

1976 and All That:  
Minimalism and Post-Minimalism,  
Analysis and Listening Strategies

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## INTRODUCTION

In what follows, I have attempted to make some assumptions about those of us who are gathered here together to discuss musical minimalism. From the titles of the papers we are to hear, it seems likely that a majority of speakers are content that a conference on musical minimalism should include all discussions of any music regarded as post-minimalist as well as minimalist, including discussions that prove sufficiently impatient with such "post-it" labels as to wish to banish them altogether. I'm also going to assume that no-one here would subscribe to the English critic and musicologist Stephen Walsh's characterisation of minimalism as "the pot noodle" of contemporary musical culture; though I suppose it might be fun if one or two arch detractors were in the audience.

And I'm also going to assume - and I realise that this might be a forlorn hope - that you will believe me when I say that I sympathise with the view that the tendency to focus on The Big Four American composers in discussions of minimalist music is sometimes unfortunate. Yes, I wrote a book entitled *Four Musical Minimalists* (Potter, 2000), and I can't, of course, deny this. But I have listened to acres of music composed, and indeed improvised, over the last three decades that our broad definition would accept as minimalist, but which goes, to reference Timothy Johnson (Johnson, 1994), way beyond the minimalism, or minimalisms - of Young, Riley, Reich and Glass, whether in terms of aesthetic, technique or style, or all three. My focus here, in terms of actual music discussed, mainly on Reich, and secondarily on Glass is due, as much as anything, to the fact that the issues I want to discuss seem best illustrated, given the time constraint we're under, by the compositions of these two gentlemen. And I'll end with a third, different one. (How many female minimalist composers and improvisers are out there, I wonder? I know a few.)

## THE STATE OF THE SCHOLARSHIP

So what, then, of the state of scholarship around musical minimalism? John Richardson draws attention to the difference between the fate of minimalist music in "high culture" and that of minimalist art. "It is no coincidence," he writes, "that minimal art entered the canon with relatively little resistance, while remaining the almost-exclusive cultural property of a small group of initiates, whereas minimal music largely failed to achieve canonical status yet spread far beyond the pale of the musical intelligentsia. Judging from the critical reception of musical minimalism, it was precisely its success with a broader public that made its incorporation into the canon an impossibility" (Richardson, 1999: 28).

We might want to debate how much has changed here since those words were written in 1999. What are we to make, to give just a single example, of

John Adams's current position as the BBC Symphony Orchestra's Artist-in-Association, regularly conducting this band, giving an annual BBC Promenade Concert with it (most recently, including the premiere of the *Doctor Atomic* Symphony)? An exhaustive examination of such reception history issues is beyond the scope of this paper, of course. Such an examination would, however, have to include many other repertoires and figures and consider, for instance, the extent to which the American "totalist" composers about whom Kyle Gann writes regularly (see, for instance, Gann, 1993), or the British composers associated with what we used to call, and some still do call, Experimental Music – such as Christopher Hobbs, still writing a kind of minimalist music today – remain marginalised and why.

More globally, there is also the matter of how these arguments are affected by the "high culture"/"low culture" debate. The question of "canon" is obviously going to be affected by the matter of just how far musical minimalism is now judged to have succeeded in breaking down such barriers. This was always conceived by some, at least – composers and commentators – as part of musical minimalism's project (though not that of minimalist sculpture, say). Whose "canon" is it now? Are we talking "canons" too loose to make much sense any more?

It is probably Robert Fink – particularly in his 2005 book, *Repeating Ourselves* (Fink, 2005) – who has done more than anyone so far to address – with an enviable combination of cultural-theoretic nous, music-analytical acumen and a ready wit – the erosion, in this context, of the barriers between "high" and "low". In the course of his rather brilliant book, Fink also surveys what may be called the first-line response to the challenge of writing about such music, both on the part of practitioners themselves and their supporters. He concludes that the positive response to the aesthetic imperatives articulated early on in the minimalist project's history constitute essentially a stance of opposition to interpretation: following not only Frank Stella's famous dictum, "what you see is what you see" (Glaser, 1968: 158), and Reich's "Music as a Gradual Process" essay (Reich, 2002: 34–6), but also Wittgenstein's *Logico-Philosophicus* (a strong influence on Reich from his student philosophy days) and Susan Sontag's often-quoted manifesto, "Against Interpretation" (Sontag, 1966).

But if so many followed this line of reasoning – "Whereof one cannot speak thereof one must be silent", to quote the final axiom of Wittgenstein's volume – in the first flush of minimalist enthusiasm, Fink argues, this does not mean that we have to continue to do so today. All is not well, however, with the outcome of this so far, he suggests. For belated recognition that the formalist approach previously dominant in musical analysis actually meshes rather well with the apparently metaphor-free thrust of minimalism has led to analyses which Fink criticises as too reliant on analytical methodologies devised for other kinds of music. He instances Richard Cohn's work on Reich's *Piano Phase* and *Phase Patterns* (Cohn, 1992) and Paul Epstein's analysis of the former (Epstein, 1986).

I'd agree with Fink that radical music such as that to be found in *Piano Phase* or *Phase Patterns* or, say, Glass's *Two Pages* demands a search on the

part of the analyst for radical methodologies to match. If he's including in his purview the analyses that form a fairly large part of my own *Four Musical Minimalists*, then I'd certainly want to defend these: not only on the grounds that they are not formalist in quite the same sense or to the same extent that Cohn's and Epstein's are, but also on the grounds that any purely structural dissections are qualified, for instance, by examination of these works' expressive connotations.

On the other hand, I will admit to more than a little concern - both while writing my book and subsequently - that my analytical approach didn't exactly match the radicalism of the music that I was analysing. At the time, I consoled myself with the thought that I was honestly attempting to find a method that would match my own response to this music as a listener; not merely testing out some preconceived theoretical position that needed merely the latest bunch of musical illustrations to prove some theoretical nicety or other, and which had precious little to do with the musical experience per se, as I confess to finding some music theory does.

And my efforts drew me not only to the conclusion that harmonic motion was crucial to the changes wrought in Reich and Glass's music, especially, around 1976, but also to the view that it was latent in the music that these two composers, at least, had been writing for the previous ten years or so. The more I felt confirmed in these views on the evolution of musical minimalism, the more valid seemed an analytical approach predicated on attempting to unpick how that harmony unravelled and, in particular, how its listeners would perceive it and deal with it. But I'll return to this topic again later.

Jonathan Bernard has warned, however, that "[t]he so-called 'return to harmony' or even 'return to tonality,' much remarked upon by critics, is (at least in the case of Reich and Adams) really an *appropriation* of harmony for purposes that are essentially new and not yet at all well understood. To assume," he goes on, "that composers, by retrieving such superficially familiar sonorities as triads and major-minor seventh chords, have also taken on, whether intending to or not, the hierarchical nature of common-practice tonality (if not its specific structures) may be assuming far too much" (Bernard, 1995: 284). That's advice we should take seriously, both when considering, say, the early minimalism of Reich and Glass, and what they have composed since 1976.

Bernard's more recent distinction between what he calls the third and fourth "stages" that he identifies in "the story of what happened after [the] initial establishment of minimalism" (Bernard, 2003: 114) makes the point clear. In "Stage 3", "pieces began sounding more explicitly 'harmonic', that is, chordally oriented, though not, at this point, necessarily *tonal* in any sense." In "Stage 4", "harmony of an ever more tonal (or neotonal, or quasi-tonal) aspect assumed primary control," leaving minimalist devices "pushed into the background, where they became stylistic objects" (Bernard, 2003: 114).

It was also Bernard who, some time ago, came up with one ingenious, if perhaps perfectly obvious, solution to the problem of analysing minimalist

compositions: taking models from examples of minimalism in the fine arts, where discussion is, as Bernard puts it, "less exclusively bound up with exactitudes" (Bernard, 1995: 266). In his comments on *Piano Phase*, Bernard suggests that looking in detail only at Part One, as does Epstein and other published analyses he has read, implies "that the rest of the piece is actually uninteresting" (Bernard, 1995: 267). Analogy with the wall drawings of Sol Le Witt, on the other hand (an artist close to Reich around the time of the work's composition), reveals "regions that alternate regularly between relative sparseness and relative density, very much like the alternating stretches of rhythmic synchrony and rhythmically out-of-phase transition that characterize the form of Reich's piece" (Bernard, 1995: 267). By this means, Bernard can address the tripartite structure of *Piano Phase* too: "in viewing the Le Witt," he writes, "one's eye is drawn in an inwardly spiralling motion - or, perhaps, a series of progressively smaller concentric circles; in Reich's piece, the ear is led on an analogous journey through the three sections" (Bernard 1995: 267).

This analogy, though, has, he admits, certain imperfections: regarding relative structural proportions, for instance. I suggest that precision of analogy is not the main problem here; rather, it's one of the usefulness of what is being related. How does it help understand Reich's *Piano Phase* better to know that it has certain features in common with a particular work of art? How are such generalisations about the connections between a wall drawing and a piece for two pianos (and they must surely remain generalisations if the analogy is not exact) going, in particular, to help the listener to that piece for two pianos listen to it with greater insight and to greater benefit?

Bernard has, however, been, as Fink puts it, "the only American theorist to push past 'the music itself'" (Fink, 2005: 18), which seems to Fink himself an inherently good thing. As it does to me. Bernard's investigations of Glass's *Music in Twelve Parts* and Reich's *Music for Eighteen Musicians* offer more evidence of this approach's advantages as an analytical, or at any rate discourse-encouraging – and, in the right hands, listener-sensitive - strategy. I'm pondering it again myself now and commend it as an approach whose full potential remains to be tested.

For Fink, the main problem with Bernard's approach is that, while it moves beyond formalism pure and simple, it still embraces what he calls "the larger formalism . . . of the autonomous work of art with no relation to material culture or history" (Fink, 2005: 18). Fink's own multifarious strategies - everything from analogies with the way disco music manipulates its audience to imaginative ruminations on a bewildering range of mid- and late-20th-century cultural phenomena (everything from the revival of Baroque music via the emergent LP to television advertising to the Suzuki Method of violin playing) – are evidently designed to transcend this "larger formalism".

It's true that, for whatever reason, his book doesn't dally with quite the kind of hardcore analytical strategies that his earlier publications had done - notably, undertaking a Schenkerian analysis of *Piano Phase* (possibly a stage too far, that one; see Fink, 1999). Yet since he addresses the cultural panoply just listed without abandoning all forms of "close reading" of musical

works ("close readings", indeed, that are genuinely probing analytically and relate to the music as actually experienced – one can't, I think, dismiss Fink as one of those cultural critics or cultural theorists with cloth ears, who actually have no interest in the music itself or, anyway, too little training and experience to talk about this music in any technical way.

Ian Quinn, another more recent arrival at the minimalist debating circle, has tabled both some ruminations on, among other matters, the formalist debate in the context of analysing minimalist music (Quinn, 2006) and a very thorough piece of analytical work on Reich's *The Desert Music* (Quinn, 1997). The latter deploys both contour theory and fuzzy set theory to create computerised models of thematic content that measure resemblances between successive melodic iterations. This approach seems to me to have a great deal of potential, and it has a good deal in common with a computer-modelling analysis project, using Glass's early music, with which I am myself involved; see below.

Quinn defends the formalist stance with sensitivity, returning in the course of his recent speculations to Reich's oft-quoted dictum from "Music as a Gradual Process", concerning the composer's interest in "a compositional process and a sounding music that are one and the same thing" (Reich, 2002: 35). He suggests, approvingly, that whatever the difficulties or desirabilities involved in applying this to most of Reich's "mature works", "narrowing the gap between the gnostic (compositional process) and the drastic (sounding music) [is] something that even [Reich's] later music not only makes possible, but seems also to demand. The music draws us in drastically, sensually, erotically, but as we approach, what it presents appeals directly [to] our gnostic, formalist sides" (Quinn, 2006: 286). That accords pretty well with my own continuing experience of the music and my approach to attempting to analyse it.

## ANALYSING EARLY PHILIP GLASS

I won't attempt to go into any depth here, but just say that, returning to this territory following something of a break from it, I have found myself looking again, in much greater detail, at some of Glass's early minimalist scores of 1967-69. I continue to be fascinated by *Two Pages*, *Music in Similar Motion* and the other works that Glass wrote in the first flush of enthusiasm of finding what his now rapidly becoming ex-friend, Reich, would have similarly called a "compositional process and a sounding music that are one and the same thing".

But I've become particularly interested in those scores of 1967-68, from *Strung Out* to *600 Lines*: the ones that, while composed according to what might reasonably be called principles of additive and subtractive process, do so in ways that don't yet adopt the systematic approach to those techniques that are familiar from the composer's much better known music, from *1 + 1* and *Two Pages* onwards. (Another of these nine scores, a piece for two pianos called *In Again Out Again*, was played during this conference.

Being Glass's answer to Reich's *Piano Phase*, it is more contrapuntal than most of its companions, and this raises yet further issues in addition to what is discussed below.)

And it's here that I have experienced something of a rethink. I used to consider, as I believe their composer does, that these works of 1967-68 simply represented rather poor music, merely the "prehistoric" phase of Glass's minimalist development before he found his own equivalent to Reich's technique of phasing. The reason appeared simple: their play with the kinds of musical material and processes familiar from the later scores, but refusal to organise this material along logical lines, made the listener aware of the potential of following a system, but quickly aware of the impossibility of actually following it, at least with any degree of consistency.

It should be clarified, however, that when the saxophonist and composer Jon Gibson, a long-time associate of Glass's, read the passage in my book which emphasises the distinction between rigorous and non-rigorous applications of additive process, it appears to have come as something of a revelation to him: Surprising, not least - in that as a performer in most of these late 1960s compositions when they were new, and of just about everything written for the Philip Glass Ensemble ever since - he would have experienced the crucial differences involved in playing non-systematic pieces that, on the one hand, had to be followed in notation, note by note, and on the other, the systematic ones that could easily be memorised and thus free the player to work with a very different kind of performance mentality.

Whatever this tells us about the validity of the distinction, it still seems to me to be a real one. But now, having heard both recorded and live performances of *Strung Out* for amplified solo violin (including the one by Francesco Peverini that came out in 2001) that made much more musical sense to me than had Paul Zukofsky's 1976 LP recording, I decided that these compositions could, after all, yield very interesting musical experiences. Any valid analysis of these pieces must, in my view, reflect the way in which this music is heard. In a piece such as *Strung Out* - or *Gradus* for soprano saxophone, a later work which its composer described as "a better version of *Strung Out*" (quoted in Potter, 2000: 280) - this means focusing on what allows the piece to be heard as an unravelling entity. Identification of both moment-to-moment and overall changes in what I call the Basic Unit of each of these compositions, its dissolution into sub-units and reformulations into new shapes and changing emphases, can of course be attempted. But it is, for me, the work's overall tonal/modal unfolding that provides the most coherent overall means of following the music and, as a consequence, the chief basis for analysis.

*Gradus* expands from an ambiguous, basically pentatonic, scale, ABDEG, to a seven-note diatonic sequence, F sharp GAB C sharp DE, the articulation of which most readily suggests a D major scale; it could basically be described as an extended, but never quite resolved, dominant-to-tonic cadence. Even back on early minimalist ground, then, harmonic motion seems to rear its suggestive head. Perceiving the modal unfolding is, however, complicated by a number of factors; these include the changing extent of registral repetition of pitch classes, and the way in which contraction as well as expansion both of

the number of pitch classes in play and of the overall number of different notes permits local explorations of different parts of the total gamut. This music appears to engage in a rather subtle manner with the interface between a modality sufficiently ambiguous to allow constantly shifting pitch perspectives, and one rooted in a familiar diatonic scale sufficiently inflected by repetition on a variety of levels to insinuate the more focused perspective suggested by invoking the term tonality.

My detailed analysis of *Gradus* is in fact part of the early stages in a project that I am carrying out with two computer scientists to investigate how much such an approach corresponds with information-dynamic modelling done by a computer. (See Potter, Wiggins and Pearce, 2007.) For me, the interest of this collaborative undertaking lies in its potential as a tool to increase understanding of how such music works on the mind. (The involvement of music psychologists is one further stage in the project.)

Such work takes us in the direction of semiotic analysis, and here it also seems to me that there is much useful work to be done: for instance, in attempting poetic and esthetic analyses of minimalist compositions (as is currently being carried out on some very interesting Russian minimalist repertoire by Tara Wilson). This would have to address the question of whether the so-called “neutral level” between the poetic and the esthetic, of which Jean-Jacques Nattiez and others have spoken (see, for example, Nattiez, 1990), can in any meaningful sense be teased out in the analysis of such music. Such a project would thus inevitably also have to tackle the question of whether such a “neutral level” – presumably located somewhere in the vicinity of the place where the “compositional process and the “sounding music” come together – has a quite different significance for the analysis of minimalist scores than it does for the analysis of the kinds of music more frequently selected by those who have undertaken semiotic analyses of musical compositions.

For me, however, any analytical methodology must always ultimately be influenced by the esthetic dimension, and by what is actually audible. For Fred Lerdahl, for me (and also for Quinn, who quotes Lerdahl with approval), “the best music utilizes the full potential of our cognitive resources” and “the best music arises from an alliance of a compositional grammar with the listening grammar” (Lerdahl, 1992: 118-19). Such an approach seems to leave ample room for what Quinn describes as “the need to fantasize” (Quinn, 2006: 293), the element needed to make analysis truly and adequately reflect human endeavour. Early as well as later minimalist, and post-minimalist, scores continue to offer a fascinating opportunity to explore how we as humans listen, and think.

WHY 1976?

So, finally, what of that “Spirit of ’76” that my title promises to address? By the year 1976 - twelve years after Riley’s *In C*, eighteen years after Young’s *Trio for Strings* - musical minimalism had clearly moved on. Readers won’t

need the evidence in detail: everything from the premiere performances of Reich's *Music for Eighteen Musicians* and Robert Wilson and Philip Glass's *Einstein on the Beach*, to the emergence of John Adams, who incorporated quotation and reference into a pattern-based minimalism that soon took off on quite different paths from those of his compatriots a decade older than he; and, of course, a host of contemporary European as well as American developments. It is uncanny, on the face of it, that so many composers moved into minimalism, or came to achieve a mature expression of it, around 1976 or at any rate 1977: Michael Nyman, Louis Andriessen, Walter Zimmermann, Arvo Part, John Tavener, Henryk Gorecki, the list goes on and on.

What exactly was the nature of this spirit, of this change? And why did it happen when it did? There are, of course, a whole raft of possible reasons: to be found in the variety of reception histories of musical minimalism that might be traced; an examination of the precise nature of the different influences that the early minimalists had on subsequent endeavours, their own included; the cultural and musical politics of which David Lang has spoken so eloquently (see Potter, 2000: 20); and so on. Here I'm going to take just one - specifically compositional issues of a more formalist kind, via Reich's output - and conclude by offering some observations on this from the perspective of three decades later.

Reich's *Music for Mallet Instruments, Voices and Organ* of 1973 begins, via its oscillation of simple two-chord sequences, to develop a new approach to harmony, starting at least to imply the sense of increased directionality that does a good deal to characterise much minimalist music of the last thirty years. Such a putative approach to harmonic direction is certainly ambiguous, evasive even. Yet this is, of course, precisely what makes listening to it - and grappling with how to analyse it - all the more interesting. A lot of the music composed around 1976 has, I've always felt, an "on-the-edge" quality to it which is especially enticing. I have elsewhere suggested that the point reached here in terms of harmonic direction was not one that could now be halted, however exciting this "on-the-edgeness" itself might be. (See, for example, Potter, 2000: 246.) The hairshirted advocates of hardcore minimalism were still right to feel dismayed by *Mallet* when it appeared, for by the yardstick of musical value the work had certainly taken an important step.

Relationships between chord and pulse, tentative melody, sensory textures and, most of all, the dastardly double-act of speed-warp and incipient harmonic directionality also determine the even more radical stance taken by Reich's *Music for Eighteen Musicians*. This is well demonstrated by the arrival of Section VI of this work's eleven sections (each based, though sometimes extremely loosely, it has to be said, on one of the chords in the richly ambiguous chord progression outlined in the work's first five minutes). I have called Section VI, with its introduction of the continuous rattle of maracas, the beginning of *Eighteen Musicians'* "scherzo", before the more complex machinations of the "finale" begin in Section IX (Potter, 2000: 242). I have also previously noted the self-quotation here of the composer's own *Violin Phase*; in the context of "1976 and all that", it's tempting to stress this still early American example of musical referencing.

Fink, who imaginatively sees these maracas as a “coded reference” to those keeping the pulse for the organs of Reich’s composition, *Four Organs* (written six years earlier), describes this moment as a “moment of recombinant teleology” (Fink, 2005: 54-5). Essentially a more sophisticated approach to establishing the precise nature of the directional ambiguity to which I have been referring, “recombinant teleology” offers a subtle way of pursuing the balance and relationship between the apparently conflicting concerns of directionality and stasis, in which the listener’s conflicting impressions on the speed of different layers of the music play an important part. Fink makes more than does my own published analysis of *Music for Eighteen Musicians* of the C sharp in the bass of Section V (a departure from the “official” chord for that section) and its dominant function, in preparation for the F sharp of the ensuing Section VI. For him, on his way to “reading disco as minimalism”, Reich’s dominant-to-tonic move here “manipulates[s] musical parameters to create [an] overt moment of teleological drama”; a climax implying “an all-encompassing teleology that the music itself does not actually provide” (Fink, 2005: 55).

Maybe Reich’s charge of musical energy here is sufficiently potent not to need the underlining Fink provides in his accompanying analysis of what he calls “musical erotics” in Donna Summer and Giorgio Moroder’s “Love to Love You Baby”, with its simulated sounds of sexual intercourse (see Fink, 2005: 55-60). It’s especially strange, though, in this context, that Fink doesn’t make more of another engine of thrustful energy – one almost new in minimalist music: the pulsing notes played or sung, for the length of a breath, mainly by voices and clarinets, rising and falling from silence to forte and back to silence, each swelling slightly staggered between the instruments. “Gradually washing up like waves”, the composer described the effect in his programme note to the work. In the context, also, of the gendered explanations that Fink additionally offers for his examples (and tonal motion has, as we know, been compared by others to the sex act), there’s surely only one interpretation for these wave-like motions: female multiple orgasms. Minimalists – mostly if not always male, and especially the so-called English experimentalists (exclusively male) - had previously been wary even of the simple crescendo and diminuendo, let alone anything more clearly sexually suggestive like this. (As the title of the 1971 West-End comedy had it, “No sex, please, we’re British.”)

If one seeks the seeds of this involvement with harmonic direction, one good place to find it is in Reich’s already mentioned work, *Four Organs* (composed in 1970), with its dominant-eleventh chord, implying a V-I cadence, hung out to dry for the listener’s inspection over some fifteen minutes. What Ronald Woodley has called Reich’s “interrogation of the Western classical tradition” (Woodley, 1992: 768) had, perhaps inevitably, to begin with the purging power of rhythmic repetition on pitch materials so reduced that little remained of any Western classical associations with which the listener might invest these materials. For all its radical rigour and harmonic reductiveness, *Four Organs* marks the beginning of Reich’s serious interest in harmonic motion.

Yet in some ways, the most telling Trojan Horse in the citadel of musical minimalism isn’t actually formalist and music-technical at all, but the way in

which metaphorical interpretation finds a place in one of the works consistently put forward as one of the basic building blocks of musical minimalism and its aesthetic of purity and non-reference. The young black preacher's sermon that formed the material of Reich's tape composition, *It's Gonna Rain*, completed in 1965, makes extensive reference to the Biblical story of Noah and the Ark. While it is already obvious that this is to be taken as the usual warnings against a selfish and decadent society, the particular spin that Brother Walter's open-air congregation, and by his own account Reich himself, were able to put on this interpretation came from the sermon's particular historical context. The Cuban missile crisis of October 1962 had created a deep and pervasive unease that, as the composer himself puts it, "nuclear disaster was a finger on the button away" (quoted in Potter, 2000: 167). Even more than two years later, this gave the story of Noah and the Flood a fresh, and urgent, dimension, enhanced by repetition that in itself is characteristic of this Evangelical style of preaching. The words of *It's Gonna Rain* thus in turn offer its audience a metaphor for impending nuclear holocaust.

## THE DIASPORA

It's perhaps surprising that it took ten years, at least in the USA, before purely instrumental minimalist compositions began to do the equivalent metaphorical job, and go on to the post-modernist project of quoting from, or at least alluding to, other musics. That happened most famously, of course, with John Adams, who was influenced in this direction by English composers such as Gavin Bryars and John White; under the latter's nicely punning dictum, "Systems and sentimentality are the SS of my Reich", lies a richly allusional, typically British version of this story.

I could illustrate the consequences of all these matters, and many others besides, of course, on minimalism's diaspora after 1976: European, and indeed Asian, as well as American; from popular culture as well as those seen as still contributing, in some sense, to the Western classical tradition. Let us end with a glance at the role of technological developments here. Though we should heed the warnings of such scholars in the field as Timothy D. Taylor against any unthinkingly simplistic implications of what he describes as a "technological determinism, in which technology is assumed to transform its users directly" (Taylor, 2001: 246), the advances in computer technology and its accessibility that brought about, among many other things, the advent of sampling, as we now understand the term, are of enormous importance in the continuing story of post-minimalism.

Any attempt to develop a comprehensive perspective on the matter of technology's impact on musical composition and improvisation is likely quite quickly to come up against the view that the very ease with which such looping and other devices can now be accomplished brings with it the danger that the results can be dangerously formulaic. Of course minimalists have heard all this before. Coupled with the whole business of quotation and reference, even the seminal American works of 1976 become

links in the chain of a process of re-appropriation that some would describe as not merely ubiquitous but also mindless and deeply damaging for creativity in the 21st century.

The young English composer Matthew Wright studied with Louis Andriessen in The Hague, and specialises in bringing together minimalist strategies of repetition and DJ turntabling. In a fascinating private communication to me (written in 2006, in response to a call for responses from both practitioners and other scholars to the question, "Did musical minimalism change in 1976, and does it matter?"), Wright suggests that:

In 2006, our four musical minimalists are the keys Ctrl (Windows), Command (Apple), C and V. Minimalism as a sounding process, an integrated aesthetic approach and an attitude to life has been diluted, in the worst case scenario, to a series of ready-made techniques (phasing, looping, etc.) for getting from A to A in a commercial industry disinterested in ideas and hungry for formulae.

For him,

The democratising force (I use this term for both its positive and negative associations) of readily-available domestic music software and its contribution (or not) to the divorce of musical technique from musical aesthetics is a thorny footnote to the shift from minimalism to post minimalism. When we use the terms 'minimal' and 'post-minimal' we are attempting to define a cultural transformation, a drift from music as a sounding process to a series of social processes in which music is only a part. It is clear, for instance, that the (relative) popularity of *Music for 18 Musicians* and *Einstein on The Beach* became part of minimalism's re-appropriation of itself within a commercial music industry, whilst Louis Andriessen's *Hoketus* was a reflection of a playful European dialectic in which minimalism both promoted and critiqued itself.

But, as Wright points out:

In the same year that *Hoketus* was blaring in The Hague and *Einstein on The Beach* was being performed in The Metropolitan Opera, on the other side of New York in the Bronx, Grandmaster Flash was perfecting his own post-minimal, antiphonal hocketing with two turntables and two copies of the same recording, potentially disinterested in the aesthetic roots of the materials he was using, but utterly concerned with perfecting a technique that re-contextualised those materials, performing ad infinitum the loop functions that our tame domestic studios take for granted.

In what could be called a post-ideological musical culture, the question perhaps should not be whether it matters if minimalism became post minimalism, but to what extent composers / performers / DJs / sound artists in 2006 are futurist creators or nostalgic re-assemblers of musical history, and whether our increasing ability to beg, borrow or steal musical techniques constitutes an increased understanding of the musical aesthetics those techniques underpin.

Wright's own recent music offers a more encouraging perspective on the impact of new technologies by focusing in on the space where post-minimalism meets the DJ coming head-on in the other direction. His composition, *A Stillness Made From Speed*, completed in 2003, is, like so much earlier minimalist compositions, obsessed with shifting tempi and unfolding bass lines that wreak havoc with the listener's sense of motion - in multiple senses. Scored for ensemble and processed recordings of sampled keyboard sounds, this music is underpinned by slow harmonic progressions but constantly characterised by multiple perspectives built around these. In the passage with which I concluded my lecture, the

hi-hat cymbals and the bass line are in heterophony in the way to fifteen minutes of what the composer calls "frozen meditation", following forty-five minutes of "protracted accumulation".

## CONCLUSION

If Wright's unforced mix of aesthetics and techniques drawn from across a wide range of musical developments is typical of the best of what younger composers are doing now (and I think it has, for example, certain attitudes in common with the "totalists"), then it also demonstrates that some of the best aspects of good, old-fashioned minimalism live on, appropriately transmuted, in the compositions of the 21<sup>st</sup> century. And, for us analysts of musical minimalism, there's plenty left to do, both on the back catalogue and on the new releases.

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