Instruments INDIA: A sound archive for educational and compositional use

MANUELLA BLACKBURN

Department of Music, Liverpool Hope University, Creative Campus, 17 Shaw Street, Liverpool, L6 1HP, UK
E-mail: blackbm@hope.ac.uk

This article documents the evolution of the 'Instruments INDIA' project, which led to the creation of an online sound archive of Indian musical instruments. Recording work with approximately 27 musicians provided material for this interactive resource (which functions as an educational tool and concertgoer's guide), and also for compositional work, where culturally tied sound material formed the basis for two new works; *Javaari* (acousmatic) and *New shruti* (mixed work) for sarod and electronics. Trialling a variety of methods for gathering and then subsequently integrating sounds from Indian musical instruments into electroacoustic compositions provided a framework for the exploration of hybridity and intercultural sound interactions, while observing the translation and transference of highly emblematic sounds from one musical tradition to the next also led to unique artistic and theoretical outcomes. Curatorial decisions made with my project partners, Milapfest (the UK's leading Indian Arts Development Trust) regarding the participating musicians and their sound contributions posed further considerations for the representative quality of each instrument showcased on the archive. Gathering appropriate material for users of the archive (young learners, audience members and interested laypeople) while capturing sounds suitable for compositional purposes presented new challenges within the recording environment. Further complexities surfaced when this challenge was coupled with a lesser degree of familiarity with instrument capabilities, playing styles and cultural traditions. This unique collaboration with cultural sounds and performance practices raised questions about my compositional intentions, cross-cultural borrowing, respectful practice, and the unavoidable undertones of cultural appropriation and colonial attitude.

1. BACKGROUND

Incorporating culturally tied sound into one's own creative output has been an increasingly popular activity among electroacoustic music composers. Examples from the existing repertoire include the use of Northumbrian pipes in *Pentes* (Smalley, 1989), Chinese sheng in *Sonic Highway Exits Neglect Grammar (S.H.E.N.G)* (Landy, 1995), Caspian Sea and Islamic call to prayer recordings in *Caspian Retreat* (Murphy, 2003), Mozambique timbila in *Xi* (Climent, 2012), Balinese gamelan in *Galungan* (Berezan, 2010), and yangqin and Shanghai environmental sounds in *Culture Shock* (Rossiter, 2012). Work of this nature,

however, is difficult to develop without being accused of appropriation, exploitation or even of indulging in a contemporary version of musical exoticism, with its overtones of nineteenth-century colonialism. My own journey into this minefield dates back to 2006 with the creation of *Sonidos Bailables* (a collection of acousmatic miniatures) where samples taken from typical Latin American dance forms were borrowed for its construction. Dual UK/Colombian heritage appeared to afford me the right to do this, with affirmation coming in the form of a public prize awarded in a Brazilian electroacoustic music composition competition (*CEMJKO*, 1st International Electroacoustic Composition Contest, Brazil, 2006). More examples of cultural borrowing followed, including *Origami* (theme of Japanese paper folding, 2008), *Cajón!* (rhythmic patterns and use of a Peruvian percussion instrument) and *Karita oto* (Japanese musical instrument samples, 2009). Uneasy reactions to my cross-cultural activity began to appear and I frequently faced questions regarding the borrowing of, use of and personal relationship to the sound materials. Building on lessons learned from these earlier explorations, I began a collaborative project involving the integration of instrument sounds from the Indian classical music tradition within my music. I sought to go beyond surface-level borrowing in an attempt to theorise the intricacies of cultural sound use. Examining the pitfalls and difficulties one might face when engaging with material from an entirely unfamiliar musical culture became the focal point of this research.

My acquaintance with Indian classical music and its associated instruments has a short history – my first encounter with these sounds occurred in 2010 while attending a concert of sitar and tabla music as part of a monthly concert series taking place in Liverpool, UK. Attracted by the rich timbres and exotic sounds, I began an assessment of these new sounds and their potential for integration within an acousmatic context. In this concert, attraction to these materials was furthered by the common ground found between my own practice (sound preferences, shaping of sound materials and sound organisation) and the directional qualities of pitch

bends, energetic builds of the percussion and the satisfying synchronicity of ensemble improvisations.

2. PROJECT HISTORY

Instruments INDIA (http://milapfest.com/instruments-india) started life as a creative pursuit with the aim of composing new electroacoustic music from recordings of Indian musical instruments. Initial recording work with a handful of musicians introduced me to a vast array of sound I had previously not encountered and, as a result, this educational experience was something I wished to share with others unacquainted with these instruments via an online platform. Access to a steady stream of musicians from this tradition willing to participate in the project was facilitated by Milapfest (project partners), who boasted a 28-year history working with performers, ensembles and orchestras within the Indian music tradition. Many musicians involved in the project welcomed the establishment of the archive and were happy to see the consolidation of the arising information in one place. Profiling the artists on the archive with direct links to their websites and online stores to buy their CDs was an exchange for their contribution to the project. As an interactive resource for hearing and seeing Indian musical instruments up close, the website archive provides a multipurpose learning platform, supporting young learners and newcomers who simply want to find out more about Indian instruments, while simultaneously acting as a concertgoer's guide to Indian instruments showcased on stage at Indian classical music concerts around the UK and beyond.

2.1. Instruments and the musicians

In total, 27 Indian classical instruments currently feature on the Instruments INDIA online archive (Table 1).

The archive features instruments and vocals predominantly found within the Indian classical tradition which are typically seen within solo, duo or ensemble performances. A number of folk instruments of a less common nature also appear in the archive (for example, uddukai, shankha and swarmandal). Performers of these instruments were more difficult to find, but it was deemed even more essential to profile these instruments to promote and publicise their lesser-known status. Accessing musicians via Milapfest ensured sonic contributions would be of a consistently high quality. Each musician was carefully selected and sourced from a variety of backgrounds including established artists, up-and-coming performers from Tarang (the UK's National Ensemble for Indian Music) and a number of film music session stars (Satish Kumar Patri and H. N. Baskar – session musicians to Academy Award nominated music composer Bombay Jayshree). Accessing musicians through Milapfest as Indian music 'agents' strengthened the project's credibility, since the project was officially endorsed and promoted by an Indian arts organisation with a high international profile and reputable standing within this niche creative sector. A network of contributors began to emerge, as word spread of the educational value the project was promising. The participating musicians brought a diversity of cultural backgrounds (some were British-born and trained, others were shorter-term visitors from the breadth of regions and traditions within India). It was anticipated that such diversity would provide ample terrain for exploring 'new signs of identity and innovative sights of collaboration' (Bhabha 1994: 2). On reflection, early hindsight regarding the implications of such diversity proved to be of great significance, especially so in relation to the data collected in the recording sessions, where the variety of responses the musicians gave to my requests for sound appeared reducible to key criteria including regional playing traditions (Hindustani or Carnatic) as well as the musician's

Table 1. Instruments and vocal styles featuring on the Instrument INDIA website

Strings	Percussion	Wind	Vocal	Keyboard
Dilruba	Ghatam	Bansuri flute	Carnatic	Harmonium
E-tanpura	Ghungroo bells	Morsing	Hindustani	
Santoor	Kanjira	Nadaswaram	Konnakol	
Sarangi	Mridangam	Shankha		
Sarod	Tabla			
Sitar	Thavil			
Sursingar	Udukkai			
Swarmandal				
Tanpura				
Tar shehnai				
Violin				
Veena				

role within their usual performance tradition context (accompanist or soloist) (Blackburn and Nayak 2013).

2.2. Collecting sounds

The process of recording the musicans revealed numerous points of interest. A somewhat unexpected focus within the research emerged as capturing appropriate sound material proved more challenging than initially imagined. Two categories of sound material were required from each musician: (i) sound for the online sound archive featuring excerpts of representational, typical playing styles and (ii) sounds appropriate for electroacoustic music (e.g. samples, short sounds, long sounds, ideas, motifs, bumps, attacks, unusual sounds). Most of the musicians had not previously encountered electroacoustic music and many had not strayed far from their performance practice within the Indian classical music tradition. Thus, soliciting unconventional, unidiomatic sound was not always a straightforward process. Some musicians responded with uncertainty, unsure about what to play. Some required precise instructions on how to explore their instrument to generate this desired material and many quickly turned to large-scale improvisations from their repertoire. Requesting smaller units of sound was often met with the explanation that the essence of Indian music could not be reduced to individual components, where it was felt that the sum or totality of their art form does not have meaning in singular form.

2.3. Recording work anecdotes

Observations and anecdotes from the collaboration demonstrated the steep learning curve both parties (composer and performers) undertook in the recording environment. From my perspective, two experiences of particular note are included here:

- Recording the swarmandal (hand-held harp-like instrument). Manuella: 'can you play something representative of your playing style?' Musician: (musician stops his light stroking of the strings and hesistently looks up) 'this is all the instrument does, the strings are stroked back and forth as accompaniment' … uncomfortable silence fills the recording studio. Contact with many unfamiliar instruments demanded 'on-the-fly' learning and discovery.
- Microphone placement for unfamiliar instruments was supported by the musicians. Best practice in setting up for recording sessions was unknown so advice was sought directly from the musicians. Many of the stringed instruments and their soundboards were structured differently from Western instruments. My reliance on each musican

for their knowledge appeared to be respected since their input in dealing with microphone technique was valued.

3. CASE STUDIES

3.1. Case study 1: acousmatic work

My first musical output from the Instruments INDIA project, *Javaari* (acousmatic, stereo work, 2013) developed out of recording sessions with sitar player Roopa Panesar and tabla maestro Kousic Sen. Compositionally, the aim was to use these instrumental sources in the same manner in which I typically used sound in my previous practice, irrespective of their cultural associations. I requested short interjections, sounds with directional qualities, pitch bends, attacks, mistakes[1] and impacting gestures from the musicians. Transforming the beautifully rich timbres of both these instruments intended to take them away from their usual context – requesting unconventional sound materials was one method of achieving this goal. Heavy transformation processes occasionally disguised both the cultural and instrumental origin (Sound example 1). The integration of isolated single sitar plucks (Sound example 2), neck scrapes (Sound example 3) tabla knocks and attacks through studio techniques also contributed to cultural detachment. Instrument recordings made without the traditional tanpura drone accompaniment further removed typical sonorities and interval patterns associated with the musician's playing styles. Overhauling a sound's identity from the way it is traditionally experienced questioned the rationale behind using culturally tied sound in the first place, especially if a sound's use was only destined for obscurity in the end. The answer can only be found in my initial attraction to the timbres I recorded. I saw potential for these sounds to lend themselves to the creative process, while the new and unchartered territory on offer through the use of these sounds was hugely tempting within an acousmatic context. Snippets of highly referential sound were intentionally left recognisable within the mix to examine the functional role of these emblematic units of sound when placed amidst more abstract materials (Sound example 4).

3.2. Case study 2 – mixed music

New Shruti (2013) for sarod and fixed media involved a live instrumentalist on stage, which immediately posed the challenge of scoring the music for performance purposes. This piece evolved in the studio, as

[1]I refer to 'mistakes' as oddities, fumbles and general unconventional playing.

one might create an acousmatic work, where sound materials from the sarod (stringed instrument from the north, Hindustani tradition), captured beforehand in the recording studio, were edited and reconfigured into phrases around which further sonic material was arranged. Due to this approach, no formal notation was created within the compositional process. Western notation was not a requirement for my performer, so an alternative method for performance was sought. The sarod part was memorised through aural means (repetition and rehearsals) while a waveform (of the pre-recorded sarod part only), visible on stage to the performer, prompted the entry of sarod phrases as a means of synchronising both live and fixed parts in performance using a real-time scroll bar within the waveform display. In places, the accompanying electroacoustic material aimed to form a supportive backdrop to the activity of the sarod (Sound example 5) and at other times the sound material would synchronise rhythmically to mirror the sarod line precisely (Sound example 6). *New Shruti* intentionally adopted a number of key traditional Indian classical music features (tanpura drone, traditional sarod tuning, melodic ideas, *tihai* rhythmic cadences and typical *gamakas*) to both reference and honour the Indian classical music origins of the recorded sound material.

4. CULTURAL SOUND MATERIALS

The creation of these two new electroacoustic compositions prompted questions regarding the use of another's 'cultural property' and the degree of entitlement a composer's own personal identity may have when justifying cross-cultual borrowing. Before discussing this in more detail, it is necessary to address some of the fundamental issues surrounding the sounds that exhibit cultural significance. While accepting that acousmatic music 'admits any sound as potential compositional material' (Harrison 1999: 2), I am less convinced that all sounds are equal source materials, waiting to be cherry-picked from the global sound palette and integrated into new works. Variety inhibits a level playing field, as some sounds have an elevated status or exhibit iconic worth,[2] while others are widely recognised soundmarks (Schafer 1977) or sonic souvenirs (Blackburn 2011). For example, the sitar and tabla sounds, recorded for integration in *Javaari* and the Instruments INDIA archive, are two instrumental sounds with iconic status disseminated globally and widely recognised as belonging to Indian music culture. Their associations are so ingrained and often operate as clichés even when taken out of context. Some sounds have such

defined symbolic status that 'use-with-caution' stickers may virtually be ascribed as in the case of some sacred, political, private or historically significant sounds. Their use can cause offence or stir up poignant memories or thoughts. Peter Cusack's *Sounds from Dangerous Places* recordings (Cusack 2012) – for example, radiometer bleeps from the Chernobyl exclusion zone – exemplify such materials. It is easy to see how such sounds, if used in a piece of electroacoustic music, could strike an emotional chord with listeners (especially with those who are aware of the background, context and sourcing of materials). Sounds from ethnic instruments, environmental sound and language have a similar sort of baggage, and like Cusack's Chernobyl recordings, they have great potential to draw attention to current affairs, political statements and identity through their use and performance. A common issue with the use of such sounds, as I have experienced, is the perception of cultural sounds being misaligned or out-of-sync with the composer (or the medium). Audiences may struggle to find the link between the material and its context or owner, and ultimately there is the risk of such engagements appearing as nothing more than a sort of sonic fetishism. Some audiences can be quick to judge the composer when he or she seemingly has no stake in the culture being borrowed from. Sensitivity, consideration and awareness of implications when using such sounds may prove to be a useful, but far from watertight, strategy in safeguarding against potential instances of offence (Young 2008) or conflicts of ownership.

4.1. Affordances

Tracing lines of ownership is a natural part of the enquiry process for audience members, composers and academics who recognise referential sounds within the music. 'Borrowing affordance' cases (e.g. a British-born composer sourcing the sound of Big Ben or an Argentine composer integrating the bandoneon) go hand-in-hand with a form of sonic patriotism demonstrating fondness of one's homeland soundscapes. In other words, looking back to one's own past cultural heritage for sound material is afforded through the right the composer has within his or her home culture. Without this affordance composers can sometimes (but not always) face an upward struggle justifying their actions. For this very reason, it is easy to feel cut off from sounds of other nations, cultures and communities. Controversial as it may seem, this argument appears to suggest that some cultural sound palettes still remain reserved for only those who outwardly demonstrate a native connection, as stakeholders in the said culture, community or country. At this point it worth considering

[2]'For a sound to be iconic it must somehow be part of the aurality of mass media' (d'Escrivan and Jackson 2008: 3).

'the liberation of cultures from geographical enclaves' (Fischman 1999: 53) and the widening gateway to cultures and communities observed through more immediate, cheaper and direct access to cultural sound material. Despite such catalysts for inter-cultural endeavours, cross-cultural exchange and creativity, the underlying issues and struggles still remain the same. It is unfortunate, but compositional work using culturally significant sound (other than by those with a genuine claim of entitlement) can lead to a problematic and tangled web of contentious issues, confrontation, concerns and possible accusations of cultural appropriation or exoticism. The imperative and reasoning behind these compositions certainly become subjects of greater scrutiny.

4.2. Signalling allegiance and cultural identity

Understanding the concern amongst 'insiders' over the use of culturally tied sound by those who have 'outsider' status is an important side note within my discussion. To illustrate this point I would like to go back to an earlier case study from 2006 examining the views of Latin American composers displaced from their cultural origin who have now settled in the UK (Blackburn 2010). Commenting on the situation of others (outsiders) sourcing sounds from his home culture, Bolivian-born composer Augustin Fernandez experienced that there is 'no spirit behind it' as the borrowings involve only that of 'gestural surface', while composer Michael Rosas Cobian's disappoint-ment in these types of works stems from the incor-poration of stereotypical material 'for export'. These reactions present a dissuasive enough argument to fend off composers from jumping head first into cultural borrowing. Such apprehension around entering the realm of intercultural composition is understandable considering these perspectives. An equally important finding from this earlier research, and one which is relevant within the context of this article includes the communicative ability of the cultural sound material used by all eight composers involved in the study. Fernandez described his tape work *Silent Towers* (1990) incorporating recordings of the charango (a Bolivian instrument he was trained in, in his youth) as a work that 'takes on a hybrid character somewhere between that of synthesis and the traditional instrument itself'. Incorporations are explained as creating a habitat for one's own cre-ativity and a means of 'signalling allegiance to where one belongs culturally' (Blackburn 2010). As an outsider to Indian classical music and culture, I became heightened to this type of 'signalling' and its operation in both *Javaari* and *New Shruti*, due to the appearance of referential sound material. The main difference was that I was not seeking to communicate cultural identity, just simply to showcase and explore

newly discovered sound material within the context of my compositional practice. Since the electro-acoustic music medium (including acousmatic and mixed formats) allows for a more immediate and apparent suggestion of culture (not simply implying or imitating cultural flavours as commonly found in Western classical music) there will always be a signalling dilemma for the composer.

4.3. Finding your compositional voice

Composing intercultural electroacoustic works as part of the Instruments INDIA project created a challenge regarding how much of the culture being borrowed from should be reflected within the new works and whether this should be at the expense of my own compositional voice and creative intentions. This push–pull struggle between acknowledging and/or honouring the cultural source, while exerting compositional voice appeared to call for compromise. Simon Emmerson has previously encouraged com-posers who engage in cross-cultural exchanges to be 'aware of what is lost in an intercultural transaction' (Emmerson 2006: 8). This aspect of loss is something *Javaari* has already come under fire for, as some audience members have commented on the absence of typical aspects associated with Indian musical instrument sounds. As one critic stated, 'The drone or the meter/tala, and impact is lost, so their inclusion begins to seem like a necessary exoticization rather than teasing out something new' (Sannicandro 2012). Swinging too far one way, for example, through the determined exertion of your compositional voice via a backlog of tried and tested sculpting, processing, and shaping methods risks 'the pursuit of the exotic and diverse end[ing] in uniformity' (Urry and Larson 2011: 8). This uniformity may refer to a composer's typical trademark gestures or signature sound, or the effect of abstraction in general. The extreme opposite is equally questionable, where one's compositional sensibilities and aesthetics are entirely abandoned over new forms, styles and structural devices belonging to the other genre's cultural makeup. At this point the composer may ask 'where am I within this work and is my identity reflected in this piece?'[3] To demonstrate these considerations, a scale of bor-rowing is plotted in Figure 1, outlining the range of options in intercultural compositions.

   The point here is not to deter composers from exploring the extremes of the scale or even to propose

---

[3]'I cannot become an Indian-trained musician overnight. But my own existing faculties must not be applied in ways which lose what I myself observe excites me in the music. To state such an obvious point needs explanation: There are plenty of examples of compo-sers killing stone dead the spontaneity and vitality which they themselves admire in non-western music through insensitive appropriation of surface technique' (Emmerson 2000: 127).
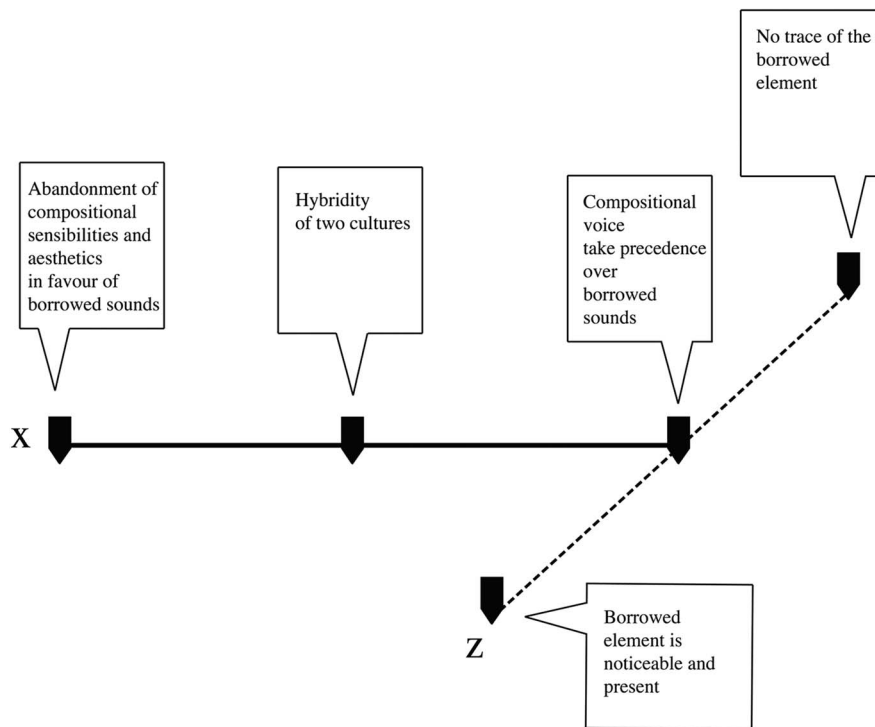
Figure 1. Scale of borrowing.

the supremacy of a balanced, middle-way model, or any other particular position. Instead, the scale's objective is to demonstrate the variety of approaches on offer when composing intercultural works. It is proposed that the x axis refers to contextual issues and can also take account of structure and form, while the z axis acknowledges source bonding, the sound material and overall outcome. The z axis also presents a practical expansion taking account of works that stay true to the compositional voice, but vary in context abstractness. Some pieces have sections classified at different points of the scale as in the case of Simon Emmerson's work *Pathways* for flute, cello, sitar, tablas, keyboard and live electronics, commissioned by the Shiva Nova Ensemble. Overall, this piece floats around the midpoint (hybridity of two cultures) but there are times where live electronics take a more foreground position (e.g. Movement 1, opening material) where the sound material clearly signals something other than Western or Indian classical music traditions (suggesting a move to the right of the scale). In a different example, Bret Battey's body of work involving Bézier spline modelling (Battey 2004) of continuous expression data that uses Hindustani classical music, and more specifically Khyal vocal recordings, as templates for composition and video construction, suggests a position towards the right of the scale. When the cultural sounds themselves do not make it into the composition, but are fundamental to the construction,

we may plot a more distant position on the z-axis indicating no trace of the cultural sound.

The scale creates a parallel with Emmerson's concept of 'masking':

> Throw two traditions of music making together and aspects of one may mask aspects of the other (sound subtlety, performance practice tradition and aesthetic intent). This may be inevitable in any intercultural work as there are bound to be incompatibilities. But we must ask – have we masked something 'significant' as seen from within the culture? This is important because if we continue this musical exchange, in time the masked element may disappear as it no longer functions within the music. (Emmerson 2006: 8)

It is here where I believe compromise can emerge as a by-product of hybridisation when striving to strike a balance between borrowed cultural material and personal composition intentions.

4.4. Cultural studies

I have found it useful to place my intercultural activity within the larger context of cultural studies and its exisiting discourse as a means of understanding and overcoming certain project-specific challenges encountered in this practice-based research:

- A handful of recordings were made in India (shankha, uddukai and sarod), and this process of

going into another's 'territory' did carry the unavoidable air of cultural tourism. This issue appeared to be more of a concern to me than to the contributing musicians. For practical reasons (e.g. access to a recording studio), the majority of the instrument recordings took place in the UK. Justifying one's actions when engaging in intercultural projects appears to be a more integral part of the process than embarking on a project using 'everyday' sound recordings, such as keys, pots and pan or cutlery. With these more common and abundantly found sounds, I would not feel it necessary to explain, justify or seek permission for integrating them into a new composition. Nor does it feel obligatory to educate oneself in the history or traditional use of these items.

- The compositional activity leading to the recontextualisation of cultural sounds (my recordings of Indian musical instruments) can be 'inserted into a new system of exchange … the original meaning is decoded or deterritorialied and quickly recoded as something else, according to a new system of meaning determined by outsiders with different values and agendas' (Root 1996: 84). Observable 'recoding' of sitar figurings and tabla rhythms occurs in my acousmatic work *Javaari*, where a new system of meaning is attached to the newly isolated cultural object, which becomes subject to this system of meaning (Sound example 7). In this sound example, the repeating sitar loop at the start acts an onset for the sustained drone. The sitar note is reshaped creating a typical cause and effect gestural behaviour common to acousmatic music. The reverse sitar material at the end of the drone also functions in the same way as it builds to an event in a causal fashion.

- John Urry's definition of the 'Tourist Gaze' (Urry and Larson 2011) provided a helpful analogy to what we might call the 'tourist ear'. Like our eyes upon unfamiliar, unencountered sights, our ears provide us with an insight and a way of hearing the world which subsequently forms what is heard and how we hear it. My intercultural works probably result from the 'tourist ear', where exposure to novel, previously unheard materials initially fuelling attraction to this cultural soundworld led to the production of new music. The way we hear these sounds for the first time is likely to be different from the way we hear more familiar, everyday sounds. At the start of the project I asked the question 'Do relationships with cultural sound change over time; for example, at what point do sounds stop being unfamiliar and exotic?' I am sure that, with time, perception does evolve so that we become accustomed to and more discerning of once unfamiliar sound.

5. INSTRUMENTS INDIA: SOUNDFILES AND REPRESENTATION

In its current format, the sound archive presents audio excerpts generated from one performer of each profiled instrument. Single soundfiles, streamed online, do not in themselves summarise or represent each instrument's complete performance tradition or capabilities.[4] The totality of each instrument is impossible to encapsulate on each webpage profile, therefore the archive may be viewed as an edited snapshot of currently active Indian classical musicians working in the field at this point in time, as well as a demonstration of the uniquely individual playing styles in circulation today. A cross-section of the entire curatorial process leading to the sounds found online reveals a multitude of decision-making milestones of great implicative value, the first of which was the initial selection of the musician. Instructions given in the recording studio produced a further layer of complexity as some musicians relished the opportunity to produce a wide range of different representational excerpts, while others were content to produce a single sample that they felt summarised their playing style succinctly. Selecting excerpts of these recordings for public auditioning on the website charged me with the task of exhibiting appropriate sound material that best typified the instrument's timbral character and playing style. At first glance, there is some irony in this responsibility being managed by a novice in the field of Indian classical music; however, a non-expert's involvement in the process may be viewed as advantageous since this offered an unbiased perspective, not favouring one playing style, instrument or sound material over another. The freedom for performers to showcase their instrument's capabilities was not compromised by any preconceived notions of technique, timbral characteristics or playing standard since these were all unknown quantities at the time of recording. Another benefit of my outsider status, likely to have greater impact further down the line in the lifetime of the Instruments INDIA project, is an inquisitive nature harnessed while recording each instrument. Information around performance techniques, instrument construction, historical significance and context acquired through musician interviews during this time shed light on many nuances likely to be of interest to new audiences unaquainted with Indian classical music: for example, 'why is the Indian violin held differently from a Western violin?', 'What is the

---

[4]This has also been noted by Simon Emmerson in relation to his work *Pathways*: 'Do I label the Indian-trained members of Shiva Nova as representative of "their" tradition? The schools of vocal or instrumental performance (gharanas) are as varied and rival each other as do the performance traditions of western Europe' (Emmerson 2000: 118).

small box on stage next to the performer called and what does it do?' and 'How many strings are there on a santoor?'

5.1. The online sound collection

The profiling of 27 instruments on the website presents a snapshot of all the material recorded. A much larger store of full-quality, unedited audio remains behind the scenes within a central repository, carefully archived for future use. Plans are in the pipeline to commission new electroacoustic music works from this archive as a means of keeping the initial line of enquiry open over the use of cultural sound use, whilst propagating further interest in intercultural creativity. There is also the intention to expand the sound archive with an emphasis on capturing material from further folk and devotional instruments with a lesser-known presence outside of India.

6. CONCLUSION

The Instruments INDIA project intentionally set out to confront a number of contentious issues associated with cultural sound borrowing and use. The controversy of this subject matter both attracts and intimidates due to the vexing and often unanswerable questions thrown up in the process. The article has attempted to lay a number of these issues bare so as to invite consideration for the multitude of issues one might face when composing intercultural works.

The creation of new electroacoustic works using sound material from Indian instruments led to a personal evaluation of my intentions in the studio. My actions in obscuring or retaining a sound's cultural identity appeared to be considerably more consequential to the signalling process, and thus a more central concern than previously experienced in works not using culturally significant sound. Understanding the signalling potential of cultural sounds when integrating them into one's music is a responsibility faced by any composer engaging in intercultural creativity. In my case, the sounds chosen as source material demanded my attention and understanding more so than in any of my other pieces composed to date, due to their musical tradition, context and iconic status.

And finally, as the Instruments INDIA website goes live, it is intended that users (young learners, concertgoers, interested laypeople and eventually other composers) will benefit from the collection and the information it holds. My own discovery of this performance tradition has certainly shaped the outcome of this resource and my own creative process.

Supplementary materials

To view supplementary material for this article, please visit http://dx.doi.org/10.1017/S1355771814000089

REFERENCES

Battey, B. 2004. Bézier Spline Modeling of Pitch-Continuous Melodic Expression and Ornamentation. *Computer Music Journal* **28**(4): 25–39.

Bhabha, H. 1994. *The Location of Culture*. New York: Routledge.

Blackburn, M. 2010. Electroacoustic Music Incorporating Latin American Influences: A Consideration of Implications, Reception and Borrowing. *eContact!* **12**(4), http://cec.sonus.ca/econtact/12_4/blackburn_influences.html (accessed 6 May 2013).

Blackburn, M. 2011. The Sonic Souvenir: Issues of Cross-Cultural Composition. *Electronic Music Studies Network Conference Online Proceedings*, http://www.ems-network.org/IMG/pdf_EMS11_Blackburn.pdf (accessed 13 April 2013).

Blackburn, M. and Nayak, A. 2013. Performer as Sound Source: Interactions and Mediations in the Recording Studio and Field. Unpublished conference paper from the Electronic Music Studies Network Conference, Lisbon, 2013.

Cusack, P. 2012. *Sounds from Dangerous Places*. London: ReR.

d'Escrivan, J. and Jackson, P. 2008. Applied Plunderphonia: Tagging Electronic Music with Electronic Music. *Electronic Music Studies Network Conference online proceedings*, http://www.ems-network.org/ems08/papers/escrivan.pdf (accessed 10 March 2013).

Emmerson, S. (ed). 2000. *Music, Electronic Media and Culture*. Aldershot: Ashgate.

Emmerson, S. 2006. Appropriation, Exchange and Understanding. *Electronic Music Studies Network Conference Online Proceedings*, http://www.ems-network.org/IMG/pdf_EmmersonEMS06.pdf (accessed 15 April 2013).

Fischman, R. 1999. Global Village, Local Universe: A Statement of Identity. *Leonardo Music Journal* **9**: 53–62.

Harrison, J. 1999. Imaginary Space: Spaces in the Imagination. Australasian Computer Music Conference keynote address, http://cec.sonus.ca/econtact/ACMA/ACMConference.htm (accessed 03 March 2013).

Root, D. 1996. *Cannibal Culture*. Boulder, CO: Westview Press.

Sannicandro, J. 2012. A Closer Look: Montreal's AKOUSMA Festival, *A Closer Listen* (19 November), http://acloserlisten.com/2012/11/19/a-closer-look-montreals-akousma-festival (accessed 4 February 2013).

Schafer, R.M. 1977. *Our Sonic Environment and the Soundscape: The Tuning of the World*. Rochester, VT: Destiny Books.

Urry, J. and Larson, J. 2011. *The Tourist Gaze*. London: Sage.

Young, J.O. 2008. Profound Offense and Cultural Appropriation. *The Journal of Aesthetics and Art Criticism* **63**(2): 135–46.