

The Lyre's Island: Some Australian Music, Sound Art and Design

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The lyre bird was named for the shape of its tail and its Orphic propensity to launch into captivating song, but it is known for being one of the world's most remarkable improvisors and vocal mimics, taking from and transforming any and all auditive sources as though it were a sampler made of meat, bones and feathers. Stories abound about some kid's squeaky clarinet rehearsals incorporated into a bird's permanent repertoire or a bird's variations on the chain saw destruction of a nearby habitat. The lyre bird's natural ability to replay human sounds is no less than downright unnatural; its name could easily be misheard as liar bird.

It is also known for passing its songs down from one generation to the next. Ornithologists have heard in its call the calls of birds long since moved out of the area; from this they speculate that within this generational transmission there survive direct passages from and faint echoes of the songs of birds long extinct. So intensely beautiful and uncanny are the vocal talents of the lyre bird that the ABC (Australian Broadcasting Corporation) Radio once set up microphones to broadcast the singing of a group of birds live to a national audience—quite an achievement for so shy a bird.

How could anyone working within contemporary music and sound arts imagine a better animal? In the past, many composers have been humbled by the melodic stylings of this or that bird, their humility bolstered no doubt by lofty figures of transcendence in the sky, just far enough above society to remain reassuringly in sight. But how could contemporary composers and sound artists really condone—let alone celebrate—these art-song and crypto-religious critters? Is not global destruction aided by imaginations of rising above the earth? The lyre bird, however, is not known for its flight, but for the dipping soft-footed dance it does, hugging the ground as it sings. Old composers' birds signalled an unsullied Nature standing for Western art music's elevated cultural goods, but the lyre bird would only throw a monkey wrench into the works—or the sound of monkey wrench. Old composers' birds sang the primacy of the original utterance, a unique voice appropriated to advertise the composers' God-given individuality (even though they stole it from a bird). The lyre bird is, instead, custom-made for cultures of appropriation, recording and transmission, where listening includes an untangling of historical and contemporary allusions from all auditive sources, as well as pleasures to be had in innocent ignorance. The lyre bird patches together, makes do: it is a bricolage bird whose art of segues has prevented it from becoming a victim of 1980s postmodern pastiche. Unpresumptuous, multitalented, worldly to the limits of its world, broadcast nationally on ABC Radio: not only is this bird the bird for contemporary auditive

arts, it does its civic duty by providing an emblem for this compact disc.

The lyre bird makes its home in Australia, who knows since when. It provides a natural emblem (of which there are many) for the Australian nation for two reasons alone: because the peculiar political-economic entity called "a nation" exists in the first place, and because the lyre bird does not belong to the species of contemporary artist in the habit and habitat of intercontinental flight. By contrast, many Australian artists are born to travel; they often find themselves working and living overseas. Many were born elsewhere and came to Australia to live and to travel. Many more are borne along the cosmopolitanism pervading the many artistic and intellectual cultures in Australia. To try to divine a particularly Australian national sensibility from this migratory scene would freeze-frame the vitality and trivialize the diversity that truly characterizes the place—wherever that place may be.

Australian auditive arts fare exceptionally well, considering the size of the country and its geographical distance from Euro-American dens of activity. Its artists and theorists not only sport a consistent presence on the world stage, but they do so with a great deal of sophistication and adaptability to jet lag, climate change and conflicting institutional seasons. Questions of national identity remaining elusive or irrelevant, it may nevertheless be possible to propose a few reasons for how this strength has been fostered and maintained (keeping in mind my own relatively brief residence here).

First of all, although the governmental support for the arts in Australia may pale when compared with that provided in certain European nations, artists here nevertheless enjoy a level of government sponsorship that would be welcomed in many other nations. Moreover, there has been a readiness to promote artistic works that, in other places, could easily vanish between the funding guidelines of conventional categories. This funding nevertheless occurs in a society in which things are relatively expensive, a society that lacks the type of material excess of, say, the United States. Artists in other nations often set up camp in zones of surplus, whereas, in Australia, a more measured use of materials exists, throwing the balance toward a greater reliance upon ideas.

When it comes to ideas within new music and the auditive arts, there are two predominant, yet overlapping, sources. The first is the fairly long-standing influence of the ideas of John Cage—a situation certainly not unique to Australia, but important nonetheless for the intensity of respect he earned

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within a fairly discrete group of musicians and composers. Not only did his ideas provide a late-modernist license to drive home untested ideas, but above all else they gave primacy to the exploration of the nature of musical sound, whereas, for Western art music in general, the nature of musical sound was a given, the task being its organization. The second source is the trickier task of fielding the provocations of contemporary theory within sound and music—trickier because these theories never really addressed themselves directly or adequately to such matters. Contemporary philosophical, poetic, deconstructionist, psychoanalytic and anti-psychoanalytic, poststructuralist, feminist, postcolonial, indigenous, literary, cultural-studies and queer theories raced through Australian intellectual life in the 1980s and early 1990s, found innumerable footholds and laid down many indelible tracks. I would suggest that many contemporary composers, musicians and sound artists in Australia owe the strength of their insights not only to the act of mixing these tracks into their work, but also to skillfully adapting them to their own ends within a larger, independent intellectual environment. Just as the ideas of Cage from the 1950s and 1960s granted license, theories in the 1980s provided the impetus to think through anew. This has been just as true within the new, related field of sound theory, in which Australia excels with such key individuals as Paul Carter, Frances Dyson, Martin Harrison, Virginia Madsen and Norie Neumark.

All of the works included here are concerned with an engagement with important, often difficult ideas (as was Percy Grainger during his own time). Rainer Linz aurally animates Stelarc's body as it transmits itself into ideas of disembodiment that are couched at once in the pain of Artaud's electroshocked eviscerations (the genesis of the discourse on the body without organs, from which the title *Images Have No Organs* derives) [1], and the pleasures circulating among technotopic scenarios; by contrast, Sherre DeLys and Joan Grounds are critical of such notions of disembodiment and instead favor the mimetic play within the act of embodying the sounds of other animals. Similarly, the other works are characterized by an engagement with sophisticated ideas, as in the post-colonial complexities of Paul Carter's work; the feminist critique of medical subjugation and technology in Frances Dyson's work,

itself employing advanced spatial-audio technology; Jodi Rose's grunge-aeolian strummings of a bridge whose daily regimen of commuting she routes into metaphysical transport; and Joyce Hinterding's invocation of the omnipresence of the electrosphere through the flattened, scriptural circuitry of artistic gestures.

Yet ideas do not mean much if they fail to take tangible form and find audiences. For this reason, I would suggest that one of the most influential factors for the strength of the new music and sound arts in Australia has been and continues to be *The Listening Room (TLR)*, a weekly program broadcast nationally on ABC-Classic FM. Evolving from similar programs dedicated to new work, its longevity has rendered routine what listeners in other countries enjoy only intermittently or in exceptional instances. Its in-house producers are among the finest radio artists and practitioners in Australia. The only reason they are not duly represented here is because most of their programs are too long to be included on a CD that attempts to provide a range of Australian works. *TLR* was, with the University of Technology-Sydney and the Performance Space, one of the main sponsors of the first SoundCulture festival (Sydney, 1991), a Pacific Region initiative promoting new auditive arts that went on to occur in Tokyo in 1993 and in San Francisco in 1996, and is slated to continue at other locations in the future.

The people included on this compact disc have all been associated with *TLR* in one way or another. Sherre DeLys, who presently works as a producer for the program, incorporates a recording by fellow *TLR* producers Jane Ulman and Phillip Ulman, the premier producers of soundscapes in Australia. Phillip Ulman also did the on-site recording of Joyce Hinterding's piece for a *TLR* documentary on Hinterding and noted sound artist Joan Brasil. The others on the disc have collectively had numerous works commissioned by and assistance from *TLR* in one form or another; for example, it was a *TLR* crew out there on the bridge recording Jodi Rose's massive pizzicato. The present collection would not have been possible but for the generosity of *TLR*'s staff and, in particular, that of Andrew McLennan, Senior Producer, who was very helpful in working out many difficult details of this project, but more importantly, in lending his expertise on the matter of Percy Grainger's Free Music. Percy Grainger—

both during his lifetime and posthumously—also enjoyed the services of the ABC in general and *TLR* in particular.

ON GRAINGER AND GLISSANDI

Leonardo Music Journal is privileged to issue examples of Percy Grainger's Free Music, his life-long investigation into a radically new form of music and the means for its realization. Grainger produced these recordings in the 1950s, during the last part of his life, when he was working intensively, in collaboration with Burnett Cross and with the assistance of Ella Grainger, on experimental instruments to realize his ideas. The recordings here are only a small sample of a number of experiments conducted and recorded during the 1950s. Yet, we believe it is the first time any of the recordings have received wide-scale distribution outside of Australia. People living in and visiting Melbourne have the unique ability to visit the Grainger Museum at the University of Melbourne, where all artifacts from his remarkable career are on display. It is through the kind cooperation of the Board of the Museum and Curator Rosemary Florimell that we are able to present the recordings here. We hope these recordings will lead to a better appreciation of Grainger and a proportional strengthening of his position in accounts of the musical avant-garde, as well as a general recognition of Grainger and Cross as a pair of the finest innovators in experimental instrument design.

Percy Grainger (1882–1961) is certainly Australia's best-known composer internationally, despite the fact that he spent relatively little of his adult life in Australia, passing much of his time touring and his final years in White Plains, New York. Nevertheless, the Grainger Museum now stands as a consecration of this most unlikely grandfather of innovative music and sound arts—unlikely because listeners familiar with the gentility of some of Grainger's best-known works, such as "Country Gardens," would no doubt find it difficult to acknowledge that the same composer was actively involved in the type of radical musical ideas usually associated with the likes of Edgar Varèse, Henry Cowell, Conlon Nancarrow, Harry Partch or John Cage. Yet, his first ideas for Free Music came to mind before 1900, when he was quite young, and they would occupy him throughout his career and preoccupy him during the last part of

his life. Moreover, in a speech given in 1938 and republished in the following CD Companion, he admitted that Free Music was his "only important contribution to music."

Once one becomes more familiar with Grainger, the impressive array of his professional activities and interests, the equally distinctive array of his idiosyncratic pursuits, the breadth of his artistic talents and the indefatigable energy and resourcefulness he displayed in all matters, it makes perfect sense that he would have addressed himself toward the basic premises of his craft in an effort to expand the realm of compositional and instrumental possibilities. It also helped to be living during the modernist period, when such questioning engaged many other composers and thinkers. Perhaps the greatest fascination exemplified in Free Music centers around the role of gliding tones and scales, which relates to similar concerns within avant-garde music, from Varèse and his *Ameriques* through Cage's *Imaginary Landscape No. 1* to James Tenney's *For Ann Rising!*

This glissando madness may seem at first like an idiosyncratic trend, were it not for its similarity to that better-known fascination with noise. In modernism, both noises and glissandi signalled a confrontation between the restrictions of musical conventions and the greater domain of worldly sound, with its attendant associations of worldliness in general. Noise as extra-musical sound may have had the capacity to be incorporated into music more directly, but in practice it was usually introduced as dissonance, percussion or an expanded timbral range. When worldly sounds were introduced through contraptual or technological means, they were reduced or contextualized in such a way as to make them musical. Glissandi had the advantage of being musical from the start and, within the infinite gradation of their trajectories, of outdoing dissonance. They were understood as signs of the world because they were in contrast to the segmentation of both temperament and instrumental design. The missing sounds between notes—even between microtones—were seen as markers of a lack of freedom, and the gradient of the infinity of all possible pitches was considered to be typical of the wealth of lived experience outside music. Glissandi were, in this manner, inscriptions tracing the range and possibilities typical of the world and nature. Simply put, a modernist glissando was a line of plenitude.

The roots for modernist glissandi can be traced back to the influence of the Italian composer Ferruccio Busoni, who, as early as the 1890s, had argued for an expansion of musical possibilities and for the development of instruments that would be at the immediate disposal of the composer and equipped with a diapason more appropriate to the breadth of the orchestra. In his influential essay "Sketch of a New Esthetic of Music" (1911), he contrasted the limitations of temperament and segmentation of keyboards themselves against the limitlessness of Nature: "Keyboard instruments . . . have so thoroughly schooled our ears that we are no longer capable of hearing anything else—in capable of hearing except through this impure medium. Yet Nature created an infinite gradation—infinite! Who still knows it nowadays?" [2]

Grainger began studying with Busoni in 1903 and, like his teacher, was probably better known for his piano recitals than for his own composition. It would be plausible that some of Busoni's grand plans for music rubbed off on Grainger, if it were not for the fact that Grainger was already entertaining ideas of non-harmony, gliding tones, total independence of voices and what he called "beatless music" as early as 1899, when he was 17 years old. Nevertheless, it would seem that, despite Grainger's avowed dislike for Busoni's own compositions, the scope of his teacher's ambitions could not help but legitimate his own.

Varèse, another student of Busoni, followed his teacher's lead by interdicting temperament and delineating an infinite gradation of tone. He did so in two complementary ways: through variegated pitches let loose from a battery of percussion instruments and the glissandi of sirens.

I began to resent the arbitrary limitations of the tempered system, especially after reading at about the same time, Helmholtz's description of his experiments with sirens in his *Physiology of Music*. Wanting to experiment myself, I went to the Marché aux Puces, where for next to nothing you could find just about anything, and picked up two small ones. With these I made my first experiments in what I later called spatial music. The beautiful parabolas and hyperbolas of sound the sirens gave me and the haunting quality of the tones made me aware for the first time of the wealth of music outside the narrow limits imposed by keyboard instruments [3].

To be precise, Varèse did not find the "infinite gradation of nature" in nature, but in the foghorns and fire-engine si-

rens floating through his window on Fourteenth Street in New York City circa 1918—sounds that eventually made their way into his compositions. Twenty years later, Cage composed *Imaginary Landscape No. 1* (1939), a combination of percussion and glissandi very reminiscent of Varèse (who, according to Cage, had "fathered forth noise" within Western art music) [4].

Beginning in 1913, the *art of noises* by Luigi Russolo, another composer influenced by both Busoni and Helmholtz, was based in part upon the continuities provided by the rotary motion of the cranks on the *intonarumori*, the "noise-intoning" instruments Russolo designed with Ugo Piatti, and upon the idea of an infinite gradation of tone:

All the sounds and noises that are produced in nature, if they are susceptible to variation of pitch (that is, if they are sounds and noises of a certain duration) change pitch by *enharmonic gradations and never by leaps in pitch*. For example, the howling of the wind produces complete scales in rising and falling. These scales are neither diatonic nor chromatic, they are *enharmonic*.

Likewise, if we move from natural noises into the infinitely richer world of machine noises, we find here also that noises produced by rotary motion are constantly enharmonic in the rising and falling of their pitch [5].

Henry Cowell, in his well-known book *New Musical Resources*, announced a similar idea based on the nature of natural sounds.

Natural sounds, such as the wind playing through trees or grasses, or whistling in the chimney, or the sound of the sea, or thunder, all make use of sliding tones. It is not impossible that such tones may be made the foundation of an art of composition by some composer who would reverse the programmatic concept [6].

But if Cowell was looking for a composer who would find in glissandi a basis from which to build an abstract music, then his friend Percy Grainger was his man (it was Grainger who assisted Cowell in getting out of prison). Grainger thought that music was unique among the arts for its dependence upon the type of segmentation inherent in temperament; as he wrote in 1942, "current music is like trying to do a picture of a landscape, a portrait of a person, in small squares—like a mosaic—or in pre-ordained shapes: straight lines or steps" [7]. Indeed, in "Free Music" (the statement published in the following CD Companion), he attributes a set of visual cues to the genesis of Free Music: "My

impression is that this world of tonal freedom was suggested to me by wave-movements in the sea that I first observed as a young child at Brighton, Victoria, and Albert Park, Melbourne.” He would faithfully keep clear of all programmatic waves or streams soaking Western art music because, within the odd tensions of modernist music, too much of an attachment to worldly sound would likewise be a constraint on freedom. Instead,

For me, of course, my free music seems entirely inspired (heard in the inner ear) and that is why I feel so much duty towards it. It seems to me the only type of music that tallies our modern scientific conception of life (our longing to know life AS IT IS, not merely in a symbolic interpretation), and clearly the kind of music to which all musical progress of many centuries has been working up [8].

The “modern scientific conception of life” was, of course, very conducive to making music with machines. In “Free Music,” following Busoni’s yearning for a piano (the working horse of the composer) that held an orchestra, Grainger expressed the desire for a direct route from composer to performance that would abolish the need for a performer. “A composer wants to speak to his public direct. Machines (if properly constructed and properly written for) are capable of niceties of emotional expression impossible to a human performer. That is why I write my Free Music for theremins—the most perfect tonal instruments I know.” The theremin: here was an instrument capable of producing glissandi all day long. However, although the theremin seems to be designed for the gestures of a conductor, it did not escape Grainger for too much longer that this was also a type of performance. He opted out of the theremin in favor of an instrument that could play more directly from the inscriptions of a composer and not the human movements arising from these marks. He was interested in a machine that came out of music, and not the inverse.

Grainger’s desire for a composing machine led him into his fruitful collaboration—beginning in 1946 and lasting the rest of his life—with Burnett Cross, whom he met while living in White Plains, New York. Unfortunately, there has yet to be an adequate accounting of the progression of their collaborative experiments in sound and instrument design, and the present project is not the occasion for such an undertaking

[9]. There was a great variety of experiments—including a number of false starts and dead ends—with manual, mechanical, electric and photoelectric play, from the small “Butterfly Piano” (whose sounds are included on the compact disc) to an inscribed film soundtrack (drawn sound). Many attempts were characterized by a remarkable resourcefulness. As Jon Bird, Grainger’s biographer, described it,

at times Ella and Percy would don their finest clothes to avoid police suspicion and spend part of an evening rummaging amongst the piles of rubbish by the back doors of department and furniture stores. Eventually the [Free Music] machines employed such improbable articles as pencil sharpeners, milk bottles, bamboo, roller-skate wheels, the bowels of a harmonium, linoleum, ping-pong balls, children’s toy records, egg whisks, cotton reels, bits of sewing machines, carpet rolls, a vacuum cleaner, a hair drier and, of course, miles of strong brown paper and string [10].

Whereas other composers sought the high-technology route, Grainger and Cross tried things close at hand. Witness the cover of this issue of *Leonardo Music Journal*: Grainger’s drawing for the “Oscillator-Playing Tone-Tool 1st Experiment” (experiment conducted 25 October 1951, sketched 23 November 1951), in which a Singer sewing machine drives a hand drill that operates a Codemaster, a small oscillator for practicing Morse Code: one of the great icons of twentieth-century music!

Grainger conducted four main types of instrumental experiments. The first used a pianola to play other keyboards, including the keyboards of Melanettes or Solovoxes (monophonic organs using reeds) clipped onto the (muted) pianola keyboard and connected with strings. Another variation (represented by the first Grainger selection on the compact disc) used a Knoxville Butterfly Piano (manufactured by Wurlitzer)—which had 26 white keys and 18 black keys—tuned in sixth tones, with a player-piano roll cut by Grainger himself to produce a glide. (Actually, these were just close tunings used to simulate glides.)

The second class used pneumatics to play different pipes and reeds, culminating in the Reed-Box-Tone-Tool (heard in the second Grainger selection on the compact disc). This contraption came to be quite large, expanding to 20 feet in length and stretching from dining room to living room in the Graingers’ White Plains home. It used Estey harmonium

reeds set a third of a half tone apart and sounded with an overlap—again, to better approximate a glide and gliding chords. It emulated a player piano, using scores cut into paper and activated by air, in this case provided by an Electrolux vacuum cleaner.

The third type, and perhaps the best known, was the “Kangaroo Pouch” Tone-Tool Cross-Grainger Experimental Instrument for Playing Grainger’s Free Music, otherwise known as the Kangaroo Pouch Free Music Machine. It consisted of two towering carpet spools, the feeder and the eater turrets, which fed and ate a cardboard roll in either direction. Depending upon how it was cut, the cardboard controlled a number of oscillators to produce gliding tones and chords. In its various incarnations—which can be heard in the remaining Grainger selections on the compact disc—the complexities of this machine called forth every possible back-alley knickknack in a dizzying display of bricolage; appropriately, its fatal flaw resided in its high-technology side: the vacuum-tube oscillators would change pitch after only an hour or two of use.

The fourth machine was the “Electric Eye” Tone-Tool, a relatively sophisticated affair that, although designed similarly with two large spools, also had a row of lights shining down upon a sheet of plastic about 5 ft wide, upon which a photo-electrically read score drawn with ink and brush would control the generation of the music. This instrument was still in the process of design and construction at the time Grainger died. Only a few elements of the machine have survived; the rest of it has gone missing and there is a fear that it has been destroyed [11].

A thorough documentation of all the Grainger instruments and recordings would be a tremendous asset for all those interested in twentieth-century music and technology.

References and Notes

1. Although the concept exists elsewhere in Artaud’s work, the phrase “a body without organs” itself appears at the end of his radio work *To Have Done with the Judgement of God* (1947). Please see Clayton Eshleman’s translation of the script in Douglas Kahn and Gregory Whitehead, eds., *Wireless Imagination: Sound, Radio and the Avant-garde* (Cambridge, MA: MIT Press, 1992) pp. 309–329. The most common anglophone source of the term, however, comes from the English translation of the elaboration undertaken by Gilles Deleuze and Felix Guattari in “November 28, 1947: How Do You Make Yourself a Body Without Organs?” in *A Thousand Plateaus: Capitalism and Schizophrenia*, Brian Massumi, trans. (Minneapolis, MN: Univ. of Minnesota Press, 1987) pp. 149–166.

2. Ferruccio Busoni, "Sketch of a New Esthetic of Music," in *Three Classics in the Aesthetics of Music* (New York: Dover, 1962) p. 89.
3. Cited in Louise Varèse, *Varèse: A Looking Glass Diary*, Volume 1 (New York: W.W. Norton, 1972) p. 42. Helmholtz's *Physiology of Music* was published in English as *On the Sensations of Tone as a Physiological Basis for the Theory of Music*.
4. John Cage, "Edgard Varèse" (1958), *Silence* (Middletown, CT: Wesleyan Univ. Press, 1961) pp. 83–84.
5. Luigi Russolo, "The Conquest of Enharmonicism," *The Art of Noises* (1916), Barclay Brown, trans. (New York: Pendragon Press, 1986) p. 63.
6. Henry Cowell, *New Music Resources* (written 1919, published 1929) (New York: Something Else Press, 1969) p. 20.
7. Percy Grainger, letter to Olin Downes (10 September 1942), quoted from *A Musical Genius from Australia: Selected Writings by and about Percy Grainger*, compiled and with a commentary by Teresa Balough (Nedlands, Western Australia: Department of Music, Univ. of Western Australia, 1982) p. 141.
8. Grainger [7] p. 141.
9. For a selection of materials in the Grainger Museum's holdings and a bibliography relevant to Free Music, see Elinor Wrobel, curator, *Percy Grainger's Paradoxical Quest for "World Music": Free Music and Free Music Machines* (Melbourne: Grainger Museum, Univ. of Melbourne, 1994). For further information, see Lewis Foreman, ed., *The Percy Grainger Companion* (London: Thames, 1981); Burnett Cross, "Grainger Free Music Machine," *Recorded Sound: Journal of the British Institute of Recorded Sound* Nos. 45–46 (January–April 1972) pp. 17–21, reprinted in *The Grainger Society Journal* 8, No. 1 (Spring 1986); Jon Bird, *Percy Grainger* (London: Faber and Faber, 1982) Chapter 18; and Richard Franko Goldman, "Percy Grainger's 'Free Music,'" *Juilliard Review* 2 (Fall 1955), reprinted in *A Musical Genius from Australia* [7] pp. 145–154, and in *The Grainger Society Journal*, *ibid.* Finally, see McLennan's interview with Burnett Cross for a program produced for *The Listening Room*, ABC-Classic FM.
10. Bird [9] p. 232.
11. This is the instrument detailed in Cross, "Grainger Free Music Machine" [9].