Institution: Coventry University
Unit of Assessment: 34
Title of case study: The first digital dance archive: Siobhan Davies RePlay

1. Summary of the impact

Professor Whatley, in close collaboration with leading British choreographer Siobhan Davies, has developed the world’s first digital dance archive: Siobhan Davies RePlay. The archive was rated outstanding by the AHRC, which funded the initial research leading to its launch. Work on the archive continues, as does its economic, IPR practice and policy, cultural and educational impact, improving access to dance, cultural heritage, new technologies and business models within the digital economy, education and creative industries. The archive contains 5,000+ items relating to 40 choreographed works and eight projects, offering free access to a collection of previously unavailable material. Beneficiaries include those within the dance, performance and archiving communities such as students, researchers, artist practitioners, teachers and arts professionals. In addition, it has benefited commercial partners and developed legal and research policy worldwide.

2. Underpinning research

Whatley’s research underpins the development of the digital archive and has grown over 15 years, from her established research into Davies’s choreographic style and movement vocabulary [1]. Her research has focused on dance analysis, reconstruction and identity. This provided the stimulus for developing a model for increasing access to dance that promotes both dance itself and the knowledge contained within dance as an art form, while offering new perspectives on the reception and interpretation of dance [1]. The archive developed from a recognition that dance, as an ephemeral art form, was largely absent from our documented history of cultural practice; so a model was needed showing how digital technologies could support the preservation and wider distribution of dance [3]. The archive provides free access to a large collection of previously unavailable video material, still images, text and related performance production materials, while preserving large numbers of vulnerable objects. It was also designed to expose the choreographic process, to enable users to find out more about how each work is made, and to reveal the working methods of dancers in the studio. The work has led to specific research insights, which have informed the development of other archival resources, both within and beyond dance, including:

- management and organisation of digital content, including digital asset management, metadata schema, issues of copyright and intellectual property [A]
- tools to support search and discovery of online content, to enhance user engagement [B]
- selection, curation and representation of live performance ‘online’; the ontological nature of dance when transmitted in the digital environment [5]
- artist making processes; exposing and sharing the hidden knowledge of dance [4]
- artist engagement with digital dance archives; reconnecting with histories - reusing, reconstructing and reconsidering audiences and users [6]

In recognition of the impact of her research towards understanding how dance artists document and publish their choreographic thinking in different modes, and how audiences become co-creators in art making practices [1], Whatley was awarded funding to extend the reach of her work internationally [B], to embed the archive and associated insights within the undergraduate dance curriculum [D], and to enhance understanding of the interface between dance and new technologies, dance inscription and analysis [C]. By 2013, the research is supported by a portal for digital dance collections, incorporating new online tools, including an enhanced virtual scrapbook and search by visual similarity. This has widened access [E] to the materials and is stimulating productive dialogues for new insights about dance as a creative, cultural practice [6]. Whatley has been invited to speak at numerous industry and research events to disseminate this knowledge.

3. References to the research

Key research outputs:

2. Whatley, S (2005): ‘Dance Identity, Authenticity and Issues of Interpretation with Specific Reference to the Choreography of Siobhan Davies’ Dance Research; 23 (2) pp. 87-105. ISSN:
Impact case study (REF3b)

0264-2875 IF = 0.101 (SJR) and IF = 0.391 (SNIP)


Key research grants:
A. PI: Professor Sarah Whatley, Title Siobhan Davies Dance Online, Period: 2006, Sponsor: AHRC Beyond, Total funding: £417,855, Rated ‘Outstanding’ by the AHRC.
B. Co-I: Professor Sarah Whatley, Title Choreographic Objects; traces and artefacts of physical intelligence, Period: 2008, Sponsor: AHRC Beyond Text, Total funding: £4,021
C. Co-I: Professor Sarah Whatley, in partnership with Surrey University, Title: Digital Dance Archives, Period: 2010, Sponsor: AHRC DEDEFI scheme, Total funding: £123,431
D. PI: Professor Sarah Whatley Title: D-TRACES (Dance Teaching Resources and Collaborative Engagement Spaces); Period:2010, Sponsor: JISC, Total funding of:£39,997
E. PI: Professor Sarah Whatley, Title: In-Visible Difference: Dance, Disability and Law Period: 2013 – 2015, Sponsor: AHRC, Total funding of, £497,072
F. PI: Ruth Gibson CO-PI: Professor Sarah Whatley Title: Capturing Stillness: visualisations of dance through motion capture. Period: 2010 – 2013 Sponsor: AHRC Total funding of £296,050

3. Details of the impact
The archive is highly successful and has established a productive collaboration between researchers at the University and Siobhan Davies Dance. From 1 September 2009 to 31 August 2010 the archive received 42,959 visits from 9,797 unique visitors, with 22.44% of new visitors. There were 121,774 page views. The vast majority of users are UK-based (40,797 visits) but use is worldwide; many are staff and students from higher education institutions. User numbers far outstrip audience numbers for live dance performances, thereby increasing public engagement with dance. Importantly, the archive has enabled British contemporary dance to be exported internationally in a new way. Link Analysis using LexiURL Searcher showed that the 20 domains linking to RePlay were from six different second or top-level domains within the educational, commercial and non-profit organisation spheres.

Archive Link
http://www.siobhándaviesreplay.com/
The Siobhan Davies RePlay home page provides access to the media objects and textual information stored in the archive. The main image on the home page is currently a video of a rehearsal. This and normally unseen notes, photographs and other material can now be accessed worldwide via the Internet.

The Archives Steering Group provided additional links into the creative industries, ensuring that the archive is disseminated to a broad constituency. The project, and the research which has flowed from it, have been influential in developing other digital archiving projects in dance and performance within and beyond the UK.

Economic Impact: Has been achieved by transferring skills and insight into the creative, digital
and cultural sectors. High-level skills and expertise have been developed by University staff; and members of Siobhan Davies Dance have applied their own new knowledge to the development of new dance events, performances and distribution methods. The skills exchange between both institutions has led to consultancy opportunities including training of external organisations in addressing repository developments; and providing intelligence for related projects, some in collaboration with overseas partners.

The difficulties of digitally archiving dance have required the research team and technology partners to overcome many complex issues: these experiences have uniquely equipped them to support more traditional archiving with innovative technologies and approaches. Ian Mottashed of Cambridge Imaging Systems confirmed that working on the Siobhan Davies RePlay archive contributed to the company’s growth as a business because it allowed it to extend the technology and the complexity of media objects the company’s system was able to store and present. It then was able to extend its products to the benefit of other customers and attract new sales. This represents strong evidence of impact on economic prosperity and is an example of contribution to innovation and entrepreneurial activity within the private sector.

The Routledge Performance Archive has been a very successful venture, and further demonstrates Whatley’s research influence on practice within private enterprise. Talia Rodgers of Routledge stated that ‘Whatley was instrumental in the early stages of development of the Archive. Without Whatley’s help and advice the project would have been much harder to get off the ground, and that Whatley provided concrete suggestions on how to move the project forward’. This Archive has since undergone 300 trials in various University libraries worldwide and has sold subscriptions to Universities in Europe and the USA. As a consequence of the impact of her research Whatley was invited to become a consultant to the project.

The Routledge Performance Archive has a distinguished International Board of Consultants and Advisors including: Sarah Whatley, Coventry University; Maggie B. Gale, University of Manchester; Toni Sant, University of Hull; Sara Jane Bailes, University of Sussex; Kate Dorney, Victoria & Albert Museum, London; Barbara Hodgdon, University of Michigan; Peter Hulton, Arts Archives, University of Exeter; Ezra LeBank, California State University; Tobin Nellhaus, Yale University; Lisa Peck, University of Sussex and Varndean College; Peta Tait, La Trobe University; Jon McKenzie, University of Wisconsin-Madison; Frank Hentschker, City University of New York and Royd Climenhaga, The New School for Liberal Arts, New York.

Impact on IPR Practice and Policy: As a consequence of problems encountered during research, significant work has been undertaken by Whatley’s team in the areas of IP, copyright and licences for distributing performing arts audio visual material online. These processes have assisted others working with content which is collectively ‘authored’, or when content owners cannot be easily traced, by providing information and models of good practice. Arike Oke of the Rambert Dance Company cites the Siobhan Davies archive as the driver that put Rambert on the road to digitising its own collection. This represents evidence of impact on cultural life and is also an example of how the RePlay archive has in a non-linear way contributed to economic prosperity and innovation. Whatley’s collaboration with lawyers on copyright and IPR in relation to performance has led to a major AHRC grant £500k to extend this research into the field of dance and disability (In/visible Difference; Dance, Disability and the Law).

Impact on Cultural Life: The archive has developed audiences and made dance more accessible and easier to understand. It has enabled British contemporary dance to be exported internationally in a new way. The research has influenced national and international organisations: Arts Council England (ACE) notes that the archive influenced the strategic development of ACE’s own web-
based project, “The Space”, in partnership with the BBC. Janet Archer, formerly Director of Dance at ACE, has said that “the Siobhan Davies RePlay archive is an exciting way of ensuring that a wider group of people have access to Siobhan Davies’ work, both in terms of its heritage and present practice. The RePlay archive was an innovative and pioneering project that has had real impact in terms of preserving cultural knowledge. The idea of making art forms more digitally available was inspired by the RePlay archive”. This represents evidence of impact on cultural life as well as an example of how the archive has influenced practice within an influential national development agency. Kate Dorney from the V&A stated that the archive has influenced curating and archiving at the Victoria and Albert Museum, which recommends the archive widely and whose staff use it as a resource themselves.

Similarly, Brooke Kellaway at the Walker Arts Centre, Minneapolis, US USA, has sought expert advice and consultancy from Whatley to support the development of the company’s performance catalogue ‘Living Collection’. “Sarah was absolutely brilliant. I think this project is incredible and one of the better examples of archiving performance”. Whatley’s support of the Walker Arts Centre’s repository is evidence of providing expert advice to a museum/art centre (in terms of influencing innovation) that indirectly has implications for impact on cultural life.

Whatley was invited in 2008 to be an International Associate for a pan-European research cluster: Inside Movement Knowledge. She is a participant in the International Education Workgroup of Motion Bank, the German-based Forsythe Company project to create digital dance scores. Freya Vass-Rhee stated that when drawing up a vision for an archive for the Forsythe Company, one of the first places that Vass-Rhee and her colleagues looked was the Siobhan Davies RePlay archive. The RePlay archive has played a crucial role in the Forsythe Company’s efforts to create a larger archive with an open public interface. Vass-Rhee believes that an archive of the calibre of Siobhan Davies RePlay is an extremely valuable resource to have in the global dance community. In her role as an academic, Vass-Rhee recommends the archive to her students both for the quality of its content as well as for its exemplary archive structure.

**Impact on Education:** A 2010 impact study revealed that most users employ RePlay to support teaching, learning and research activity at both higher education and school level. This is also reflected in the decision to include Davies’s work at GCSE and A Level. Sarah Jackson (Chief A Level examiner) has said that the archive site has become fundamental to teaching; it not only underpins the study of a particular area of the A-level specification but contributes towards developing the students’ ability to conduct their own research and help them think for themselves.

**Conclusion:** Whatley’s research in close collaboration with leading British choreographer Siobhan Davies resulted in the development of the world’s first digital dance archive Siobhan Davies RePlay. This has created impact by extending the concept of an archive to include ephemeral objects and allowing wider access to hard-to-reach material associated with dance performance. This has resulted in direct economic impact for one of the technology partners and in the development of new commercial products for a range of other organisations. By helping to solve the IPR and copyright issues associated with group works and objects where the owner cannot be traced, the research is impacting on IPR and copyright practice and policy. The research and the archive have extended the cultural and educational impact and reach of UK contemporary dance.

5. **Sources to corroborate the impact**
   a. Brooke Kellaway, The Banff Centre, Canada (previously with the Walker Art Centre, USA), interviewed by RAND Europe, see addendum to PR-248-CU
   b. Ian Mottashed, Cambridge Imaging Systems, UK, interviewed by RAND, see addendum to PR-248-CU.
   c. Talia Rodgers, Routledge, UK, interviewed by RAND, see addendum to PR-248-CU.
   d. Janet Archer, Arts Council England, UK, interviewed by RAND, see addendum to PR-248-CU.
   e. Jane Pritchard, Curator of Dance at the V&A, interviewed by RAND, see report PR-248-CU
   g. Arike Oke, Rambert Dance Company, UK, interviewed by RAND, report PR-248-CU
   h. Sarah Jackson (Chief A Level Examiner), Blue Coat Church of England School and Music College, Coventry, UK interviewed by RAND, see addendum to PR-248-CU
   i. Arts Council England: [http://tinyurl.com/q5ekhwz](http://tinyurl.com/q5ekhwz)