



image: Debra Bosio Riley, "Silent Blue Soap" video still



An invention of our fast disappearing century, audio art is founded in the idea that sound (as opposed to pitch relationships and a harmonic system) can be the organising principle of musical activity. As a young student, Claude Debussy anticipated this new zone of expression by playing pianistic impressions of Parisian street noise. Six years later, the attractions of pure sound were magnified for him when he heard Javanese gamelan performed at the Paris colonial Exposition of 1889. "Remember the music of Java," he wrote to his friend Pierre Louÿs, "which contained every nuance, even the ones we no longer have names for."

This sense of recapture, a world lost through the ferocious rationality of European music, is present in many of the first ventures into audio art. In the Futurist Manifesto of 1913, the Italian inventor of noise machines, Luigi Russolo, cursed classical orchestras for their enervating anaemia. The rich industrial environment of motors and machines would prove to be the essence of 20th century vitality, he predicted; music would draw from the noises of nature, modern warfare and the city. "And are we not surrounded by strange and curious noises in our own home," he asked, "by the most indefinable timbres and the queerest variations of pitch, emanating from the various pipes for drinking water, gas and heat? Who can deny that these noises are less annoying than those made from morning to evening by the neighbour's piano?"

Russolo's celebration of the urban nervous system projected forward into the future defined by J.G. Ballard, an unsettling world of background hum and sentient communications technology. "A gasolene-driven generator in the entrance hall was soon pounding away," Ballard wrote in *The Ultimate City* (1976), "its power plugged into the mains. Even this small step immediately brought the building alive . . . However, in the tape-recorders, stereo-systems and telephone answering machines, Hallway at last found the noise he needed to break the silence of the city."

Russolo also looked over his shoulder at the end of the 19th century. His theories emerged in a period when science was exploring the properties of sound, using experimental methods not dissimilar to the audio art pioneered by Alvin Lucier in the 1960s and 70s. John Tyndall's *Sound*, published in 1898, is an exhaustive catalogue of acoustic experiments, including musical sounds produced by puffs of air, the action of sound lenses on flame, the creation of artificial acoustic clouds and the musical flow of water. Though late 19th century scientists such as Tyndall and Hermann Helmholtz distanced themselves from the half-magical beliefs of Renaissance philosopher Athanasius Kircher, their methodology shares some of the arcane mystery of Kircher's sonic investigations. In turn, Kircher's hydraulic organ, his speaking statues, solar powered artificial birds and Aeolian harps, seem pre-echoes of Raymond Roussel's fantastic literary creations: an Earthworm Zither Player or a young woman whose lungs are surgically connected to sounding tubes. Roussel's *Impressions d'Afrique*, staged for one week at the Parisian Théâtre Femina in 1911, featured among its scenes the trained earthworm whose undulations in a mica trough dripped mercurial water onto the strings of a zither to produce complex melodies.

Roussel's bizarre inventions lay in an interzone between vaudeville, anthropological fiction and future audio art. A fictive art that was improbable yet tantalisingly possible, the living sound sculptures of *Impressions of Africa* touch areas of cruelty, dream, perverted science, an atavistic social subversion.

Sound has emotive, suggestive powers that can flourish when detached from music. The Futurist agitator and polemicist Marinetti believed that free words, vocal sounds stripped of syntax and inspired by power stations and cannon fire, would enable literature to "enter directly into the universe and become one body with it." In Zurich in 1916, Emmy Hennings and Hugo Ball staged their *Cabaret Voltaire*, Ball reciting a sound poem - "gadji beri bimba glandridi lauli lonni cadori gadjama bim beri glassala" - dressed in a "high, blue and white striped witch doctor's hat", his legs encased in cardboard tubes, aiming to redeem language that had been "devastated and made impossible by journalism".

Audio art began as a rejection of bourgeois values and cultural nostalgia, an attempt to wrestle sound, noise and vocalese

from the clutches of the establishment and its safe havens. Through the medium of performance, Dadaists and Futurists recontextualised sound in a hybrid of rapidly evolving forms. Presaged by Erik Satie's *Parade*, *Musique d'Ameublement* and *Vexations*, sound was transformed from passive rites to action, propelled from the concert stage into art galleries, cafés and clubs, even the vast, intimidatingly dynamic cityscape itself.

As a consequence, audio art has developed into an evolutionary strand that fuses with other art forms yet is separate from their professional aspects. The impact of John Cage led many artists to pursue sonic experimentation that made no claims to instrumental competence or musical form. Though Cage has been rehabilitated as a composer, the potency of his ideas once overshadowed his music. Without Cage it is hard to imagine the existence of the Fluxus group, particularly George Brecht's conceptual, minimalistic, humorous text works that questioned musical certainties.

In 1862, Herman Helmholtz began his magnum opus, *On the Sensations of Tone*, by differentiating noise and musical tones. "We can easily compound noises out of musical tones," he wrote, "as, for example, by simultaneously striking all the keys contained in one or two octaves of a pianoforte." By the late 1950s, George Antheil, Henry Cowell, John Cage and Cecil Taylor had assaulted pianos in ways that Helmholtz could not have imagined; by the early 1960s, Fluxus composers were writing scores that instructed performers to feed the piano with a bale of hay, lie down inside the instrument, push it through a wall, put a dog and a cat inside it or totally destroy it.

Helmholtz proposed irregularity as the quality that distinguished noise from music, yet his categorisation of wind and water, rustling leaves or the rumbling of carriages as noise has been reversed by 20th century audio art philosophy and practice. From 1948, Pierre Schaeffer's manipulation of recorded 'found' sounds created electronic music from the concrete environment. For audio artists, the environment (whether political, urban, rural, psychological or conceptual) had expanded beyond soundworlds. A sound piece might even dispense with sound altogether, suggesting a transferability between art practices that questioned the need for boundaries. Sound had become an infinitely flexible medium for political confrontation and provoking awareness of problematic social, artistic and musical issues. In 1967, for example, Charlotte Moorman was charged with public indecency for playing the cello bare-breasted in the New York premiere of Nam June Paik's *Opéra Sextronique*.

By the 1970s, audio art - as practiced by a growing number of diverse artists such as Christina Kubisch, Annea Lockwood, Max Neuhaus, David Dunn, Max Eastley, Bill Fontana, Harry Bertoia, Gavin Bryars, Raymond Gervais, Michel Waisvisz, Julius, Alvin Curran, The Scratch Orchestra, Hugh Davies, Laurie Anderson, Charlemagne Palestine, Pauline Oliveros and Takehisa Kosugi - encompassed conceptual and impossible texts, land art, environmental installations, sound sculpture, performance art, pyrotechnics, acoustic ecology, sound poetry, electro-acoustic and computer compositions, invented instruments, kinetic sculpture, interspecies communication, performances for records and turntables, interactive systems, multi-media performance, video art and structural film, events exploring natural phenomena ranging from brainwaves to echoes, political resistance music and participatory social events.

Detached in many instances from the art market, the concert hall and the record business, audio art had developed into a relatively independent voice, dedicated to excavating the deeper meanings of sound in an overwhelmingly information-based society. Although Yoko Ono and Laurie Anderson made spectacular transitions from conceptual sound art into rock music, the majority of audio artists actively discouraged associations with music and its compromised conventions of structure, presentation, personality and intent. Now something of an audio art tradition, this disengagement can be found in an intensified form in recent work by younger artists such as Hiroyuki Iida, Atsushi Tominaga, Minoru Sato and Toshiya Tsunoda. Their work is preoccupied with faithful audio documentations of physical processes or electrical events. Although these recordings are issued commercially on compact discs, no other concessions are made to conventional concepts of pleasure, entertainment or aesthetic structuring.

Ironically, as some branches of audio art further distance themselves from mass market tropes, popular music has been invaded by noise. Vinyl's distinctive crackle, the prima materia of turntable artists such as Christian Marclay and Philip Jeck, is now just as likely to be artfully positioned within the ultra-digi-tech of a modern soul record, indicating a self-conscious moment of shared understanding about the significance of technological history within cultural tradition. As media proliferates and the electronic communications soundscape escalates, popular music's absorption of audio art - extreme noise, electronic minimalism, electrical processes, digital glitches, concrete sound, ambient sound, montage - is matched by a crisis of performance precipitated by computer technology. Human performances of MIDI-controlled electronic music are redundant; audio art's annihilation of the musical personality is now a commonplace of techno, where the operators activate machines via Power Books or, like Pierre Schaeffer, manipulate the sounds of the world on record turntables.

An apparent interchangeability of previously marginalised art forms with popular musics, cinema, pop video, computer games and television can create freedom along with dilemmas. It may be argued that audio artists of the past have felt constrained by the seductive nature of music, its power to communicate emotions, excitement and body movement along with ideas. Inhibited or ideological avoidance of such effects has contributed to the near-invisibility of much audio art and its concern with the minutiae of private, precious sound worlds. These worlds may be valuable and beautiful but how much can they tell us about our saturated, often oppressively complex and confusing sound environment? Recent encouraging signs of intersection between audio art and its less rigorous relations complete a circle; just as Russolo and his fellow Futurists sought to mirror and change a world that was bursting with the din of transition, so audio art can

illuminate the terrifying silences that lie buried within our noise.

David Toop / London, England, July 1998

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