

<b>Institution:</b> University of Portsmouth		
<b>Unit of Assessment:</b> UoA 32: Art and Design: History, Practice and Theory		
<b>Title of case study:</b> Brains to Biennale: Bridging Art and Science to Build Audiences and Develop Artists		
<b>Period when the underpinning research was undertaken:</b> 2008-ongoing		
<b>Details of staff conducting the underpinning research from the submitting unit:</b>		
<b>Name(s):</b>	<b>Role(s) (e.g. job title):</b>	<b>Period(s) employed by submitting HEI:</b>
Marius Kwint	Reader in Visual Culture	01/10/2008 - date
<b>Period when the claimed impact occurred:</b> 1st August 2013 to 31st December 2020		
<b>Is this case study continued from a case study submitted in 2014?</b> N		
<b>1. Summary of the impact</b> <p>Marius Kwint is a cultural and art historian whose curatorial research practice has significantly enhanced the public profile of institutions and individual artists with whom he has worked. His 2012 Wellcome Collection exhibition <i>Brains: the Mind as Matter</i> broke house records for visitor numbers and had online engagements in the millions. This led to Kwint being appointed to re-curate it for Manchester's Museum of Science and Industry in 2013-14, to spearhead a programme of building new audiences. Established and emerging artists have additionally benefited from Kwint's curatorial collaboration and writing, since he has featured them not only in <i>Brains</i>, but also in the global contemporary art arena, notably the 2015 Venice Biennale official collateral exhibition <i>Frontiers Reimagined: Art That Connects Us</i>.</p>		
<b>2. Underpinning research</b> <p>Dr Marius Kwint's wide-ranging curatorial research practice has explored the visual and material cultures of science, the intersection between art and science, and transcultural artistic responses to globalization. In 2005, he devised and co-curated a major multimedia exhibition at the Museum of Design in Zurich, <i>Einfach Komplex: Bildbäume und Baumbilder in der Wissenschaft</i> (Simply Complex: Tree-imagery in Science) (R1). This, on the recurrence of dendritic forms such as brain cells in nature, art and scientific visual culture, was shortlisted for the Swiss Academy of Sciences Prix Expo. In 2010 he mounted an extensive solo exhibition of figurative prints and drawings by Beth Fisher RSA, in its first tour from the Royal Scottish Academy (R2). Through sustained international cooperations, especially with Sundaram Tagore Gallery in New York, Hong Kong and Singapore, he has also published over 30 feature articles, exhibition catalogue and book contributions on emerging and established artists around the world. These include, in 2017, the catalogue essay for the first major exhibition by the famed Brazilian photographer Sebastião Salgado in Thailand (R3).</p> <p>Exhibitions, catalogues and associated activities are both the substantive research outputs and the means of public engagement in this methodology, where the contextualized interpretation of artworks and artefacts is central. Kwint extends the typical aesthetic purview of the art curator to include scientific apparatus and imagery such as diagrams and scans. In partnership with neuroscientist Richard Wingate, he has, for example, detailed how the fundamental concept of modern neuroscience – the brain cell or neuron – corresponds with broader currents in visual culture, particularly artistic Modernism (R4). Kwint also generates opportunities for artists, enabling artistic self-development that in turn enriches the public domain.</p> <p><b>Brains</b></p> <p>In April 2010, Kwint's research esteem prompted an invitation from Wellcome Collection to research and curate the major exhibition <i>Brains: the Mind as Matter</i> (R5 and G1). Wellcome Collection is the public forum, museum and library of the Wellcome Trust in London, an endowment of over £27bn which commits more than £1bn a year towards international research in health and associated arts and humanities. <i>Brains</i> ran there from late March to mid-June 2012, attracting record numbers of visitors, global media coverage and critical plaudits for its novel approach to the brain as represented and treated by the biomedical sciences.</p> <p>Kwint based the exhibition on his extensive investigation of primary sources, visiting many anatomical collections, archives and experts in the USA, Germany, Spain and the UK. In Madrid,</p>		

he interviewed the grand-daughter of the neuro-anatomist Santiago Ramón y Cajal (1852-1934), awarded the Nobel Prize for his discovery and theorization of the brain cell, and secured the loan of some of his celebrated drawings for their first British showing. *Brains* featured over 150 exhibits, many never before displayed. Key to the exhibition were artworks about the brain, which foregrounded the emotional significance of the organ and the human stories associated with it. Among the 15 contemporary artists represented or commissioned to make new work were Andrew Carnie and Annie Cattrell FRBS, RSA, who, with Wingate, had both contributed to *Einfach Komplex*.

*Brains* broke Wellcome's records for popularity. Boosting daily attendance by 22% and attracting over 105,000 visitors, it necessitated an outdoor queuing system for the first time. BBC News (24/10/12) cited it to illustrate the need for Wellcome Collection's £17.5m new building expansion. Though not intended for touring, the London success of *Brains* prompted the Manchester's Museum of Science and Industry (MOSI [now SIM], a member of Science Museum Group) to make a request for the exhibition, revised to feature more locally sourced artefacts and spearhead MOSI's new corporate strategy of attracting more independent adult audiences. Kwint's expertise was sought to curate new exhibits in order to focus the exhibition on the important history of neuroscience and neurosurgery in Manchester.

### Biennale

In 2014, gallerist and art historian Sundaram Tagore invited Kwint to co-curate an ambitious exhibition as part of the next year's 56th Venice Art Biennale, the world's premier contemporary art event. Based on international research and enterprise by Tagore, in regular dialogue with Kwint since 1989, it would showcase artists who respond creatively to the cultural fusions, collisions and frictions caused by globalization (R6). *Frontiers Reimagined: Art That Connects Us* opened at the 16th-century Museo di Palazzo Grimani in May 2015, featuring over 65 works by 44 artists from 25 countries. Kwint contributed substantially to the catalogue and display texts and the successful application for official collateral status in the Biennale. He also sourced some participating artists and commissioned new work from them. They included, in the scientific vein, the Nigerian-born painter Osi Audu, whose work explores traditional Yoruba concepts of the mind vis-à-vis modern neuroscience. *Frontiers Reimagined* platformed emerging talent such as the Haitian-Swiss activist artist Sasha Huber alongside established stars such as Sebastião Salgado, Bulgarian environmental artist Christo and the late American neo-Dadaist Robert Rauschenberg (G4). It was rated by *The Art Newspaper* (7/5/15) as one of the five highlights of the entire Biennale and led to a direct invitation from the Biennale President, Paolo Baratta, to return next time.

### 3. References to the research

- (R1) **Kwint, M.** (2010). Exhibiting the dendritic form. In A. Filippopoliti, (Ed.). *Science exhibitions: curation and design* (pp. 239-267). Museums Etc, Edinburgh.
- (R2) **Kwint, M.** (2010). Ligatures: Beth Fisher's work of kin. In N. Fisher (Ed.), *Beth Fisher: Grisaille Legacy* (pp. 76-81). Royal Scottish Academy, Edinburgh.
- (R3) **Kwint, M.** (2017). The imperfect pearl: the worldly view of Sebastião Salgado. In *Sebastião Salgado: The world through his eyes* (pp. 9-16). Sundaram Tagore Gallery in association with the Royal Photographic Society of Thailand and Bangkok Art & Culture Centre. New York.
- (R4) Wingate, R. & **Kwint, M.** (2006). Imagining the brain cell: the neuron in visual culture. *Nature Reviews Neuroscience*, 7(9), 745–752. <https://doi.org/10.1038/nrn1973>.
- (R5) **Kwint, M.** & Wingate, R. (2012). *Brains: the mind as matter*. Wellcome Collection, London.
- (R6) **Kwint, M.**, (2015). New pathways. In K. Tagore, (Ed.). *Frontiers reimagined: art that connects us* (pp. 25-31). Venice: Marsilio. (Submitted to REF2 as part of output ID:10644328)

### Statement in support of underpinning research quality

Kwint's curatorial practice-research is internationally recognised: his expertise is sought out by world-leading artists and art historians to curate exhibitions in internationally renowned arenas such as the Venice Art Biennale, the world's premier contemporary art event. Kwint's Venice exhibition was rated by *The Art Newspaper* as one of the five highlights of the entire Biennale. The *Brains* exhibition at Wellcome Collection was the most (and to this day is the second most) popular exhibition ever held by the Wellcome Trust.

**Grant funding**

(G1) **Kwint, M.** *The brain exhibition*. Funded by the Wellcome Trust, February 2011-March 2012 (GBP7,426).

(G2) Navin, M & **Kwint, M.** *Manchester Science Festival, Mosi*. Funded by the Wellcome Trust, 2015 (GBP16,000).

(G3) **Kwint, M.** *Of Bodies Chang'd*. Funded by the Henry Moore Foundation, December 2016-June 2017, (GBP3,000) Henry Moore Foundation.

(G4) **Kwint, M.** Support for Haitian-Swiss artist Sasha Huber's participation in *Frontiers Reimagined*. Funded by the Frame Foundation, 2015 (EUR3,000).

**4. Details of the impact**

Kwint's expertise and novel methods of combining art and science have been transformative for institutions and developmental for artists. Cumulatively, his research practice has **facilitated new partnerships** and **changed ways of delivering exhibitions** in order to **increase visitor numbers and build new audiences**. Previously unseen artefacts, processes and viewpoints have been brought to the public domain through some highly distributed means, **increasing knowledge and understanding of science and medicine**, and their ethical dimensions, through arts and culture. He has **provided a platform for artists and created opportunities for new commissions** that have increased visibility to new and larger audiences.

**Facilitating new partnerships**

*Brains* showed at the Museum of Science and Industry (MOSI) in Manchester from 26th July 2013 to 4th January 2014. It was the first major collaboration between MOSI and Wellcome Collection (S1). The partnership bore later fruit in a major joint exhibition on electricity and life, also bringing in the Teylers Museum, Haarlem, which opened in 2018. *Brains* provided the basis for new Wellcome support for the Manchester Science Festival at MOSI (G2). The original London version of *Brains* had, meanwhile, stimulated the arts curator of Latitude Festival in Suffolk to invite Kwint as a speaker and approach the Wellcome to support a future strand of neuroscience and health-themed productions. This became the Wellcome Hub at Latitude (to which Kwint also contributed); it ran from 2013-18 and enabled about 80 academic experts each year to reach out to 30-40,000 festival-goers across the age-range at one of the most important music and arts events in the UK (S1). In Venice in 2015, *Frontiers Reimagined* brought together the official patronage of the Italian Ministry of Culture, the Biennale and the Venetian State Museum Authority for the first time. Kwint's Henry Moore Foundation funding with Annie Cattrell opened up opportunities for her to work experimentally with dance and video artists and motion capture technology on the theme of metamorphosis, inspired by Bernini's 1625 sculpture *Apollo and Daphne* in Rome (G3). They exhibited the resulting sculpture and video performance project, entitled *Transformation*, at the Ruskin Gallery in Cambridge in 2017, as the core of the public engagement programme for Cattrell's permanent kinetic artwork adorning Anglia Ruskin University's new Science Building.

**Changing ways of delivering exhibitions**

Kwint's stress on scientific apparatus and imagery as cultural-historical artefacts, rewarding of aesthetic and critical scrutiny, has served to overcome the division between scientific audiences on the one hand and artistic or cultural ones on the other. In May 2019, [text removed for publication] MOSI, said of *Brains*: '*reflecting on our practice, I think it enabled us to, perhaps, be more bold, so there were particular parts of the exhibition . . . where some difficult issues were confronted and I think that showed we can present that kind of narrative in our exhibitions and our visitors will respond*' (S2). Other curators have testified to its influence on their approach, not only at MOSI but also in the new £24m Wellcome Galleries at the Science Museum, London; at the Medical Museion in Copenhagen; the Norwegian Museum of Science and Technology in Oslo; and in the public engagement programme of the Nobel prize-winning Moser neuroscience group at the Norwegian University of Science and Technology in Trondheim (S3).

**Increasing visitor numbers and building new audiences**

Visitors to the Venice Biennale tend to dwindle after the opening week in May and have to choose between hundreds of exhibits across the city. Nevertheless, *Frontiers Reimagined* attained the

'huge' figure of over 25,000 visitors during its run there: *'probably the biggest of all collateral events'* (S4). *Brains* at MOSI, meanwhile, attracted more than 40,000 in its first six weeks, against a target of 50,000 for the entire six-month run, with an eventual total of over 100,000: more than double the original target. The Science Museum Group reported that *Brains* was a *'major success'* and: *'Through the exhibition MOSI succeeded in its objective of drawing new adult audiences to the Museum. In this 30th birthday year on its current site, there were 669,000 visits to the Museum'* (S5). This was a 27,000 (4.2%) increase on the previous year, followed by an 11,000 (1.6%) increase in 2014-15. According to the MOSI audience evaluation survey, 38% of exhibition visitors said that *Brains* was the main reason for visiting; 92% of visitors would definitely or probably visit again for future exhibitions similar to *Brains*; 91% agreed that the museum was trying interesting new things; and 69% of visitors agreed that seeing the *Brains* exhibition had changed their image of the museum. The evaluator noted *'real potential for MOSI to become the local science innovator and to trigger meaningful debate in Manchester and beyond'* (S6).

In September 2013, [text removed for publication], MOSI [text removed for publication], stated: *'Brains: the Mind as Matter has set the marker for the calibre of exhibitions we intend to host going forward and is an important symbol of the museum we aim to be. I believe it is impossible to underestimate the impact of hosting this show at MOSI and in Manchester. Further, we are developing a programme of events around the exhibition that will feature as a centrepiece of this year's Manchester Science Festival'* (S7). In February 2014, [text removed for publication] at Science Museum Group, concurred: *'We think that we have made a great first step towards building an audience for similarly intelligent exhibitions in the future'* (S6). Later, in May 2019, [text removed for publication] at MOSI, said: *'since the Brains exhibition, that [independent adult] audience has grown for us and it is a more regular audience to our programme'. Brains 'enabled us to think about how visitors come in with certain expectations [and] match the exhibition's aims with the audience's needs'* (S2).

### **Increasing knowledge and understanding of science and medicine**

Spin-off events and activities from *Brains* have greatly furthered its dissemination. Some have shown unusual longevity up to 9 years after the original event. From 24th October to 3rd November 2013, Manchester Science Festival at MOSI delivered a programme of adult events inspired by the exhibition (with a lecture and guided tour by Kwint) and won the Manchester Tourism Award for Large Tourism Event of the Year. Fundraising for the 2013 edition was more successful than at any point in its six year history, securing nearly £250,000 from a range of supporters, including a £16,000 Wellcome Trust People Award with Kwint as CI (S5, G2). The accompanying book to the exhibition (R5) was a Wellcome Collection best seller, with 1,432 sales in its bookshop up to September 2013 and a further 124 copies sold since July 2016. The online game *Axon* and YouTube videos from *Brains* have reached a broader, younger, not traditionally museum-going audience in extraordinary numbers. *Axon* is a simple jeopardy game in which players have to grow a branching brain cell in competition with other neurons. The games company Preloaded states on its website: *'We worked closely with the exhibition curator Marius Kwint and neuroscientist Richard Wingate . . . to ensure the science learnings were fully embraced and embedded in the core of the game. . . . Within the first month, AXON was played over 3.5 million times, making it one of Preloaded's most successfully online published games'* (S8). *Axon* provided psychologists at the University of Sheffield with massive data sets for a newsworthy study on learning and skill acquisition (BBC News 6/1/14). New players have numbered over 66,000 in the two years up to the end of December 2020. Moreover, the YouTube version of the *Dissecting Brains* video that Kwint produced for the exhibition stands at 5.8 million views and has received over 9,000 comments up to the end of 2020 (S9). It has been watched nearly eight times as much as the next most popular of Wellcome's 194 YouTube videos. The lead scientist featured in the video reports that it has become something of a go-to for A Level biology students in the UK.

### **Providing a platform for artists and creating opportunities for new commissions**

Kwint's interaction with artists has enabled them to assess their own practice within the broader patterns of art history and other cultural contexts; it offers them a platform and opens up new intellectual avenues and contacts from which they can benefit. Eminent and emerging artists alike, [text removed for publication] have testified in writing or recorded interviews to the consequential fruits of Kwint's curatorial engagement, publications, and advice. In a video interview in 2018,



Andrew Carnie described the ongoing inspiration of the *Einfach Komplex* exhibition theme, the dendritic form, for his work since 2005 (S10). This took shape in further work with Kwint on an exhibition at the county council's Discovery Centre in Winchester, *The Winter Tree*, in 2020. Besides bringing many existing artworks to the public eye, Kwint's research practice has generated about 14 new commissions for artists; at least six of them were for *Frontiers Reimagined* in 2015 (G4). Writing in *Vogue India*, artist Olivia Fraser said of her involvement: '*For an artist to be invited to the Venice Biennale is the equivalent of an actor's first glimpse of the Oscars or an athlete qualifying for the Olympics. I got my break ... in a remarkable show ... called 'Frontiers Reimagined'*' (S11). Speaking of the exhibition to *Ocula* art magazine, Sundaram Tagore, Kwint's fellow curator and director of Sundaram Tagore Gallery and Tagore Foundation International, said: '*The positive outcome is that ever-widening swaths of previously local artistic production are gaining exposure -- and acceptance -- on international platforms*' (S12).

#### 5. Sources to corroborate the impact

- (S1) Interview transcript, [text removed for publication] Festival Republic, 03/07/19
- (S2) Video interview transcript, [text removed for publication] MOSI (2019)
- (S3) Collected video interviews of key artists, science engagement and museum professionals testifying to the impact and legacy of *Brains*, 2018 (available on request)
- (S4) [text removed for publication] *Frontiers Reimagined*: citing visitor numbers (2015)
- (S5) Science Museum Group *Annual Report 2013-2014* (MOSI references pp.16-17)
- (S6) Email correspondence, [text removed for publication] Science Museum Group (2014 & 2021)
- (S7) Testimonial letter, [text removed for publication] MOSI (2013)
- (S8) Preloaded: statement on development and impact of *Axon* on website
- (S9) Wellcome Collection: *Dissecting Brains* (with viewing figures and comments)
- (S10) Andrew Carnie: *Exhibitions, collaborations and the dendritic form across art and neuroscience* (video interview with Kwint), August 2018
- (S11) Artist Olivia Fraser's Venice Diary, *Vogue India*, 15th May 2015
- (S12) In Conversation: Sundaram Tagore. By Laura Thomson. *Ocula*, 8th May 2015