

<b>Institution:</b> University of Central Lancashire		
<b>Unit of Assessment:</b> UoA33 - Music, Drama, Dance, Performing Arts, Film and Screen Studies		
<b>Title of case study:</b> <b><u>Global Sound Movement: Working with communities around the world to preserve and share vulnerable music heritage</u></b>		
<b>Period when the underpinning research was undertaken:</b> 2015 - 2020		
<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>
Phil Holmes	Co-Founder of Global Sound Movement and Senior Lecturer	September 2008 – Present
Paresh Parmar	Co-Founder of Global Sound Movement and Deputy Head of School	September 2005 – Present
Phil Bush	Lecturer in Music Production	August 2013 – October 2019
<b>Period when the claimed impact occurred:</b> 2015 – Present (Ongoing)		
<b>Is this case study continued from a case study submitted in 2014?</b> Y/N – No		
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)  The Global Sound Movement (GSM), based at the University of Central Lancashire, is a research project with a wide international reach and significant global cultural impact. Winners of the Times Higher Education Award 2016 for Excellence and Innovation in the Arts [C1], GSM is concerned with cultural preservation through audio archiving of musical instruments and performance spaces of significant importance to individual indigenous tribes and communities. This combined with the development of new music technology designed to disseminate these research findings ensures that new audiences engage with these musical cultures, preserving this unique heritage. The project has financially contributed to education programmes across Uganda, social development and community projects in Indonesia, whilst assisting agricultural initiatives in Southern China. International musicians and sound designers that engage with the GSM sound libraries have developed new techniques and instrument pairings, creating new works only made possible through the GSM.</p>		
<p><b>2. Underpinning research</b> (indicative maximum 500 words)  GSM is a non-profit organisation and an research project that aims to identify, record and archive musical instruments built by indigenous communities in areas of social or economic need. These recordings are digitised and sample libraries and sampler instruments are created and sold to the international music community, with all monies generated being donated to the original instrument makers and communities. Having travelled over 65,000 miles, the Global Sound Movement currently have conducted projects in Uganda, Cyprus, Bali, China, Croatia, Gibraltar and Morocco.</p> <p><b><u>Substantial audio archive; sample libraries [1]</u></b>  From 2015, a fundamental aspect of GSM has been the recording of unique musical instruments in their natural surroundings or performance areas. For the most part, the instruments captured by GSM are rare, hand built and unique to a specific tribe, community or geographical location. Each instrument recorded is sampled with every note being captured in high resolution at varying levels of velocity and volume. Through innovative microphone placement techniques and field recording methods, the natural ambience of the performance space is captured and becomes inherent to the recordings. Following extensive post-production and pioneering digital instrument creation, sampler instruments are made that fully integrate to digital audio workstations. Research has been conducted into how multiple unique instrument pairings work sonically and produces coherent musical works consisting of previously unheard musical instruments and their combinations [5].</p> <p><b><u>The GSM Player [2]</u></b>  Enabling non-musicians to engage with the sounds and instruments captured by the Global Sound Movement is of paramount importance to the educational element of the project. In order to create accessibility, a new innovative musical interface has been developed since 2018 that is hosted online. This has changed the way coders of PHP integrate JavaScript Object Notation (JSON) to work with timeline-based systems within web browsers. The development of this has benefitted other coders of these scripts internationally. Users can compose music with either</p>		

pre-selected loops or single hits to create a new unique piece of music. The sounds that can be triggered are taken from each country visited by the GSM, creating new instrument pairings that cross culture, location and genres of music.

### **Virtual Reality [3]**

In the summer of 2018 location recordings in Yunnan Province, China uncovered a unique percussion instrument that was wholly integral to the rituals, performances and cultural storytelling of the Hani tribe. Along with a detailed and high-resolution recording session, The Global Sound Movement took in excess of 350 photographs at varying angles. Through innovative design and coding the 'Devine Drum' now exists in Virtual Reality and users not only trigger the actual sound of the instrument in its original setting but receive haptic feedback from the controllers and this provides a realistic experience of playing the drum. This virtual instrument ensures that a wider international audience can engage with the instrument whilst the original remains in its natural home.

### **Global Sound Movement Website [4]**

Since 2015 the main output for the project is the extensive website publication. As international access to the research of the Global Sound Movement is central to the aims of the members of the project, this website has many innovative features and systems that assist with the dissemination of information. Details of how the Global Sound Movement operate in the field and in postproduction educates users about different cultures, musical instruments, locations and soundscapes specific to each location, whilst providing global access to rare instruments. These products can be purchased and included in new compositions or sound design. The website houses the online store where all instruments and products can be purchased. By using the website as the main form of interaction with the project, GSM can gather data and analyse international public engagement.

Between 2015 and 2017 there have been seven projects in Uganda, Cyprus, Bali, Zadar, Yunnan Province, Gibraltar, Morocco. Further trips to China also occurred throughout 2018. However, the application development and technology area of the project is ongoing with the continuing innovation and development of new technology.

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

1. **Audio Archive and Sample Libraries**
  - Phil Bush, Phil Holmes, Paresh Parmar
  - GSM Audio Archive and Sample Libraries
  - 2015 - date
  - Virtual Instruments, samples and environmental collections
  - <http://tinyurl.com/y2sbo5ml>
2. **GSM Player**
  - Phil Bush, Phil Holmes, Paresh Parmar
  - GSM Player
  - 2018
  - Online music sequencer
  - <http://tinyurl.com/y6gdxs5d>
3. **Virtual Reality**
  - Phil Bush, Phil Holmes, Paresh Parmar
  - VR Demo of the Hani Drum
  - 2018
  - Solid Works – VR Demo
  - <https://tinyurl.com/y38eltk9>
4. **Website**
  - Phil Bush, Phil Holmes, Paresh Parmar
  - Global Sound Movement Website
  - 2015
  - Website

- [www.globalsoundmovement.com](http://www.globalsoundmovement.com)

#### 5. Composition

- Phil Bush
- The Path of the Zadar Sun
- 2020
- Music Composition
- <https://tinyurl.com/y5e5b23w>

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

The Global Sound Movement has extensive international reach. Following media attention from industry press an article about the GSM Uganda project was translated into eight different languages and published internationally. Phil Holmes was then interviewed on BBC Radio 4's Today Programme [E2] and the BBC World Service [E3], with a combined listenership of 188 million. Following this, hits to the Global Sound Movement increased massively and currently stands at 65,000 unique visitors. The website has sold over 2,000 downloadable products [A] and is often the subject of music specific blog articles [E4, E5, E6, E7, E9]. A conference presentation by the GSM in Beijing, China in March 2019 was streamed live and viewed by 3.8 Million viewers via WeChat [C7]. BBC One commissioned a short film about the GSM Project hosted by Mark Radcliffe and included the acclaimed guitarist Aziz Ibrahim, associated with the Stone Roses, Paul Weller etc. This was broadcast on 9<sup>th</sup> March 2020 [E1].

**“I got such a buzz out of meeting the GSM guys. The work they've put into what is a fascinating and vital resource and archive is truly admirable. Perhaps in these challenging times of climate change and Coronavirus our futures will involve considerably less travel and so it makes it even more important that these sounds have been preserved before it's too late. Thanks to their work we will have access to these sounds for the rest of time”. – Mark Radcliffe, BBC Radio2 [E11]**

#### **Supporting communities, indigenous peoples and tribal groups**

Set up as a Non-Profit Organisation, the Global Sound Movement commercialise their research outputs for community benefit by way of selling the digital products via an online store. Each product sold is catalogued and all funds are assigned to the original project. Quarterly, these funds are distributed back to the communities that built the original instrument/s or the NGO partners in the locale. Since 2016, GSM have been donating funds back to Uganda, Africa, where the people of Nakimembe (village North West of Jinja) have received monies that have enabled upwards of 150 children of the village to receive school meals and uniforms [D3]. This has in turn seen the level of education raised within the village and means that the food supplies can be directed to other members of the community, increasing nutrition and health. The NGO 'Brass For Africa' [D1] receives regular donations and supplies of brass instruments that are used for Musical Education purposes across orphanages in Kampala. 'Hands for Hope' [D2] is an NGO that provides schooling from early years to high school for children and learners housed in the Namuwongo Slum, Kampala. Donations from the GSM to 'Hands for Hope' provide musical education and enrichment activities alongside language, mathematics and science classes.

Projects across Yunnan province, Southern China have seen donations to three tribes that reside in mountainous regions close to the Vietnamese boarder [D4]. Yao, Yi and Hani communities have all benefited from the monies that have been received and the GSM are aware that the finance is being channelled in to developing agricultural land and the way in which it can be farmed more efficiently. Extra produce is sold generating another income stream for the community [D4]. Supporting sustainability and building relationships with communities in this way was acknowledged by Synchtank when GSM was listed in the top 25 international music charities [E8].

#### **Enabling musicians, composers and sound designers to innovate and develop**

Traditional and wholly unique musical instruments are recorded and developed into sample libraries that integrate with professional Digital Audio Workstations (DAWs) such as ProTools,

Logic Pro X, Ableton and Native Instruments Kontakt. This integration enables musicians to include the sounds recorded by GSM into new musical works. This is especially important and impactful when concerned with musical diaspora. Allowing musicians to utilise the sounds of instruments they would not otherwise have access to into their compositions. As well as providing an avenue for the individuals to use their native instruments digitally. Specific instruments traditional to certain countries are now available to download and use. Mediterranean musician, Edoardo Talenti, composer for BBC's *Death in Paradise* and film scores for Magnus Fienes includes GSM samples and instruments in new works. He fuses Greek and Turkish instruments with Hip-Hop production methods creating a new sound to the genre. The 'Artist Series' section [B] of the Global Sound Movement website displays testimony from multiple and varied international music producers who explain how the GSM samples and sound have changed their compositional techniques creating new works, instrument pairings and developments of genre. Of particular note has been the acclaimed guitarist and composer, Aziz Ibrahim who is currently working with the Samples recorded in China and combining them with innovative guitar layering techniques [E1]. This is developed on mobile platforms and the GSM samples fully integrate into this technology making it more accessible to musicians without studios or DAWs. The engagement by contemporary artists with these sounds connects them musically with the indigenous cultures, sounds and instruments, which ultimately provides international exposure to this heritage.

***'The GSM library and instruments has absolutely changed the way I play and compose... It's a God send in a way'*** – Aziz Ibrahim, Musician [E1]

#### **Empowering music education and enriching curriculum**

Innovative developments and app creation enables the GSM to disseminate research findings to a wide audience across age groups, international locations and languages. This is made possible by the GSM Player, a step sequencer that plays across platforms in any browser, therefore making the GSM sounds accessible to anyone with an internet connection globally. Users engage with the material and are empowered to create and compose music and soundscapes through products designed by the GSM. Each product has detailed information embedded that explains every sound and instrument. Through workshops delivered across primary schools in North West England, students have a hands-on experience composing music regardless of theoretical knowledge [E10]. Innovative integration of this player enhances other subjects at different Key Stages of the National Curriculum. Geography, Maths, English, History and World Topics are subjects enhanced by this technology, not just Music classes.

Following the success at the Times Higher Education Awards where the GSM project won the 'Excellence and Innovation in the Arts' category 2016 [C1], members of the project were invited to speak at education and creative conferences in Africa and China [C2, C3, C4]. BBC news covered a press conference at the 2019 British Science festival where GSM presented 'Preserving rare instruments in the virtual world' through the innovative VR software [C6, C7].

Partnerships between the Global Sound Movement and Chinese Universities have proven positive where collaborative projects have taken place, Hebei University in Boading, China worked with the GSM to present a fashion show. Here the music composed used samples taken from southern China, informed garment design and resulted in a catwalk show in Beijing in March 2018 where GSM performed live. Following the success of this project, Paresh Parmar and Phil Holmes were invited as keynote speakers at the Chinese Service Centre for Scholarly Exchange (CSCSE) conference in Beijing March 2019. This was streamed to 3.8 million viewers [C5] and was the only keynote from UK Universities. This has led to further discussions with the Chinese Ministry of Education (People-to-People) with regards to multiple projects and knowledge transfer initiatives that will assist with cultural preservation along the route of the 'Belt and Road initiative' set out by the Chinese government.

The Global Sound Movement continues to donate finance to areas of economic need, provide innovative musical instruments to composers globally and educate international communities about musical cultures.

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

- A. GSM Archive and Digital Products: - <http://tinyurl.com/y2sbo5ml>
- B. GSM Artist Series - <https://tinyurl.com/y2o9tape>

- C. Change in the Universities external research profile: -
1. Times Higher Award: - <http://tinyurl.com/y3fru5v2>
  2. African conference: April 2018 UCLan
  3. Hangzhou Expo (China): September 2018
  4. Ghana Symposium: October 2018
  5. CSCSE Keynote speaker (China): March 2019
  6. Press Conference at the British Science Festival 2019 - <https://tinyurl.com/y9kjdmy4>
  7. British Science Festival: Preserving rare instruments in the virtual world  
<https://www.britishecienceassociation.org/blogs/bsa-blog/preserving-rare-instruments-in-the-virtual-world>
- D. Charity Stakeholders
1. Brass for Africa - <http://tinyurl.com/y29fxnam>
  2. Hands for Hope - <http://tinyurl.com/y2gsv2x2>
  3. Nakibembe village – <https://tinyurl.com/y3qsrxaa>
  4. Hani, Yeo, Yi Tribes, China - <https://tinyurl.com/yxzv4zp8>
- E. Public Engagement
1. BBC One – Inside Out – <https://tinyurl.com/y38elk9>
  2. BBC Radio 4 - <http://tinyurl.com/yxdsnmah>
  3. BBC World Service - <http://tinyurl.com/yypuubwg>
  4. Sound on Sound - <http://tinyurl.com/yybsk5pn>
  5. Mix Mag - <http://tinyurl.com/yxz6xenk>
  6. Fact Mag - <http://tinyurl.com/y6269pzf>
  7. [www.popularmechanics.co.za](http://www.popularmechanics.co.za) - <http://tinyurl.com/y5zef4xp>
  8. Sync Tank (listed with top 25 music charities) - <http://tinyurl.com/y67g4pxn>
  9. UK Fundraising - <http://tinyurl.com/yyd5pb9h>
  10. UK Primary Schools - <https://tinyurl.com/y6pi2yb8>
  11. Mark Radcliffe testimonial