Real-World Music as Composed Listening

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The paper considers the aesthetic implications of employing sounds from the real world as musical material. It takes the view that music composed from, and about, real-world sounds shares concerns already explored by writers and practitioners in film, poetry and other *non*-sonic arts. The preoccupations of, among others, film-makers Eisenstein and Vertov, philosophers Bachelard and Casey and composers themselves are investigated to support the contention that real-world tape music is enriched and, to some extent formed, through the listener's imaginative response: real-world sounds – their meaning, being and sonic implications – encourage an internalized listening montage; a composed listening constructed in order to make imaginative sense from non-narrative sonic journeys.

KEY WORDS   listening, montage, representation, imagination, real-world music

Introduction

... one need only think of the rumbling of thunder, the whistling of the wind, the roaring of a waterfall, the gurgling of a brook...the rattling jolt of a cart on the road, and of the full, solemn, and white breath of a city at night....

... Let us cross a large modern capital with our ears more sensitive than our eyes. ... ... We will amuse ourselves by orchestrating together in our imagination the din of rolling shop shutters, the varied hubbub of train stations, iron works, thread mills, printing presses, electrical plants, and subways.
(Russolo, 1986, pp. 25–6)

Russolo's infamous manifesto, written in 1913, is more than an ironic piece of cultural provocation. His celebration of environmental noise urges us to learn from real-world sounds and from the way in which we listen to them, to gain understanding – through investigation and analysis – of both our environments and ourselves. His proclamations, whilst advocating the philosophical fulfillment of understanding and enjoying such sounds as purely sonic discourse, also appear to indicate that music made from them cannot be anything but political.

Eighty years down the line we have the technology to put it all on tape, we've had it for quite a while. Computers give us the power – and it is a certain kind of power – to 'orchestrate' sampled sounds from the 'real world', and to use sophisticated wizardry to cajole them into new forms, frequencies and fantastic documentaries. And while there is a vast body of more 'abstract' tape music using real-world sounds as a basis for sonic alchemy, there is also much music which seeks to *preserve* our connection to its recorded sources. In this latter kind of approach the meaning of the sounds is maintained, heightened or transformed. These pieces are *about* the real world.

My intention in this paper is to examine how this 'real-world music' might be construed as arising from a particular aesthetic approach, one which is listening-centred. Composers working with real-world sounds are, naturally, acutely aware of, and concerned with, listening: Barry Truax and John Young (both writing in this

journal) provide enlightening appraisals of how we respond to real-world sounds, in both real life and as music. My initial discussion is similarly concerned with the listener's response to real-world sounds, focussed on an investigation of listening as montage, with direct parallels to be drawn between montage film and documentary art.

For Russolo, the 'orchestration' of real-world sounds was an activity necessarily – in the absence of digital editing – undertaken in the individual listener's imagination. It is my thesis that real-world tape music still, and primarily, celebrates that internal fusion of listening and imagination. In fact it *depends* on our listening participation and invites us – through our active, imaginative engagement with 'ordinary' sounds – to contribute, creatively, to the music. In listening to a piece of real-world music we employ, and develop, the 'non-musical' strategies that we ordinarily use, in addition to our more rarefied musical sensibilities. We expand our understanding of both familiar sounds and experiences, and of music itself. As listeners, and composers, we may return to real life disturbed, excited and challenged on a spiritual and social plane by a music with hands-on relevance to both our inner and outer lives.

Listening In

Our ordinary listening is itself a complex, multi-layered activity of which hearing is but a part. In going about our everyday listening lives we take – I suggest – several different, but interdependent, stances, which amount to a dynamic construct. References, memories, associations, symbols – all contribute to our understanding of sonic meaning. Rather than deprive us of this activity, the real-world composer can treat it as a creative force, one which may be influenced, changed or subtly directed to give us an enriched understanding of real-world sounds: listening is as much a 'material' for the composer as the sounds themselves.

Referential listening

So, how do we listen? In real life, we tend primarily to understand sounds as referring to objects or events, and we use memory to to recall this essential information. By invoking recognition and contextual judgments we decide on a sound's immediate relevance to our situation – whether it's worth listening to. Sounds lead us towards references to sounding things, and in this way referential meanings for sound could be attributed to reminiscences awakened through the sound's agency.

Yet, on listening, our immediate reaction is to supplement, or supplant, sound with visual data; we look for the sounding object, either in reality or by using remembered knowledge to envisage a likely source. The persistent dependency of sound on sight could be seen as a corrective strategy; visualization provides information that listening either contradicts, or fails to convey. Perhaps visualization is more than a reinforcement of actual aural perception; it is also an attempt to bring a sonic experience into the temporal reality of our presence.

Presence, naturally, is defined in terms of time and space. "To be in the presence of someone" is to recognize him as existing contemporaneously with us and to note that he comes within the actual range of our senses.

(Bazin, 1967, p. 96)

In ordinary experience we each place ourselves at the centre of our personal temporal universe and judge things to be here and now only when they infiltrate our attention. Bazin neglects to stress the primacy of sight in our evaluation of what is present – as a film-maker, he takes it for granted. But attention here is synonymous with *sight*: we insist on visual perception as our window on temporal presence despite the fact that many other perceptions continually invade our consciousness. As a sound impinges on our listening attention we create an internal visual presence to bring the experience into our perceptual 'now'. For instance, a telephone conversation makes especial demands on our consciousness because, as McLuhan suggests, the auditory image needs to be strengthened by other senses.[1] But, surely the reason for this lies not in the quality of the auditory image but in the fact that the experience is insistently present in our attention without providing confirmatory visual data. This is untenable for our visually weighted understanding of presence, so we make a strong and comprehensive visual picture to fit a voice. All our senses ultimately inform our experience of how we exist in time and, with sight as a primary means of defining what is happening in our presence, we readily visualize to draw other senses into our temporal domain.

There are other ways, perhaps less consciously perceived, in which sounds can influence our perceptual understanding and defy the symbiotic relationship between sight and sound. Consider, for instance, sounds such as alarms and sirens, or pealing church bells. The meanings that we allocate to these types of sound arise from a contradiction in our referential listening processes, directly attributable to the volume of the sound. These sounds surely claim our full attention, yet they are usually disembodied visually from their sounding objects. Although the objects themselves do not enter our presence their sound, through its continuous and loud insistence, seems near to the point of immediacy.

Loud sounds can disorientate us through an apparent spatial proximity – the hypothetical object seems to be here, now – that contradicts a failure to allocate a focal visual source. The confusion arising from this deprivation of visual confirmation brings us to a point of timelessness where nothing matters except the aural presence of the sound and we expend little, if any, energy on attempts to imagine the physical source. And this, of course, is the response intended by alarms and sirens, whose role is to alert us to danger – a learnt association – rather than refer us to their sounding objects.

Some musical examples

Transferred to a musical domain, the implication that disembodied real-world sounds must be loud in order to have true 'presence' for the listener becomes an issue for the composer. The frequently voiced criticism of tape music as 'lacking' in visual stimulation may have less to do with unsuitable performance or playback scenarios than with the very fact that we are distanced from disembodied real-world sounds in both musical and real life circumstances, and in tape music world sounds in both musical and real life circumstances *all* sounds are disembodied. Such criticisms indicate an unsuccessful attempt to find listening parallels between our relationship to recorded sounds

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[1] McLuhan, 'Since the telephone offers a very poor auditory image, we strengthen and complete it by the use of all the other senses.' (McLuhan, 1964, p. 235)

and to the sounds of live musical instruments. Perhaps it would be more appropriate to seek similarities between referential listening in real life and in the concert hall. For instance, the sheer volume and intensity of many tape pieces mirrors the immediacy of alarms and sirens and may arise from a similar attempt to force sounds into the individual listener's presence, despite the lack of a visually perceived source. We could make an interesting comparison between sonic amplification and Bazin's evaluation of visual enlargement in film:

What we lose by way of direct witness do we not recapture thanks to the artificial proximity provided by photographic enlargement? Everything takes place as if in the time-space perimeter which is the definition of presence. . . . . . . the increase in the space factor re-establishes the equilibrium of the psychological equation.

(Bazin, 1967, p. 98)

As a musical example, Stockhausen's dramatic use of a real-world sound as a structural device in his work *Trans* makes judicious use of our propensity to give 'presence' to loud sounds. The sound engendered by a mundane object – a weaving shuttle – is transmuted by amplification into an enlarged and alarming entity, which takes full control of our aural attention. Here, the absence of visual stimulus aids the effectiveness of a sound whose role is to momentarily confound our understanding of temporal flow. We are encouraged to regard the sound as distinct and 'timeless' in relation to the progress of the movement – visual and temporal – of the instrumental music.

A shuttle of a weaving chair passing loudly through the hall from the left to the right, shooting through the air. And with each shuttle sound the string players were beginning the next upward movement of their bows, all synchronously, and then in the middle of the duration between two shuttle sounds, they started a downward motion. Another shuttle sound, and they played a new note. The first shuttle sound opens the chromatically dense wall at a certain interval, closes it with the next sound.

(Stockhausen in Cott, 1973, p. 55).

In this case whether we recognize the sound as that of a weaving shuttle is less important than whether we interpret it as communicating a particular kind of mechanical side-to-side movement; an abstraction of the sound's real-world meaning is sufficient and intended. And this dissociation of visual and aural meaning is borrowed from our listening to alarms and other 'present' sounds since, by changing our normal listening relationship to the shuttle sound, Stockhausen discourages visualization and encourages us to refer not to the cause of the sound but to the external information it conveys. The disembodied sound becomes symbolic of a kind of movement which, in turn, becomes an analogy for the 'slicing' of the musical form which it initiates. Indeed the left-to-right spatial projection heightens this significance by translating visual data into aural terms.

It seems that, once a sound has become timeless and source-less, in the manner described, we are free to extend our temporal understanding outside the frame of the physically perceived environment to the world of historical remembrance. In this manner sounds are listened to, not as emanations from a visual source but as informing symbols imbued with culturally acquired significance. Although we recognize Stockhausen's weaving shuttle as a real-world sound, its actual provenance isn't something we strive to ascertain, in fact we probably can't. Instead we accept it as a 'generic' sound from life, one that has attained a symbolic significance independent of its physical source.

Every sound has its cultural tale to tell although the older the symbolic knowledge, the more likely we are to appreciate the historical breadth of its informing content.

Consider church bells whose religious symbolism reaches a far wider audience than the Christian community. A large proportion of listeners, in the Western world at least, will be touched by the story of these sounds. And, for the composer, such well-established sound symbols provide a conceptual vocabulary which will have meaning for the audience:

Any attentive reader of newspapers will have noticed the old trick by which his or her attention is sought – the classic first paragraph in which the essence of a story is presented with maximum impact. Harvey achieves precisely this, opening *Mortuos* with a vigorous carillon of bells which gradually declines in intensity until only two or three slowly pealing bells are left . . .

(Campbell, 1986, p. 524)

Philip Campbell doesn't elaborate precisely on how 'maximum impact' is made at the opening of Harvey's work; we might naturally assume it sufficient that the sounds are loud, sonorous and interesting to the ear. But the force of the impact comes as we encounter a known symbol which refers us to a learnt meaning for 'church bells'. The symbolic association of bells with worship and the web of meanings that leads them to 'enumerate the fleeing hours. . . mourn the dead. . . call the living to prayer'[2] continues to inform because the cultural history of the sound is ingrained.

In the composer's words :

We constitute the music according to the interplay of the composer's codes and our own, *the references to past meaning and usage of sound*, the patterning of repetition and variation within the work itself. A Chinese peasant's codes would be totally different from Wagner's, and our own different from both. (my italics)

(Harvey, 1985, p. 11)

While referential listening connects sounds to objects, to measurements of time and place and to learnt 'symbols', the latter connection finds us removed from our initial attachment of sights to sounds into a world of conceptual meaning. In broadening our investigation of real-world listening to include such attention we might find that, once we get past seeing things , we can obtain a deeper experience of qualities, rather than quantified relationships, of time and space.

Reflective listening

The above discussion indicates that real-world sounds are loaded towards referential listening, unlike the more abstract timbres of musical instruments whose 'imaginary' world status is clearly delineated. But that isn't to say that real-world listening is devoid of imaginative activity. How – and why – do we hear the 'song' of the sea? To do this we have to switch listening channels to a less usual, reflective type of attention. This reflective listening is neither a contemplation of an action invoked – Stockhausen's moving shuttle – nor a meditation on a sound's extra-sonic cultural history – Harvey's ecclesiastical bells – but a creative, enjoyable appraisal of the sound for its acoustic properties. Yet, although it might seem that reflective and referential listening are independent activities, I prefer to see them as working together as a means of synthesizing our knowledge and our enjoyment of real-world sounds.

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[2] The inscription on the Winchester Cathedral bell is "Horas volantes numero, mortuos plango: vivos ad preces voco" ("I enumerate the fleeing hours, I mourn the dead, I call the living to prayer") Both the inscription – sung by a boy soprano – and the sound of the bell itself are used as material in Harvey's *Mortuos plango*.

To hear music in the sea we change our usual relation to the sound, allowing interested enchantment to eclipse alert information-gathering. As in daydreams and reveries a perceptual shift lulls us into 'forgetting' how, and why, things normally make sense. Instead, we use our ears and minds to create, or reinterpret, imagined meanings for the sound. This seems to be diametrically opposed to referential listening in which we take considerable pains to 'remember' how things are. But what conditions encourage reflective rather than referential listening? If a real-world sound can be responded to with either it seems likely that optimum conditions for the one must separate, or mute, an inclination to focus in on the other. We need to consider what inner processes invite a particular listening stance.

Remembered content is actual in status; it is something that we assume has in fact appeared or occured on some previous occasion (even if we cannot now recall the precise moment). Imagined content, in contrast, is purely possible in status, it is something that, at most, might have appeared or occurred previously or that might yet do so in the future. Positing imagined content as only possible, I am not as engrossed in it as such; my attention wanders more freely beyond this content to its immediate environs and more particularly to its margin, where still other possibilities might emerge. When I posit remembered content as actual, however, I tend to remain riveted to it, and I am correspondingly less tempted to transcend it toward a marginal region that lacks such sturdy actuality.

(Casey, 1987, p. 77)

Taking Casey's description as a model for response to real-world sounds, we could take the view that an interest in the acoustic qualities of a sound prompts us towards imagined content while a focus on referential meaning prompts recognition, that is remembered content. Assuming the real-world sound's ability to represent meanings of either the particular or the general when disembodied – as with Stockhausen's shuttle sound – then the sound can act alternatively as an agent for remembrance or imaginative fantasy. (In this sense I classify straightforward recognition as 'remembering' the significance of the sound from its sensory data.) Secondly, Casey's assessment of remembered versus imagined content proposes a dependency of inward attentiveness on content for each. This suggests that, in the case of imaginative, reflective listening for instance, we move toward a particular kind of inward attentiveness. By precluding the attentiveness for remembered content we are moved away from our usual relation to sound as a referential trigger. This hypothesis represents an idealized model in which imagination and remembering are completely estranged and, if it is true, we should switch from hearing at one moment the sound of the waves and the next a sound which makes no sense at all, completely divorced from 'sturdy actuality' and taking the sound's disembodiment one step further to a stage where even significatory meaning is abandoned.

But reflective listening, as with other perceptual interpretations, doesn't in reality achieve complete estrangement of memory and imagination. This apparent deficiency is especially true of real-world sounds: we can't pretend that we don't know them. Imagination, nevertheless, enables us to attend to remembered data in a creative and free-wheeling way that needs make fewer concessions to commonplace perception; conditions for reflective listening mean that we do not need to hear the sound of waves but can instead imaginatively recognize them as whispers, hissing or any other comparable remembrance. In seeking to clarify the difference between remembering and imagination Casey goes on to suggest that we 'compare, for example, the visualization of a wholly imagined friend with the visualization of a remembered friend'. But there can surely be no such thing as a

'wholly imagined friend'; our imaginings are composite fantasies on experienced data. So, inevitably, tensions are set up by a friction between imagined and remembered content and conflicting types of simultaneously perceived meaning.

This continuous shifting between referential remembering and reflective, imaginative forgetting may be constructive in itself. Perhaps one nourishes the other so that contradictory meanings can provide a multi-faceted and richer understanding of a source. Compare, for instance, the way we remember a new acquaintance in terms of friends they resemble, until we know them better. This is a fairly simple example of a deficiency in terms of recognition – we do not know this person from previous experience – being supplemented by imagination's propensity to fill the gaps with remembered data. And the data can be remarkably obscure as our imaginative 'attention wanders more freely . . . . . . to its margin where still other possibilities might emerge'; we can perhaps come up with remembered vocal inflections or a subtle physical gesture, or even a way of sneezing to help our understanding.

How does this compare with the imaginative conditions of reflective listening to real-world sounds which are, after all, familiar friends rather than casual acquaintances? Perhaps we can find a connection in the perceptual games we play to 'deceive' us into perceiving fictions in everyday experiences. When we find faces in the wallpaper, demons dancing in a fire or voices in the wind we are playing a similar game of imaginative substitution but in these cases with less imperatively functional intent. So there are fewer constraints on how freely imaginative attention can wander and we're at liberty to produce startlingly distant possibilities. And, in the case of these examples, we have time to do so; all of them represent continuously transmitting sources which are recognized in an instant, but leave temporal room to spare. Although survival requires instant, or at least fast, recognition of a source attention is less weighted to remembered content while the source continues. Synthesizer sounds which splice sampled instrumental attacks to crude synthetic sustains are practical examples which exploit our tendency to lose referential interest. So, time can suspend the source from its usual context; after we see the log-fire, we sit down to watch it for demons. In the same way we listen to the song of the sea after we've heard, and recognized, the waves though, in reality, we never stop hearing them completely.

But this still doesn't quite account for why we delve up such distant and intricate images as demons and faces, voices and songs to describe the complex appearance of diverse phenomena. This part of the game exhibits an attention to the behaviour of the source and represents another attempt to make sense of the unknown.

They had a game they would play, sitting at a coffeehouse. They would ask: How far away is the near strange attractor? Was it that rattling automobile fender? That flag snapping erratically in a steady breeze? A fluttering leaf? "You don't see something until you have the right metaphor to let you perceive it," Shaw said. . .

(Gleick, 1987, p. 26)

Imagined content produces metaphors for complex behaviour that would otherwise be interpreted as chaotic and meaningless. These metaphors are obviously going to be dependent on to what extent the behaviour seems chaotic, and that will naturally vary from one person to another, as will the 'right metaphor' that imagination provides. But metaphors denote, they don't explain, and the right metaphor must come from an understanding, at some level, of the structure of the behaviour. In reflective listening to the sea we are, again, shifting our relation to

sensory perceptic in an attempt to evade normative understanding, but we are also noting sensory messages that don't generally warrant perceptual attentiveness such as subtle changes in amplitude or pitch. If, estranged from its referential meaning, the ordinary real-world sound would have seemed confusingly random, making no sense at all, now we can take an unusually analytical approach in order to explain it. To find a metaphor we perceptually deconstruct the sound and listen to it as temporally shaped behaviour in a constant state of flux. We try continually to build relationships between what we are analytically perceiving and what we know. We are listening differently. As we actively engage both referential and reflective listening stances, our freely wandering attention to imaginative content is, all the time, travelling further in order to obtain the 'right' metaphors to summarise this acquisition of knowledge. The metaphors, in turn, change as perceptual understanding increases, giving us pitches, rhythms, songs, voices – whatever comes to mind.

Contextual listening

We evidently enjoy attempting games in which, to quote Nietzsche, 'the over-turning of experience into its opposite, the purposive into the purposeless, of the necessary into the arbitrary. ... ... delights us, for it momentarily liberates us from the constraints of the necessary' (Nietzsche, p. 512). Perhaps we can compare this to our response to humour; we laugh at punchlines that strike home with a shock or surprise because, in the context of a joke, they are non-threatening. Similarly, in reflective listening we *direct* our attention over the source without any preconceived intent, other than a willingness to fall prey to perceptual deceit. But the material, its context and our relation to both each change in time so that, although we may direct our reflective listening attention over real-world sounds, there is always the strong possibility that, at any moment, circumstances will force a 'cut' to reality. Real life perceptual games are difficult and 'delight' will always be qualified by contextual constraints; if we *only* see demons in the fire or hear songs in the sea we wander into the realms of unintelligible hallucination. Vacillations between memory and imagination have to be fine-tuned to our evaluation of the material's contextual significance.

This implies that both referential and reflective listening activity in fact takes place over a pervasive ground, through which material and context are interrelated and evaluated. It is this ground, an amassing of individually experienced knowledge, that extends beneath all our new experiences to influence and constrain our perceptual direction. Prior to any acquisition of specific referential information, we relate our current experience to our experiential history, to the context of our lives. Inwardly comparing remembered and presently experienced personal contexts for the material, we make a judgement as to its likely referential importance. So, contextual listening relates the material to the context of our individual history, and influences both the extent of our imaginative wanderings and the nature of the meanings they provide.

Creative tensions arise when the interrelationship between context and material is disturbed so that contextual importance indicates the presence of referential meaning that we're unable to perceive. As an example we could consider our response to language – contextually essential to all our lives – when verbal meaning is in some way obscured. Jung remarks on a colleague's journey on a Russian train

during which 'though he ... ... could not even decipher the C, ..ilic script, he found himself musing over the strange letters in which the railway notices were written and ... ... he imagined all sorts of meanings for them. '(Jung, 1964, p. 27) Successive attempts at finding referential meanings in material with known contextual importance lead imaginatively to 'all sorts of meanings' for an unfamiliar actuality.

Similarly, when listening to human speech that is somehow made linguistically incomprehensible, we find it difficult to mute referential perceptions because of the important human context of this real-world sound. This places us in a frustrated listening position in which contextual knowledge points to a vast substructure of referential meaning – the communication of thoughts and emotions, syntactical logic, indications of cultural and personal character – to which we are denied complete access. Trying to gain entry to this mass of referential knowledge we gather all our listening resources about us to perceive the source afresh. In fact, we *re*-perceive it, attempting to create referential, and contextually relevant, order from the acoustic properties of a cryptic sound. Our appraisal of its qualities now springs from an *intent* to find informing relationships in the sound – accent, intonation, speech rhythms or imagined verbal content – through a fusion of reflective and referential listening stances.

Participating

This compulsion to 'make sense' of sounds is interesting; it seems that we are prepared to go to extreme perceptual lengths in our desire to relate an obscured source to experienced models. The more mysterious the material, the more ambitious our perceptual reconstruction and the more varied the relationships we are willing to entertain. We want to make these confusing sounds relevant to the fabric of our lives, to contextualise them. And, I contend, we retain this participatory activity in listening to real-world music.

Techniques such as processing and mixing give the composer the opportunity to obscure real-world sounds, and so deny our easy access to referential clues without entirely severing our contextual connection with the source. She can guide us on a circuitous perceptual journey in which her re-perceptions of the sound direct our own, creative, listening. In this sense we could regard the composer as just another listener, but one who publicly reveals a rarefied listening process through her transformation of the sound. In this sense we might compare her position to that of the film director who reveals a re-perception of real-world narrative through the temporal refinement of montage, but never disallows the viewer's personal experience.

each spectator creates an image along the representational guidance suggested by the author, leading him unswervingly towards knowing and experiencing the theme in accordance with his own personality, in his own individual way, proceeding from his own experience, from his own imagination, from the texture of his associations, from the features of his own character, temper, and social status. The image is at one and the same time the creation of the author and the spectator.

(Eisenstein, 1986, p. 78)

As summarised by Bazin, who was, however, ultimately critical of this approach to film, 'the meaning is not in the image, it is in the shadow of the image projected by montage onto the field of consciousness of the spectator. '(Bazin, 1967, p. 26) On watching a film, we place the director's image in the context of our own lives.

Montage can function similarly in real-world music: for instance, Harvey's gloriously familiar pealing bells are abruptly followed by a confusingly alien world where individual spectral components are slowly explored. We retain our recent memory of the source while experiencing sounds whose strange, but familiar, progress clouds our contextual judgements. The music continues with similar juxtapositions and is just one example, from many, of a work combining montage techniques with more traditional relationships of pitch and timbre.

This kind of montage, in both film and music, might be defined as horizontal in nature. Ultimately our re-perception of the material is guided by linear divisions of time. But there is also, in both film and music, the possibility of what we might call a vertical montage[3]. The composer can offer superimposed layers of sonic transformation while appearing to preserve the temporal duration of a real-world scenario. Instead of slavishly following a composer-directed narrative, we create an inwardly perceived dynamic as our listening re-perception travels to and fro.

Paul Lansky's *Night Traffic* appears to preserve the temporal flow of recorded traffic sounds while submitting them to radical transformation. In fact the temporal narrative is also surreptitiously tuned to both rhythmic patterns and the harmonic rhythm of slowly changing chords. Nevertheless, we are left with the sensation that the music's linear time is a naturalistic reproduction of reality. Already his subtle directon of time gives the impression that it is our listening attention, not the composer's manipulation, that creates the horizontal dynamic. The sounds themselves are transformed with equal subtlety; the timbre of the source is never completely obscured, instead it is lit by comb-filtered pitches which focus, rather than destroy, our awareness of contextual meaning. Similarly, and importantly, controlled panning of the sounds mimics the spatial effect of passing traffic and places each listener firmly at the centre of the experience.

With a great deal of understated listener-direction, Lansky deceives us into thinking that *we* create the music in these sounds. Everything conspires to place us at the centre of the work – from the persistent familiarity of the sounds to their listener-centred movement. There is just enough contextual confusion – in the filtered pitches, the evolving harmonic progression and also the slightly unnerving sense of an invisible approaching object – to encourage a perceptual quest. At the same time there is enough recognition to maintain our concern with real-world significance and the many associations attached to such culturally powerful, and pervasive sounds.

Compared to Harvey's *Mortuos plango*, Lansky's subtle direction is no less rigorous, but is possibly more demanding of the listener. It places far more weight on our individual response and encourages us towards the satisfying impression that we *aid* the creation of the music through our perceptual activity. We might say that, in doing this, he solves the problems of audience alienation often attributed to tape music. How can we feel alienation when we're part of the music ourselves? In both his treatment of the subject and his attitude to the listener, Lansky achieves a gently political work.

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[3] Not to be confused with Eisenstein's specific use of this term to describe the relationship between sound and image in film.

Listening Montage in Real-World Music

If the composer's 'direction' of our listening can, in some way, make us feel that we participate in the *creation* of the work, we need some analysis of the means and effect of that direction. Why are real-world sounds, and our ordinary, real life, relationship to them, so essential to its success? Perhaps because, once our real-world listening response can be guaranteed, the composer is at liberty to place 'noise' in our perceptual channels, confusing, obstructing or colouring our normal understanding of the sounds. This leaves our evaluation of who is 'intending' our listening at any one time in a constant state of flux, along with our evaluation of the 'being' of the real-world sound. At one moment recorded traffic sounds, the next a quasi-tonal progression of filtered chords. Real-world and abstract, 'musical' listening – and the various combinations and permutations within them – get so mixed up in our responsive endeavours that they engender a kind of internal 'listening montage'. Ultimately they cease to exist as distinct from one another as we 're-assemble' the relationships between them.

> montage is proposed purposefully as a kit designed to be assembled, while collage is nothing but a mixed bag full of obviously incongruous components
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> (Thomas, 1983, p. 85)

But montage, as opposed to collage, strives for *coherence* through confusion. And, as in montage, our individual reconstitution of intentionally confused listening stances becomes a *part* of the real-world work.

Confusion of intent

Real-world listening – our ordinary, quite possibly creative, take on sounds as we attend to them in real life – might be classified, or included, as *self-intended* listening. While attention is the *state* of applying our mind to, in this case, sounds, intention is the *determination* – an active process – to 'stretch out' towards this state. Through intention we make the transition from passive hearing to attentive listening. In this sense, self-intended listening occurs when the imaginative decisions that lead to a creative or analytical consideration of sounds are largely, if not entirely, of our own volition. In Cageian terms self-intended listening can certainly be musical; as individual inhabitants of the real world, we can 'let sounds be themselves' and make a conscious decision to attend, musically, to our natural environment. But then we create our 'own' music, and we do not seek, neither are we able, to transmit the inwardly-formed result to another individual And although our appraisal of abstract sonic relationships in ordinarily occuring sounds is certainly, as I've discussed, encouraged by contextual considerations, it is, finally, our own choice. As we sit on the beach, revelling in our sonic environment, no person 'tells' us that we might listen to the 'song' of the sea. Of course, the real life context may defeat a desire to reflect creatively: if we were drowning, we'd probably take less aesthetic delight in sonic matters ; presumably, even if we *wanted* to listen reflectively, we'd have difficulty in doing so. Yet, in both cases, our priorities are molded by external, fortuitous circumstances rather than an external, communicating individual.

This last point is essential to a distinction between self-intended and *composer-intended*[4] listening. Initially it would seem that composer-intended listening is synonymous with 'musical' listening, in the traditional sense of listening out for an abstract sonic discourse. That isn't to say that the composer dictates, or can dictate, *how* we listen but merely that she *intends* our listening to be attuned to the perception of acoustic relationships, sonic architecture and the like. In a concert hall we are already contextually conditioned to expect this intent and we are somewhat more open to aural suggestion, perhaps, than in real life. We are switched into the 'correct' listening channel. But, regardless of whether we hear music in an 'appropriate', encouraging context – the concert hall, or coming out of our CD player – or in unprepared, real-world circumstances – as we do the weekly shopping, in a lift, through an open window –we appear to *know* that a composer intended us to listen to the sounds in a particular, 'musical', way. We decide that we are hearing 'someone else's' music.

Or so it seems. In fact the ground is already shifting beneath our feet since the perceived distinction between composer-intended and self-intended listening is disempowered when the two fuse, or *con-fuse* each other. For instance, Alvin Lucier's *I am sitting in a room* shows an exquisite awareness of the potentialities of transforming our self-intended experience of real-world sounds into composer-intended music, through the introduction of surreptitious intentional confusion.

In this work Lucier's natural speaking voice – complete with stutter – informs us of his actions and then, as this recorded speech is successively re-recorded in the same environment, an accumulation of reverberating frequencies transfigures his words into clouds of resonant pitch. Lucier's complete text is as follows:

I am sitting in a room different from the one you are in now. I am recording the sound of my speaking voice and I am going to play it back into the room again and again until the resonant frequencies of the room reinforce themselves so that any semblance of my speech, with perhaps the exception of rhythm, is destroyed. What you will hear, then, are the natural resonant frequencies of the room articulated by speech. I regard this activity not so much as a demonstration of a physical fact, but, more as a way to smooth out any irregularities my speech might have.

Lucier is careful to avoid referring to musical listening or, indeed, listening of any kind. His words refer solely to a description of what we will *hear*. He tells us what he is going to do, and then he does it; listening, it appears, is entirely up to us. Indeed, as the work commences we seem to be entirely engaged in self-intended, real-world listening. We recognize and process speech, we may well reflectively contemplate the 'musical' qualities of its patterns but in, at this stage, an informative rather than an interpretive context. As the work progresses the reflective aspects of real-world listening take over, the context expands to encompass both 'demonstration' and musical 'performance', and our engagement with pitches, rhythms and timbral resonances is successively heightened. Yet all these phenomena happen simultaneously and, also at the same time, our referential attention to words is imaginatively redefined. For each of us there comes a point, or rather there *isn't* a discernible point, where we are listening to music *as well as* listening musically to

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real-world sounds. When the work ends, forty-five minutes later, we are left in no doubt that *Lucier*-intended listening has directed our own intent. But we're also in no doubt that *our* intent made music from what we heard. This is confusing. It's all the more confusing since , in reality, this work *is* nothing more than a demonstration, a process set in motion by the composer but left to run without any creative intervention. We're 'duped' by our assumptions, but our willing 'suspension of disbelief' enables us to appreciate more fully the musical attributes of a natural phenomenon.

Noise as interference

Ultimately, Lucier's work disrupts the powerful connection between listener and language by putting noise in our communication channel. In this case it's done, literally, through the 'noisy' reverberation of the room, but this is just one means of confusing the listening intent of speech. Luc Ferrari's *Presque Rien avec filles* achieves a similar confusion simply through the superimposition of material. This work takes candid recordings of environmental sounds and edits them seamlessly together. But his material includes speech, in French, German and Italian. By layering the three simultaneously Ferrari effectively confuses our recognition of intent. If we understand one of the languages, its communication of intent draws our attention while the others appeal more for their sonic content. Yet, even if we understand all, or none, of the languages concerned the experience is confusing. Are we listening to a surreal multi-lingual conversation? Are we in three places at once? What are they talking about? Are their linguistic messages connected?

These disconcerting questions plague us because, despite the fact that we also appreciate the speech for its purely sonic profile, its listening intent is demanding. And Ferrari's layering brings noise to our self-intended, real-world understanding, through which we evaluate the 'being' of a sound.

On the face of it, the composer's creation of cognitive noise might seem a perverse activity because noise generally pollutes communication and confounds explanation. Or, rather, it confounds the expected explanation and makes for a more volatile, unpredictable relationship between composer and listener. But when the 'noise' amplifies the confusion between listening intents the resulting volatility may provide new listening discoveries. Marie Maclean shares this sentiment with regard to growth in narrative form:

[noise] can be an invaluable stimulus, constantly setting the challenge of winning the battle for control. . . . . . . The disruptive input of anarchy, of violence, of noise, stimulates the mutation and the new growth of narrative forms and their evolution within the wider interplay of social forces.
(Maclean, 1988, p. 3)

Perhaps, also, noisily frustrated intents can lead to 'new growth' in our listening habits. Paul Lansky's *The Lesson* is a rather different work from Lucier's, but it also uses speech and frustrates the intents of language. But Lansky's work creates cognitive noise of a complex, dynamic kind by blithely frustrating *all* intents. Through making all our listening channels noisy and unstable, *The Lesson* prevents us from clinging to any one point on our listening dial. But of course we might discover new, and more interesting, stations this way – ones we'd never heard of.

Lansky takes some speech (from a friend, and colleague, J. K. Randall) and processes it continuously. Like several of his speech-based works the processing largely takes the form of plucked string synthesis which is generated by the

amplitude contours of the speaker's inflection and tuned to particular chords. So while the speech engenders the processing, the processing obscures the speech.

But this work is, for Lansky, unusual in two particular respects. Firstly, for a significant proportion of the time the words, and vestiges of the speaker's natural timbres, are heard intelligibly, or semi-intelligibly. Secondly, the harmonies have a distinct sense of 'progression' which is heightened by careful voice-leading, and aided by sustained vocal tones. The composer reveals connected reasons for his decisions:

> *The Lesson* uses more complex 'sort-of-atonal' harmonies, with fairly complex voice leading relations. I remember struggling long and hard with these issues there and deciding that this sort of voice leading was much more analogous to the reasoning processes of JKR than my approaches in *Quakerbridge* or *Night Traffic* etc. I think that using these latter approaches with JKR's texts would have made his words seem silly.

<div align="right">(from correspondence with the author)</div>

J. K. Randall's words are entirely relevant to our discussion since they are concerned with his experiential evaluation of listening to Mozart and Beethoven, and this is perhaps why Lansky allows us teasing glimpses of the speaker's meaning. But they are only fleeting allusions since the text is fragmented in a random collage and the processing ultimately frustrates our engagement with the listening intent of speech. Repeated listenings reveal a little more each time, but there will always be moments of complete confusion as particularly dense flurries of plucks obscure the words entirely while simultaneously signalling their existence. Even then, as in the popular story of the young Tolstoy, standing in the corner trying 'not to think of a white bear', we are constantly frustrated by trying 'not to' perceive speech.

The plucks seem to impose a particular cognitive noise on the speech; on the intent of its 'being', its linguistic meaning, and the timbre and inflections of its sound. But the loudest cognitive noise comes from a more 'traditional' direction. While trying to 'parse the damn thing' (one of the few intelligible spoken phrases in the work) I discovered that words were far easier to discern when, winding the tape back and forth, I randomly selected very short sections. In doing so, I removed all harmonic progression. For a few seconds only, the words suddenly emerged more clearly, as did the disconcerting realization that the composer had very tangibly altered, or intended, my listening. This implies that the familiar logic of an harmonic progression had effectively frustrated the intent of speech and also implies that Lansky's choice of tonal or 'sort-of-atonal' vocabulary achieves far more than mere sonic appeal.

This work is especially intriguing, then, because we are presented with a complexity of intents which each impose noise on the other, since the speech and the plucked rhythms also introduce their own cognitive noise to, for instance, the harmonic rhythm. Our listening attention flits rapidly from one to another, sometimes of our own, individual volition, often through the fluctuations created within the work. We are confused, and frustrated, and yet we're compelled by the result.

Transforming the being of the sound

While assembling our montage 'kit' from intentional confusion, cognitive noise and frustrated expectations, we begin to see that our precarious listening situation is changing our relationship to sounds. As our listening is questioned and fragmented, so is our evaluation of what sounds *mean*, of their essential being.

Each of the above musical examples makes use of speech, a sound with a peculiar and important being. Lucier could have used any sound source for the same 'demonstration' but instead:

> decided to use speech; it's common to just about everybody and is a marvelous sound source. ...... It's also extremely personal.

<div align="right">(Lucier interviewed by Simon, liner notes to *I am Sitting in a Room*)</div>

His observation understates the significance that speech itself 'intends' towards our ears. As previously discussed, speech has an unusually defined being and we honour it with special attention, even if we don't understand the language concerned, because it speaks of communication. We cannot choose to ignore it, for it communicates such a variety of emotional, intellectual *and* sonic information. Try listening to a subtitled foreign film with the sound down and see how much you miss.

So, while Lucier plays with listener and composer intents he does so with material that makes its own demands, constantly. The source exacerbates his fruitful confusion since, even when the intelligibility of the words becomes completely lost in the ringing reverberation, their meaning resonates in our minds. We retain what might be called 'speech-intended' listening to the end; as each re-recording proceeds we compare and contrast it with the remembered original, we attempt to perceive the sound of the words by continuing to delve for remnants of verbal meaning. The being of speech as a sound source insistently transmits its own listening intent.

Similarly, Lansky and, to a lesser extent, Ferrari are engaged in compositional activity which interacts with, rather than radically transforms, the being of the speech. A great deal of *The Lesson's* attraction lies in the resilience of the source. As in other speech-based works by Lansky, we certainly come to perceive speech differently, revelling in its rhythmic and spectral content in a manner which enriches its being, but the enduring magic resides in the *persistence* of its being, against all odds.

But when a composer engages with a real-world source, or sources, of less 'focussed' significance, the result can be very different since our listening montage can causes *changes* in our evaluation of being.

An obvious way to 'de-focus' the being of a sound is to remove it from its usual context and thus deprive us of our contextual listening judgements. Acousmatic music chooses to take this decontextualization beyond the point of real-world understanding, abstracting sounds completely from their being. However, it need not be the case. Ferrari's *Hétérozygote*, for instance, is a somewhat pointillistic collage of real-world fragments, ranging from speech to birds, to ambiguously perceived noises. Out of context, we have no environment in which to place these sounds. Unlike his *Presque Rien* pieces, there is no attempt at conveying a 'realistic' context. The only context is the rhythmic environment defined by the sounds in time. As incongruent superimpositions and momentary real-world allusions assail our ears, we start to listen to sounds as musical objects, almost as 'notes' or 'phrases', but without ever losing our connection to their real-world provenance. At the same time, we persist in attempts to make some kind of narrative out of contradictory real-world meanings. As a result of their decontextualization, sounds whose being, in real life, might be deemed of passing significance become essential to our musical understanding.

Jean-Claude Risset's *Sud* provides an example whose very subject is this active process of transformation. He does this by confusing our recognition of a sound's origins, so that our appraisal of the being of the sound is frequently, and continuously, disrupted. In *Sud* we are, at all times, confronted with a careful amalgam of 'real' sounds – largely unadulterated real-world sounds – and 'imaginary' sounds – transformed real-world sounds or entirely synthetic timbres. But, because the divisions between 'real' and 'imaginary' are constantly in a process of transition, nothing is what it seems to be. This work infiltrates and directs our internal listening montage to such an extent that we are constantly at sea perceptually.

The complexity, and subtlety, of Risset's procedures warrants an extended description of the opening minutes of the work, in which I use the terms 'real' and 'imaginary' in the sense described above[5]:

The movement opens with real wave sounds, filling the stereo field, underneath which an harmonic grid is, very quietly, present. While the waves continue, and get louder, real birdcalls build up distantly. A distinctive real birdcall is accompanied by an equivocal peeping sound, probably imaginary, which is repeated several times, alternating between channels. The waves subside imperceptibly as the birdcall texture becomes louder. The texture has started to pan, fairly rapidly and continuously. The rate of panning, and its regularity, is now too controlled for a natural spatial environment.

About one minute into the movement, the previously real birdcall texture becomes higher, more white-noise like and pans faster. A new, abrupt birdcall appears repeatedly, with a breathy, pipe-like timbre. It appears to be real. As it accelerates in tempo and occurrence, its imaginary status is revealed. Its progress occurs over vestiges of the real birdcall texture, which exacerbates the confusion.

At around two minutes a croaking, almost frog-like pattern enters under the birdcalls. It's loud, reverberant and very clearly processed. It is hard to pinpoint referentially, perhaps it is slowed-down birdsong, or insects. The croaks rise in an obviously 'un-natural', fast glissando, the rhythmic pattern accelerates simultaneously. As the pitch rises, the timbre changes until, at the extreme of the glissando, almost imperceptible in pitch, the sound re-emerges as a 'woody' wind-chime clattering.

During this mutation the real birdcall texture has continued, similarly accelerating and rising in amplitude, though not so much in pitch. By the arrival of the wind-chime sounds the texture has become unnaturally frenetic and loud. The sound cuts off abruptly at this point.

After a moment's silence, a resonant synthetic pitch collection bursts in. There is an abrupt change of context, with no real-world sounds. For an extended period

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[5] Risset provides the following guide to the first movement (of three), my description proceeds from the opening to include the 'harmonic clouds':

The sea in the morning. The opening profile permeates the entire piece.
Waking birds: isolated peeps rising to a stretto.
Harmonic clouds.
Hybrid sounds emerge from the low frequencies.
Heat. Luminy. at the foot of mount Puget: real and imaginary insects and birds.
(Risset, liner notes to *Sud*)

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the texture is largely synthetic; sine waves, metallic sounds, transformed piano and bell-like sounds. The rhythmic contours of some gestures are reminiscent of the preceding birdcalls, now slower and suspended in an imaginary world. Synthetic clusters, heavily-processed real-world sounds, sine-wave burblings and glissandi are obviously shaped by the profile of the waves. Near the end of this passage a fairly loud, real, seagull cry – a new sound – is suddenly introduced within the established imaginary context.

This extended 'wave' of music is a real *tour de force*; within the large-scale move from a real to an imaginary context, Risset creates a fluctuating and carefully paced gradation which constantly evades our expectations and evaluation of *all* the sounds. Our listening montage is never allowed to come to rest. Only when we reach his resonant, harmonic clouds do we breathe a perceptual sigh of relief at finally reaching something familiar; if the imaginary can be judged familiar. Yet, now that we're safely ensconced in this illusory world the subsequent, unannounced, seagull arrives with an almost extra-terrestrial surprise.

So our constant re-evaluation of real-world sounds engenders a shifting appraisal of their meaning. We strive to make sense of our increasingly untrustworthy deductions regarding sounds that, significantly, are rarely abstracted to the point of non-recognition. The birdcalls, initially real, are distinctive enough to be attended to closely. There are several clearly defined, different birdcalls. We are aware of their being, as identifiable cries and as part of a natural environment. Mixing real and imaginary birds creates a progressively uncomfortable perceptual confusion, a need to *re*-perceive. *What* are we listening to? *Where* (on earth?) are we? While bird, insect and wave sounds are continually in the *process* of 'be-coming' transformed, so is our appreciation of their being. As the wave reaches its peak the transformations of being reach radical conclusions; when frogs become chimes a communicative cry has become the byproduct of an action, implicitly the arbitrary action of the wind. Animate being has become inanimate being.

Risset's perceptual roller-coaster ride puts paid to any representational expectations we might have had of the recorded environment. He isn't in the market for convincing us that what we hear is mimetically 'realistic' but neither is he concerned to disrupt our connection to the real world. What we perceive and listen to are resemblances, traces and transformations of the known. More importantly, what this work is perhaps ultimately *about* is the way in which we forge some kind of coherence from these perceptions within our internal listening montage.

Listening montage as rediscovery

This brings us back to the initial definition of montage as a *purposeful* 'kit designed to be assembled' from apparently incongruous elements. As we resynthesize our fractured listening processes we 'rediscover' the relationships between them and we are required to make new listening deductions. The significance of this process of discovery shouldn't be underestimated. Our perceptual deductions are normally ingrained and inflexible. Part of the success of real-world music lies in its ability to shake us out of our established listening processes; deduction is, of course, a process of perceptual subtraction, whereas real-world music seeks to *add* to our perception.

But what exactly is maintained as the result of our reassembled listening? For one thing, real-world music places us in a constant state of retrospective evaluation, both during our listening to the work and afterwards, as we evaluate our musical

listening experience in relationship to our lives. To clarify this point, compare the experience to the processes we undertake in completing a cryptic crossword puzzle:

As we make successive attempts to solve crossword clues we create a kind of internal linguistic montage. In order to come up with the answers we engage in lateral thinking, exploring all implications of the information. We start to think of words differently; in terms of their sound, their content, their shape or etymology. We look for unforseen or double meanings and we actively strive to expand our comprehension. As when listening to a real-world work, we open ourselves to shifts of perception, to re-perceptions, and on solving a clue we retrospectively trace how we 'got' its meaning.

On finishing a crossword we are confronted with an unusual presentation of words, out of their normal context. We appreciate connections of a more unorthodox kind; connections of length, of internal structure, of visual pattern or spatial symmetry. Just as the real-world work causes us to retrospectively re-evaluate the being of familiar sounds, now we overlook a completed structure that presents these familiar words – for a while at least – as strange and new.

But, more importantly, we have the satisfaction of regarding the completion of the puzzle as partly down to us. Our minds created and perceived the answers. Unless we feel particularly frustrated or peevish we choose to forget that, somewhere out there, a crossword compiler already has them written down.

Although real-world music offers an infinitely more enriching listening 'puzzle', we can likewise emerge from our listening montage feeling that *we* had a say in creating the answers, even if the composer created the clues that directed our perception. Yet it is the *process* of completing the puzzle, rather than the final result, that has enlarged our understanding. And the listening decisions that we each make in reassembling our listening montage are personal 'solutions'. Just as the process of solving crosswords is something we each undertake in individual, unforseeable ways, so our listening understanding arises from an individual, creative activity.

Montage postulates intersubjective communication and the transmission of meaning, but it refuses the literal character of representation and the direct accessibility of its meaning. Just like the collage, montage is a destruction of reality; but when collage, insisting on the heterogeneous superficial character of the summoned-up fragments, plays the hand of *provocation* (the rapture of rupture), montage is an inducement to rediscover the network of signification that organizes them, to recover underneath the deconstruction not a nihilistic chance, which only retains the absurd and the accidental, but the uncanny that economizes significance.

(Thomas, 1985, p. 85)

The essence of a real-world approach to composition lies in the invitation to participate *subjectively* in the creation and transmission of transfigured meanings, to create *through* the confusion of our individual listening montage. Real-world music prompts a creative state that, while also 'destructing' our normal perception of reality, encourages us to discover it, in retrospect, anew. And this process of re-discovery is, I believe, the aesthetic crux of the matter. Discoverers embark on journeys into the unknown, leaving the safety of hearth and home in search of new knowledge and experience. We, listening to a newly imagined reality, can travel away from both listening, and experiential, assumptions.

Imaginative Journeys

As I write this it is Halloween or, in its original Celtic sense, the 'Night of the Dead': the night in which we face our innermost fears regarding spirits, ghosts and ghouls through stories, bonfires and other assuaging rituals. And I've been listening to ghost stories on the radio, each framed by the lugubrious tones of Vincent Price conjuring up a dark and forbidding environment for tales which are themselves of darkness and dark things. When we want to be frightened, we turn down the lights and scare each other with spooky stories, or we watch a horror film. Having been transported imaginatively from our darkened reality, we return to it again, but now there are movements in the shadows and strange beings in the flames. We have moved from reality, to fantasy, and back again. And reality has changed, just a *your* reading reality has changed as you remember that I have a life, and time outside this text.

But, returning to the text, not all imaginative journeys are frightening, of course. Risset's *Sud*, even within the short excerpt discussed, makes a similar, wave-like movement which rises from the real to the imaginary and ebbs back to the known. Like a wave, and like the ending of a story, there is that sense of return, of shaking ourselves back into real life, picking up our coats and programmes and leaving for home. Yet we retain the experience of a journey of some kind between departure and re-arrival. *Sud* is perhaps unusual in that the journey is described within the work, but all real-world music is concerned with similar travel A real-world work can be seen as a move *away* from the reality, but *through* the reality, that frames or experience of the music. And real-world works provide 'open-ended' musical work since they require our continued remembrance of reality; of how things really are or seem, or *were*, to us.

While not being realistic, real-world music leaves a door ajar on the reality which we are situated. I contend that real-world music is not concerned with realism and *cannot* be concerned with realism because it seeks, instead, to intitiate a journey which takes us away from our preconceptions, so that we might arrive at a changed perhaps expanded, appreciation of reality.

The idea of real-world music as providing an imaginative experience which proceeds through reality towards a more fantastic recognition brings us back Casey's contrast between remembered and imagined content:

Remembered content is actual in status; it is something that we assume has in fact appeared or occurred on some previous occasion (even if we cannot now recall the precise moment). Imagined content contrast, is purely possible in status, it is something that, at most, might have appeared or occurred previously or that might yet do so in the future.

(Casey, 1988, p.

For me, Casey's distinction remains problematic, since my belief is that in real-world music it is our recognition, i. e. our remembrance, of real events that invite an imaginatively fruitful journey. We need to discover if there might be a useful *connection* between our remembering of reality and our imaginative reinterpretation of what it might mean. This necessitates exploring how and why listening recorded events within real-world music might invoke a different kind of recognition from the norm, and it may elucidate the open-ended nature of the world offered even the most 'fantastic' real-world work.

A departure from realism

Realism relies on, even demands, our normal recognition. For instance, Bazin regards the value of film realism as recording and then re-presenting[6] a 'slice' of reality, with the onus on the viewer to provide their own interpretation of events.

> Bazin pictures the viewer of mimetic cinematography as accepting that he or she is witnessing a slice of reality – the film viewer is said to regard the image as the representation of some event or state of affairs from the past. ... ... What Bazin sees as the glory of cinema – its *purported* capacity to move viewers to accept that they are in the presence of the referent of the image – ciné-Brechtians bewail as film's disgrace.
>
> (Carroll, 1988, pp. 94–5)

In Bazin's view recorded material and reality are, in effect, – and *affect* – identical. This idealistic model requires our perceptual response to film to be identical to our relationship to real, unrecorded, life. But this means that we are restricted to our normal perceptual activities; everything has to come from us, and any meaning we might glean from our experience of – in this case – film realism will be bounded by personal knowledge. Moreover, any imaginative activity we undertake is purely of our own, unaided, volition. Ultimately, we embark on a journey with few shocks in store, which can prove unsatisfying if we are seeking involvement of a more enlarging kind:

> When Flaherty sees a woman walking along the shore with a casket of seaweed on her back, it is for him exciting and dramatic, because he knows by experience the struggle for existence that that load represents. But when the audience see the same picture, they see only the woman and the seaweed. *Man of Aran* is a sealed document, the key to which is still in Flaherty's own mind. (from a contemporary newspaper review in *The Observer*)

But more often realism, in both documentary and fiction film, is compromised by the inclusion of dramatic events that will engender in us an apparently natural 'trauma'. In reality, Flaherty compromised himself in an attempt to capture his audience dramatically: *Man of Aran* (1934) used actors, contained a dramatic whale-hunt and a storm sequence – both of which were 'staged' – and, subsequent to its completion as a silent film, an added soundtrack using Gaelic dialogue. In this respect it could perhaps be viewed as one of the first 'docu-dramas'. In their search for 'hyper-realism' docu-dramas impose narratives on reality while soap-operas – fictional 'real life dramas' – are littered with car-accidents, terminal illnesses, love affairs and other 'natural' conflicts. Yet none of these dramatic excursions ask for a departure from rationally grounded habits. Rather than inviting us towards a more fantastic, imaginative understanding of reality, they confirm what we already know:

> photographic and cinematographic processes can accomplish better, faster, and with a circulation a hundred thousand times larger than narrative or pictorial realism, the task which academicism had assigned to realism: to preserve various consciousnesses from doubt.
>
> (Lyotard, 1984, p. 75)

But although reality is its starting point, real-world music doesn't seek to preserve normal consciousness of the real from doubt. We aren't required to respond to the music as a Bazinian re-presentation of reality. But none of the works I have discussed

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[6] Bazin's notion of representation in film is narrowly defined, as Nöel Carroll remarks: 'Bazin argued that the truly cinematic film stays as close to recording as possible, eschewing the interpretation, recreation, or reconstitution of reality.' (Carroll, 1988, p. 96) For Bazin the film was, literally and (ideally) exclusively the re-'presentation' of reality.

uses musical drama to 'spice up' the action – there are no sonata forms or symphonies here – neither do they present overtly programmatic 'plots'. Indeed, Risset – taking the continuous, repetitive ebb and flow of a wave as his structural model – is almost perverse in his avoidance of confrontation. The absence of 'dramatic realism' in real-world music indicates that while it 'fails' to provide a 'realistic' world, rather than leave reality it leaves realism behind.

Emotional recognition

Ferrari's *Presque Rien avec filles*, like montage film, re-orders reality according to the composer's internal, subjective viewpoint. What we recognize is not a realistic and objective representation of reality, but an individual's emotionally coloured interpretation of recorded events. In this respect Ferrari, himself a film-maker, has much in common with directors such as Vertov and Eisenstein, who were scathing in their disregard of film realism as an imitative re-presentation of reality – 'Imitation is the sincerest form of flattery. Not a film, but a filing cabinet' (Vertov, p. 264) and polemical in their advocation of subjectively interpreted reality:

> Not dispassionate information, but the music of science. The poetry of reality. An emotional approach to the cognitive and a cognitive interest in the emotional. Research that uses the methods of the artist rather than just purely scientific methods.
>
> (Vertov, p. 233)

Vertov's proclamations ask for a recognition that is essentially emotional. Similarly, though we may recognize a close friend through their voice, their appearance or their manner, our 'intelligent' recognition of them *as a friend* employs an emotionally educated knowledge, to which our intellectually governed perceptions contribute peripherally. In comparison, although we might imaginatively understand the *sounds* of real-world music through a complex listening montage, our recognition of the *music's* meaning – for us, personally – is both part of, and more, than this. If real-world music seems to offer an 'open-ended' world that both connects us to reality and transfigures our understanding of it, this may be because our remembrance of reality is evoked through an unusually emotional response.

From this standpoint there might be more freedom to engage in imaginative flights of fancy, without abandoning a recognition of the real. Many imaginative journeys maintain the appearance of a connection to the known; by convincing us that the world we are entering has some relation to reality, fantasies can encourage us to believe the increasingly irrational intelligence of an imagined world. 'Once upon a time' gives us access to a fairy-tale fabrication but also implies that, once, this remembered time was real. And fairy-tale characters often live in real or pseudo-real countries, have realistically described homes, and do real things – drink, eat, sleep – even if the homes are golden palaces, the food and drink is ultimately en-chanted or the sleep may be for a hundred years. The irrational is still tenuously connected to reality and, for many children, Red Riding Hood seems real enough to be perhaps inadvisable as a bedtime story. And though we might regard our adult selves as more sophisticated, we are just as prone to the emotional pull of an apparently irrational recognition.

However, real-world music differs, of course, from fairy-tale worlds in that its source material is essentially documentary and immediately connected to real life.

Like a documentary film, or a journalistic report, it carries the 'authority' of apparent truth. But this doesn't exclude emotional recognition – in fact it may accentuate its effect.

The fabulist need only convince on the basis of the internal cohesion of his purely imaginary works. He says, *All this could never happen, so do not blame me if it does not seem real*. The new journalist, on the other hand, need only convince on the basis of verifiable sources and his personal integrity: *All this actually did happen, so do not blame me if it does not seem real.*

(Hellman, 1981, p. 11)

The new journalist, in presenting his personal interpretation of 'verifiable sources' has perhaps *more* emotional latitude than the fabulist because the 'contract' he makes with his reader assumes a connection to reality, however irrational or fantastic its presentation may seem.[7] We don't dismiss the 'authority' of his tale lightly, and perhaps this aids a willingness to place more 'weight' than usual on our emotional response. Similarly, in advocating that films 'must be *highly emotional* narratives and not merely *logical exposés* of facts' (Eisenstein, 1970, p. 62) Eisenstein implies that an emotional recognition can be powerful when the material, and subject, is documentary in nature. A 'highly emotional narrative' doesn't require that we lose our hold on the facts, rather it encourages our recognition of them to be 'coloured' by emotions. Perhaps an appreciation of real things can be changed or filtered precisely *because* recognition involves both emotional and intellectual responses, and we may be directed towards one response, without entirely abandoning the other.

Partial representation

Through an appeal to emotional recognition, then, we may be distracted from our normal perceptions. We are discouraged from travelling along habitual routes that now appear to be changed or 'repressed' in some manner.

The author sees with his mind's eye some image, an emotional embodiment of his theme. His task is to reduce that image to two or three *partial representations* whose combination or juxtaposition shall evoke in the consciousness and feelings of the spectator the same generalized initial image which haunted the author's imagination.

(Eisenstein, 1970, pp. 76–7)

For Eisenstein 'partial representation' provided the means to the imaginative 'liberation' of emotional recognition. And his chief means of obtaining it was through film montage, which he regarded as an essentially emotional molding of images in time. By cutting up film he also 'cut up', and thereby obscured, the normal flow of events to create a new structure of relationships, carefully selected for their evocative power.

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[7] New Journalism is a term often used for reportage or 'fictionalized' fact, in which an account of actual events is molded into an imaginative, even fantastic, work by the author. Norman Mailer and Truman Capote are classic examples of this type of writer. The category might be expanded to include the, increasingly prevalent trait of imbuing fiction with factual events, or vice versa, in what is sometimes termed the 'post modern' novel. As examples, D.M. Thomas' *Flying in to Love* is an investigation of John F. Kennedy's assassination that soon becomes a reflection on dreams and collective memory; Martin Amis' *Money* is one of many recent novels where the novelist himself appears as a character in the plot. These kind of strategies rely on our willingness to integrate fantasy within a scenario that appears to be 'authoritative' through its use of real incidents and characters.

In his film *October*[8], for instance, he conveyed the emotionally charged sense of 'waiting' that preceded the storming of the Winter Palace through a disjointed succession of fleeting images. The film cuts continually from shots which include a stationary warship by a bridge, a pair of soldiers huddled in anticipation of a message and the opposing women soldiers nervously walking the battlements. The same images return repeatedly and, each time, nothing has changed. As an almost superfluous confirmation, the word 'waiting' briefly appears on the screen. An emotional recognition is almost inevitable with such evocative images whose temporally obscured representations transmit far more than the sum of their individual parts.

In similarly eschewing 'realism' or 'plot' it seems no accident that real-worl music frequently uses signal processing in a manner which, literally, obscures th music frequently uses signal processing in a manner which, literally, obscures th recorded source. The techniques may be – if the composer so chooses – directl analogous to this intention to 'partially represent' a theme. While *musique concrè* frequently uses digital filtering or synthesis, for instance, to destroy all referenti information, real-world music may use these same techniques – as in Lansky filtered speech pieces, or Risset's cross-synthesized birds – to retain particula evocative aspects of a source. This music speaks of – and through – the composer internalized vision of reality – an emotional response that cannot be communicate through realism alone. Instead, it presents fragmentary or restructured imag that, while retaining allusions to their real-world 'being', are decontextualised from the normal course of events; and each are more concerned with experience tha fact.

Real-world music, perhaps, has a slight edge on film here since – in less tim than it takes to sing a g-sharp – reality can be transformed through music abstraction. Partial representations are abetted by the fact that, in addition to tl vagaries of obscured recorded images, we may contend with the emotion 'disruption' of overtly musical contours. This is particularly apparent in Lansk *Quakerbridge*, a work where quasi-tonal harmony becomes the means, to quote tl composer, to 'find the music of the experience of. . . . nostalgia' or, rather, escap the 'restrictions' of realism in recorded shopping mall sounds. And he, li Eisenstein, speaks in terms of emotional rather than intellectual engagement referring to nostalgia, an image of *personal* experience conceived within his ov 'mind's eye'. Lansky's intention is to lead us away from realism towards a music appreciation; he places us in a 'musical' chair – we listen to the sounds of the m through our musical ears because his interaction with the material 'sits us down' listen this way. It seems that music, more than film, can give us 'another root from which to watch the world go by. Without in any way seeking to control ou emotions the composer invites us to *use* them to find, in Vertov's deceptive flamboyant phrase, our own 'poetry of reality'. And an evocative, irrational journe one which takes fantastic flight from normal understanding, depends on a poe sensibility that, far from being dramatic, arouses a subtle *evolution* of illusion allusions and other departures from the known.

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[8] 1927, dir. Sergei Eisenstein and Grigory Alexandrov.

Poetic Metaphors

> We could say that a stable and completely realized image *clips the wings* of the imagination. . . . . . . But real mobility, the very essence of motion, which is what *imagined* motion is, is not aroused by the description of reality, even when it describes the unfolding of reality. . . . . . . What I would actually like to examine. . . . . . is how the imaginary is immanent in the real, how a *continuous* path leads from the real to the imaginary.
>
> (Bachelard, 1988, p. 4)

If reality obscured – through mythologizing, through montage, through digital filtering – accesses a peculiarly emotional recognition, Bachelard gives some indication of the poetic value of this exercise. In exploring that 'continuous path' from the real to the imaginary, through the poetics of real-world music rather than poetry *per se*, we might discover that real-world music also encourages an individual, imaginative discovery of what is *immanent* in reality. And this is why it holds fast to its connection to the real.

My work, *people underground* fails – intentionally – as an essay in either dramatic 'realism' or abstract sonic art. Because it is about being underground in its metaphorical, as much as its physical, sense, it might be regarded as an attempt to document metaphysical relationships which transcend the reality of our normal perceptions. The sounds of people walking in foot-tunnels, and interacting spontaneously with these unusual surroundings, are used as the starting point for an imaginative, inner journey, one weighted towards emotional rather than intellectual perception. Although framed by a simple 'narrative' – a descent from above ground, a journey underground and re-arrival at the surface – this musical underground journey descends beyond reality, and beyond temporal narrative. It strives to take us away from a simple apprehension of real things towards a complex apprehension of their associative meanings. It also seeks to remind us of the un-reality available in real life: we are captivated by tunnels; the changes in our environment are magic, we play with the echoes, stamp our feet and shout as we, temporarily, enter a strange, new world. And magic, of course, causes us to re-evaluate reality because what *seemed* to be real, suddenly isn't.

Like a deceptive magical illusion, *people underground* tries to create an experience which *almost* could have happened this way, but then again, you never know. You never know because the real-world sounds are processed and rearranged in a surreptitious manner. This places us in a suitably insecure and wary state of mind, despite which 'fantastic' events sneak up on us unawares, sometimes infiltrating our reality without us even noticing. And because the work doesn't sit us down safely in either a 'real' or 'imaginary' chair we don't quite know what kind of ground, or underground, we are going to land on.

For instance, shortly after an opening rhythmic 'descent', composed of sharp attacks and fragments of speech, we arrive in a strange place. This, however, is unprocessed and 'real': the sounds of two people walking, and talking intermittently, underground. The regular rhythm of the footsteps is interrupted occasionally by sudden 'thuds', which reverberate in the resonant environment. As we would expect, their pitch is always the same, since – as in Lucier's *I am sitting in a room* – the fixed space provides the 'filter' which tunes them. This section could be, and in fact was, a straightforward recording of real events, but its strangeness already engenders some doubt. As the walkers proceed these thuds are tapped out in a clear rhythmic pattern which is then promptly 'answered' by a loud collection of random attacks,

layered and occuring at a variety of pitches. The environm   appears to ha~ responded wilfully to the human interaction. Reality fails and fantasy, momentaril prevails.

In spite of the fact that overtly 'musical' parameters are underplayed, it is throu~ these parameters that I tried to extend our 'underground' associatio~ metaphorically. As already indicated, pitch is used to infiltrate reality. Towards ~ centre of this work, where the established underground environment descends ev~ further from reality, pitch and rhythm are used to extend our imaginative journ~

A passage using the sounds of a crowd of people passing through the tun~ gradually subsides and is replaced by distant fragments of speech interspers~ with the thudding sounds and the disruptive crash created by lift-doors. Solita~ footsteps return and continue in the foreground. This section is suddenly mu~ quieter, events happen infrequently and the sounds of the lifts, thuds and dist~ vocal fragments occur in alternation, separated – for the first time – by moment~ silence. Since the resonance of the tunnel has defined our context, now we ~ nowhere. All these sounds descend in pitch at each repetition, and the thuds ~ neither single events nor chaotic collections but descending pairs, almost caden~ in rhythm and pitch. Gradually all sounds of human origin disappear and we ~ left with unidentifiable thuds and crashes. Pitch and rhythm provide a mus~ trajectory; one which, though clearly descending, provides no clues as to its p~ of arrival. We perch, tentatively, on a 'musical' chair. I tried to convey the sense t~ this downward journey could perhaps go on for ever; we are abandon~ underground and left alone to contemplate our individual doubts – musical ~ otherwise – in gradually encroaching silence.

Our isolation is then relieved by the sound of a crowd of people, entering fr~ silence and gradually rising in amplitude and density. Thuds and crashes disap~ and humanity enthusiastically reasserts itself. Listening, we return to the inhabi~ world of the real life tunnel, and the journey continues. And in a work whose ~ decisive trajectory is that discovered by our listening minds in respons~ metaphorical suggestions, both musical processes and realism are par~ representations that we meet along the way.

> of all metaphors, metaphors of height, elevation, depth, sinking, and the fall are the axiomatic meta~ par excellence. Nothing explains them, and they explain everything. Put more simply, if a per~ willing to live them, feel them, and above all compare them, he realizes that they have an ess~ quality and that they are more natural than all the others. . . . . . . And yet language is not particu~ well-suited to them. Language, conditioned by forms, is not readily capable of making the dy~ images of height picturesque.
>
> (Bachelard, 1988, ~

Bachelard leads us from those powerful, elemental metaphors that all art str~ to let us to feel – to *live* – towards language's struggle to express those things ~ words can't express, and that is the sublime frustration of true poetry:

> Words strain,
> Crack and sometimes break, under the burden,
> Under the tension, slip, slide, perish,
> Decay with imprecision, will not stay in place,
> Will not stay still.
>
> (T. S. Eliot, "Burnt Nort~

Poetry takes words out of their usual context and seeks to defeat the powe~ language, the rational 'conditioning of forms' that gives words their 'normal' se~

And real-world music, similarly, takes real events out of their usual context, defeating our rational balance of recognition; but it also takes *musical* processes out of their, wholly imaginary, world where they normally struggle in abstraction with those same 'axiomatic' poetic metaphors that Bachelard describes. But in this world they find expression in melodies, modulations, gestures, timbres or chords. Now these metaphors are turned to poetic ends in that music enlightens the 'continuous path' from the real to the imaginary. In this manner pieces such as *Sud*, *The Lesson* and, I hope, my own work imbue musical procedures with an additional poetic worth; they give us a new, 'de-conditioned', recognition of chords, pitches, or amplitude curves. Now there is a tension; between what we customarily 'expect' of words, sounds or musical processes and the new ends to which they're turned. We lose our preconceptions of both music and reality – they make no sense.

When preconceptions desert us, we're left with fantasy – the free play of our creative imagination. And this, for Bachelard, is the dynamic, individual, condition that poetry ideally invokes. I share Bachelard's preoccupation with fantasy as an internal state of affairs and believe that real-world music, like poetry, is impelled by a desire to invoke our internal 'flight' of imagination so that, through an imaginative listening to what is 'immanent in the real', we might discover what is immanent in us.

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