

Institution: University College London
Unit of Assessment: 34B – Art and Design: History, Practice and Theory: Fine Art
Title of case study: Materialising the digital: The commercial, social and cultural benefits of new artistic forms
<p>1. Summary of the impact (indicative maximum 100 words)</p> <p>Research conducted by the UCL SCEMFA research group into materialising the digital has had many and varied impacts, including the creation of new forms of artistic expression, and the production of new cultural resources. The research has also had demonstrable impacts on cultural heritage, both through the acquisition of its outputs into important national collections and through contributions to policy relating to the preservation of digital artefacts. Wider societal and cultural contributions have been delivered through work in the public realm, and commercial benefits have accrued through collaboration with Liberty.</p>
<p>2. Underpinning research (indicative maximum 500 words)</p> <p>Since its foundation in 1995, the UCL Slade Centre for Electronic Media in Fine Art (SCEMFA) has interrogated the material of the digital, a field in which it was one of the first research centres internationally to specialise. Its members include Susan Collins (full-time academic staff since 1995, Professor since 2011), Jon Thompson (part-time lecturer since 1995, Reader since 2011), Simon Faithfull (part-time lecturer since 2003) and Tim Head (part-time lecturer from 1976 until retirement in 2011). United by their shared focus on the exploration of the ‘Material of the Digital’, SCEMFA researchers interrogate this notion in diverse ways.</p> <p>A key starting point for this investigation was Collins’ pioneering 1997 work, <i>In Conversation</i> (http://www.inconversation.com), which used one of the earliest examples of online video streaming to link the internet to the public physical space of the street, thereby bringing the internet into the physical realm and online and offline participants into contact with one another. Prompted by the unexpected artefacts and imperfections that appeared in the live images, Collins extended this investigation with an on-going remote landscape series (including <i>Fenlandia</i> 2004, <i>Glenlandia</i> 2005, <i>Harewood</i> 2008) employing live transmission through the internet for its fabrication. These ideas were explored further in <i>Seascape</i> 2009. Here, Collins combined digital technologies with the classical traditions of English landscape painting to create a series of gradually unfolding digital seascapes using imagery captured in real time by network cameras installed at five vantage points between Margate and Portsmouth. Each image was constructed one pixel at a time, from top to bottom and left to right, in horizontal bands developing continuously over six and a half hours – the approximate time it takes for the tide to come in or out – to reveal the endless fluctuations in light, movement, time and tide, as well as the shifting weather conditions of the English coastline [a].</p> <p>Head likewise explored the basic ingredients of the digital medium; since 1998 he has used a series of real-time computer programs to generate visual outputs on screens and projections, as well as to produce inkjet prints. Here, he sets out to redefine the usual role of a commercial inkjet printer, diverting it from a reproduction machine into a direct primary printing medium in its own right. This investigation formed the basis of <i>Raw Material</i> 2009 [b], which consisted of screen and projection-based works, as well as a series of prints: <i>Dust Flowers</i>.</p> <p>In 2008, Faithfull was commissioned by a consortium including Liverpool City Council, Liverpool Biennial and other partners to explore this act of materialisation as the public art component of the regeneration of Lime Street station, the Grade II-listed ‘gateway’ to Liverpool city centre. In <i>Liverpool to Liverpool</i> (2008), Faithfull conceived a work serving as a gateway between the digital, the performative and the physical [c]. He linked the city’s heritage as a trade hub with its future in a digital age through 181 digital drawings made on a Palm Pilot during a journey from Liverpool, UK to Liverpool, Nova Scotia. These were sent as postcards to 181 Liverpudlians chosen randomly from the (Liverpool UK) telephone directory. The pixelated drawings, each with its precise GPS coordinates included, were eventually given physical form by being etched into the paving and glass of the redeveloped Liverpool Lime Street station in 2010.</p> <p>Thomson’s collaborative research with Alison Craighead (University of Westminster and Goldsmiths College) as Thomson & Craighead (T&C) spans online and public art commissions, as well as gallery-based work. Like Collins and Head, Thomson uses his work to explore the use of</p>

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real-time processes and live data transmission as material or artistic media and to demonstrate the potential for intangible content circulating on digital networks to be brought into the physical world. *BEACON* 2005 [d] continuously relays live web searches as they are made around the world, representing them at regular intervals in a way that becomes a form of contemporary concrete poetry [d]. The work exists online; as a projection in the gallery; and more recently as a mechanical railway half-flap sign developed via Thomson's AHRC-funded research, whose sculptural, physical presence brings together a retro technology (the mechanical railway flap sign) with a very current one (the internet search tool). Like *In Conversation*, *BEACON* makes a live, real-time connection between physical public space and the online public space of the internet.

Decorative Newsfeeds 2004 [e], developed in parallel with [d], extended this research to create a real-time installation presenting up-to-the-minute headline news from around the world as a series of generative animations, demonstrating one of the ways in which transitory digital content can manifest in site-specific ways and become an artefact in itself. Originally developed for gallery exhibition, the work explores how an artist might 'draw' with live data (in this case rolling news headlines), rather than traditional materials. It was later developed as a bespoke colour LED screen comprising a series of special curving tracks visible in direct sunlight. This work was installed first at Forest Hill, London (2006) and later in a semi-permanent external installation at The Junction, Cambridge (installed 2008). Most recently *London Wall* 2010 [f], one of three commissions used to re-launch the Museum of London (MoL) following its refurbishment, explored the transformative effects of digital technology on our perception of the world and the utility of digital communications technologies as tools for showing and recording social history. The work comprised over 500 fly-posters representing social media traffic within a three-mile radius of MoL, presented as a large-scale performative concrete poem.

3. References to the research (indicative maximum of six references)

[a] COLLINS, S. (2009) *Seascape*. [Solo Exhibition]. De La Warr Pavilion, Bexhill-on-Sea.

ALFREY, N., BODE, S. & CUBITT, S., (2009) *Seascape: Susan Collins*.

<http://www.susan-collins.net/seascape> Submitted to REF 2

[b] HEAD, T. (2009) *Raw Material*. [Solo Exhibition]. For description and photographs of the installation: <http://bit.ly/HgSpZb>. Catalogue available on request.

[c] FAITHFULL, S. (2010) *Liverpool to Liverpool*. [Public Commission] <http://bit.ly/19ZrTNo>

FAITHFULL, S. (2010) *Liverpool to Liverpool*. Liverpool University Press. Submitted to REF 2

[d] CRAIGHEAD, A. & THOMSON, J. (2005–) *BEACON*. [Artefact]. <http://www.thomson-craighead.net/docs/beacon.html> Submitted to RAE 2008

[e] CRAIGHEAD, A. & THOMSON, J. (2004) *Decorative Newsfeeds*. [Artefact].

<http://bit.ly/1ajS3Hn> Submitted to RAE 2008

[f] CRAIGHEAD, A. & THOMSON, J. (2010) *London Wall*. [Exhibition]. Museum of London. Submitted to REF 2

Quality of research is demonstrated by the following research grants:

Susan Collins. *Materialising Time: Developing new methods of visually representing time as embedded in The Seascape*. AHRC Research Grant: Practice Led and Applied. £15,450. Duration: 15 Nov 08 to 14 May 09. Led to [a] above.

Craighead, A. & Thomson, J. *Artworks that Explore the Boundaries Between Physical Public Space and Virtual Space*. AHRC Research Grant: Practice Led and Applied. £15,031. Duration: 18 Sep 06 to 17 Sep 07. Led to [d] above.

4. Details of the impact (indicative maximum 750 words)

SCEMFA research has supported the **creation of new forms of artistic expression and the production and preservation of new cultural resources** from a medium widely considered non-physical, impermanent and ephemeral. This is demonstrated by the production of original art and by a series of subsequent, high-profile acquisitions, permanent installations and public art commissions from important galleries, museums and other organisations. In many cases, these represent the first commissioning or acquisition of digital works by those organisations. The research has also **supported national and international public engagement** with these original works of art (and, by extension, with the museums and galleries in which they are shown), including through its use as the basis for a **wide-ranging programme of public events** and for the **development of new information and learning resources** to accompany the work itself.

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These impacts have arisen particularly from SCEMFA's active collaboration with curators and the wider professional art community: Collins, for example, was an invited member of and contributor to the Tate's AHRC-funded 'Beyond Text' research network (2008–10), and Thomson's research on 'sculpting the web' [d] has led to groundbreaking and on-going involvement with museums and curators on conceptualising digital art for the gallery space. The SCEMFA research was widely shared by Collins through a series of invited talks and keynote lectures for diverse international audiences of students, artists, curators and members of the public. Venues have included Sergio Motta Art and Technology Forum, Sao Paolo, Brazil 2009; Bangkok University, Thailand 2010; Shenkar College, Tel Aviv 2011, as well as a UCL public lunch hour lecture on *Framing the Digital: Materialising New Media* (31/1/13), which was webcast live and made available on YouTube [1].

One of the works featured in that lecture was *Seascape*, which was shown at the De La Warr Pavilion, Sussex (April–June 2009). The gallery reported 18,756 visitors to the show, which was accompanied by free talks, videos, schools projects and tours as part of a comprehensive programme of public events. Collins' show enabled the gallery to extend the reach of its interpretation programme beyond its premises for the first time, with a talk to a digital media audience at Lighthouse, Brighton. Reviewing the show for *The Times* in 2009, the renowned film director Ken Russell recognised and celebrated *Seascape's* futurity and exploration of "how electronic space enables us to experience physical space in an amplified way" [2]. Five prints from *Seascape* were acquired by the Government Art Collection and displayed from Oct 2010 to Jan 2012 in 10 Downing Street's prominent First Floor Corridor area. In April 2013, some of the prints were put on display at the new Department of Culture, Media and Sport building in Whitehall [3].

Thomson's collaborative work (as T&C), *BEACON*, was widely exhibited in the UK and overseas: it appeared in Tallinn, New York, Edinburgh and London in 2008–11 alone. *Decorative Newsfeeds* also engaged wide public audiences through the installation of the latter as a semi-permanent outdoor work in Forest Hill, London from 2006–11. Its planned lifespan of five years was then extended to January 2013, thanks to its favourable reception by the sponsor Sainsbury's, Lewisham Council and local residents. The commissioner described *Decorative Newsfeeds* as "one of the most successful works for the public realm I have been personally involved in, connecting daily with thousands of passers-by and customers to the store." Demonstrating the impacts of SCEMFA research on wider artistic and curatorial practice, he added: "it has provided an important model for the installation of electronic/virtual works in the public realm and is an example that I use often in my work as a curator/facilitator for contemporary art in the public realm and would highly recommend the work to others" [4].

The success of *Decorative Newsfeeds* led to a £60,000 commission in January 2008 (Commissions East) for another five-year, outdoor public version of the work for the Junction, Cambridge. In 2010, the work was cited in *Rethinking Curating* as an example of how artists can bridge the gap between the distributed networks explored by digital artwork and gallery or public spaces [5, p. 67]. It also facilitated further research with the Harris Museum, Preston (*The Distance Travelled*, 2011); and the National Media Museum (*A live portrait of Tim Berners-Lee*, 2012). *The Distance Travelled* represented the first acquisition of digital art for the Harris Museum collection, who described its acquisition as a "completely new departure" [6], while the Life Online Content Curator at the National Media Museum noted that *A live portrait of Tim Berners-Lee* "raised some very interesting questions relating to the nature of digital art acquisition (a fairly new challenge to the Media Museum)...The nature of [the] piece means that it will continue to comment on the themes of the exhibition for as long as the web exists" [7].

Decorative Newsfeeds also led in May 2010 to a commission from the Museum of London (MoL) to mark the launch of its new permanent Galleries of Modern London. The result of that commission was *London Wall* (2010), whose planned run to 5 September 2010 was extended by popular demand to the end of October 2010. *London Wall* has since been acquired as part of MoL's permanent collection as a socio-historical record of online social networking – the museum's first acquisition of its kind. *London Wall* was *in situ* for a total of five months (MoL total visitor numbers for the year ending 31 March 2011 were 671,951 [8]). Following the commission's success, senior curator Francis Marshall at MoL consulted T&C on policy development for MoL to commission, exhibit and collect more digital artworks.

The reconceptualisation through SCEMFA research of digital art as something that may inhabit

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physical spaces has opened the door for the production of other kinds of new, permanent public artefacts. Faithfull's *Liverpool to Liverpool* work constituted a central contribution to a widely acclaimed project recognised as having regenerated a previously rundown part of Liverpool's historical cityscape: the station's annual footfall is now estimated by Network Rail to exceed 24 million per annum [9]. The launch of the work was accompanied by extensive public engagement activity, including public performance lectures at St George's Hall, Liverpool and the Adelphi Hotel, and the urban regeneration sponsor, Liverpool Vision, attests to the public interaction with the art within the station's space, where many people are seen "following' the art trail" [10]. In 2011, the project won a blue plaque from the National Railway Heritage Awards for "creating a magnificent setting" for the station. The Public Art Officer for Liverpool City Council has recognised the integration of Faithfull's art into the Lime Street Gateway project as a best practice model for future projects, particularly praising Faithfull's engagement from an early stage with the commission, with the specificity of Liverpool's Lime Station, and the potential viewers of his work [11].

Research into *Materialising the Digital* has also delivered commercial benefits, particularly through its use to **provide external organisations with new techniques and approaches to design**. A new range of digital print fabric was, for example, commissioned by and released as part of Liberty's Autumn/Winter 2012 premium art fabrics collection, after the store's head of design saw Head's *Raw Material* exhibition. Two works from that show, *Virtual Light* and *Dust Flowers*, were developed into Liberty print designs and produced on over 10,000m of a range of fabrics; by the end of Winter 2012 most of the range had sold out, and at least one special request had been received for further metreage. Liberty also cited Head's work as the "original inspiration" for a collection of digital prints by various designers [12]. His Liberty prints have since been used in the manufacture of other products, from pushpins to clothing, with *Virtual Light* being used by Nike for a Nike x Liberty collaboration titled 'pixel pack' [13]. Launched in June 2013 as an exclusive limited edition, the range caused an intense fashion buzz on both sides of the Atlantic [14], selling out at Liberty within weeks of its launch.

5. Sources to corroborate the impact (indicative maximum of 10 references)

- [1] Lunch hour lecture <http://bit.ly/11U3fHq>; Sergio Motta Forum slideshow <http://slidesha.re/4tEAFi> (over 900 online views).
- [2] Ken Russell. 'Views from a spaceship? No, it's Margate' *The Times* (7/4/09). Available on request.
- [3] Display of *Seascape* prints in Downing Street and Whitehall can be corroborated by the Government Art Collection (GAC) Director. For their acquisition by GAC: <http://bit.ly/1fXnRKq>.
- [4] A statement about the public appeal of *Decorative Newsfeeds* and its influence on wider artistic and curatorial practice is available on request from the project Commissioner.
- [5] GRAHAM, B. & COOK, S. (2010) *Rethinking Curating: Art After New Media*. The MIT Press. See p. 67, available on request.
- [6] Head of Arts & Heritage, Preston City Council on the Harris Museum's acquisition of *The Distance Travelled*: <http://bit.ly/1biifV0>
- [7] Statement provided by the Life Online Content Curator of the National Media Museum about its acquisition of *A live portrait of Tim Berners-Lee* is available on request.
- [8] MoL Governors' Report and Financial Statements for y/e 31 March 2011. Available on request.
- [9] Network Rail footfall breakdown: <http://bit.ly/17eFTmD> [PDF].
- [10] Email from the Project Manager at Liverpool Vision. Available on request.
- [11] The Public Art Officer, Liverpool City Council can corroborate that *Liverpool to Liverpool* was a best practice model for future projects, particularly Faithfull's engagement from an early stage with the commission, with the specificity of the site and potential viewers. Contact details provided.
- [12] A PDF of the Liberty website showing products using Head's prints. Head is acknowledged as the 'original inspiration' at <http://bit.ly/1fXtUhl>. The Head of Design at Liberty can be contacted to corroborate the information on the use of the designs. Contact details provided.
- [13] For examples of the use of Head's Liberty prints elsewhere, including by Nike: <http://bit.ly/1akwHxv>; <http://etsy.me/1fZGmZ>; <http://bit.ly/1akx0bO>. PDFs available on request.
- [14] Examples of international online fashion press and blog coverage of the Nike x Liberty pixel pack products: Guardian (July 2013): <http://gu.com/p/3gkg3>; Grazia (June 2013): <http://bit.ly/19AbeQ5>; Canopi (July 2013): <http://bit.ly/1fXvvyQL>; Sneakers Actus (July 2013): <http://bit.ly/HieJQV>; High Fashion Magazine (June 2013): <http://bit.ly/H4mryt>. PDFs available.