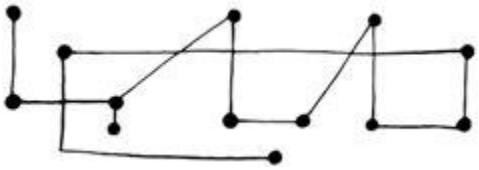
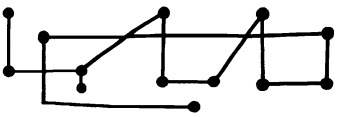


Re-Complexifying the Function(s) of Notation in the Music of Brian Ferneyhough and the "New Complexity"



Stuart Paul Duncan

The acts of composing, performing, and listening to music are inherently complex, a complexity that is mediated by the musical score: It might be said that a composition mediates between the composer and his ideas, for which the score becomes a representation of "the work." Likewise, a performance mediates between the performer's prior experiences and the score, for which the realization becomes an instantiation of "the work," while the instantiation's reception is similarly filtered by the receiver's listening habits and expectations. Where then does the complexity of music reside, especially in the case where the music is extremely complex such as music referred to as the "New Complexity"? As we shall see, several

theorists locate the complexity of New Complexity in the notation. It is claimed by these scholars that the notational complexity simply reflects the need to match the complex underlying compositional processes. Such an argument seeks to simplify the relationships between composer and score resulting in a one-to-one relationship. Viewed through this simplifying lens, the composers associated with New Complexity are indicted with attempting to perfect this one-to-one relationship at the expense of both the performer and listener. However, I will argue that the complexity these composers seek, in fact, resides in the interstices between the composer and score, score and performance, and performance and reception. Therefore, the resulting notation encapsulates these interstices, 'complexifying' the relationships between composer, score, performer and listener.

In response to the question "What is meant by complexity in music?" the musicologist Harry Halbreich states that the prevalent view limits complexity to the density of notation alone:

> By complexity today one generally means so called 'black scores' replete with millions of notes, preferably (almost) unplayable. This is a very restrictive view, which does not take into consideration the complexity of the problem. In fact, complexity—not to be confused with complication!—is a prerequisite of any great art wishing to satisfy not only the sense and feelings, but also the mind. As such, it has always existed (Halbreich 1990, 24).

Complexity, according to Halbreich, became synonymous with the term complication, reducing its ephemeral and ambiguous nature to a concrete depiction through the notes on the page. Several responses to the question of complexity in music were published during 1993–95, including collections of articles in *Complexity in Music?*, *Perspectives of New Music*, and *Contemporary Music Review*. From just a brief acquaintance with these journals it is possible to see how an entrenched frustration with notationally dense scores has fed into a larger argument involving underlying compositional processes. Those composers who embraced the notion of complexity did so, not as a notational fetishization, but as a reflection of the complexity of the world that surrounds us. However, such an approach was called into question by the Finnish composer Kaija Saariaho:

> It is true that the world is complex, as are also our perceptive mechanisms through which we are receiving the fragments of the reality around us. Should our music reflect the endless informa-

> tion surrounding us, or should it reflect our personal way of filtering the world? The latter seems to me more interesting (Saariaho 1990, 34).

Saariaho implies that although the world is undeniably complex, art should seek to filter this complexity in order to reflect the composer's own views.

Much of the discussion on complexity during the early 1990s stemmed from the 1960s, and in particular focused on the music of Brian Ferneyhough. Ferneyhough's scores, replete with intricately woven nested rhythmic strands, abrupt dynamic changes, and spectacular shifts in pitch register reflected Saariaho's "endless information." However, Ferneyhough defends his position:

> 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 outside world! 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 (Ferneyhough 2003, 373).

One performer, Roger Smalley, having performed Ferneyhough's *Three Pieces for Piano* (1966–67), concluded that "the interweaving and crossing of the parts produces such a dense contrapuntal tangle that it is frequently quite impossible to articulate them meaningfully" (Smalley 1972, 1222). Smalley valiantly attempts to accurately realize every complexly woven strand in the score and understandably becomes entangled within the almost endless information presented. In the context of Ferneyhough's remarks, Smalley approaches the score by trying to realize the complex notation as if the score presented a single path to traverse. However, Ferneyhough's music presents a map, incorporating a variety of paths in which the performer, instead of the composer, becomes the musical filter to Saariaho's concept of the "world." In other words, the complexity of Ferneyhough's music derives not from the informational density of the score, as Smalley believes—it is not that the litany of performative instructions, upon successful completion, transparently transmits the composer's prebuilt compositional system to the listener—but rather from a coalescence of the dialogues between composer and score, score and performance, and performance and reception.

Ferneyhough's critical approach to the function of notation, which rejects the existence of a transparent relationship between composer,

score, performer, and listener, reached a wider audience of younger composers at Darmstadt's *Ferienkurse* during the 1980s. These composers (including Richard Barrett, Aaron Cassidy, Frank Cox, James Clarke, Chris Dench, James Dillon, James Erber, Michael Finnissy, Klaus Hübler, Claus-Steffen Mahnkopf, and Roger Redgate) each responded to Ferneyhough's underlying aesthetic in his own unique way, even while sharing a collective distrust for what notation could, or should, represent. Erik Ulman insists that "one could hardly confuse, even on the most desultory acquaintance, the sonic and philosophical worlds of, for example, Brian Ferneyhough, Michael Finnissy, Chris Dench, and Richard Barrett" (Ulman 1994, 202); however, the individuality of each of these composers' responses was amalgamated under the epithet "New Complexity."[1]

The term arose in Australian musicologist Richard Toop's 1988 article "Four Facets of 'The New Complexity,'" in which he examines the works of Finnissy, Dillon, Dench, and Barrett, who he claims have become, along with Brian Ferneyhough, "the corporate subjects (or victims) of a new catch-phrase 'The New Complexity'" (Toop 1998, 4). Contrary to popular opinion, however, Toop claims not to have been the first to use the term. According to Toop he had heard it from Roger Wright, who had in turn heard it from Dillon regarding Nigel Osbourne's pre-concert talk on his music circa 1980.[2] However, Finnissy suggests in an interview that Halbreich had conceived of it in 1978 (Finnissy 2002, 75). Christopher Fox's account seemingly concurs with Finnissy's: "For better or worse, these composers were regularly labeled by critics like Halbreich as representatives of the so-called 'New Complexity'" (Fox 1993, 23). Retrospectively, it is unfortunate that Toop, in following the traditions of naming schools, did not continue his original plan:

> My original title was "Four Faces in the New England"—the obvious Ivesian reference reflected Dench's and Finnissy's enthusiasm for that composer. But since Dillon is a Scot, Barrett is Welsh, and at the time of publication Dench was about to move to Italy, this title was ditched and the "New Complexity" was dredged up as an expedient titular substitute (Toop 2002, 133).

Similar to Halbreich's description of the current view of complexity as synonymous with notational density, New Complexity became, "in street parlance . . . 'a lotta notes'" (Truax 1994, 176). The same point is emphasized by the critic Julian Silverman: "They all write notes. And more notes. More than can be played: more than can be imagined"

(Silverman 1996, 34). This prevalent attitude led many critics to the view that the scores of those who fell under the banner of New Complexity are not just complex, but unnecessarily complicated, eliminating the performer's role to interpret and leaving the listener saturated in incomprehensible information. Ivan Hewett follows in the same steps as Silverman, stating that "A good deal of so-called 'New Complexity' music from the 1980s and 1990s forces the performer along this *via dolorosa* of struggle and inevitable failure, and it's hard not to suspect that the extra *frisson* of intensity possessed by these pieces isn't due to their latent sadism" (Hewett 2003, 140). Another critic, Richard Taruskin, reduces the score to its notational complexity alone, concluding that "despite the evident progress it fostered in notational technology the movement was too obviously a rear-guard action to inspire much interest" (Taruskin 2010, 476).

Having examined these scores solely in light of the "blackness" of the page, critics were quick to conclude that composers drew exclusively from an intellectual and philosophical elitism. Paul Thermos, for example, observes that

> New Complexity is a modern manifestation of polyphony as an expression of intellectual and philosophical speculation and prestige. . . The New Complexity composers are mostly men (and women?) with at least a strong intellectual self-image and who are extremely proud of their brain (Thermos 1990, 36–37).

This charge of intellectual elitism is fueled, to a large extent, by a view that Ferneyhough's music presented a return to modernist standards. Coupled with his tenure at Darmstadt during the 1980s, Ferneyhough and his fellow New Complexicists were indicted with the charge of having resurrected the integral-serialist practices of 1950s and '60s Darmstadt. The journalist Alex Ross argues that, even though it has been some years since the Darmstadt of the 1950s and '60s,

> the modernist impulse is by no means dead. For some years the British-born, American-based composer Brian Ferneyhough has been testing the outer limits of what players can play and listeners can hear, and he has become the somewhat unwilling figurehead for a movement known as the New Complexity (Ross 2007, 522).

The view that New Complexity was fueled by a return to integral-serialist practices, that scores with such large swaths of black notes could only be produced by someone employing a systematized

approach, dominated articles on this music during the 1980s and early 1990s.

James Boros, in his position as the guest editor for a special journal issue of *Perspectives of New Music* on New Complexity, sought to argue against this all too prevalent attitude. According to Boros the New Complexity grew as a reaction against the "new simplicity," with "composers and performers who, having peeked over the fence surrounding this dungheap, have determined that shovelling shit is not to be their fate" (Boros 1993, 7). Distancing himself and his fellow composers' music from the previous serialist generations of Darmstadt, Boros continues that those "authors of these musical cookbooks, [are] myopically preoccupied with the construction of their inevitably isolationist systematics . . . in place of taking a stab at the real thing, which, like our selves, is nonalgorithmic, and which defies systematization" (Ibid.). Boros argued the following year equally against both the "new simplicity" and those who hold dogmatically onto outdated serialist principles in favor of a music that

> blasts away inherited construals, whether they be Pavlovian tablatures (or high-powered pumps) for playing upon (milking dry) the heart-strings (the udder of affections) or dusty placards advertising 'satisfying coherence' to be found within dreary displays of flotsam belched forth from the rotting hulk of the good ship '12×12' (Boros 1994, 96).

In other words, New Complexity was not only a reaction against a new simplicity, but also a rejection of an integral serialist approach that seeks to control every musical domain. The complexity of New Complexity therefore derives not from the means of construction, nor the blackness of the page.

As Taruskin's and Boros's views demonstrate, "New Complexity" evokes such strong responses that those critics who are able to look beyond the notational complexity, who are able to find more in the music, are at pains to distance the composer from the term. This distance can be seen in Gavin Thomas's CD review of a collection of Dillon's early works. He complains that "the Ferneyhough-inspired New Complexity is decadence personified, a fascinating but ultimately self-destructive movement . . . In a sense, however, James Dillon stands apart from the school with which he has been rather too conveniently pigeon-holed" (Thomas 1992, 466).

In sum, two positions have formed around the term New Complexity. On the one hand we have those who wish to group together composers

who employ a complex notation, contenting themselves with a superficial examination of the scores' informational density. On the other hand we have those who wish to assert the independence of each composer and put as much space as possible between that composer and the term New Complexity. Ross concludes that "the New Complexity is not exactly new. Henry Cowell layered rhythm upon rhythm back in 1917" (Ross 2007, 523). But he misses the point. Beyond the notation lies a complexity of relationships that New Complexity composers are consciously aware of, and which is explicitly employed in their work. It is this awareness, perhaps forming an underlying aesthetic that provides a commonality between their works that is fundamentally different from the serialist procedures and aesthetics with which they are so often linked. New Complexity addresses Frank Cox's concern that,

> at all levels, the descent into generic compositional, performative, and listening templates must be prevented, so that the entire domain [of music] may avoid sinking into those well-worn categories already prepared to contain and restrain it, most particularly the often-cited charge that such developments are merely notational in nature and represent the mere willfulness of mannerism (Cox 2002, 70).

The works of New Complexity are often characterized by a snippet from one of Ferneyhough's scores. Yet, within Ferneyhough's own works a diverse range of notational approaches is employed, problematizing the view that such short extracts are representative. Despite this diversity, however, several performers interpret the visual complexity of New Complexity scores from a single viewpoint, regarding the increase in notational complexity as synonymous with an increase in the composer's specificity. This assumed specificity leads to a prioritizing of accuracy over all other musical considerations, as if attempting to create a transparent relationship between notation and realization—forming one of the polemical fault lines lies along the supposed boundary between what is "performable" and "unperformable." Ferneyhough's response, "The fake issue of 'unperformability' is really a red herring" (Ferneyhough 2003, 71), requires one to temper the notion of accuracy as the guiding principle in performance away from a narrow view of exactitude.

In this paper I will re-complexify this overly-simplistic interpretation: an interpretation of complex notation that leads performers to believe in a transparent relationship between score and realization. Starting with an examination of a variety of notational strategies in Ferneyhough's music, I will look at multiple ways in which the notation functions. The paper continues by examining Cox's contemporary performance practice

models in order to situate, and critique, accuracy as the guiding principle for evaluating both performance and composition of works subscribing to a New Complexity aesthetic.

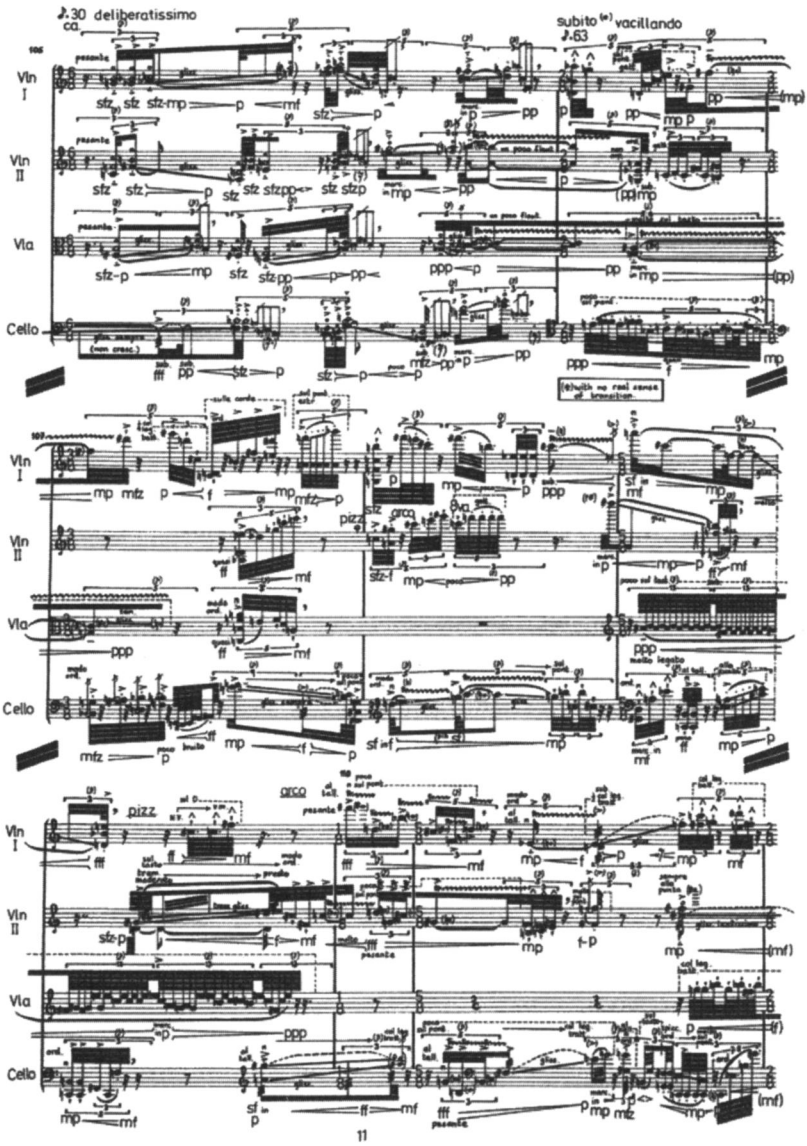
Notational Complexity in the Music of Ferneyhough

According to Taruskin, the composers Ferneyhough and Finnissy "formed the nucleus of a group identified with 'the New Complexity'" (Taruskin 2010, 475). The extract in Example 1 shows Taruskin's representation of New Complexity; focusing on the notational density of the score, he states:

> to speak of the appearance of the music is in this case not trivial, because composers associated with the New Complexity put much effort into finding notations for virtually impalpable microtones, ever-changing rhythmic divisions and tiny gradations of timbre and loudness in an effort to realize their ideal of infinite musical evolution under infinitely fine control and presented with infinite precision, with absolutely no concession to 'cognitive constraints' (Taruskin 2010, 475–476).

Since the composers of New Complexity employed both "notational extremities" and "'extended' playing techniques" with "editorial attention given [to] every single note," Taruskin concludes that their scores represented a "determination to diversify at all costs" (Taruskin 2010, 476). If we take a cursory glance at the excerpt it is hard to disagree with Taruskin's assessment. In m. 105, the rising harmonic glissando in the cello undergoes multiple transformations through abrupt textural changes (with tremolos and accented staccatos), which are followed by a series of non-harmonic Boulezian grace notes. Coupled with a series of dramatic changes in dynamics, this passage supports Taruskin's complaint regarding the "tiny gradations of timbre and loudness" employed in the score.

Although Taruskin makes a compelling case based on the notational complexity of the score, the coherence of his argument falters upon broader examination of Ferneyhough's Second String Quartet, his other works, and those of other New Complexicists. In the first case, Taruskin asserts that the Second String Quartet was written "with absolutely no concession to 'cognitive constraints.'" In fact, though, Taruskin's chosen extract shows a climactic state in the diversity of parametric material, not the norm on every page. If we examine earlier



EXAMPLE 1: TARUSKIN'S EXCERPT FROM FERNEYHOUGH'S SECOND STRING QUARTET (TARUSKIN 2010, 477).

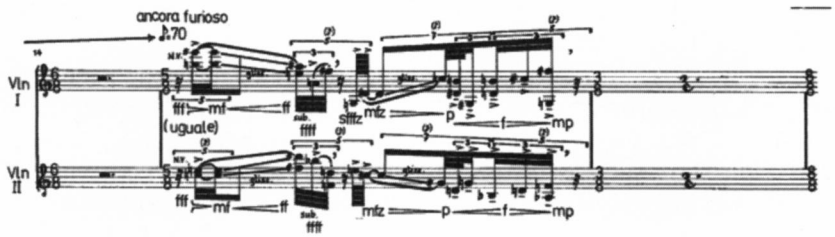
passages in the work, we find instead a process of gradual parametric diversifications.

In mm. 14–15, for example, the violins differ solely in the parameter of pitch (Example 2A). Although many of the parameters remain in unison as we move toward mm. 39–41, several begin to diverge (Example 2B)—such as textural and dynamic treatment. Ferneyhough continues this process until he achieves maximum divergence of parameters at the moment represented in Taruskin's example. Since Ferneyhough gradually introduces parametric divergences from a central idea, the Second String Quartet offers a cognitive grounding. Taruskin's chosen example, rather than being "not an unusually complicated page," is on the contrary part of a complex developmental sequence. Therefore, when compared to the earlier passages, Taruskin's passage neither embodies a representative example of the work, nor supports his complaint that the work does not attend to cognitive constraints.

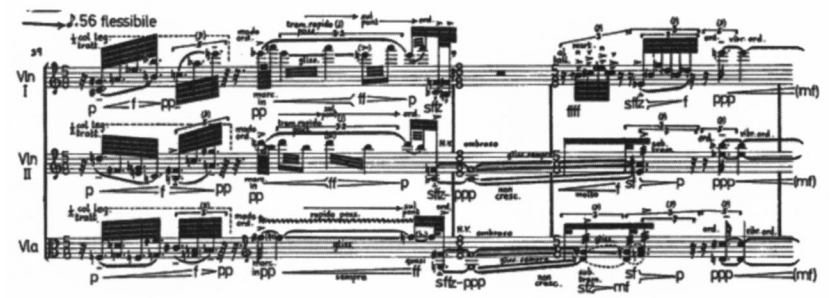
Taruskin's teleological narrative implies that the Second String Quartet is yet another step towards Ferneyhough's "ideal of infinite musical evolution." However, *Time and Motion Study II* (henceforth referred to as *T&MSII*) demonstrates an even higher level of notational density, even though it was completed four years prior (Example 3).

In *T&MSII* the cellist has to accommodate multiple staves rather than the single staff in the Quartet. Ferneyhough uses, at minimum, one staff for each hand, alongside a third for the vocal part; additional staves are added when the required gesture becomes congested. In this excerpt, the second and third staves (reading from the top down) require the cellist to use his or her right hand without the bow. The performer must use the thumb to silently navigate a glissando on the lower two strings (double stopping) while striking the cello with the remaining fingers. The fourth staff requires the left hand to perform both pitched material on the upper strings and "percussive slaps" beneath the right hand. In addition to unpacking the pitched, non-pitched, and rhythmic domains, the performer has to contend with frequent tempo changes and a variety of dynamic profiles.

In short, the level of notational detail used in *T&MSII* appears to be greater than that employed in the Second String Quartet. Therefore, instead of an "evolution" the Second String Quartet conversely presents a pseudo devolution, turning Taruskin's argument on its head. Nonetheless, Taruskin's conclusion that in the music of the New Complexity "the notational detail was significant, even if the music was not; for its intricacy set a benchmark that is never likely to be equaled, let alone surpassed" (Ibid., 476) is problematic. Had he used the



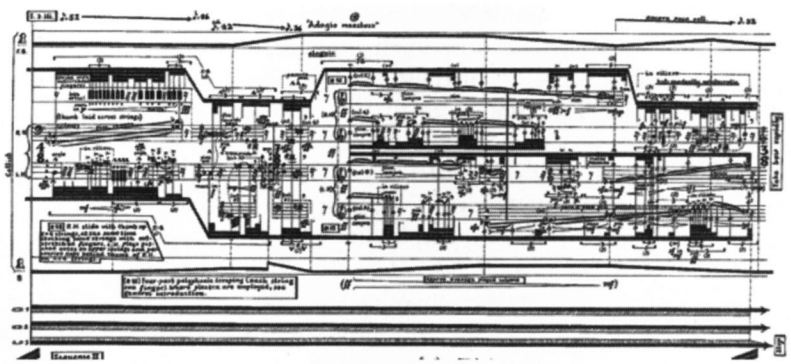
EXAMPLE 2A: BRIAN FERNEYHOUGH'S SECOND STRING QUARTET MM. 14–15.



EXAMPLE 2B: BRIAN FERNEYHOUGH'S SECOND STRING QUARTET MM. 39–41.

example from *T&MSII* to demonstrate New Complexity's apparent evolution of musical notation to a point of no return, his assertion would surely have had greater impact.[3] Instead, his use of the Second String Quartet undermines the argument that the composers were only focused on the embodiment of complexity through notational "evolution."

Rather than attempting to look beyond the notational complexities, Taruskin's argument offers a blanket "nothing lines up" response, typical of those who hunt for the least unison-like passage rather than



EXAMPLE 3: EXTRACT FROM FERNEYHOUGH'S *TIME AND MOTION STUDY II* FOR VOCALIZING CELLIST AND ELECTRONICS.

examining the entire score. Another musicologist, Arnold Whittall, mirrors Taruskin's position in his *Musical Composition in the Twentieth Century*. He comments that "Stability of the kind shown in [*On Stellar Magnitudes*] is rarely glimpsed in Ferneyhough," (Whittall 1999, 382), emphasizing a lack of rhythmic unisons in Ferneyhough's music—a common generalization made by scholars. Such moments of rhythmic stability contextualize the listening process, allowing a respite in which to organize our own trajectory through the work.

Ferneyhough's two works embody a common aesthetic that "reflect[s] the endless information surrounding us" rather than filtering it to reflect a personalized view. *T&MSII* and the Second String Quartet offer different approaches to the encapsulation of this endless information, a view lent credence by Benedict Weisser's examination of Ferneyhough's compositional practice. Weisser states that Ferneyhough makes use of "various pre-compositional generations of multi-metric structures and compositional transformations of material" that are "presented in an ostensibly unfiltered manner" (Weisser 1998, 7). This ostensibly unfiltered manner lies at the heart of works referred to by the epithet of New Complexity. The diversity of pieces associated with the New Complexity aesthetic stems not from an evolutionary perspective of an ever increasing complexity, but from how the composers choose to encapsulate this endless information. They employ a variety of compositional approaches and notational

systems that reflect a wide spectrum of complexities, complexities that manifest not solely in the notational domain, but also in the acts of performance and reception of these scores. Two further examples will demonstrate an underlying aesthetic that emerges in different notational approaches.

Aaron Cassidy's *Crutch of Memory* (2004) demonstrates how the underlying aesthetic of New Complexity can produce an entirely different notational approach, employing a different type of complexity (see Example 4). *Crutch of Memory*, for indeterminate string instrument, choreographically encodes the motion of the performer's hand position, finger spacing and fingerings on three independent staves.[4] The top staff indicates which string to play and the finger used to depress it, as well as traditional indications of bowing position such as *sul pont.* etc. and the more unconventional bow pressure, indicated through variously filled square boxes (above the staff). The second staff indicates different levels of space between the fingers, with number 1 requiring the performer to keep the fingers tightly together, while a number 5 entails the "widest possible spacing, extended as far as physically possible (to the point of becoming awkward and uncomfortable)."[5] The composer notes that the player should keep the different gradations constant throughout the piece. The last staff details seven hand positions on the fingerboard, with the seventh position at the octave above the tuning of the open string. The lines from these positions entail movement up and down the fingerboard in their respective directions.

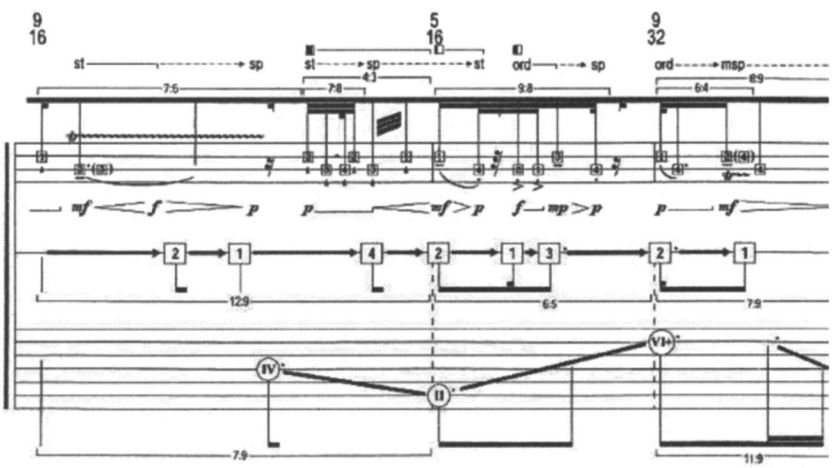
The choreographic use of notation and its resultant complexity is apparent as all three staves are put into simultaneous action. Taking m. 56 as an example, we can see how, on the lowest stave, the player must move from the second position on the fret board up to the fourth over the space of three eighth notes, accelerating over the remaining two eighths to reach a slightly higher sixth position. Concurrently, the change of the finger spacing, taking place under a 6:5 tuplet, moves from "reasonably tight" to "very tight" over two eighths of the 6:5, and remains at this position for a further eighth, before rapidly moving to "open natural hand position (3)" for the rest of the tuplet. The top staff requires yet another subdivision of the measure, including a 9:8 tuplet over four fifths of the measure switching between the two central strings of the instrument and applying various changes of bow position and pressure alongside changes in dynamics.

While at first this may seem as if the composer is attempting to control every aspect of the performance, leaving nothing to the discretion of the performer, on a second look this proves not to be the case. The composer has left several avenues of exploration for the

performer, the most obvious being the instrumentation (though usually players are specialized, when playing complex music, in one instrument—hardly a choice). Another area under the performer's direction, apart from the fingerboard positions and the finger spacing, is the domain of pitch. At the opening of the score, the composer suggests tunings for the violin, viola and cello, but allows the performer to choose how far they tune each string downwards based on several criteria.

If Cassidy's *Crutch of Memory* presents one end of the spectrum, where the performer defines the type of path through certain pre-performance choices with Cassidy suggesting the direction that path might take through his choreographic-type complexity, Ferneyhough's *Cassandra's Dream Song* (1970) presents the other. In this piece Ferneyhough offers no such direction for the path the performer might take:

> The material has been intentionally so slanted as to present, at times, a literally 'unplayable' image. The boundary separating the playable from the unplayable has not been defined by resorting to pitches lying outside the range of the flute, or other, equally obvious subterfuges, but has been left undefined, depending for its



EXAMPLE 4: AARON CASSIDY'S *CRUTCH OF MEMORY* MM. 55–57.

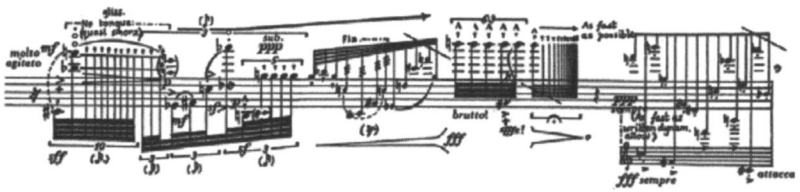
Reproduced by kind permission of the composer.

> precise location on the specific abilities of the individual performer, whose interpretation endowment forms a relativizing 'filter' [see Example 5] (Ferneyhough 2003, 5).

The notation here does not denote the ideal performance, as might be assumed. Traversing every disjunctive melodic fragment, each with its own articulation and intricate rhythmic profile, is at times impossible. Ferneyhough notes this in his preface to the piece: "The work owes its conception to certain considerations arising out of the problems and possibilities inherent in notation-realization relationship," before adding, "some of the combinations of actions specified are in any case either not literally realizable (certain dynamic groupings) or else lead to complex, partly unpredictable results."[6] The unfiltered manner of Ferneyhough's composition requires the performer as a relativizing filter. In light of this, the performer must make decisions regarding the realization of the piece, to choose a route through all the possibilities inherent in the notation. In the process of making theses decisions, the performer assumes the role of the relativizing filter, parsing Ferneyhough's encapsulation of the "endless information surrounding us."

A "High-Modernist" Interpretation of New Complexity

The differences in approaches to notation within Ferneyhough's own music, and furthermore between his works and the piece by Cassidy, problematize the nature of notation. The generation of



EXAMPLE 5: EXCERPT FROM BRIAN FERNEYHOUGH'S *CASSANDRA'S DREAM SONG* FOR SOLO FLUTE.

performers who had performed the works of the Second Viennese School, and who had come to terms with the integral-serialist works of the 1950s, assumed that the same function of notation held in the newer works of the New Complexicists. In "Notes toward a Performance Practice in Complex Music," Cox describes various performer responses to music of the twentieth century. Rather than referring to individual performers, Cox posits several generalized models. The one most pertinent to our current discussion is referred to by Cox as a "High-Modernist Model of Performance Practice," which he defines in this passage:

> A new manner of performance was clearly demanded by modern music from the nineteen-teens on: motoric and neo-Classical musics demanded a more 'objective' performance style, whereas the high-level tuplets, more complexly interwoven textures and structurally-conceived dissonant combinations of the Second Viennese School required a greater degree of accuracy in all domains (Cox 2002, 72).

According to Cox, this new manner of performance required a "clear communicative chain" between score, performer, and listener. Under this model, if the notation is realized accurately, leading to an "audible projection" of all musical domains, then an "ideal" perception results. In other words, the listener comprehends the compositional system employed by the composer via the "accurate" realization of the performer.

Within the bounds of this model, the performer's role as an interpreter is seemingly reduced. As Cox explains, "the properly interpretational level . . . should . . . primarily begin after one has mastered the technical challenges: one aims for an 'ideal' performance, balancing the demands of adequate technical realization with those of the less specifiable interpretational realm" (Ibid.). On the one hand, Cox notes, a soft realization allows interpretational concerns to take precedence over "responsible realizations," presumably allowing the performer some leeway, instead of applying an absolute standard of accuracy. On the other hand, a hard realization would not allow for this leeway. For Cox, the most compelling aspect of this hard approach is its "testability" and monitoring of long-term technical improvement: "either one comes close to meeting the high technical standards of the 'authoritative' performances of the classical-music world or one loses all hope of being taken seriously" (Ibid.).

By applying the hard approach, performers "raised the standards of both performative precision and responsible realization immensely, the

latter often treated as absolute and absolutely testable, all at the expense of the interpretative, intuitive, and stylistic factors which were in earlier periods considered the ultimate goal of performance" (Ibid.). Cox commends those performers who apply themselves to accuracy rather than preferring interpretive, intuitive · or stylistic factors. However, he is not sold on a direct mapping between score, performer and listener, which he classes as a "projective ideal." Rather, he sees the fostering of technical proficiency as an alternative to

> Artistically illegitimate factors, such as the 'loveliness' and size of the performer's tone (this is directly proportional to the expense of his/her instrument, therefore to the performer's financial resources), the force of the performer's showmanship, and/or the performer's marketing savvy/political connections and power (Ibid., 73).

Moreover, Cox is as wary of those who preach a "projective ideal" as of those who favor his "illegitimate factors." He states that the hard approach or "absolutist versions of the High-Modernist model would maintain that, as regards an adequate realization, the score denotes precisely what is intended"; however, "the precise meaning of notational and rhythmic symbols is not as unequivocal as the High-Modernist model would presume" (Ibid., 86–87).

The pianist Roger Smalley, however, in tracing the development of notation over the past four-hundred or so years, adheres to just such an unequivocal position. Written in 1969, Smalley's article on "Some Aspects of the Changing Relationship between Composer and Performer in Contemporary Music" will allow us to determine his position. The paper focuses on three compositional approaches to notation that he defines as "totally determinate," "variable in form," and "indeterminate." The first, or totally determinate, is most relevant to our discussion and reflects a "desire of the composer to exercise an increasing degree of control over the performance of his works via the medium of the written score" (Smalley 1969/70, 73). According to Smalley, however, this is not a modern phenomenon; instead, beginning just after the medieval period, it was a gradual process of increasing composer specificity, at first through determining instrumentation. Smalley continues to trace this process, noting, "indications of dynamic level and tempo were the next elements to pass from the area of the spontaneous to that of the notated" (Ibid.). The first of these, dynamics, is ascribable to Beethoven's scores, which "must be observed with great fidelity" (Ibid.). The second, the notation of tempo, suspended spontaneity during the late romantic

period, and was primarily due to "the exploitation of instrumental virtuosity (in all its aspects) and of complex orchestral textures [that] provide an in-built regulator of tempo" (Ibid., 74). Through composers such as Liszt, cadenzas, which had usually been at the discretion of the performer, now entered the realm of notated music. Alongside Liszt and Schumann, Chopin began to incorporate rubato into a notated form. Furthermore, Smalley draws on Brahms and Mahler who, he says, began to write an ever-increasing amount of verbal instructions in the score. Ultimately, however, it was Schoenberg and his student Webern whose "music caused the number of directions to proliferate to an unprecedented degree" (Ibid.).

It is at this point that our discussion of Cox's High-Modernist model and Smalley coincide. From Smalley's teleological view of notation, the only valid outcome can be a complete embodiment of the composer's ideas through the score. This leads him to the conclusion that "if a performer realizes accurately all the indications in the score then his performance will be an authentic projection of the composer's intention" (Ibid., 75). The High-Modernist model's one-to-one relationship between the composer/notation and the performer resonates strongly in Smalley's discussion. Weisser describes a "conventional" notation similarly: "According to this most common of paradigms, the notation acts as an intermediary . . . the role of notation is purely presentational; its success is defined by how 'clearly' the composer transmits his/her ideas to the performer" (Weisser 1998, 197). In order to link the composer's intention directly to the listener, Smalley quotes Stephen Pruslin's discussion on Debussy: "In Debussy, the succession of sounds no longer *represents* the meaning, but *is* the meaning, so that no mental process other than simple aural reception is necessary to grasp the full musical statement [emphasis added]."[7] To which Smalley adds, "This quotation is almost equally true of the later music of Webern and of much music which followed" (Smalley 1969/70, 75). Hence for Smalley, any music, post-Webern, that displays an equal or greater amount of notational specificity, including that of Ferneyhough, has to be realized in a way that follows Cox's "clear communicative chain." This highlights Smalley's desire for a direct relationship between the notation, its realization, and reception.[8]

John Butt, a scholar on the philosophy and criticism of historical performance practice, offers a contrasting view to that of Smalley. First, however, his description of the traditional view reveals that Smalley is not alone in his assertions: "The traditional periodization of music history tends to support this view of the fully formed work solidifying

in the nineteenth century, and of the composer taking ever more control over the notation of performance directives in the music." Butt describes the same teleology as Smalley before continuing:

> The same 'story' can be continued to encompass the specification of many other musical and extramusical factors in performance by Wagner, to Stravinsky's belief that the performer need do nothing more than read the notated instructions, to the serialization of dynamic and attack by Messiaen, Babbitt, and Boulez, and, finally, to tape music, in which both performer and notation are subsumed by the recorded medium (Butt 2000, 138–139).

It is this "story" that Butt disputes and by doing so he contradicts Smalley: "The story tends to support the concept of inexorable progress towards the perfected musical work, and, like all grand narratives, it often serves a purpose that is by no means innocent and universally valid" (Ibid.). This leads him to a conclusion which as well as negating Taruskin's earlier claims also sheds light on the notational complexity employed by the New Complexicists:

> We might perhaps consider the extreme specificity of much twentieth-century notation as part of a last-chance effort to preserve the identity of a musical work from the threat—indeed the inevitability—of indeterminacy. If this is indeed the case, then perhaps we should be wary of equating the increasing complexity of notation purely with the technicalities of performance . . . In other words, the notation of performance details may have a function over and above (and occasionally contrary to) the simple prescription of actual, practical performance (Ibid., 143).

The underlying aesthetic of New Complexity is a shared critical awareness of the dangers of notation and a collective understanding that a direct relationship between score, realization, and reception is not possible.

Roger Redgate expands upon this aesthetic "for one thing, there are received ideas of what notation means," as encountered in Smalley's argument, and "how you interpret it and . . . what is possible and what isn't possible, which creates an interesting kind of boundary or limit to what notation seems to be capable of for the performer" (Redgate 2006, 99). With this in mind, Redgate observes that conventional notation is "already telling me what kind of music I can write, it's already providing a kind of contingent matter, if you want, that is external to me as a composer. Any ideas I have of music are very much

influenced by what I can actually write down. So that's why I am interested in notation" (Ibid., 100). This process of writing ideas down is further complicated as, according to Ferneyhough, "no notation, of whatever iconically representational state, can presume to record information encompassing all aspects of the sonic phenomenon for which it stands" (Ferneyhough 2003, 3). If notation is not an exact encoding of sound, then as Chris Dench, another New Complexicist, offers,

> the ***notational*** purpose of my scores is to engage the performer in the unfolding musical argument by implying a world dominated by interpretative rubato. . . . This understanding of the notation as a series of bar-bracketed "cartouches," capsules of information both technical and expressive which require "reading" (that is, decoding and digesting) rather than just reflex articulation, is central to the fluidity of my work [emphasis Dench's] (Dench 1991, 104).

However, according to Ferneyhough, it is not only an awareness of the problems of notation, but an engagement through the compositional process that brings notational elements to the fore as an aesthetic choice. Ferneyhough asks,

> What can a specific notation, under favorable conditions, hope to achieve? Perhaps simply this: a ***dialogue*** with the composition of which it is a token such that the realm of non-equivalence separating the two (where, perhaps the 'work' might be said to be ultimately located?) be sounded out, articulating the inchoate, outlining the way from the conceptual to the experiential and back [emphasis Ferneyhough's] (Ferneyhough 2003, 7–8).

From the mid twentieth century on, a group of performers began to specialize in works dating from the early part of the century. Separating themselves out from those who performed pre-twentieth-century works, they attempted to define a new performance discipline based solely on those works of the twentieth century which they regarded as worthy of performance. The clarinetist Roger Heaton is representative of this new group. His perspective can be evaluated through an investigation of another of Cox's models, referred to as the "triumph of Professional Absolutism" (Cox 2002, 89–94). The main purpose of this approach, according to Cox, is to "legitimize the insecure domain of contemporary music as a professional discipline"

(Ibid., 89). Cox refers to this domain as "'official new music,' comprising styles of composition oriented more toward refining, inflecting, and rearranging aspects of already discovered domains than with opening up fundamentally new domains" (Ibid.). In other words, compositions that follow the well-trodden paths of contemporary music (adopting a High-Modernist model) are favored instead of the music of New Complexity. In "The Performer's Point of View," Heaton asserts that

> Players naturally prefer pieces which they understand in terms of their own experience and familiarity with a particular style, and which are more or less conventionally notated, though not necessarily technically easy. Players want to enjoy playing a part which offers expressive and stimulating possibilities, so the extremes of recent music—minimalism and the New Complexity—are not high on the list, whereas almost anything by, for example, a composer of the Second Viennese School is (Heaton 1987, 30).

Heaton's assertion of the player's role is important to understanding Cox's "professional absolutism." Heaton points out that, within the contemporary music world, performers' social standing seems to lag behind those of composers and musicologists. According to Heaton, this is due to performers who "perhaps, do not give enough thought to what they play—the notation, the style itself—and therefore do not command the *respect* they deserve from composers [emphasis added]" (Ibid.). He is keen to advertise the improvement in performance standards. "Over the last 20 years, standards of performance in new music have risen dramatically" (Ibid.) he claims, reinforcing his preference for accuracy, or exactitude, as *the* guiding principle for interpretation, and feeding his rejection of New Complexity. If, having improved performance standards over the last twenty years, performers still cannot perform complex notations accurately, then the fault is the composer's. Furthermore, Heaton believes the performer is in a position to guide the composer:

> The performer does have a great deal to offer the composer, not least in such practicalities as notation and what used to be called 'idiomatic' writing, and he is in the best position to have a finger in all three pieces: performance, composition and musicology. The performer is potentially the most powerful of the three, since composition and musicology cannot exist without performance; and

> analysis, the most important and 'active' part of musicology, is what the performer does every day (Ibid.).

The performer, in Heaton's view, can take a superior position to assert both musicological aims and compositional goals. In terms of "idiomatic" writing, Heaton is explicitly stating what level of technical challenge should be presented by the composer. One can infer from Heaton that such an idiomatic approach would maintain "an illusion of absolute technical mastery, this is in general accomplished through the unbroken maintenance of a high-energy, glossily 'beautiful' tone" (Cox 2002, 89) as described by Cox. However, such an approach "cannot be universally applied to contemporary music" (Ibid.). Since performers such as Heaton and other professional absolutists require the realization of notation to be exact and to produce the appearance of both complete mastery and beauty of tone, it is understandable that works of New Complexity were met with resistance by these performers. New Complexity, with its challenging technical requirements and exploration of a variety of Heaton's "tones," does not grant the performer's realization the same image of absolute technical mastery. The vocalist Brenda Mitchell, who alongside Heaton and Smalley performed Ferneyhough's music, supports Heaton's view: "It is not the musical difficulty per se from which 'many respectable musicians' shy away, but the lack of opportunity to employ the vocal sound in the technical and aesthetic way acquired during years of study" (Mitchell 1994, 31).

The dangers of ascribing to the goals of professional absolutism is put into context by Cox, who observes that "if leading 'new music' ensembles/performers cannot at this time realize such notated demands, then the demands themselves are unreasonable: whatever cannot be played 'perfectly' does not deserve to be performed at all" (Cox 2002, 90). Furthermore, "many such musicians even go so far as to assert or imply that by refusing to even attempt such challenges they are maintaining the highest performance standards for their respective instruments, surely a paragon of twisted reasoning" (Ibid., in footnote). Heaton's response to Ferneyhough's music associates him with professional absolutism: "Ferneyhough, by very nature of the conventional notation, places the performer's approach to his music within the western classical tradition" (Heaton 1987, 32), and thus in Heaton's domain of professional judgment. Heaton argues that "because the pieces are impossible, the performer has to fake and to improvise certain sections; players familiar with the style, and probably well practiced through free improvisation, can get away with it," which leads to his conclusion that "a player with a sound traditional

technique (the only one to have!) would not attempt something which has no regard for the instrument while still, by the notation, setting out its terms of reference within the tradition from which that instrument comes" (Ibid.). Cox sums up his concern toward the latter point, professional absolutism, stating:

> The aim of maintaining rigorous performative standards in music should always be applauded, but in an art form which goes by the name of 'new music,' any decision to limit one's concern for maintaining standards to those domains which are relatively secure (i.e., extremely conservative pitch and rhythmic challenges) is, at the least, highly questionable; even worse would be to treat the relative reliability of these domains to an absolute standard for condemning all those domains which have not yet achieved this degree of stability as unworthy of consideration (Cox 2002, 90).

Both Smalley and Heaton see New Complexity as the attempt of the composer to control every aspect of the score. Notation, for Smalley, has over the past centuries become more and more controlled, with New Complexity taking this trend further. His desire to fulfill what he sees as a direct encoding of the composer's ideas through notation is understandably frustrated in a music such as New Complexity that does not offer transparency between the composers' ideas and their realization. The works of New Complexity do not allow for the same performance techniques that Heaton values from earlier twentieth-century works. The notation of such works, one can infer from Heaton, is unidiomatic and therefore not accurately performable, requiring fakery in performance:

> For a performer the major criticism is one of unnecessary rhythmic complexity . . . which makes much of this music impossible to play *accurately*. Therefore we are thrown into an area of approximation and even improvisation on a text whose very nature is to notate in detail and control every aspect of performance [emphasis added] (Heaton 1990, 26).

The journalist Alex Ross, in *The Rest is Noise*, takes Heaton's position further, suggesting that it is not just the performance that becomes an improvisation, but the notation itself: "Because not even the most expert performers can execute such notation precisely, it becomes a kind of planned improvisation, more akin to a free-jazz or avant-rock freak-out than to anything in the mainstream classical tradition—mutatis mutandis, a mosh pit for the mind" (Ross 2007, 522).

"Rationalization" and Accuracy

Through his examination of the recordings of Ferneyhough's *Intermedio alla Ciaccona* and Second String Quartet, the composer Roger Marsh sums up the concerns of both Smalley and Heaton with a concrete example. Through Marsh's transcription of the performances of Ferneyhough's piece, we gain a greater understanding of both Smalley's desire that notation reflect aural result and Heaton's view that complex notation results in improvisation. Ultimately, Marsh attempts to show how his transcription of the Arditti quartet's performance does not match Ferneyhough's notation. He concludes that the performance is vastly different from the score, resulting in an approximation, which, while sounding like an improvisation, stems from a "rationalization": "there are occasions, however, when performer rationalization (for it is this and not sloppiness which accounts for the discrepancies noted above) does appear to come perilously close to changing the music into something which the composer almost certainly did not intend or predict" (Marsh 1994, 84). Marsh's statement resonates with Smalley, if not from the point of view of a direct relationship between the notation and the performance, then at least in terms of asserting the importance of accuracy in realizing a score.

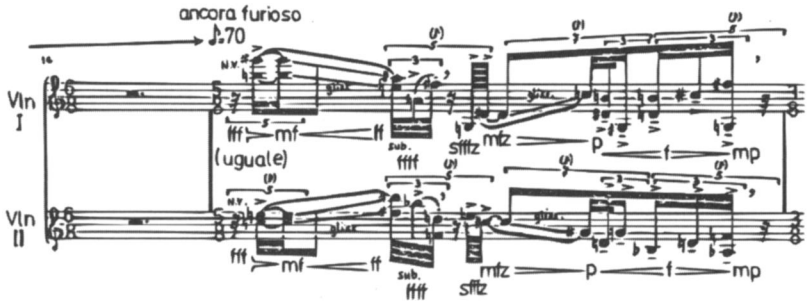
In comparing the score and reading of Ferneyhough's Second String Quartet, Marsh argues that "rationalisation" is required to simplify "rhythmic absurdities" (Ibid.). These absurdities, according to Marsh, stem from the difficulties associated with multiple instruments performing the same complex rhythms. In transcribing the performance of the passage we met earlier from mm. 13–16 (Example 6a), Marsh concludes, "it is unthinkable . . . that two successive phrases . . . in a piece by Ferneyhough, would jog along in 6/8 with no rhythmic values more complicated than a simple triple" (Ibid., 84–85). Marsh's example provides a visual embodiment of the issues that Smalley and Heaton offered earlier. His recomposition of the passage suggests that a simpler approach to notation would achieve the same audible result as the complex notation. Furthermore, he posits that, since Ferneyhough accepts the recording as valid, his recomposition must also be valid.

The motivation behind Marsh's transcription is to demonstrate the "absurdity" of Ferneyhough's rhythmic schemes, yet a more considered position might have discussed the Arditti's performance from the point of view of the entire work, rather than in a select few passages. As things stand, his transcriptions merely attempt to show the inaccuracy of the Arditti's performance: "The point is, however,

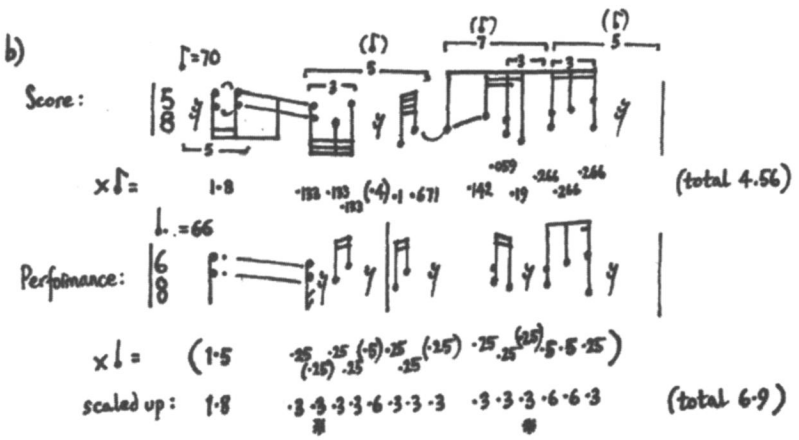
not whether the performance is accurate or even whether the score is playable as written" (Ibid.). Marsh boldly concludes, "It is a music of generalized, if often spectacular, effect" (Ibid., 86). Silverman's view of the disjuncture between sign and sound fuels an equally polemical response: "So is it all about nothing? . . . do they have any particular sounds in mind, or doesn't it matter? There must be something very interesting for them in what they do, it is just not clear whether it is the music" (Silverman 1996, 34). In his dissertation, Weisser examines Marsh's processes of rationalization in Ferneyhough's *Intermedio alla Ciaccona*; however, he stops short of applying the same method to Marsh's rationalization of the Second String Quartet and therefore misses the implicit argument that Marsh makes—calling for a transparent relationship between notation and realization.

There are other concerns, too. For one thing, Marsh's complaint about the lack of congruence between the notation and the recording is undermined by a similar lack of equivalence between his own transcription and the recording. Consider, too, how the performance would have sounded had the Arditti quartet performed Marsh's transcription rather than Ferneyhough's score. Marsh's transcription is fraught with problems. While claiming that the performers have to rationalize Ferneyhough's notation for the realization, Marsh, in the process of attempting to notate this performance, ends up applying his own rationalization to the listening process. An analysis of the recording[9] makes clear that, although Arditti's performance is not entirely accurate regarding Ferneyhough's notation (in the sense of realizing all notated durations and pitches with absolute precision), neither is Marsh's transcription (Example 7). If the first two gestural units performed (Arditti Quartet time) are compared to score time, the performance certainly could fit into a newly notated 6/8 meter (as the first gesture performed is shorter than notated while the second is prolonged, equaling the other in duration). This undoubtedly prompted Marsh to "hear" the 6/8 meter throughout the rest of the example. If indeed the third and fourth gestures fell naturally into 6/8, Marsh's argument might have succeeded. However, excluding the opening measure, the performance is actually closer to the "Score time" than to "Marsh time."

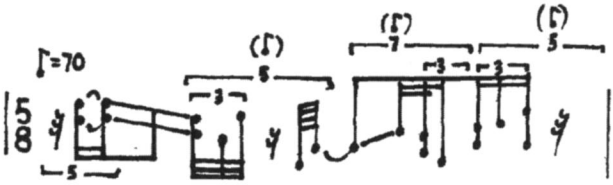
Furthermore, Marsh's transcription and argument follows Smalley in applying Cox's High-Modernist model to Ferneyhough's music. Marsh expects a performance to match the notation, and through transcription he is taking the place of the listener, thus completing the expectation of a "clear communicative chain" from notation through performer to listener. It would be easy to assert that the differences



EXAMPLE 6A: FERNEYHOUGH'S SECOND STRING QUARTET MM. 14–15.



EXAMPLE 6B: MARSH'S AURAL TRANSCRIPTION OF M. 15 OF EXAMPLE 6A (IBID., 84–85).



						Total Time
Score "Time"	1.71	0.68	0.66	0.37	0.86	4.28
Marsh "Time"	0.909	0.909	0.498	0.498	0.83	3.64
Arditti Quartet "Time"	0.81	0.817	0.567	0.35	0.747	3.291*

EXAMPLE 7: FERNEYHOUGH'S SECOND STRING QUARTET, ARDITTI'S REALIZATION AND MARSH'S TRANSCRIPTION.

between Marsh's transcription and the computer analysis of the recording are due to his incompetence. On the contrary, Marsh's transcription provides further evidence that the listener's response to the performance, similar to the performer's response to the notation, is not a direct, unmediated transmission. Instead, Marsh brings his experiences as a listener to the music, and in doing so hears Ferneyhough's performance in relation to a 6/8 meter: "Try as I might I cannot hear the recorded performance of this as anything other than [Example 6B]" (Marsh 1994, 86). However, he assumes that this is how everybody receives the passage. Hence his conclusion that "What you see (rhythmic asymmetry) and what you get (bucolic dance) are actually quite different. This ought to matter, and yet for Ferneyhough, Arditti and probably most listeners, it appears not to" (Ibid.). Marsh's conclusion is invalidated by his assumption that the listening process is a passive one as suggested previously by Pruslin, rather than an active one.

I would like to raise one final apprehension with Marsh's transcription which acknowledges the difficulty of asserting a direct relationship between score and realization. Marsh asserts that there is no difference between his transcription and the Arditti's performance. However, as we have already seen, differences exist between Marsh's transcription and the recording's analysis. Hypothetically, if we were to perform Marsh's transcription, would the resulting performance match the Arditti performance? The listening process aside, I would have to say no. The very use of a 6/8 meter, from a historical point of view,

implicitly leads to a different approach, stressing a dotted quarter note pulse. Marsh's transcription places emphasis on the beginning of each of his transcribed 6/8 measures, which would surely lead to a very different realization—one that would conversely stress a sense of meter that is not apparent in the Arditti recording. In the first beat of the second measure of his transcription, Marsh places Ferneyhough's ***sffffz*** here, which (relying solely on renotating the score) would seem to make sense. Nonetheless, if this were an accurate transcription of the recording, then we would note that the first and second violins do not accentuate the ***sffffz***; rather they are subdued. Thus, Marsh is not simply transcribing the passage from the recording; he is recomposing it based on his own rationalizing tendencies.

The thoughts of Smalley, Heaton, and Marsh present a common view regarding the function of notation. Fundamental to all three is an understanding that a successful performance posits accuracy as the vital yardstick in realizing the notational demands of the score. By successfully navigating the technical challenges through an accurate performance, performers fulfill Cox's High-Modernist model. As we have seen, however, Ferneyhough's notational complexities make such an approach untenable. Their complaints, though revolving around Ferneyhough's music, reflect a general frustration with New Complexity, centering on composers' use of "extreme complexities" that lead the performer employing a High-Modernist model approach to fail.

For Ferneyhough, notation can never present an exact encoding of the aural experience; notation is the beginning of a process, not the end. The performer has to engage with the work, making decisions as he or she traverses the various technical challenges: "The criteria for aesthetically adequate performances lie in the extent to which the performer is technically and spiritually able to recognize and embody the demands of fidelity (NOT 'exactitude'!). It is not a question of 20% or 99% 'of the notes'" (Ferneyhough 2003, 71). The notation does not present a single path but rather a labyrinth with multiple entrances and exits. Thus, a direct link between the performer and the notation (via the High-Modernist model, à la Cox) is rejected by Ferneyhough. Moreover, Ferneyhough's notation raises the question of the supposed direct link between the performer and the listener. Previous works have been seen "as a graspable, invariant entity, as something that can be directly transmitted" (Ibid., 5). From this point of view, a performer approaching Ferneyhough's work looking for the "authentic performance" faces an impossible task.

Given the complexities inherent in the work, each reading is independent from the next, with the performer providing "a

determination of the combination of elements (strata) which are assigned preferential status at any generative stage of the realization process" (Ibid., 4). According to Ferneyhough, the notation "must incorporate, via the mediation of the performer (his personal 'approach'), the destruction (secondary encoding) which it seems to be the task of most music to brush impatiently aside" (Ibid., 5). In short: banish the belief in a single way to approach a work; challenge the inbuilt tendency to resort to years of training about what notation *should* represent and how it should be tackled.

Harry Spartanay's thoughts act as a suitable demonstration of Ferneyhough's position as well as a response to Smalley, Heaton, and Marsh. Having performed the world premier of Ferneyhough's *Time and Motion Studies I*, Spartanay felt that he had succeeded musically "but notewise I think I didn't grab more than thirty percent" (Spartanay 1990, 37). Following the performance he made a recording that he felt was "technically perfect," sending it to Ferneyhough. At first Ferneyhough's preference for the premier surprised Spartanay, but on reflection Spartanay notes that "[Ferneyhough] was right, because that was the real struggle, that's what he wants and that's what's in the music" (Ibid.). Musicality is distinguished from mere accuracy.

Irvine Arditti, the first violinist of the Arditti quartet (who performed Ferneyhough's Second String Quartet) on the one hand supports Spartanay's and Ferneyhough's previous comments. He questions the often held view that an adequate performance is one that privileges perfect accuracy, "If the composer. . . . chooses that his or her work is conveyed sufficiently without a high level of accuracy, then this should be the criterion for judging if the performance is valid or not" (Arditti 1990, 9). In addition, though, Arditti is clearly attracted to transcending the traditional limits of instrumental performance through the technical development of skills: "Every era seems to uncover new realms of possibilities for the player. What was not possible earlier this century [twentieth], is or will be possible. It is the player's responsibility to transcend traditional limitations and find new possibilities of interpretation" (Ibid.). Though to be sure the "strain" of performance is not the only outcome of a complex notation and, as Arditti notes, "Sometimes the interpretation becomes a product of all these 'strain' factors but such an interpretation then becomes 'less' rather than 'more' under the conscious control of the player" (Ibid.). Within a framework of interpretation these "strain" factors can focus the direction of the work; however, the performers must restrain from making the strain an end in itself, otherwise the struggle becomes the focus.

Cox refers to such an approach as "Absolute Self-Assertion," where accomplished classical performers looking for a new challenge take "a wild stab at realizing the spirit of the music" (Cox 2002, 79). Cox's negativity towards this approach comes from a distrust of glorifying the performer at the cost of disparaging the score: "Such performers generally share the assumption that there is a hallowed domain, often referred to as 'artistic intuition' and/or 'artistic freedom,' which must remain sovereign over the notated task—which leads to a glorification of the struggle against the 'drudge work' aspects of the score i.e. pitch, rhythms, dynamics etc." The area of interpretation within this model becomes somewhat relaxed according to Cox, who comments, "too often such performers treat the music as a glorified form of spatial notation, or as a 'cue-sheet' for their musical habits," which is tied to a lack of accuracy and refusal "*on principle* to go through the difficult learning process demanded by complex music in order to realize their freedom *through* the music" (Ibid.). This learning process is a vital component of the piece's interpretational development. Cox's dissatisfaction with this type of approach, some of which can be seen in Spartanay, is not laid solely at the feet of the performer:

> Many composers of complex music have been and are so grateful for any performance of their music that they accept and praise wildly insufficient realizations. This can be understood on a human and professional level, particularly when the performer is famous and can help one to survive as a composer (Ibid., footnote on 79–80).

Though not all performers agree with Arditti in terms of the revolution of all aspects of playing or with Spartanay's less technically proficient performance, the trombonist Toon van Ulsen offers a mediating position. In a discussion on Ferneyhough's music, van Ulsen posits that although the majority of the music is possible, the remaining "impossible" challenges feel as though they make sense, but "approaching them in a global manner doesn't seem to unveil their full meaning either. The only choice you have left seems to be to put as much effort as you can and accept that you will fail to a certain extent" (van Ulsen 1990, 38). Given that this is contrary to traditional approaches to performing music, it is no wonder that this feeling of failure, no matter how much work is put forward, could be disconcerting. However, van Ulsen continues, turning the situation into a positive one, where interpretation seems more pertinent:

> Once you have accepted this fundamental choice you begin to understand your role therein as very positive. Not because you can play as many wrong notes as you want, but because as a performer you are given a far greater freedom and responsibility than in most other music (Ibid.).

Nevertheless, this reinterpretation does not go far enough—the idea of failure is still based on the yardstick of accuracy. Steven Schick, a dedicated performer of complex music (and especially Ferneyhough's *Bone Alphabet* for solo percussion), offers a different view that provides the basis for a re-evaluation of the music of New Complexity:

> Normally the goal of learning is the preparation of a *representative* performance of a piece of music. But what does it mean to represent a piece of music? The initial need to develop the physical capacity to play a piece of music . . . curates a view of learning as *perfecting*, the focus of which locates the integrity of a performance experience as accuracy of presentation (Schick 2006, 95).

This counters the views espoused by Heaton, Marsh, and Smalley, in favor of

> A more fluid view of learning as *development*, over both the short term and the long term, foregrounds a flexible environment of exchange between the piece and the player. Unfortunately, western performance practice is suspicious of too much flexibility. It teaches us that the score, the shroud of classical music objectified, is sacred. Performers learn that to venerate this music means devotion to a faithful reproduction of the score. The paralyzing need to *perfect* mistakenly places emphasis on the first few performances of a piece and neglects the rich experience of evolution over the long term [emphasis author's] (Ibid.).

The discussion of works falling under the epithet of New Complexity have suffered due to a reductive understanding of the role that notation plays. This reduction is simplistic in that it sees the increase in notational density as a direct corollary of an apparent need to control the music in a bid to "realize their ideal of infinite musical evolution under infinitely fine control." Consequently, performers attending to this view apply interpretations that are simplified to a one-to-one mapping from the score to the performance, of the notes on the page to their "perfect" aural realization (the "work" for them

exists solely in the notated score). Such simplistic reductions of the functions of notation in the music are in dire need of a re-complexification, a re-complexification that shifts the New Complexity performance paradigm away from the idea of "perfection" to a dialogue between performer and score which takes place over an extended period of time.

Notes

1. New Complexity has been defined as a "group" by Richard Taruskin, *Music in the Late Twentieth Century* (New York: Oxford University Press, 2010): 476; "Movement" by Alex Ross, *The Rest is Noise: Listening to the Twentieth Century* (New York: Farrar, Strauss and Giroux, 2007): 522; "Branch of new music" by Alastair Williams, "Ageing of the new: the museum of musical modernism," in *The Cambridge History of Twentieth-Century Music*, eds. Nicholas Cook and Anthony Pople (New York, NY: Cambridge University Press, 2004): 527; A "journalistic slogan" by Peter Nelson, "Introduction," *Contemporary Music Review* 13, no. 1 (1995): 1; "Supermarket labeling" by Michael Finnissy, "Biting the Hand that Feeds You," *Contemporary Music Review* 21, no. 1 (2002): 75; A "school of thought" by James Boros, "Why Complexity? (Part Two) (Guest Editor's Introduction)," *Perspectives of New Music* 32, no. 1 (1994): 92; A "radical aesthetic," by Christopher Fox, "British Music at Darmstadt 1982-90," *Tempo* New Series, no. 186 (September, 1993): 23; A "broad aesthetic," by Roger Marsh, "Heroic Motives. Roger Marsh Considers the Relation between Sign and Sound in 'Complex' Music," *The Musical Times* 135, no.1812 (February, 1994): 83; Or as a "resistance to musical post-modernism" by Claus-Steffen Mahnkopf in "Second Modernity—An Attempted Assessment," *Facets of the Second Modernity, New Music and Aesthetics in the 21st Century*, 6 (2008): 14. But primarily the term has been used to refer to the density of black notes per page rather than the broader complexities offered by Ferneyhough's earlier music.

2. See also Christopher Fox, "A Darmstadt Diary," *Contact* 29 (1985): 45, where the term New Complexity is used prior to Toop's article.

3. It is not surprising that Taruskin's negative reaction to notational complexity can also be found in his description of the Ars Subtilior period, which he describes as an "explosion of convoluted musical artifice and intricate embellishment that, it is often said, reached a height of sumptuous complexity unrivaled until the twentieth century." Taruskin goes on to claim that "In the name of *subtilitas*, composers at the end of the fourteenth century became involved in a sort of technical arms race." Taruskin, *Music from the Earliest*

Notation to the Sixteenth Century (New York: Oxford University Press, 2010): 337.

4. The piece is designed for performance by violin, viola, or cello, but Cassidy does allow other non-fretted string instruments to perform the piece provided they only use four strings.

5. Aaron Cassidy, preface from "Crutch of Memory," score, 2004, Sidney Cox Music Library, Cornell University.

6. Ferneyhough, preface from *Cassandra's Dream Song* (London: Edition Peters, 1975).

7. Stephen Pruslin, "Maxwell Davies's Second Taverner Fantasia," *Tempo* 73 (Summer 1965): 2, quoted in Smalley, "Some Aspects of the Changing Relationship," 75.

8. Smalley is not alone in his assertions, Susan Bradshaw states: "In any case, approximation could have no place in a musical future where composers would increasingly need to go their separate ways and, as the composers themselves were soon to make abundantly clear, henceforth to define their stylistic starting points in ever more specific detail." Susan Bradshaw, "All Fingers and Thumbs. Can We 'Interpret' Contemporary Music, or Do We Just Perform it? Susan Bradshaw Investigates," *The Musical Times* 135, no. 1811 (January, 1994): 22.

9. The analysis examines the recording through an audio editing program in order to offer a precise reading of the Arditti Quartet's performance.

References

Arditti, Irvine. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 9.

Boros, James. 1993. "Why Complexity? (Part One) (Guest Editor's Introduction)." *Perspectives of New Music* 31, No. 1: 6–9.

————. 1994. "Why Complexity? (Part Two) (Guest Editor's Introduction)." *Perspectives of New Music* 32, No. 1: 90–101.

Bradshaw, Susan. 1994. "All Fingers and Thumbs. Can We 'Interpret' Contemporary Music, or Do We Just Perform it? Susan Bradshaw Investigates." *The Musical Times* 135, No. 1811 (January): 20–24.

Butt, John. 2000. "Performance on Paper: Rewriting the Story of Notational Progress," in *Acting on the Past, Historical Performance Across the Disciplines.* Mark Franko and Annette Richards, editors. Hanover: Wesleyan University Press: 137–159.

Cox, Frank. 2002. "Notes Toward a Performance Practice for Complex Music." Edited by Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig, *Polyphony & Complexity*, New Music and Aesthetics in the 21st Century, Vol. 1, Hofheim: Wolke Verlag.

Dench, Chris. 1991. "Sulle Scale della Fenice: Postscript." *Perspectives of New Music* 29, No. 2: 100–105.

Ferneyhough, Brian. 2003. *Collected Writings—Contemporary Music Studies*, 10. Edited by James Boros and Richard Toop. Oxford: Routledge.

Finnissy, Michael. 2002. "Biting the Hand that Feeds you." *Contemporary Music Review* 21, No. 1: 75.

Fox, Christopher. 1993. "British Music at Darmstadt 1982–90." *Tempo* New Series, No. 186 (September): 21–25.

Halbreich, Harry. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 24.

Heaton, Roger. 1987. "The Performer's Point of View." *Contact* 30, (Spring): 30–33.

————. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 26.

Hewett, Ivan. 2003. *Music: Healing the Rift.* London: Continuum.

Marsh, Roger. 1994. "Heroic Motives. Roger Marsh Considers the Relation between Sign and Sound in 'Complex' Music." *The Musical Times* 135, No. 1812 (February): 83–86.

Mitchell, Brenda. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 31.

Redgate, Roger. 2006. "On Music, Philosophy, and Creativity." *Naked Punch* 6 (Spring): 98–105.

Ross, Alex. 2007. *The Rest is Noise: Listening to the Twentieth Century.* New York: Farrar, Straus and Giroux.

Saariaho, Kaija. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 34.

Schick, Steve. 2006. *The Percussionist's Art.* Rochester: University of Rochester Press.

Silverman, Julian. 1996. Review of *Aspects of Complexity in Recent British Music.Tempo*, New Series 197 (July): 33–37.

Smalley, Roger. 1969/1970 . "Some Aspects of the Changing Relationship between Composer and Performer in Contemporary Music." *Journal of the Royal Music Association* 96: 73–84.

————. 1972. "Avante-Garde Piano." *The Musical Times* 113, No. 1558: 1222.

Spartanay, Harry. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 37.

Taruskin, Richard. 2010. *Music in the Late Twentieth Century.* New York: Oxford University Press.

Thermos, Paul. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 36–37.

Thomas, Gavin. 1992. Review of James Dillon, *East 11th ST NY 10003; Windows and Canopies, La Femme Invisible*; cond. by Richard Bernas. 1992. In *The Musical Times* 133, No. 1795 (September): 466–467.

Toop, Richard. 1988. "Four Facets of 'The New Complexity.'" *Contact* 32: 4–50.

————. 2002. "'New Complexity' and After: a Personal Note." *Polyphony and Complexity, Music and Aesthetics in the 21st Century.* Vol. 1. Edited by Claus-Steffen Mahnkopf, Frank Cox and Wolfram Schurig. Hofheim: Wolke Verlag: 133–138.

Truax, Barry. 1994. "The Inner and Outer Complexity of Music." *Perspectives of New Music* 32, No. 1 (Winter): 176–193.

Ulman, Erik. 1994. "Some Thoughts on the New Complexity." *Perspectives of New Music* 32, No. 1 (Winter): 202–206.

van Ulsen, Toon. 1990. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability.* Edited by Joel Bons. Netherlands: Job Press: 38.

Weisser, Benedict. 1998. "Notational Practice in Contemporary Music: A Critique of Three Compositional Models (Luciano Berio, John Cage, and Brian Ferneyhough)." PhD dissertation, City University of New York.

Whittall, Arnold. 1999. *Musical Composition in the Twentieth Century.* New York: Oxford University Press.