

Notes on Co-production: Experimental methods and spaces in the Humanities

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Doing is designing for these people – not systematic hypotheses, or structures of thought or orderly procedures; but potting-shed hit-and-miss, sorry I blew the roof off but you know how it is darling, craft-work.

Christopher Frayling (1993/1994:2).

The emergence of the language, practice and aspiration of co-production has in recent years shaped the interaction between universities and communities. The shift from community engagement to participation and towards co-production has been supported by individual research councils in the United Kingdom. There has been much of value in new practices of engagement, participation and co-production but there also remain significant problems in the relationship between universities and the civic spaces and initiatives with which they interact. In the light of a recent project supported by the Arts and Humanities Research Council, *Co-Curate North East*, it is worth elaborating some of the problems and possibilities of co-production around Knowledge Exchange (KE) and the kinds of 'spaces' which need to develop. We argue for three central practices in the Humanities and social research – the co-design and practice of experimental spaces, the re-configuration of the idea of university 'civics' and 'communities', and the collapse of the predatory, knowledge extraction imperatives that drive universities in favour of more collective and responsive projects built with coalitions or ensembles of forces.

The language and discourse of co-production is becoming ubiquitous in engaged academic work. The review of university-community co-production by Catherine Durose et al notes that 'Whilst co-production in research is an admirable and currently resonant subject of debate, researchers should not be complacent about its use and about the significant changes it demands about research with communities,' (Durose et al 2011:9). The emergence of understandings of co-production techniques in Science and Technology Studies (Jasanoff 2004) have led to new ways of thinking about community imperatives and issues like citizen science. The re-focus away from traditional academic communities into communities and landscapes of practice (Hart and Wolff 2006, Martin 2010, Wenger 1998) have recomposed arts practices and the role of the community in participation (Bishop 2011, Kester 2011). New visual methods, moving away from traditional academic text-based approaches have been developed (Beebeejaun 2013, Clark et al 2013, Woolner et al 2010) which de-centre reading and even verbalisation of language. Engagement and co-production projects with museums and communities have developed new models of understanding the socialities around heritage (Morse, Macpherson and Robinson 2013, Stevens, Flinn and Shepherd 2010) with new digital communities develop around specific online archives often generated from communities themselves. (Macarthur 2007, Waterton 2010). Further, question of research design or even research through designing *with* communities is becoming of increasing importance and value particularly around the commercial application of using experiential and tacit knowledge in communities to develop new designs (Barnwell 2011, Carter 2004, Dunne 2005, Frayling 1993/1994).

New social machines to enhance co-production and support the interaction between users and technology can also be seen as metaphorical 'third spaces' – places of interaction and intersection (Hudson 2013, 2015).

The following sections are not timeline to be followed but a schematic representation of aspects of co-production raising possibilities and problems of the process. RCUK, in a recent report on public engagement stressed the importance of a strategic commitment on behalf of universities (RCUK, p.6). Whilst worthy, questions of engagement and participation in research design and practice have to be supported by new ways of thinking about circulations of Knowledge Exchange. Issues of equality, exclusion and reciprocity have to be central to research practice as do issues of the ownership or authorship of knowledge. The predatory knowledge extraction organism of the university has to be displaced by the multiple production and use of knowledge between the university and its project partners.

1.Co-discovery

Communities are not monolithic, unitary phenomena – they are enmeshed in questions of power, exclusion and identity. Neither are they perpetual. They take multiple forms and are full of multiple fractures and social relations. In the best sense communities should be seen as self-determined and self-defined, in the worst as exclusionary or inherited. Most of us belong to many communities even when we might think of ourselves as having some kind of primary identity. In order to address the social exclusion and even the self-exclusion of communities from a relationship with university research we have to think about the processes by which a community and a university might 'discover' each other. More, we should think about Knowledge Exchange partnerships in the informal sense as coalitions of knowledge, bringing to together new collectives or new ensembles of social forces to bear on social issues and what we want to learn about them. In some ways those alliances can come into being to defend or recover specific types of knowledges as in archives or intangible cultural heritage. In others coalitions can be built to discover new forms of knowledge and apply them as in medical research. An ensemble might come together to address one specific question and then dissolve, others will be more sustained.

The *Community University Partnership Programme* (CUPP) at the University of Brighton has used an innovative 'Helpdesk' system as the first contact zone between potential collaborators (CUPP July 2013:4) in order to support community knowledge exchange. The helpdesk becomes an 'enabling platform' for knowledge circulation supporting trust, commitment and mutual understanding (Hart et al 2009:47). The experimental programme of CUPP has supported the developed of spaces around arts (June 2013:17) and the co-produced performance of data amongst a range of innovative projects (2013:26). As part of her CUPP project Nicola Khan has raised a significant question about engagement and why communities might want to be engaged - 'what interactions, accommodations and resistances to being engaged are at stake?' (2013:28) Those interactions, accommodations and resistances are not just about a university and a community discovering each other and working together but about a complex production of a relationship for mutual benefit. As the Beacon North East and Thrive *Community Toolkit* notes - 'Universities exist to share knowledge and they house expertise in a huge range of subject areas. They can also have useful resources such as funding and facilities and can act as a broker to other organisations and businesses,' at the same time as communities themselves have a wealth of knowledge and expertise (*Community Toolkit*, p.2). The

sharing of knowledges means the dismissal of the idea of the university as an Ivory Tower (Bond and Paterson 2005). But more than this – universities are not enclaves separate and aside from the other social forces that inhabit the territories around it. At their best they themselves can be territories for contestation, civics and democratic practice and as spaces of knowledge generation open to all.

2. Co-language

Defining the problem of co-research and practice is central to the emergent relationship of university academics and community activists in their specific coalition or ensemble. But definition also initiates one of the most important aspects of co-production – the different language-worlds within a coalition particularly when thinking about methodology. As Beebeejaun et al point out ‘while ethos is central to co-producing research with communities, method is key in facilitating and enabling co-production. The use of text, and therefore text-based research methods, can be seen as a cause and a symptom of the disempowerment of research subjects,’ (Beebeejaun et al 2013:5). This has led them to thinking about what they call the ‘Beyond-text’ methodologies of co-production (Beebeejaun et al 2013:7). This displays the emergence of specifically visual models in co-production practices;

Speaking de-privileges text, but still privileges language. Visual methods can help people articulate their individual perspectives without (necessarily) words or text. In the social and natural sciences, there has long been extensive use of non-linguistic modes of representation – charts, models, diagrams – to express complex, inter-related ideas. Yet in conventional research, these visual methods are often as exclusionary of lay people as text, with highly technical formats and professional or disciplinary terms or concepts. Visual beyond-text methods open up research to a wider range of sources of non-linguistic representations, including the use of cartoons, hand-drawn images, images from popular media, photographs, installations, video, film and animation, art and painting, drama, dance and other forms of performance, (Beebeejaun et al 2013:7).

What we might call the social choreography of interactions between dancers and social scientists de-centre a text-based approach by using texts and transforming them into visual data and movement (see, for example, the work of Sharp and Durham-Cesaro for a social science/dance co-production).

Problems of jargon and technical language have been addressed in the Beacon North East and Thrive report where issues around communication almost meant the instant demolition of joint projects. Yet we should also be aware that the precise elaboration of difficult concepts can accrue languages that are challenging and co-production should be raising capacities to understand and not abandoning disciplinary languages. Communities themselves have difficult languages also.

3. Co-design

The success of projects depends on not seeking a community to practise upon after the project has already been decided upon and funded. Communities should be involved in the development of projects from the beginning. Taking co-design seriously means the creation of conversational spaces, metaphorically and materially, that allow contingency, improvisation and experimentation. Interactivity is central to the co-production of research (Robinson and Tansey 2006).

4. Co-extraction

'Data-mining' in community archives, memories, photograph albums, without the ownership and authorship of those resources being addressed is predatory and is often a quick 'smash and grab' into communities destroying relationships of trust particularly when academics are never seen again. The idea of predatory knowledge-extraction organisms or 'knowledge-thieves' (Hudson 2013b) has to be abandoned. Work at *Co-Curate* with schools has led to innovative developments in both research and design practices which are about forging relationships between multiple partners (Cotterill et al 2015). Students at Shawlands Academy in Glasgow have been developing new ideas about including young people in research with Newcastle University and others –

Research is about studying things we don't yet know about or don't fully understand. It can be carried out by observation or through qualitative and/or quantitative methods. We think research is important because: it is good to find new information; it is a great way to find out new things; and you are able to see different opinions from people on the subject. It is also important because the only way for humans to excel and expand our understanding and knowledge is to carry out research and unlock new experiences. It is in human nature to attempt and to advance and create new theories. Therefore, research is essential. Before taking part in research, we think it is important to know what the research will be about and what is going to change as a result of it. Once research is finished, we think we should get feedback from the researchers telling us what they found and if the research was successful or not (Abdi et al 2015:4).

5. Co-curation

The curation, exhibition, and sustaining of 'extracted' data has to be part of a co-curation process. There are limitations to the interpretations of data and those interpretations should rest on a co-produced understanding. The use of social machines and digital devices, including ownership and copyright, are significant features of curation models (Hudson 2015). The way that data is visualised, performed and even stored is important and the kinds of storage mechanisms for digital curation particularly should be addressed.

6. Co-understanding

What the co-produced research finds in terms of data is not self-evident, it needs to be analysed, described, explicated. These again should be part of the contestation of multiple partners.

Case Study One: Co-Curate North East

Co-Curate North East was a project which wanted to generate 'unofficial' knowledges from different types of collectives and communities in Northern England and mix and mash them with 'official' knowledges generated by big memory-institutions like museums and national collections. The project was about understanding vast circulations of digital objects, stories, and ideas but also about how we can curate those things with a lot of partners. We searched, we archived, we curated, we exhibited, we learned. But that 'We' was always a complicated thing. Not only was Co-Curate a transdisciplinary project including researchers and designers from Medical Sciences, Music, Heritage Studies, Education, and Computing it worked with a significant number of museums and collections. But it was also co-produced with its community partners. There was no model for this but practices,

conversations, convivialities emerged. It was essentially about the co-production of a new social and digital machine enmeshed in all kinds of social relationships and networks.

In the midst of an exciting project perhaps the most challenging aspect was working with Big Data with a 'Big Group' – a collective of designers, archivists, social researchers, marketing specialists, education officers, museologists, artists, and computing specialists. This collective was a whole year 7 group of 230 students at George Stephenson High School at Killingworth in North Tyneside. As part of their I-learn programme led by teacher Phil Robinson they developed not just materials to go on the website but the website and software itself, new methods for approaching digital archives and innovative ways of presenting data in multiple formats. Each of the 10 classes chose a theme for the final exhibition held at the Great North Museum at Newcastle. Teachers, university researchers, museum staff from Tyne and Wear Archives and Museums, and a graphic designer supported their work on the Big Data of Tyneside stories. Themes included George Stephenson, Souter Lighthouse, Newcastle United Football Club, Migrating surnames of Tyneside, the history of Fenwick, Tyneside traditions, Coal and mining histories, Tyneside manufacture, and Tyneside timelines. We also had a lot of interest from media around the intergenerational work of the groups including the reuniting of old friends from historical photographs (The Wallsend Four), family memories of Kenton comprehensive, and Killingworth Park flats. The Big Data in each of the themes was presented in new visual formats and patterns that reflected some of the design ideas the groups had been working with, including typography and photographic information. The data on migrating surnames of Tyneside was particularly exemplary as its visualisation technique was embedded in geographical routes and origins.

Aside from co-producing exhibitions with museum professionals and curators the students also had the chance to learn more about the kinds of information, designs and knowledges that inhabited university and gallery spaces. They worked with the researchers and with the Hatton gallery around exploring the artistic and architectural vision of Victor Pasmore, learned about the influence of Kurt Schwitters and the Merz barn wall on Basic Design techniques and looked at the influence of architects like the firm of Ryder Yates on the estates and houses which they live in today in Killingworth. These knowledge exchanges and circulations were part of the navigation through and production of the social machine of our Co-Curate digital platform and its resources. The digital platform has the potential to stream, mesh and reassemble tens of thousands of resources in new narrative directions. The capacity to 're-story' Big Data through co-curation and exhibition has become now part of the technological and cultural landscape of the school, its work on product design, and the futures of its research practice. Linking microscopic local stories and resources with vast and often abstract social forces our new social machines can transform our understanding of digital historical and archival practice.

7. Co-application

The useability of knowledge is central problem if the application of data is perceived differently by partners in a coalition but it should have some useability for future practice (Campbell 2014, Forester 2014). But co-application also means the dissemination of research data and interpretations in terms of social and policy impact thereby often escaping its intended uses and the governance of data by its initial coalition.

8. Co-evolution

The building of relationships can mean the ongoing sustainability of projects. Just as there is a co-evolution of users and machines, there may be continuing interactions as coalitions self-determine, emerge, reassemble, fall apart, or reconvene in new assemblages. Simon Northmore and Angie Hart have looked at some of the characteristics of sustainable partnership working including genuine reciprocity, creativity, mutual learning, building 'bridges' and funding (2011:5). A genuine partnership can be built as a singular project or one which continues in other iterations.

9. Spaces

Co-production of research can support the emergence of new types of interaction and new democratic spaces (Campbell 2014:4). Universities are not autonomous enclaves or entities but they do offer the possibility for the development of new experimental spaces of interactivity both metaphorically and in actuality. In those spaces we can both discover and elaborate new coalitions and new possibilities – they are what we might call 'third spaces' – territories which are not governed and controlled by any of the contending and collaborating partners (Hudson 2013). The innovative work at Peoples Collections Wales around spaces for civic engagement and community modelling are also significant (2015).

David Wolff and his collaborators at CUPP have argued for the need to 'Develop spaces for engagement, both physical and virtual, that act as permeable boundaries through which different forms of knowledge might be exchanged' (2014:5). These physical and virtual spaces have to be spaces of intersection for multiple disciplines and for multiple partners beyond the university and promote flexible and accessible locations (2014:9-10). In their reflection on the early work of CUPP Angie Hart and David Wolff have talked about the problems of language but also that emergent university-community partnerships give us structures, relationships and practices that exist in physical localities (2006:126). These are emergent metaphorical and physical spaces that take boundary issues and objects seriously (2006:126-127, 135-136).

These spaces are at one and the same time metaphorical and actual, virtual and physical – they are imaginary spaces for contestation and collaboration even when most rooted in the physical spaces of buildings and meeting rooms. The practice of co-production has to begin in landscapes in which improvisation, experimentation and innovation are possible.

Case Study Two: Northumbrian Exchanges

A set of workshops in Alwinton were led by the classically-trained early music specialists of the Northern Early Music Collective (<http://www.northernearlymusic.co.uk/>) and recent graduates of Newcastle University's degree programme in Folk and Traditional Music. The workshops and ensuing concert explored the contradictions and relationships between Italian and English classical music of the 17th century and local Northumbrian traditional music, culminating in a new commission from Matthew Rowan that reformed the broken and separated traditions of classical forms and folk repertoires and improvisations. The improvisation present in *Living In Memories* is partly notated in the score but at designated sections it becomes at the discretion of the performer so that the affordance and idiom of each instrument can be expressed. For Rowan this is intimately connected to collective memories and their relationship to the landscape. The workshop itself becomes a site of co-production which at the same time allows the knowledge of the facilitator Jamie Savan to locate the tunes of a northern Northumberland valley into the tradition of ground bass motifs and

notations of an earlier tradition rooted in Northern Italy, Spain and Portugal. The ornaments, variations and elaborations of the workshop culminate in Rowan's piece, a performance which is hybrid not just of two traditions but of the multiplicity of communities of practice in isolated, rural farmsteads, the idioms and affordances of the instruments, and the formal notations of the European classical tradition.

The exchange then works within the soundscape and new music emanating from traditional and classical forms. By noting these we can offer complex insights into both the sociology of music/sound and the sociology of knowledge itself. Exchange around musical knowledge and practice has been situated, in the Northumbrian Exchanges project, around the extraction and utilisation of localised knowledges of traditional music and its situatedness in the classical tradition, or more specifically, at that point in the 16th century where there was a cleavage between the traditions. 'Instrumental', practical, tacit knowledges of music, often partial and locally situated, came into conjunction with classical notation, with improvisation questioning musical fixity and the printed page. The nuances of the multiple traditions, reconnecting that severed heritage, rework motifs which are incorporated into new classical pieces, idiomatic, idiosyncratic, and rooted in a complex relationship with the landscapes witnessing their emergence. Diverse traditions were thus resolved in a 'broken consort' performance of traditional and classical musicians creating new pieces around motifs inherited through both traditions.

Much of the music from the main concert produced by the Alwinton partnership has been captured on CD (see the Northern Early Music Collective website above). A further CD, including the NX commission from fiddle player Shona Mooney for Northumberland National Park, will be released shortly.

A series of classes and workshops were held in Tasset Village Hall and Bellingham Middle School. These were facilitated by Nathan Armstrong and involved 10 participants over a period of 18 months. The purpose of these was to encourage more young people to play traditional music and created a more sustainable tradition in these sparsely populated areas of Northumberland. It was successful in supporting an inter-generational group of musicians and those just beginning to practice in music. It led to a series of events including two Ceilidh concerts and brought together practitioners each Sunday afternoon from remote rural sites in north Northumberland to continue thinking about the Northumberland music tradition and performing key pieces. Shona Mooney was commissioned in partnership with Northumberland National Park to develop a piece of music performed at the Kings Hall Newcastle. Shona had previously been one of the facilitators in the Alwinton seminar and with Matthew Rowan's commissioned piece.

Musical traditions can have a significant relationship with landscape and the localities in which that music emerges and is practised. This has been true of pastoral classical compositions such as those by Vaughan Williams or Holst which take the landscape as a theme to reflect upon or represent. It is also true of much traditional music which has emerged from localised folkloric traditions or the songs of the labouring poor. It is also the case that much sound art work takes as its point of reference field recordings from the landscape as well as performing in and upon that landscape. Often music refracts certain kinds of social relations around landscape but musical practice also has an impact in structuring certain kinds of social relationships in communities. In this sense we have to

reflect upon the kinds of natural and social relations which are invested in music but also the impact that the practice of music has upon the communities and spaces from which it emerges.

Conclusions: Futures of co-production

Melanie Nind has recently pointed to some key features of co-produced research in the light of histories of inclusive research. These include questions of usability and democratic knowledge production and use, the abandonment of colonisation and colonial models of research and the key issues around the ownership of data and IP and copyright (Nind 2015). Fundamentally this is about the collision and interpenetration of the mutual objectives of the different partners and coalition members. The very process of forming coalitions is about emergence – about the contestations and collaborations that take place in civic conversational spaces. There are also very real questions about what happens with the data itself. Is data and knowledge imposed on groups? Is it gifted to them, transferred to them? Is data gifted to the university or to organisations? What happens to the provenance of knowledge when it is taken or given away from ‘experts’ whether these are academics or community archivists and transferred elsewhere. What is the exact value and provenance of official and unofficial knowledges?

So what are the futures of co-production? We want to see it extended, re-elaborated, re-engineered. We want to learn from the limitations and mistakes of our projects. Certainly we think we need to think, develop, describe, think again. Here are 15 points that make sense to use from our projects and practice and which will serve to help us co-design the projects of the future;

- 1.The development of new experimental physical and imaginary spaces where we can play, converse, engineer, build and make. We need to think about where they are physically, digitally imaginatively. Co-production can be essentially ludic – about experimental gaming and play.
- 2.The development of new types of social machines and human/machine interactions and socialities. Emerging digital archives, digital social trails, vast connections of Big Data and machine offer immense possibilities and problems – not least the ownership, curation and re-elaboration (and of course use) of data.
- 3.Challenging the arrogance of professional academic power. We need the development of new types of social expertise, animation and with that new types of third space practitioners who can work with communities and multiple organisations. Creating and encouraging hybridity rather than extraction, intervention and then retreat ‘back’ to the university.
- 4.We need new active research on the multiple generations of knowledge – and what universities and communities do with it if its generated from the other. This is about the provenance and usability of what is produced. Co-production is not simply the self-generated knowledges of communities and universities but genuine knowledge circulation experiences.
- 5.We need to think about questions of useability and practice – what is knowledge for and critically who will it be used by particularly if the data and the narratives extracted from it are used by other parties. But we also need to think about those very disciplines that may see themselves as having no utility socially and challenge them to connect, elaborate, explore.

6. We need to foster the extension of civic, democratic ideals of participation and production rather than the tyranny of research practice.

7. We need new experimental research techniques specifically based around issues of experimental design and architecture, speculative models, building and making and co-design. We need what Frayling has called a 'Dambusters' approach to research and development based around craft and creation and research through co-design (1993/1994).

8. We need to be about the forging of coalitions and alliances after initial and often protracted messiness and contestation. These initial periods are of value but we need to form clear memo's of agreement and understanding and expectation/aspiration in our coalitions.

9. We should not be afraid about actively engineering confrontation, provocation and challenge.

10. We need to urgently address how to 'Engineer' access for groups to social and any other research. The development of Helpdesks, matching procedures, the support of university managements, the profile of projects are all important in forging the initial conversations that can lead into the building of knowledge alliances.

11. We need to understand the permeability and constant recomposition of collectives – there are no such things as stable/static collectives and certainly not unchanging 'communities'. Those collectives and communities might change as a consequence of being in coalitions and we should welcome the porousness and fragility of collectives just as much as their social strengths and idiosyncratic histories.

12. We should rethink and abandon the process of extraction in favour of co-discovery – fundamentally this means the generation of the 'big questions' within collectives and the kinds of stories and data they want to collect and which have a utility for them.

13. We should perform and speak data in multiple movements and languages – de-centre the text and look at different formats of presentation, visualisation and engagement.

14. Think about research through design and design by research – let's not just build 'stuff' but build collectives, coalitions and societies.

15. We should welcome transformation, renewal, experimentation and not be afraid of doing stuff to extend, re-elaborate and rethink social forms, institutions, practices. Engage in Craft-work in our societies.

References

- Abdi, M. et al (2015) *Get Your Facts Right: A guide to involving young people in social research*, Newcastle:Newcastle Institute for Social Renewal
- Barnwell, M.(2011) *Design, Creativity and Culture: An orientation to design*, London:Black Dog.
- Beacon North East and Thrive (no date) *Community Toolkit: A guide to working with universities on research projects*, Beacon NE.
- Beebeejaun, Y., Durose, C., Rees, J., Richardson, J. and Richardson, L.(2013)'Beyond text': exploring ethos and method in co-producing research with communities,' *Community Development Journal*, doi:10.1093/cdj/bst008, accessed 27/05/2015.
- Bishop, C.(2011) *Artificial Hells: Participatory Art and the Politics of Spectatorship*, London:Verso.
- Bond, R. and Paterson, L. (2005) 'Coming down from the ivory tower? Academics' civic and economic engagement with the community,' *Oxford Review of Education*, 31 (3), 331–351.
- Campbell, H.(2014) 'Making knowledge that matters: realising the potential of co-production,' *ESRC/N8 Position Paper*, Dec 2014.
- Campbell, H.(2014) 'Why co-production? Why now?' *N8/Co-production workshop – Making a Difference Together*, Sheffield 5th December 2014.
- Carter, P.(2004) *Material Thinking: The Theory and Practice of Creative Research*, Melbourne:Melbourne University Press.
- Clark, J. Laing, K. Tiplady, L. and Woolner, P.(2013) *Making Connections: Theory and Practice of Using Visual Methods to Aid Participation in Research*, Newcastle University: Research Centre for Learning and Teaching.
- Co-Curate North East (2015) at <https://co-curate.ncl.ac.uk>, accessed 25/06/2015.
- Community University Partnership Programme (July 2013) *Community University Partnership Programme: 'Defining in the doing'*, Brighton:CUPP.
- Community University Partnership Programme (June 2013) *Learning to make a difference: Case studies that link University of Brighton and its local communities*, Brighton:CUPP.
- Cotterill, S.J., Hudson, M., Lloyd, K., Outterside, J., Peterson, J., Coburn, J., Thomas, U., Tiplady, L., Robinson, P. and Heslop, P. (2015) 'Co-Curate: working with schools and communities to add value to Open collections', in *Open Educational Resources - OER15*, 2015, Royal Welsh College of Music and Drama, Cardiff.
- Dunne, A.(2005) *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design*, Cambridge, Mass.:MIT Press.

Durham-DeCesaro, G., & Sharp, E.A. (Accepted). Immersion in the muddy waters of a collaboration between a social scientist and a choreographer. *The International Journal of Social, Political and Community Agendas in the Arts*.

Durose, C., Beebeejaun, Y., Rees, J., Richardson, J. and Richardson, L. (2011) *Towards Co-Production in Research with Communities*, London:AHRC, Connected Communities, https://www.dur.ac.uk/resources/geography/reframing_state/CCDiscussionPaperDurose2etal.pdf, accessed 27/05/2015.

Forester, J. (2014) 'A Reality Check on Current Research Practice,' *N8/Co-production workshop – Making a Difference Together*, Sheffield 5th December 2014.

Frayling, C.(1993/1994) 'Research in Art and Design,' *Royal College of Art Research Papers*, 1(1):1–5.

Hart, A. Northmore, S. Gerhardt, C. and Rodriguez, P. (2009) 'Developing Access between Universities and Local Community Groups: A University Helpdesk in Action,' *Journal of Higher Education Outreach and Engagement*, 13:3, 45-59.

Hart, A. and Wolff, D. (2006) 'Developing Local 'Communities of Practice' through Local Community-University Partnerships,' *Planning, Practice and Research*, 21:1, 121-138.

Hudson, M.(2013) 'Knowledge Exchange and the university as archive and intellect,' *Online Educational Research Journal*, 4:5, 1-18.

Hudson, M.(2013b) 'Curating the Northumbrian Commons', in *Sustainable North N8 Workshop*, Manchester, UK: N8 New Thinking in the North.

Hudson, M.(2015) 'Desire Lines: Open Educational Collections, Memory and the Social Machine,' *Online Educational Research Journal*, 6:5, 1-16.

Hudson, M.(2015) 'Complexities of co-production in the North East: assessment and prospects', *Working with Third Sector Organisations and Social Enterprises to develop relevant research in the North East region universities*, 29 June 2015, St Mary's College, Durham University.

Jasanoff, S.(2004) 'The Idiom of co-production,' in Jasanoff, S.(ed.) *States of Knowledge: The co-production of science and social order*, London:Routledge, pp.1-12.

Kester, G.H.(2011) *The One and the Many: Contemporary Art in a Global Context*, Durham, NC:Duke University Press.

MacArthur, M. (2007) 'Can Museums Allow Online Users to Become Participants' in Din, H. and Hecht, P. (2007) *The Digital Museum: A Think Guide*, Washington, DC:American Association of Museums, 57-66.

Martin, S. (2010) 'Co-production of social research: strategies for engaged scholarship,' *Public Money and Management* 30(4), 211-218

Morse, N., Macpherson, M. and Robinson, S.(2013) 'Developing dialogue in co-produced exhibitions: between rhetoric, intentions and realities', *Museum Management and Curatorship*, DOI:10.1080/09647775.2012.754632, 1-17.

Nind, M.(2015) 'Introduction to 'Sharing Experiences of Co-Production', *Sharing Experiences of Co-Production/Newcastle Institute for Social Renewal seminar*, 17th June 2015, Great North Museum.

Northmore, S. and Hart, A. (2011) 'Sustaining community-university partnerships,' *Gateways: International Journal of Community Research and Engagement*, 4, 1-11.

Northumbrian Exchanges (2013-2014) at www.n-ex.org.uk, accessed 25/06/2015.

Peoples Collection Wales (2015) at <http://www.peoplescollection.wales/content/pcw-champion>, accessed 25/06/2015.

Research Councils, UK (no date) *Inspiration to engage: Concordat for engaging the public with research*, www.rcuk.ac.uk, accessed 23/05/2015.

Robinson, J. and Tansey, J. (2006) 'Co-production, emergent properties and strong interactive social research: the Georgia Basin Futures Project,' *Science and Public Policy* 33(2), 151-160.

Sharp, E. A., & Durham-DeCesaro, G. (In Press). What Does Rejection Have to Do With It?: Toward An Innovative, Kinesthetic Analysis of Qualitative Data. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*.

Stevens, M., Flinn, A. and Shepherd, E.(2010) 'New Frameworks for community engagement in the archive sector: from handing over to handing on', *International Journal of Heritage Studies*, 16:1-2, 59-76.

Waterton, E.(2010) 'The advent of digital technologies and the idea of community', *Museum Management and Curatorship*, 25:1, 5-11.

Wenger, E.(1998) *Communities of Practice: Learning, Meaning and Identity*, Cambridge:Cambridge University Press.

Wolff, D., Millican, J., Moriarty, J., Bramwell, P., Nash, E-A., Laing, S. Hart, A. and Church, A.(October 2014) '10 down, 10 to go!' *University of Brighton and the future of community partnerships*, Brighton:CUPP.

Woolner, P., Clark, J., Hall, E., Tiplady, L. Thomas, U., and Wall, K.(2010) 'Pictures are necessary but not sufficient: using a range of visual methods to engage users about school design', *Learning Environments Research*, 2010, 13(1), 1-22.