THE TWINS: A PURE PLANE OF IMMANENCE

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"… there is a pure plane of immanence, univocality, composition, upon which everything is given, upon which unformed elements and materials dance that are distinguished from one another only by their speed and that enter into this or that individuated assemblage depending on their connections, the relations of movement." (Deleuze & Guattari 1987, 255)

David Worrall is a composer and sound artist, based in Canberra Australia, who has had a long-term involvement with computer-based composition and multimedia art. Perhaps his 'signature' construction is his 'Dome' – a portable immersive audio-visual environment. The Dome, based on the geodesic dome promoted by Buckminster Fuller, was first developed in 1987 with animator Stuart Ramsden. Their first large collaborative work *Life Dreaming* was commissioned by the Australian Bicentennial Authority in 1988. The work was based on the Life algorithm of John Horton Conway and was performed in a seven meter radius dome with a seating capacity of approximately 200 (Worrall 1989). Ramsden and Worrall then established ACAT, the Australian Centre for the Arts and Technology at the Institute of the Arts, Australian National University, Canberra in 1989 and developed a curriculum in which animators and composers studied such things as the use of a broad spectrum of mathematical and algorithmic techniques (Worrall 1996 "Studies in metamusical methods..."). Since leaving ACAT, Worrall has continued to independently develop the Dome technology, both commercially and artistically, through his company Avatar Space Design (Avatar website 2000). Worrall's investigations and developments in this area are at the leading edge of interactive and immersive sound technologies in Australia.

This paper is concerned with another central strand of Worrall's practice which has foundationally informed the development of his creative relationship with computer-based technology and music composition – namely his notion of 'procedural composition'. This elegant and simple methodology describes and inscribes the computer as essential to a creative moment – not simply as tool, as platform, or as

instrument, but as Medium in the proper sense – a projective substance of unexpected answers. Worrall's work contributes substantially to the emergence of generative computational works as works of art.

In particular this paper focuses upon Worrall's 1999 installation *The Twins* (Worrall 2002 website). The installation consists of a pair of semi-naked sex-dolls playing Scrabble. Embedded in their facial orifices are small loudspeakers, through which they communicate, both with each other and to their exhibition audience. This 'conversation' consists of vocal sounds composed and synthesised in real-time using a software speech synthesiser, controlled by software written by the artist. Worrall explains the construction of the sound work in the following way:

> *"The Twins* 'speech' is generated continuously, in real time, using the Macintosh speech synthesizer whose phoneme generators are controlled by my own software, written in Python. The phoneme streams are composed of valid English phoneme sequences. However rules invoking in-word phoneme placement (which dictate that certain phonemes can only occur at the beginning, in the middle or at the end of words) are ignored." (Worrall 1999)

The two painted plastic dolls, one male and one female, sit facing one another. Not fully blown up, kept a little let down, soft, so that they can bend into the chairs. Full of stale warm human breath and wearing underwear, they 'speak' to each other, answering in counterpoint, or speaking over one another, or chiming in together, or sharing spaces of silence. Their conversation is just beyond reach – otherwise we could join in. Their secret language ebbs and flows, and is moody – in the way music is and in the way speech is. We try to glean the 'gist' of what they are saying though these (a)tonal rhythms, automatically, unconsciously, and in this way we ARE, we are part of the work.

The Twins bears interesting correlation to the philosophical writings of Gilles Deleuze and Felix Guattari, and to their notion of the 'body without organs'. *The Twins* enacts an auto-poesis that erases agency (a 'becoming-animal') while generating unlimited responsiveness (a 'becoming-machine'). What new conceptions of human consciousness emerge from such a delicate, intimate, and abstract continuum?

Becoming animal

In its most immediate sense, *The Twins* is a ready-made and has a naïve quality. A construction of everyday objects, banal in their arrangement, and presented simply and literally for what they are. There is no Duchampian inversion (the bicycle wheel upside-down), but chairs, table, scrabble game, dolls, underwear are what they are. There is a level of viewing dis/comfort in this – objects intense in their familiarity are arranged ordinarily and left. The scene is similar to a child's tea party – where the activity is quite real and there is no dream or phantasy involved. The child does not imagine a tea party, does not draw a picture of a tea party, but quite literally has a tea party. But there is no tea (an adult substance). One must substitute water or cordial. It's a private embarrassment, and that is the feeling which emanates from *The Twins*.

Visually then, *The Twins* is not a representation – an image for contemplation and identification. It is, more accurately, a zone, a circular territory for a passive participation. There is no re-presentation, but there is misplacement. The inflated sex dolls, like a teddy or a doll, are taken out of their usual comfort role and committed to another kind of play, for which they are not designed. In this shift, which is the artist's sense of humour, is our discomfort, amusement, embarrassment. The dolls, in their plastic resemblance, their anti-presence, may be felt as a threshold of becoming. Deleuze and Guattari write:

> "A becoming is not a correspondence between relations. But neither is it a resemblance, an imitation, or, at the limit, an identification. … Becomings-animal are neither dreams nor phantasies. They are perfectly real. But which reality is at issue here? For if becoming animal does not consist in playing animal or imitating an animal, it is clear that the human being does not 'really' become an animal any more than the animal 'really' becomes something else. Becoming produces nothing other than itself. We fall into a false alternative if we say that you either imitate or you are. What is real is the becoming itself, the block of becoming, not the supposedly fixed terms through which that which becomes passes. Becoming can and should be defined as becoming-animal even in the absence of a term that would be the animal become." (Deleuze & Guattari 1987, 238)

The viewer is not asked to identify or interpret, but insofar as they perceive use-value in the ordinary objects (chairs, table, scrabble game), then there is an animation of the assemblage (shadowing the body through the installation space). The dolls should not be read as human substitute (a life drawing foundational to fine art). Rather they are an imaginary friend, the creature of potential action, the animal of a becoming. The installation is not (or not only) seen with the eyes but involves the phenomenon of seeing.

Hearing *The Twins* is also phenomenological. What we think we see / hear is speech – and one must both resist and accept that in order to experience the work. It is not (or not only) a listening with the ears that is required – again not an interpretation or a deciphering. Worrall releases the phoneme, the basic aural unit of speech, from within the English language. But the effect is not to rob it of functionality – after all most of our communications are phatic (emotive reassurance and common identification rather than information bearing). The phoneme streams approach the refrains of birdcall (a becoming-bird) or the vibrations of insect noise (a becoming-cicada). The speech synthesiser program is a virtual ready-made, as is language itself in Worrall's material re-arrangement of its basic phonetic rules. And in his own programming code, where he 'speaks' to the computer in its own language, Worrall demonstrates an understanding of himself not as author but as composition, a multilingual complexity. Beautifully, it is Worrall's appreciation of the material substantive nature of sound and vision that enables him to fashion the virtual – the creative informatics of procedural composition. He writes:

> "Today, one may select almost any combination of human and/or environmental factors as the basis for independently establishing compositional continuity. With the aid of computation, procedural methods can result in compositions of a considerable and previously unimagined complexity. The procedural construction approach to composing is different from past approaches in that it does not attempt to create the work (the sonic 'object') directly, but by formulating procedures that describe the behaviour of a conceptual model, the resulting sound/image construction is formed and manipulated conceptually. The reduced importance of directly controlling what one might call the dramatic contour of the object is fundamental to procedural making – and further extends conceptual art practice." (Worrall 1999)

The sex dolls cannot return our gaze though their libidinal command is real. Their speech cannot be understood though we know what they are saying – on the rise and fall of their tonalities float messages of sadness, of irritation, of agreement, of indifference. 'You don't have to tell me anything. I understand.' In this interpolation of ourselves into the work, this involvement, there is a becoming. A becoming lacks a subject distinct from itself. If we cease to objectify the work then the space between author and reader, artist and viewer, composer and audience ceases to be one of maker-receiver but are inseparable planes embedded within the work, a single block of becoming. Within this geometry there is an unfolding of moments, durational intensities, uncertainties, effects, drives, propulsions. Procedural composition may be understood as a harnessing of force rather than form. Worrall writes:

> "Procedural compositions are made using a command and control structure: not simply with predefined tools to simulate classical composition methods (automation), but in the innovative design and use of new tools in order to expand the procedural possibilities of the art. For example, programming fractals on a computer and producing images and sounds is procedural because it introduces an entirely new class of compositions and compositional parameters compared to a through-composed work. Procedural composition enables the composer to consider music and animation as worlds defined by (mathematical) spaces - particular aggregates of items inhabiting a situation that can be altered according to a certain number of variables rather than as a traditionally defined discursive argument drawn from linguistic images." (Worrall 1994)

Becoming machine

The mathematical algorithm, like cellular DNA, is not a signature code, an answer, a 'word'. It is a material metonym, a fractal, and possibly a phoneme, a small part through which is visible the whole. What is required is a process of machinic expansion. Take any phoneme (the vowel 'aa' or the consonant 'v' for instance) and through it (through the conch shell of the ear) we can hear an unlimited expansiveness of meaning – a resonating universe (not a universal meaning, not a 'primitive'). With that vibration there is a becoming-insect, a becoming-molecular, a becoming-machine. In *The Twins,* the device that effects expansion is the computer. Can we begin to perceive a plane of synthetic substance? The computer effects a

movement – the signals sent by fingers touching the keyboard are stored in an arrangement, then reactivated, sending out signals to two small speakers that emit sounds. The silent computational process shifts an assemblage through matrices and vectors of time.

There is no doubt that technology is a path bearing future momentum, that telematic systems are an integral aspect of a changing social fabric. But the becoming-machine is not oppositional to the becoming-animal. All becomings are molecular and the blocks and planes of their symbiosis is synchronic. Deleuze and Guattari understand the machinic as a common structural formation. "The varying relations into which a colour, sound, gesture, movement, or position enters in the same species, and in different species, form so many machinic enunciations."(Deleuze & Guattari 1987, 331) They modify an evolutionary understanding of change and of time to incorporate such collective machinic enunciations, describing a process of involution.

> "There is a block of becoming that snaps up the wasp and the orchid, but from which no wasp-orchid can ever descend. There is a block of becoming that takes hold of the cat and the baboon, the alliance between which is effected by a C virus. There is a block of becoming between young roots and certain microorganisms, the alliance between which is effected by the materials synthesised in the leaves (rhizosphere). If there is originality in neoevolutionism, it is attributable in part to phenomenon of this kind in which evolution does not go from something less differentiated to more differentiated, in which it ceases to be a hereditary filiative evolution, becoming communicative or contagious. Accordingly, the term we would prefer for this form of evolution between heterogeneous terms is 'involution', on the condition that involution is in no way confused with regression. Becoming is involutionary, involution is creative. To regress is to move in the direction of something less differentiated. But to involve is to form a block that runs its own line 'between' terms in play and beneath assignable relations." (Deleuze & Guattari 1987, 238-9).

The Twins is not a demonstration of technological sophistication. It is not 'about' technology's promise, its futurity as a point of definition. Nevertheless 'our' involvement with the work is a machinic assemblage of involution, which processes time (has a future). Worrall is a composer, and in attention to this he has developed

the methodology of procedural composition that is more and more centrally bound to the computer. This should be understood as thoroughly different from a composer writing music. One may perceive music in *The Twins*, but one is more likely not to. Music is not an already known outcome for Worrall (an understood linear goal). Worrall manipulates sound substantively and makes a noise, attempts to communicate, calls out, effects a vibrational shift which is a sonic block of becoming, releases sonic contagion. This is creative, close to what we may think of as 'new', and part of a contemporary synthetic human consciousness.

In relation to actual sound machines, Deleuze and Guattari comment on the synthesiser: "By assembling modules, source elements, and elements for treating sound (oscillators, generators, and transformers), by arranging microintervals, the synthesiser makes audible the sound process itself, the production of that process, and puts us in contact with still other elements beyond sound matter." (Deleuze & Guattari 1987, 343) This is all the more true for the computer where the capacity to store and process data, to carry out multiple functions simultaneously is increasing exponentially. Indeed, sound matter cannot be divorced from technological change, and the sound molecule will resonate with varying intensities as it is channelled through larger informatic systems, altering our relationship with sound (beyond our capacity to hear or ability to listen).

The Body without Organs

Viewing/experiencing *The Twins* does not require a belief in technology (as with a photograph or a film), but the work reveals the technology imbricated in all our communications. The phoneme streams thread their way through the installation space, particles within waves of sound. Their subtle shifting and re-shifting, the repetition and arrhythmia, effect a plane of consistency. Forms and subjects (the viewer, the sex doll, the chair, the board game, speakers, computer), as coexistent strata in an order of representation and reality, find an intersection on this plane where they are de-stratified. What might be thought of as a bodily shadow – the viewer's organic human form, the plastic human semblance and prosthesis of the sex doll, the chair with legs, arms, and seat, and so on are visible on this plane which is an immanence. The plane of consistency or immanence is what Deleuze and Guattari refer to as the Body without Organs (or BwO).

The phenomenon of seeing and hearing must involve the BwO. The act of composition must involve the BwO. The act of reading, viewing, listening must involve the BwO. Worrall perceives a creative 'unintention' in procedural composition that approaches a plane of immanence. He writes:

> "Given the levels of daily noise to which each of us are subjected, selection (filtering) rather than construction or development is a more common social activity and the found-object and procedural composers can explore this paradigm freely. The composer and/or audience can subtract rather than add: adapt rather than determine, persuade rather manipulate and this fundamentally challenges the idea of art as a message-bearing medium."
> (Worrall 1994)

If hearing and seeing *The Twins*, as well as listening to and viewing them, is phenomenological, then the organs of the eyes and ears are machinic, are more similar in fact to the computer and to the speaker devices and possibly to the sex doll orifices than they are to the other organs of the viewer's own body. For in the moment of perception ('hearing', 'seeing') they are in a greater relationship of intensity, of exchange and filtration, with these devices than with the organic plane of bodily functions. It is in this manner that Deleuze and Guattari can state:

> "Thus the BwO is never yours or mine. It is always *a* body. It is no more projective than it is regressive. It is an involution, but always a contemporary, creative involution. The organs distribute themselves on the BwO, but they distribute themselves independently of the form of the organism; forms become contingent, organs are no longer anything more than intensities that are produced, flows, thresholds, and gradients."
> (Deleuze & Guattari 1987, 164)

The indefinite article 'a' is also a phoneme. A basic aural unit of spoken language meets a most basic unit of written language – sound and code becoming one, the one, singularity. Understood in this way, a singularity is already a complexity – a planar moment of co-terminus intensities. 'a'. The BwO is not a fragmentation, a splintering, a cancellation of organs. The BwO harnesses the distribution of intensive principles of organs with their positive indefinite articles.

Look again at this doll's tea party, this paralysed scrabble game. I will take your turn for you and then it will be your turn. I'm playing against myself and I'm playing with dolls and with imaginary friends. Phonemes, rearranged into nonsensical streams, form a pre-linguistic song. But there is more to the acquisition of language than echolalia. Imitation is never accurate, interpretation is never knowing. The dolls are dressed-up but their adult human underwear makes for a monstrous modesty. The game is misguided in the name of play. On the plane of immanence *The Twins* tell us that we never grow up. This is not an erasure of childhood or the child, nor a denial of adulthood, but the BwO configures a strict conjuncture – an indefinite article of spoken and written 'a' meaning the same and becoming different.

> "The BwO is a childhood block, a becoming, the opposite of a childhood memory. It is not the child 'before' the adult, or the mother 'before' the child: it is the strict contemporaneousness of the adult, of the adult and the child, their map of comparative densities and intensities, and all of the variations on that map. The BwO is precisely this intense germen where there are not and cannot be either parents or children (organic representation)." (Deleuze & Guattari 1987, 164)

Like evolution, the transition from childhood to adulthood is not a journey from being less differentiated to more differentiated. The gene / the DNA of the body, the phoneme of language, and the algorithmic machinations of the sensate realm (sound, touch, sight, smell etc) proceed life forces through time in blocks of becoming. Surely it is in this way that we remember ourselves, that we touch ourselves.

Sexual Difference

But what of the two plastic dolls and the two synthetic voices – male and female – their painted faces, their costumes, and the detachable dildo? What of gender and its organs? The 'dramatic contours' of *The Twins* are codified as gendered. Worrall's programming code reads:

> "# ``````````` female voice variables pitch, rate & volume '''''''''''''''''
> fempitch=Frange(50,60,0.1)   # range(500,600,1)
> femrate=range(10,200,5)
> femvol=range(50,100,5)
> # ``````````` male voice variables pitch, rate & volume '''''''''''''''''

```
malepitch=Frange(40,45,0.1)   # range(400,450,1)
malerate=range(10,200,5)
malevol=range(50,100,5)" (Worrall 2000)
```

Their gender does not emerge, is not made manifest over time, as a feature of procedural composition (technology as trick). It is a found material, another ready-made (pre-existent in Apple MacIntosh system software), and thereby the stuff for composing/arranging. *The Twins* threaten a bisexuality and an asexuality. In a presentation as pornography the viewer co-operates in a logic of possession and may variously ask: 'Why are there two sex dolls? Aren't they for the satisfaction of solitary pleasure? Is it better / more fulfilling to have both? I would never own a sex doll. I refuse to be disturbed by sex dolls. How much do they cost? I would like to try her/him out. I remember...' And so on. This normative frontal speculation is only concerned with use-value.

The Twins have no use value - not only in their presentation as Art, but, more importantly, they have no use value to each other (which is their success as Art). The viewer in this configuration is not a consumer; they are not required to attest to the validity of the product and its social ranking. Of course, as a consumer of Art, the viewer is led to another kind of normative identification which is an egocentric philosophical questioning 'Are we not all empty sex dolls? Have I been created to solely serve the pleasure uses of others? Do I experience pleasure myself? Are all my communications automatic responses?' And so on. The threatening of bisexuality/asexuality continues as dialectical trap.

In the procedural composition of *The Twins* there is a basic connectivity between gender and sexuality. This precedes any narcissistic division by the viewer. Quite simply the painted face of the doll, the costume and the voice are correspondingly female or male. However, Worrall's project is not to humanise the dolls (or the computer-machine) - to reassure the dolls that they have gender (that the computer can speak). The sonic object on the plane of immanence effects an involution of the viewer. In a block of becoming, the painted face which is not my face is *a* face, the chair is an echoed armature of *a* torso at rest, the synthetic streams of phonemes are *a* voice, in a Body without Organs. The plastic orifices resound vowel movements, and minute consonant variations (the difference between 'd', 'p', 't' for instance) have only the lips of the viewer to use. The work speaks my lips.

Deleuze and Guattari use the commonplace word 'sex', signifying both the gendered body (singular) and the bodily act of intercourse (plural), to demonstrate a machinic complexity. They write:

> "... there are as many sexes as there are terms in symbiosis, as many differences as elements contributing to a process of contagion. We know that many beings pass between a man and a woman; they come from different worlds, are borne on the wind, form rhizomes around roots; they cannot be understood in terms of production, only in terms of becoming. ... These multiplicities with heterogeneous terms, cofunctioning by contagion, enter certain assemblages; it is there that human beings effect their becomings-animal." (Deleuze & Guattari 1987, 242)

The Body without Organs is effected through lines of correspondence, not through ignoring the organs of the body but by effecting corresponding relations / movements anterior to organic flows. Worrall 'knows' the viewers' bodies before 'making' the work, but this is not the subject of the work and nor is the viewer subject to the work (though we need to think that the work speaks to us as any artwork and even more insistently in the shape of the twins speaking). Worrall (the artist) is not concerned with the opinion of the viewer, and yet of course he is implicated in the effects of the work – the blocks of becoming which proceed (compositionally) from it – becomings-rat, becomings-dog, becomings-parrot, becomings-cricket. Somewhere here is an intersecting understanding of life-processes and artificial life. In our very real bodily functions there are ordinary operations of a greater consciousness. Worrall writes of the ear-machine:

> "Because the inner ear (the cochlea) is essentially a frequency analyser, perception of pitch is acute and this accounts for the primary role which it plays in music. However, we don't have sense organs for timbre and location. The perception of them is not only of a different order, but of a different kind. They are somehow 'constructed' or inferred from the processing of sensory information, yet we seem to experience these aspects of sound very directly, with little if any, conscious mental processing." (Worrall 1998)

Have we finally reached a place beyond absence/presence:presence/lack and a belief in a phallic/symbolic order? There are sensations for which we do not have organs.

Can we finally hear the echolalia of the child as an actual communication (*The Twins* as a procedural composition) and not a parasitical diagnosis. In their art of anti-psychiatry Deleuze and Guattari over-write the Freudian legacy:

> "When Little Hans talks about a 'peepee-maker', he is referring not to an organ or an organic function but basically to a material, in other words, to an aggregate whose elements vary according to its connections, its relations of movement and rest, the different individuated assemblages it enters. Does a girl have a peepee-maker? The boy says yes and not by analogy, nor in order to conjure away a fear of castration. It is obvious that girls have a peepee-maker because they effectively pee: a machinic functioning rather than an organic function. … Does a locomotive have a peepee-maker? Yes, in yet another machinic assemblage. Chairs don't have them: but that is because the elements of the chair were not able to integrate this material into their relations, or decomposed the relation with that material to the point that it yielded something else, a rung, for example." (Deleuze & Guattari 1987, 256)

The Twins are speaking dummies, a 'female' voice and a 'male' voice as code generated by a computer-machine, which is part of a larger machinic functioning. Worrall decomposes speech to yield something else, a sexless mating, a gendered 'peeing', a neutered harmonica.

Poetics – an imagined scenario (paraphrasing from Perloff 1994)

Supposing for a moment that the scrabble game were a chess game, then the two dolls, the twin characters, might be Marcel Duchamp and John Cage for they played chess together (though Marcel complained that John never wanted to win badly enough). Of course, Marcel is presenting as his female self, Rrose Sélavy and going on with his "preoccupation with eroticism, with sexual punning and double entrendre, with the display of men and women as perverse machines or machine parts..". John, on the other hand is just in love. "While he was alive I could have asked him questions, but I didn't. I preferred simply to be near him. I love him and for me more than any other artist of this century he is the one who changed my life." Cage's discourse "is, after all, an American – more specifically, Californian, evangelical Protestant-cum-Zen Buddhist, and (however veiled) homosexual discourse". And yet they play chess, meeting on their common ground of 'purposeless play' that was, for

both of them, the central driving aesthetic notion for their respective artistic practices. In this conversation is a future movement. John is telling Marcel that when Marcel dies John will construct a work of art for him. 'I will subject a dictionary to the *I Ching*, picking words, then letters from those words, and then their arrangement in space by chance operations. I will distribute the words according to a typography likewise based on chance, on sheets of plexiglass. I will put the eight sheets of plexiglass parallel to one another on a wooden base. So the letters will appear in depth, superimposed and combined as you look at them. Not you of course for you will be dead. There are four bases each holding eight sheets. The whole thing comes from chance, including the colours. It is an object that has no meaning, and which cannot be said to refer to a text. I think you will be amused by this object. Only you will be dead.'

But of course John is not saying this to Marcel because he did not know that Marcel would die before him. It is another conversation – the same conversation but with different words which prefigures Marcel's death, John's grief and the work of art.

Marcel replies 'Your chance generated words and morphemes are not double entendres like my *L.H.O.O.Q.*, and your language games are cerebral, not sexy. Your visuals are sitting at odds with your aurals, instead of supporting each other.'

Then silence. John is thinking – 'I don't want to disturb you with questions. And even if you are not disturbed and you answer me, then I will have the answer to my question and not the experience of you.' Both of them silent and staring at the chessboard. Marcel is thinking nothing because he thinks in images and they flash too fast for him to take any real note.

In his own paper discussing *The Twins*, Worrall writes:

> "As they shed meaning, languages begin to touch the universals of communication, and this universality is an aspect of their transparency. When languages are pushed by various strategies towards transparency, they seem to abandon their capacity to mean in the normal sense of the term. You might say their poetry becomes the poetry of nothing." (Worrall 1999)

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