Cultural Value

Modelling Cultural Value within New Media Cultures and Networked Participation

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Arts & Humanities
Research Council

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Executive Summary

'Modelling Cultural Value in New Media Cultures of Networked Participation' was a collaboration between the Curating Contemporary Art Programme at the Royal College of Art, Tate Research, and the Centre for Media and Culture Research at London South Bank University. The aim of the project was to examine how conceptions of cultural value are currently operating within national and European cultural institutions in relation to digital media and online communication and what challenges the rapid development of network cultures is posing. Working with Tate as a case study, and bringing together cultural practitioners, academics, policy-makers, and funders to address the research questions, the project found that:

1. There is a general confusion within the public cultural sector about what constitutes the digital and hence its relation to culture, audiences, and cultural value.

2. A false binary opposition persists between the concept of culture and the concept of the digital which is rooted in the historical separation of art from technology; a separation that continues to underpin the traditional distinction between high and low culture.

3. Museums predominantly understand and employ the digital as a tool and continue to adopt the analogue broadcast model of one-to many transmission based on traditional models of institutional cultural authority and disciplinary expertise.

4. Cultural institutions are trying to adapt to the two-way, many to many model of digital networked communication through which new collectives and collectivities are redefining the idea of the social and publics, but struggle to identify and find ways to work with these new users / visitors.

5. While cultural heritage is understood to hold exceptional national cultural value, there are conflicting positions about how this value can be sustained in contemporary digital culture.

6. The separation of practice, policy and theory, restricts the emergence of new models of cultural value which recognise contemporary socio-cultural conditions of online production and consumption of culture.

Researchers and Project Partners

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Key words

Communities, Digital, Museum, Networks, New media, Post-critical

Context

'Modelling Cultural Value in New Media Cultures of Networked Participation' was a collaborative research project between the Curating Contemporary Art Programme at the Royal College of Art, Tate Research, and the Centre for Media and Culture Research at London South Bank University and ran from February to August 2014. The project was led by Professor Victoria Walsh (RCA) with two Co-investigators, Professor Andrew Dewdney (LSBU) and Dr Emily Pringle (Tate), and supported by Ioanna Zouli as Research Assistant. The project took place between February and July 2014.

The aim of the project was to examine and understand how conceptions of cultural value are currently operating and challenged in relationship to digital media and cultural institutions. The research was based on Tate as a case study and its own digital practices and policies alongside those of other European museums and galleries in the context of current digital technologies and networks. The project directly built on a previous major AHRC funded collaboration 'Tate Encounters' which focused on the challenges and opportunities of audience development at Tate and was conceived from the beginning as a 'problem-solving' form of research to address issues Tate had identified around what it called 'its missing audiences'.

In putting this subsequent research project together our starting point was based on one of the key findings from Tate Encounters which is that most contemporary professional practice, policy-formation and understandings of cultural value remains 'resolutely analogue'. That is to say, that most accounts and concepts of cultural value are

predominantly based upon representational systems and forms which have developed over the course of the European Enlightenment in relationship to analogue modes of reproduction. In contrast, network culture is defined by new non-representational forms of distributed communication and exchange forms of value – but recognition of these new forms and conditions of cultural value is lagging behind at the level of policy, practice and theory.

In addition to Tate Encounters' findings on the impact of the digital on the relationship between the museum and its audiences, one of the key problems identified in this earlier research was the significant separation between how knowledge about the museum was produced in the academy and the actual, everyday practices of the museum, and how the organisational culture of the museum defined these. The further disconnection of both academic study and museum practice in relation to the formation and implementation of funding and government agency policies was also made evident in the research.

To address these separations of knowledge and practice, Tate Encounters developed a new methodological approach that was defined as the 'Post-critical' and aimed to bring practitioners, academics, and policy-makers into the same arena of discussion. In bringing together these different players, or actors, agents, the aim was to try and forge new types of knowledge interaction towards a more integrated overview and analysis of how culture is produced and consumed in the museum, and through it how cultural value is generated and circulated.

Continuing this methodological approach, but on a considerably smaller scale, a series of nine public research forums were organised between February and June 2014 which brought together thirty-seven cultural practitioners, academics, policy-makers, and funders in the same discursive forum to address the research questions from their own institutional positions and individual expertise in dialogue with contributors from other parts of the cultural sector and creative industries and with different practices (see Appendix 1 for a full list of participants.)

In order to refine the articulation of the project's research questions and to identify key individuals to be invited to participate in the public forums a further literature review was carried out across the fields of cultural practice, cultural policy and media theory (see Appendix 2). In addition, site-based research at Tate took place talking to staff working across the departments of Collections, Learning, Marketing, Digital, and Research which identified further external individuals from partnership projects, funding bodies, academia and policy-making.

Following this combination of literature review and situated research, an initial matrixial analysis (see Figure 1) based on the core national policy and funding categories ('new media', 'access' and 'co-production'), and adopted by the AHRC in their own funding call, was developed in relation to the three designated areas of the project's research problematic ('representation', 'network', and 'archives') in order to identify the points of intersection to be examined in the relationship between policy and practice.

Cultural Value and Cultures of Network Participation: Research matrix

Strands: Dimensions of the research problematic			
	1. Representation Crisis of analogue value systems	**2. Network** Collapse of public/private realm.	**3. Archives** Challenge to cultural authority and expertise
New Media	Remediation	Interface	Distribution
Digital Access	Computing/Code	Circulation	Collections
Co-production	Subjectivities	Collectivities	Agency

Themes: Cultural Value Policy Perspectives

Fig.1. Mapping of themes (AHRC Cultural value call) and strands (Selective Literature Review)

The conceptual matrix, represented in Figure 1 was used to produce the pubic programme as well as identify participants whose positions and perspectives the research sought to investigate and record. (see Figure 2.)

Cultural Value and Cultures of Network Participation: Research matrix

Day	Research Strands and AHRC Themes Combined		
	1. New Media Representation/ Crisis of analogue value systems	**2. Digital Access** Network and the collapse of public/private realm.	**3. Co-production** Convergence/Challenge to cultural authority
	1. Producing Culture POLICY FRAMING	5. Online Collectivities identifying and working with new formations	9. Converging practices virtual and real spaces, communication models
	2. Digital Culture Histories, medium specificity	6. Online Collections analogue and digital collection, problems curation	10. Digital Economies ecologies, experience, scale, globality,finance
	3. Digital Channels Marketing & Programming the Digital	7. Coding Cultures software as culture,	11. Agencies new subjectivities, definitions, practices, authorship, status
	4. Digital Tools Uses of medium, education, learning	8. Networks/Interfaces visualising data, working with data interfaces, politics of data	12. Digital Politics FUTURE POLICY

Fig.2. Synthesis of strands and methods used to define public programme.

A further stage of research, using a literature and Web review led to the identification of a number of overlapping issues and concerns of the field and the research objectives, which was also used to frame the public sessions and identify key participants. (see Figure 3.)

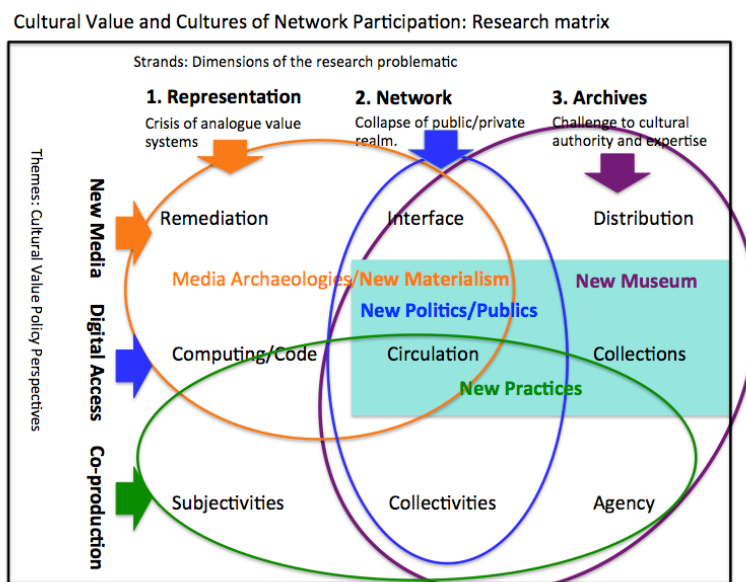Cultural Value and Cultures of Network Participation: Research matrix

Fig. 3. Plotting of perspectives and opinion from policy, practice and theory

Following this initial mapping of the research problematic the project moved into the final stage of its practice-led enquiry by inviting thirty-seven practitioners, theorists and policy-makers to participate in nine designated and structured sessions in response to specific questions defined by the preliminary analysis (see Appendix 1). The eight sessions under the project title 'Cultural Value and the Digital' took place at Tate Britain between February and June 2014 and the questions and aims of each session are summarised below:

Strand One: New Media

Over the past two decades the impact of the Internet upon specialist knowledge practices as well as in everyday life has been immense and in many ways our understanding of what has and is taking place lags behind. Fundamental questions still need to be asked about both the nature of the transformation of analogue modes of cultural and communicative reproduction and the shaping of emergent network practices. This strand sought to create a 'snapshot' of current thinking and practice about what constitutes new media and its relationship to the cultural sector and what the wider policy drivers of the digital transformation are.

Session 1.   Digital Culture

Are the discourses of art, media and technology converging and if so what does it look like?

This session aimed to understand current revisions and reformulations in media and aesthetic history and theory and to discuss the ways in which this changing set of ideas relates to cultural practices. The session focused upon changing disciplinary and practice

boundaries and what facilitates or prevents their progress. How is knowledge production itself being affected by changing economies and ecologies of art and media?

Session 2.   Digital Platforms

Do digital platforms work for cultural institutions or do cultural institutions work for the platforms?

This session focused upon the strategies used by cultural institutions, artists and curators to communicate with their audiences through digital platforms and asked how the technological, commercial and social dimensions of digital 'channels' shape practices

Session 3.   Digital Audiences

Does the use of 'digital tools' in and across the museum and visual arts practices challenge established practices of cultural value?

This session focused upon questions of how the general uses of computing across a range of artistic practices and cultural media is being taken up across the museum and how it is being understood. Historically, gallery education programmes have been at the forefront of encouraging the use of digital tools for the exploration of the arts, but are there wider and more far-reaching uses of digital tools which would involve curation, audience development or even collecting?

Strand Two: Digital Access

For cultural institutions the term 'digital access' describes online practices and knowledge of users, software systems, and the interface values established by the online practices of museums and archives. This strand aimed to look at the current state of practice, knowledge and understanding of this policy term and aimed to examine what problems and opportunities are posed by working with users and their online behaviours, as well as the problems presented by the digitization of archives and collections practices. Both of these concerns are located in the wider discussion of the coded behaviours of software systems and their network interfaces.

Session 4.   Online Collectivities

Do online collectives constitute a new public space for museums?

The session aimed to review how Tate is engaging with online collectives, how it understands them, and what they offer in terms of the museum's role in mediating the relationship between artists and audiences? It also looked at whether network cultures circumvent the museum in creating a space or channel of art practice. The common element in the session was to get a closer understanding of the practices of network culture and how the museum understands and relates to them.

Session 5.   Online Collections

What knowledge has the museum developed from the project of digitisation of collections?

Digitisation of archives and museum collections has been underway for over two decades but in archival terms only a small fraction of analogue collections are available online. What problems have emerged for the museum in the digitisation of analogue objects and how are online collections being used in network culture? What new problems are posed in the collection and curation of digital object? What will analogue museums collect in future and what will be the experience and value of virtual museums?

Session 6.   Coding Cultures

How is cultural value coded in the computational network?

Technology and network culture have brought the discourses and practices of art and media significantly closer. Both media and contemporary art theory are engaged in generating new knowledge of how computational culture codes and frames media and art in new ways. From culture as software, to the internet as capitalist labour, the traditions of thinking about cultural value in analogue terms is being questioned. This session examined those debates.

Session 7.   Networks and Interfaces

What is the current understanding of the operations of data in interface culture?

This session aimed to identify current preoccupations and problematics of computer operations for cultural institutions who recognize the need to engage with data and networks. Since the theorist Les Manovich and others began to map the features of what was termed 'new media' in 2000 interest and research in the cultural sphere has moved to the functions of software and data. How does software define value, how is the storage, access and circulation of data and metadata reconfiguring social, political and cultural values?

Strand Three: Co-Production

Co-production was one of the strands identified by the UK's Arts and Humanities Research Council's strategic programme 'Cultural Value' as an important aspect of new modes of production, distribution, circulation and consumption, which have emerged as a result of the application of digital technologies and the development of the Internet. How museums relate to such practices, what forms co-production are taking place and whether they reproduce or challenge existing models of cultural value was the central question of this strand. From the research point of view, co-production is underpinned by a concern to articulate the challenge to cultural authority represented by convergent practices, new economies, ecologies and digital politics.

Session 8.   Converging Practices

What are the new productive spaces for cultural institutions and creative practices in relation to co-production?

This session focused upon the idea and practices of convergence in digital media and network culture and asked how they have been taken up and with what outcomes for creative practitioners and cultural institutions. Does co-production offer new models of communication and exchange and is it making us rethink knowledge production and cultural authority?

A further methodological stage was undertaken prior to the final conference at Tate Modern in July in which the key points to have emerged during the eight sessions were written-up and sent to potential contributors to the conference, asking them to make a response in their presentations. From this research and in reviewing the project's original objectives, the project can now report the following findings which provide a useful body of data for future analysis and theorisation which was beyond the scope and remit of this small-scale, short-term project.

OBJECTIVES AND FINDINGS

1. Objective One

To explore the emergent processes of identifying value within new media practices

This was a primary objective of the project and the approach adopted argued that the method of achieving this objective was that the mode of enquiry needed to be situated close to the practices of those involved in new media access and co-production and within the social, professional and working contexts in which practice takes place. The project proposed to base its enquiry on such processes within Tate, a major national museum in which new media is present in a variety of practical and expanded forms which cross the public, private and social realm.

In addition to the Tate Co-investigator who helped identify key members of Tate staff working with the digital and online cultures, ten members of Tate staff took part across the departments of Collections, Learning, Marketing, Digital, and Research, and in two instances their contribution was supported by the input of their external collaborators in digital projects.

'Digital' as a term

Both during and in reviewing the full nine research forums it became clear that the term 'digital' was predominantly being understood and discussed in four distinct, but overlapping modes:

- The digital as a tool – as a means to deliver a productive end / output of a particular practice, project, activity

- The digital as a medium / media – particularly in differentiation to traditional fine art mediums such as painting, sculpture, printmaking (although less so in relation to photography, which is still seen as a young medium in the museum)

- The digital as technology – the binary opposite of modernist artistic practice and art history, understood as the essentialised expressions of human individualism

- The digital as culture – the ubiquitous, naturalised condition and character of daily life, whether on- or offline, which underpins contemporary global existence, whatever the proximity or access to digital and online culture

Whatever the variation in understanding of the term, the digital was generally regarded as a useful catalyst, if not both a provocation and foil, in posing fundamental questions about what the core mission of an institution is, its organisational principles, the basis of its cultural authority, the configuration and conceptualisation of its audiences, and the bringing to the surface implicit working assumptions of what constitutes cultural and public value.

New Media

The term 'new media' was taken up by the project in a number of different ways. Firstly, it was understood in relation to the research policy category identified by the AHRC Cultural Value project which positioned it as a digital communication tool. Secondly, it was understood as a creative medium in its own right and specificity, comparable to the medium designation of painting, sculpture, drawing, and so forth, of Fine Arts practice. In this second sense the term new media gathers up a range of creative practices loosely affiliated around the term Netart, which have been developed by individuals and groups over the last two decades and which are increasingly seen to have their antecedents in Electronic Art and Cybernetics. Thirdly, new media was recognised as a term which encompasses the remediation as well as extensions of mainstream media through digital technology. Finally, new media was understood as the cultural reworking of knowledge through digital media to produce a new paradigm of cultural thought and conceptualisation.

A general anomaly was identified that while museums of modern art, and Tate especially, were quick to grasp the potential of digital technology as a tool to enhance access to collections as part of the key funding policies of the 1990s focused on audience development, the engagement with digital technology as a medium used by artists has

been significantly neglected. This lack of engagement with artists' use of technology has directly contributed to the separation and construction of the binary operation between art and technology, and art and culture, limiting the present understanding of new media as an essential component of understanding it in relation to cultural value. This has now come into focus as the questioning of the commitment to digitising analogue archives and collections in relation to its use-value and cultural value. Decisions to digitise have been predominantly driven by funding policies of audience development which have further contributed to the perception of the digital as primarily a tool rather than a medium of creative production.

One of the pervading messages of the research was that instead of thinking about the 'digital' as a conventionalised add-on to existing forms, codes, conventions and practices of both media and institutions, new media draws attention to the larger dimension of a set of fundamental changes in human communication made possible in the human-computer interface. In addition:

1.5   There is a gradual recognition that museums of modern art have not paid sufficient attention to the collection and interpretation of new media artifacts and have not collected the art of their own time. In what is now referred to by many as the 'post-digital age' (in respect of the naturalisation and ubiquity of digital culture), there is an even more urgent need to selectively capture historical examples of new media art production in collections.

1.6   With the rapid expansion of digital technology and the inherent archival function of online culture, new media no longer needs the museum as a platform to build public engagement or validation and is establishing its own audiences, contexts and cultural value.

1.7   Museum interest and understanding of media production by artists is insufficiently valued or validated by existing academic or museological study, such as art history and visual cultures, which need to articulate the history and value of non-traditional art forms for the museum. Whilst some areas of art history have moved to take account of new media, curatorial practices have been slow to adapt, if at all.

1.8   The use of new media and digital technology to support the interpretation of analogue objects or offsite online projects is predominantly being initiated and creatively deployed by audience-facing departments in the museum through innovative interdisciplinary research with external partners in academia and industry, and working with young people.

Organisational Engagement with the Digital

Implicit in all discussions of cultural value within the museum is the inherent and relatively uncontested concept of cultural heritage based on the unique 'aura' of the collection object, further imbued by the architecture of space and the legacy of place, and framed by a working narrative of public education and cultural democratisation. The commitment to preserving this conceptualisation of cultural heritage and cultural value

underpins the current prevalence by the museum to approach the digital as a tool of communication in the analogue broadcast mode, rather than in the two-way, distributed online form of digital communication which networked culture is defined by.

Given the museum's expressed commitment to the digital and online culture this produces a series of contradictory and conflicted relationships organisationally in relation to communicating with visitors and online users, creating lines of tension between departments depending on the proximity of their work to both analogue and online visitors. These lines of tension reflect the disconnection between policy, planning and implementation and the different timeframes in which they operate, further highlighted by the speed of technological development.

Despite the initial enthusiasm of museums of modern art towards the digital the proliferation of issues regarding the purpose and value of digitising everything increasingly poses questions and presents challenges related to practical questions around resource allocation, asset management, use value, copyright, and the need to build and manage a new skills workforce which is not necessarily professionally invested in the object of analogue collections. Museums such as Tate, are however, enthusiastically engaged with finding ways of working and producing knowledge inside commercial ecologies using business models in order to achieve large-scale distribution of content. As the research found:

1.9   The digital is primarily understood within museums as a technical tool rather than as as a knowledge system and a culture.

1.10   The museum is still fully committed to maintaining cultural value based on analogue cultural heritage and is yet to connect with the digital as part of culture.

1.11   Despite the range and increasing number of digital projects in the museum that are directed towards openness and equal exchange, the analogue broadcasting model of television and radio emerges as the predominant model of operation in the production of content and in the relationship to audience.

1.12   Cultural organisations, such as Tate, have spent considerable time and investment in harnessing the tools and channel of online media to broadcast themselves (technically, narrowcast), and have harnessed the potential of video to arts programming, effectively adopting a pre-digital broadcast model of television.

1.13   The established cultural authority of national institutions is sustained through the online broadcast model of content generation and continues to be based upon medium-specificity, although the future currency of this is unclear.

1.14   Despite high levels of digital activity in the museum, there are significant organisational disconnections across policy, planning and implementation which limit engagement with the potential scale of changes that the digital makes possible across the fields of curating, acquisitions, communication and audience engagement.

1.15   Digital practices in online culture create networks that extend out of the museum and in so doing invariably focus attention on the social fact of museums and the audiences that it is assumed to serve.

1.16   The digital as an open, networked system, is more effectively aligned with the practices of museum learning and education departments whose ethos, methods and roots in community arts and outreach in many ways prefigured network culture of inclusion, participation, and distribution of cultural value.

1.17   Within well-established European museums of modern art, including Tate, there is a level of frustration with the lack of appetite for risk and innovation within the museum in relation to the digital, while giving full recognition to the challenges posed by the museum of the scale and speed of change that the digital is characterised.

1.18   Younger museums of modern art, or cultural institutions and organisations whose governance, practices and activities are not defined by collections or national cultural heritage, are more adept and flexible than traditional museums in responding to new forms of cultural and social value being developed through creative and open engagement with networked communities.

2. Objective Two

To begin to identify the processes in which the shared values of networked practices relate to notions of community and collectivities

This objective was a corollary of the first objective in that the aim of the method to use Tate as a concrete 'node in a network' sought to trace out the connectors of new media practices in terms of agency and articulations of value positions within a network. The project experienced significant difficulties in achieving this objective during the five-month timeframe as Tate itself is struggling to identify its relation to new online communities and collectivities and there are limited data-gathering projects in progress within the museum. Where such projects do exist there are limited models of analysis available to help make use of the data, as the contributions and accounts of projects by Tate's own staff highlighted.

2.1   Museums are aware of and enthusiastic about the potential of extending their work through digital technology and online communication, but there are organisational disconnections in grasping the scale as well as the speed of network culture.

2.2   National cultural organisations grasp the potential of digital tools and online platforms as a marketing medium and for the broadcast of high quality content, and have found ways to engage directly with networked audiences, but struggle to respond openly.

2.3   Where the logic, practices and values of collection constrain the digital at an organisational level, young people have assumed a notably greater currency and agency

in relationship to the digital because they are understood to engage with the museum through the digital and through network culture as a form of cultural value

2.4   While concepts of collaboration, partnership and distributed risk have become an established modernising approach to cultural development, organisational management, and partnership-building in museums – practices that underpin online networked culture - there are limits to the institution's capacity to fully embrace the open-ended logic and condition of online networks which short-circuits and limits interaction with new networked communities and collectivities.

2.5   Museums underestimate the extent to which network culture has its own cultural 'ecology' which historically has been characterised in terms of a decentralised, anti-hierarchical means of dialogue. In this sense, network culture does not necessarily need to relate to, or, be in the museum as it has created independent communities of practice.

2.6   Working successfully with online producers to create interactive projects raises key questions of what criteria the museum wishes to apply in deciding which audiences and collectivities it should work with, how it should work with them and why. These conversations are predominantly unaddressed.

3. Objective Three

To locate and explore the limits of cultural value based upon analogue representational systems in relation to policy agendas of Digital Media, Digital Access and Co-production.

This objective was based upon the proposition that there is a significant faultline between analogue institutions and networked communication, produced by the speed and extent of digital transformation in which adjustment and accommodation to the new conditions is taking place. Developing a fuller understanding of these limits is central to being able to develop new knowledge of non-representational paradigms operating in the network.

For both museum practitioners and independent cultural organisations, questions about the new locations and new sites of production of cultural value are clearly generating positive debates about the future of cultural value. That said, the research found that there was a conservative consensus that cultural value continues to reside in analogue models of culture and that while value is much harder to identify in network culture and its computational systems the maintenance of national cultural value through heritage is an important function of national cultural institutions.

What became apparent through the research, particularly in relation to Tate as a case study, was the extent to which having achieved immense success in creating a business model based on brand value (and generating income against this to offset an ever-increasing decline of public subsidy), networked culture is perceived to pose significant

risks to brand value and asset management through the redistribution of cultural authority online.

3.1   For the museum, cultural value remains closely tied to the attributes and assets of building, collections, and expertise which have been expressed through the umbrella marketisation of brand identity.

3.2   The ubiquity of the digital combined with networked cultures has created a continuum between high and low culture and a new prosumer which challenges the institutional authority, disciplinary expertise, brand identity, and broadcast model of traditional, and particularly national and collection-based, cultural institutions.

3.3   Online communities of interest challenge the analogue organisational paradigm and practice of 'brand' and raises the question of whose voice does the museum represent, posing challenges to both the management of brand identity and its relation to cultural authority.

3.4   The museum is trying to negotiate the paradox of the accelerated time of the network against the slow time of the analogue institution and the archival conditions and mechanisms of the institution which maintain and guarantee the hold and validity of its cultural authority.

3.5   The potential of digital tools and online platforms as a medium for the broadcast of high quality form-based content has been enthusiastically taken up by museums and cultural institutions, developing and sustaining an understanding of the dynamics of networked culture and directly engaging with its communities seems harder to achieve.

3.6   Existing categories and practices of audience market research for cultural institutions does not effectively translate across to online behavioiur of audiences which limits how new communities and collectivities can be engaged and sustained by cultural institutions.

3.7   There is a strong consensus across both museums and cultural institutions that cultural value resides in analogue models of culture and that value is currently much harder to identify in network culture and its computational systems.

4. Objective Four

To identify and examine the presuppositions of knowledge production which currently configure and maintain concepts of cultural value.

This objective is paired with Objective Three in providing a critical overview of how current knowledge practices conceive of the relationship between cultural value and networked cultures. The methodological approach suggests that emergent forms of practice take place in relationship to those of dominant and residual forms of practice. It

was therefore an important objective to understand and articulate these terms as well as the ground on which practice takes place.

For national museums and cultural organisations, public cultural value continues to be defined by notions of national cultural heritage produced and reproduced through a representational model of democratising received and established culture, tied to the analogue systems within which it was developed and which was given foundational expression by Lord Reith in post-war public broadcasting. In contrast, network culture gives new definition and expression to plural, parallel and simultaneous cultures of democracy. As a consequence of the persistence of analogue forms and values, national cultural organisations understand and respond to media convergence as a means to scale up the distribution of content rather than as a renegotiation of the management of, and interaction with, content itself. This is further reflected in how institutions instrumentally look upon the expansion of distribution in relation to quantitative data gathering as evidence of audience engagement.

4.1   Despite the range and increasing number of digital projects in the museum that are directed to openness and equal exchange, the analogue broadcasting model of television and radio emerges as the dominant model of operation in the production of content and in the relationship with the audience.

4.2   Broadcasting high quality video programmes, based upon the content of collections and contemporary exhibitions and using the accumulated knowledge and expertise of the institution, reproduces and extends the museum's cultural authority. It also side-steps, however, the promise and potential of the Web to create two-way communication in which knowledge creation is a collaborative, relational and dialogic process.

4.3   Digital projects that use the collection as a resource for the production of new cultural knowledge and value outside of the museum and within online networks demonstrate the need for new methods of audience research and cultural value production through networks.

4.4   Although there are early stage projects seeking to develop an understanding of the digital as a knowledge system and a culture rather than a tool, the museum remains at a disadvantage in developing ways of measuring, evaluating and sustaining the value of network participation.

5. Objective Five & Objective Six

To articulate the challenges presented by network practices to existing forms of cultural authority and expertise based upon the analogue.

To identify and describe how the new knowledge of the 'prosumer' or co-producer is recognised and valued within established critical cultural discourse.

The aim of Objectives Five and Six was to present a mapping of both the limits and possibilities recognised in and between theories and practices of networked culture and cultural value, and to offer a basis for future programmatic work.

5.1   The recognition of the problems associated with the historical digitisation project creates new opportunities to rethink the organisation of knowledge and cultural values inherent within the design of content management systems and to reconsider the potential cultural value of repurposing existing digital assets.

5.2   Online communities of interest challenge the paradigm of the analogue organisation, posing challenges to both the management of brand identity and the institutional voice of cultural authority.

5.3   Online digital culture is an open system, recombinatory and participative in character, which does not acknowledge or respect analogue conditions of copyright, intellectual property rights, and other systems of legal ownership that the museum depends on to manage its assets and those of artists, lenders, funders and patrons.

5.4   The rise of social media made possibly by Web 2.0 which the museum has sought to embrace has opened up complex questions regarding organisational conceptualisations of what constitutes the analogue visitor, viewer, and audience as much as the online visitor and user. Such questions have also raised the key issues of how much unmediated interaction and unregulated cultural exchange the museum can enable or accommodate, or is practically able to address within institutional, strategic, and legal constraints. These questions are posing the greatest challenge and tension between departments in daily working practices.

5.5   The digitisation of everything leads to an undifferentiated consumption of data both by the museum and user. Putting 'art' online produces new, unpredictable and, in many instances, unwanted responses. Future digitisation of collections is more usefully led by a research / learning approach than a marketing one.

5.6   For the museum to embrace network culture it will need to challenge its own transmission model of culture and move to champion knowledge as contingent, provisional, relational, and socially constructed.

5.7   New media inverts the condition of scarcity to one of abundance questioning modernist and essentialist concepts and paradigms of aesthetic value, originality and authenticity

6.   Objective Seven

To overcome the separation of policy, practice and theory and build new networked understandings and models of cultural value based upon user-experience.

This final objective sought to work across all of the objectives and focus upon further development and understanding of new research models in which embedded and collaborative approaches are foregrounded.

The project's methodological challenge lay in recognising that over the course of the development of the Internet the production of social and scientific knowledge no longer conforms to institutional hierarchies in which universities, research laboratories, and think-tanks generate and then disseminate forms of universal objectified knowledge. Since at least the 1980s knowledge has become less of a meta-discourse about the world of objects and practices and more of a selective commodity to be bought and sold and circulated in instrumentalised forms. As a consquence we have come to recognise the situated, provisional and relational nature of knowledge production.

Building the research design and method of this project upon such a fundamental shift in understanding requires a significant reorientation of the tradition of critical theory developed in the academy towards a more pragmatic engagement with the framing of contingent, real world problems. In not wanting to jettison the analytical reach of critical theory, but equally wanting to stay within the field within which commodified knowledge circulates and has currency, the ambition of the method was to open up the spaces between theory, policy and practice as a form of both translation and reflexivity.

Translation is not only the formal process of converting technical lexical terms, but a tracing out (to use a tool from Actor Network Theory), of the work that language in its context of use performs. In other words, to identify the agency between people, objects and ideas and in so doing to 'see' the relations of the production of value. Further, the idea of reflexivity is used to situate translation in practice as a means of sharing what translation produces in the productive relations of knowledge use. New understandings or knowledges necessarily reside in and are performed in network formation. Reflexivity offered the research a means of acknowledging that what was being examined and the method of examination needed to be understood as cause and effect of each other. In this respect, the nature of the actual research collaboration between the museum, the academy and the art school also brought into play three distinct relations to ideas of the digital and cultural value.

The practical implication of this analysis for the method constructed and enacted by the project was to see if it was possible to see both new connections between people, objects and ideas as much as disconnections within organisational structures. In adopting this approach, the project was building on the 'post-critical' model first established in the AHRC-funded Tate Encounters project. In this latter project, the research recognised the exhaustion of insights provided by traditional disciplinary knowledge, and particularly by the work of critique which historically positioned the (cultural) institution as an object of enquiry rather than as a participant in the research process.

Through the process and practice of collaboration, data-gathering of the tacit, day to day working practices in which cultural value is generated and mediated is enabled, and opportunities to usefully trace why and how challenges and obstacles emerge are facilitated more easily. Subsequently, a situated, practice-led rather than purely

theoretical analysis is arrived at which is of interest to both researchers *and* institutions. In terms of producing new networked understandings of cultural value based on user-experience, the research found the following across the three areas of policy, practice and theory:

Policy

6.1   Policy formation and academic thought around the digital is often concerned with older, binary ways of thinking and theorising, such as analogue versus digital and critique versus techno-culture which leads to a discussions framed by a discourse of crisis and a narrative defined by the constant need to play catch-up through adopting the latest technology which invariably produces and reproduces a narrative of technological determinism.

6.2   Funding policies for the digital have generally been underpinned by concerns with instrumentalised value focused on enhancing and demonstrating commercial value which has limited more open-ended research into the digital for cultural practitioners and organisations

6.3   Value is being instrumentalised and a model is required which meets the needs of institutional measurement and audit requirements, but also recognises a network model of value i.e. one that recognises value is produced in an ecology, a community, and a life pattern of relationships.

6.4   There is an absence of a common and shared vocabulary around the digital that policy-makers, cultural institutions, and academics need in order to be able to connect and maximise the value of the insights generated by their individual work.

Practice

6.5   The project found that there is a considerable appetite and interest for more interdisciplinary and cross-sector research to engage with the impact of the digital on culture. Such research is also understood to be a fundamental necessity to help develop a more inclusive, less esoteric, and technical or theoretical-orientated language across disciplines and sectors so that better quality discussion can be forged between practice, policy and theory.

6.6   For museums and cultural institutions to engage more confidently and usefully with networked cultures more research (and resources) is needed to help identify how value is being produced in online engagement and to understand how this affects the nature and character of interaction with the analogue cultural institution itself as a material entity.

6.7   New models of research, knowledge creation and cultural production are needed to link an engagement across digital tools, channels and cultures.

6.8   Opportunities for research and development related to the digital is limited within museums due to a primary emphasis on allocating resources to targeted production,

while at the same time academic researchers have limited access to museum staff to inform their own critical engagement with museum's use of digital.

6.9   The importance of developing a conceptual and practical knowledge, and understanding of the wider historical development of computing is recognised as a crucial step in being able to see how analogue cultural institutions sit within and are directly affected by computational systems.

Theory

6.10   Opportunities for academics to develop and test more applied theory within cultural organisations is limited due to a primary emphasis of digital research funding in cultural institutions for creative production.

6.11   The digital 'object' is not the content to be focused on as the generator of meaning, but rather the flow of information attached to its circulation – it is through the metadata of online users that a different frame of value should be traced. Museums need to value the metadata of online users and to prioritise research in this area to understand how value is being redistributed, but this needs greater applied research.

6.11   Ambient and ubiquitous computing is a condition of labour and the everyday and consequently of the production of art – this relationship remains discreet in the production of cultural value, and in the academic studies of this area.

6.12   There is a new level of complexity of communication in both art and media that demands new transversal perspectives that can inform acquisition and display. Whether this might be formulated within or across existing disciplines the underlying issue is the need to create new insights and understandings of the convergence between the discourses of art, media and technology which aesthetic modernism has historically resisted.

Concluding Remarks

One of the pervading messages of this research has been that instead of thinking about the 'digital' as a conventionalised add-on to existing forms, codes, conventions and practices of both media and institutions, new media draws attention to the larger dimension of a set of fundamental changes in human communication made possible in the human-computer interface. The application of networked computing across an increasing number of activities and situations has created a generalisation of all data systems which directly impacts upon the social, political and cultural systems of representation which previously defined the analogue era.

One of the most striking aspects of the development of computational systems is the consistency with which volume and speed of transactions increases. Human life, even in places where there are no network computers, is now deeply affected by the collection and distribution of volumes of data in computational systems beyond simple human grasp and calculation. Human life is tied to the machines we have fashioned in more

complex and intimate ways than ever before. Computational culture is now a general condition of organised and personal purposeful activity, with new and unlooked for outcomes on our personal and social life.

The changes taking place in everyday life through computational culture are so important that we need to develop and share our knowledge and understanding of its effects and affects. One way of doing this is through historical and theoretical scholarship in new and interdisciplinary studies which cross between science and art, culture and technology. Such emerging fields of study can provide us with understandings of the intersection between the world of computational science and the world of culture and its representations.

An important point to have emerged in this research about cultural value and computational culture, however, is that understanding the operations of metadata is as important as applying software to the analysis of Big Data. It is not simply the digital 'object' that we should be focusing upon as the generator of meaning, but rather the algorithms from which objects are fashioned, as well as the networks within which they circulate. Computer code most often simulates the representational, whilst the value system of code and what it does to objects remains invisible and untranslated.

While the research project clearly identified what new kinds of research models are desired and needed by stakeholders across the spheres of practice, policy and theory, the lack of any substantial or useful existing data about online user engagement was most notable in the discussions with cultural institutions who are struggling to find ways to capture this data or who lack the resources. Now that the moment of infatuation with social media has passed and cultural organisations are recognising that without sustained engagement with users the value of the exchange remains superficial and primarily a branding exercise, the need to revist the principles of the 'broadcast model' of communication is paramount.

Although the broadcast model has and continues to be a productive and strategically effective development by museums and cultural institutions, there is an increasing set of questions around why more time, resources and indeed interest is not being directed to developing sustained audiences or user engagement and collaboration in creating value. For the museum to embrace network culture it will need to challenge its own transmission model of culture and move to champion knowledge as contingent, relational and socially constructed.

Historically, the concept of knowledge in museums has been exclusively identified and owned by those directly responsible for the acquisition and display of works of art. With the expansion of the museum's role into the public and expanded social domain through online and networked cultures, and the changing relation of artists and audiences to technology, the kinds of knowledge being called into play in the curating and reception of works of art is increasingly being diversified. Such shifts continue to raise questions about how value is attributed to the work of artists and cultural producers, and on what forms of cultural authority and professional expertise value judgements are made. While the project's findings clearly reconfirmed the general interest in the preservation of national cultural heritage, the need for curatorial experts in museums to articulate more

clearly and make more explicit the nature and origin of their value judgements appears more pressing than ever as museums comes under pressure from the diversification of other forms of cultural engagement and knowledge-production in the cultural field.

The problem is not that of developing interest, or access, or knowledge of how to exploit the potential of open web communication, but a question of strategic priorities, and organisational structures within cultural organisations, and particularly national museums which are rooted in traditional, representational systems of value and meaning. The potential deregulation of television and the use of online platforms for distribution offers museums a powerful opportunity of creating cultural television on a global scale, but the new models of networked communication still need to be embraced to work with such opportunities effectively.

Finally, there is an ever-increasing disjunction between the accelerating timeframes of technological development and digitisation with those of the analogue museum and the cultural institution, both in relation to funding and resource capacity as much as skills, and this is exacerbated by a further disjuncture between the timeframe of policy-making and that of research. For policy, practice and theory to relate and generate knowledge usefully new models of research collaboration to inform policy formation, funding criteria and targeted organisational development need to be established.

Research Methodology and Methodological Advances

Problem-solving research

As detailed in the preceding report, the overarching framework for this research was based on the application to new media of a general problematic expressed across a number of related disciplines (sociology, social geography, post-colonial studies, cultural and media studies), which acknowledges a 'crisis' within European social and cultural systems of representation (Thrift 2008). As this research has noted, such recognitions extend beyond the political and communicative to the established paradigms and processes of academic and scientific analysis and knowledge reproduction. Building on the research findings of the previous AHRC funded project 'Tate Encounters' which identified the impact of the digital on the formation of cultural value in relation to the museum, this project argued that new methods and approaches need to be developed to understand the relation between cultural value and digital and networked culture within the context of this crisis of representational systems.

In relationship to the research policy categories identified by the AHRC Cultural Value Programme - new media, digital access and co-production - the problematic of representational systems can be expressed in terms of the highly condensed transformations experienced between analogue and digital systems of coding, storage, and circulation of objects and information. It is from the triangulation of the problematics surrounding representational systems and the shift from analogue to digital, and more recently the network with the cultural value interests in new media, digital access and co-production, that the project developed the research matrix. The research matrix was the primary means of generating relevant research questions and organising the data-gathering research forums which formed the public programme 'Cultural Value and the Digital' held at Tate Britain and Tate Modern (see Figure 1).

Tate as a Case Study

Again, building on the previous research project 'Tate Encounters' and responding to the AHRC's call for qualitative case studies the project collaboratively worked with Tate as the central case study. Not only has Tate historically been at the forefront of adopting the digital at the organisational level and through the development of online marketing, but its present-day relevance is that it currently attracts 7.5 million physical visitors in 2012/13, 20 million unique online users and 300,000 facebook friends. As both a sector-leading national and international cultural organisation, Tate wants to understand the cultural value of its digital offer both on and offline which is crucial if it is to continue to develop new audiences and sustain the engagement of existing ones. Tate's

acknowledgement of the need for research into this area underpins both the collaborative organisation of this project and its methodology which was constructed to ensure maximum impact for Tate. Tate's active commitment to the digital was first outlined in its strategic development paper published online, *Tate Digital Strategy 2013-15: Digital as a Dimension of Everything (Tate Papers,* April 2013*),* which identified nineteen areas of organisational activity that the digital needed to be addressed. Finally, the collaboration with Tate also actively built on research gathered through the work of Ioanna Zouli whose AHRC Collaborative Doctoral Award position was secured following the research findings of Tate Encounters and is focused on Tate's use of digital video across its programmes and departments.

'Tracing the Social' / Actor Network Theory

The research framework of the project was also directly developed from the design and analysis of the organisational study which was undertaken for Tate Encounters, both of which were further informed by Actor Network Theory and the analysis of Bruno Latour. Throughout the project there was a strong emphasis upon reflexivity to encourage participants (including the research team) to articulate their own individual agency in their work, outputs and partnerships, as a means to identify new collectivities and new patterns of cultural value operating in the network, rather than reiterate their formal role within existing organisational (usually articulated through corporate rhetoric.

This approach was founded upon the proposition that methodologically and epistemologically studying new media's relationship to cultural value requires approaches derived from the network itself. In this respect Latour's project of 'tracing the social' through the modelling of Actor Network Theory, provides a useful approach and in particular the following four key ideas:

- the social is not an entity but something to be discovered in a network
- that networks involve the agency of non-human actants
- that method emerges from tracing the connectors which make up different kinds of network
- translation is a key to recognising the process of knowledge production of a network

Post-critical: Connecting Practice, Policy and Theory

Traditionally, the public 'realm', in which national cultural organisations were understood to be located, was perceived as naturally divided into different spheres of interest, modes of expression, and communication. Whilst the formal organisation and institutional arrangements of the public 'domain' are all still in place within representational systems of thinking, their operations as well as agency are in complex and as yet un-clarified ways of being transformed by network culture.

The project's argument was and is that many of the existing challenges and difficulties to developing a coherent knowledge of cultural value which overcomes historic binary distinctions, stems from a series of structural separations between knowledge practices of the digital; between academia, professional and policy practices; and, between different sites of cultural production and reproduction. The division between theoretical and practical knowledge has particularly left the policy sphere with a collection of loose abstractions of the 'social', 'public', 'culture', and 'value', which perpetuate rather than address the crisis of analogue representational systems.

While scholars and researchers have recognised that the advent of a global new medium calls for new modes of investigation, the contexts of formal study, research and practice continues to operate along largely separate disciplinary lines. This is true not only of academic disciplines, but also within professional knowledge disciplines in the cultural field and most importantly the separation of formal and operational knowledge. The very success of contemporary cultural consumption puts the cultural practitioner in the position of 'over-producer' or 'hyper-producer', with little or no time for reflective, nor reflexive strategies, whilst on the other hand the academic, apparently freed from production, has time for reflection, but whose very reflections circulate outside the modes of production.

Through the previously discussed triangulation of the project's research themes and questions, and through the matrixial analysis to identify the key intersections, thirty-nine individuals from academia, policy, and professional practice in the cultural sector were identified and invited to participate in a series of nine public research forums to help generate new knowledge and insights through direct interaction. In advance of each defined session, participants were sent an outline of the session's key concerns and research questions to address from their own perspective. The open, public nature of these forums was designed to moderate extremes of professional and technical language and aimed to engender a more inclusive, and practice-based discussion of mutual interest and dialogic exchange. In so doing, the project continued to build on the 'post-critical' approach first established in Tate Encounters and discussed in detail in *Post-critical Museology: Theory and Practice in the Art Museum* (Dewdney, Dibosa, Walsh, 2013). The list of final participants indicates the scope of the project's reach:

Hasan Bakhshi (Director, Creative Economy, Policy & Research, NESTA)

James Bridle (artist, writer and journalist)

Anna Cutler (Director of Learning, Tate)

James Davis (Programme Manager, Google Cultural Institute)

Jonathan Dovey (Professor of Screen Media, University of West England)

Wolfgang Ernst (Chair for Media Theories, Humboldt University Berlin)

Maya Gabrielle (Senior Digital Producer, National Theatre)

Kristoffer Gansing (Artistic Director, Transmediale)

Marc Garrett (Artist, curator, writer, co-director, Furtherfield)

Beryl Graham (Professor of New Media Art, University of Sunderland)

Oliver Grau (Professor of Image Science, Danube University Austria)

Rachel Falconer (Head of Art and Technology, The White Building - SPACE)

Matthew Fuller (Professor of Cultural Studies, Digital Unit, Goldsmiths, University of London)

Sarah Kember (Professor of New Technologies of Communication, Goldsmiths, University of London)

Paula Le Dieu (Digital Director, previously BFI / Mozilla)

Geert Lovink, (Professor of Media Theory, Institute of Network Cultures, Amsterdam)

Alessandro Ludovico (Artist, Media Critic, Editor in Chief, Neural Magazine)

Sonia Lopez (Webmaster and Head of Digital Publications, Museu d'Art Contemporani de Barcelona (MACBA)

Derek McAuley (Professor of Digital Economy in the School of Computer Science, University of Nottingham)

Mark Miller (Circuit National Lead and Convenor Young Peoples Programmes, Tate)

Kerstin Mogull (Managing Director, Tate)

Jennifer Mundy (Head of Collection Research, Tate)

Jen Ohlson (Tate Collectives Producer, Tate)

Emily Pringle (Head of Learning Practice and Research, Tate)

Margriet Schavemaker (Curator and Head of Research and Publications, Stedelijk Museum, Amsterdam)

Rebecca Sinker (Curator; Digital Learning, Tate)

Katrina Sluis (Curator, Digital Programmes, The Photographers' Gallery)

Lucy Sollitt (Relationship Manager, Visual Arts, Arts Council England)

John Stack (Head of Digital, Tate)

Leyla Tahir (Curator and Creative Producer, Tate Collective)

Catherine Wood (Curator of Contemporary Art / Performance, Tate)

Elena Villaespesa (Digital Analyst, Tate)

In order to capture the cross-sector nature of the public research forums and to build a databank of useful material for further analysis and research each of the eight sessions were recorded to be uploaded to the Tate website, and the final conference session presented a summary account of the sessions for further public discussion. The full programme and recordings can be accessed at:

http://www.tate.org.uk/whats-on/tate-britain/eventseries/cultural-value-and-digital-practice-policy-and-theory

Method as a Performative Tool of Change

One of the fundamental tenets of the Post-critical approach to problem-solving research is that method can and should be a performative tool of change and effect in and of itself.

In this respect, it can be seen to what extent reflexivity is a key theoretical principal and methodological commitment to ensure that an effectively balanced dialogical relationship is established between individuals from different sectors, disciplines and practices, in order to prevent the usual fixed academic construction of the 'object of study' which 'critical' studies of culture and cultural institutions has built its knowledge-base on.

As John Law and John Urry have discussed in their seminal paper 'Enacting the Social' 'social inquiry and its methods are productive: they (help to) make social realities and social worlds. They do not simply describe the world as it is, but also enact it.' (Law / Urry 2003).

While there are ongoing debates in academia about the instrumentalisation of knowledge and research and scepticism towards the policy reporting category of 'Impact', the terms of reference for the post-critical approach specifically focused on problem-solving research inherently carries within it and actively embraces the idea of 'impact' as a pre-requisite for change. As such, the range of participants and the facilitation of cross-sector and interdisciplinary discussion towards data gathering is seen as an integral part of the process of method as change. This point was welcomed and commented on positively by the majority of contributors who understood the nature of the opportunity to participate. This is not to say that the challenges of moving beyond the professional constraints of institutional representation were either erased or temporarily suspended, but rather than seeing institutional or cultural disconnections as sector-given or insurmountable, discussions emerged which focused on identifying mutual areas of vested interest for change.

Theory, Language and Practice

From the outset the research team acknowledged a number of problems of trying to bring cross-sector professionals together in a useful discussion in relation to the different uses of language, theory, and their connection to every-day practice. To help the move between 'common sense' and 'theoretical' uses of language the project highlighted the role of reflexivity, itself a theoretically derived concept, as means to register such moments of difficulty in communication and translation. The main problem in the use of theory clearly comes at the point of linguistic retranslation to the concrete world of experience.

To note, theory is turned to in the first instance because in its technical and formal structure it enables the formulation of larger concepts about everyday experience. Theory is conventionally the tool set for the analysis of phenomena and involves key moments of abstraction from concrete everyday experience and its received forms of knowledge and understanding. Theory's abstractions are often technical and employ unfamiliar concepts in order to interrogate and challenge conventional wisdom in the light of new and changing conditions and contexts. The over-arching aim of the use of theory within research is to return its understandings to the world of the concrete everyday. Equally, the assertion of 'common sense' language is understood to be inherently defined by a naturalised set of working assumptions and principles which are in turn implicitly encoded and embedded in a complex set of values and conceptualisations. Which is to say, the practices of everyday life contain implicit theory and that theory itself is a practice of everyday life.

The research team understood the challenge and effort to translate theory, without a loss of specificity; to make what is illuminated in theory clear and accessible within other practices of language. One of the key aims of the project's methodology was to open up the common explicit theoretical space between the technical academic practices of theory and the equally technical practices of the museum and to reconnect them in relation to generating new understandings of the relationship between cultural value and the digital. The act and process of translation between different sectors and professionals remains one of the greatest challenges and obstacles to new forms of problem-solving and knowledge-production through research, but as the project's findings confirmed the level of interest in developing new collaborative methods and research opportunities is significant.

References and External links

For full information about the 'Cultural Value and the Digital' public research forums programme held at Tate between February and July 2014 and to download podcasts of all the sessions visit:

- http://www.tate.org.uk/whats-on/tate-britain/eventseries/cultural-value-and-digital-practice-policy-and-theory

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The Cultural Value Project seeks to make a major contribution to how we think about the value of arts and culture to individuals and to society. The project will establish a framework that will advance the way in which we talk about the value of cultural engagement and the methods by which we evaluate it. The framework will, on the one hand, be an examination of the cultural experience itself, its impact on individuals and its benefit to society; and on the other, articulate a set of evaluative approaches and methodologies appropriate to the different ways in which cultural value is manifested. This means that qualitative methodologies and case studies will sit alongside qualitative approaches.