**Impact case study (REF3b)**

<table>
<thead>
<tr>
<th>Institution:</th>
<th>Oxford Brookes University</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Assessment:</td>
<td>34 - Art and Design: History, Practice and Theory</td>
</tr>
<tr>
<td>Title of case study:</td>
<td>Siren, a sonic art masterpiece by Ray Lee, artist, composer, performer and lecturer</td>
</tr>
</tbody>
</table>

### 1. Summary of the impact (indicative maximum 100 words)
Research-informed sound sculpture practice demonstrates cultural life, public discourse and economic benefits that can be evidenced by the highly successful ‘Siren’ by current British Composer of the year for Sonic Art Ray Lee. Following its initial performance in 2004, since 2008 ‘Siren’ has been performed more than 120 times across the world at key venues such as Walker Arts Center in Minneapolis, USA and the Melbourne International Arts Festival that collectively generated £124,051 in fee income. The work has left a significant record of its presence through social and new media, but also continues to develop and demonstrate further impacts through a new piece by Ray Lee ‘Chorus’.

### 2. Underpinning research (indicative maximum 500 words)
‘Siren’ is a practice-based output by Oxford Brookes’ Ray Lee (Principal Lecturer, 1999- Present) that builds on ‘The Theremin Lesson’\(^1\), a 25 minute performance made as part of a Year of the Artist residency in Masson Mill, Derbyshire otherwise known as Arkwright’s New Mill and one of the first modern factories of the industrial revolution in 2000 (at the time Lee was also employed 0.5FTE as Senior Lecturer, Nottingham Trent University 1993-2001). Using the disused top floor of the historic mill, Lee created a series of sound machines that evoked the sense of spinning with sound.

The research that formed the basis for ‘The Theremin Lesson’ aimed to create a series of sound sculptures that evoked the history and former function of the site and in particular the idea of spinning with sound. As part of this process a tripod with rotating loudspeakers was built and working through iterations of the sculptural form the final ‘Siren’ design was generated. Through support from The Arts Council of England (£3,750) this initial and singular sculpture was used as the prototype for a further fifteen tripods and a prototype version of Siren, entitled ‘Choir,’ was performed at the Museum of Modern Art in Oxford in 2001\(^2\).

A further grant of £4,951 from the Arts Council of England enabled the work to develop into its final form and was presented at a former F1-11 Fighter jet hanger, in 2004, at the ex-US air force base at Upper Heyford, Oxfordshire\(^3\). This distinctive location became a key aspect of the way in which the work developed, enabling the work to be influenced by the history and associations generated by the former air force base, and resulting in the title ‘Siren’ which alludes to the nature of the sound generating material, the air raid warnings associated with the former history of the site and the sirens of mythology.

As a composition ‘Siren’ explores the effect of a massed choir of rotating sound generating devices, all of which are emitting precisely tuned electronic pitches. This choir of Doppler voices generates a dense wall of sound, the rotation creating a rich vibrato that enables complex overtones, out of which sound world the listener can imagine a myriad of different voices.

As a performance it allows the audience to become more active in their participation, moving around the space and experiencing different sonic and visual perspectives of the work.

The architecture of the performance takes the audience on an immersive journey through the increasing complex sound world to a period of non-literal experiential theatre when the stage lighting is removed and the audience are left in the darkness save for the red LEDs at the end of the rotating arms. As the performance ends and the tripods and their sounds are slowly stopped one by one the listener’s awareness of the sound of the space that they inhabit is intensified by the silence that is left behind.

### 3. References to the research (indicative maximum of six references)
   Submitted to RAE2001, Oxford Brookes University, UoA64-Art and Design, RA2, RA Lee,
Impact case study (REF3b)

Output 4.


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

Ray Lee’s ‘Siren’ brought together a synthesis of different artistic traditions, emitting pulsing electronic tones and defying the conventions of art, music and theatre. ‘Siren’ demonstrates that research insights through a series of sound sculptures to evoke history and function can demonstrate benefits to economic, public and cultural life. These can be evidenced through not only influencing creative practice and artistic expression but also by, contributing to economic prosperity and enhancing processes of memorialisation. The impacts from ‘Siren’ have been ongoing, since it first performance in 2004; however the following narrative details selected examples from 2008-2013.

Since 2008, ‘Siren has been performed more than 120 times throughout the world at key venues such as the Walker Arts Center, Minneapolis, USA (7 Performances); Under the Radar Festival, New York, USA, (9 Performances); PUSH International Festival, Vancouver, Canada, (16 Performances); Auckland International Festival, New Zealand, (20 Performances); Melbourne International Festival, Australia,(16 Performances). The work generated a wide range of unsolicited responses evidenced through reviews, articles and interviews in print newspapers and magazines and on-line blogs and journals.

Alexander Ferguson, in a 2009 review for Plank in Vancouver, describes the movement of the audience as they navigate their own route around the work: ‘Sometimes I linger with the higher frequencies. Other times I back myself against a wall and let the force of the bass register overwhelm me.’ Writing in The Age, Melbourne, 2009 the reviewer Jessica Nicholas states: ‘We are literally watching sound as it moves through space. Since Lee offers no interpretation of his work, audience members are free to form their own associations. For me, the experience was akin to a guided meditation – a carefully choreographed ceremony where science and artistic endeavour unite to create a mesmerising journey into the nature of sound.’

As the work ends and the room is returned to silence Sunčica Ostoić of Kontejner - bureau of contemporary art praxis, Zagreb writes in 2008, with a clear reference to John Cage: ‘In the fade out the artist leaves us to real and imaginary echoes that are slowly transformed into the sound of our nervous system and our heartbeat – to silence as we know it.’ Meg Walker, in issue 90 of RealTime Arts magazine, 2009 writes: ‘The silence that follows is both full and hungry: my ears feel superbly sensitized, yet want more.’

Details of the impact can also be evidenced through the large quantity of video clips posted to, for example, YouTube. Thirty-eight clips of Siren are easily accessible through YouTube, of which thirty-six have been posted by audience members and by venues around the world, independent to Ray Lee, with a combined viewing figure as of June 2013 of 23,510.

There were also a number of associated education programmes during the touring period of ‘Siren’. Of these two have documentary evidence of responses from young people and students who experienced the work. In 2009 ‘Siren’ was included in a comprehensive education pack produced by The Melbourne International Arts Festival.

Of those venues that organised education programmes the Wexner Arts Center education programme has left a fascinating record of how the young high school students from Ohio responded to the work in 2009. Michael, a student at Upper Arlington High School in Columbus, Ohio said: ‘I had never before seen, felt, or heard anything like “Siren” and all that it encompassed before and it was in a word, breathtaking. “Sirens” is an experience that one cannot explain but something one can only feel. I don’t think I am alone in saying I could feel it once again.’ When it was presented at the Walker Arts Center in Minneapolis in 2009 the work was included in the semester’s Sound Art Class at Minneapolis College of Art and Design. ‘ande8344’ posted that:
"The overwhelming aesthetic of this work left me reconsidering my notions of how sound and light interact within perceived and imagined space." 

'Siren' generated £124,051 in fee income from twenty-seven different venues in addition to £25,201 in grant income from the British Council and The Arts Council of England. The impact of ‘Siren’ will continue through the development of ‘Chorus’ a new piece by Ray Lee first performed at Oxford Castle in November 2012. Chorus creates an utterly immersive sound installation on a monumental scale and suitable for audiences of up to 1500 people in outdoor locations, Chorus features spinning tripods 5.5metres high, towering over the audience heads and creating an arresting image in city squares, parks and urban and rural locations. The work is informed through the insights initiated by ‘The Theremin Lesson’; it will continue the on-going benefits of research-informed sound sculpture practice established through ‘Siren’ to a wider audience.

5. Sources to corroborate the impact (indicative maximum of 10 references)
4. Selected examples of performances by Ray Lee. Programmes for all events available from Oxford Brookes University Research Support Office on request.
   a) http://www.walkerart.org/calendar/2009/ray-lee
5. Selected reviews of Ray Lee’s ‘Siren’
   a) Review from PLANK, Vancouver, Canada, January 2009
      http://www.plankmagazine.com/review/performance-art/siren-waiting-spaceship-land
   c) http://www.kontejner.org/siren-english
   d) http://www.realtimearts.net/article/90/9391
6. You Tube search ‘Ray Lee Siren’
8. Examples of individual responses to Siren
   a) http://wexpagesonline.blogspot.co.uk/2009/01/ray-lees-siren.html
   b) http://blog.lib.umn.edu/willow/sound/reflections/spark_festival/
9. ‘Chorus’ at Oxford Castle ITV Meridian November 2012
    http://www.youtube.com/watch?v=5vkGw7SM2ak