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Player Piano: poetry and sonic modernity

Tim Armstrong

The problem addressed in this essay is that of the poetic impact of recorded sound; and more specifically the connection between recorded sound, music and poetry. This is not, according to one way of thinking an inevitable connection, for in the gramophone and its successor devices the modern world has a way of recording not just the discrete tones of music but *all* sounds, the messy glissandi and dissonances of the natural world. In Douglas Kahn's account of the move towards sonic transcription – and this is also implicit in the work of Richard Leppert, Friedrich Kittler and other recent media theorists – devices like the gramophone and Edouard Léon Scott's earlier phonautograph (1857) means that the musical model for sonic reception which runs from Aristotle to Helmholtz must be rejected in order to open up the regime of sonic modernity, characterized by what Kahn calls 'all sound' including noise:

Beginning in the late eighteenth and pervading the nineteenth century, three new inscriptive practices as applied to sound – graphic techniques in general, visible sound techniques, and automatic recording instruments as represented by the phonautograph and phonography – contributed to a loosening up of the reliance of acoustics on music. A plethora of lines made sound tangible and textual by making the invisible visible and holding the time of sound still.¹

For Kittler, in a parallel fashion, this is the shift from the note to the frequency; from the arts to media.² But that seems to me a premature judgement, or at least one which ignores the possibility that music itself *already* carries the notion of redeemed time later attached to the gramophone. This essay aims to examine that possibility – in which music is already a technology – and its metaphoric location in the player piano, a device which might be approached in the spirit of Walter Benjamin's suggestion that technologies become most interesting at the point of their obsolescence.

We can begin with three moments. Our first stop is a study in Wandsworth, South London, in the summer of 1878. A man suddenly rises from his desk and dashes out. As he describes it, in a sentence which comes as a mechanical rush of syllables:

he had heard a street barrel-organ of the kind that used to be called a 'harmoniflute', playing somewhere near at hand the very quadrille over which the jaunty young man who had reached the end of his time at Hicks's had spread such a bewitching halo more than twenty years earlier by describing the glories of dancing round to its beats on the Cremorne platform or at the Argyle Rooms, and which Hardy had never been able to identify.³

Thomas Hardy, for it is he, goes on to describe how that haunting dance tune was brought down to Dorset around 1860 by the 'jaunty young man'; when Hardy moved to London he searched for the music, without success. Now here it is outside his door, albeit in a flattened guise – the organgrinder has little English and can only point at the marking on the organ: 'Quadrille'.

Our second stop is again in London, the Silenus beer-hall, that hangout of suspicious characters – two of whom, a small shabby man and a younger yellow-haired man, are plotting over their ale. In the corner an 'upright semi-grand piano' suddenly lurches into life, its playerless keys moving up and down to a variety of popular tunes – mazurkas, airs. This is the player piano of Conrad's *The Secret Agent* (1906), an obscurely potent symbol for evacuated meanings and automaticity which returns at the novel's end as a suitable chorus for Ossipon's derangement of memory, his obsessive repetition of that journalistic phrase about the *'impenetrable mystery*' surrounding Winnie's suicide.⁴

Our third stop is an old poet, meditating in his study in Hartford, Connecticut in the dark days of the second world war on those 'times of inherent excellence' when the world collects itself. This is the formula he arrived at

> incalculable balances, At which a kind of Swiss perfection comes

And a familiar music of the machine Sets up its Schwärmerei, not balances That we achieve but balances that happen This is Wallace Stevens, who would declare that 'The leaves were falling like notes from a piano' - a declaration which, as we will see, evokes a history of thinking about sonic transcription.⁵

All these passages allude to the history of mechanical music which comes to fruition in the player piano, developed in the 1890s and entering many bourgeois homes in the period from 1900 to the mid 1930s. At that point sales collapsed; many instruments used in popular post-war 'pianosmashing' charity events were pianolas.⁶ The player piano, and especially the self-powered 'reproducing piano' launched by Edwin Welte in 1904, occupies an important place in the history of technology: a place between the formal sonority of music epitomized by the piano, on the one hand, and the possibilities of storing sound offered by the phonograph, gramophone, and optical soundtrack on the other. When shellac was in its scratchy, dim and shortwinded infancy, the perforated rolls of the reproducing piano offered, within the constraints of the instrument, the actual keyboarding of Rachmaninoff or Paderewski, a ghostly virtuoso performance, including 'not only the correct pitches and rhythms, but also those elements which comprise the expressive rendering of the piece'. Leopold Godowsky could be depicted listening to his ghostly doppleganger at a 'companion concert' (first the artist; then his performance on a roll).⁷ 'The performance of a master becomes the possession of the centuries', as one Pianola advert put it.⁸ Like the gramophone, this offered a real-time transcription of a sonic world, though one (and this is its mediatory characteristic) still tied to the discrete notes of the musical scale and to a human inputting - tied to the human hand. No wonder that Adorno was fascinated by the barrel-organ as the harbinger of modernity; no wonder that modernist composers like Stravinsky and Nancarrow were attracted to the pianola; or that the American 'systems' novelist William Gaddis collected thousands of pages of notes on its history, condensed in his posthumous novella, Agape Agape (2002), a bitter tirade on the mechanization of cultural production.⁹ The sarcasm of Pound's 'Mauberley' - 'The pianola "replaces" / Sappho's barbitos' - is one point of reference; though Pound also suggests some of the tensions in this field, later praising the avant-garde, technology-laden music of George Antheil for its sonic modernity, included low frequencies that 'are merely noises that have not been considered as sonority'.¹⁰

Why is the recording of sound such an important issue? We need to remember that in the nineteenth century, sound offers a paradigmatic image of the dispersal of energy and the thematics of decline which flowed from understandings of the second law of thermodynamics. The stone dropped in the pond; the cry which echoes and fades; the absent voices of the dead – emblems of entropy, of the heat-death applied to social life more generally in texts like *The Secret Agent*. For Conrad's Professor this takes on a sonic

edge: 'The sound of exploding bombs' is his attempt to punctuate a world; he fears that these too are 'lost in their immensity of passive grains [mankind] without an echo' (ch.13).

At the same time, the dream of recuperating those losses, and the related dream of binding the energies of sound into a permanent form, has a long history. Kahn cites Charles Babbage's *Ninth Bridgewater Treatise* (1847), which depicts sounds forever circling the earth, the atoms of the air carrying the minute trace of every human cry – there to be heard if only one had the means.¹¹ This is echoed a century later by the professor in Djuna Barnes's last-published story, 'The Perfect Murder' (1942):

... after all, his Mistress was *Sound*, that great band of sound that had escaped the human throat for over two thousand years. Could in be re-captured (as Marconi thought it might) what would come to the ear? No theories for or against; no words of praise or of blame, only a vast terrible lamentation which would echo like the 'Baum!' of the Malabar Caves. For after all what does man say when it comes right down to it? 'I love, I fear, I hunger, I die.'¹²

In order to see why the development of recorded music offered by the historically specific transcription technology of the player piano is relevant to this dream, we need to trace a pre-history of sound, beginning with Schopenhauer.

Schopenhauer and music

Schopenhauer was the first philosopher to place embodied experience – and thus energetics – at the centre of any analysis of thinking; and to see thought in terms of the uncertainties of physiology and temporality, an uneven flow modulated by body's rhythms and contingencies. Rationality, for Schopenhauer, is subordinated to the desire which is the Will. As Jonathan Crary points out, in his theory of consciousness 'Time .. has none of its Kantian characteristics: there is no longer any guarantee of the contents of consciousness'.¹³ Instead of the Kantian synthesis there is a chaotic struggle to deal with the thronging world of sensation, emotion and thought, and to rise into the world of the ideal. At the same time, it is the body which offers the best route to understanding the will which underlies appearance: the body is the aspect of the will given to us as an immediate perception. So while Schopenhauer follows Kant in linking the aesthetic to notions of detachment; and while he seems an Idealist, in fact his work contains a powerfully opposed impulse: the suggestion that all perception is physiologically determined, and that the body's drives are the truth of human life. This also makes him the first philosopher of limitation; of

perspectivism in Nietzsche's sense.

For Schopenhauer music is the greatest of the arts, because it is music which conveys the struggles of the embodied will. Music is independent of the world of Ideas; of representation. It offers 'the *copy of the Will itself*, whose objectivity the ideas are'. Which is to say that music *presents* rather than *represents* the travails of the will: 'the effect of music is so much more powerful and penetrating than that of the other arts, for they speak only of shadows, but it speaks of the thing itself'.¹⁴ Or rather, since music can have an allegorical relation to the world of idea, it is music which enables him to forge a bridge between the embodiment of perception and intellectual self-consciousness, between being (Will) and representation (Idea). In this scheme, music cannot provide a representation of an actual moment; what it transmits is the human struggle to make sense of Time:

All possible efforts, excitements, and manifestations of will, all that goes on in the heart of man and that reason includes in the wide, negative concept of feeling, may be expressed by the infinite number of possible melodies, but always in the universal, in the mere form, without the material, always according to the thing-in-itself, not the phenomenon, the inmost soul, as it were, of the phenomenon, without the body. (*WWI* 339)

This sounds fine, but clearly it *is* music's relation to the body, and its reception by the body, which enables it to transmit the pulsations of the will. As Schopenhauer makes clear in his supplementary remarks, music mimics the interplay between dissatisfaction or longing and satisfaction which characterizes the individual will. He writes that in our alienation from the natural world the will is aroused and energised, allowing us to become 'the trembling thing that is stretched and twanged' (*WWI* 3:237); and it is this painful struggle which music manages to objectify via a kind of twanging resonance in the listener.

The relation between music and temporality is thus a problematic one: music cannot in theory convey the specifics of a particular moment; indeed Schopenhauer describes it as the *universalia ante rem*; a predictive template that can be attached to later occasions, like Mozart used for a film. For that reason, Schopenhauer's conception of music is resolutely undialectical: he has little to say about musical development, outside the notion of a rising upwards towards the ideal. But at the same time music *does* convey the human struggle to structure temporality. And when Schopenhauer discusses melody, he does so it a way which does – despite strictures against representation and program music – firmly suggest a transmission of embodied existence: As he [Man] alone, because endowed with reason, constantly looks before and after on the path of his actual life and its innumerable possibilities, and so achieves a course of life which is intellectual, and therefore connected as a whole; corresponding to this, I say, the *melody* has significant intentional connection from beginning to end. It records, therefore, the history of the intellectually enlightened will. This will expresses itself in the actual world as the series of its deeds; but melody says more, it records the most secret history of his intellectually-enlightened will, pictures every excitement, every effort, every movement of it, all that which the reason collects under the wide and negative concept of feeling, and which it cannot apprehend further through its abstract concepts. (*WWI* 335)

The terms used here – 'record', 'pictures' and 'expresses' – have alternative renderings: Schopenhauer's most recent translator uses 'tells the story of', 'depicts' and 'imprints itself on'. Nevertheless they suggest an embodied 'copying'. Schopenhauer's insistence that musical genius does its work in a state which he describes as akin to the mesmerized subject, 'far from all reflection and conscious intention' (*WWI* 336), reinforces this, since mesmerism itself is linked to notions of transmission and the exchange of bodies.

Schopenhauer thus bequeaths a series of topics – music as emotion; music as mediation; music as temporal struggle – to the tradition which follows, as well as a series of questions: in what sense is music historical? What does it transmit? What is the relationship between its formal inscription (the Idea) vs. performance (the Will; the body)?

Helmholtz's pianistic ear

If one asks 'what is the instrument was which enables the transmission of embodied experience hinted at by Schopenhauer?', one answer is 'The human piano'. Or at least, that is the image that structures Hermann von Helmholtz's hugely influential investigations of hearing in *On the Sensations of Tone* (1863) and related lectures. Sound-recognition in Helmholtz's view involves a complex analysis in which complex and compound wave forms are recognized by the ear and rendered in terms of their constituent waves – 'upper partials' and 'harmonic overtones' – an analysis expressed mathematically in Fourier's Theorem, which states that any complex periodic wave-form can be analysed into a series of sinusoidal components.¹⁵ The ear is different from the eye in this respect: the eye cannot 'see' the underlying wave-forms as the ear can; it has no equivalent to the sense of harmony produced by the ear's recognition of

mathematically related pitches. That sense of harmony is fundamental to Helmholtz: he has no interest in noise, in a-musical tone.

It is this focus on the tone which informs Helmholtz's description of the ear as a Fourier analyser, which centres on the piano both as analytic device and model. In 'The Physiological Causes of Harmony in Music' Helmholtz describes his experiments with the undamped piano used as a resonator, alongside the amplifying glass ball known as the 'Helmholtz resonator' and the human voice. When he comes to describe the operation of the ear, the piano is employed to describe both its architecture and its workings. The ear is likened to a huge and complex set of resonating piano keys, 'tuned to a certain tone like the strings of a piano'.¹⁶ The 3,000-odd arches of the cochlea – Corti's arches – are described as 'lying orderly beside each other, like the keys of a piano in the whole length of the partition of the cochlea' (see fig 1).¹⁷ This is a description of the pianistic ear taken up by subsequent English commentators like James Sully and John Broadhouse: like a piano, the sensitive human apparatus resonates to the music of existence¹⁸.



Fig. 1

The notion of mechanical resonance is what allows the idealistic, indeed in some respects Schopenhauerian, view of music as the transmission of emotional experience which Helmholtz elsewhere expresses, for example in concluding 'The Physiological Causes':

Now gently gliding, now gracefully leaping, now violently stirred,

penetrated or laboriously contending with the natural expression of passion, the stream of sound, in primitive vivacity, bears over into the hearer's soul unimagined moods which the artist has overheard from his own, and finally raises him up to that repose of everlasting beauty of which God has allowed but few of his elect favourites to be the heralds.¹⁹

Helholtz seems to intend this as a trans-historical contact; a counter to Time's Arrow (he was never keen on Kelvin's theory of entropy). To see this notion of historical resonance at work, one has only to turn to his lecture 'On the Conservation of Force', where Helmholtz distinguishes the physicist's 'conformity with law' from the human energy carried by art and music:

Every great deed of which history tells us, every mighty passion which art can represent, every picture of manners, of civic arrangements, of the cultures of peoples of distant lands, or of remote times, seizes and interests us, even if there is no exact scientific connection among them. We continually find points of contact and comparison in our own conceptions and feelings; we get to know the hidden capacities and desires of the mind, which in the ordinary peaceful course of civilized life remain unawakened.²⁰

Music carries the secret history of the self. Helmholtz thus has a conception of music, I would argue – and I am aware that this is simplifying a complex body of thought – in which the mechanical and ideal interlock around the notion of resonance and tone: tone is embodied music; feeling can be carried across time by music. If the interlocking of these ideas can appear forced, it is into the gap between them – between recording and production – that the pianola might be inserted. The player piano is important because the piano provides, as we have already seen, a way of thinking about tone and resonance which is tuned to the human apparatus; and because it is a device which offers to store a transcription of the human response to the world of the kind suggested by Schopenhauer.

The instrument with a memory

Let us continue with Hardy. As I suggested earlier, sound is a dubious vehicle for incarnating memory, since it the late nineteenth century it is persistently linked to entropic fade. At the same time, music is persistently linked to memory in Hardy's work; to the 'storage' of impulses and their transport across personal and collective history. Hardy's poem 'In a Museum' expresses this problem, comparing a fossil trace with music in the memory:²¹

Here's the mould of a musical bird long passed from light, Which over the earth before man came was winging; There's a contralto voice I heard last night, That lodges in me still with its sweet singing.

Π

Ι

Such a dream is Time that the coo of this ancient bird Has perished not, but is blent, or will be blending Mid visionless wilds of space with the voice that I heard, In the full-fugued song of the universe unending.

The passage here is uneasy: the fossil serves as a vehicle of a metaphor in which all sound might be recovered. It moves from individual sonic memory to sonic radiation and universal sonic survival in the manner of Babbage. But what Hardy is imagining is, I would suggest, the realm of musical storage suggested by his barrel-organ story; that is of memory which might be carried *outside the human frame*.

Another way in which the status of recorded sound is implicit in Hardy is in a series of poems about music with a memory: poems in which he evokes the instruments themselves; instruments which remember the fingering of their players and occasions they played at. In an essay entitled 'Magic Rattle and Human Harp', the Weimar critic Ernst Bloch, describes the progress of music from the primitive and sensual to the rational and abstract.²² In origin, he argues, the musical instrument is not dissociated from the music which it produces: 'sound is a property of the instrument and is objectively bound to it'. The primitive instrument so conceived has magical powers: it can cure the sick and drive away spirits; like the totem it speaks to its audience. Subsequently, as he puts it, music becomes formalized and 'the sound climbs out of the instrument, so to speak, treating it merely as a means to an end; the musical notes break loose from the chiming bells and ringing bronze'. Music replaces the 'magical substance consisting of sound', creating an abstract world.

Bloch adds, 'no one has ventured to "re-enchant" musical instruments'. But that is something like what Hardy does in poems like 'Haunting Fingers', subtitled 'A Phantasy in a Museum of Musical Instruments'. The poem dwells on the memory of the fingers which played over their surfaces:

And they felt past handlers clutch them, Though none was in the room, Old player's dead fingers touch them, Shrunk in the tomb. (*CP* 546) One could place alongside this a cancelled stanza from Hardy's great poem on the traces of the past in objects, 'Old Furniture' (*CP* 428). They follow a stanza in which dancing fingers on an 'old viol' are again invoked, and here too music as language is involved. He is thinking of his father's violin:

> From each curled eff-hole the ghosts of ditties Incanted there by his skill in his prime Quaver in whispers the pangs and pities They once could language, and in their time Would daily chime.

In such poems on the instrument-with-a-memory, and in other fictional and autobiographical stories, Hardy imagines the ontological realm of recorded music: music detached from its producer. At times such music can seem mechanical and abstract, as it is in Conrad and to some extent in Hardy's harmoniflute story – in which the origins of the music are lost; indeed in which it threatens to represent a commodified mass culture, like the mechanical organ which replaces the church choir in one of his stories. But elsewhere it is a kind of impersonal memory which is involved; an inscription which in some senses fulfils the promise of storage offered by the fossil bird, while also preserving the Schopenhaurian trace of the will's struggle, the language of 'pangs and pities'.²³

It is interesting in this respect to turn to Adorno, whose critiques of the culture industry are better know than his more sympathetic accounts of recorded music. In his essay 'The Form of the Phonograph Record' (1934) he argues that the phonograph record 'petrifies' the actuality of the performance it records; that it, it turns it into a speaking monument or an impression like Hardy's fossilized bird. But at the same time, Adorno sees something else in this dead storage: recorded music saves the past, returning it to the status of *text*:

There is no doubt that, as music is removed by the phonograph record from the realm of live production and from the imperative of artistic activity and becomes petrified, it absorbs into itself, in this process of petrification, the very life that would otherwise vanish. The dead art rescues the ephemeral and perishing art as the only one alive. Therein may lie the phonograph record's most profound justification, which can not be impugned by any aesthetic objection to its reification. For this justification re-establishes by the very means of reification an age-old, submerged and yet warranted relationship: that between music and *writing*.²⁴

Musical notation is not what Adorno has in mind here; rather, both the actual direct transcription of sound – the trace of the needle on the record – and something fuller and more experiential, open to constant reinterpretation. Implicitly, I think, Adorno is using the metaphor of writing to hand music back to the listener. In terms of historicity, recorded music saves the past; but in providing an indexical trace of a passage of time, a snapshot of the reified moment in which the musical text is realized and written into the medium within a specific acoustic environment, it also challenges the listener to open up the past and inhabit it as an objectified phenomena.²⁵

If we ask 'where is the stored music in Hardy?', the answer is 'potentially everywhere that is human': in music which floats through occasions; which haunts, in-habits, anticipates and echoes, structuring time for its makers and listeners. The most general version is the twanging or vibrating of Being itself. At the end of the description of the dying in the Walcheren marshes in *The Dynasts* Part Second, the Chorus of the Pities offers a lament. The Spirit of the Years replies (as it always does) in lofty cadences, telling the Chorus of Pities to stop recording (storing, repeating, writing down) this human music:²⁶

SPIRIT OF THE YEARS

Why must ye echo as mechanic mimes These mortal minions' bootless cadences, Played on the stops of their anatomy As is the mewling music on the strings Of yonder ship-masts by the unweeting wind, Or the frail tune upon this withering sedge That holds its papery blades against the gale?

The Spirit of the Years insist that all passes away, 'Whether ye sigh their sighs with them or no!' The 'mechanic mime' here is the sound of a recorded music; and to open himself to this sound, the sound of human experience, is among Hardy's most fundamental aims – an aim which places him on the cusp of modernity.

Twanging Resonance

To illustrate more fully the way in which a Schopenhauerian understanding of music, for all its problems, might be connected to notions of pianistic inscription and memory, I want to turn to Wallace Stevens. Stevens is a poet whose frequent use of musical tropes owes a good deal to Schopenhauer (as, arguably, do some of his other figures – crystal, clouds). The connection is

acknowledged: Stevens describes reading Schopenhauer in a 1908 journal entry, and praises him over 40 years later in his essay 'A Collect of Philosophy' (*CP* 857).²⁷ What we see in Stevens is a movement from a focus on the musician in the earlier poetry, as in 'Peter Quince at the Clavier', to a preoccupation with both what he calls the 'fire' of music – music rendered visible energy – and with forms of natural music.

In his earlier work in particular, Stevens often describes music in Schopenhauerian terms: music is consolation, 'the voice of this besieging pain', that 'By which sorrow is released, / Dismissed, absolved / In a starry placating' ('Mozart, 1935', *CP* 108); it is connected to pure sensation, as in 'The Man With the Blue Guitar'. The guitar

> After long strumming on certain nights Gives the touch of the senses, not of the hand,

But the very senses as they touch The wind-gloss. (CP 143)

The banging and striking; the tock of the instrument; the 'buzzing' which is life might be taken as representing the will in its animal state; before it climbs into abstraction. If for Schopenhauer music is connected to the unconscious, in 'Notes' music is 'like a sense, / A passion that we feel, not understand' (*CP* 339). Schopenhauer had written of the individual will as 'the trembling that is stretched and twanged'. In 'Of Modern Poetry' Stevens writes that

The actor is A metaphysician in the dark, twanging An instrument, twanging a wiry string that gives Sounds passing through sudden rightnesses, wholly Containing the mind, below which it cannot descend, Beyond which is has no will to rise. (CP 219)

In 'The Owl in the Sarcophagus' this is 'a likeness of the earth, / That by resemblance twanged him through and through' (*CP* 372). This is a twanging which is adequate to existence, mediating the world 'below' – the phenomenal world – and the world 'above', the ideal.

In this poem, and indeed throughout Stevens's mature poetry, music serves an integrative function. The fact that 'Of Modern Poetry' moves from the musical figure above to a resolving set of images – 'a man skating, a woman dancing, a woman / Combing' – is characteristic of his use of music. Indeed the movement between the three worlds suggested by 'Of Modern Poetry' suggests a tripartite scheme repeated throughout Stevens's poetry, which I would describe in these terms: natural sound; music; and the inscribed music-image which pushes us towards the ontological realm of recorded sound. It is made explicit in the three sections of 'Certain Phenomena of Sound'. The first section describes the cycle of natural music – 'the beating of the locust's wings' – with the comment that 'It is safe to sleep to a sound that time brings back'. Section II describes the 'slick sonata' which is musical narrative, the story of a character called Redwood Roamer, which 'makes music seem / To be a nature, a place in which itself / Is that which produces everything else' (*CP* 256). But the third section seems to veer away into the visual, in that mysterious evocation of Semiramide, Rossini's operatic heroine, and the euphonious Eulalia, for whom naming is being – 'There is no life except in the word of it'.

This three-part scheme responds, I think, to a temporal predicament. In nineteenth-century psychophysics, the world is in an important sense a retrospective construction, seen under the sign of loss: sundered from us by the mechanisms of perception, with their processing-speeds, reaction-times; and constrained by the limits of perception. Stevens, familiar with these ideas from William James and others, makes the point in 'A Collect of Philosophy' (1951), as it happens in the middle of his discussion of Schopenhauer:

According to the traditional views of sensory perception, we do not see the world immediately but only as the result of a process of seeing and after the completion of that process, that is to say, we never see the world except the moment after. Thus, we are constantly observing the past. (*CP* 857)

Stevens meditates in this manner for some pages, citing (from Jean Paulhan) a version of Ernst Mach's radical descriptionism: the belief that science makes rather than reflects a world.²⁸

Poetic perception is in this view necessarily characterized by two things: a temporal disjunction; and the synthetic creation rather than the reception of an image. Thus the declaration of 'An Ordinary Evening' that the leaves in the wind – and his own poem, since that is the parallel offered – are 'The mobile and immobile flickering / In the area between is and was'. This formula suggest the space of the perceptive apparatus, of the mind; the processing which turns the 'is' of existence into the 'was' of representation and memory. This is also, in Stevens as in Schopenhauer, a space which music structures as an interplay of expectation and fulfillment. That is to say, music is a way of understanding the process in which the past of raw

experience and the present of apprehension are bound together, rhythmicized, spatialized and stored in the mind.

In describing Schopenhauer's account of perception, Stevens cites from the crib he is using (Roger's A Student's History of Philosophy) a striking metaphor: 'The will is thus far deeper seated than the intellect; it is the blind man carrying on his shoulders the lame man who can see' (CP 859). The venerable metaphor of the blind man is picked up in a poem which had, some six years before 'A Collect', taken up the issue of the disjunction of perception and the 'real' - 'Description without Place', his 1945 Phi Beta Kappa poem at Harvard. Stevens wrote in a letter: 'I am about to settle down to my subject: DESCRIPTION WITHOUT PLACE ... It seems to me to be an interesting idea: that is to say, the idea that we live in the description of a place and not the place itself, and in every vital sense we do.²⁹ 'Description without Place' has often been interpreted as signalling a break with the real, inaugurating an idealism in which poetic description is privileged over actuality; even a flight from history.³⁰ But it seems to me that Stevens's purpose is an analysis of the problem of perception as temporally mediated. He writes of

The lesser seeming original in the blind

Forward of the eye that, in its backward, sees The greater seeming of the major mind. (*CP* 297)

This is to say that 'blind' perception, or what he calls 'flat appearance' – looking sundered from actuality by the processes of perception itself – might be integrated, knitted with retrospection into in some total vision in which the temporal deficit of perception is overcome. In section III of the poem, Stevens expands on that vision in terms which refer us both to music and light:

There are potential seemings, arrogant To be, as on the youngest poet's page,

Or in the dark musician, listening To hear more brightly the contriving chords.

There are potential seemings turbulent In the death of a soldier, like the utmost will,

The more than human commonplace of blood, The breath that gushes upward and is gone, And another breath emerging out of death, That speaks for him such seemings as death gives.

There might be, too, a change immenser than A poet's metaphors in which being would

Come true, a point in the fire of music where Dazzle yields to a clarity and we observe,

And observing is completing and we are content, In a world that shrinks to an immediate whole,

That we do not need to understand, complete Without secret arrangements of it in the mind. (*CP* 298)

Why might 'the fire of music' offer a completion of 'observing'? Firstly, because music, as in Schopenhauer, carries the vital heat of being ('the will is warmth, the intellect is light'); and secondly because, in the manner depicted by Schopenhauer, it offers a an image of temporal integration, a melodic totality which binds together the far of the ideal and the near of the body.

In 'The Owl in the Sarcophagus', Stevens's elegy for Henry Church, and therefore a poem concerned with remembrance and decay, the re-integration of perception is again figured in terms of music, memory and spatialized time. Canto 3 ostensibly describes Church,

> conceiving his passage as into a time That of itself stood still, perennial,

Less time than place, less place than thought of place And if of substance, a likeness of the earth, That by resemblance twanged him through and through,

Releasing an abysmal melody, A meeting, and emerging in the light, A dazzle of remembrance and of sight. (*CP* 372)

I've already noted 'twanged' in this passage. Harold Bloom suggests that "'Dazzle" is the key word in the canto³¹ – and indeed it repeats the 'dazzle leads to clarity .. and observing is completed' of 'Description without Place'. 'Dazzle' is a word which seems to describe the moment where music – signalling the temporal disconnections of perception and the integrations of memory – achieves an imagistic solidity, integrating the phenomenal and

the world of mind as a presentation of being. In 'The Whole Man: Perspectives, Horizons' (1954), Stevens would write that 'The principle of music would be an addition to humanity if it were not humanity itself, in other than human form' (*CP* 875). In 'The Whole Man: Perspectives, Horizons' (1954), Stevens would write that 'The principle of music would be an addition to humanity if it were not humanity itself, in other than human form' (*CP* 875).

Inscription and Storage

We can, in a final step, move these images of music back towards notions of inscription, and to the overcoming of what 'An Ordinary Evening in New Haven' describes as 'the wasted figurations of the wastes / Of night, time and the imagination' (*CP* 407), a correlative of Hardy's gramophonic record of being. To be sure, it is not that easy to find technological images for music in Stevens – despite the fact that he was an avid record collector whose letters often reveal his listening habits: Schönberg in 1935; Mahler and Berlioz a decade later. If we wanted to know what 'pure' storage is for Stevens, we might turn to the 'gramaphone' [sic] of a typically cryptic poem 'The Search for Sound Free from Motion', which 'Parl-parled the West Indian weather'.³² In contrast,

you, you used the word, Your self its honor.

All afternoon the gramaphoon, All afternoon the gramaphoon, The world as word, Parl-parled the West-Indian hurricane.

The world lives as you live, Speaks as you speak, a creature that Repeats its vital words, yet balances The syllable of a syllable. (*CP* 240-41)

The irregular prefix shifts the instrument away from the line or trace of a stylus (*gramo*) to the letter (*grama*); from the dynamics of sound to writing. But this instrument, at once typhoon and technology, can only repeat the weather in a phonemically hollow and empty fashion; it is the human speaker who brings those words into balance and relation; into temporal difference. One name for that difference, I would suggest, is music.

Section XX of 'An Ordinary Evening' describes a transcription of being

imbued with human feeling:

The imaginative transcripts were like clouds Today; and the transcripts of feeling, impossible To distinguish. The town was a residuum,

A neuter shedding shapes in an absolute.Yet the transcripts of when it was blue remain;And the shapes that it took in feeling(CP 409)

The cloud, for Schopenhauer, represent the inconsequential world of phenomena, used in Book 3 of *The World as Will and Idea* to exemplify the distinction between the contingent and the essential:

When the clouds move, the figures which they form are not essential, but indifferent to them; but that as elastic vapour they are pressed together, drifted along, spread out, or torn asunder by the force of the wind: this is their nature, the essence of the forces which objectify themselves in them, the Idea; their actual forms are only for the individual observer. (*WWI* 235)

Clouds as stochastic phenomena are like the life of mind – a confluence of atomic theory and psychology recently explored by Daniel Tiffany; they scatter, disperse, forever change.³³ If the transcripts of mind are clouds, the transcripts of feeling are also men or actors – the point of interchange between these the air which is the 'bare boards' of 'Notes' and 'theatre floating through the clouds' of 'The Auroras of Autumn' (*CP* 359). Or again in the late poem 'Artificial Populations', weather, the 'weather's appropriate people' (an 'artificial population'), and finally 'music that last long and lives the more' (*CP* 474) – a triad of existence, humanity and integration again resolved in music.

Stevens's late poems thus offer the hope that in music – the music of poetry – 'the wasted figurations' might be 'Saved and beholden' (CP 407); that we might convert the noise of weather into music: 'The leaves were falling like notes from a piano' (CP 242). An Ordinary Evening' culminates in the celebration of

The less legible meanings of sounds, the little reds Not often realized, the lighter words In the heavy drum of speech, the inner men

Behind the outer shields, the sheets of music In the strokes of thunder, dead candles at the window When day comes, fire-foams in the motions of the sea ... (*CP* 416)

In a final section which both evokes either end of the electromagnetic spectrum – the little reds, the 'spectrum of violet' (like the 'vanishing-vanished violet' of 'The Own in the Sarcophagus') – and describes 'A philosopher practicing scales on his piano' (417), what is wasted and what is saved is held in a delicate tension. The conclusion has often been depicted in terms of the buzzing new world of sub-atomic particles – of 'a shade that traverses / A dust, a force that traverses a shade', as the poem's final lines describe reality – but the emphasis is on inscription; on written music rather than noise; or rather music as 'noise emancipated', to borrow Benjamin's description of jazz; noise taken up into composition, with 'the process of production' allowed to fall away.³⁴

The notion of inscription is further explored in the poem which follows 'Notes' in *The Auroras of Autumn*, 'Things of August'. In 'Things of August' the possibility that the buzz of existence might be saved is implicit in the 'instruments' of poetry, a technology in which body and language are equated – in the sex of a spirit, or a spirit's voices:

> Nothing is lost, loud locusts. No note fails. These sounds are long in the living of the ear. The honkey-tonk out of the somnolent grasses Is a memorizing, a trying out, to keep. (*CP* 417)

Honkey-tonk 'memorizing' and keeping is, I like to think, close to the player-piano in its mechanics – a suggestion I don't mean in a trivial sense; since it is at once a return and a recovery of being. The world is held still in the poem. In the late Stevens we find a poet for whom the music of existence – the natural music of the red robin, weedy wren, loud locust as much as human song – can be repeated, for whom as he puts it near the end of 'Notes', 'the going round / And round and round, the merely going round' is a measure of existence. And while the point about repetition is in essence a philosophical one, a point about the pleasure of the quotidian, it is also worth asking whether it also involves, as it does in Hardy, a kind of musical technology inscribed within the poem.

I began with the player piano – the instrument which stands on the brink of sonic modernity; which records sound but not 'all sound', retaining its link to the world of human music-making and Helmholtz's depicting sonic reception in terms of music and the piano. With Schopenhauer's description of music as the transcript of the temporal struggle of the will in mind, I

considered what I called the 'instrument with a memory' in Hardy, the music of being. Finally, I looked at the binding function of music in Stevens, its ability to integrate a world in which perception is afflicted with a splintered temporality; and looked at the notion of an inscription of natural music. In such cases, the dream that entropy may be overcome is sustained via notions of resonance and storage which draws us towards the notion of recorded music – the story whose first stop is the player piano, the instrument with a memory.

This is, of course, rather different from the flat storage offered by the gramophone, which, to be sure, seems to offer in its inscription of sound into the groove a fuller realization of Stevens's title 'The Search for Sound Free from Motion' – Kahn's phrase was 'holding the time of sound still'. But none of the authors I have considered wishes to evacuate the human producer or listener, the twanging resonator, from the circuit; which is to say that they conceive of sonic storage within what is at once a psychology of memory and a technopoesis, rather than an independent technology. The passage from Stevens's 'Notes toward a Supreme Fiction' that I cited at the beginning, about 'Swiss perfection' and 'not balances / That we achieve but balances that happen' is, I think, ultimately a description of a kind of serio-comic surrender to the machinery.

Readers may have detected a muted critique of the technological determinism and historical isolationism running through the work of Kittler, Kahn and other media theorists - muted because I think there is much of interest in their work and its reconceptualization of writing as media. But Kittler's final dream often appears to be that of machine talking to machine; indeed, the systems theorist Niklas Luhman goes so far as to claim that human beings do not communicate, only communication systems communicate - a version of the behaviorist critique of the 'inner man' explaining the workings of mind.³⁵ Despite the persuasiveness of this at the level of the system, the indifference of such thinking to the origins of any message in human beings suggests an evacuation of experience to which neither Helmholtz, the great materialist himself, nor these two poets would have subscribed. For both, music is already a technology for the storage of experience, prior to the gramophone; offering the possibility that being might be formalized. 'These sounds are long in the living of the ear' writes Stevens; and for the poetic tradition he perpetuates, it is the life which his lines carry.

Notes

¹ Douglas Kahn, 'Concerning the Line', *From Energy to Information: Representation in Science and Technology, Art, and Literature*, ed. Bruce Clarke & Linda Dalrymple Henderson (Stanford: Stanford University Press, 2002), 180.

² Friedrich A. Kittler, *Gramophone, Film, Typewriter*, trans. Geoffrey Winthrop-Young and Michael Wutz (Stanford: Stanford University Press, 1999), 24. Examples of recent work inflected by this approach include Lisa Giltelman, *Scripts, Groooves, and Writing Machines: Representing Technology in the Edison Era* (Stanford: Stanford University Press, 1999) and Sara Danius, *The Senses of Modernism: Technology, Perception and Aesthetics* (Ithaca: Cornell University Press, 2002).

³ Thomas Hardy, *The Life and Work of Thomas Hardy*, ed. Michael Millgate (London: Macmillan, 1984), 126. The material on Hardy included here reworks part of an essay included in *Thomas Hardy and Contemporary Literary Studies*, ed. Tim Dolin and Peter Widdowson (Basingstoke: Palgrave, 2004).

⁴ Joseph Conrad, *The Secret Agent: A Simple Tale*, ed. John Lyon (Oxford: Oxford University Press, 2004), 46-50, 226-7.

⁵ Wallace Stevens, *Collected Poetry and Plays*, eds. Frank Kermode and Joan Richardson (New York: Library of America, 1997), 334, 242. Hereafter referred to as *CP*.

⁶ See Arthur W. J. G. Ord-Hume, *Pianola: The History of the Self-Player Piano* (London: George Allen & Unwin, 1984), esp. pp.27-31; and Kent A. Holliday, *Reproducing Pianos Past and Present* (Lampeter: Mellen, 1989).
⁷ Holliday, *Reproducing Pianos*, 2, 11 (the latter page reproduces Godowsky in the first issue of the *Ampico Magazine*, 1920).

⁸ Cited in Arthur W. J. G. Ord-Hume, *Clockwork Music: An Illustrated History of Mechanical Musical Instruments from the Musical Box to the Pianola* (London: George Allen & Unwin, 1973), 272.

⁹ William Gaddis, *Agapē Agape* (London: Atlantic Books, 2002).

¹⁰ Ezra Pound, 'Hugh Selwyn Mauberley', *Personae: The Shorter Poems of Ezra Pound*, rev. edn., ed. Lea Baechler & A Walton Litz. (New York: New Directions, 1990), 186; Ezra Pound *Machine Art and Other Writings: The Lost Thought of the Italian Years*. Ed. Maria Luisa Ardizzone (Durham: Duke University Press, 1996), 74.

¹¹ Douglas Kahn, *Noise, Water, Meat: A History of Sound in the Arts* (Cambridge, MA: MIT Press, 1999), 210-1.

¹² Djuna Barnes, 'The Perfect Murder', *Collected Stories*, ed. Phillip Herring (Los Angeles: Sun & Moon, 1996), 439.

¹³ Jonathan Crary, *Suspensions of Perception: Attention, Spectacle and Modern Culture* (Cambridge, MA: MIT Press, 1999), 56.

¹⁴ Arthur Schopenhauer, *The World as Will and Idea*, 3 vols., trans R. B. Haldane and J. Kemp (London: Trübner, 1883), 1:333. Subsequently referred to in text as WWI (vol. 1 unless indicated).

¹⁵ Hermann Helmholtz, 'The Physiological Causes of Harmony in Music' (1857), in *Science and Culture: Popular and Philosophical Essays*, ed. David Cahan (Chicago: University of Chicago Press, 1995), 46-75; cf. *On*

the Sensations of Tone, rev. ed., trans. Alexander J. Ellis (London: Longmans, Green, 1897).

¹⁶ 'The Physiological Causes', 61.

¹⁷ This illustration appears both in 'The Physiological Causes', 67 (fig.8), and *On the Sensations of Tone*, 210 (fig.51); in the latter cf. also 209 (fig.50) and 218.

¹⁸ See e.g. John Broadhouse, *Musical Acoustics, or the Phenomena of Sound* as *Connected with Music* (London: Reeves, 1892).

¹⁹ 'The Physiological Causes', 75.

²⁰ Helmholtz, 'On the Conservation of Force' (1862), *Science and Culture*, 97.

²¹ Thomas Hardy, *Collected Poems*, ed. James Gibson (London: Macmillan, 1978), 430. Herafter referred to as *CP*, in text.

²² Ernst Bloch, 'Magic Rattle and Human Harp', *Literary Essays*, trans. Andrew Joron et al. (Stanford: Stanford University Press, 1998), 291.

²³ On Hardy, Schopenhauer and music, see Mark Asquith, *Thomas Hardy*, *Metaphysics and Music* (Basingstoke: Palgrave, 2005).

²⁴ Theodor Adorno, 'The Form of the Phonograph Record' [1934], trans. Thomas Y. Levin, *October* 55 (1990), 56-61 (59 cited). Also in *Essays on Music*, ed. Richard Leppert, trans. Susan H. Gillespie et al. (Berkeley: University of California Press, 2002), 277-82.

²⁵ This is clearer in his later essay on Opera, in which he argues that the record allows a kitsch and stylised form to be objectified and re-interpreted: see *Essays on Music*, 283-87.

²⁶ Thomas Hardy, *The Dynasts*, ed. Harold Orel (London: Macmillan, 1978), Part Second, IV viii, 345-6.

²⁷ Since Frank Doggett's *Stevens' Poetry of Thought* (1966), Stevens's relation to Schopenhauer has received little attention; a partial exception is Bart Eeckout, *Wallace Sevens and the Limits of Reading and Writing* (Colombia: University of Missouri Press, 2002), 81-86.

²⁸ On Mach's influence on Modernism generally, see Michael H. Whitworth, *Einstein's Wake: Relativity, Metaphor and Modernist Literature* (Oxford: Oxford University Press).

²⁹ Letters of Wallace Stevens, ed. Holly Stevens (New York: Knopf, 1996), 494.

³⁰ See Alan Filreis, *Wallace Stevens and the Actual World* (Princeton: Princeton University Press, 1991), 155-60.

³¹ Harold Bloom, *Wallace Stevens: The Poems of Our Climate* (Ithaca: Cornell University Press, 1977), 285.

³² *Collected Poems* (1954 and subsequent printings) has 'gramophone' in the opening line; *Collected Poetry and Prose* 'corrects' this to 'gramaphone' without editorial explanation.

'gramaphone' without editorial explanation. ³³ Daniel Tiffany, *Toy Medium: Materialism and Modern Lyric* (Berkeley: University of California Press, 2000).

³⁴ Walter Benjamin, *The Arcades Project*, trans Howard Eiland and Kevin McLaughlin (Cambridge, MA: Belknap Press, 1999), 862.

³⁵ Niklas Luhmann, 'How Can the Mind Participate in Communication?' in *Materialities of Communication*, ed. Hans Ulrich Gumbrecht and Ludwig K. Pfeiffer (Stanford: Stanford University Press, 1994), 371-388.