



**Heaton, R. (1983) 'Horatiu Radulescu, 'Sound Plasma''.**  
***Contact*, 26. ISSN 0308-5066**

## **ResearchSPAce**

<http://researchspace.bathspa.ac.uk/>

This version is made available in accordance with publisher policies.

Please cite only the published version using the reference above.

See <http://researchspace.bathspa.ac.uk/> for usage policies.

Please scroll down to view the document.

---

Roger Heaton

## Horatiu Radulescu, 'Sound Plasma'

---

1983 sees the first performances in Britain of music by Radulescu. On 28 April Roger Heaton gave the world premiere of *The Inner Time* for solo clarinet at the Purcell Room. On 31 July the composer will direct Circle in a concert of his works in Adrian Jack's MusICA series at the ICA; the programme will include *Ecou atins*, *Capricorn's Nostalgic Crickets*, and *Incandescent Serene*.

Paris is becoming, increasingly, the most interesting and stimulating centre for new music in Europe. It is the base for the Ensemble l'Itinéraire and for such important composers as Gerard Grisey and Tristan Murail, members of that 'alternative' movement which shuns the complexities of the post-integral serialists and explores sound itself by making the harmonic spectrum the substance of music. Among these composers Horatiu Radulescu stands out as one of the most imaginative and colourful figures working in France today.

Radulescu was born in Romania in 1942. He studied composition with Stefan Niculescu, Tiberiu Olah, and Aurel Stroe, and then undertook research into folklore at the Institute of Ethnology of the Romanian Academy of Sciences. In 1970 he left Romania to participate in the Ferienkurse für Neue Musik at Darmstadt and Cologne, and he has never returned to his native country to live: he settled in Paris, and became a French citizen in 1974. Radulescu is little known in Britain but on the Continent he is regarded as the most adventurous and least traditional composer of the 'alternative' group—a reputation that has been fostered by numerous commissions from the major festivals of contemporary music, French Radio, and IRCAM, and by frequent performances and broadcasts both in Europe and the USA; he has several committed interpreters, including the flautist Pierre-Yves Artaud and the double bass player Fernando Grillo. The instrumentation and titles of his works are always extravagant and exotic: *IHI19—requiem pour l'azur* (1972)<sup>1</sup> is for string quartet, harpsichord, 'prepared sound icons' (pianos), 19 gold and silver coins, 13 alto flutes, 19 reciters, 19 yoga dancers (with dynamic compressed feedback microphones), and tape; *Wild Incantesimo* (1978, composed for the Metz Festival) is scored for nine orchestras (162 players) whose parts are written on 4170 slides which are to be projected onto no fewer than 19 screens.

*Sound Plasma—Music of the Future Sign* (1969-73), written for the Danish Institute of Futurology, is both a performable prose composition and a theoretical text. Each page of the pamphlet is 'numbered' with a line of verse and the theoretical exposition is overlaid with 'stardust poetry' which evokes the 'universe' of the music Radulescu describes. He states that most music treats sound from the outside, that it simply organises sounds produced in traditional ways, and that even in the expanded sound world of electronic music, 'the old formal and aesthetic mania of acting with sounds has dominated'. In his own work, by contrast, he explores the possibility of sound's autonomy and its direct communication with the listener—he speaks of 'entering the sound'. While

recognising the pure music of works such as Ligeti's *Atmospheres* and Stockhausen's *Stimmung*, he feels that it has taken a long time for musicians to realise the potential of sound itself, and 'its organism, the music . . . As if the abstract sound vibrations had obliged a more concrete sound activity and mimetism in relation to reality.' This last sentence is characteristic of the beautiful yet confusing poetry of Radulescu's language (he has published Romanian and English poems in France, Germany, and the USA). Like other composers who have sought to explain or describe their music in words, Radulescu has constructed a compositional mythology around his music; in his case, however, this arises not from a desire to mystify but as an integral part of his whole artistic personality.

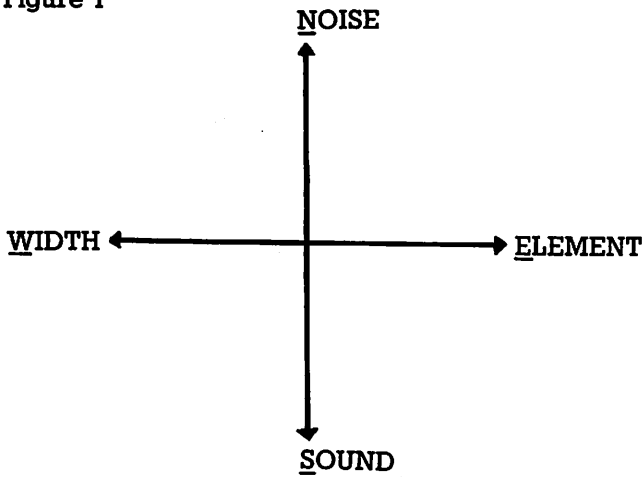
Radulescu's works are built from sound situations created by different treatments of fundamentals, the spectra produced by these treatments, and the isolation of individual spectra. The music results 'naturally' from the initial organisation of sound sources and formal structures, its interest lying in the interaction of the resulting harmonics, difference tones, subtones, rhythmic beats, and so on. The texture thus produced is called the 'sound plasma';

there are no longer steps, interval jumps, chords, etc., but discreetly gliding and trembling narrow frequency bands, vibrating (living) sound plasma. Duration, by the lack of clear appearance and disappearance, is infinitely long or short, and no more an element of comparison. Hence, rhythm exists no longer as combined values, but only as spectrum pulse of the micro and macro sound plasma, or as an infrasonic trembling of the non-evident sound lava.

The 'narrow frequency band' is a fundamental pitch consisting of one or more of the natural and irregular frequencies that oscillate within any interval between a ¼- and a ¾-tone. This band 'emanates an aureole of harmonics'—the overtones in the harmonic series of the fundamental—which are isolated and/or 'amplified' in the music, forming the 'spectrum pulse'. The artificially organised rhythms of traditional music are replaced by this natural pulse, which is produced by two operations: the interaction of different sound sources (for example, the human voice with instruments, or electronic with recorded natural sounds), and the multiphonic treatment of a single sound. In the first operation opposing fundamentals, with their respective spectra, struggle to form a single spectrum; in the second a single spectrum fluctuates according to the performer's control.

Dynamics follow a similar pattern. Timbre is a consequence of the spectrum pulse, which is governed by the 'sound compass' and the 'global sound sources'. The axes of the 'sound compass' join opposites that represent a definition of the space in which the sound occurs (Figure 1). 'Noise' means 'unclearness, wave unperiodicity, irregularity, opaque spectrum, confusion between fundamentals and harmonics', and so on, and 'Sound' is its opposite; the micro pulses of the sound plasma, operating on the overtones of the narrow frequency band, produce colour changes resulting from the naturally irregular interaction of N and S, giving the music 'consistency, quality and space'. 'Width' stands for the 'wide atmospheres of agglomerate and dense sound plasma', and 'Element' for 'a narrow band of rarefied sound plasma'; their interaction gives rise to the macro pulse of the sound plasma, which gives the music its 'density, quantity and time' (that is, form). Radulescu gives two examples of the 'sound compass': the first shows the extreme limits of the sound space and the second the placing of traditional musics and natural sounds within that space (Figures 2 and 3). The micro and macro sound

Figure 1



plasma is multi-directional and envelops the total space continuously.

According to Radulescu the vibrations that are perpetually present in the environment are channelled to our senses through five 'global sound sources': the human source that produces vocal sounds, breath, etc. (H); the 'concrete' human source that organises sounds produced by H into language, articulation, etc. (L); natural sound such as birdsong, wind, or rain (N); an instrument or object (I/O), a cello or a stone, for example; and electronic sound (E). These five sources co-exist and interact to synthesise the sound plasma. They may be classified as objective (N) and subjective (L, I/O, H, E), a classification that can have a bearing on the relationship between the composer/performer and the music he creates—as, for example, when the sound source is natural-objective and is mediated or contained by subjective sources. To put it simply, the ways in which the global sound sources are treated must follow certain 'compositional' laws if their product is to fuse together and achieve 'the sound micro and macro plasma, as the real music of the future'.

Sound situations are set up by different syntheses of the sounds from the global sources, so that, for example, some sounds are modified and others concealed. The score of *Capricorn's Nostalgic Crickets* (1974), for seven woodwinds of the same type, consists of 96 pitches (some of which create 1/4- and 3/4-tone intervals), each notated by one of four

symbols which show the treatment to be applied to it. The four treatments are an irregular tremolo on a single pitch (applied only to pitches in the highest register), multiphonics, multiphonic trills or tremolos on the same fundamental, and flutter tonguing and singing in unison with the pitch; the global sound sources used are therefore I/O and H. Each player begins at a different position in the series of pitches and with a different type of treatment, so that each pitch is treated both by the player (creating the micro plasma) and by natural interaction with the other six pitches and treatments (forming the macro plasma). The sounds are intended to bear as little resemblance as possible to those of the instrument when it is played in the conventional way. Each pitch-event begins *pianissimo*, grows to a 'paroxysm in the middle region', and fades away again, lasting 11 seconds or longer; the transition from one to the next should be inaudible.

Similar sound situations are created in *Twilight Intricacy* (1973) for 13 double basses and 679 tuned gold and silver coins spun by 97 coin spinners, and *The Outer Time* (1979-80) for 23 flutes. In another group of works, including *Lamento di Gesù* (1973-5) for large orchestra and seven psalteries, and *Doruind* (1976) for 48 solo voices (both composed for the Royan Festival), the spectrum pulse derives from a few spectra created by different treatments (filtering, ring modulation, reverberation, etc.) of the narrow frequency band.

Radulescu's mystical approach to composition is, perhaps, a throwback to the sixties (he cites *Stimmung* as an important influence). But whatever its origins, his work offers an alternative to the regression and conservatism of the neoromantics, the often impenetrable complexities of the post-integral serialists, and the mindlessness of much minimalism—a refreshingly different music which is both 'musical' and new.

Nature and art in their highest degree of purity merge. Therefore the sound plasma as music of the . . . future should reach an abstract nature, created by us, which conceals—as nature does—both cause and effect, and thus surpasses its original condition ('handmade') by becoming a complex phenomenon.

<sup>1</sup> Until 1977 Radulescu's works were published by Edition Modern, Munich; since that date they have been published under the composer's own imprint.

Figure 2

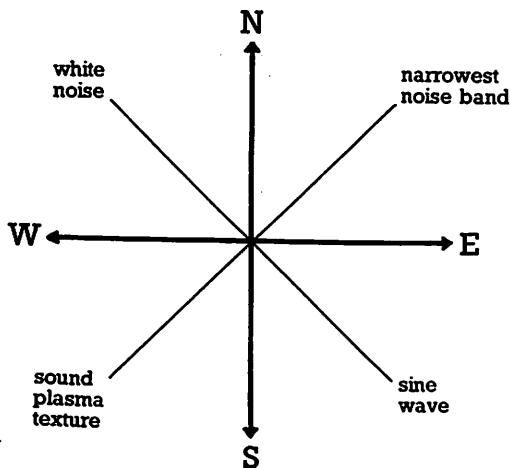


Figure 3

