

**Meeting the Garden Halfway: Ethnographic Encounters with a Sound
Installation Microculture**

Ethnography and the Practice of Sound Art

Sound art as a practice harnesses, describes, analyzes,
performs, and interrogates the condition of sound and the
processes by which it operates. (LaBelle 2015:xi)

The idea of sound art as a “practice” is powerful and pervasive, yet partial. Amid ongoing debates about definitions of sound art, its interdisciplinary and inter-art form status, and its uneasy relationship with work- or genre-based categorizations (Licht 2009), the idea of “practice” works to keep sound art’s history and future open-ended, its incarnations ontologically fluid, and the activities of its “practitioners” plural and processual.¹ Yet an emphasis on theorizing the critical, political, and philosophical significance of sound art practice (e.g. Kim-Cohen 2009; Kouvaras 2013; LaBelle 2015; Licht 2007; Voegelin 2010) has often eclipsed consideration of other, more localized, tangible, and mundane activities involved in making sound art. Existing literature focusses surprisingly rarely on the processes by which practitioners design or mix sound art, and more rarely still on tasks such as laying cables, installing cooling fans or positioning speakers.² Where it does, these are often only addressed in passing as technical features of finished works or as a mere preamble to the wider

“artistic practice” of sound art. This neglect is even more stark in the literature on sound installations, “sound works that privilege concepts and experiences of space and place” (Ouzounian 2008:33; emphasis removed). Given the prevalence of “site-specific” and “interactive” as qualifiers of “sound installation,” and keen interest in sound art’s spatiality, it is surprising that scholars have rarely asked *how* installations are installed into or adapted for specific sites and made interactive *in practice*.³ The reasons for this partial analysis are not my main concern here, but no doubt the relative lack of ethnographic studies of sound art is a major factor.⁴ Perhaps more than any other method, ethnography offers opportunities to catch practices in the act of world-making. By exploring the process of designing, installing, and mixing one site-specific, interactive installation, this article suggests directions for the social and cultural study of sound art, a topic largely neglected within ethnomusicology to date (despite ongoing engagement with the, sometimes overlapping, area of Western art music; see Nooshin 2011).

Conceived and co-composed by Genevieve Lacey, *Pleasure Garden* is an outdoor installation inspired by the music of Dutch composer, improviser, and performer Jacob van Eyck (c. 1590-1657). Genevieve, a prominent Australian recorder player, collaborated on the project with Norwegian producer and musician Jan Bang (as co-composer), Australian sound engineer Jim Atkins (sound design), Australian audio-visual artist Robin Fox (system design), and several others (see www.pleasuregarden.com.au). Elsewhere I describe the longer story of *Pleasure Garden*, from conception to reception via multiple “iterations” including a CD, several installations and live performances (Current Author, Article 1, Article 2). This article focusses on the installation of *Pleasure Garden* into the garden of Vacluse House in Sydney, just before it was opened to the public. I spent time with the team

during the installation period (4th-7th January 2016) and during preparations in Melbourne in late 2015. Variouslly described as a “listening garden,” “interactive instrument,” and “kinetic sound sculpture,” *Pleasure Garden* was installed, as part of the 2016 Sydney Festival, in the historic (mid-nineteenth-century) pleasure garden of Vaucluse House, a colonial era estate managed by Sydney Living Museums and located in the wealthy, harbor-side suburb of Vaucluse in eastern Sydney.

This article adapts the title of Karen Barad’s (2007) book *Meeting the Universe Halfway* (itself borrowed from the poem *Cascade Experiment* by Alice Fulton [2004]) to describe the process of installing *Pleasure Garden* in Vaucluse. By “meeting the garden halfway,” the creative team staged an encounter that involved both responding to and reshaping the installation-in-the-garden, negotiating its constraints and contributions through emergent practices. Questions of agency are central here, and Barad’s notion of “intra-action” or “the mutual constitution of entangled agencies” offers a useful starting-point for tracing how *Pleasure Garden* was made:

in contrast to the usual “interaction,” which assumes that
there are separate individual agencies that precede their
interaction, the notion of intra-action recognizes that
distinct agencies do not precede, but rather emerge through,
their intra-action. (2007:33)

For Barad, intra-actions entail not only the emergence of distinct agencies, but also materials, space, time, meanings, subjectivities, and more – indeed “the world is intra-activity in its differential mattering” (2007:141). Barad’s far-reaching, deeply

relational theory is challenging to think with, but resonates with my ethnographic experience of *Pleasure Garden*. Drawing Barad's ideas into this narrower setting, I argue that installation practices, far from being mundane activities subservient to "larger" artistic agendas, are in fact richly complex intra-actions through which a diverse range of contributors come to matter (or not), ontological differences are entrenched and undone, spaces are given shape, and attentive relationships are cultivated between people and world.⁵ *Pleasure Garden* offers a productive case study in part because of what I describe elsewhere as the project's "quasi-autonomist" stance: its creators conceived it as emergent and open, not guided by a strong artistic agenda or political message (although see Current Author, Article 2, for a discussion of the many, occasionally politicized, interpretations that nonetheless gathered around the project). As such, it provides an opportunity to seek social and cultural significance in the *act* of installation as much as its conceptualization. My aim throughout the article is to focus on practices as forms of world-making that are in dialogue with, yet irreducible to, pre-existing cultural categories. Rather than reading notions such as "natural" or "technological" onto *Pleasure Garden*, I consider how such categories were, in practice, both repeatedly reinscribed *and* undermined, through an oscillatory dynamic characteristic of (what we might gloss as) Western late modernity (after Gautier 2006).

Entangled Agencies: "Whipbird"

Once open, *Pleasure Garden* ran from 8:00 a.m. to 8:00 p.m. for 20 days, looping a roughly 55-minute cycle of 14 tracks. Ten of these were co-composed by

Genevieve and Jan (and in one case Jim), often drawing on van Eyck's compositions for inspiration or actual musical material. They are populated by diverse recorder sounds – performed by Genevieve on several different instruments and utilizing various extended techniques – as well as field recordings, predominantly of birds, bells, and carillons. Interspersed among these new compositions are four “interactive” tracks: recordings of Genevieve's performances of pieces from van Eyck's *Der Fluyten Lust-Hof*, during which audience members' movements would trigger a variety of sounds, including recordings of bells, cicadas, and frogs. Tracing the story of one of these 14 tracks helps to orient my exploration of *Pleasure Garden*.

The central refrain of track 7, “Whipbird,” comes from a field recording of Eastern Whipbirds (*Psophodes olivaceus*) made by Jim and Genevieve in Bermagui, New South Wales, in 2015. Later, while composing *Pleasure Garden* at Jan's studio in Kristiansand, Norway, Jan was especially taken with this recording and asked Genevieve to try to make sounds in a similar frequency range on her recorders, sparking a creative process that led to the final track. Collaboration seems to be built into “Whipbird” from the beginning: whipbird calls are often produced antiphonally, with a male bird making a whip-like glissando before the female contributes a “chew chew” response. Their calls are skillful, coordinated acts, performed “so precisely that the resulting song appears to emanate from a single individual” (Rogers 2005:158; also Watson 1969). From there it is easy to add further contributors and collaborators: Jim and his microphones, Genevieve and her musical instruments, Jan as producer-composer – all of which enabled and constrained both process and outcome.

Arguments such as this – highlighting the distributed or relational character of agency and creativity – have become relatively familiar in music studies (Born

2005; Clarke and Doffman 2017; Clarke et al. 2013; Piekut 2013; Stanyek and Piekut 2010). One aim of this article is to work through certain ramifications of this argument that have been less thoroughly explored. Among these, “Whipbird” usefully demonstrates the “strange ontologies” (Born 2015:14) that come with distributed agency, since it belongs to the family of what Haraway calls “creatures simultaneously animal and machine, who populate worlds ambiguously natural and crafted” (1991:149). The mimesis built into the creative process meant that it was not always clear which of the high frequency sounds in “Whipbird” were made by birds and which by Genevieve and her recorders. And in Vacluse, mixing the track at a realistic volume level meant that it was not apparent whether the birdcalls were real or recorded (especially since whipbirds are typically heard, but not seen). These semiotic ambiguities, combined with the agential complexity in its creation, mean that “Whipbird” hovers at the “three crucial boundary breakdowns” that Haraway identifies as characteristic of the cyborg: between human and animal, organism and machine, and physical and non-physical (1991:151–54). As we will see, these border-crossings were writ large through the installation of *Pleasure Garden* as it emerged at the ambiguous fault line between real and imagined gardens, and came to be populated by “medianatures” (Bronfman 2017:23; after Haraway 1991; Parikka 2012) made through the combined work of people, animals and technologies, often in ways which made it hard to know the difference between them.

Insulation, Camouflage and Calibration: Preparing the System

Among the key infrastructural elements of *Pleasure Garden* were two kinds of loudspeaker which the team called “buckets” and “bird boxes” (see Figure 1). Buckets – upturned black plant pots with a transducer attached to the inside – were the result of Jim’s experiments to find a suitable speaker for *Pleasure Garden*: inexpensive, durable and naturalistic, they could project sound in a hemisphere and diffuse it evenly throughout the garden. Also, as Jim noted, a bucket “produces the perfect frequencies for the recorder as it happens, because recorders don’t have very many harmonics and [they’re] certainly not very pronounced.”⁶ Bird boxes likewise provided a naturalistic and durable container, but housed more powerful, higher quality loudspeakers, compensating for the relative inefficiency of the buckets. The bird boxes formed the outer ring of the *Pleasure Garden* diffusion system, while buckets made up the two inner rings. Bird boxes also housed the video cameras used in the interactive system (Figure 1).

Figure 1.

One day in November 2015, I arrived at Jim’s house to see a new phase in the creation of *Pleasure Garden*. Cables snaked across the floor as Robin worked between two computers, testing the cameras. Bird boxes stood stacked in the back garden. Tools lay around. After several days mixing the *Pleasure Garden* CD, and as summer brightened, it felt good to move outdoors. The new task was to prepare and test several elements of the installation to ensure that it was sufficiently robust to run continuously for 20 days in Vaucluse. Much of Robin’s work that day involved setting up the system in order to check that the software for the interactivity was working. The reliability of the system pivoted on a plan to switch between

“production mode” and “performance mode” in the garden. In production mode, they could mix the installation’s “music tracks,” primarily using the digital audio workstation Reaper to adjust EQ, volume, spatialization and other parameters. Once it was finalized, they could record the mix to a “garden computer” in the form of 16 “bucket tracks” (the sounds played through each individual bucket/bird box speaker, as distinct from “music tracks,” which might be spatialized across multiple speakers). In performance mode – used when the installation was running and audiences present – the garden computer would simply play the 16 bucket tracks on a loop through QLab (a cue-based multimedia playback software), while also processing the interactive elements of the system (see below). This switch from “production” to “performance” mode meant that much of the intensive computer processing associated with mixing and spatialization could be prepared in advance and then fixed for playback, rather than performed in real-time. It represented a way of managing the risks associated with large data flows, especially processor overload and overheating – material effects of seemingly immaterial computer processes that shape technological systems small and large (see Starosielski 2014; also Steingo 2017 on failures and music technology).

When we returned to Jim’s house in December, the system had been running in his back garden, silently and without any problem, for several weeks. If running in performance mode safeguarded the internal stability of the computer system, Jim had also done much to insulate the computer from the external world of the garden. The hub of the installation – laptop, mixer, iPad, and more – was housed in “the box,” a large, grey container intended to protect the machinery from theft, water, rats, insects and so on. Again, heat was a major concern, since the installation would be running during Sydney’s hot and humid summer. Even with processing kept to a minimum,

there was a risk the computer could overheat, so Jim installed a small fan on the box. To deter insects, he covered the fan opening and the windows of the bird box speakers with a fine mesh and gave the bird box cameras transparent plastic windows. Traffic between internal and external worlds was regulated: hot air moved out, fresh air moved in, electrical signals came and went, but the system's border was closed to potentially disruptive creatures that might find these warm, dry boxes appealing. Such practices are what Starosielski calls "strategies of insulation," which "produce an internal break in an ecology, allowing one system to extend into and through another without being affected by it" (2015:19).

Once the installation was set up in Vaucluse, the box was locked and chained to a tree; a chemical repellent was added to discourage insects or rats. Because the garden is a site of archaeological significance, the installation cables had to be buried carefully and at a regulation maximum depth by the Vaucluse gardening team. This also prevented rats from chewing through the cables and audience members tripping over them; multiple parties were imagined and brought into relation through such practicalities. Burying cables was also one of several tasks motivated by aesthetics; in keeping with the naturalistic look of the buckets and bird boxes, another task was to use palm fronds to hide the cables attaching speakers to trees (see Figure 2). Like practices of insulation, this camouflaging worked to constitute the technological system and garden as "separate and autonomous" domains, a form of what Gautier calls "purification" (2006:809–10). Together, these practices attempt a complex accommodation: cables, computers, speakers, and cameras were at once woven into and protected from the Vaucluse garden, then subsequently hidden as if to render the space "natural" once more. Gautier argues that this "cyclic relation between hybridity

and purity” is a characteristic feature of modernity (2006:810), and similarly oscillatory or ambivalent relations emerged elsewhere in *Pleasure Garden*.

Figure 2.

Work on calibrating the interactive system represented a partial inversion of these measures to protect and conceal. The interactivity used a multi-person tracking system (based on a design Robin developed for an earlier project) to detect movement in zones around particular buckets and cause sounds to be played in those parts of the spatialized system. Transient pixels in any one of four quadrants of four cameras were registered in a Max patch which sent pre-assigned midi notes to QLab, causing “interactive” audio tracks (running concurrently with the van Eyck recordings) to fade up and then fade out after a set period. Repositioning the cameras inside the bird boxes effectively changed the aperture and so the contrast of the video image, and, combined with camera placement, brought different features of the garden into or out of shot. In this way, and by adjusting the programming, the team tried to calibrate the system so that it would not register, for example, bees or moving foliage, but would pick up people as they walked around the garden. Of course strict differentiation was never guaranteed in the dynamic garden environment, as large birds visited or rain battered foliage into new positions, but a logic of (il)legibility nonetheless patterned the installation. While the technological system was hidden from *Pleasure Garden* audiences, the installation had to “see” those audiences yet remain blind to other garden inhabitants. Barad’s notion of “apparatus” is useful here: “apparatuses are not mere observing instruments but boundary-drawing practices – specific material (re)configurings of the world” (2007:206; emphasis removed). Calibrated to

recognize certain types of movement in certain locations, the interactive system did not simply detect presence, but drew (albeit fuzzy) boundaries between the garden's human and non-human inhabitants.

These strategies of insulation, camouflage and calibration were important in determining “what matter[ed]... and what...[was] excluded from mattering” (Barad 2007:184) in the world of the installation. But to understand their significance we must situate them within a more complex story, in which they contrast both with the prior entangled agencies of tracks such as “Whipbird” and with the recrossing of boundaries during the mixing stage.

Mixing (in) the Garden: Emergent Epistemologies

Mixing in Vaucluse followed a loose rhythm. We began in the mixing tent, sited just outside the installation area (see Figure 3), where Jim would start the “Lambley mix” of a track playing. These were the mixes prepared for a trial-run of *Pleasure Garden* at Lambley Garden in rural Victoria (see Current Author, Article 1 and below). Then some or all of us – Genevieve, Jan, Jim, Robin, and I – would leave the tent and cross a footbridge, over a small creek, to the pleasure garden (see Figure 4). We would each trace a slightly different route through the central paths, listening to the sound filling the air. You walk out of the pleasure garden by one of two exits up onto the surrounding lawn: one route leads to a fountain and then to the house and estate beyond the installation; another leads onto a sloping lawn with a tall pine tree in the middle (see Figure 5). Somewhere along these journeys we would talk, exchanging a few words about a volume level, noting a slight distortion in a bucket,

or pausing for a longer conversation. Then we returned to the mixing tent via different routes. Back in the tent, Jim would stop the music and, taking suggestions from Genevieve and Jan, work on any changes as we sat on camping chairs, chatting, listening and watching his computer monitor. This done, he started something else playing and we walked out again into the garden to listen.

Figure 3.

Figure 4.

Figure 5.

This cyclic process characterised much of the three days we spent mixing *Pleasure Garden*: dispersing, listening, discussing, returning, reworking. Mixing a track often began with adjusting the overall volume – calibrating the level of the music to the “level” of the garden – before changing numerous internal details, often making several passes at the more complex tracks. Later, attention turned to the “interactive tracks,” and finally, on the last day, to the overall “flow” of relative levels and silences between tracks. As Genevieve reflected, “We learnt a lot from walking.... You just need to hear it multiple times from multiple different vantage points and that will tell you what works.”⁷ Mixing involved a strange combination of the magical and the mundane: the garden was heavy with rain, yet also startlingly alive with music, floating free of any clear source; cold, damp hours of walking and listening were leavened with moments of creative discovery.

Tsing’s argument is particularly apt here: “The point of ethnography is to learn how to think about a situation together with one’s informants” (2015:ix).

Walking, listening and talking with them, I learnt a great deal not only about how the

team mixed *Pleasure Garden*, but also about how they *learnt to* attend to Vaucluse and mix the installation with this particular garden in mind.⁸ Together, they developed what I call an “emergent epistemology” of the installation-in-the-garden: they learnt how to know and become responsive to a rich interrelation of material, spatial, affective and sonic features. A large part of this was what Feld calls “acoustemology” or “sound as a way of knowing” (2015:12). But the team’s epistemology of *Pleasure Garden* was importantly multi-sensory, attendant to the textures, contours, and sights of the installation-in-the-garden, including dynamic properties associated with the movements of wind, water, sounds, birds, and foliage. Nonetheless, Feld valuably characterizes the spirit of this attentiveness: “The kind of knowing that acoustemology tracks in and through sound and sounding is always experiential, contextual, fallible, changeable, contingent, emergent, opportune, subjective, constructed, selective” (2015:14).

In describing the epistemology as emergent, I do not mean that the team created everything from scratch. They drew on experiences and expertise from their professional careers, personal lives, and time spent mixing the installation in Lambley. Jan, for example, brought a pre-existing sense of music as spatial or emplaced, explaining that “I always think quite visually when it comes to music: I have a sense of a place or something.”⁹ Like me, he also found the Vaucluse garden and its birdlife quite different from the European landscapes we had grown up with, while, for the rest of the team, that environment was much more familiar. Such experiences pre-conditioned each team member’s work in the garden. But, with the exception of Robin who works primarily as an audio-visual artist (<http://robinfox.com.au/about/>), the members of the *Pleasure Garden* team are not sound artists (and, significantly, Robin’s contribution was largely technical; he was

less involved than others in the mixing process) and so the process of designing and mixing the installation was a new experience for Genevieve, Jim, and Jan. Likewise, in emphasizing emergence, I am not suggesting that the installation process was unplanned. The infrastructure and system design were carefully prepared in advance, but the ritual of processional listening was not planned beforehand and the mixing, as Genevieve explained, “was done on instinct and also in that lovely way...in conversation as well” as a collective response to the relationship between site and installation.

Relational Spaces: *Pleasure Garden*, Vacluse, and Lambley

One dimension of this emergent epistemology was the practical negotiation between the spatial features of the Vacluse garden and the spatial organization built into the design and infrastructure of *Pleasure Garden*. Jim’s hand-annotated map documents this accommodation between system and site by recording the final locations of, and distances between, speakers (Figure 6). Three concentric rings of speakers – a long-standing feature of the system design – had to be placed where the garden afforded suitable locations, so the outer ring of bird box speakers was installed in tall trees and along a perimeter fence (Figure 7), while the two inner rings of buckets were placed in flower beds. This accommodation turned the outer ring into a horseshoe shape (because of the lack of a suitable boundary on the house side) and distanced it further from the inner rings on one side (see Figures 4 and 6), making some parts feel, as Genevieve put it, “remote” and giving opportunities to “play with that space and what’s mysterious and what’s not.”

Figure 6.

Figure 7.

Such negotiations “produced and performed” the space of the installation (see Barad 2007:393); others shaped how we worked within it. Because there was only one area of flat ground suitable for pitching the mixing tent, this location – just outside the outer ring of speakers – became a hub of activity and the start- and end-point for our listening walks (Figure 4). The paths of the pleasure garden directed our walking, its high, enclosing foliage drawing attention to the close at hand; on the lawn, the sound was more expansive, the view more open and you could wander freely. The sounds of garden and installation pulled our attention in different directions with varied intensities: upwards and away to the voices of birds or the strongly directional bird box speakers high in the trees; downwards and around to the diffuse buzz of insects and bucket speakers on the ground. Together, these constraints and affordances shaped the mixing experience, helping to produce the distinctive spatiality of the finished installation.

Along the way, the team built on and reworked an informal set of mixing practices developed previously in Lambley. There, Genevieve explained, they learnt collectively about “transforming something [i.e. a musical texture] from having a smaller to a much larger number of dimensions” by adjusting the relative levels and positions of sounds. Where ideas did not carry over, the differences between the two gardens also became instructive. As Genevieve recalled it, Lambley was flat, open, and remote, making it quiet except for, at the time of the trial-run, many “wrens, little tiny things with little tiny clear voices,” while Vaocluse was undulating and

“theatrical,” with vivid colors and large trees, and dominated by the “big bodied” sound of Black Currawongs. So where in Lambley “it felt like what we did there needed to be incredibly delicate,” in Vaocluse:

the combination of the shapes and the colors of the
landscape and the feel of that place and then just the sound
of the currawongs, it’s like, “Oh, we need to think of this as
a much more...full-throated piece than it was the first time.”
Because the first time it was like “Is it there is it not?”,
whereas this time it...needed to really embrace the
landscape.

No doubt observing the mixing process in Lambley would have added depth to my ethnographic perspective, but it was also instructive to notice Lambley as a kind of shadow-presence haunting the Vaocluse installation. Often, when Jim first played the “Lambley mix” of a track in Vaocluse, the team chose to raise the overall level by a few decibels. Turning up the installation responded to this perception that Vaocluse was more “dramatic” than Lambley. Thus mixing was not simply a question of inserting an abstract installation into a neutral space; rather the mix emerged from the manifold relationship between the real Vaocluse garden, the design of the installation *and* the prior relationship between garden and installation in Lambley.

Another sense of place also shadowed the mixing process. Sounds drawn from or references to Australian Aboriginal culture were conspicuous by their absence from the installation, given the colonial era location. Yet this is not a straightforward omission, as Genevieve explained:

One of the layers of the project that I wanted to explore but didn't because it was too big... [was] the whole other matrix of an indigenous...connection to land. It would have needed to become a really different project if I'd gone down that track and it may yet.... But I think I ended up deciding that van Eyck doesn't need to be part of that conversation.It's one of those big questions that's always floating [around], so...it was a conscious decision to take that particular train of thought out of this thing, but yet it's there.

As Genevieve's comments make clear, contemporary Australian artistic projects which somehow engage with "country," "place," or "land" are always about indigeneity. Here indigeneity is figured as a multiply absent presence (Law 2002): at once "too big," deferred ("it may yet"), and consciously removed, "yet it's there" nonetheless. In other projects (such as *Namatjira*; see <https://genevivelacey.com/projects/namatjira/>), Genevieve has indeed collaborated with Aboriginal artists and talking with her it is clear that the absence of this "layer" from *Pleasure Garden* was intended to be culturally sensitive, a way of avoiding superficial representations or appropriation:

I feel like we're still at an interesting enough point in our conversation with our indigenous people that...I couldn't just use those sounds unless it were literally in conversation

with someone whose sounds they were and that was their contribution. So...I still feel careful about borrowing those things.

Inevitably, such care over borrowing risks a kind of representational silencing, naturalizing the absence of Aboriginal sounds, stories, and land from *Pleasure Garden* as they are so often absent from wider Australian cultural and social life. Yet music's "hyper-connotative, hyper-affective propensities" (Born 2011:384) allowed such absent presences to reassert themselves: as I discuss elsewhere, the installation did (in varied and sometimes fraught ways) prompt listeners to think about an "indigenous...connection to land" and even hear certain sounds as Australian Aboriginal (see Current Author, Article 2). This chimes with Genevieve's hope, discussed below, that "this piece has got enough space in it for the listener and for the place, and so those things emerge...in the place, but also in the ears of the listener." Thus multiple senses of place oscillated in and out of awareness in the process of installation, flickering between real and imagined or absent and present (Haraway 1991:153; Law 2002), shaped by the combined histories of Vacluse and the *Pleasure Garden* project.

"Leaving Space for the Garden"/The Garden "kicks back"

Mixing also brought a strong appreciation of the garden not only as a site, but as a sonic contributor to the installation. As noted above, Jim chose the bucket speakers in part because of their compatibility with the sound of the recorder, with its

relative lack of harmonics. By the time the team had installed *Pleasure Garden* in Vacluse, such frequency-related thinking was engrained and expanded: during a talk at the launch of *Pleasure Garden*, Jan explained that he had also come to appreciate the way that the bucket sound “leaves space for the garden,” since high frequencies missing from the buckets were instead provided by the sounds of birds, insects, wind, and moving foliage. During the same talk, Genevieve also described “leaving space in the piece so that in the best possible way the garden can intrude.” The idea of crafting relatively sparse textures from simple materials was present from early in the creative process, but the rationale shifted subtly: what was initially an attempt to let audience members experience the full, multi-sensory world of the garden, increasingly became about recognizing the contributions of the garden itself. Reflecting on mixing in Lambley, Genevieve explained that “the ambient environmental sounds became the glue, ...they were a way of holding [together] all these things that could have felt fragmented.” In Vacluse, however, the currawongs that dominated the garden became more than “glue” – Jan described them as “soloists.” Illustrating his comments with an impression of a currawong call, he explained that, because the currawongs sang less frequently than the wrens in Lambley:

when they appear it’s much more powerful, ...because that’s also something to do with economy. So let’s say in one of the pieces that I really enjoy..., ‘Bee Halo’: ...[in a record] I would probably have a soloist on top of it, ...like a trumpet or something. But it’s not happening [in the garden], and in a way this is a possibility also for something to

interact.... [At] one point, I was standing under the tree on the top [of the lawn] ...and it was like one bird going [imitates call] ...which was so beautiful. So you don't really have to do much in these...type of textures, ...it's just something that grabs your attention, and if it doesn't happen that's fine also.

So although the garden's non-human inhabitants were carefully separated from the installation through insulation of the system and calibration of the interactivity, they were nonetheless welcomed as contributors to its soundworld. Barad argues that epistemologies are collective endeavors, since "practices of knowing cannot fully be claimed as human practices, not simply because we use nonhuman elements in our practices but because knowing is a matter of part of the world making itself intelligible to another part" (2007:185). So, ways of knowing *Pleasure Garden* emerged relationally: Vaocluse's currawongs contributed "intelligible" presences and vocalizations that, for all their apparent singularity (so unlike "Whipbird"), became caught in a wider history of co-production: the creative team found these sounds meaningful and so mixed the installation to make them audible; the decision to site the installation in Vaocluse was informed by an awareness of its inhabitants; and the currawongs themselves were there because of a longer, tangled history of garden cultivation and opportunistic bird migration (see Current Author, Article 2).

The garden's contributions were not, however, always predictable or welcome and efforts to include or exclude, whether sonically or materially, particular inhabitants were only partially effective. For example, the noise of the rain, which fell heavily throughout the installation process, raised doubts, as Genevieve explained:

I was fretting that...it was shrouding what we were hearing,
because it was another layer to try to listen through. So it
was a long way from any kind of pristine listening
environment and I began to worry, particularly towards the
end, [with] the combination of tiredness and nerves, just
that that we were balancing in a way that would prove
wrong if it stopped. But thankfully it wasn't actually
[wrong]. ...I was thinking, "Oh maybe we have made it too
loud" and "Maybe we've had to accentuate certain
frequencies because the rain is masking them."

On top of this, the water that collected on the bucket speakers made them quieter and increased the risk of distortion. Especially heavy rain sometimes stopped work altogether and we just waited in the tent. Unless the rain paused or fell lightly, listening meant walking out with an umbrella or wearing a waterproof, usually with hood up. Umbrella, tent, and waterproof were another form of insulation, this time between human listeners and the weather; being fully open to the sounds of *Pleasure Garden* meant taking off this protection and so also being open to the rain and cold. By contrast, the launch of *Pleasure Garden* brought very hot days and, despite their preparations, Jim reported that the high-specification "garden" laptop was still running close to the limit in "performance mode": Max MSP was using about half of its processing power and QLab another third. The laptop did crash twice in 20 days, but was quickly reset by one of the Sydney Festival staff. During the rain we saw worms gathering in large numbers around the seal at the top of the box; currawongs

came and went unpredictably; after the installation was taken down, Jim found ants in the bird boxes. In these ways, the garden “kicked back” (Barad 2007:215), recrossing previously established boundaries and so affecting the installation.

Strange Ontologies: “Granite”

As should be clear already, the boundaries between “knowing” and “making” are fluid here (see Barad 2007:185); mixing *Pleasure Garden* involved simultaneously apprehending and reshaping the sonic-spatial features of the installation-in-the-garden. Our sense of this process is enriched by following work on the track “Granite” over several days. One of the newly composed pieces in *Pleasure Garden*, “Granite” opens with breathy, percussive sounds (just about recognizable as flutter tonguing on the recorder) flickering around the installation space. Soon this mobile texture is thrown into relief by a bass recorder melody. The team refer to this bass recorder part as the “storyteller” or “narrator” (see Current Author, Article 1). During work in his studio in Kristiansand, Jan came to especially enjoy the sound of this instrument, and so, as Genevieve put it, “that became a really human creature that kept popping up” in many tracks. One early decision while mixing in Vaucluse was to clarify the position of this “narrator,” by consistently placing it in a single pair of buckets in the inner ring of speakers (see Figure 4). As “Granite” continues, the texture becomes more complex as the melody and flutter tonguing are joined by, first, the fast tapping of stones, then by percussive, low-pitched key hits on the contrabass recorder. This texture falls back to make room for two field recordings from Utrecht: three widely spaced bell sounds and then a recording of a carillon. The track ends as

slowly pulsating electronic “chords” emerge from the carillon recording then fade out accompanied by birdsong.

Sometimes, on our listening walks, Jan would enthusiastically explain to me why he wanted to mix in a certain way. He understood that I was there to learn about the installation process, but his explanations also conveyed his pleasure in the work, almost as if he was unable to contain his fascination with the sonic possibilities afforded by the installation. Once, listening to the opening of “Granite,” Jan mentioned that the flutter tonguing sounds were working well as they sounded “threatening.” Then he paused to explain a subtler point: having one still voice within a mobile texture helps to emphasize the moving elements, so here the stationary “narrator” melody represented a kind of “vertical” element within a field of “horizontal” movement produced by the flutter tonguing and stone sounds. This prompted him to suggest that the volume of the “narrator” should be raised to make it stand out from the surrounding texture. As he reflected later: “it’s like...in a dance piece, you have all the dancers going like this [moving] and then suddenly something just stops and looks straight at you, ...you can feel it in your whole body that...something here is the focus.” Where the Lambley mix of “Granite” divided the texture of contrabass key hits between opposite sides of the installation space, in Vaucluse Jan wanted to change the mix. After trying with the texture in the entire outer ring of speakers, they decided to place it solely on one side, in the line of the trees on the upper lawn:

With that specific piece there is something that happens that is...kind of like a chord.... Once they [the key hits] become...harmonic, it’s important that...you get that kind of

[harmonic] feel into it. If that is too divided, you won't be able to get it. So if it's just...one note coming from there and one note coming from there,it would just be noisy, so it wouldn't...create that emotional thing, because....in order to make it work you have to place it in [such] a way that you understand the connections between the events.

Jan spent a considerable length of time listening to this texture on headphones and working with Jim to bring out its internal rhythms. Like the “threatening” mobile sounds at the opening of “Granite,” it represented for Jan the “darker side” of the *Pleasure Garden* soundworld. As he joked, the listener hears those mobile sounds and thinks: “‘Hey, look out! There’s something happening here, something is about to happen.’ ...so it represents some kind of a danger, at least to me.You think to yourself, ‘Is this...a small animal? Is it a snake or is it a rat? Will it bite me? Is there a cure for it?’” (Similar characterizations appear elsewhere in *Pleasure Garden*: a spreadsheet from Lambley, made to record the spatialization of different sounds, includes annotations such as “rat” and “mole pop up.”) One late change to “Granite” involved remixing the electronic “chord” texture at the end of the track. In the Lambley mix, this was spatialized as a static sound, dispersed evenly throughout the garden. Spurred on by the increasing refinement of the track, Jan suggested that Jim place the low-pitched component of the texture in the outer ring of speakers, giving it a clear spatial separation, and adjust the three higher elements so that they moved slowly in between. Achieving this involved lots of tweaking of levels of individual music tracks, reducing their diffusion, and increasing the speed of movement, so that the mobility was clearly audible. The result was magical, provoking delighted

comments – for Jan, it was “like a breath”; for Genevieve, it felt “like standing inside a big bell” – as complex, wavering harmonics drifted around us.

This work on “Granite” gives a snapshot of the kinds of ways in which the team reshaped the sound of the installation for Vaucluse. Sometimes this involved creating specific local points or defined areas within the spatial field of the installation, typically by increasing volume and reducing diffusion or by increasing the spatial separation between thematically connected sounds in order to differentiate them. Converse strategies involved making sounds mobile or dispersing them in a static field throughout the entire garden. Sometimes the two combined in a kind of contrastive juxtaposition of moving and static elements (e.g. the “narrator” and flutter tonguing or, less explicitly, the high and low components of the closing electronic chords). Another more mundane concern was to fix “problems,” for example by reducing the volume when sounds caused the buckets to distort. My aim here is not, however, to propose a taxonomy of spatial strategies (e.g. Smalley 1997; Smalley 2007), but rather to credit the informal principles of mixing that developed in practice.

In *Pleasure Garden*, these principles were grounded on an assumption, which Born argues is central to much sound art (2015:17), that sonic experience is perspectival, relational, and multiple. Collaborative walking-and-listening – moving, separately and together, with varied expertise and agendas – allowed the team to occupy multiple spatial and subjective positions which (partially) anticipated those of *Pleasure Garden*’s audiences. These also helped produce “strange ontologies” (Born 2015:14; after Wakefield and Smith 2011), which superimposed heterogeneous senses of space onto the real installation site, sometimes in paradoxical ways (Clarke 2015). Take, for example, the three bell sounds heard late in “Granite,” which the

team decided to place in a pair of bird boxes in trees on the upper lawn (see Figure 4). When making this decision, they briefly mentioned making a “bell tower,” deploying a metaphor that rationalizes the high, remote location through a kind of acoustic realism. Yet clearly there is no bell tower in the Vaucluse garden: it was a virtual artefact of the creative process, one which folded a distinctive acoustemology of Utrecht (with its famous Dom Tower, housing a set of medieval bells and formerly the workplace of van Eyck) into that of the Vaucluse garden.¹⁰ *Pleasure Garden* is full of such virtual spaces (Born 2015:16; Clarke 2015), some relatively realist or tied to a real “elsewhere,” others more fictional or abstract. For example, Genevieve’s feeling of “standing inside a big bell” during the closing electronic chords briefly invoked a non-realist virtual space, related to but distinct from the “bell tower.” (Such families of spatial-sonic metaphors propagated during the installation process: bells, breathing, voices...) The provenance or character of these virtual spaces were more significant to creative insiders than they were for later audiences, whose reactions were, of course, multifarious. Rather than trying to construct an internally consistent sonic-spatial world that would direct listeners’ experiences, what mattered was being inventive with the rich mixture of sonic and spatial resources at hand.

Installation Microcultures

My discussion so far raises important questions about the motivations, ideas, and experiences of *Pleasure Garden*’s creators and audiences. Such questions inform my argument here, and I discuss them elsewhere (Current Author, Article 2), but I also want to avoid reducing the installation process to the playing out of a pre-

existing symbolic agenda, or a merely transitional phase between creation (i.e. composition) and reception. Instead, I want to suggest that it might usefully be explored through the notion of an “installation microculture”: the relatively localized, ephemeral cultural formation that emerges around the installation of a piece of sound art.¹¹ As I have shown, an installation microculture develops its own epistemologies, creative practices, social interactions, discourses, and material culture (“buckets” and “bird boxes” are among the material-discursive objects central to *Pleasure Garden*). These emerge for the short duration of the installation process and then disappear, perhaps re-emerging in new forms for subsequent versions. They are not fully determined in advance of the encounter between practitioners, spaces, and sounds; and they do not, in turn, fully determine the later experiences of their audiences. At the same time, these microcultures are not neatly bounded: they have their own prehistories (extending at least into the system design and other prior stages of the creative process) and feed into subsequent acts of reception. Although this definition is broadly applicable to many kinds of creative process, it is perhaps especially useful for sound art, because it often necessitates the development of new computer programming, the use of non-standard infrastructural materials, the improvisation of new listening and mixing practices, and so on. Compared to preparing various musical genres for concert performance, where conventions are relatively fixed, the installation of a piece of sound art represents a more improvisational and idiosyncratic process. Indeed, future research might ask whether the cultivation of distinctive microcultures is a *generic* feature of sound installation art.

My involvement in *Pleasure Garden* drew my attention to another characteristic of such microcultures: their effects on participants. Within a day or two, the mixing process brought an uncanny (sometimes amusing or slightly maddening)

side-effect: team members commented that they were hearing the installation when it was not playing, even outside the installation space. At the end of each day, as I returned to my accommodation nearby, cicadas seemed to turn on and off as I walked past, as if they were part of the interactive system; melodies from the installation hovered on the edge of hearing. The feeling only gradually faded after I left Vaucluse. These auditory hallucinations were partly a result of the weather, which encouraged a concentrated, prospective listening as our ears continually searched for sounds over the noise of the rain. While it is tempting to look for psycho-acoustic explanations, it seems more productive to think of this experience as something akin to a ritual outcome of the installation microculture. Indeed, the broader atmosphere surrounding the installation made the artistic team not just agents of a creative process, but also recipients of its effects: like the garden and the installation, they were subtly reconfigured by the process. As Genevieve commented, “It felt like everything was heightened in those days, ...the urgency of the deadline, but also...something about that weather, what that did to us, and the whole process, it just...amplified all sorts of things.” This liminal quality – heightened, caught between creation and reception – alongside the repetitive, communal nature of the processional listening made the installation process in some ways highly ritualistic. And the disorientation and ambiguity (both characteristic features of liminal experiences; see Turner 1995) associated with hallucinating the installation – were sounds natural or technological, imagined or real? – brought further crossings of the boundaries associated with Haraway’s cyborg (1991:151–54). Yet, despite its liminality, the installation was a strange kind of ritual, barely part of a tradition, in that its practices and atmosphere were largely unprecedented except for partial resemblances with Lambley.

These microcultural effects on the *Pleasure Garden* team were, at least for Genevieve, part of a wider sense of the entanglement of creative agency, landscape and art. When I asked if she considers *Pleasure Garden* a distinctively Australian project, Genevieve explained:

I feel like I'm Australian in a sort of deep, wired way,
because of the way that I'm attuned to this landscape and
the light and the space and the heat and the sounds and it's
like my senses have actually been configured around this
environment. And I think if you're an artistic person who's
working always out of [a] combination of senses and
imagination and intellect, ...what those things have been
molded around...has got to have a fairly large part to play
[in what you create].

This cyborgian metaphor ("deep, wired way") for the relationship between subjectivity and environment also surfaces in Genevieve's comments on the relationship between subjectivity and art: "I do have a really passionate belief in beauty...and...those really old-fashioned ideas of it being transformative and the fact that if you're in the presence of something exquisite and you pay attention to it, it does actually rewire you." Just as the technological system underlying *Pleasure Garden* was a more-or-less hidden element of the installation, so the idea of "wiring" is hidden inside Genevieve's attitude towards human-nature-art relationships. The idea of reconfiguring sensibilities also applied to *Pleasure Garden's* audiences: Genevieve hoped the installation would afford listeners a similar "sense of delight

and wonder and some kind of stillness.” And, importantly, *Pleasure Garden*’s interactivity gave audiences, as Genevieve put it, “permission” and “agency” to experience the installation in diverse and personal ways. In this, the installation’s interactivity functioned as something closer to Barad’s notion of “intra-activity”: audience and interactive system were not entirely separate entities, rather the system gave its listeners “agency” to affect and be affected by the installation even as those same listeners allowed the interactive system to operate; neither could be removed without changing the other, neither wholly preceded their encounter. Perhaps more than any other phase in the creation of *Pleasure Garden*, the installation process, with its liminal position just before the launch, staged the entangled co-constitution of creators, system, and audience (see also Current Author, Article 2).

Meeting the Garden Halfway: A Tangle of Practices, Ontologies, Actors

The term “microculture” has a special resonance for *Pleasure Garden*, because its biological (rather than anthropological) overtones suggest creativity and ferment: the cultivation of micro-organisms in a small-scale experiment through the meeting of human, organic, and technical elements. Following the design, installation, and mixing of *Pleasure Garden* reveals a rich mixture of practices involved in forging and forestalling relations between such elements. *Pleasure Garden* both protected and camouflaged its technological components – by for example keeping the laptop cool and hiding cameras inside naturalistic bird boxes. It both enlisted and excluded non-human animals, plants, and other elemental presences: birds, cicadas and the sounds of wind and foliage were welcomed as sonic

contributors; the rain was tolerated and accommodated; ants and rats were kept out, although the latter were also valued as a shadowy imagined presence in the sonic undergrowth. *Pleasure Garden* made all these garden inhabitants more-or-less illegible to the interactive system, while ensuring that the system was able to “see” and respond to people – who, in turn, both responded to and enabled the functioning of the interactivity.

What should we make of this tangle of practices? Camouflaging, for example, could be understood as aestheticizing, nostalgic or anti-technological. But the hyperreal soundworld of the Vaucluse installation was unambiguously reliant on complex technology, making the camouflage something more like a magic trick – a sleight of hand which was pleasurable without really fooling anyone. If camouflage seems to value nature above technology, this sense is undermined by practices of insulation which protected technologies from nature. And if these practices of insulation seem sanitizing, excluding rats from materially affecting the system, why reinstall them as an imagined feature the installation’s soundworld? If we read these practices as done only by humans and simply as symptomatic of wider, pre-existing ontologies or philosophies, we encounter many possible interpretations and contradictions, both regarding single practices and when multiple practices are juxtaposed. Attempts to draw out single threads of intentionality or symbolism are quickly frustrated since any of a range of ontological categories – nature, technology, human, non-human – can be seen as separate, connected, antagonistic, unified, and differentially or equally valued. But this is to read analytical distinctions back onto *Pleasure Garden*, where, in fact, the installation process was not intended to be symbolic of some wider presumed order. Instead, we might see the installation process in terms of what Piekut calls an “improvisational ontology, born of risk,

[which] refuses the precompositional step of dividing the world into the categories of nature and culture” (2013:158). The status of Aboriginal land within *Pleasure Garden* is instructive here: its absence was motivated by care (concern over appropriation), yet remained fraught and complex (a conspicuous absence).¹² Indeed, the installation process was characterised throughout by oscillations between presence and absence (Law 2002), inclusion and exclusion (Barad 2007), hybridity and purity (Gautier 2006), autonomy and interrelation (Steingo 2017). If this suggests anything about *Pleasure Garden*’s wider cultural setting, it is not the ongoing surety of ontological categories in Western late modernity, but rather their paradoxical, uneven status as both powerfully operative and intensively reworked.

Following the installation of *Pleasure Garden* moves us, then, towards a sense of epistemology, ontology and ethics as immanent in practices. Activities from the mundane to the magical determined what mattered in the garden-and-installation – “mattered” in the sense of what was known, what existed and what was valued (Barad 2007). “Relations of exteriority, connectivity, and exclusion...[were] reconfigured” (Barad 2007:141) so that diverse entities were materialized and made differentially agential, populating and shaping the installation space with cables, soil, cameras, trees, speakers, rain, computers, sounds, heat, rats, currawongs, people, “whipbirds,” a “bell tower,” a “narrator,” and more. As Steingo argues, we need to “understand the ways that people intervene in the world...as having real ontological weight” (2017:16). But more than this, we might see such interventions not as the exclusive prerogative of humans, but as a collective endeavor, part of the world’s moment-to-moment engagement with itself. One implication of this is to decenter the creative team and disperse creativity across all the diversity that made up *Pleasure Garden* (Browning 2017). Knowledge practices were not exclusive to people; rather

deciding what “counted” was a responsibility shared, unevenly, with the interactive system and the intelligible interventions of non-humans. Their collective practices were variously caring, controlling, creative, attentive, responsive, self-asserting, and mutually reshaping; they made space, “kicked back,” sought alliances and autonomy. In this, they point to a wider project for music studies: to recognize the heterogeneous actors, epistemologies, and ontologies at stake in musical practices (Steingo 2017:16) and to credit forms of world-making that unsettle familiar analytical categories (even, or perhaps especially, when they are close to home). *Pleasure Garden* was not simply installed; it made itself from the inside out. Its human creators played a crucial yet far from self-sufficient part in this process, but in meeting the garden halfway they joined in the co-creation of this world-within-a-world, refreshing our appreciation of what it means to make sound art in “practice.”

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1 Its institutionalisation in CriSAP, an academic centre for "Creative Research into Sound Arts Practice" (<http://www.crisap.org/>), is indicative of the wider phenomenon.

2 There are of course exceptions, such as the literature on multichannel diffusion in sound art and electroacoustic music. Even here, however, discussion focusses on generalised techniques and technologies or case studies of finished works or particular diffusion systems. The

treatment of installation practices in processual terms remains rare. See, for example, the 2010 special issue of *Organised Sound* on multichannel diffusion (Harrison and Wilson 2010).

3 As Ouzounian notes, the literature on sound art “remains focused on composition, recording, transmission, and performance practices...with installation practices receiving less attention by historians and critics” (2015:73). Even Ouzounian’s pioneering historical study of “spatial practices” in sound installations still engages relatively little with the kinds of practice I explore here, however.

4 Some studies are informed by scholars’ experiences as listeners or grow from composers’ reflections on their own works, such that a strain of loosely auto-ethnographic inquiry runs through much writing on sound art (e.g. Hawkins and Straughan 2014; Hogg 2013; Ouzounian 2006). Sound art projects informed by ethnography (e.g. Wynne 2011) and theorisations of various sonic arts as ethnographic (Drever 2002; Gallagher 2015; Rennie 2014) represent other points of connection. But, with a few exceptions (Stirling 2016; Tan 2017; Valiquet Forthcoming a), there is very little substantive ethnographic work on sound art and sometimes allied fields such as electroacoustic music (see also Novak 2010; Plourde 2008; Valiquet Forthcoming b).

⁵ Far from a straightforward valorisation of “practice” (for critiques or extensions of the “practice turn” in music studies see Born 2010; Steingo 2017), my approach continues the ongoing engagement with actor-network theory, ontology, and new materialism in ethnomusicology (Bates 2012; Risk 2013; Roda 2014; Roda 2015; Steingo 2017), and music studies at large (Born 2005; Born 2015; Haworth 2015; Piekut 2013; Piekut 2014). Although I draw primarily on Barad (2007), related ideas about “mattering” animate Latour (2004) and Stengers’ (2010; 2011) work on “cosmopolitics” and Mol’s (1999) discussion of “ontological politics.”

⁶ Jim Atkins, interview with the author, Melbourne, 2 June 2016.

⁷ Unless otherwise attributed, all quotes come from my interviews with Genevieve Lacey in Melbourne on 18 December 2015, 15 April 2016, and 20 September 2017.

⁸ For other dimensions of my role as participant-observer in *Pleasure Garden*, see Current Author, Article 1, Article 2.

⁹ Unless otherwise attributed, all quotes come from my interviews with Jan Bang in Sydney on 6 and 10 January 2016.

¹⁰ The term acoustemology proves its worth here in keeping our attention firmly on practices – noticing and choosing to record specific sounds – rather than positing a Utrecht “soundscape,” which would imply an objective landscape of sounds existing independently of such listening (see Feld 2015:15).

¹¹ Slobin’s notion of “micromusics” (1992; 2000) is a key reference point here, although I use “microculture” to signal a formation highly delimited in time, space, and sociality: local, ephemeral, and involving few people.

¹² See Watson (2011; 2014) on “subalternist cosmopolitics”.