Chapter Two

Facets of Complexity

2.1 Introduction

The diligent performer new to the repertoire will want to know something of the history of the genre and aesthetics of the individual composers. This information might directly influence their views on how to approach learning the works and lead to greater insight when considering interpretation. The accumulation of many such thoughtful performances over time might lead to a performance practice being established. Toop’s paper *Four Facets of ‘The New Complexity’* was the first paper to propose, or acknowledge, the new genre so it is essential to give précis of it as a foundation from which subsequent papers and events may be viewed.

As indicated in Chapter One, complexity in music was an issue for composers and musicologists for some time before Toop’s paper was published. The following section contextualises Toop's paper and gives a provisional definition of new complexity together with arguments as to why it is insufficient to contain the aesthetics of the composers that Toop chose as representative of the new genre. References to their compositions for the guitar will be made so as to provide specific examples of their views that will be of relevance to the case studies given later.

2.2 Defining complexity and new complexity

Complexity (in music) is a term that describes to some degree the intricacy of the composition of a work, the level of virtuosity and mental effort needed by the performer even to attempt an accurate rendition, and the means of representation
of these facets by means of a score. The term new complexity can therefore be seen as describing the work of a number of composers who had each developed their own responses to the complex musical structures of the modernist composers of the early 20th century by delving more deeply into the psychological effects on the performer (and ultimately, audience) of the attempts to discriminate ever smaller differences of rhythmic units, pitch relationships (including microtones) and instrumental idiosyncratic resources, often incorporated into larger scale musical forms, frequently via some formulaic quasi mathematical structure. The possibilities of musical material generated primarily from inherent notational potentials are the means by which such psychological material could be explored.

While the above definition catches the superficial aspects of the scores, it would probably not be accepted by any of the composers associated with it. Ferneyhough’s scores certainly evince these rhythmic subtleties but his music is not especially dependent on mathematical structures1. As will be seen from Toop’s interviews, if anything, Finnissy and Dench employ unusual rhythmic figuration to try to notate a flexibility and fluidity of interpretation and free the performer from a metronomically strict adherence to note values. By trying to define new complexity, there is a danger of selecting those features of each composer’s scores that fit and ignoring those that do not. Ferneyhough sees complexity as a technique and not a style (Ferneyhough 1995, 67) and has often silenced those who criticize his notational complexity by saying he simply has to write it that way (most recently repeated by Irvine Arditti (Arditti 2012)). When there is an alternative (for example a change of pulse rather than the use of a so called irrational rhythmic subdivision) he has quite rightly preferred his way of notation, seeing the conceptual compositional structure as primary.

There is also the historical dimension: each composer’s work has naturally developed over the decades. Restricting a study to the years shortly after Toop’s paper gives a narrow focus, enough to investigate the general concerns of the composers at the time, together (and perhaps contrasted) with the learning methods and performance practice of the performers associated with the first, early performances of the music. The development of Toop’s views over the
subsequent decades is also key to understanding the aesthetics of new complexity and consequently how performance practice has developed.

2.3 The new complexity composers and complexity

Each of the four composers cited by Toop in *Four Facets of ‘The New Complexity’* dismissed the idea of complexity for its own sake, with varying degrees of distress or even contempt. Toop quotes Dench:

> I think that ‘complexity’, as most people understand it, is a kind of hyper-intellectual teasing out of the skin of the music. O.K., that's great, except that you're not really offering complex music, you're just offering a complex process of generating it. (Toop 1988, 5)

And Finnissy says ‘It horrifies me that people say the music is complex. It isn’t, except in a very superficial detailed kind of way.’ (Toop 1988, 5)

As stated above, Toop’s paper was probably the first to examine new complexity as a putative musical genre. He begins by discussing the similarities and differences, both superficial and otherwise, between the four composers and remarks on their individual styles, attitudes to complexity, performability, use of microtones and attitudes to instrumental idiosyncrasies (for example, pianistic writing). For Toop, writing in 1988 (or shortly before), these composers, and the more senior Ferneyhough and Harrison Birtwistle (1934-), represented a possible new direction for modernism in British music which, as he saw it, was in decline because of the rise of postmodern influences – or the ‘New Capitulationism’ as he called it (Toop 1988, 4). He interviews each of the composers and analyses several of their works in some detail. He sees them as aesthetically uncompromising and intellectually secure, their works evincing an artistic integrity not always so obvious in their peers on the British new music scene at the time. It must also be remembered that while all these composers were relatively young in 1988 – Finnissy was 42, Dench 35, Dillon 38 and Barrett 29 – all had written many
substantial works and established their own attitudes to their own style and aesthetics. The interviews obviously represent their thoughts at the time and give a useful insight to their work procedures and views on the aspects mentioned earlier, thoughts they might not express in the same way today.

While Toop groups these composers together he is clear that none (at that time) had written scores as complex as Ferneyhough’s (Toop 1988, 5). Although he had mentioned Birtwistle earlier, Toop makes no further reference to him and it would appear that for him Ferneyhough is the leading figure. He notes the daunting appearance of the scores, the need for virtuoso techniques and the improbability of accurate performances ever being the norm. On the other hand, all the composers are clear that they are writing for performance and it would seem that in some respects the difficulties are superficial (for example the look of the score, whilst initially off-putting, might be less problematic once some effort has been made to understand it). Toop insists, however, that the visual, calligraphic element of their scores does not constitute any part of their musical aesthetics (Toop 1988, 5).

Barrett is optimistic that in time the difficulties will become ‘second nature’ (Toop 1988, 5). Dench is quoted:

I’m not interested in writing music that can’t be played – that’s stupid … it simply gives the player a hard time. You can only ‘stretch’ the player if you do something that is feasible but hard. (Toop 1988, 5)

Ferneyhough has castigated student composers for writing impossible instrumental requirements insisting that at the very least they ask another student performer if what they have written is playable. He has said he investigates the instrumental potentials of an instrument he is less familiar with in a visceral way to the extent he dreams about playing it (Sheridan 2005).

All these composers have written for the solo guitar and used the guitar in ensemble. It is clear that they have indeed made every effort to acquire an
understanding of what is practical and possible – even for a virtuoso player. Their errors are few.

2.4 Aspects of new complexity

Several issues seem prevalent. The idea of several simultaneous pulse streams is important; an idea that can be traced in its modern form back to Ives. For Ives though there was the idea of a collision of marching bands and the like – that is, a programmatic content. It seems doubtful that such simple representations are the impetus for modernist composers who are more likely to be looking for more abstract constructions. For Finnissy though, this is the way events in the world actually happen. He is: ‘trying to capture phenomena moving at different rates, to impose a rhythmic grid somehow on different kinds of metric pattern.’ (Toop 1988, 9)

And even more clearly:

things don’t move in regular 4/4 or 3/4 ; they move at all manner of rates – speeding up, slowing down, independently. I wanted to capture that excitement, that dynamic, kinetic quality. (Toop 1988, 9)

Such descriptive justification is not generally held. In discussing Dench’s Espérance, Toop notes the chains of periodic (note) values that ‘create a multi-layered tapestry of shifting pulse-rates (or ‘pseudo-tempi’) whose components are at least nominally perceptible.’ (Toop 1988, 21)

Finnissy’s rationale for using microtones is similar to his rationale for rhythmic complexity:

Busoni talks somewhere in one of the essays about melody being an endless curve which you fix the points on … one would need quarter
tones in order to fill in the more interesting kinds of shape. (Toop 1988, 6)

Toop comments ‘when Finnissy composes with microtones the expressive element is always very much to the fore, with the ‘lament’ styles of much Eastern European folk – music’ (Toop 1988, 6).

Microtones can therefore be used ornamentally, in the sense of colouring the melody and enhancing its expressive content, or as a huge augmentation of the available pitch resource. In this latter case, Toop notes the danger of acoustic incoherence in practice – especially given the performance standard to date (Toop 1988, 21).

Finnissy does not use microtones in Nasiye, his piece for the guitar written in 1982 but completely revised in 2002, which is a Kurdish folk dance. Whilst the lament style is very much part of this piece, the guitar can only use microtones in special situations such as a scordatura – which forces a similar pitch change on all the notes on the altered string – or by string ‘bending’ (pulling the string out of tune with the left hand) – which can be variable, less determinate and generally unreliable if a specific microtone, for example a 3rd tone, is required. It not surprising, therefore, that Finnissy declined to use microtones in this piece. The use of a microtonal retuning in guitar music is not unusual: Jonathan Harvey uses (what he calls) fifth-tone retuning, in his piece Sufi Dance for solo guitar and Ferneyhough uses the following microtonal retunings in Kurze Schatten II:

1st string: E quartertone flat (normally E)
2nd string: B flat (normally B)
5th string: B quartertone flat (normally A)
6th string: E, quartertone sharp (normally E)

(The 3rd and 4th strings stay at their conventional pitches (G and D) throughout but the three altered strings are returned, one by one, to their usual tuning after every second movement. At the end of the second movement the 6th string is returned to
E natural. At the end of the fourth movement the 5th string is returned to A natural and at the end of the sixth movement the 1st string is returned to E natural. At the end of the piece the second string remains at B flat – hence there is no remaining microtonal resonance.)

Toop notes that from 1987 (Toop is writing in 1988), Dench’s instrumental writing is ‘austere’ eschewing idiomatic effects (Toop 1988, 22). It is interesting to note that he uses many such effects in his guitar piece Severance (first written between 1988 and 1991 but completely revised in 1994).5

Compared with Finnissy and Dench, Toop’s interview with Barrett seems to be on a much more abstract level. (Toop states that Barrett was reluctant or hesitant to talk about the details of his compositional methods saying that, as his music was not very well known, he considered it might be ‘offputting’ (Toop 1988, 4).)

Toop sees Barrett very much as a ‘new voice’:

It seems to me, though, that since Anatomy, a new voice has emerged and it is a very striking one – wild, but hard-edged, using post Xenakis compositional strategies to recapture, amongst other things, some of the ‘chance encounters’ typical of the free improvisation in which Barrett has also engaged in as a guitarist. (Toop 1988, 31)

(That it is acknowledged that Barrett is, or was, a guitarist is important when considering his works for the guitar.) Toop goes on to discuss the literary influences (in particular, Beckett, Lautréamont, Flaubert) on Barrett’s music, and his view of music as ‘fiction’. Barrett describes his planning of his pieces as a matter of taking the ‘large scale’ decisions first and then distilling/focusing on several levels to achieve the final product (Toop 1988, 32). He elaborates the geological metaphor later when he says ‘it is important to me that a work is arrived at through a long period of excavation.’ (Toop 1988, 32)
In response to a question from Toop about his use of the computer to generate pitch sequences Barrett replies:

Well, that would depend on what one means by pitch sequences. Nowadays the pieces have a set of what I’ve called ‘virtual’ pitch material, which is by no means related to the pitches one hears, except by certain processes; it’s what is done with it that is important, and not the specifics. Once I’ve made the decision that the virtual pitch material will have certain characteristics, then those characteristics are mathematically generalised and run through the computer to produce one level of the piece, which is then worked on using processes that might be tangential to that. The mix between system and empiricism in the final result is so complex that it’s very difficult for me to figure out myself a lot of the time. Obviously that way of organizing the material has been arrived at as a result of generalising from the heard, psychological function of that passage, or piece, or whatever it happens to be. (Toop 1988, 32)

This might be an example of Dench’s view, quoted earlier, that while the music is not necessarily complex, the method of generating it is.

In discussing Anatomy (Barrett’s 1986 piece for eleven instruments) Toop quotes Barrett:

Two simultaneous pitch-vectors, defined as non-discontinuous pitch/time relations, have certain apparent characteristics, their speed and direction relative to one another (as well as their individual differentials relative to the pitch and time axis), which have nothing to do with the fact that they generate “instantaneous dyads” whose sequence is, in harmonic terms, irrational; in any case, too complex to be perceived as rationally composable. The instantaneous chord-sequence of ten such independent vectors (as in the opening of Anatomy) has absolutely no chance of being perceived as such.
Nevertheless, since they do ‘exist’, it must be possible to deploy them in an organized form such that their posited characteristics and relationships are congruent with their posited functions within a musical/psychological stream of events. (Toop 1988, 34)

It is not clear if, by ‘non-discontinuous’, Barrett means ‘continuous’ and this quote does contain many disputable ideas but Toop is generous in allowing that:

there is no guarantee, no certificate of theoretical rectitude that can be attached to such procedures. On the basis of what the composer has heard and what he surmises, a certain strategy is set in motion – not with indifference to the result, but with the hope and conviction that by this means, and no other, he can break through to a new expressive domain. [Toop 1988, 34]

An alternative interpretation might have been that the compositional strategy is helpful to Barrett in constructing music that is unique in its expressive potential. It is not clear how he has arrived at the conclusion that the composer believes this can be achieved by no other means.

Toop gives an insight into Barrett’s instrumental writing when he discusses Ne songe plus à fuir, his piece for amplified solo cello written in 1986. Referring to the detuning of the two lower strings by a semitone to B and F sharp, he notes that the compositional strategies above are ‘mapped’ on to the cello and quotes Barrett:

This obviously is not something that can have any functional harmonic basis but has a cellistic basis … that a pitch not only has a frequency value, but also has a particular place on a particular string. (Toop 1988, 34-5)

Barrett employs a similar approach in Colloid – his piece for 10-string guitar, written between 1988 and 1991, where it is clear that the ideas are generated
from a direct, physical involvement with the guitar's technical idiosyncrasies and the resulting ideas notated in tablature.

James Dillon, also a guitarist⁸, is similarly reticent in talking about his methods. (Toop states that of the four composers Dillon was the only one who refused to make his compositional sketches available for analysis (Toop 1988, 4).) Toop begins his section on Dillon with his feeling that:

> there is a sense of struggle, of wrestling with an intractable material, which puts one in mind of a Renaissance sculptor slowly wrenching his David, or whatever, from a block of marble. (Toop 1988, 38)

He then makes the obvious comparison with Varèse and notes the ‘sheer aggression’ of his early work and ‘marked degree of violence lurking in the shadows’ (Toop 1988, 38) of the later _helle Nacht_ – his 1987 orchestral piece.

Like Barrett, Dillon’s views on his own music can be very elusive; for example, Toop refers to his distrust of ‘easy formulations’ (Toop 1988, 39) when talking about style or idea, preferring ‘style’ and ‘idea’ (Toop 1988, 39). Asked about style he says:

> I can trace my fingerprints in my work: they're very tied up with technique and for me technique is something that is always in a state of genesis that never really crystallises – if it does crystallise then you're talking about something that gets close to this idea of style. The fingerprints are in some senses slightly suggestive of this thing that becomes rather frightening when you confront it (which is to do with whether we are just locked in some kind of karma – yet I didn’t want to get mystical...). (Toop 1988, 39)

Then rather more helpfully he adds ‘I think the thing that surprises me is that I can definitely hear a certain continuity in terms of timbral density in my work.’ (Toop 1988, 39)
This he allows is a ‘technical thing’ (Toop 1988, 39), but asked by Toop if technique ever has a pre-eminence over the kind of sound it produces, Dillon replies ‘No, I can’t separate things out like that’ (Toop 1988, 39) and that there comes a point when:

the technical solutions allow you to work in such a way that you are walking a tightrope between the conceptuality and creating a situation where the techniques remain open enough to have some kind of transaction going on between (author’s italics) the conceptuality and something with a life of its own. The whole situation is like a continuum: it’s impossible to string out the separate parts, because then you de-contextualize them. (Toop 1988, 39)

Asked by Toop if he has an abstract notion of musical structure, Dillon opines that musical logic only exists inside time and hence ‘vectorial’ musical parameters need to be represented or organized temporally (Toop 1988, 39). Dillon refers to the ‘extraordinary complexity that is going on in terms of amplitude, time, frequency, phase relationships, spectral relationships’ (Toop 1988, 39) and the methodology he has as ‘essentially an instrumental composer’ (Toop 1988, 39) for dealing with the breakdown of these parameters into scalar variables and the combination of them with ‘action’ – this resulting in ‘the vector taking on a higher-level application’ (Toop 1988, 39).

Interestingly, Dillon speaks of notation from the point of view of close attention to the micro details of the way the piece is going to work:

For me, notation is not simple transcription, ... one of the useful things about notation is its circumscribed environment. Ideally, you use it to make the state that you are in even more concentrated, which is why I tend to write things out neatly: its not just a matter of graphism, of ‘how it looks on the page’. It’s also a question of forcing myself to work at an incredibly slow speed, so that you begin to become aware of the micro-detail of what you’re working at in a different way from the initial
moment you might have made those marks somewhere else. (Toop 1988, 40)

Here it must be noted that Dillon’s piece for solo guitar – *Shrouded Mirrors* – written in 1987, is indeed published as a facsimile of the composer’s manuscript.

2.5 Conclusion

This is no more than a brief précis to give some idea of Toop’s paper and his proposition that new complexity was a new genre, distinct from older modernist genres. Of course each composer says far more, and most offer some insights into the workings of the pieces that Toop analyses. By these interviews and analyses, Toop gives a snapshot of the working processes of these composers in 1988. They explain their methodologies, concerns and priorities as one might expect composers to do – in terms of solving the compositional problems they set themselves. There is little to learn from them though for the performer anxious to perform the pieces to at least a satisfactory level. The line between composer and performer is tightly drawn. Of the four composers the only true performer, Finnissy, has nothing to say about performance issues. They all clearly assert that they want their music to be playable, are not interested in writing unperformable music and often take an instrumental view of their compositions.

In his Epilogue (Toop 1988, 49), Toop stresses that these are ‘four distinct creative outlooks, and four very distinct musics’. He notes their wide-ranging intellectualism, their integrity, seeing them as modernists, not experimentalists, and as the ‘logical inheritors of Western Classical tradition’. On the other hand he does not place them in any British or European tradition but, taking his cue from a comment by Dillon, finds their essence in the ‘fringe notion’ – music in the western modernist tradition but influenced by the cultures on the outskirts of Europe.

Despite being published in a relatively new journal, Contact, Toop’s paper had enormous influence on composers and musicologists, inspiring the *Complexity in
Music? festival in Rotterdam in 1990 and the two volumes of the Perspectives of New Music in 1993/4. These will be discussed in the next chapter.

Notes

1. Ferneyhough explains his quasi-serialist use of sieves and filters in (Ferneyhough 1995, 227)

2. Nasiye (1982/2002) was unpublished at the time this was written. The score is now available from Composers Edition. Also see Case Study Number 2 in Part 2, Chapter Eight of this thesis.

3. Jonathan Harvey (1997), Sufi Dance, Faber Music. The particular microtonal scordatura is:
   1st string – E – 40 cents flat
   2nd string – B – 40 cents sharp
   3rd string – G
   4th string – D – 40 cents flat
   5th string – A – 40 cents sharp
   6th string – E
   (with the usual guitar terminology for pitch)


5. Chris Dench (1994), Severance, Australian Music Centre. See Case Study Number 1 in Part 2, Chapter Seven of this thesis.

7. Richard Barrett (1991), *Colloid* for 10-string guitar, UMP

8. Most recently mentioned in the BBC Proms Composer Portrait devoted to James Dillon broadcast on 19th August 2010 (Hear and Now 2010). This excerpt is included with the supplementary data files.