

## PERCEPTION AND DEVELOPMENT IN RELATION TO METAMORPHOSIS IN SOUND

At the Exhibition Universelle in 1889, Claude Debussy encountered a performance from a Javanese gamelan ensemble and was fascinated by not only the radiant sounds, but what he found as the Indonesian method of shaping time. Although not interested in the metaphysical structure of the music, or even perhaps the ethno-history of the style, he perceived the radically different temporal modes from European practices.<sup>1</sup> This helped him in his own work in experimenting with traditional structures, tonal harmonies and was largely influential in transforming his *Modus Operandi*, with Erik Satie, an early milestone in the development of experimental music.

In theory, and in the context of Martin Heidegger's discourse in *Being and Time*, one could see the unraveling of metamorphosis in hearing. Heidegger devotes a section to hearing, listening and hearkening. Heidegger explains to us how certainties can be mistakes, how language always precedes and exceeds us, and notes 'Language can be broken up into words -things which are present-at-hand' "Hearkening" is phenomenally still more primordial than what is defined as "hearing" in psychology – the senses of tones and the perception of sounds. "Hearkening too has the kind of Being of the hearing which understands."<sup>2</sup>

Composer and performer Trevor Wishart, who could be considered in many senses a specialist in sound metamorphosis, constructed the software tools to make it possible such as the Sound Loom / CDP, as well as other Computer Sound Transformation systems in the 1970's. The earliest successful transformations developed can be heard in his piece *Red Bird* (1973–77) where the structure of the piece was conceived between sound types. As he was at the time using a local, analog studio, which only offered techniques for achieving the most practical outcomes. The transformations heard however, all from voice to assorted sounds, include 'lis' (from the

word 'listen') to birdsong, 'rea' (from the word 'reason') to animal-sounds, 'reason-able' to water, and various machine-like events constructed from vocal subunits.<sup>3</sup> By combining the basic studio facilities available (tape editing, mixing, EQ, etc) and extending the range of vocal techniques (developed while working as a free improvising performer) the sounds were achieved. Eventually, a number of software instruments for the spectral transformation were developed and one of the most significant of these were spectral morphing – the creation of a seamless transition between two different sounds which are themselves in spectral motion.

Metamorphosis in music, whether one as a producer seeks to make or as a listener finds entertainment in, can be heard everywhere in popular culture. In Dub music for example, an originally Jamaican invention, bits of sound (stored on multi-track tape or hard disc) alters from any original sequence and redesignates into a new listener experience. Or, one could see the possibilities from the invention of the loop, by Terry Riley, which allows sound to change and alter after generating itself at its own pace. Not only a phenomenon for experimental artists and musicians, this technique can be heard from any Hip Hop dj or pop song to this day.

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1. McClary, Susan. *Rap, Minimalism and Structures of Time in Late Twentieth Century Culture Audio Culture*. Ed: Christopher Cox. Continuum NY. 2004
2. Heidegger, Martin. *Being and Time*. Translated by John MacQuarrie and Edward Robinson. Oxford: Blackwell. 1995 [1962]
3. <http://www.trevorwishart.co.uk/transformation.html>