

## Cambridge Companion to Women in Music since 1900

### Women and Music Technology

#### In her own words: Practitioner contribution 3

### **1. Introduction**

This chapter documents a series of compositions created between 2013-2018 where my compositional process and research trajectory distinctly changed as a result of life changes. My work as an electroacoustic music composer has consistently explored sound recordings of objects, instruments and environments captured from the real world. My interest in this field was cultivated during my undergraduate Music degree at the University of Manchester where I learned how to combine composition with computer technology.

My earlier fixed media works (from 2006 – 2013) exhibited a preoccupation with foreign, unfamiliar and exotic sound sources. Armed with a portable field recorder, I travelled the world to capture culture-specific sound materials; anything from street musicians, jukeboxes, languages and traditional instruments. I would bring these sonic treasures home like souvenirs<sup>1</sup>, unpack them and give them pride of place within my fixed media compositions. These globally sourced sounds can be heard in my works *Sonidos Bailables* (2006), *Cajón!* (2008), *Dance Machine* (2009), *Karita oto* (2009), *Javaari* (2012-13) and *New Shruti* (2013), where the search for sound involved field trips to Argentina, Mexico, Portugal, Japan and India respectively. A shift in focus to home-sourced sounds led to the creation of a series of works derived entirely from domestic sources - *Time will tell* (2013), *Ice Breaker* (2015), *Snap happy* (2017) and *Landline* (2018). The shift was propagated by a significant life-changing milestone; the birth of my two children.

### **2. The domestic and creativity**

Having two children in close succession resulted in more time spent around the home and less time traveling overseas for recording projects. This elongated time at home was unusual and grounded me in a single location for long stretches of time both in the pre- and antenatal stages. Sounds found around the home, which had always been there, suddenly became points of inspiration for compositional work, since I noticed and appreciated them more for their consistency and association with my home space – I was also around them more than usual. These home-based sound sources became viewed as personal sounds and began to mean more to me as they marked out a period of time that signified importance and change. This shift in sonic focus functioned as a reminder of the emotional connections and memories one can have with personal possessions, which one is surrounded by daily. The re-imagining of the domestic ‘mundane’ is a sentiment shared here with sound artist, Felicity Ford and her concept of the ‘domestic soundscape’<sup>2</sup>. Ford’s use of everyday sound as documented in her research has been used to highlight daily activities that take place within the home such as home decorating, knitting and cooking and other sounds from the kitchen. The home environment as an impetus for creating music is not by any means a novel or exclusively

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<sup>1</sup> Blackburn, “I have coined the phrase ‘sonic souvenir’ to encompass culturally tied sounds/sound objects that are not common or familiar to ones own cultural heritage or immediate surroundings. The sonic souvenir is a relative concept dependent on individual backgrounds”, in ‘Importing the Sonic Souvenir: Issues of Cross-Cultural Composition’, Electroacoustic Music Studies Network Conference proceedings, New York, 2011 ([www.ems-network.org/IMG/pdf\\_EMS11\\_Blackburn.pdf](http://www.ems-network.org/IMG/pdf_EMS11_Blackburn.pdf))

<sup>2</sup> Ford, “My work to date with the domestic soundscape has been about subverting the idea that domestic sounds are rubbish, boring, unimportant, and celebrating the special sonic textures of home - particularly in relation to women’s lives and history.” (2017).

(female) gendered approach, take for example the kitchen environment which has inspired a wealth of electroacoustic music repertoire<sup>3</sup>:

- Jonty Harrison's *Klang* (1982) uses two earthenware casseroles dishes as the sole sonic material.
- Paul Lansky's *Table's Clear* (1992) uses kitchen utensil sounds and recordings of a domestic scene in a kitchen.
- Matthew Herbert's *Around the House* (2002) uses samples of washing machines, toasters and toothbrushes processed into swinging grooves.
- Konstantinos Karathanasis' *Ode to Kitchen* (2015) showcases hundreds of sounds from kitchen objects clustered together.
- Matmos's *Ultimate Care II*, derives every sound from the duo's washing machine. The 38-minute duration mimics a single wash cycle.
- Amon Tobin's *Kitchen Sink* (2007) constructs trip hop music through looped samples of water splashing and pans clattering inspired by *musique concrète* processes.

Exploring the work of installation artist Fran Cotel and her *House Projects* (2001) furthered my interest in this area. Cotel's own domestic home space was converted into a 'museum' venue accessible to visitors, initially established for the public to view "the honesty and truthfulness of mess over domestic order."<sup>4</sup> In one of these projects visitors had access to Cotel's home through specially constructed walkways to observe the reality of domestic life (with young children) along with the objects that inhabited this space.

Assessing the domestic through the perspective of anthropology, Csikszentmihalyi and Rochbert-Halton's publication - *The Meaning of Things* has also shaped my understanding of the relationship of the self to personal objects (like those objects that appear sonically in my music). This text suggests that: "to understand what people are and what they might become, one must understand what goes on between people and things. What things are cherished, and why, should become part of our knowledge of human beings."<sup>5</sup>

The home as a site for artistic creation and contemplation has clearly inspired many, but there is something curiously subversive about the mix of motherhood and the use of domestic objects as a means for creativity within the examples I have encountered. The remarkable (and often unbelievable) time and spaces these examples emerge from is also worth a note here - finding a window to 'make' and continue practices in light of children arriving on the scene is significant and provides the subject for a growing body of practice from voices discussing and representing this impossible juggling act (consider the national initiative Mothers Who Make<sup>6</sup>). Academic study has also begun to follow suit as articulated by the work

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<sup>3</sup> Despite these objects' association with the kitchen and the domestic, Ford reminds us that in these musical examples "the whisk does not whisk eggs or milk; the saucepan is not used for cooking food. These utensils instead become surrogate musical instruments extricated from their domestic environments and imported into contexts of music primarily for their sound-producing qualities rather than their links to other realms of experience or meaning such as home, meaning, domestic labour or the sustenance of the body." (2010:20).

<sup>4</sup> Fran Cotel states that "The focus then shifted to the visitors who with the occupants discussed their relative stays bringing into play conflicting and contradictory power relations", (accessed 05/06/19), <http://www.francottell.com/>

<sup>5</sup> Csikszentmihalyi and Rochbert-Halton, *The Meaning of Things: Domestic Symbols and the Self*, Cambridge University Press, 1981, p1.

<sup>6</sup> Associate Director of Mothers Who Make, Matilda Leyser, noticed "many parallels between the two roles [of artist and mother]: both are concerned with creativity and play, both require stamina, patience and sensitivity. Both are fuller than full time. This is work that will not be left behind at

theories of dance practitioner Sarah Black. Black's research<sup>7</sup> has led to new terminology when she considered the combination of creative practice and mothering. Her concepts of 'maternal ethics', 'mother as curator' and 'mother-artists'<sup>8</sup> are particularly significant in this context.

My collection of compositions, under the heading of 'Domestic Bliss', adds to this emerging body of work from women practitioners that document periods of transition, while still eager to be creative. My contribution, from the perspective of a woman electroacoustic music composer, discusses decisions to use home-sourced sounds in my music making, and explains the connection these sounds have to my changing circumstance. From the outside, and without this chapter as evidence or verification, listeners of my compositions are unlikely to receive this level of context, significance or meaning, but to myself, as composer, I look back on these works and catch the symbolism, memories and connections embedded within the timbres and structures.

### **3. Domestic Bliss (2013-2018)**

#### ***Time will Tell (2013)***

In 2013 I was given a commission from EMPAC (Experimental Media and Performing Arts Centre, Troy, New York). This residency in spring 2013 gave me access to the Goodman Studio<sup>9</sup>, a team of technicians and *carte blanche* to create a new work for performance at EMPAC. On arrival my only preconception for a new composition was to continue my interest in short sounds (initiated in my earlier work, *Switched on*, 2011). Part of my sound collection activity led me to a clock shop in a nearby town, Waterford. These clock sound recordings were added to my collection as part of my residency, including sounds of the EMPAC building, the surrounding environment and a thunderstorm I experienced during my stay. On return from my residency I continued to work on sound materials I had gathered, but it was my extended malaise with *hyperemesis gravidarum* that solidified my focus upon clock sounds featured in *Time will Tell*. Non-stop sickness and the knowledge that symptoms might ease off in the second trimester kept my mind on the passage of time, checking off dates on the calendar and working on the mantra of 'taking one day at a time'. Hearing the sounds of the house during this seemingly endless 'house-bound' time was a new experience, one that I had not previously had the 'luxury' of. The previously unnoticed clocks tick-tocking in the house that continued to mark out each day found their way into my commission. *Time will Tell* was premiered in EMPAC in November 2013 when I was four months pregnant.

#### ***Ice Breaker (2015)***

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5.00pm, work that wakes you up at night, concerned with fundamental questions of identity, looking after and making sense of who we are, where we have come from, who we might become".

(<https://www.improbable.co.uk/motherswhomake/>)

<sup>7</sup> Black emphasises a sensitive approach to art-making with children and family, and consider implications of using the home as a site for the dissemination of an art practice. The research imperative stems from her engagement with 'family art practice' where art making is facilitated from working with family/children. This body of work questions the vast complexity of ethical procedures of presenting public art in ones own home (an open house), involving ones children in 'play as art' and how visual artists can document the mother as artist as a means of making this more visible and accepted in today's society and culture (see 'Mother as curator: performance, family and ethics, PhD thesis, University of Middlesex).

<sup>8</sup> Sarah Black, 'Mother as curator: performance, family and ethics', PhD thesis, Middlesex University Research Repository, (accessed 20/08/19) <http://eprints.mdx.ac.uk/25913/>

<sup>9</sup> The Goodman studio at EMPAC can be viewed here:

<https://empac.rpi.edu/about/building/venues/studio-1-goodman>

My first daughter was born in June 2014. The summer of this year was unusually hot for the UK and I remember ice cubes becoming the 'soundtrack' to this time. Copious cold drinks, ice packs, cooling down and wanting to live in the freezer to escape the heat initiated my fascination with the phenomenon of differential expansion. Placing ice into drinks resulted in the satisfying cracking sound of the ice expanding due to the sudden change of temperature. Five weeks postpartum I developed sepsis and as a result, spent all of my maternity leave recovering. Recording ice crack and pop sounds was a welcomed distraction conducted at nap times. *Ice Breaker* was premiered in the L'Espace du son festival at Théâtre Marni in Brussels, Belgium in 2015, 16 months postpartum.

### ***Snap Happy (2017)***

Part way through my second maternity leave in 2016 I discovered a box filled with old cameras, which had been tucked away in my loft for some time. After contemplating the camera function on my iPhone which adopted the classic shutter sound to accompany picture taking, I realised these recently discovered older-style cameras had much more to offer in the sound domain such as flashes, zooms, clicks, film roll winds, disc cartridge cranks and function button switches. The use of my camera in this antenatal period struck me as a fundamental part of bonding, capturing the passage of time, gathering one-off moments and documenting developmental milestones that would freeze these memories amidst my particularly acute sleep deprived state. I chose camera sounds to represent this 'happy' time. *Snap Happy* was premiered in the Martin Harris Centre for Music and Drama at the University of Manchester, UK in 2017.

### ***Landline (2018)***

The discovery of my landline phone behind my sofa, caked in dust, reinforced how little this household object had been used in recent times. This discovery took me back to my memories of the rotary phone my parents had in my childhood home. This shiny black patent object took pride of place in the hallway, complete with telephone table and phone book - it was the first object to greet you as you entered the home. Like the cameras I stumbled upon in my loft, the phone as a device had undergone great developments rendering the older styles obsolete. My role as composer was to document these changes sonically, fix these endangered 'historic' sounds within a musical form and also to celebrate the newer sounds emitted by modern phone cameras. In my composition I explored dial tones, touch tones, rings and ringtones, the engaged tone and rotary dials from older phones. I received permission to use a rotary dial phone sound from Conserve the Sound<sup>10</sup> online museum as it approximated the sounds of the phone in my memory, since my parents no longer had possession of the phone I recalled from my childhood. This work became concerned with recreating a domestic space from a childhood memory - a time hop to an earlier time, forced from the reflections I had been having of being a child, which tends to happen after having children. *Landline* was premiered at Edith Cowan University in Perth, Australia in 2018.

## **4. Process**

The second part of this chapter provides insight into two key features that guided my process within this body of work.

### **Short sounds focus**

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<sup>10</sup> Rotary phone sound sourced from Conserve the Sound project, (accessed 04/10/17), <https://www.conservethesound.de/en/> (telephone name: Fernsprechtischapparat, Manufacturer: Deutsche Bundespost).

Short sound use has dominated my compositional output as exhibited in the Domestic Bliss series of works. Focus upon brevity increasingly directed the capturing, editing and sequencing of sound. Working with such minutia (soundfiles of approximately 100-1000ms in duration) has required great patience and time to cultivate length from tiny components. This careful focus on miniature detail of each individual sound shifted attention of macro structuring onto more finite intricate timbral shaping. Treating these single, particle-like materials as mini compositions contributed to a more overall enriched, embellished and complex sound. In isolation, individual soundfiles can appear too brief to make any significant statement, but piecing them together, *en masse*, brings vibrancy and interest to sustain a gesture, a phrase, a section and eventually a composition. This accumulation of small materials has always fascinated me; in the same way a pointillist painting reveals an overall image from a multitude of individually coloured dots. Up close, the dots do not say much on their own, but standing back enables a cumulative effect to emerge, something with detail, clarity and complexity. This methodology was inspired by Horacio Vaggione's concept of 'micro-montage'<sup>11</sup>, but differs in construction, since all sound placements and sequencing is manual (piecework) within a digital sequencer and independent of automated systems. Micro-montage is described as "the assembly of many short sounds in high densities" (Roads, 2000:296) and links closely with the concept of both micro-sound and micro time scales. In this technique, a "composer extracts particles from sound files and rearranges them in time and space"<sup>12</sup>. The term 'extraction' is important here since it implies fragmenting, truncating or the cutting short of an existing sound. My own preference has always been upon wholeness as opposed to truncating. There is an audible difference in working with fragmented sound versus naturally short sound material. This is primarily due to the 'organic' decay inherent in the naturally occurring short sounds. Fragmenting also removes a sound's transient information and its trajectory, resulting in a sense of incompleteness.<sup>13</sup>

As my work has developed in this area, I have continued to believe the smaller the sound, the better. In the works discussed above, I purposely sought out sounds that had short-lived durations. *Time will tell* (2013) embraced brevity together with dynamically subtle or barely-there presence. Recording clock tick-tocks, chimes and strikes from a multitude of clocks demonstrated how muted these sounds had become, perhaps through consumer preference over time. This work encouraged me to look at 'hyper-real magnification', known as "the exaggeration of feeble sounds for expressive effect... analogous to the blowup technique in photography, which greatly magnifies a detail on an image."<sup>14</sup> Sound material collected from a standard wall clock ended up providing punctuating impacts using this magnification technique. Internal clock mechanisms giving delicate whirs, and pings resulted in larger than life cogwheels churning in oversized timepieces. *Ice breaker* (2015) took short 'blink-and-you'll-miss it' sound collecting to new heights as I explored novel ways to capture brevity. Ice was required fresh out of the freezer to maximize the chances of it cracking in water - any delay, and this sound would not happen at all. Small lavalier microphones were used to capture the cracks and pops of the ice suspended in glasses of varying sizes for pitch variation. Working in this way bucked the trend for more overtly grandiose sound, powerful evasive

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<sup>11</sup> Curtis Roads, 'The Art of Articulation: The Electroacoustic Music of Horacio Vaggione', *Contemporary Music Review*, Vol.24(4), 2005, p299: "Horacio Vaggione deploys microsounds in a non-metrical manner. Micromontage is an essential component of the Vaggione style."

<sup>12</sup> Ibid, p299.

<sup>13</sup> Ideas about obtaining short soundfiles for creative work are articulated more formally in Blackburn, 'Working with Brevity: Short soundfiles in electroacoustic music', International Computer Music Conference, Conference Proceedings, New York, 2019.

<sup>14</sup> Curtis Roads, *Composing Electronic Music: A New Aesthetic*, Oxford University Press, 2015, p86.

masses and vast landscapes of sound typical of the acousmatic music genre, since my focus remained on the minute and delicate.

### **Pitch content and the harmonic soundworld**

Pitch, harmony and tonality are all noticeable upon listening to my compositions. That said, when creating these work, I cannot recall a work which started out with any pre-planning, scheme or pitch map of what I wanted to realise, instead these decisions are formed as a result of working with the materials in front of me. Being led by my ears is a process that demands repeat auditioning to confirm decision-making. Spending up to a year on each piece certainly provided ample listening time to cultivate harmonic relationships across the entirety. I actively chose pitched material to record, for its interest and ability to lend itself well to the processing tools used. On the whole, pitch relationships within a composition tend to occur as a result of 'trial and error' attempts while composing. Pitches that work well together, that collide and juxtapose serendipitously can turn out to be defining features in my music, reinforcing the need for ample exploration of materials in the initial stages of work, enabling by-chance happenings or happy accidents. Dissonances tend to be avoided in the sequencing stage, where I tend to omit sound materials that jar, oppose each other or create a greyness, or as I term it, 'sludge' or 'durge'. Just like the mixture of every paint on a colour palette creates an unappealing grey-brown, the mix of all or any pitched sound available can create an unappealing sonic mess. My ear is attracted to consonance, as exploited in the sustained drones found in *Landline* (2018) created from looped dial tone frequencies. Pitch relationships are often repeated to reinforce intervals that work particularly well. Interval relationships can sometimes define the composition's identity, as in the case of *Ice Breaker* (2015) and *Snap Happy* (2017) since alternating intervallic relationships appear throughout their durations. Working with pitch in the compositional stage has often involved me 'singing' the notes as a means to find complementary pitches to develop intervals and harmonies from selected sound recordings. In *Landline* (2018) the connective sustained material are used to transition from section to section. These sustained dial tone frequency lines provide the backbone over which I adorned gestural material, mainly comprised of hundreds of short, tightly packed sound materials.

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