

Memory Space

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Memory may be mapped metaphorically onto space, as in the mediaeval and renaissance *Memory Theatre* (see Frances Yates, *Art of Memory*, 1966/1992 [Reference 4]). But we now have the power to project this literally in sound in sound installation systems such as the *Klangdom*. In *Resonances* (8 channel acousmatic work, commissioned by the IMEB (Bourges) in 2007), I explore my memories of the modernist repertoire (1820-1940) using small timbral ‘instants’, extended, layered and spatialised. Some juxta- and superpositions are logical, others unlikely – but that is the joy of memory and creativity. But memories also fade and die ... This paper examines this work, and how the memory and spatial relationships are articulated through the material. It also presents plans for a more elaborate work to be realised in 2008-2009. In this the fixed nature of the previous work will give way to an ‘evolving’ acousmatic piece which changes at each performance as new spatial layers are added, others fade. The paper will be illustrated with music examples.

I. MEMORY AND SPACE

Space is not simply a geometric ‘thing out there’. We are born with sight and sound, touch, taste and smell ready to initiate our particular construction of it. Space would not be perceptible without objects, textures, sounds. The sonic arts have tended to separate out taste and smell (although they have crept back in in recent more open social musical spaces) – and touch, too, unless you are a performer.

But *memory* is also spatial in two senses. Neuroscience is slowly unlocking the secrets of the most complex system observable by us – the human brain. But the nature of memory within the brain is not much understood – except that the questions are becoming more sophisticated and it is evidently distributed in many locations. But there is also a deeper link which has been exploited over some thousands of years – most extensively before writing (and more specifically printing) allowed us a short cut.

This is best described in classical, mediaeval and renaissance practices of mapping places, images and other objects of memory onto an imaginary stage in the mind – the so-called *Memory Theatre*. This was most especially examined in Frances Yates’s book *The Art of Memory* (1966/1992 [Reference 4]). Starting from ideas of rhetoric inherited directly from the Greeks through Roman sources we start from the idea that natural memory can be improved or augmented through the exercise of ‘artificial memory’. This is created from

places and *images*. A place (*locus*) is easily memorised – a construction, a characteristic *location*. Images are ‘forms, marks or simulacra of what we wish to remember’ [Reference 4: p.22]. There have been developed rules for places and rules for images. The *loci* relate to each other such they can be walked through in the imagination and even a particular building is to be seen as the best receptacle for the totality of the loci. Each fifth locus is given a particular mark in its characteristic. The building should be empty since crowds might distract! This allows us to construct two kinds of artificial memory - *memory for things* and *memory for words*. ‘Things’ are not objects in the contemporary sense but can include the subjects of speech - ‘the ideas we are trying to express’ - while words are simply (but importantly) a vehicle to convey that and often have to be memorised in the ‘correct’ order. In brief, the art of artificial memory lies in the direct association of image with locus and the ability to recall one through ‘visiting’ the other. By the Renaissance period the building within which the memory locations were found was very often constructed as a kind of theatre with five doors, five columns and other easily memorised characteristics. Yates discusses many of these examples and their complex historical interconnections – including highly dangerous rivalries, accusations of magic, heresy and the like – such as those of Giordano Bruno (late 16th C) and Robert Fludd (early 17th C).

II. TIME PAST

I have for a long time been interested in exploring through composition how memory and music interact. In the 1980s I completed a series of works (*Time Past I-IV* for various solo instruments or voice and electronics) based on different ‘layers’ of memory from mythic and cultural, to poetic and ‘technical’.

In *Time Past I* the tape-delay system of Stockhausen’s *Solo* was used to create polyphony. The tape delay systems of those years had a physical spatiality now lost to the digital world. The longer the tape, the longer the time. Delay times from 7.5s to 45s – that is from the edge of short term memory into the longer term – were used. The choices for the live montage included when (and hence what) to record. Which delay playback heads were used, and whether the signal from these was fed back and re-recorded. The resulting polyphony managed to avoid the obviously canonic (so easily done with delay lines of

fixed duration). In *Time Past II* (instrumental and electronic) and *III* (acousmatic) issues of mythic time ('before recorded time') were modelled on Simha Arom's work in the Central African Republic. Most specifically the myth of the origin of music from the NgBaka, in which a hunting trap becomes a music bow and thus music is discovered. Common usage of the bow for hunting and music is found in many cultures.

In *Time Past IV* (soprano and tape), Shakespeare's Sonnet 30 ('When to the sessions of sweet silent thought, I summon up remembrance of things past ...'), the text is fragmented and then slowly reassembled as the work progresses. In a kind of archaeological reversal of time the sonnet is pieced together; fragments change order until the whole is finally revealed. A necessary struggle to recall and reconstitute. (Yates discusses Shakespeare's Globe Theatre in detail as relating to a real manifestation of Fludd's memory theatre [Reference 4: chapter 16].)

The entire sequence was influenced also by my reading Marcel Proust's *A la recherche du temps perdu* at that time. A taste, a smell, a felt texture can trigger the most profound mental shifts into memory. These are not mere recollections of the past but shifts in mental space for a brief moment 'back to where you were then'. As the 'author' remarks in final novel of the sequence, *Time Regained*:

"... for in order to get nearer to the sound of the bell and to hear it better it was into my own depths that I had to re-descend. And this could only be because its peal had always been there, inside me, and not this sound only but also, between that distant moment and the present one, unrolled in all its vast length, the whole of that past which I was not aware that I carried about within me." [Reference [2]: p.1105]

III. THE MOMENT (EXTENDED)

Duration has no meaning in spatialised memory – but that gives its recall and realisation great flexibility. That is in externalising a memory we may subject it to all kinds of time manipulations. Historical time can be 'time stretched'. Karel Goeyvaerts talked in his early correspondence with Stockhausen (1951-53) of 'dead sounds' - effectively of virtually no duration [3] - the impossibility of which did not stop the idea having resonance in Stockhausen's later thinking. The instantaneous and the eternal meet in William Blake's famous dictum: 'He who kisses the joy as it flies lives in eternity's sunrise' which was of course the motto for Stockhausen's *Momente*. That same composer's *Hymnen* had space built in as we 'flew' with him across continents, glimpsing national anthem groups and regions, finally finishing up in the Utopia of 'pluramon' a striking image of both memory and prediction. In fact the anthems of *Hymnen* are increasingly the objects of

memory as they fade, change meaning and simply disappear. The Cold War was once the dominant contemporary world-image and is now faded. The metaphors of space and time blur inevitably in listening to this work. This explains the fragility of the postmodern idea of 'double coding' – we increasingly fail to remember the 'references'. And, furthermore, each of us has a unique pattern of memory fades – we can call this a unique resonance.

IV. SPACE AND TIME

Sound projection (on such as the acousmonium) allows us to play with sound in space in performance. But the advent of multi-channel surround space allows composers to control that to an even greater extent – to control more clearly a spatial polyphony and to allow sounds to be heard 'da lontano' at the same time as an intimate close soundfield is also present.

György Ligeti played with the spatiality of memory in his orchestral work *Lontano*. He brilliantly manipulates the tonal space of harmony into an allusion of real space and distance. This in turn reminds us of things we think we have remembered –

"... the very sound of horns has a 'historical perspective'. ... an allusion, a reference to certain elements of late romantic music. ... particularly of Bruckner and Mahler, but also of Wagner. ... Well, there are many similar – not quotations, but allusions in *Lontano*. I would say that as well as spatial distance, there is also temporal distance; that is to say, we can grasp the work only within our tradition, within a certain musical education. ... it does not treat exact quotations from late romantic music, but certain types of late romantic music are just touched upon. ... the temporal distancing evokes also a spatial distancing. The horns can be heard from a distance and from long ago ..." [Reference 1: p.93]

This work (its soundworld and its ideas) undoubtedly influenced my own recent work *Resonances*.

V. RESONANCES

Most recently (2007) I completed *Resonances* (8-channel acousmatic). This was commissioned by the Institut International de Musique Electroacoustique de Bourges and was first performed at the Festival Synthèse, Bourges in June 2007.

Resonances 'plays with' our memories of the timbres and colours of the modernist repertoire (with considerable reference also to some 19th C precursors from which it is said to have evolved) (1820-1940). I always loved the music of the 20th C having come to it earlier than more classical or romantic repertoires (the Bartok string

quartets were my earliest record purchases). In the great tradition of British education I was asked to teach a course on modernism in music at short notice and relatively unqualified; but I realised in preparing such a programme how much I already knew by ear and how little I knew of the background theory. The sound came first and I have always attempted to teach with this priority – the experience (and memory) of the soundworld first followed by its construction and historical context in tandem.

In this work we hear glimpses of music we think we know; no melody or rhythm, just an instant of ‘colour’, frozen and moving – ‘eternity in a moment’. Colours may be vivid and clear, or sometimes dark and opaque. This is a personal choice from my memories of a repertoire I love but which may not last another century. Memory changes perspectives, transforms and shuffles, creating unique resonances in each of us.

VI. SPATIALISATION OF TIMBRAL MEMORY IN *RESONANCES*

I will now describe the *spatialisation of timbral memory* in *Resonances* - how layers and movements of sound are not only spatialised for ‘acousmatic’ reasons but as an analogy to spatial thinking about history and memory. Personally I ‘see’ time and space in front of me while composing in the studio. While using ‘classical’ aural approaches to sound combination – that is with no imposed theory on the one hand or overt narrative on the other – I also found that the ‘memory time’ relations started to speak directly to me, indeed intuition and free association often indicate a subconscious hard at work. But there was one explicit decision - the opening. As Adorno said, it all began with late Beethoven. The suspended discord at the centre of the fourth movement of the Ninth Symphony is first and foremost an extraordinary sound in which harmony dissolves into timbre. This is where we begin. This in turn dissolves into that great enigma of the mid-19th century, the ‘Tristan chord’. Do I claim that decision is based purely on the sound? I’m not so sure ... but I now ‘played’ with another version of the chord (in Debussy’s *Prélude à ‘L’après-midi d’un faun’*) which my memory has suggested to me. This collapse and expansion are at once timbral and spatial, they literally grow around the listener.

But in addition to the timbral transformations that articulate this juxtaposition, the history of 19th C music is also spatialised around the listener. This is further reinforced through the metaphor of the river. There are allusions to the Rhine (although it has moved slightly – another Debussy-Wagner constellation whose sketch was titled *La cathédrale engloutie ... sous le Rhin*) and later in the piece a Swan boat that sails to another country and century (Wagner to Ligeti).

Memory shuffles both time and space: this is often described through the metaphor of the window ‘through’ to another world displaced from that in the current foreground. But in turn that foreground can curl back and retreat to the distance. We glimpse times yet to come, new sounds and timbres. Sometimes the space of another planet (as in Schoenberg’s imagination). In addition to the window there is the mirror – the perfect space-time construction of modernism (especially for the Webernians). A purely spatial construct is elevated to a major metaphor of time reversal – ‘in my end is my beginning’. So Schoenberg and Webern are found transformed in space and time as each point is placed in the memory map.

But in memory is also forgetfulness and ... we forgot the Russians! So there is a burst of colour and we go from the slow movement of a coronation to the ecstatic fury of a dance to the death – where modernism left the body for the best part of the 20th century, and where the piece concludes.

VII. FUTURE PLANS

I am planning a work which explores these relationships in a more dynamic and open work. The *Klangdom* (or its equivalent installation) can become a literal representation of such a spatialisation of memory in sound. Software would control movements of the different layers of ‘memory’ (and their eventual fading). While conceived as a primarily acousmatic work there will be a ‘live mix element’ resulting in similar but evolving performances over time with each performance adding a new layer while other memories transform and eventually fade out. It is planned for completion in 2009.

REFERENCES

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