Culture change is a big challenge. The REACT partnership alone comprises five universities, over 20 research disciplines, one digital media organisation, and a broad and diverse set of creative companies that make up the creative economy in the South West and Wales. All of these institutions and organisations operate at different scales, in different places, have different traditions, and different approaches to research, collaboration and creative work.

Finally, REACT will be conducting critical research into how knowledge exchange processes unfold. These include the various methods, models and outputs used to support KE. It also includes exploring the politics and meanings produced by working in the field of cultural and creative work at a conceptual level. This will lead to a range of outputs, including, but not limited to, case studies, best practice material and academic articles

What challenges has the REACT collaboration faced?

As the project has developed over its first year, we have noticed a number of challenges that REACT needs to address. These challenges are theoretical, conceptual and practical. They relate both to specific operational challenges and broader concerns about how to support growth in the creative economy, value research and advocate for the role of creative and cultural activity in society. Recognising and resolving these challenges will be an important part of the growth and development of the project.

These challenges can be summarised as follows:

1. Geographical reach

- It takes time and resources to form a distributed network across a large geographic reach; different areas have different political/culture approaches to creative economy.
- Meeting and networking with creative and academic communities across Wales and the SW is labour intensive. Dedicating resources within partner HEIs and REACT team to develop these relationships has proved essential.

But what impact does geography have on REACT's work? How does this effect the way we translate, negotiate and advocate for knowledge exchange?

2. Institutional cultures in the REACT collaboration

- A key REACT challenge has been slow working timescales and attitudes to risk at Higher Education Institutions, relative to those of the creative economy. REACT now ensures long lead up times for Sandbox applications and meets regularly with Finance, legal and contracting representatives from HEIs to ensure all parties are kept abreast of changes/challenges.

How do we understand these cultures? What is the best way to negotiate existing processes and advocate for change?

3. Different ways of working

- Traditional arts and humanities academic researchers are often wary of research using digital technology and demanding impact.
- Demonstrating that REACT offers value for Creative businesses has been difficult without 'track-record' of projects that clearly strengthen companies' market position.
- Academic researchers and publicly funded cultural organisations are deeply acculturated to the idea of one off project funding which challenges longevity of REACT projects.

The production of accessible evidence is part of our strategy. As stakeholders begin to see successful examples of prototypes and share positive experiences with colleagues the challenge of selling REACT decreases.

4. The experience of creative work

- If REACT are to support collaborations to produce this kind of innovation, leave a lasting legacy in the HE and creative sectors, and find ways to unlock the value of academic research, we need to understand how such work unfolds and is experienced.
- REACT recognises that the skills needed to make things in this field are fluid and that REACT collaborations reflect this.

So how can we develop an understanding of creative and academic work that helps creative KE unfold in the future? What do we need to know about the experience of creative work?

5. Value

- Methodologies for understanding and evaluating value creation in the Creative Economy are underdeveloped.
- A challenge for all the Hubs is to develop better methods for evaluating their impacts in ways that take account quantitative, qualitative and network-based data. This is a key focus of our research.

Understanding value is a key part of our advocacy work. How do we promote the work we do? How do we rethink value in a way that changes how we understood the potential of knowledge exchange?

Many of these challenges are not peculiar to the REACT Hub. Recent research has shown similar challenges at work across the Higher Education and creative sectors (Channer et al., 2013, CIHE, 2010, CIC, 2012, Hughes et al., 2011). This paper now unpacks these challenges in more depth, articulates how they are experienced by the REACT collaboration, and considers the contribution REACT can make to this field. This document also considers some of the broader analytical questions than can be asked to better understand the impact of the hub's work.

Challenges facing REACT

The REACT Hub supports collaborative Knowledge Exchange (KE) projects that operate specifically between arts and humanities researchers, and creative businesses. Knowledge Exchange is a process where academic researchers and individuals and organisations in the public, private and commercial sectors share learning, skills and outputs with another to develop a mutual outcome. Supporting these kinds of projects has presented the following challenges for REACT.

1. Geographical reach

REACT aims to build capacity in the creative economy by connecting creative companies with skills and research in the arts and humanities. The creative economy is frequently signalled in government policy as important to the UK economy, often by reference to the rate of growth in the sector comparative to other areas of the economy (DCMS, 2008). This growth is calculated as 6.2% per annum (Chapain et al., 2010).

REACT has a specific remit to support academic and creative activity in Wales and the South West of England. REACT comprises research institutions in Bath, Cardiff, Exeter and two in Bristol. The range of creative economy companies extends from Cornwall to Wales. Much of the creative activity identified above is, however, concentrated in London, as demonstrated in recent figures from the DCMS (2011). Outside of this area, there is a wide variation in the geographical scale and intensity of creative activity in different regions.

These regional differences influence efforts to support knowledge exchange projects in two interrelated ways. Firstly, it impacts REACT's access to creative companies and researchers. The creative economy varies in scale and concentrations within REACT's geographical area. Secondly, the way creativity is understood within the region varies as well.

Access to creative economy

The DCMS identify the South West as having a high concentration of creative businesses, relative to the rest of the UK. According to the report, 7.9% of the UK's creative enterprises based in the region. This is the highest concentration of creative enterprises outside of London and the South East (52.7%) after the East of England (8.9%) (DCMS, 2011). The area in which REACT works thus has access to a relatively large network of creative businesses. Bristol and Bath have a strong reputation for successful creative industries. The area has been identified as one of 4 creative hotspots by NESTA (Chapain et al., 2010). A recent report from B.O.P Consulting suggested that Bristol accounted for around 46% of creative jobs in the region in 2005, around 12% of all regional employment, and Bath accounted for around 22% of creative jobs (B.O.P, 2007). This weighting can be ascribed to a number of factors; Bristol in particular has large creative companies associated with the city. These include Aardman Animation, Endemol, and BBC, whose long association with the city has helped establish Bristol as an important hub in the documentary industry, as Bassett et al. (2002) have shown. Bristol is also now home to the West of England's Enterprise Zone (EZ).

But these creative businesses vary within the South West. Elsewhere in the region, the distribution and constitution of the creative industries differ (Channer et al., 2013). Wales, for example represents a different concentration of creative labour. The Creative Industries in Wales account, for between 1.7 and 2.3% of total employment in Wales and contribute between £450m and £500m to annual Welsh economic output (Hargreaves, 2010). 2.3% of the UK's creative enterprises are based here (DCMS

2011). So creative industries in Wales, for instance, are low in proportion to the rest of the UK, and low in proportion to regional economic output (1-1.1% per cent of the total) and employment (Hargreaves, 2010).

REACT's aim to connect with creative businesses is made more difficult by these uneven concentrations of creative businesses in the regions. The numbers above are indicative of how creative activities and business are manifested unevenly across the region. There are clusters of various sizes operating across the region, though the largest is the Bristol/Bath area (DCMS, 2011). However, elsewhere, difficulties might be in terms of broadband infrastructure, access to clients for a creative business, limited networks of peers for mutual support, or a lack of events to showcase or grow skills.

The implication is that creative businesses, and audience are at different stages of development in different areas and have different ideas about how to sustain a creative business, as Harvey et al. (2011) have found. This variation leads to uneven development in the creative sector across the region. This means different business will require different forms of support and resources from REACT and the REACT network.

Concepts of creativity in economy

The way in which creative activity is understood varies across the region and consequently REACT encounters many different creative discourses about the creative economy. The term 'creative discourse' refers to how governments, organisations or individuals imagine what the creative industries are, and the processes they put in place to support that understanding. Creative discourses are not only definitions, but also the processes – such as policies, projects, rules, regulations or opportunities – that bring those definitions to life. An example might be a local authority believing that craft was a central part of a creative economy, and offering funds and space to craft practitioners, whilst another local authority might invest in technical infrastructure and business support for digital businesses. These discourses are important because they also account for many of the variations we have identified in the creative economy in our region. This geographic variation in how creativity is understood or supported has been identified in a recent Creative England/AHRC report as key characteristic of the growing creative economy (Channer et al., 2013).

Research has shown that regional differences in support for creative work are emphasised by differences in political strategies for regions (Jayne, 2005). We can see such different approaches to creativity at a national level. For example, the Department for Media Culture and Sport (DCMS) and Department for Business and Innovation Skills (BIS) have responsibility for funding, guiding and shaping the creative industries workforce and businesses in the 'digital' sector. Their conception of creativity is one of competitive economic value and informs much of the UK's creative economy policy (DCMS, 2008, DCMS, 2007, Oakley, 2004). This language can be seen in other documentation that promotes the value of the creative economy to UK development (CIHE, 2010, Channer et al., 2013).

This discourse has an influence at the regional level. The competitive creative discourse can be seen embedded in the rhetoric that surrounds initiatives such as the West of England Enterprise Zone in Bristol: these strategic zones were announced in the March 2011 Government Budget, as one of a first wave of eleven zones within Local Enterprise Partnerships (LEPs), established to stimulate enterprise and drive economic growth. The message is, is that Bristol is a competitive 'creative' city. Creative rhetoric linked to regional growth is visible in the large-scale digital infrastructure renewal plans in Cornwall, such as the SuperFast Cornwall, a £132 million programme funded by BT/EU/Cornwall County Council to bring broadband to Cornwall and the Isles of Scilly. Here, digital infrastructure is seen as an opportunity for regional competition, education, and access to job opportunities. This is a key part of the current administration's Superfast Broadband agenda (BIS, 2010).

There are also other creative discourses. The Arts Council England and Arts Council for Wales are responsible for creative activities in the arts. They deliver funding and training, monitor skills development and offer business support for artists, craft makers and artisans. The Arts Council link creative activity to social wellbeing and inclusion (Matarraso, 1997, ACE, 2005, ACE, 2006). This type

of thinking was visible in creative policies in the late 1990s, but is less apparent in contemporary policies as Lee et al. (2011) show. This version of creative practice is a preoccupation in many of our regions, especially those with high levels of unemployment or poor community cohesion. For example, Cornwall recognise social wellbeing as a challenge and offer arts and creative activities as a solution (The Creative Unit, 2008), as do other regional councils, for example Somerset (Jones, 2009) and Dorset (Fleming, 2006). So creative economies are linked to both economic and social wellbeing in the region.

These are just some examples of differences in creative discourses. There are many more. These examples, however, show how differing approaches to supporting and recognising creativity pose a challenge for REACT. This is because we must consider what the implications of a political, or ideological variation in the beliefs, motivations and outputs of creative practitioners in different regions might mean for our projects.

Enquiry questions:

These preliminary observations suggest that the interplay between geography, infrastructure, history and discourses about creativity have played a role in shaping what we call the creative economy in the South West. We need to understand this better. We want to know:

- What are the different discourses of creativity at work in the region? What are their effects?
- How can we offer support that recognises these conceptual and geographical variations? What are the regional variations of academic work?
- How are spaces of creativity supported and connected within the REACT network?
- What is the impact of basing REACT in Bristol? How do our own organisational discourses about creativity influence the projects that we support?

2. Institutional cultures in the REACT collaboration

REACT works at a number of scales. One is at the institutional or business scales. At this level, there are distinct cultures of work that differ between the HE sector and the creative economy. The term 'cultures of work' is broadly used in organisational studies and elsewhere to describe dominant ways of envisaging, seeing and enacting approaches to organising work. This section is concerned with how different traditions of organising work in HEIs presents a challenge for REACT.

There are four elements to this challenge. The first is an incompatibility in timescales across different organisations. This is an important challenge for REACT to address because it creates bad faith amongst our collaborations, threatens our reputation and slows down the rate of work and rhythm of collaborations. We have found that the speed of processes and operations within HEIs are often slower than the rate of operation of creative businesses. HEIs move slowly, in part due to their need to be accountable as publicly funded bodies. For example, it can take three months for the University partner to sign contracts, approve a creative business as a supplier or raise the necessary purchase orders. However, creative businesses, often small SME and micro-organisations operate much faster. In the South West, almost 90% of creative industries businesses in the region were micro-businesses. More than a third of people were self-employed (B.O.P, 2007). These types of organisation needed to be paid quickly to meet living and working costs, because their working lives are often precarious and rely on making ends meet by working on many projects at once, at a fast pace, and for differing levels of remuneration (McRobbie, 2002).

The second element is attitudes to risk in large organisations, like HEIs. The Council for Industry and Higher Education argue that encouraging entrepreneurial and risk-taking behaviour within the HE sector is challenging, but vital for the promotion of innovation and economic growth (CIHE, 2012a). But universities are risk-averse organisations in comparison to creative SMEs, who are able to move very rapidly, be opportunistic and take very high risks. Creative businesses often maintain a slate of projects at any one time that at its crudest is designed to create hits that support flops and creates diversity of cultural outcome.

The third challenge is approaches to decision making in the HE sector that reflect both the slow timescales of processes and aversion to risk. Whilst Peer Review is the accepted norm for academics to arrive at quality judgements it is never used in the same way to make Creative Economy investments. This has the effect of constraining producers' judgement - constraining a key part of their identity and way of operating. Additionally we need to be able to be strategic with our investments, to recognise that great ideas and great talent might need a long lead-time, might not be there fully formed with the academically acceptable application form. The peer review system may not in fact be the best way to develop talent.

Finally, the REACT collaboration is forming its own institutional culture and how that process unfolds will impact how the Hub is run. In particular, the collaboration is aiming to minimise bureaucracy, value intuition and hunches, being accountable and open to change, and being able to adapt quickly to challenges and opportunities. These are not just desirable outcomes, but essential components of how innovation can be supported.

Consequently, ensuring the REACT collaboration works in this manner on a day-to-day basis is an important part of the hub's development. Implementing these changes is challenging. This is because building trust and common languages between collaborating organisations takes time. Demonstrating the value of the project to many different HEI departments with different organisational systems, performing new ways of working, and negotiating institutional processes are all part of this process. This involves recognising when and where expertise and knowledge flow back into the REACT collaboration from academia, and recognising and respecting the ways of working developed by our creative economy collaborators. In short, knowledge exchange is not only happening within our funded projects, but also happening within the REACT collaboration itself.

Research questions

Many of these challenges appear to be systemic, and a result of different working structures between the partners involved in our collaboration. But we need to know how to negotiate between these systems. To do that, we need to find out:

- What political constructs underpin the differing attitudes to risk, time horizons and innovation?
- Can we offer alternatives to these processes that values hunches, intuition and curation as well as established models of peer review?
- In what ways are the systems and processes of REACT constituted by our own beliefs about how we think creative industries operate?
- What influence does this have on our expectations of the processes we describe? Do we need to evolve, too?

3. Different ways of working

The REACT collaboration recognises that the way in which academics work, and the way in which creative practitioners work, can be different. This difference might be in approach to research, project design, or how to go about undertaking a collaborative R&D project. Attitudinal responses between collaborators are important for REACT to understand because it means we will know what to expect from our collaborators, and how best to support them. We have found a number of differences.

Firstly, we have found that engaging academics in a project that deals with digital technology can be difficult. In other disciplines such as applied arts, design, media, and performance, audiences are integral to research practice. In traditional Arts and Humanities subjects, a relationship with the audience is less clear beyond traditional dissemination models such as books, articles or lectures. Consequently, academics in these disciplines where the tradition is more of scholarship than performance may not see how or why their research could be applied in non-traditional ways.

There is, however, much scope within this field of research for valuable public outcomes. These were highlighted by the Centre for Business Research (CBR) in their report for the AHRC, 'Hidden Connections' (Hughes et al., 2011). This report attempts to quantify and qualify the types of work undertaken by arts and humanities academics in knowledge exchange (Hughes et al., 2011). The report recognises that there are a range of motivations for dissemination in the arts and humanities that extend beyond only financial gain. These include effecting social change, improving education and cultural understanding. The report also recognises that a range of businesses – not just those working on technological products – benefit from academic knowledge. The report is, however, unclear on how best to support these processes.

Another challenge relating to academic ways of working is the presence of impact and knowledge exchange terminologies. The evaluative systems put in place to monitor performance within the HE sector, which includes measuring public impact as well as academic output, have been the source of much debate in the HEI sector (Välilä and Hoffman, 2008, Kenway et al., 2004). Although there is a general tolerance of the idea of public engagement with research work, creating impact is still a very novel process for the academic community. Moreover successful Arts & Humanities departments in traditional Universities carry a strong sense of entitlement and change resistance. They have been successful under particular historical research funding arrangements that are now changing, but are not necessarily connected to the right forms of pedagogy, research, dissemination or world-views to respond to those changes. This resistance to KE and impact is difficult because it constructs REACT as 'part of the problem'.

We have also found that Creative Economy partners need to be persuaded that research in these disciplines has anything to offer their businesses. Models of knowledge exchange, such as those outlined in a recent Council for Industry and Higher Education report (CIHE, 2012b) tend to refer to knowledge transfer and knowledge exchange as fairly transactional processes that deliver Intellectual Property (IP) for exploitation into a commercial setting. REACT, however, recognises that the kinds of expertise needed to innovate in this field derive skills from both arts and business sectors, from academia and from business practices. Knowledge exchange in this field is thus not transactional, but mutually constitutive, where values, knowledges and skills are developed together to produce both new work and new workers. Within our research base, which it lends itself to scholarly outputs such as journals, books, talks or working with cultural institutions in more straightforward capacities, the way in which prospective business partners envisage the kinds of skills, knowledge and interventions that are on offer within the field is unclear.

Finally, we've found that academic researchers and publicly funded cultural organisations are deeply acculturated to the idea of one off project funding. Because of short funding horizons there is often a model of bid, deliver, evaluate, publish, develop and bid again. REACT aims to disrupt this model by demonstrating that in some instance sustainable economic and social value can be made through an on-going collaboration. One problem, identified in a recent report from the Creative Industries Council research access to finance for creative companies is that moving across scales – from micro-business to SMEs or beyond is an unmet challenge that represents a barrier to growth (CIC, 2012). This means exploring new ways of supporting creative businesses to grow, potentially by changing attitudes to the value of a collaborative creative and academic project.

Enquiry questions

Working cultures are tricky to describe and pin down. However, we need to know more about the people with whom we are collaborating. These observations thus raise the following questions:

- How do working practices differ between academics and creative?
- How do we recognise different skills and values bought by our collaborators?
- What are our expectations of how collaborations will operate? Does this affect the attitudes of the collaborators we support?
- In what way is REACT constituted as part of the problems associated with modernising or ne-liberalising Higher Education?

4. The experience of creative work

REACT recognises that the way in which everyday work is being carried out is changing. This change extends across Western economies in all fields, especially when we start to value knowledge in economic terms (Jessop, 2000). These changes impact the work of the REACT collaboration because they also describe changes to the experience of work in both the creative economy and the academy. Phrases like precarious labour, emotional labour and immaterial labour are becoming more common (Gill and Pratt, 2008). They describe short-term or uncertain working conditions, and the increased production not of goods, but of services, software, or even feelings, that can be bought and sold (Lazzarato, 1996, Hardt, 1999). There are also political challenges that come with the systems associated with these new ways of working (Raunig et al., 2011, Lovink and Rossiter, 2007). These changes are part of a global restructuring of how work is imagined and is being carried out.

REACT recognises that the skills needed to make things in this social context are fluid and that REACT collaborations reflect this. They provide a rich terrain for understanding the experience of creative work. If REACT are to support collaborations to produce this kind of innovation, leave a lasting legacy in the HE and creative sectors, and find ways to unlock the value of academic research, we need to understand how such work unfolds and is experienced.

REACT collaborations require interdisciplinarity where existing skills, for example in narrative theory, cultural critique, history or philosophy combine with those of set design, journalism, 3D modelling, engineering, and software skills, product design, or performance. The ethos and dynamics of such interdisciplinary teams might be derived from the software and games industries as much as they are the lecture theatre or the library. We recognise the value of all of the skillsets in our collaborative teams, but productive here requires agility, iteration, and a commitment to making and doing alongside thinking and analysing.

This new set of skills can present a challenge to the REACT network: traditional Arts and Humanities research may have an underdeveloped grasp of the social value of digital innovation whilst as for creative business partners, innovation may actually be a new service or product for their business. The challenge is to support creative work with a different kind of subjectivity for both academic and creative businesses, that may prove to have more in common with the hacker than the auteur.

Finally, the REACT Hub must also pay attention to how the types of creative practice it seeks to implement and embody impacts on the collaborative work the Hub supports. UWE, Watershed and iShed have all developed distinctive ways of talking about creative work as evidenced in research that examines the networked activities of Watershed (Leicester and Sharpe, 2010) and the Pervasive Media Studio (Bachmann et al., 2012), and the Media and Theatre Sandboxes pioneered by iShed (Warburton, 2011, 2010). In this way, the discourse at work in the REACT collaboration sets the conditions, expectations and understandings of how creative and innovative practice can work.

Enquiry questions

We recognise that there are differences in the way we are all being compelled to work in contemporary society. In academia and creative work, there are also changes demanding new attitudes, skills and approaches. These are making the experience of work challenging, but potentially rewarding. But to make sure we understand what we are seeing happen in REACT, and how best to support our collaborations, we need to know more:

- What are the broader conditions that are changing how we work?
- What does it feel like to do creative or academic work?
- How does it feel to work together in a REACT environment? What are the skills being required of academics and creatives?
- What is our role in shaping, supporting or even exploiting these ways of working? What role do rates of work, feelings and innovation mean for the kind of work we are supporting?

5. Value

REACT wishes to leave a legacy in the creative economy, and in its HEIs. This involves demonstrating the value of the REACT approach. We are already building a range of evidence that we are communicating with our audience. Our audience ranges from political bodies such as BIS, and the DCMS, through to NESTA, Arts Councils, local authorities, key players in the creative industries and private sectors, the HE sectors.

REACT thus presents us with an opportunity, which is not only to speak to accepted approaches to measuring and demonstrating value, but to rethink the nature of value itself. Previous research carried out by members of the REACT team reminds us that value is a complex term, and can be understood and generated in many ways (Bachmann et al., 2012). Value is contingent and constantly recreated within interactions and relationships. Normann and Ramirez (1993) have shown how furniture giant IKEA's strategy was able to compel customers to create their own sense of value from using the affordances of modular furniture to build a distinct domestic identity. Value is generated here through an interaction of people, products, services and affects – they make their own value out of what they consume, how they consume, and what they do with it. Normann and Ramirez describe this as comprising a 'value constellation', where value is made by the interaction of the time, attention and emotional investment of consumers and producers, as much as it does to the intrinsic value of any singular product. This idea was later refined (Ramirez, 1999) and speaks to similar ideas about how consumers generate value via producing, consuming, reinterpreting or manipulating existing products and media (Kember and Zylinska, 2012). This often happens within networks of consumers, users, fans or producers. So value is made by emotion, attention, experience, space, time and any other number of relationships between people and things.

This constellation of people, things, and feelings also constitutes a network. We've already identified the importance of 'networks' in the success of REACT: networks of people, things, places and opportunities, of know-how and know-whom all support creative and academic work. They create both communication channels for formal opportunities, and spaces for chance encounters and unexpected discoveries. These processes highlight the potential for an intentional role for a focal organisation (in this case Pervasive Media Studio from which REACT operates) in orchestrating such a network. Perhaps the value comes from the object being developed, perhaps from the experience of learning, perhaps in an as-yet-unanticipated meeting that will happen within the REACT cohort. But it will not only be economic value, but a value of experience, knowledge or skills.

Thinking in this way also enables REACT to try and destabilise some established assumptions about what is valuable and how it is valued. Authors like Gibson-Graham have shown how we might stop thinking about the 'economy' as a monolithic concept to which we are all in thrall, and instead see it as many, multiple interactions of lots of different kinds (Gibson-Graham, 1996, 2006). Thinking about the economy as lots of interactions between people and things, some of which involve money and exchange, others of which might not, lets us have a more progressive view of how we understand value. We can ask: how do you value intangible creative activities? Is value equal between creative sectors or geographic regions? What are the alternative ecologies of practice that generate social value? If we talk only in commercial terms, how can we recognise the stories that slip between the nets?

Enquiry questions

The question of 'value' generated by creative activities is a very important element of the work of REACT. It is an important part of our agenda to come up with an account of value that is not reducible only to economic imperatives, but that explores how we might think differently about what benefit creative and academic work offers society more broadly. We need to think through:

- what might we learn from thinking differently about the economy? How might we explore the ramifications of terms like the gift economy, or the economy of contribution?

- How does thinking about the production value in this way relate to conversations about consumption-led value definitions?
- By unsettling normative terms like 'economy' and 'value', can we think of other ways to bring alternative systems into being?
- How do we develop a methodology for capturing value?

What we are learning and what we'll do next

This case study has outlined some of the challenges facing REACT. In so doing, we observed that shifts in working cultures and systems are needed if the arts and humanities and creative occupations can be supported to deliver impact. Implicit is the belief that the social landscape of making, creating, using, experiencing and consuming is shifting around models of creativity, technology and distribution. We believe that to make positive interventions, we need to be involved.

REACT is operating in an exciting theoretical and operational terrain. Traditional models of knowledge exchange hinged on the exploitation of intellectual property developed through academic research are changing. Whereas in disciplines like engineering, medicine and the sciences, outputs – inventions or discoveries – are more apparent and easier to exploit, REACT is looking to unlock different types of creative value. Knowledge Exchange in the arts and humanities may appear less straightforward because often the knowledge that emerges from this field of research might be translation, historical interpretations of books, archaeological work or discoveries relating to philosophy and social issues.

Creative work makes meaning and value in an increasingly busy world. But what this value is, how to recognise, defend and promote it is a difficult question to answer. The discourses and landscapes of creative and academic practice are changing. Insistent pressures to work differently are unfolding across the Western working world, and digital innovations are still often seen as a panacea of hi-tech development. Higher Education demands new output for research and new kinds of working subjects to perform, undertake, evaluate and participate in that research. Although culturally invaluable, it is not always clear how these can be exploited in the same way in which scientific discoveries can be (Crossick, 2006). Consequently, making interventions in the space is a key strategic interest to a number of cultural bodies including Creative England (Channer et al., 2013), the Technology Strategy Board (TSB, 2009), Arts Council England and NESTA (as exemplified by their Digital R&D Fund for the Arts) and the HEI sector itself (PACEC, 2012).

A recent report from Creative England/AHRC reflects similar challenges in the national field of KE to those outlined in this document (Channer et al., 2013 pp. 6 - 7) and suggests responses, including developing leadership and networks, encouraging academic and creative partnerships and developing the evidence base, all of which the REACT Hub and its collaborative partners are already doing. Further, Channer identifies that successful KE projects in this field are often, “informal, individual and network-led; appropriate for a business’ stage of development; highly collaborative; highly-networked; cross disciplinary; accessible and brokered; part of a systematised approach to innovation” (Channer et al., 2013 p. 5). This precisely describes the approach developed by Watershed, iShed and the Pervasive Media Studio (Leicester and Sharpe, 2010), and exemplified in prior Sandboxes. This has already demonstrated how Watershed’s open approach to innovation is not only integral part of how REACT runs, but also that it is key to delivering knowledge exchange in a way commensurate with Channer et al.’s findings.

Another key area in which REACT is well-positioned to explore this field is in its adoption of creative producer roles within its delivery team. The creative producer role represents a distinctive set of talents needed in the field of creative innovation, and KE as identified by recent research on Watershed (Leicester and Sharpe, 2010) and in the arts more broadly (Tyndall, 2007). They operate in multiple ways, acting as boundary spanners between sectors, project managers and advisors to support funded projects, relationship brokers within the REACT network and creative practitioners in their own right. These roles address many of the needs for ‘brokers’ in KE projects identified by a

number of KE reports (CIHE, 2010, CIHE, 2012b) while at the same time providing a new set of skills specific to the creative and arts sector.

The successes realised by the REACT collaboration are exemplified by the successes of our first year of operation and our first round of funded projects. The REACT collaboration has also made some early operational progress in developing new systems and promoting culture change. Successes outside of the projects we have funded include negotiating new procedures within partner HEIs to accommodate REACT and working with CE. The Universities of Cardiff and Exeter have funded posts from non-REACT funds to develop regional relationships with the creative economy and other partner Universities' research development offices (e.g. RED at Bristol, RBI at UWE) are dedicating staff time to REACT. Knowledge Exchange activities with the creative economy are now part of the Arts and Humanities Research Impact Strategies at University of Cardiff where previously it was absent. REACT also want to ensure that the voices and expertise of creative professionals have a space in the project. As well as the core delivery partnership with iShed, REACT also features creative experts on our Steering and Advisory Boards, as well as on our team of Sandbox advisors, offering their creative/commercial insights to our Knowledge Exchange collaborations.

However, there is still much more work to be done to explore, develop and strengthen the approaches adopted by REACT collaboration. We recognise that we need to know more about our modes of working, the impacts of the work we do and the implications for the REACT network that emerge from the Hub. Consequently, REACT recognises the need to be reflexive space in which learning through thinking, doing and research enables the project to adapt and evolve. In a complex collaboration like REACT, it can be easy to make generalisations. This might mean making assumptions about the categories in which we deal – the university, the creative, the academic. It might also mean assuming certain ways of doing things represent a status quo, or best practice. We know, however, this isn't the case. The categories used to describe and understand the REACT collaboration might threaten to actually mask diverse systems, subjects and categories at play across the Hub. These vary within and between institutions, across the region, and between individuals and companies. Our research moving forward needs to pay attention to this fact. This will enable the collaboration to recognise when and where ideas and cultures are being changed. REACT project hopes to interrogate and destabilise the terms being used in the sector – like innovation, value, or economy - and open them up to a more rigorous, critical method for understanding how creative and organisational collaborations work, and how they generate value.

Next steps

In trying to understand and learn from these challenges, we have identified the need for **translation**, **negotiation** and **advocacy** in the everyday work of REACT:

- We **translate** between working cultures and spaces, such as between creative businesses and HEIs, artists and academics, and the scales of small businesses to large.
- We **negotiate** between different organisational languages and ways of working; we work with institutions and organisations whose systems and understandings of ways of working maybe very different. We broker conversations and look for new ways to work together.
- We **advocate** for new ways of doing things. We believe in the value of collaborative, creative, Knowledge Exchange, but believe that the methods needed to do it successfully need to be advocated for.

As we work on developing these three areas of expertise, we will continue to support collaborative projects in our REACT Sandboxes. The next themes, including Books & Print, Future Documentary and Objects, comprise a wide-ranging intervention in the field of contemporary media.

As we do this work, we will continue to reflect, consider, research and sharing our thinking and learning on the work we do. REACT continues to research, document and assess its own work, and is

developing mechanisms to share this learning with other KE Hubs and the public. This includes more working papers in this series. Some of the guiding questions for that research include:

- What is the relationship between creative discourses, places and spaces in the REACT network?
- What is the experience of creative labour in REACT collaborations? In what ways do the different imaginings of knowledge exchange and innovation influence that experience?
- How do we envisage innovation, and the times, spaces, subjects and conditions necessary to shape it?
- How can we re-theorise value from the point of view of production? What other languages can we bring into being to describe and evidence the impact of creative practice on the social world?

Exploring these questions will allow us to know our field of operation better, translate and negotiate between different institutions more efficiently, support innovative practice better, understand how to create impact in academic and creative economies, and understand politically and practically how to advocate for new methods of supporting growth in the UK creative economy.

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