

Shattering the Vessels of Received Wisdom

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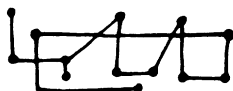
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SHATTERING THE VESSELS OF RECEIVED WISDOM



BRIAN FERNEYHOUGH
IN CONVERSATION WITH
JAMES BOROS*

YOUR MUSIC HAS the reputation of being extremely difficult to play; however, you've had a great deal of success with a number of individual performers, such as Pierre-Yves Artaud, and ensembles such as the Arditti String Quartet, the ASKO Ensemble, and the Ensemble Intercontemporain. In your view, what lies behind the astounding achievement of these performers in the face of what many perceive to be unsurmountable difficulties?

For a start, we should distinguish between musical and performatory difficulty. I take it that you mean the latter. In general, one encounters two distinct types of performer; one that might be termed the “gig” musician—

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the player who, in a couple of rehearsals, is justly proud of producing a “professional” realization of just about anything. Often, such individuals are required to interpret vastly different styles in close juxtaposition and have, in consequence, developed a technique of rapid reading and standardized, averaged-out presentation in order to maximize effectivity for the vast majority of works and contexts. It seems to me that there is a certain tyranny involved in frequent attempts to impose this approach on the composer as some sort of desirable aesthetic norm—a “good, healthy common sense” of music, so to speak. Inevitably, ease of rehearsal and performance involves more than just a careful regard for technical difficulty. What happens is that whole chunks of conventional wisdom in terms of musical *thinking* are also absorbed, since ease of realization is frequently a function of expectation or applicability of already present manual patterns. It seems to me no contradiction in terms to presuppose a species of interpreter for whom a lengthy and intense involvement with the artistic and technical demands and assumptions of a particular composer or group of composers would be an essential prerequisite for adequate performance activity. That’s the performer who’s willing to spend six months or so really trying to penetrate to the roots of a style, to focus in on the mental development of the composer during the act of creation so as to be able to actively counterpoint this against his own personal learning and reproduction dynamic. It’s true that, over a couple of decades now, I have developed a significant relationship of this sort with a number of soloists and ensembles. It would be a mistake, though, to concentrate overly on the quasi-virtuoso aspect of this: the spiritual relationship is always more important. Very often, such people are disparaged as some sort of performing animal who make a living out of hawking around their manual dexterity. I imagine that such individuals exist, but I have not come across many who play my music, perhaps because the effort involved is by no means invariably associated with the requisite illusion of supreme control and mastery transmitted by “virtuoso” vehicles. For one thing, I never *collaborate* with a given performer in the sense of having him give me his particular “box of tricks:” I believe that one should never start from the global effect, but rather allow it to emerge synthetically as a result of the confluence of other compositional considerations. This seems to me the sole way to legitimize, to ground sonic innovation; everything else is *bon gout*. For example, there have been several quite well-known flutists who have refused to take my *Unity Capsule* (1975) into their repertoire with the argument that it is not worth the amount of time and effort required, since “similar” sounds can be improvised or else notated much more simply (perhaps graphically). There is no way that I can see to persuade such individuals that the approach to learning the work is an essential polyphonic strand in the final result. Only the experience of actually attempting it can—perhaps—achieve

that. There is a basic, unbridgeable abyss separating the effectful “virtuoso” approach from that adopted by my regular associates, and I am not in the business of obscuring this vital distinction, since to do so would be to trivialize the extent to which the performer’s personal confrontation with a richly-articulated musical environment can contribute to a gripping aural experience.

One should also remember that these players do not dedicate themselves exclusively to my compositions: they do not function as regular, long-term members of a “Ferneyhough Ensemble.” We are talking about a quite different situation than where a group plays one composer’s music almost exclusively for an extremely lengthy period of time as in the case of, say, Stockhausen or, more recently, Steve Reich. Traditions built in that way have other dynamics.

A number of performers have described experiences whereby, after having spent a period of time working on your music, getting beyond what were initially perceived as obstacles to comprehension, “many problems seemed to have solved themselves.”¹

I’ve found that there’s a kind of exponential time-saving process with my music: if you spend six months learning one piece, you’ll be able to learn another in three weeks. For example (albeit an extreme case), the Arditti Quartet was able to learn my Third String Quartet (Example 1) in only a few weeks, largely without my active supervision, because its members are all very familiar with my general approach. On that basis it was generally possible for them to extrapolate plausible solutions to executive or aesthetic questions. In fact, I was still composing the final pages of the score during the final period of rehearsal, sometimes sitting in the same room as the quartet and passing new material over to be photocopied and run through, often during the same session. It was a strange experience!²

What many players often fail to realize is that most of the textures in my works are to a large degree relatable to gestural conventions already familiar from other contexts. What is unfamiliar is, firstly, the unusual rapidity with which these elements unfold and succeed one another; secondly, the high level of informational density in notational terms; and, thirdly, the extreme demands made throughout on the performer’s technique and powers of concentration. Most of these hurdles to acceptance are encountered predominantly during the initial period of familiarization in which the necessary connection between notation and expressive realization is obscured by the welter of surface detail. Once this reading phase has been passed, many players have come to accept that these factors actually make their job easier and more rewarding. Of course, in the sort of rehearsal situation prevailing in New Music today, there is little or no opportunity to achieve this experience; as a composer one has the choice of accepting this fact and working with it, or seeking to establish performance traditions on a gradualistic basis. Both views have their arguments; essentially, I think, it’s less a

The image displays three systems of musical notation for a string quartet, labeled 59, 60, and 62. Each system contains four staves, one for each instrument. The notation is dense with notes, rests, and dynamic markings. Key performance instructions include:

- 59:** *legg*, *sul tasto* (gliss sempre), *sub*, *den marc*, *gliss*.
- 60:** *sul tasto*, *gliss*, *sub*, *niente*, *den marc*, *gliss*.
- 62:** *sempre marc*, *poss*, *gliss*.

The score is annotated with various dynamics (e.g., *ppp*, *pp*, *f*) and articulation marks. The measures are numbered 59, 60, and 62 at the beginning of their respective systems.

EXAMPLE I: STRING QUARTET NO. 3

matter of professional ethics than of the relationship of one's expressive ideals to the prevailing opportunities for their public reproduction. I'm aware that many composers argue that it's somehow more honorable to

work within the bounds set by current socio-economic norms, to tailor their production to them: I simply beg to differ and hope that my views will also be accorded respect.

Some critics of your music claim that the speed of informational presentation is too high, that they, as listeners, can't keep up with it.

Again, it's partly a question of familiarity. I try not to be overly influenced by the thought that most listeners will hear a piece only once, even if this is often the case. One simply has to ask *how* people listen these days—are they listening more or less statistically, passively, or does a piece cause some form of inertial resistance in the perceptual works? The more the listening mind gets tied up in powerfully structured contexts, the greater is likely to be its sense of informational overload. That's true of anything which is at once unfamiliar and immediately demanding in terms of trying to tie together partially perceived objects and processes into a provisional whole. One thing that makes this music perhaps more difficult than some is not so much its actual density, but rather the slight disbalance I tend to build into the relationship of time-flow to complexity of individual semantically coherent units. This gives the listener the sensation of always being “behind” the flow of events, of running to catch up, as it were. Some might assume this to be a negative state of affairs; I simply utilize it as one more tool for energizing the sonic flow, for modifying its perspectival characteristics. It's clear that many interesting avenues of investigation open up when one adopts this sort of absorption ratio as a compositional variable. Some composers positively expect that the audience be essentially passive, whilst still others treat the public rather paternalistically. My own attitude is to suggest to the ear sequential bundles of possible paths through the labyrinth—paths, that is, which are mapped out in the synchronization of simultaneous processual layers with a view to encouraging the risky undertaking of instantaneously selecting between them.

Things in the present-day world surely move rather quickly. It seems rather anomalous to expect our art to be easily understandable; I don't see music as providing a sort of breathing space between bouts of confrontation with the world outside! It is also not directly about offering privileged insights, but more about how to create one's own insights when immersed in the complex ambiguity of the art object.

How do you respond to other charges which claim that you “over-notate” your music?

It's true that some musicians have told me that they feel robbed of much of their traditional autonomy of interpretation through my “over-specification.” On the other hand, what might arguably upset a performer even more is not knowing *why* they're doing something, not having any applicable criteria of interpretational excellence. Most contemporary music can be scarcely said to be over-familiar; this state of unfamiliarity is often

the result of a lack of such specific criteria. My method of notation attempts, at best, to suggest to the player relevant methods and priorities wherewith the material can be usefully approached—the establishment of hierarchies; at worst, I imagine that he will constantly be reminded that new works often do not permit much to be taken for granted. Suggesting contexts of this sort via notation allows the player a different but no less important “free space” within which to move. With a complex score, where does one begin? With the rhythms, sorting out the pitches, general sorts of movement? How important is articulation, for instance? If you are confronted with several distinct and independent layers of activity, as in my *Unity Capsule* (Example 2), then this surely becomes a central issue.³ Everyone approaches the task in a unique fashion, each sets his own priorities. In consequence, the results are always somewhat different from performance to performance. Scores are more than just tabulatures for specific actions or else some sort of picture of the required sound: they are also artifacts with powerful auras of their own, as the history of notational innovation clearly shows us. As such, they are capable of playing an active but not authoritarian role, even in a period of pluralistic aesthetic standards: they carry their own history on their backs.

*The degree of variability from one performance to another is something which is strikingly evident in the multiple recorded versions of your works for solo flute, which are radically different in many ways despite their being recordings of interpretations by a single musician.*⁴

It's obvious that you spend a great deal of time and effort in considering, down to the most minute detail, exactly what you're asking a performer to do, which requires an unusually high level of familiarity and identification with instruments and playing techniques.

Thinking about composing means, first of all, thinking about the specific nature of the instruments to be employed. I'm very concerned that the things I ask an instrumentalist to do be so instrument-specific that they conspire to create a sort of “X-ray” of his instrument's inner essence. That doesn't mean employing the entire catalogue of secondary effects (although it might), but rather ensuring that one could not imagine any other instrument playing the same material in the same way. My approach to an instrument is really rather physical in the sense that I conceive of it as a theatrical space for the disposition of actions; the spatial relationship of the performer and his movements to this framework is always a primary consideration if one wants to “polyphonicize” the apparent degree of difficulty of a passage with its actual performative complexity. Very often my string textures, for instance, move rapidly from register to register, but it makes the world of difference if one has chosen one's material disposition with a view to minimizing the real amount of distance that the left hand is expected to traverse (Example 3). By these and similar means one is in a

The image displays a musical score for a solo violin piece. The top section features a complex melodic line with various dynamics and articulations. The dynamics range from *pp* (pianissimo) to *ff* (fortissimo), with intermediate markings like *sffz*, *mfz*, and *pp sub*. The articulation includes slurs, accents, and staccato markings. The bottom section shows 'Sounding Pitches', 'A Possible Fingering', and 'Strings Utilized' (E, A, D, G) with fingerings III, IV, III, IV, III, II, I, II, III, II, III, II, I.

EXAMPLE 3: *Intermedio alla ciaccona* FOR SOLO VIOLIN

position to suggest contexts to the player that a more abstract treatment of his instrument might leave unremarked. If the composer does not occupy himself directly with such questions, the performer might well consider himself justified in applying received conservatory techniques in a blanket fashion not necessarily automatically appropriate for all forms of contemporary expression. I know a lot of composers who maintain that “if you just notate the sounds you want, the techniques will look after themselves.” Quite apart from leading composers into the occasional performative absurdity, this is emphatically not the point I am starting from.

It seems as if many of the issues surrounding contemporary performance practice have been and continue to be to a large extent overlooked within the musical community.

In previous ages it was never performances which survived, but scores, notated music. If all the information necessary to a correct interpretation is not contained in a score, it is practically impossible to reconstruct original intentions with any degree of certainty. Only tradition can provide some sort of tenuous continuity in this respect. If you play a Beethoven sonata, you're not interpreting the notes on the page, you're interpreting many generations of interpretation, an entire corpus of slowly evolving conventions. Contemporary music has little of this sense of self-reflexive tradition, partly for the obvious reason of being new, but also because of the extreme fragmentation of stylistic continuity so characteristic of the present day. This results in a sort of institutionalized deracination where the performer is all too often reduced to putting the right notes in the right place with little sense of the larger perspective which would make it all make sense to him. If one considers interpretation as the art of meaningful deviation from the text, one will be saddened to hear music played (and—mutatis mutandis—composed and listened to) in this reductive manner. In terms of my own work, I employ what some consider to be over-definition of the musical image as a path to suggesting what might come to replace this interpretative overview. Composers who tend to restrict their notational specifications to a bare minimum end up getting one-dimensional representations of a possible sound-world rather than entering into that world's inner workings. Again, my entirely subjective view, confirmed by a significant number of excellent musicians.

Your stance with regard to the notation/interpretation process is a remarkable one in that you seem to have overcome many of the obstacles represented by the currently pervasive attitude which deems that “the imprecision and variability of human performance are actually quite detrimental to the requirements of totally organized and predetermined works.”²⁵ While many composers have skirted the issue by either simplifying their musical language or by turning exclusively to the electronic medium, you are one of the few to have expressed a concern with the means by which one may actually take advantage of these “human” qualities and limitations through careful, well-thought-out compositional strategies.

Cassandra's Dream Song for solo flute, written in 1970, seems to have been one of the first compositions to display this attitude towards the performer. This is clear in, for example, the introductory notes attached to the published score;⁶ you've also referred to the “dynamic projection into an ‘energized time-stream,’ via the mental and physical capacities of a totally involved performer.”²⁷ Another attractive feature of this work is the fact that, while it is in some ways representative of the European “tradition,” begun in the 1950s, of mobile works which provide “mechanisms by which progressively to liquidate the workings of chance ...”²⁸ and which yield

“performances . . . progressing systematically towards complete exhaustion of the freedom of choice,”⁹ it also represents a unique, personal solution to the problems posed by mobility.¹⁰

Probably *Cassandra* is not a very typical example of the “open form” genre. When I was composing it, back in 1970, I was very well aware of the effect of each of the limited number of combinations of fixed and freely ordered elements. This was important since it is precisely the vast diversity of energy-transfer situations that the mobility of the freer elements provides which was my primary concern. It is a very physical piece, I think—the first of my works, in fact, to consciously explore this aspect of performance practice—and this is especially manifested by those boundary situations where one type of energy is forced to confront, blend with, or mutate into another. In the absence of metric subdivisions it is the manipulation of such qualities which lends the piece its specific inner articulation, both within and between sections. The clearly distinct implications of such an approach and that exemplified by the more overtly linear, “logical” sections are intended to sensitize the flutist to the nuances of energy expenditure and interpretative moment-to-moment detailing in a manner not otherwise available to me at the time. Since then I have maintained the metaphor, but attached it, not so much to large-scale sections in confrontation, as to the confrontation of various densities and consistencies of figurations with a network of temporal spaces within which they are confined. I don’t see much point in maintaining the convention of regular pulse in a music devoid of the tonal harmonic rhythm which lends it significance on a global level; the measure thus tends to function for me, firstly, as a space, secondly (via the bar-line), as the domain of a certain energy quotient suddenly facing the necessity of leaping to a sometimes quite contrasted state. It is not the emphasis on a down beat which counts, but the feel for what is needed to leap this experiential hurdle to the immediately subsequent situation. The length or regularity of measure disposition in relation to the implied degree of continuity in a given material provides the player with essential information concerning relevant phrasing, weight of detailed nuance as against emphasis of larger gestural aspects, etc. In shorter measures the performer is necessarily stumbling from state to state; there is, if you like, a high correlation of figural definition and “rhythmic harmony” (as opposed to harmonic rhythm) whilst the same materials spread over a small number of larger measures would convey the necessity of integrating more clearly these same figures into a more obviously continuous, evolving perspective. Conversely, the latter case seems to imply a more catastrophic transition between measure boundaries than the former. *Cassandra* deals with this issue more through its large-scale formal dichotomies and, on the micro-level, the opposition of fermatas to written-out pauses combined with more or less anti-natural interruptions or distensions of the sort of

time-flow that each type of texture seems to demand. It's very close to a compositional involvement of the well-known phenomenon whereby a solo performer tends to calculate rests not so much by their actual written durations as by the degree of accumulated energetic impetus with which he approaches them, with the consequence that their clock-time duration can fluctuate wildly from performance to performance. A recent example of this would be the concluding viola solo in my Third String Quartet, where the immediately preceding whirlwind of linear motion causes the violist to perceive the rests as major impediments (Example 4). The effect of this perception on the way he then attacks the intervening events is very evident in performance.

Much of your music seems to revolve around what Boulez refers to as a "polyphony of polyphonies."¹¹

I do tend to work with distinct layers of activity, in the sense that diversely instrumentated, individually textured processual vectors are usually co-extant in my works. Much of the larger-scale formal working out of my structures is based on the intersection, collision, confluence, and divergence of these strands of activity. I find this way of imagining and ordering sound much more congenial than treating an ensemble as a value-free and pristine source of possible sonorities. In larger groupings, too, the performer has a chance to orientate himself towards events emanating from his immediate neighborhood, or at least remaining constant for a significant period of time. My large orchestral work *La Terre est un homme* (1976–79),¹² for instance, treats each of the instrumental families very much as a unit of activity in itself—something supported, in some cases, by the inclusion of the complete spectrum of members of that family, the clarinet group, for instance, comprising Eb, Bb, Bass and Contrabass. These distinct strands may then be combined into larger conglomerates: one example that comes to mind is the regular association of four muted trumpets with the oboe/english horn quartet. On a still larger scale we have the integration of all wind instruments pitted against all the strings (as in the very opening of the work, where a single woodwind/brass process is pitted against a complex mass of more than forty solo strings). This sort of constant fluctuation of alliances militates against the utilisation of the orchestra in its normal division of forces; at the same time, I feel that there is a certain timbral logic at work which goes beyond usual concepts of "orchestration." All the large ensemble pieces in the *Carceri d'invenzione*¹³ cycle are tropes of the same approach: in the third and last of the series, the woodwind, brass, and percussion have clearly distinct roles to play in the articulation of the form, whilst in the first two of the series the constant generation and redefinition of color-groups as polyphonic strata form the very roots of their particular identities.

It seems to me that this approach is basically an extension of my attitude

The image displays a complex musical score for a string quartet, consisting of four staves (Violin I, Violin II, Viola, and Violoncello). The score is divided into several measures, with measure numbers 101, 105, 109, 114, and 117 clearly marked. The notation is dense and includes various musical notations such as notes, rests, dynamics (e.g., *ppp*, *f*, *mf*, *ff*), articulation (e.g., *acc.*, *stacc.*), and performance instructions (e.g., *molto legato*, *molto sp.*, *immobilita*, *molto sostenuto*, *molto pesante*, *molto*, *molto sp.*, *immobilita*, *molto sostenuto*, *molto pesante*, *molto*, *molto sp.*, *immobilita*, *molto sostenuto*, *molto pesante*, *molto*, *molto sp.*, *immobilita*). The score also features tempo markings like *molto* and *molto sp.*, and dynamic markings like *ppp*, *f*, *mf*, *ff*. The notation includes various musical symbols such as notes, rests, and articulation marks. The score is presented in a traditional musical notation style with a key signature of one flat and a time signature of 3/4.

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EXAMPLE 4: STRING QUARTET NO. 3 (CONCLUSION)

towards the multiple defining vectors which go to make up single, less texturally complex sound events. One of my enduring aims has been not to create some automatic transliteration of compositional techniques or points

of reference from one layer of articulation to another, but rather to provide a rich meshing of analogous approaches which, whilst specific to each level of activity, are nevertheless sufficiently imbued with points of processual contact as to permit significant perceptual inter-reference on the part of the listener. Quite often, pupils make the mistake of assuming that the sort of proportional relationship effective on one level of a composition will be equally effective (or at least function in much the same manner) on a higher formal level; usually this is far from being the case. On the other hand, a constant awareness of the general category of operation or shaping strategy informing all levels of a discourse is extremely useful, and something the composer should make every effort to suggest. Often, people have been rather disappointed to discover that the operations I employ at any given moment are really rather basic. This is necessary in order to ensure their wider applicability in an extended family of comparable situations; one is often mildly astounded to see how complex a context can become as the result of the intersection of just a few such primitive procedures!

Stockhausen has stated that, beginning with his Kontra-Punkte (1951), he "didn't want any background any more, . . . everything was . . . of equal importance."¹⁴ Do you view each of the lines or processual strata in your music as being of equal importance?

It's interesting that Stockhausen takes that particular stance. Although what he says would seem to be a natural consequence of the total serial concept as he understood it, in the sense that anything derived directly from the fundamental steering mechanisms would be theoretically equivalent (even if not so in terms of perceived structural weight), in fact the definitive version of the piece doesn't function at all that way. We know from his sketches that *Kontra-Punkte* is the result of at least two interleaved work-processes, the one more basic, the other essentially interpolative or elaborational. One might suppose that this implies a certain disbalance in the mode of assessment of sonic experience: after all, even if "everything was . . . of equal importance," that still depends on the perceived "grain" built into the texture in terms of such before-after strategies. The punning nature of the title is surely aimed at Stockhausen's dissatisfaction both with the premisses of *Punkte* and the basic "point" approach in general; it is fairly easy to discern the moments at which the global, group effect is primary. As in Orwellian democracy, all may be equal, but some are still more equal than others.

In my own music, I certainly try to legitimize all strata equally in terms of their inner coherence and sense of self, but this is not to be interpreted as the espousal of some sort of principled equality in the resultant compound texture. Some types of texture are, by their very nature, more insistent than others. In addition, I employ the detailed definition of things like timbre and amplitude to move lines or linear complexes in and out of focus.

In terms of their contribution to the overall argument, all lines might be of comparable significance but, by adjusting their relative dynamic envelopes, all sorts of interesting weightings of things like translucency, physical presence, and resonant support-functioning can be arranged. Even in more obviously traditional contexts it's often the things you can't hear (or can only hear in a limited way) which are instrumental in giving a texture its decisive nudge in a particular direction. Also, when event-strata do become directly audible (rather than mediatedly perceived via their syntactically articulatory effects on other layers), they exhibit more sense of continuity and directionality precisely because they had a prior "inaudible" run-up. Even in a Bach-style fugue it's frequently the absences which are as influential as those things stated right out; the same, in perhaps greater measure, is true of something like a Webern *Bagatelle*, where, at any given time, only a small portion of the contributory ordering is consciously assimilated, even after many hearings. For me, silence—by which I mean also "functional silence," the camouflaging or dissimulating of functions—is far from being a neutral medium for spacing out events: I see it (perhaps fancifully) as a disembodied "aether" capable of acting as an energized vehicle for the "silent continuation" of fragmented developmental structures.

In other words, silences may simply represent phases during which particular processes are "hidden" from view, much as a stream may disappear beneath the ground, only to re-appear at another point; they don't necessarily signify a suspension of action or arrested motion.

That's right. Without assuming something along those lines, it would be much more difficult for me to allow textures to re-emerge, perhaps greatly evolved, and expect them to be appreciated as another aspect of a "perforated continuity" prepared earlier in the work, the series of "tips of icebergs."

Given this contextually reactive approach, it would be less than useful to attempt to define all aspects of a situation simultaneously, right at the outset. In fact, precisely the opposite is the case, in that I am often struck by the divergent paths material takes when identical operations are carried out in a different order—so much so that decisions concerning precedences of this type usually form part of a work's initial generative repertoire, setting up further levels of constraints through which invention and intuition can meaningfully express themselves.

In the introduction to his analysis of your piano work Lemma-Icon-Epigram, Richard Toop states that your compositional process

is not a predetermined path, but a labyrinth, and the completed work is, in a sense, an arbitrary byproduct of that labyrinth, to the extent that there is nothing predestined or predetermined about the outcome of any particular moment in it; each moment is, rather, the inspired momentary response to a

given set of constraints, and in each case other solutions, equally compelling, would have been thinkable.¹⁵

For me, a piece of music tends to grow like a coral reef, accumulating or sedimenting the remains of many small animaculae. In that sense it is really a record of past processes, it is an imperfect and partial imprint of a no longer determinable set of compositional presuppositions. Music is always an interactive thing; just as you define it, it tells you what it needs for the next stage of its development, telling you in terms that would not necessarily have been meaningful or even available at an earlier stage of composer/work evolution. In this essentially symbiotic activity the temporal succession of decision-making is absolutely crucial. The high density of pre-compositional preparation for a piece does not set out to define *a priori* each and every event: it is meant to provide a life-support system, a dispositive of constraints and delimitations with which it is meaningful to make decisions affecting other parts of the totality. The almost ritual activity of bringing events together in predetermined frames sometimes gives rise to sudden insights on an altogether different level. In an important sense, processes don't exist in order to generate music, they're there to predispose one to approach the act of composition in a work-specific fashion.

It's not as if you simply set these processes in motion and allow them to proceed without their interacting or affecting each other. There's a vast difference between this approach and that which is manifested in "algorithmic" compositions by composers such as Xenakis or Hiller.

It's curious how often I've been asked why, given the complex nature of my scores, I just don't specify some appropriately complex algorithm at the outset which would generate everything at once! Needless to say, this reflects a massive misprision concerning my approach to music, even assuming that such a utopian calculatory device were available, even in principle: it effectively eliminates from the picture any sense of the wider compositional consequences of decision-making acts without which the exercise would be null and void. Invention always follows from limitation; constraints are aids to thinking, to processually molding sensations as articulate subsets of the universal.

What role do the processual strata play in your works for solo instruments, as opposed to your ensemble music?

They function in essentially the same way, seen as musical structures, even if their accumulation in a single voice in practice leads to the information being differently evaluated. Of course, if you are composing for twenty instruments you are going to think twice about the efficacy of simultaneously specifying thirteen individually quantified informational strands for each and every player, since the Law of Diminishing Returns soon

comes into force to render even such maximally defined textures in terms of “terminal grey” tones, the sort of non-color remaining on an artist’s palette after all his paints have been thoroughly mixed at the end of the day.

One thinks of John Cage’s description of the “mud” of Ives’s music.¹⁶

I’m not familiar with that comment but it certainly sounds appropriate. Sometimes, it’s true, I find such states useful, but it would be anti-productive to maintain this overall-ness for too long: in recent works I have tended to employ articulation stranding to enhance the specific sense of shaping of individual lines or texture-types at key moments, to increase their “presence,” their power to generate a cutting-edge identity *within* diversity. An example of a piece constructed almost exclusively on this premise would be *Carceri d’invenzione I* of 1981 (Example 5), where the degree of focus of this or that texture within a larger mass is a key both to its overall function and its degree of internal coherence, its self-awareness, if you like. With solo instruments we have a wholly different situation in which the issue is not so much defining a continuous identity in the mass but rather one of constantly thrusting at the performer the *non*-identity of the work, those centrifugal tendencies which are only provisionally held in check by the multiplicity of compositional devices which serve to define the strands you mention. The more these are explicitly rendered by the notation, the more a “separation of powers” is imaginable, an exploding outward from tentatively common trajectories.

This brings us to your concept of a musical “figure.” You have written:

It is ... imperative that the ideology of the holistic gesture be dethroned in favour of a type of patterning which takes greater account of the transformative and energetic potential of the sub-components of which the gesture is composed.

... The gesture is brought to function in several ways simultaneously, thus throwing its shadow beyond the limits set by its physical borders, whilst the strands of parametric information of which it is composed take on lives of their own—without, however, divorcing themselves from the concrete point of their common manifestation to such a degree that their independence on the processual level could ever pose a serious threat to the credibility of integrity of the gesture itself.¹⁷

Would you care to amplify these statements?

In my efforts to clarify to myself the inner workings of musical structures, I’ve found it useful to distinguish three fundamental areas of activity—or, at least, three distinct ways of looking at those activities. They are (1) Texture; (2) Gesture; and (3) Figure. I am, by the way, certainly not suggesting that these are mutually exclusive domains—quite the contrary, in

EXAMPLE 5: *Carceri d'invenzione I*

fact, since their usefulness to me as a composer resides precisely in their encouragement of “cross-fading” from one to another. Basically, I’m postulating that the identification of function or identity proceeds from the general to the specific, that is, from types of activity up to particular

exemplifications of those types in concrete contexts. A *texture* here would be a global form of activity characterized by some recognizable consistency—slow clusters, for example, or heterophonic *gettato glissandi*. It is music's irreducible stochastic substratum, and is a minimal precondition for any further pertinent differentiating potential. Textures are gathered into related bundles, each of which assumes certain basic equivalences among its members. Without the assumption of such fundamental correspondences it would be difficult to locate individually-characterized elements according to any scale of implied values, which would, in turn, greatly hinder the establishment of any consistent form of hierarchical ordering. Exemplifications of particular texture-classes are seen as such by reason of global resemblance, either in terms of typical configuration of substance or analogous tendencies of processual transformation.

The *gesture*, on the other hand, belongs to a particular class of objects or states by virtue of all members of that class referring to a particular (well or vaguely defined) semantic domain, a conventionally established signified. Mostly, we associate semanticity with evoked emotional (“artistic emotional”) states. Precisely *how* this comes about is not my present concern: I take it that there exist various historically-defined, partially intersecting codices for that, no matter if most of them have become debased, eroded, or themselves mediately referential in the course of this century. Over and beyond its referential, “expressive” function, the gesture usually manifests clear-cut boundaries; it has certain object-like qualities. Once one accepts this analogy, others immediately impose themselves—terms such as force, energy, impetus, momentum, perspective, friction, opacity, and so on, all of which I associate with my own habits of working. The extracts from my article that you throw at me are attempting to suggest that over-reliance on such referential expressivity has its perils. Much recent music, for instance, explicitly assumes a Late Romantic affective vocabulary without, I think, reflecting very deeply on the changes in cultural consciousness that have radically transformed everything about how we see the world. It buys a place in “the System” by adapting itself to fit the time-capsule norms which the latter has adopted to ensure its own survival in no matter what peripheral fashion. I'm clearly over-simplifying all this of course—it's by no means the whole story.

The point of departure for my concern with the third component—the *figural* dimension—arose from a consideration of the relationship between the gestural-affective and the operatively self-referential. At the time of writing that article (1982) I was hearing a lot of music whose reliance upon the sort of expressive ideology I mentioned earlier was leading it towards the monadic isolation of expressive hieroglyphs in only very roughly contiguous chains. Larger formal considerations restricted themselves to varieties of the “contrast principle” or else to imposing quite arbitrary standard text-book forms onto resistantly neo-expressionist materials. At the time, I

had been working for some years with the idea of “parametric polyphony” I mentioned in connection with *Unity Capsule*: in that piece the overt multi-stranding of articulatory qualities was pretty much carried on the surface as a sort of formal carapace, so the ultimate sound result was clearly synthetic in nature. More recent pieces had moved away from that position, partly because I was writing more ensemble pieces where that approach was less appropriate. Nevertheless, the approach remained the same, in that individual gestures were still made up of articulatory particles which, in principle, retained the status of free radicals.

*This change in your music has been described by Toop: “... The structural processes which were once articulated at surface level by the different kinds of playing techniques have now sunk down to various levels below the surface, so that the music itself becomes, to some degree, the ‘sediment’ of these processes.”*¹⁸

That’s so. In some forms of total serial practice, a (in my view largely just) criticism was that the serially-generated intersection of parametric strands produced a sound object which in no way clearly reflected the ordered nature of these same strands: the polyphony was generationally virtual whilst remaining perceptually latent. In my own recent pieces, I’ve tried to bypass this problem by allowing the individually manipulable parametric strata to begin life authenticated by means of functional embedding in a concrete gestural context. I invariably envisage a sonic event as fluctuating between two notional poles—that is, its immediate, identifiable, gestural gestalt, and its role as a launching pad for the subsequent establishment of independent linear trajectories of the gestalt’s constituent characteristics. The specifically figural aspect of an event is thus the degree to which these parametric quanta render themselves obviously amenable to such separation, extension, and re-combination in later constellations. Clearly, under such circumstances, it’s not useful to restrict oneself to the “traditional” parameters; I myself treat anything as a parametric variable that (a) can be quantified sufficiently consistently as to permit stepwise modulation and (b) is a clear enough component of its parent gestalt to ensure its adequate perception in later contexts. Whereas, in earlier pieces, the sonic events were resultants of independent parametric modulation, my more recent efforts have been concentrated on precisely the opposite, i.e. the definition and deployment of linear-polyphonic sound-qualities such as initially arise from fully composed-out events. This has the advantage of being able to exploit the ambiguity inherent in the object/effect dichotomy; parametric lines of force can be clearly perceived as infecting, damaging, or reconstituting their carrier vehicles. The opening of my Second String Quartet is perhaps a particularly clear example of this technique,¹⁹ (Example 6) but many of the works from the *Carceri d’invenzione* (1981–86) cycle would do just as well.

Your notion and handling of parametric composition appears to be much more

String Quartet NO.2

Brian Ferneyhough

The musical score for the beginning of String Quartet No. 2 by Brian Ferneyhough is highly complex and detailed. It includes the following elements:

- Violin I (solo):** Starts with a tempo of $\text{♩} \text{ca. } 70$ and a *furioso* marking. It features rapid sixteenth-note passages with dynamic markings ranging from *sfz* to *fff*. Performance instructions include *al. rall. n. v.* and *sub. subito*.
- Violin II:** Enters with a tempo of $\text{♩} \text{ca. } 56$. It includes *sub. sempre sul tasto* and *sempre sul tasto* markings, along with dynamic markings like *pp* and *ppp*.
- Viola:** Enters with a tempo of $\text{♩} \text{ca. } 70$. It features *al. rall. n. v.* and *sub. subito* markings, and dynamic markings such as *mp* and *mf*.
- Violin I (second system):** Features a tempo change to $\text{♩} \text{ca. } 82$ and *accet. sempre* marking. It includes *modo ord.* and *gliss.* markings.
- Violin I (third system):** Features a tempo change to $\text{♩} \text{ca. } 70$ and *rall.* marking. It includes *modo ord.* and *mult. aprivative: legge pas.* markings.
- Violin I (fourth system):** Features a tempo change to $\text{♩} \text{ca. } 70$ and *ancora furioso* marking. It includes *ff* and *mf* markings.
- Violin I and II (fifth system):** Features a tempo change to $\text{♩} \text{ca. } 70$ and *uguale* marking. It includes *ff* and *mf* markings.
- Violin I and II (sixth system):** Features a tempo change to $\text{♩} \text{ca. } 82$ and *rall. molto* marking. It includes *sub. subito* and *ppp* markings.

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EXAMPLE 6: STRING QUARTET NO. 2 (BEGINNING)

sophisticated and highly evolved than that of composers who steadfastly cling to "orthodox" serial principles. On the other hand, I also find the physicality of your way of thinking attractive; for example, you've spoken of sounds as "solid things" which can be "bent, twisted, ripped open, and scratched."

I'd like to turn briefly to a question related to one asked earlier. I've witnessed numerous listeners, after hearing your music, ask themselves and others "Am I really expected to absorb everything that's going on?" How do you respond to this?

I'd hesitate to suggest that my approach be more "sophisticated" than some serial tendencies; it's just that personal priorities—the sort of information that one imagines sound to be able realistically to convey—inevitably differ. The sort of presumptions one makes as, for example, to the relationship between smallest compositional building-blocks and smallest aural unit reference conspire to create wholly different evaluational models. Some people start with a very central awareness of absolute pitch identities; I myself prefer to exploit the ever-changing field of forces created by the opposition of pitch and interval. These things are important and need somehow to be conveyed at an early stage of a work's audition.

The orientation which each composer, each composition sets out to subliminally propose naturally has a vital influence on the sensitive listener's concept of "thingness." If we talk of "everything" we are begging a lot of questions. Most Western art music has been based on the assumption of structural priorities, things that are more or less important on various direct or indirect levels of perception. The lack of expectations dogging a lot of contemporary music in this respect plus, perhaps, the experience of more literal-minded species of twelve-tone thinking, has indirectly engendered an odd egalitarianism in which an event ceases effectively to exist if it is not projected onto the same two-dimensional, high-gloss screen as everything else. Was it Richard Strauss who once, when told that a certain instrument couldn't be heard, replied "Maybe, but I'd notice if it were *not* there?" Much the same could be said, I expect, for a lot of secondary strata, in that perhaps it's not so much their physical presence which is contributive at any given moment as their providing of pre-planned points of structural coincidence with other processual areas, points where things suddenly "click together" without us always being precisely aware of what it is that's doing the clicking. "Hearing" inevitably relies for much of its effect on anticipation, for slotting stimuli into provisional frameworks, at least some of which must clearly be suggested by the piece itself if it is to lay plausible claims to both coherence and individuality.

I was once asked if I could "hear" all the notes and rhythms occurring in a single beat of the large orchestral work I mentioned some time ago. The very formulation of the question seemed to me to underline how little of what was going on had been "heard" by my interlocutor, since his approach eliminated *a priori* all aspects of causality and musical consequence, identity of line, instrumentation and consistency of texture—everything, in short, that made the passage in question what it was. Process, after all, is nothing less than a slanting object! In such a case, are we listening to everything at once? In one sense, yes, in another, no.

All this leads to the major issue of *knowing what's important*. If you don't want to re-vamp musical styles where these problems are pre-digested you have to be constantly weighing-up your personal developmental history in the context of a clearly defined stylistic continuum. Something that starts life in a given piece as an incidental detail or embellishment might, in the next piece, assume the status of a core material or concept; still further down the road, it might have become so widely disseminated throughout the fabric as to have, in effect, dematerialized, been elevated to a higher organizational level, become capable of assuming characteristics of or regulating groups of otherwise discrepant elements. It's largely thanks to the step-by-step development of the language that the listener has a chance for a wider perspective, for what is "audible" in a more comprehensive sense.

For me, one of the most illuminative observations regarding your music was Jonathan Harvey's comment:

However closely you listen to the details of these works there is a structure of roughly the same degree of sophistication as that which plans the large-scale events. You can focus in and out at will, and with greater familiarity contain all focussing in the one integral perception.²⁰

Jonathan's remarks remain one of the most perceptive (and earliest) approaches to my music, and what he says is very relevant. Still, though, I should perhaps emphasize that the sort of focussing he is talking about does not imply the consistency of structural correspondence or quantification on all levels (as, for instance, in some of Stockhausen's later total serial essays). My experience has been that attempts to maintain absolute consistency from top to bottom run quickly foul of the nonlinear mutation of psycho-acoustic propensities in the listener. It's better to resort to overlapping and intersecting systems of approximations, where common principles are modified to take account of the constraints of the layer of activity being treated. This permits more readily the sort of layer-transfer I am looking for than any literal mirroring of technique or proportion would guarantee (even though this is certainly not excluded). The mind is a wonderful analogical instrument, and I try to operate with this fact constantly in mind.

John Cage has suggested that the artist could do worse than imitate Nature in the mode of her operations. I concur, although the conclusions I draw probably couldn't be more different. When I speak of "life and death cycles" of materials, I'm implying that there's a definite correlation between the way a living organism extends itself, mutates in time, and the multiple narrative strands of a piece of music. I'm not really interested in an *imitatio naturae* as a processual injunction; I find it far more interesting to reflect Nature back to herself via distorted mirrors, to allow her to re-enter via my own reactions to the arrays of constraints and opportunities I set up in advance.

What other suggestions might you offer to listeners who are approaching your music for the first time?

Try and remember that, no matter how strange or daunting, no music stands alone in the world. There may be no genre-dictated norms of expectation satisfaction; anything that remains is a valid approach, no matter from what apparently distant domain of experience it may come. Works of art act, in some deep sense, as “meaning-magnets;” they should embrace, not thrust away, the personal perceptions of the listener—which is not to suggest that this is necessarily a pleasant sensation for the latter, or that they should achieve this by means of some spurious pretension to immediacy! Often, we shove things into categorical shoe boxes precisely in order to avoid the weird, perhaps frightening, feeling of sacrificing-up some integral part of ourselves to an alien environment in order that we subsequently receive it back again, enriched and re-articulated. There’s no guarantee of that, of course, which initially makes the whole transaction so seemingly onesided. Ambiguity—or, rather, the constant awareness of ambiguity—is always something that my music presupposes: embrace it, but *not* uncritically. One should not hesitate to make instantaneous decisions as to listening direction; at the same time, though, every attempt should be made to retain the sensation of multiple realities which the layerings of process and texture provide. Musical logic is not necessarily based on an exclusive “either-or” but on an inclusive “both-and.”

And then, get to hear the piece again!

You’ve taught composition for a good number of years throughout Europe and, more recently, in the United States. What are your feelings with regard to the role of the composition teacher?

Some years ago I wrote that “composition” is a subject perpetually in search of a content. What once was traditionally counted as composition has experienced something of a partition since the Second World War, with much of its previous content being siphoned-off towards theoretical disciplines. There are plenty of people who regret this; I myself don’t necessarily see its lack of precise definition as a bad thing. Why should it be wrong for the methodology of a creative discipline to reflect, to some extent, the natural flexibility and open-endedness of the activity itself? Composition teaching does well to be constantly in a state of self-critical evolution, especially in the university, where the natural infrastructural pressures towards conformity are more intense. Of course, I’m talking primarily here of advanced instruction; in Europe there’s a lot less of the sort of basic bread-and-butter composition course that is characteristic of university situations here, largely because composers are, in general, less bound to the successive steps of the academic career path than in the States. People tend to come to formal instruction later, when they have already produced a certain body of work, and the vexed question of style-bound or style-free teaching is moot.

For me, teaching is essentially reflecting and amplifying back to a student a coherent articulation of what he wanted to do in the first place. In that sense it's a passive role. The most important thing that one can teach, I think, is the capacity for consistent self-criticism, for asking the right questions of oneself and one's materials. One's questing and probing during the lesson thus has an exemplificatory function in respect of long-term development as well as affecting the specifics of the piece at hand. I've had frequent occasion to observe how very difficult it is for a younger composer to maintain this ruthlessness of productive critical reflection as time and circumstances change, and the individual is taken up by the new music media. It's for that reason that I regard the study period as one of nurturing and protection; I've usually required of my students, for instance, a two or three-year period during which they agree not to undertake any sort of "career-building"—competition participation, commission-seeking, self-advertisement—without my express permission. This is by no means to exert authority, but rather to permit the undisturbed development of those inner forces which will serve a composer his entire life long. Again, it's a different situation here; I'm not convinced that it's appropriate or even practical to impose such restrictions in an American context, where the early accumulation of performances and different types of distinction is an important factor in ensuring later opportunities.

In this country there seems to be an ongoing controversy as to the respective efficacies of style studies and "free composition" in the formation of a composing personality. While I am certainly in favor of mastery of the tools of historically defined and codified theoretical practice, I am firmly opposed to any attempt at organized imitation of person-specific languages—Bartók, Hindemith, or whomsoever. There is a vital distinction between the deployment of means from closed areas of reference (species counterpoint, four-part chorales) and the adoption of vocables or technical conventions which a particular individual has created out of the accidentalia of his own life circumstances. That we all, to some extent, are influenced by other musics is banally clear and by no means unhealthy; that seems to me quite distinct, however, from sitting down to consciously expropriate or extrapolate from another composer's thought-patterns. Style is the product of compositional activity, not its presupposition. The vast majority of composers certainly carried on *traditions* in the sense of learning their trade within the framework of the composing practice of their immediate forebears—usually their teachers; to some extent that is understandable and legitimate. It strikes me as distinctly dangerous, though, to be encouraged to scan around for some biographically-specific practice or other that happens to be simpatico. One can surely learn a tremendous amount about handiwork by analyzing in detail examples of any and every style and genre; where I part company with the advocates of style study composition is in

the legitimacy and ultimate usefulness of actively creating within the delimited field of concerns artificially defined at the moment of a composer's death. At the same time it's necessary to expose a pupil to as many stimuli as possible in this respect, as long as stylistic questions are dealt with from the perspective of historical linguistic embeddedness.

Boulez has written:

*What is in fact taught at a conservatory? A certain number of traditional rules, very limited in date and geographical provenance; after which any student wanting to enter the contemporary field must, as it were, jump with a miniature parachute, taking his life in his hands. How many are brave enough to make that jump? And how many feel strong enough?*²¹

You've already spoken of the abuse and misuse of conservatory technique on the part of certain performers. What would you recommend as a corrective action, one that could initially be implemented by instructors within the conservatory?

It's difficult to change things in most conservatory situations because the conservatory is seen as the feeder for the major components of the prevailing culture industry. It's dependent on the latter, so it can scarcely be expected to deviate significantly from long-established industrial standards and norms if it wants to keep its customers. It's *supposed* to "conserve." Basic exposure to new music is an essential prerequisite, naturally: unfamiliar techniques need to be understood in terms of their function as well as their means of production, so extensive ensemble interpretation of twentieth-century works should be mandatory beyond a certain proficiency threshold. No more grand isolation with Beethoven's Violin Concerto in some cubby hole, plus nominal participation in orchestral sessions dedicated to "repertoire" generally stopping dead after 1945, sometimes after 1910. Even if there be a significant contradiction built into the notion of a prevalingly critical, disbalancing role for contemporary creative production being made plausible to young people aiming at rapid entry into the "system," there must be a *via media* which would prevent the galloping erosion of opportunities for thoughtful exposure to a representative selection of current compositional practices. This is not a problem limited to the States—one frequently encounters students in European conservatories who actively avoid contact with contemporary music because of the opposition of their instrumental professors to their participation, apparently because it will "ruin their technique." Their technique for *what*?

Turning to another topic of controversy: you've been involved with various aspects of electronic music over the years, and you've worked at IRCAM. What are your feelings with regard to the medium?

Extremely ambiguous, to say the least! I've never composed a piece just

for tape, for instance, but always with live instrumental participation. My researches at IRCAM were dedicated to real-time computer/instrument interface situations where the input of the instrument would modify various aspects of the precomposed computer materials.

Were you working with the 4X machine?

Actually, I was at IRCAM just before the 4X was introduced. One of the problems which led me to abandon my project was the reorganization made necessary in the wake of that change. It would have meant beginning practically from scratch, and I felt unable to justify the time commitment at that juncture.

My only other major effort in the field was my *Time and Motion Study II* for cellist and live electronics, in which the all-enveloping electronic set-up might well be seen as some sort of punitive cage within which the performer—singing, speaking, operating two foot pedals, reacting under intense pressure to the delay systems' reactions to her—is being confined.²² I've always felt myself constrained to subvert the obviously "effective" exploitation of the medium in one way or another. For instance, in the cello piece I was primarily concerned with the nature of memory—the way it sieves, reorders or obliterates layers of experience in order to build a viable future out of a fictional past. There are several assistants who, reading from the score, filter and modify, eliminate and overlay characteristic fragments of the cello's discourse. These twisted fragments are then fed back into the total texture to disturb or undermine the linear rhetoric, sometimes singly, at other points fed in in massed and tangled block sonorities. The compositionally most elaborate sections of the piece are sonically manifested almost exclusively by means of the amplified sounds of fingernails scraping at various speeds along one or more strings (Example 7)—an interesting "scorched earth policy" of lyric expression—and the final violent moments of the cellist's attempts to assert a "voice" are drowned out by a pre-recorded tape overlay of noise elements from earlier in the work, now ripped absurdly out of context. As the title implies, that series of works was setting out to investigate the concept of "efficiency" as related to aesthetic evaluative criteria—almost an absurd undertaking in itself, but closely related to some of the points we were making earlier concerning performance technique and real or perceived difficulty of execution and perception.

I note that my pupils seem to have no such reservation with the electronic medium, particularly in the field of computer composition: whether I will ever feel impelled to turn in that direction once more remains to be seen. If so, I am sure that it will be from a comparably ironic or subversive standpoint to earlier years. There is little likelihood that I will ever shift the emphasis of my activity away from the live performer.

You described your most recent work involving electronics, Mnemosyne for bass

6
♩ = 36 "Adagio maestoso"

1.52 → 1.46 → 1.42 → 1.36 → 1.32 →

ansura, poco rall.

Take bow rapidly

Stop

**[153] R.H. slide with thumb up
to 4th string, at the same time
pick up 2nd string with right hand.
Then pick up 3rd string with right
hand using the upper bridge and pick
up 4th string of C.V.**

**[154] Four part polyphonic plucking (each string
one finger), where plucks are overlaid, see
general introduction.**

**[155] Four part polyphonic plucking (each string
one finger), where plucks are overlaid, see
general introduction.**

Violin I
Violin II
Viola

cello

EXAMPLE 7: Time and Motion Study II

*flute and tape (Example 8), the final work of the Carceri d'invenzione cycle, as " . . . an amplification; a densification of the techniques that until that point had been treated in the cycle."*²³ *How did you achieve this result? What role did the tape, and its interaction with the live flutist, play?*

What I was aiming at through the confrontation was a reintegration of metric and harmonic patterns of order. The tape part consists entirely of chordal sequences initiated always and only at the downbeat of each measure, thereafter generally remaining immobile. The chordal materials were derived from the eight-chord sequence underlying almost the entire *Carceri* cycle. The sounds on the tape are invariably electronically unmodified bass flute sonorities; the soloist co-ordinates his more complex activities with the tape by means of a click track. The latter enabled me to employ "irrational meters" such as 3/10, 5/24, etcetera and to modify tempi in exact proportional relationships.

The pitches of the solo part are either (a) the same as those appearing on the tape or (b) pitches related to these latter by a limited, constantly evolving set of secondary intervals. At the beginning of the piece the number of notes on the tape is very small, while the number of secondary intervals in the solo part very large; in consequence, the tape sounds very much like some atrophied, ethereal cantus firmus. As the work progresses, the density of pitches in the bass flute diminishes, whilst that in the tape increases, effecting a sort of "cross-play," an exchange of perceived physical presence, weight, or whatever. The effect is interesting in that the slow unfolding of the chords creates a very particular temporal tactility whilst the increasingly obvious web of referential restrictions imposed on the maneuverings of the flutist generates quite another sense of physicality.

Mnemosyne has actually been played in a realization for nine bass flutes, by Pierre-Yves Artaud in the Centre Pompidou in Paris. The effect was far more transparent, the micro-variations in each long-held note more immediately audible by reason of the spatial distribution of the sound sources.

Would you mind speaking about your more recent works? Do you think that your compositional concerns have been undergoing major changes of late?

It's certainly the case that moving to California has changed something in the dynamics of how I approach the compositional act: whether that will have an audible effect on my subsequent production I can't tell as yet. As far as I am aware, the things I have been doing follow directly out of what I had concerned myself with immediately before leaving Europe, in particular the matter of the musical object and its processual manifestation.

In 1988 I completed a piece, *La Chute d'Icare*, for performance in the Strasbourg Festival, which addressed this issue head-on. There is an obbligato clarinet part (written for Armand Angster, the excellent Strasbourg clarinetist) placed against a small chamber ensemble. Both parties begin the work with essentially the same, quite primitive material,

The image displays a complex musical score for a piece titled "Mnemosyne". The score is written for piano (piano) and strings. It consists of several systems of staves. The piano part includes a grand staff with treble and bass clefs, and a separate staff for the right hand. The string part includes staves for Violin I, Violin II, Viola, and Cello/Double Bass. The score is marked with various dynamics such as *pppp*, *p*, *mf*, *f*, and *pp*. There are also performance instructions like "concer. più libero" and "rit.". The score is divided into sections, with the first section labeled "HO retorico" and the second section labeled "DE". The score includes many musical notations such as notes, rests, and articulation marks.

EXAMPLE 8: *Mnemosyne*

consisting of invariant ascending and descending modes (Example 9); the entire first section of *La Chute* is concerned with eroding both this extremely hard-edged situation and with dissolving the heterophonic complicity which initially binds the solo player and the ensemble together (in that the latter simply echo the undulating riffs of the former at a slower, irregularly octave-transposed rate). It is as if the entire processual build-up to this extremely naked state has been composed, and then violently suppressed. Deprived of its generational grounding, the modal “object” cannot but commence a gradual but irreversible decay, the soloist in one direction (leaping over different groups of intervals, microtonal inflections, etcetera), the ensemble (modifying rate of heterophonic distortion, number of pitches sounding on, tendential linear modification of ancillary string textures, microtonal pitch deviations, etcetera) in one or more others. It is as if the object had been gradually “wiped over” (*pace* the paintings of Francis Bacon), become threadbare and perforated. In so doing, other, smaller objects and states become visible “below the surface,” gradually coming to take over the action. It was quite something for me to decide to point up the issue at stake in such a blatantly obvious fashion (especially so in view of the piece’s subtitle “Little Serenade of Disappearance”).

In a recent conversation you once again made use of the term “labyrinth” when referring to the 137-bar rhythmic scheme which, overlapped and canonically treated, forms the basis of La Chute. Why does this notion appeal to you?

We shouldn’t *always* capitulate to the urge to explain away our basic drives, images, and predilections! The symbol of the labyrinth is too deeply embedded in our collective consciousness for me to claim any personal proprietary rights. All of life is a maze; no one can see where the next turning will lead, even though we can—and do—make educated guesses. That’s what consciousness is about, surely? All creativity is essentially mysterious, and all answers to the Sphinx’s riddle orbit around the anthropocentric dilemma. The various mannerist periods of European music history have understood very well how invention and artifice are inextricably and ecstatically intertwined; I find much to identify with in the concerns manifested in such styles.

Since the completion of *La Chute*, I have finished *Kurze Schatten II* for solo guitar, something begun several years ago. In it I return to the miniature form which has always attracted me, attempting to locate the musical events at the precise and brilliantly blinding intersection of form and substance. This intention is suggested in the choice of title, which is taken from aphoristic writings of Walter Benjamin in which the author speaks of the uttermost reality of the object revealed as the sun progressively wipes away the shadows in its approach to its noon zenith. It was extremely challenging to work with the guitar, especially in view of the generally brusque violence of my vernacular: I had to seek gestural areas which

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Brian Ferneyhough
1988

La Chute d'Icare
Poète Sévère de la Disparation

♩.56

Clarinet

Flute

Oboe

Vibraphone
Marimba

Piano

Violin

Cello

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EXAMPLE 9: *La Chute d'Icare*

were amenable to collecting and explosively releasing energies “in miniature,” rather analogous to the violent *effect* (but factually low *amplitude*) of a very pronounced flute key click. Talking earlier of the compositional integration of performance technique: these seven pieces are played with a three-string scordatura. At the conclusion of every second piece one string is retuned to normal, so that by the seventh movement only one string (B4) is still detuned (to Bb). The narrowing-down process continues, in that the final section of the work is a tiny fantasy utilizing exclusively that string (Example 10).

EXAMPLE 10: *Kurze Schatten II* (CONCLUSION)

My Third String Quartet addresses this object/process dichotomy perhaps even more extremely, in that two movements stand starkly opposed, unmediated, one of them essentially composed of a series of more or less well-defined objects continually being recombined, the other a totally linear, process-oriented mirror image of the first in which transformation comes much more clearly to the fore. Despite the vast gulf which separates them, both movements have their origin in one and the same precompositional disposition of periodic, metric and rhythmic patterns.

Most recently, I've been busy with a string bass solo piece, *Trittico per Gertrude Stein*, which pursues several satellite concepts in the field of large-scale rhythmic confluence and interference. There is still a lot to be done there, I think.

One final, difficult question: in your opinion, what role does (or should) contemporary art play in our society?

I'm not sure I can answer this, nor am I sure that a straightforward statement would even begin to accurately reflect the contorted complexities

of the situation. It's clear that there are as many views on this as there are composers! The *actual* role of contemporary music in society at large is, of course, peripheral in the extreme. There is nothing particularly wrong with this unless quality equals numbers, even though we'd all like more listeners, of course. By its very nature, a critical art form will be thrust into the position of a tolerated irritant by the vested interests of a Consensus Society; it assuages chronic bad conscience among those who are aware that something is very badly wrong but are unable or unwilling to distance themselves from the prevalent entertainment ideology imposed by increasingly onerous media constraints. I myself view the growth of mega-corporative communications networks as something of a blessing in disguise, in that anything which doesn't fit into their acceptance patterns will fall between the cracks into the spaces beneath and, in clear opposition, may flourish once more with a sense of mission. The idea of attempting to grapple the odd fifteen-minute slot for contemporary music on some satellite channel is grotesque in the extreme and, in my view, misses the opportunity completely.

On the more positive side, I believe that new and challenging aesthetic approaches *are* still possible and represent one of the very few open spaces, in increasingly over-developed Western society, for a resensibilization to the possibility of the "total individual" beyond the manipulative splintering of our social selves which is turning us increasingly into sleepwalking jugglers. Whether the individual work of art is still capable of achieving such momentary reintegration is unclear, but at least it can aim at making us vitally aware of the utopian possibility.

The whole *raison d'être* of much of twentieth-century art has been to shatter the vessels of received wisdom (including its own!); it would be a great tragedy if the open-ended, imperfect project of critical aesthetic thinking were to decay by reason of well-meaning but inappropriate appeals to external evaluative norms.

NOTES

1. Harry Halbreich, jacket notes to Stil 3108–S–83, “Brian Ferneyhough rencontre Pierre-Yves Artaud.”
2. The Arditti Quartet plans to release a recording of Ferneyhough’s three string quartets on CD.
3. For a description of some of the compositional techniques used in *Unity Capsule*, see Brian Ferneyhough, “*Unity Capsule*: un journal du bord,” *Contrechamps* 8 (1988): 139–48.
4. See footnote 1. This recording contains two versions of *Unity Capsule* and three of *Cassandra’s Dream Song*.
5. Kurt Stone, “Problems and Methods of Notation,” *Perspectives of New Music* 1, no. 2 (Spring-Summer 1963): 30. (Reprinted in *Perspectives on Notation and Performance*, edited by Benjamin Boretz and Edward T. Cone [New York: W.W. Norton and Co., 1976], 30.)
6. Ferneyhough’s notes read as follows:

This work owes its conception to certain considerations arising out of the problems and possibilities inherent in the notation—realisation relationship. The choice of notation in this instance was principally dictated by a desire to define the quality of the final sound by relating it consciously to the degree of complexity present in the score. The piece as it stands is, therefore, not intended to be the plan of an “ideal” performance. The notation does not represent the result required: it is the attempt to realise the written specifications in practice which is designed to produce the desired (but unnotatable) sound-quality.

A “beautiful,” cultivated performance is not to be aimed at: some of the combinations of actions specified are in any case either not literally realisable (certain dynamic groupings) or else lead to complex, partly unpredictable results. Nevertheless, a valid realisation will only result from a rigorous attempt to reproduce as many of the textural details as possible: such divergencies and “impurities” as then follow from the natural limitations of the instrument itself may be taken to be the intentions of the composer. No attempt should be made to conceal the difficulty of the music by resorting to compromises and inexactitudes (i.e. of rhythm) designed to achieve a superficially more “polished” result. On the contrary, the

audible and visual degree of difficulty is to be drawn as an integral structural element into the fabric of the composition itself. (Brian Ferneyhough, introductory notes to *Cassandra's Dream Song* [C.F. Peters Edition])

7. Brian Ferneyhough, jacket notes to Stil 3108–S-83.
8. Herman Sabbe, “A Logic of Coherence and an Aesthetic of Contingency: European versus American ‘Open Structure’ Music,” *Interface* 16, no. 3 (1987): 182.
9. *Ibid.*, 182.
10. The form of *Cassandra* is a direct result of the interpenetration of two different musical structures, one being fixed in sequence and “directional,” the other being variable in sequence and “nondirectional.” The score of the work consists of two sheets: the first contains six sections of music, labelled 1 through 6, and the second contains five sections, labelled A through E. Ferneyhough’s instructions regarding the manner in which the contents of the two sheets are made to interpenetrate are as follows:

The six numbered sections (1–6) on sheet one must be played in the given numerical order. The piece therefore invariably begins with 1.

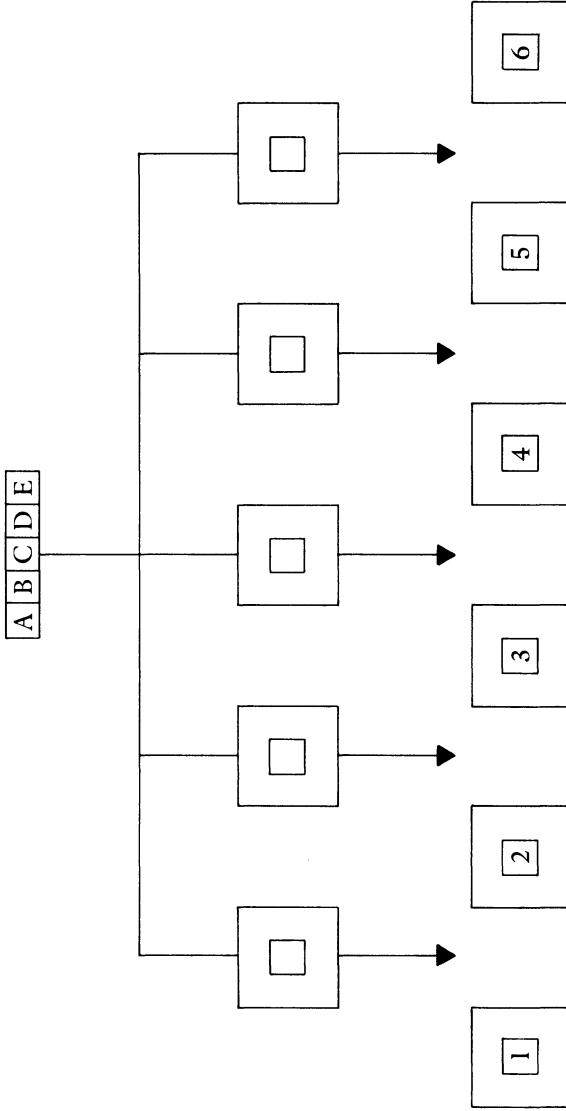
In between each of these sections is interspersed one of the other of the five sections (A–E) to be found on sheet two. These may be played in any order.

The piece thus ends with 6 on sheet one.

No section may be played more than once.

One immediately deduces that, firstly, a realization of *Cassandra*, revolving around the placement of the five variable elements within the fixed structure defined by the six numbered sections, will yield an alternation between the two types of material, as depicted in Example 11. This regular fluctuation proves to be both an important structural element and a dramatic feature which adds an element of predictability that tends to balance the indeterminate aspects of the mobile scenario. Secondly, because of the denial of sectional repetition, no section may be omitted. Thus, the interpreter is immediately limited to a total of $5! = 120$ possible permutations of the five variable elements. We therefore avoid the difficulties characteristic of works which contain both “obligatory” and

VARIABLE STRUCTURE
(SHEET TWO)



FIXED STRUCTURE
(SHEET ONE)

EXAMPLE 11: *Cassandra's Dream Song*

section 2 (from sheet 1)

section C (from sheet 2)

EXAMPLE 12: *Cassandra's Dream Song*

Order of groups 1-4 free.
Dynamics variable between ppp and fff

“optional” passages, the latter being viewed by many as being “functionally indispensable to the essential cycles of the narrative” (Robert Black, “Boulez’s Third Piano Sonata: Surface and Sensibility,” *Perspectives of New Music* 20 [1981–82]: 189) of such a piece, and therefore mandatory.

The listener, in confronting a performance of *Cassandra*, is greatly aided by the fact that each sheet of music possesses its own distinctive sound quality: for example, sheet one gravitates around and strongly emphasizes a single pitch, A 440 Hertz, while sheet two typically avoids this pitch (Example 12). This extremely clear differentiation of basic material is reminiscent of Boulez’s distinction between “points” and “blocs” in the “Constellation-Miroir” formant of his Third Piano Sonata.

The overall result of these concerns is a “directional” work, one which is easily recognizable from one performance to the next despite the presence of the mobile sections.

11. Pierre Boulez, *Boulez on Music Today*, translated by Susan Bradshaw and Richard Rodney Bennett (London: Faber and Faber, 1971), 115.
12. *La Terre* was commissioned by the British Broadcasting Corporation and was premiered on 20 September 1979 at the Musica Nova Festival in Glasgow, Scotland by the Scottish National Orchestra conducted by Elgar Howarth. Ferneyhough has commented:

Over the years I have developed a “nose,” I think, about what is likely to stimulate me and what not. Sometimes other works of art (usually not music) have acted as catalyst, not directly leading to the piece, but acting as focus points for the collecting and ordering of all sorts of fragmentary impressions, speculations and so on. One of these was the Matta painting *La terre est un homme*, which served this purpose on several levels at once, such as the actual configuration of the elements, the title and its implications, and the sort of surreal animism that lends the painting its specific life. (Paul Griffiths, “Interview with Brian Ferneyhough,” *New Sounds, New Personalities, British Composers of the 1980s* [London: Faber and Faber, 1985], 78)

13. The *Carceri d’invenzione* cycle consists of seven works, and totals approximately 1 ½ hours in duration. (The title, taken from the well-known series of etchings by Piranesi, is yet another example of Ferneyhough’s being influenced and stimulated by the visual arts.) The constituent works are:

Superscriptio (1981)

Carceri d'invenzione I (1982)

Intermedio all ciaccona (1986)

Carceri d'invenzione II (1985)

Études transcendantales/Intermedio II (1982–85)

Carceri d'invenzione III (1986)

Mnemosyne (1986)

The first complete performance of the cycle was given on 17 October 1986, at the Donaueschingen Music Days.

14. Karlheinz Stockhausen, cited in Jonathan Cott, *Stockhausen: Conversations with the Composer* (London: Picador, 1974), 35.
15. Richard Toop, "Lemme-Icone-Epigramme," translated by Daniel Haefliger *Contrechamps* 8 (1988): 86. Original English text in this issue, below.
16. John Cage, "Two Statements on Ives," in *A Year from Monday* (Middletown, CT: Wesleyan University Press, 1963), 42.
17. Brian Ferneyhough, "Form, Figure, Style: An Intermediate Assessment," *Darmstädter Beiträge zur Neuen Musik* 19 (1984): 64–65.
18. Richard Toop, "Ferneyhough's Dungeons of Invention," *Musical Times* 128 (no. 1737) (1987): 624–25.
19. For details, see Brian Ferneyhough, "Deuxième quatuor a cordes," *Cahier Musique* 1 (1980): 1–5. Reprinted in *Contrechamps* 8 (1988): 149–62.
20. Jonathan Harvey, "Brian Ferneyhough," *Musical Times* 120 (no. 1639) (1979): 725.
21. Pierre Boulez, "The Teacher's Task," in *Orientations*, edited by Jean-Jacques Nattiez, translated by Martin Cooper (London and Boston: Faber and Faber; Cambridge: Harvard University Press, 1986): 119.
22. *Time and Motion Study II* is the second in a series of three works, the first being a piece for solo bass clarinet, and the third being a piece for sixteen solo voices with percussion and electronics. An additional comment reads:

... The very complexity and nature of the instrumental/electronic layout will almost certainly induce associations with with extra-musical events (i.e. capital punishment practices of various national varieties ...) which, whilst not entirely unwelcome, are not in any way to be boosted onto a level of importance equal to that represented by the purely musical substance. (Brian Ferneyhough, introductory notes to *Time and Motion Study II* [C.F. Peters Edition])

23. Richard Toop, "Brian Ferneyhough in Conversation," in *Ferneyhough: Carceri d'invenzione* (London: Peters Edition Ltd., 1987): 11.

CHRONOLOGICAL LIST OF
COMPOSITIONS BY BRIAN FERNEYHOUGH

<i>year</i>	<i>title/instrumentation</i>	<i>duration</i>
1965	<i>Four Miniatures</i> flute and piano	6 1/2'
1966	<i>Coloratura</i> oboe and piano	7'
	<i>Epigrams</i> solo piano	7'
	Sonata two pianos	14'
1966–67	Three Pieces solo piano	15'
1967	<i>Prometheus</i> fl (picc), ob, ca, Bb cl (Eb cl), hn, bsn	23'
	Sonatas for String Quartet 2 vlms, vla, vcl	42'
1968	<i>Epicycle</i> twenty solo strings	15'
1969	Missa Brevis twelve solo voices	13'
1970	<i>Cassandra's Dream Song</i> solo flute	10'
	<i>Sieben Sterne</i> organ (2 assistants)	15'

1974	<i>Time and Motion Study III</i> sixteen solo voices (with perc. and electronics)	23'
1972–75	<i>Transit</i> six solo voices (with amplif.) and chamber orch.	45'
1975–76	<i>Unity Capsule</i> solo flute	14'
1973–76	<i>Time and Motion Study II</i> solo 'cello (with electronics, 3 assistants)	17–24'
1971–77	<i>Time and Motion Study I</i> solo bass clarinet	9'
1976–79	<i>La Terre Est un Homme</i> orchestra (101 players)	15'
1969–80	<i>Funeraïlles I and II</i> 2 vlms, 2 vlns, 2 vcl, cb, hp	23'
1980	Second String Quartet 2 vlms, vla, vcl	11 1/2'
1981	<i>Lemma–Icon–Epigram</i> solo piano	14'
	<i>Superscriptio</i> solo piccolo	5 1/2'
1982	<i>Carceri d'invenzione I</i> chamber orchestra (16 players)	12 1/2'
1983	<i>Adagissimo</i> string quartet	1 3/4'
1985	<i>Carceri d'invenzione IIa</i> solo flute and chamber orchestra (20 players)	14'
	<i>Carceri d'invenzione IIb</i> solo flute	10'

1982–85	<i>Études transcendentales/Intermedio II</i> fl (picc/af), ob (ca), vcl, hpsd, sop	27'
1986	<i>Carceri d'invenzione III</i> 15 wind instruments and percussion (3 players)	10 1/2'
	<i>Intermedio alla ciaccona</i> solo violin	7'
	<i>Mnemosyne</i> bass flute and tape	10 1/4'
1987	Third String Quartet 2 vlms, vla, vcl	18'
1985–88	<i>Kurze Schatten II</i> solo guitar	13'
1988	<i>La Chute D'Icare</i> solo clarinet and chamber ensemble	10'
1989	<i>Trittico per Gertrude Stein</i> solo double bass	6'
1989–	Fourth String Quartet 2 vlms, vla, vcl, sop	(in progress)

Note: with the exception of *Firecycle Beta*, which is published by Ricordi, all of the works listed above are available from Peters Edition Ltd., London.

A FERNEYHOUGH DISCOGRAPHY

<i>label</i>	<i>title</i>	<i>performer(s)</i>
RCA Red Seal RL 70610	Sonatas for String Quartet	Berne String Quartet
Decca Headline HEAD 18	<i>Transit</i>	London Sinfonietta/ Elgar Howarth, cond.
Musicaphon BM 30 SL 1715	<i>Time and Motion Study II</i>	Werner Taube
Editions Stil 31085 83	<i>Unity Capsule</i>	Pierre-Yves Artaud
	<i>Cassandra's Dream Song</i>	Pierre-Yves Artaud
RCA Red Seal RL 70883	Second String Quartet	Arditti String Quartet
IRCAM/Erato STU 71556; reissued on Erato ECD 88261	<i>Funerailles</i> , versions I & II	Ensemble Inter- contemporain Pierre Boulez, cond.
Wergo 60111	<i>Time and Motion Study III</i>	Schola Cantorum Stuttgart/Clytus Gottwald
Frequenz	<i>Lemma-Icon-Epigram</i>	Massimiliano Damerini
Bauer	<i>Superscriptio</i>	Carin Levine
	<i>Cassandra's Dream Song</i>	Carin Levine
Etcetera KTC 1070	<i>La Chute d'Icare</i>	Nieuw Ensemble Amsterdam/ Ed Spanjaard, cond.
	<i>Études transcendentales</i>	Nieuw Ensemble Amsterdam/ Ed Spanjaard, cond., Brenda Mitchell, sop.
	<i>Superscriptio</i>	Harrie Starreveld

	<i>Mnemosyne</i>	Harrie Starreveld
	<i>Intermedio alla ciaccona</i>	Irvine Arditti
Neuma CD 450.72	<i>Cassandra's Dream Song</i>	Pierre-Yves Artaud
Éditions Montagne (forthcoming)	String Quartets 1–3 plus <i>Adagissimo</i>	Arditti String Quartet
Attacca Babel 8945-1	<i>Time and Motion Study I</i>	Harry Spaarnay