

“Creavolution” with Trevor Wishart

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Abstract

Trevor Wishart is an electroacoustic composer who obtained his PhD at the University of York in 1973 . books *On Sonic Art* (1984 and 1996) and *Audible Design* (1994), which present his ideas about sound treatment, perception and composition. All of the theories and ideas I talk about here are related to my research as a graduate student in music and musicology, entitled *Sound identification, listening strategy and narrativity in Trevor Wishart’s Journey into Space – Agentization, objectization and narrativizations* (translated from the French: *Identification sonore, stratégie d’écoute et narrativité dans Journey into Space de Trevor Wishart – Agentisation, objétisation et narrativisations*). The present essay is mainly the transcription of an interview with Wishart himself, in which we talked about *Journey into Space*, sound identification (“landscape”), voice (both recorded and improvised), symbolism and narrativity. I will add some comments and ideas throughout the essay; these will deal with music and meaning, the main subject of *JMM*, as well as with my own research on electroacoustic narrativity.

1. Introduction

Trevor Wishart's work oscillates between music, symbolism and what he calls *sonic art*. Focusing my master's research¹ on narrativity in electroacoustic music and radiophonic art, I chose *Journey into Space* (1970-72)² as a basis for a series of tests, the first of which has already been completed...

Three thirty-seconds samples from *Journey into Space* ([1](#) / [2](#) / [3](#)) were presented to forty listeners who were then asked to write down their thoughts and sensations on a piece of paper. The main findings showed that listeners tend to "objectize" sounds that seem to be produced by a human or anthropomorphic agent or an event, and to "agentize" human or anthropomorphous sounds³, thus "narrativizing" music (for details about narrativity and narrativization, see Hermann & Vervaeck, 2005 and Prince, 2003).

Moreover, it seems, as many soundscape composers would acknowledge (Schafer, 1994), that sounds carry a certain symbolism which is often transmitted to the listener. Mainly, I distinguish between three sorts of *contextual identities* that can help the analyst define the symbolism and "meaning" a sound can have. Those identities are based on chronological, spatial and anecdotal potentialities of the sound production. This approach posits that the listener relates elements of a narrative work to what Laure Ryan calls the rule of *minimal departure* (Ryan, 2004), which states that when not provided with information, a narratee – in our case a listener – will complete the narrative worldmaking by him- or herself, assuming that the missing information can be related to the real world, or at least to a world that is plausible to him or her (Herman, 2009).

On March 15th, 2011, Trevor Wishart welcomed us into his home and agreed to be interviewed about his music, and more specifically about *Journey into Space*, the *VOX-Cycle* (1980-88) and his ideas about narrativity and meaning in music. This conversation took place over a cup of tea, with Trevor Wishart and Roxane Villeneuve, a graduate English student who came as a backup interpreter. It tends to show that musical meaning – or maybe we should say music's meaning to avoid confusion – far from being one-

¹ As of today, my research is not available in print. Details and publications will be available soon on my website, <http://marty.nicolas.chez.com/>

² Throughout this essay, musical works are dated but not referenced in the references list. Complements about Wishart's works can be found on his website, <http://trevorwishart.co.uk/>

³ "Human sounds" would be sounds that have a certain quality of "voiceness" (Wishart's utterances). "Anthropomorphous sounds" would be sounds that seem to be both self-produced (as events) and willing, thus acquiring a "voice-like" quality.

dimensional, can go from socio-politics to more private domains, and from purely “musical” – i.e. formal – meaning, to meaning connected with more realistic considerations. All in all, the composer’s mind is but one of the aspects of this meaning, and narrativity in itself cannot exist without the listener’s narrativization of a work.

2. Sonic Art

Nicolas Marty. Where do you come from as an electroacoustic composer?

Trevor Wishart. I became interested in using sounds from the real world for personal reasons.

At the time, I had just written a very big piece for orchestra. I was very much influenced by Xenakis, whom I did my thesis about: I used random number tables and seven or ten different tone rows and... all that stuff, you know – 1960s stuff.

And my father, who worked in a factory, died, and I thought: ‘What’s this music got to do with anything?’ (*laugh*). So I just bought a little portable recorder, very cheap, it ran at three inches per second, which is like a sampling rate of 6,000 hertz. It had a built-in microphone, and I went out around power stations and factories for making recordings without any idea what I was going to do. And then I applied to the University of York, which had a studio, with some vague idea that I was going to make a piece with sounds from the real world. And that’s how I got involved, really, I wanted to make a piece that related to my father’s experience and somehow relate what I was doing to the real world. (*silence*) That’s essentially how I got involved.

It wasn’t through the influence of listening to electronic music. I knew that there was the electroacoustic music, I knew there was the great debate about electronic music versus *musique concrète*, but I didn’t really know a great deal of music. Richard Orton, from the group *Gentle Fire*, was my supervisor, and played one or two pieces. Richard was really into the American experimental things. So it was more those kind of things that I knew about, rather than the French tradition of electroacoustics – I really got to know that a little later, when Dennis Smalley came.

And I came across Xenakis’ piece from the Brussels exhibition, *Concret PH* (1958). It was a multi-channel thing, with a sort of breaking glass going on for ever (*laugh*). I was fascinated by Xenakis, he was a genius, but I had – and still have – a more humanistic attitude toward music: I’m more interested in some conception of how music communicates. I guess Xenakis’ idea is that music is a kind of ideal object, a mathematical object which you make, which is logically coherent. But in fact, it’s a bit like Stockhausen, there’s the theory on the one hand, but when you listen to the music...

I'm quite interested in things rigorous because I do computer programming, but in the end, it has to have an expressive purpose. I find pieces which are technically complex without expressive or poetic intent...boring. And pieces which have poetic intent without any technical complexity...boring! (*laugh*) So the trick is to link those two things.

I was also interested in improvisation. And so a lot of the work I did with the electroacoustics – because there was hardly any equipment here, there were just tape recorders, essentially – was to find objects or to get people to blow down scaffolding tubes, or all kind of things. Recording improvisations, which I structured in some way. And then editing those to make a piece: I call that music-montage. And although I'd say even now my electroacoustic composition involves a certain amount of improvisation – because you never know what you'll get, no matter how experienced you are – what I do now is much more contrived, and tends to be in the studio, with material I collected and I'm working extensively on.

NM. When people listen to your music, do you want them to listen in a certain manner?

TW. I'd like at least people listening from the beginning to the end. It's not an installation; it's a piece of music. It has a beginning, it has an end. I don't really mind how people listen to it. In general I feel that there must be something in a piece that grabs you on the superficial level at the very least. It shouldn't be so complex that unless you study a textbook you won't listen to it again. It must have at least one thing that goes to 'That was horrible, I must find out about it' or 'That was fantastic, what was going on?'

Then, it must have some layers. I think as I have grown older, my music has become more complex, but there's always this immediate surface that you can grasp. When you listen several times you can hear more and more things. That's thinking musically, I guess. A non-musician would listen to things and enjoy them or not. As a musician, I tend to take things apart as I listen – I can hear this different levels going on, because I'm trying to listen. I tend to like music like that, with three things going on at the same time. With more than three things, it becomes too complicated because it is not possible to hear more than three things going on in music, in my view.

NM. What could you say about your musical style?

TW. I felt the term 'sonic art' was a good thing which was able to include these things like music that approach documentary, or music that approach representational mythology. It's a more general term.

I've been taking my new piece, *Encounters in the Republic of Heavens* (2006-11), around places where I did recordings. I played some samples in a retirement home, and they really enjoyed themselves. Then one lady came out to me afterwards and said: 'Before you did this stuff, did you use to write real music?' (*laugh*)

So it's very difficult, and sometimes it's useful to describe to people what you do as 'soundscape', or 'sonic art', because then they don't have to think 'It's not quite a tune' or 'It's not like the music that I like'. But as far as I'm concerned it's all music, because it has to do with the organization of sound in time. It has to have sound. And it has to be organized in time, because those are the two critical things about music: you're taken on this journey through time, using sound. And that's the essence of the medium.

It's very confusing because sometimes you get these debates about what is sonic art. Sometimes sonic art is being taken by people coming out of the art world. Then sonic art is Art, which you make, but using sound: installations, happening in galleries, which you can go and stay in for one second or three hours. That's very interesting. It's not music. But that's fine. (*laugh*) Then there's sonic art which is music using sound. For me, music has a beginning and an end. You have to hear it from the beginning to the end, because it's all about the logic of time. It's a different thing.

I do music. (*laugh*)

3. Transformation

Computers (and before them tape manipulation) allow the transformation of sounds, whether in themselves (reverberation, time-stretching ...) or between several sounds (hybridizing, interpolations). Those processes were and still are widely used by Wishart, who participated in the programming of the Composers' Desktop Project, an open-source computer interface for sound manipulation and composition.

Apart from the obvious formal and compositional uses they imply, I prefer to focus on the meaning of those transformations, particularly in works like *Journey into Space* or the *VOX-Cycle* where sounds are easily recognizable. At this point, transformation may lead to a surrealist, or at least metaphorical, musical language. Wishart named this concept the *concrete metaphor*. According to him,

the sound-image 'bellow/water-pump' may be interpreted as the functioning of the machine or the functioning of a human body and when our perception of it changes from one to the

other, a metaphor is implied. [...] Using concrete metaphors (rather than text) we are not 'telling a story' in the usual sense, but unfolding structures and relationships in time.

(Wishart, 1996. 166)

Such metaphors do not seem prominent in the perception of a work when the listener is not told that they may exist, or when they are ambiguous (like the 'bellow/water-pump' metaphor). However, from the moment the listener is aware of their existence, they take on an important role in the perception and the perceived meaning of the entire work.

NM. In *On Sonic Art* (Wishart, 1996), the concept of transformation seemed very important to you. Is that still true today?

TW. Well, actually, it has changed since *Red Bird* (1973-77). I think the pieces led up to *Red Bird*, where I crystallized the idea of using sounds in a mythological way. So instead of saying 'this is the sound of something', I thought 'this is a sound of something which probably represents something else, and I can work with it in a mythical world of sound transformation'. *Red Bird* distills that idea and develops it as far as it would go, from my point of view.

The change really came after that, when I became more interested in sound transformation as a musical formal idea. In my later works, the other extreme is *Imago*, which is about transformation, but not with a mythological content. It's poetic, but it doesn't have any referential uses... Well, that's not true (*laugh*), it has one or two; but most of the time, you're just aware of the transformational processes. It's more abstract.

NM. And when you are aware of the source, it's a 'concrete metaphor'.

TW. Yes. You are aware of the source, but the source has some kind of mythological resonance as well. In *Red Bird*, and before, these extra-musical relationships are the important thing. What's the relationship of the birds to the machines? It's not just that they sound like each other; it has to do with how they refer, and what they might be referring to. In the later works, it's more about the transformation itself.

NM. In *VOX-2*, we have human beings right before us, which can be imitating birds, animals, or whatever. Then in *VOX-5*, we don't have any visual dimension. But still, we have a voice, a human voice...

TW. Well, the point of *VOX-5* is that it's not a human voice. It's strange, it's too great, it's too loud, it fills the space. It's a mythological voice. But as with all mythological beings, we tend to think of it as human. (*laugh*) We can talk of the voice in all kinds of ways. We can talk about The Voice, by which I mean everybody's voice. We can talk about the voice of the people. So what is this voice? It's one of those kinds of voice: a generalized voice. It has something to do with human creativity and human destructiveness. I don't think it is the voice of God, literally speaking, but it's using the Shiva metaphor. In *VOX-5*, this voice is the source and fountain of everything, it creates and destroys everything. So it's a metaphor of everything for life, a metaphor of the world.

There's a sort of drama. You've listened to nearly an hour of music, performers in front of you. At the end of *VOX-4*, they gradually sit down, it goes dark, and this voice seems to emerge out of nowhere and fills the entire space. It has this very dramatic contrast with everything you've heard. It is... it is literally disembodied. (*laugh*) There is no one there. So the theatre, it's quite important.

NM. Then there is the idea of 'landscape'.

TW. Yes. The original idea of landscape was to differentiate the ideas of where sounds come from and where sounds appear to come from. A simple example is a symphony that you hear on the loudspeakers. You don't think to yourself 'I'm listening to loudspeakers'. You think you're somehow listening to an orchestra. Landscape is the imagined world from which sounds come.

In the popular or classical music world this is extended, because most performances that you hear on record are not realistic representations of performances. They're constructed in the studio, not only in terms of getting everything right and recording people on different days, but also in terms of where people are in the space, and all kinds of other things. You can therefore move into this other sphere where you're in an imaginary space, just as in a film.

It's a theatre of sound, because there is nothing to look at, so there can be anything to look at, and you can create whatever illusion you like in front of the listener. And it becomes an aspect which you can work with as a musician. I think it's really important to understand that. A lot of students who come to the studio compose in a traditional way, like if they were composing for instruments. And they have no sense that they're working in this theatre of sound.

I tend to use space a lot. Because you can add gesture to a sound, by the way it moves. It can accelerate towards you or move off in the stage, or hover in the distance or whatever. And those are kind of musical expressive qualities. Again, the same development has happened as with the other things in my work. Now I think more abstractly about that. I tend to make gestures in the space that feel powerful musically, rather than using them as if they were representations of sounds. The gesture of a thing accelerating towards you has a sort of musical impact, whereas the gesture of the same thing accelerating away is kind of the opposite. This is more formal, but it doesn't mean that it's less powerful. The gestures have to be emotionally or expressively justified. I'm not doing it because I have a scheme which says that this moves to the left and that moves to the right. I'm doing it because this sound feels like it wants to do *that* in this particular context when I'm trying to do *this*. Theatre of sound, of the articulation of space is really crucial to all my music.

NM. In *On Sonic Art*, I think, it was more about identification of sound. Recognizability of realistic sounds, maybe.

TW. To some extent, yes. But the key idea is that there is an imaginary space behind the loudspeakers, where you recognize things that you recognize; or you think you recognize them because they sound familiar. There are all kinds of other interesting psychological issues. There's more of that in *Audible Design* (Wishart, 1994): even sounds that are completely synthetic, unless they're extremely contrived, will tend to be thought of as being hit, stroked, shaken, ...

We tend to have archetypes which we impose on sounds. Even with music that derives directly from instruments or things that are played, you have this conception about how they came into being, about what they are. It's not so much 'Oh yes, that is a bird'. It's 'That's something that's being hit', or 'That's some creature-like thing', 'It's a voice articulation'.

In the electroacoustic domain, where there is no performance in front of the audience, it's sort of foolish to ignore this while composing. Firstly because the audience is probably not going to ignore it (*laugh*). And secondly why ignore it? You can use it, you can play with it. I guess in general I work with a slightly abstract view of recognizability. (*laugh*)

NM. And without having to verbalize it, the listener will take it into account?

TW. Yes. It's not theoretical in the sense that it's not like I construct them and then you have to agree with me on things. When I hear sounds, these things strike me about them. And I think that they will also strike everybody else in that way. I have a more empirical view of these things. But this is how sounds work, and this is how sounds are interpreted, because we have these Gestalts in our minds about the nature of sound.

4. “Creavolution”

Analysis of the samples used for my first experiment led me to believe that most people would perceive a religious resonance while listening to the samples (it can be seen in the first animation, in which I used a church background). This was apparent from two main things: firstly, the numerous (church) bells, used recurrently during the samples, were identified with daily, community life but mainly with the anecdotal identity of the church celebration itself; secondly, the chanting present in the third sample was apparently in a foreign, smooth (without consonants) language – even though it was in fact English –, sung over single repeated notes and regular rhythm. This led me to believe that most listeners would relate it to oriental religious chanting, often presented this way in big screen movies.

The test showed that the religious aspect was in fact important to the manner in which listeners verbalized their experience of the samples, and that for the few who didn't relate the bells to church itself, the bells were a symbol of an announcement, whether joyous (birth) or dark (apocalypse). It is interesting to note that even for those listeners who didn't mention religion at all, the bells were still related to the church and the functionalities it inherited from religion. It then seemed more than logical to ask Wishart about his link with religion. His answers show that again, the composer's vision of a work is not at all the only one to be considered when analyzing the meaning of the work.

NM. About recognizability, do you remember where the sounds used for *Journey into Space* come from? Particularly the bells...

TW. (*laugh*) It was a very, very long time ago... Some of the sounds came from sound-effects records, because at that time, sometimes I used those rather than making my own recordings. I can't remember. The baby was a recording I made or I got from a friend.
(*pause*)

I can remember there's a thing with chanting in bells in the middle. At that time, the gas people were changing gas fires, because we were changing to North Sea Gas. So everyone had their gas fire changed. There were these metal bits inside the gas fire, which were all roughly the same shape, but not quite. And if you hit them, you got this sequence of sounds which were similar but not quite the same. So those bells are the insides of gas fires! *(laugh)*

There are all kinds of things in *Journey into Space* like sort of toys, and blowing down scaffolding pipes, but there are things mixed in from what I made in the studio, and some things from sound-effects records. It's a very eclectic gathering of sounds.

NM. What about the church bells?

TW. There might have been church bells, I can't remember! *(laugh)* I'm not a really religious person, so it's unlikely that I recorded any church bells. But if they sound like church bells, they're church bells. *(laugh)*

NM. Well, I did an experiment, with a sample from *Journey into Space*, at the end of the 'birth dream', with those church bells, a baby crying and children singing. Almost everybody thought of 'baptism', or at least 'religion'.

TW. *(laugh)* Oh, dear! *(laugh)* Well, that certainly wasn't intended to do that, but if that's how people interpreted it, well we have to accept that. The bells, I guess, would be just a joyful thing. I'm fairly atheist, so that's very interesting! *(laugh)* I don't associate those bells with religion at all... but I guess they are religious. They're used on occasions like weddings or baptisms... It's a sound of celebration. I didn't make that conscious connection, not with religion.

NM. What about the rest of *Journey into Space*? The 'creavolution' chant for example. This seems pretty involved.

TW. Yes, that was political. *(laugh)* It's very strange to talk about it, because I feel like I'm a different person by now. It was the 1960s, when the people felt the society could change and was moving in a new direction – it did a tiny little bit, but not as much as people thought. I was interested in the idea of creativity from a political point of view. I felt that by creating things, people would learn that they can have an influence on the world, that they don't have to just do the things that they're told to do, or even to do things in the way you're supposed to do them. You can actually make something yourself. This was a slightly naïve idea, but essentially I had this idea of creativity as a form of political action. *(pause)*

If the world is entirely deterministic – it was the general scientific view – how is it possible to be creative? I spent a lot of intellectual energy thinking about that kind of crisis. *(pause)* It's quite interesting how evolution works. Roughly speaking, everything's determined if you know the starting point, the initial conditions. If you knew the initial state of the entire universe, you would be able to predict everything that would happen. But the point is: nothing in the world can ever know that, so the idea that everything is determined is a kind of philosophical construct. It might be determined, but it's not determinable.

Well, it's a long, complicated philosophical discussion about the nature of creativity; I could go on for hours about that, I approached various biologists and thinkers to discuss some ideas about creativity. I'm linking the ideas of biological evolution and social change. How does society change? *Journey into Space* is a little bit about that, about the journey through life, evolution, change, those things. I'm quite an optimist.

NM. So it was more of a physics / political view, rather than a religious one?

TW. From my point of view, yes. I don't think that things are completely determined, and I think it's possible to create new things. I'm not very deterministic or materialistic. There are things that we don't understand, and it is possible to create new ideas. Human beings create things all the time. It's not possible to contradict the laws of physics, but from what we know it is possible to create. I have a kind of religious view about that... Creativity is part of what makes life meaningful. Certainly for me. The fact that your life can actually bear fruit, that you can create something that has not existed before. But I don't have any traditional religious views.

NM. The word 'crevolution' has then nothing to do with the antagonist theories of Creation and Evolution?

TW. Quite the opposite, no. *(laugh)* No, no. Essentially I'm opposed to religion, I think it's a bad thing. It divides people, and it makes people kill people. I'm also a scientist. I was trained as a scientist, and I just don't think there's any evidence for a religious view of the world. But you don't need God to be creative; humans are creative, that's really my point of view. And that's to be celebrated.

NM. What about the 'being is becoming' chant? Many listeners heard this as some Tibetan monks, or...

TW. Well, it's probably influenced by that, because it was the time when we were listening to all that music from different countries. We were exploring singing harmonics and things

like that. Stockausen's *Stimmung* (1968) was around, I think. I was exploring my voice, and I was able to sing these harmonics. (*pause*)

But, I don't think Tibetan chanting is being religious (*laugh*) because I'm not a religious person. I can see people celebrating the earth, or humanity, or creativity. If they want to express it in religious metaphors, that's okay, I don't have a problem with that. As long as they don't kill each other (*laugh*)...

I guess religion for me is a metaphor. All gods and things are metaphors, they're not real. In *VOX-5*, Shiva is a metaphor of the creation and destruction of things, the internal creativity of the world. That is what the fifth movement is about... (*pause*) You go through the cycle of things, through the social breakdown, and then you hear the voice which represents this combination between chaos and creativity. Fascinating, that. (*pause*) Well, interpretation by listeners is okay for me, because it's like when you have a child. They grow up, and end up doing things you never thought they would do, and you probably don't agree with. That's what happens to your work, because it becomes independent from you. In the end, it's what other people take it to be. It certainly wasn't my intention to come by any religious matter, but it may, in a very broad sense, go with the importance of creativity and development. Change in the world.

The *Sounds Fun* booklets come out of this interest in creativity. Through my career, I've done a lot of workshops, getting people to create their own music. The *Sounds Fun* are a way of getting people to work musically, to gather material, to get the workshops going. We play these little rhythmic and melodic games, and I give people tasks to do, like 'make a piece on one note, where there's only one event'. It has to last two minutes, you can't change the note and you can't have any events happening. You've just got to think what to do. That would be the start of a bigger project.

While recording people in the north-east of England for my latest project, when I went to schools to record, I also ran workshops with the children. All these workshops had to do with polyrhythm. We took a phrase like 'Lockwood school is the best school in the world', then we said it in triple, quadruple, quintuple meter. Then they had a task where they had to think of a hundred of ways to say the sentence, and to make a piece. They made those pieces and then we brought the pieces together, rhythmically. That's a simple compositional task. (*pause*) I'm really interested in unlocking people's creativity... They can make it, they can do things... It's all part of that *Journey into Space* thing, it's all part of that mission.

NM. And that's the meaning of 'being is becoming'.

TW. I guess so, yes. (*pause*) I have to say, I find that now, very embarrassing. It's very 1960s. (*laugh*) Some people really like it, though, so that's fine! Six years ago, I went to Los Angeles to do a concert, and I discovered this whole cult of people really into *Journey into Space*! Now I find it quite embarrassing, a sort of juvenile work; but it doesn't matter, because it's gone off into the world.

NM. So you think the *ideas* were juvenile?

TW. I think the ideas were the ideas of a young man, and as you get older you have a more sophisticated view of the world. Also I think technically it's not very good. It's too long. I find it slightly embarrassing, to listen to. If you come to it afresh from the start, maybe you don't notice those things, they don't matter. You hear, and you either like the events or you don't like the events, but it's not like you're going to go back and hear lots of other things in it, that you didn't hear the first time.

But now listen to *Red Bird*. My views have become more sophisticated, it is really organized, worked out in terms of the mythological structure of the sounds, the gestures, the timing and everything. Even after you hear it for the first time, you can go back and hear lots of other things, and so it has this richness about its construction.

Going back to *Journey into Space*, this feels... (*laugh*) This is a first attempt at doing something! *Machine* (1969-71), I find satisfying as a piece, but it's not technically good: it has all kinds of distortion, those kinds of things. More primitive equipment, and in more difficult circumstances. *Journey into Space* is more ambitious, and for me it falls on its face with it. Whereas *Red Bird* is... my first really good piece. I managed to get these ideas to come together and really work.

5. Symbolism and Narrativity

Murray Schafer posits that

a sound object is symbolic when it stirs in us emotions or thoughts beyond its actual mechanical sensation as sound. / The sounds of nature are most pleasing to man. Water in particular has splendid symbolism. Rain, a fountain, a river, a waterfall, the sea, each make a unique sound but all share a rich symbolism. They speak of cleansing, of purification, of refreshment and renewal.

(Schafer, 1973. 37)

Moreover, birds and their songs symbolize delicacy, freedom and protection (Schafer, 1994. 106), sounds of travel carry mystery and vocal articulations : “On the prairies – so flat that one can see the full train from engine to caboose, spread out like a stick across the horizon—the periodic whistling resound like low, haunting moans” (ibid. 81). Closer to our samples, the sounds of bells marks (or marked) the passing of time and the limits of human community. But Schafer says that “while the contemporary church bell may remain important as a community signal or even a soundmark, its precise association with Christian symbolism has diminished or ceased; [...]” (ibid. 175). As we have seen in the third part of this essay, this is not entirely true.

Still, the idea of sound symbolism and “associationism” has widely spread among composers, and particularly among soundscape composers (for details, see Copeland, 1997; Copeland, 1998; Westerkamp, 1995; Westerkamp, 1999). Since Wishart seemed quite involved with sound-symbols himself, I asked him about his use of them and their narrative implications in *Journey into Space* and in *Red Bird*.

NM. In the *Journey into Space Travelogue* (Wishart, 1975), you speak of sound-symbols used for their *obvious* symbolic content...

TW. *Obvious* symbolic content... (*pause*) I think it’s clear that someone is going on a journey, because you hear him set off, and then get into a car and drive away. Then that journey becomes abstract or more ‘dream-like’. *Journey into Space* is a dream. Or it’s not. It’s that kind of mythological thing. I suppose those things are obvious. (*pause*)

Then, the sequence of the bells that becomes the keys that unlock the doors: it’s the ‘revelation’ through the opening of a door, and moving into a different space. Then you hear the beginning recapitulated, or maybe developed. (*pause*) It’s difficult to tear apart these meaning threads and musical threads, because it’s a recapitulation, it’s a standard musical procedure. I always think like that, because I’m a musician. I put things together from a musical point of view, even when there’s a lot of narrative going on. (*pause*)

I can talk more easily about *Red Bird*, because I remember it. In *Red Bird*, you have the birds, the animals, the voices and the machines. The way they’re organized, the machinery has obviously some relation to both advanced industrial society and the way we organize society as well. Some voices, human or animal, are dragooned into the shape of machines.

Obviously the animals represent the natural world. But they also represent things that are not in this mechanistically controlled society; so they're a metaphor for freedom.

The symbols are naïve, in a way, but what's important is what you do with them. I wanted to use symbols that everyone would just get, without having to read or put a huge program note, or several books on mythological theory. If you take the symbols together without organization, people might say: 'Oh, how naïve and stupid'. Then you develop in complicated ways the relationship between them, the way they transform themselves, and that becomes interesting. You grasp the symbols at an intuitive level, but you're captured by the mythological storytelling and transformations.

I can't remember so much about *Journey into Space* or what I was thinking about. This idea of the journey was also about space flight at the time, because of all this recent successful explorations of space. There was an excitement about the possibilities of technology, which is related to the metaphor of what is possible in the creative space. (*pause*) I guess the best in *Journey into Space* is the opening. I really like that thing with the scaffolding pipes, toys, all those which are nearly all live recordings of people moving around to get the sensation of space. That, and the thing with the keys at the finale.

NM. What about the baby?

TW. Well, I suppose there are about three journeys going on. There's the journey getting up in the morning, going off in the car; there's the journey of life: you are born, you develop and so on; and there's the journey of discovery, which is some kind of mythological journey. These things are melded together in the idea of a universal journey. Life is a journey, which moves towards some kind of creative realization.

That's the idea, except there's no realization, since when you come to the end the piece just stops. (*laugh*) That was a very conscious idea: the journey just stops. There isn't a conclusion. Because to have a conclusion would be to say he was searching and now he knows... so okay we can go away, there's nothing to learn anymore. Here I have to go through this journey, and suddenly I'm left here: that's a metaphor for life. You're right here, and you set off for this journey. You don't know where you're going. There isn't any natural conclusion where you can say 'Okay, I've got the point of life, yes' and tick the box (*laugh*).

NM. And since the piece lasts one hour and twenty minutes, even at the end you don't know if it's really finished, for at least thirty seconds.

TW. Yes, because there are long gaps in the middle anyway.

NM. Plus I think that there's this idea of *silence* that goes in the space. In the 'journey' part, you have fifteen minutes with almost only little bells. And still, even with sound, you hear the *silence* in background.

TW. I guess the idea is this mysterious landscape. You don't know where you are. I don't think it's *silence* – rather a floating, strange world. (*pause*) There's some mystery about the world. Not religious, but... You can look at space and see things that are forty million million million million million miles away... and they are actually millions of years older as well. They've been there from a time there was, never mind humans, no life. And they will be here afterwards. It is this amazing spectacle of the universe. It's almost impossible to capture that feeling. The beginning is this kind of mysterious... thing. This atmosphere in which things float about... (*pause*) And it works as if it were a dream... But obviously it is both a dream and something metaphorical. The end is more conscious while building momentum towards the great climax and then stopping, leaving us here. 'Where are we going? What happens now?'

NM. So *Journey into Space* might be a narrative rather than a musical form?

TW. I don't think so; I think it definitely has a musical shape. If you set it out as a narrative, like if someone tells you the story, it's not very interesting. It's a musical sound experience, it has the recapitulation, the developments; but it's not polyphonic, it doesn't have a lot of musical layers.

NM. Still there are narrative layers. The man wakes up, gets in his car, and disappears for a journey...into space! Then twenty or twenty-five minutes later, he comes back asking for gas. Then I thought: 'So all I heard until now was happening in his head'.

TW. I think it's meant to be ambiguous. It could be what he dreams. But as it goes along, the dream becomes what the thing's about. He disappears, entirely, from the narrative. And we go on this journey, whatever it is.

NM. He comes back again, with the keys...

TW. Well, he may be. (*laugh*)

NM. A key can't just turn itself in the door except if we're okay with it being a dream and being totally dream-like. But as long as we get this as a 'turning key' sound, this sound cannot exist without a human agent. So it's him, it's the man.

TW. For me, these threads, it's meant to be confused, confusing: is it a dream or isn't it a dream? Sometimes you come out of it, and then the man disappears again. And by the time you get to the end, he has disappeared altogether.

NM. The title of the first part, 'birth dream' is really... restrictive for the listening strategy.

TW. This was continuously composed, it wasn't conceived in movements. My intentions were that you start off in this mysterious world, you don't know where you are, and then suddenly... oh yeah, it was a dream. But was it a dream? I'm not sure. Oh yes it was a dream. So that's the strange thing: it was a dream, but was this a dream? That's part of it, it's not clear. It's mythology. His journey is also mythological.

NM. It was almost like *Red Bird*, then? A contemporary myth?

TW. Yes.

NM. You thought of it like that?

TW. *Red Bird* was written after reading Lévi-Strauss' *The Raw and the Cooked* (1983), and I consciously tried to construct a mythological structure, where I could do what I wanted without it being a narrative. There are various sections in the piece, but it doesn't have a storyline like *Journey into Space*. It has a set of mythological objects which relate to each other, in all kinds of ways. That is better for me, because you're allowed much more complexity in the relationships, in what to suggest, in the way the people will interpret it.

Journey into Space is a narrative that's going somewhere whereas *Red Bird* has a kind of complexity about it, about getting things together. I prefer that. From my perspective, *Journey into Space* is an interesting experiment, and *Red Bird* is the conclusion of that experiment. The greater formalization in the use of the material allows *Red Bird* to work more successfully.

NM. *Journey into Space* seems to be more of a *hörspiel*, a radio work. *Red Bird* too...

TW. Yes. When they were written, no one wanted to put them on the radio, because they weren't music, and they weren't drama. They weren't anything. Then somebody invented the new *hörspiel*. (laugh) But they still wouldn't put it on the radio, because there was the tradition of *hörspiel*. (laugh).

I worked with this world of sounds; it could be narrative, music, documentary, and all kinds of things. That was completely new at the time. This flow of ways of looking at it was quite interesting. I've always been interested in things that fall between categories.

NM. At the time you composed *Journey into Space*, there was already one experiment that existed, the *Almost Nothing n°1* (1970) by Luc Ferrari.

TW. Yes, Luc Ferrari. I didn't know that work. That's a very different technique. That's a representation without being narrative. That piece is kind of... a photograph. A very well-crafted photograph. Which is another way of looking at things.

6. Voice

Another extremely important point in Wishart's work is the concept of *utterance*: "[...] there's utterance, in the sense of when I laugh or scream, or something which tells you about my age or health or attitudes" (Witts, 1988. 454). Definition is extremely complex, but it can be clearer using an example: a cry of fear is an utterance, whereas a fixed-pitch *fortissimo* sung by a soprano female is not an utterance, even if we can find utterance characteristics in it (at least telling us that we're listening to a woman). We can plainly say that utterance is that which, in human or animal voice, does not stand in the verbal or musical domains. As a matter of fact, "many of the signals communicated among animals—those of hunting, warning, fright, anger or mating—often correspond very closely in duration, intensity and inflection to many human expletives. Man also may growl, howl, whimper, grunt, roar and scream" (Schafer, 1994. 40). Utterance is then the vocal characteristic that relates man to the animal he is. It is also the sound object that calls the most for "agentization".

Wishart, as a skilled improvisator, has always used voice in his composed works. Even *Machine*, his first work, is composed of only group voices and machinery sounds. Voice is thus an inescapable element of the meaning of his work.

NM. You used voices a lot. And still do.

TW. I explored extended vocal techniques, improvising with my voice. I catalogued them, noticing that you can manipulate one sound by doing a particular thing, for example changing the vowel shape. Eventually I wrote a piece, called *Anticredos* (1980), which explores that whole catalogue of vocal techniques. The point is about openness. It starts with the word 'Credos', and what it does is that it takes apart the syllables and develops them, and so they evolve through sonic transformation. It finishes with a complete rewriting of the word 'Credos' where the sounds are almost unrecognizable.

The idea is that things change. And the human beings can have some impact on that... You can't pick that up from the music. You can only tell that the word 'Credos' dissolves. This is one of my most abstract pieces. But any piece I write has some poetic impact, some idea behind it. All the transformations structure the piece.

When it came to writing the pieces of the *VOX-Cycle*, I adopted a different style of notation for each, because the approaches to the voice are different. There are so many things you can do. That's why the scores are very different: it depends whether I'm focusing on rhythm, sonority, ... I came to the conclusion that you can't have a universal notation system, which was what I was trying to do in *Anticredos*. In the end, you can't do everything. If you're writing for the voice, you have to decide what the key feature of what you're doing will be, and to adopt the notation that's best suited to it.

The voice is such a powerful sound-maker: you can do almost anything with your voice, you can imitate any instrument, ... It's connected with language, with all the things, primeval things like laughing and crying, screaming,... *(pause)*

NM. That's 'utterance'. Have your ideas about that changed since *On Sonic Art*?

TW. Oh probably yes! *(laugh)* For example, I've discovered new ways of using the voice. And the other thing is that I tend to move on from one project to another. I like the research aspect of being a composer, so if I know how to do something, it's not interesting to do. For example, *Globalalia* (2004) uses lots of syllables, looking at how you can musically organize the sounds of language. But then I moved on to the latest piece I've just finished, *Encounters in the Republic of Heavens*. I have recordings of people telling stories, and I'm looking for the melodic and rhythmic shape of actual speech phrases, at a large scale. What I'm interested in is the music that's actually inside the material. You extract the melody, you extract the rhythm, you extract the sonority, and then you use those as part of the music-making.

NM. That's quite like... Steve Reich's 'speech melody', then?

TW. It's not quite the same. He worked with loops, and things that I'm not interested in. For example, I take various people's phrases, and then I discover what their melodic content is, and I attempt to put them together in harmonic fields. So they speak, and the whole thing is in harmony. That's partly choosing the material, but it's also making very fine adjustments. And abstracting those things, too.

The voice has a particular quality that allows you to recognize a person. Originally that was my chief interest: can you extract that essence? ... The answer to that is no. *(laugh)*

It's too complicated, it rests on so many factors. With some voices you can extract particular sonorities like grittiness, or breaks, or nasality, projection. You can extend that into more abstract things. This piece uses instruments, melodies, ...derived from the voices. It's a very long piece, it's an hour and twenty minutes.

NM. But the stories still count as semantic material?

TW. They still count, yes! There were a lot of issues surrounding that. I was recording people who live in the north-east of England. It's not like recording a performer of contemporary music. It's someone who probably never listens to art music. So there's kind of an ethical issue. With someone from the community, you can't make them sound stupid or stretch their voice like you might do with your own, if you're going to play it back to them. So I decided I would preserve that, I would restrict the sort of transformation I would do on the actual voices, but I'd still abstract material from them.

It is an eight-channel piece. The point of this is that you hear what I call the 'portraits' – because they're not just stories – of people in very wide stereo. There are eight loudspeakers and you hear them on the four frontal ones. Then you hear the other sections with all these voices around you, sometimes circulating around you, so you're enveloped by the community, you are part of this community of voices. That's part of the poetic of this piece, the human community, and also the uniqueness of individual voices.

NM. And the people, the audience will be able to turn around?

TW. Well, they can if they want, but they're sitting because it's a direction thing – this way (in front). The portraits are here, they're in front of you, they are people talking, accompanied by things, sounds moving, stereo images. There are two portraits, and then you have sound all around you. But it's still organized with the view that this is the front. Key events will emerge at the front. But sometimes things will rotate around.

Generally, you can follow the story complemented by the instruments that are derived from the voices. It's a crossover between storytelling and sonic art. The crucial thing is: what happens when you take it somewhere else? There's a very strong accent in the north-east of England and even if you take it to the south, a lot of people won't understand what is being said. Still, it's about the music of speaking. If you understand the story sometimes they're funny or engaging or whatever. If you don't, you still hear the music of the speech, which is what it's about.

NM. It may even be easier. You might lose the music by understanding the text.

TW. Yes, that's right.

NM. What about when you improvise? How do you choose your sounds?

TW. (*laugh then pause*) When I improvise, it depends on the situation, very much. What I'm concerned with is sound, and I'll begin with sounds like breath, and as I improvise I gradually transform. They are often sonic relations like 'pffsscchheiiuu'. But occasionally I will use theatrical transformations. So you can transform '...hah! ...hah! ...hah! ...' into laughter. These are sonically related, but they also have a theatrical impact.

Also when you're improvising there's a reaction from the audience. Sometimes the audience find things disturbing or funny or whatever, and you might react in some way to that. Or not. Or react against it. This is thinking multi-dimensionally. I had an interesting discussion about the piece *Anticredos*, which is a pure sound piece for six voices. I performed it in Germany recently, and someone said 'It's funny', and I said 'It's funny the first time you hear it, yes'. There was a big argument about it, and in the end, I said 'If you find it funny, because people are making sounds like that (*imitates*), that's a bonus, that's an extra for me, that's fine. When you've listened to the recording twelve times, you'll have forgotten, totally, about how the sound was produced, and then the sound is structured in an interesting way, musically interesting.' Humour is this kind of extra that I get from it. It's like the stories in *Encounters*: the stories are important, particularly in the place where I recorded them, but if I take it to France, or to Japan, the stories just fall out, altogether.

7. *VOX-Cycle*

Talking about voice irremediably take us to the *VOX-Cycle*, composed during the 1980s as Wishart had left the world of the mythological structure to enter the world of the voice experimentation itself. This cycle, for voice quartet and tape goes through almost every aspect of the voice, even having the performers disappear in the fifth piece, leaving their place to the Shiva representation – thus leading back to the metaphorical ideas – and the transformations of the voice. These pieces are a good way to study meaning, but also narrativity and dramaturgy in mixed works including the human voice. They explore it from theatrical representation to the most abstract numerical structures, always relating to the listener through the presence of the human element.

NM. Could you talk a bit about the *VOX-Cycle*?

TW. I composed it between 1980 and 1988. At least with the first four, I was looking at different aspects of humanity, and how to reflect it in different approaches to the voice.

The first piece, *VOX-1*, is the emergence of language out of chaos: it uses the sound transformations from *Anticredos*. Gradually, as the piece progresses, an imaginary language emerges. That's about evolution... like *Journey into Space*, I suppose.

VOX-2 is more a contemplative piece, which has to do with the inner details of things, and with the natural world. You have a very slowly changing harmonic field. But the ornaments, the articulations of the sound carry energy inside. It's an internal kind of articulateness. I guess it suggests this contemplativeness.

The third one is about intellectual excitement: a group of people is playing rhythmic games which become increasingly complex as it goes on. Again, you're not supposed to get a textbook about intellectual rhythms and how they work. You just hear those rhythms and you can't think of how they're doing them (because it's based on click tracks), so it gives the excitement of intellectual endeavor, but not by being intellectual (*laugh*).

The fourth one is about social relations ...very much like Ligeti's *Aventures* (1963), which is about social relations and the way they develop, the way the social structure breaks down. (*pause*)

VOX-5 then becomes the voice of Shiva, which is like a voice of creation and destruction, the voice that contains everything within the world, using the transformation techniques, now with the computer. (*pause*)

And *VOX-6* is a very interesting, very controversial thing... because everybody hated it: serious musicians because you're not supposed to write rock music; rock musician because serious musicians don't know how to write rock music. In fact, it's a piece of serious music, but dance music.

It was in the 1980s when Margaret Thatcher came to power, and all the hopes and aspirations of those who wanted change were dashed. (*pause*) So, it's a slightly ambivalent thing, a joyous dance but also a dance of death. (*pause*) I had been asked to rewrite the *VOX-6* as something different. But again, it was already gone.

NM. Where did you compose those?

TW. At the time, the situation was that, outside IRCAM, people were working on mini-computers. The big, expensive things, you couldn't buy as an individual, as they cost tens of thousands of pounds.

I worked in the York University Studio, where the computers were infinitely slow, and ran things like Music-V, which is not really musically friendly. We were experimenting on the Sinclair machines.

VOX-1 and *VOX-2* use analogue tape, they were made in the early 1980s. We still had four-channel analogue tape recorders. *VOX-3*, with the click tracks, was also made in the York Studio; I used to work there early in the morning: from 4 to 10 am – no students would ever be there (*laugh*). (*pause*) There was a computer by then, and probably to make the click tracks I used that. (*pause*) *VOX-4* was also made there. I had a couple of analogue machines at home, but I never really used them, I used the York Studio. It's only when I started to really work with computers that I started working at home. *VOX-4*, I think, is still pre-computer. *VOX-5* was composed at IRCAM. (*pause*) *VOX-6* was made with MIDI-controlled instruments, with a MIDI keyboard, at home.

NM. So you did the composition alone.

TW. Oh, I was doing the work alone, yes.

NM. And the sounds used, were those sound-effects or...

TW. I had a huge collection of sources, from *Red Bird*, on vinyl. I bought every possible recording of wildlife that was available, transferred to analogue tape from vinyl, and catalogued them, with catalogue sheets, so I could find the material to work on. I recently got rid of those tapes, because I couldn't store them anymore.

NM. In the writing of the vocal parts of *VOX-2*, you said you were inspired from *bunraku* puppet theatre and the vocal music of Mali.

TW. I listened to lots and lots of music from around the world, and I was particularly interested in those two kinds of vocalization. I tried to imitate the *bunraku* type of articulation in the opening of the piece. In the score, the time-varying vibrato and the use of sub-harmonics, all those kinds of things are written out. It's not meant to be a kind of exact imitation. I'm trying the flavor of those detailed articulations. But I don't intend to make a conscious reference, I don't do that.

But in fact that's un-*bunraku* because the articulations are in counterpoint. What you have is a field of limited transpositions, with the octatonic scale, that moves a second, and then a minor second. The interesting thing about that is that if you stick a C in the base, you think 'Oh yes, that's in C'. If you put an A in the base, you think it's in A. Same thing

with F sharp and D sharp. You can actually use the same material and modulate, simply by shifting the base.

What happens in the piece is that it shifts down by a third, while the harmonic field doesn't change. Then it shifts down again by a third, and in the final section it shifts down by a tritone. That's the most dramatic change you can make in that field. I use only those very limited harmonic changes to make the thing quite static but to keep this possibility to modulate. The end of each section will modulate, without actually changing. (*laugh*) And I focus all the energy on the internal articulation, on the ornaments.

In the final section, when it becomes fast, the ornament turns into rhythm. That's suggested to a greater extent by the Mali music, but it's much less authentic. (*laugh*) Listening to Fanta Sacko it sounds like a very articulate classical Arabic singing, with a jazz feel, it's kind of loose. It is very elaborate, but the rhythm is much freer. It's not all over the place; it's just more fluid, like jazz. It has a very amazing quality to it. (*pause*) That's what inspired some of the material in the rhythmic sections.

NM. Still in *VOX-2*, there are interactions between the voices and the tape.

TW. There isn't, really. What happens in *VOX-2* is that the environment is used like perhaps you would use an orchestra: you've got the voice, and you've got the landscape provided by the orchestra. Here, we have a real landscape, we don't need to have the orchestra, we can create any illusion we want.

Two things: suggesting a natural landscape, you can imagine that most of the sounds you hear are from the natural landscape. But of course it isn't natural, because it has been constructed, tuned, so the voices sing in tune or out of tune with it. Or they synchronize with events that happen within it. It is treated like an orchestra, an accompaniment to the voice. It's a cross between the way we use an instrumental accompaniment to a vocal piece, and the way you would hear an environment around you. There's an ambiguity about that. Music is an artifact, so you're able to suggest both things at the same time. It's a natural world in which the existents you hear relate to each other harmonically and in terms of the events happening; so you feel some sort of empathy between the performers and the natural world. Well, it's not a natural world.

NM. I meant, at one point, we hear the wolf...

TW. Oh yes! Well, it's more pitch. The singer is asked to imitate the line of the wolf, which is not in a tempered scale. The singer has to get quite close to that. It's quite difficult to get close to things spectrally, because without computer manipulation this isn't something we

can do. But certainly there are some resonances, some correspondences between the things in the landscape and the things in the voices.

NM. Imitation.

TW. Imitation, yes.

NM. You say in the booklet that comes with the CD that the tape is an optional musical accompaniment to the performance.

TW. I can't imagine why I would have said that. (*pause then laugh*) Well, this idea is... completely crazy! (*laugh*) You cannot possibly perform any of them without the tape. *VOX-6* has instrumental backing tracks you couldn't perform without. *VOX-1*, *VOX-2* and *VOX-4* have environmental backing, *VOX-3* has click tracks that you can't perform without. I don't understand this at all...

NM. So was this cycle composed for performance only, or for it to be recorded?

TW. It's for performance. One of the things I was interested in was the transformation of the performance space. In using an electroacoustic environment as a way of transforming the performance space, a bit like at the theatre: you go to the theatre, but you don't think of yourself as sitting in a seat looking at people on a stage. You think they are people in their living room, or... whatever.

So the role of the electroacoustic material is to set a scene. In *VOX-1* you're surrounded by sounds from creation, it's sort of like this maelstrom thing. *VOX-2*, you're in what sounds like a natural landscape. It's not natural at all, but it has implications of a natural landscape. In *VOX-4*, you hear people hammering on the door, attempting to break in. Instead of just being at a live concert – where the guy comes into a jacket and everything – you're in a magic space, like at the theatre. You theatricalize the performance space.

NM. Do you see yourself as a surrealist composer?

TW. I guess not, really. (*long pause*) No, I'm more of a magic realist (*laugh then pause*). No, I'm principally a musician, but I have a sort of orientation towards progressive social ideas and notions of creativity and things. (*pause*) I'm a person of the left. Very much so. But... whether that is apparent in the music I have no idea, because I'm just a musician, and I'm making these things.

NM. Well, thank you very much for your time.

TW. Okay! (*laugh*)

8. Conclusion

From this essay-interview, the reader may keep in mind chiefly the subjective aspect of meaning, but also the inexistence of narrativity without the process of narrativization undergone by the listener. If recording sound erases the materiality of the sound-source, it doesn't erase the symbolic value it may have, once recognized (whether directly or via contextualizing cues). Once again, this symbolic value will or will not be taken as such by the listener, who, if he wants to listen in the most reduced (the most musical?) way possible, can make abstraction of all reference to sound-sources.

But going back to reality, we can say without a doubt that most listeners will when possible turn to the realistic aspects of sounds, considering as of primary importance their origin and their symbolism – what I called contextual identities. Even in cases where this is not possible, they will typically turn to the mode of sound production, giving it symbolism or narrativizing the musical scene whenever they can.

Trevor Wishart, as a composer and an improvisator, tries and uses those tendencies of human perception to produce associations and conceptual narrativity, without ever leaving the realm of the musical merely for the sake of meaning. Because of this, he *is* a magic realist, or even a musical realist, that can be related both to soundscape composers and to radio art (*hörspiel*) composers.

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