To Infinity and Beyond: A Reflection on Notation, 1980s Darmstadt, and Interpretational Approaches to the Music of New Complexity

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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 … 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.¹

—Richard Taruskin

Within the scholarly community, the vaguely-defined territory encompassed by the term "New Complexity" is infinitely fraught with misconceptions. No one wishes to lay claim to the neologism, and composers associated with the term seek distance from it.² Nevertheless, Claus-Steffen Mahnkopf has recently attempted to define the term and suggests that the music has its roots in the 1970s with works such as Brian Ferneyhough's *La Terre est un Homme*, with consequent elaboration in the 1980s.³ Though Mahnkopf does not specify the nature of this elaboration, Darmstadt's summer courses clearly provided an important gathering place for composers such as Richard Barrett, Chris Dench, James Dillon, Michael Finnissy and Roger Redgate, who were willing to invest time into investigating the ideas of complexity. The term New Complexity, within this paper, refers to a series of compositions fueled by Darmstadt's summer courses during the 1980s and early '90s that complexify the relationships between composer, score, performer, and listener.

² The term New Complexity arose in print in Richard Toop's 1988 article "Four Facets of 'The New Complexity,'" *Contact* 32 (1988) 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 claims not to be the first to use the term, contrary to popular opinion, in Toop, "'New Complexity' and After: a Personal Note," Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig, eds., *Polyphony & Complexity*, New Music and Aesthetics in the 21st Century, vol. 1, (Hofheim: Wolke Verlag, 2002), p. 133. However, Finnissy suggests in an interview that Halbreich had conceived of it in 1978, in Michael Finnissy, "Biting the Hand That Feeds You," *Contemporary Music Review* 21, no. 1 (2002), p. 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,'" in Christopher Fox, "British Music at Darmstadt 1982-90," *Tempo* New Series, no. 186 (September, 1993), p. 23. Regardless of the fact that no one wishes to lay claim to this neologism, it is clear that the term originated from within the walls of Darmstadt during the late 1970s.
The battlefield surrounding this music has long been home to a variety of polemical invectives, including the arguments that the composers are searching for the perfection of abstract compositional systems with attendant notational representations. Similarly, critics inveigh against the impossibility of both performing an "accurate" realization of the score and hearing its underlying compositional processes. In the introductory quote, Taruskin alludes to these invectives, arguing that the composers were grasping for some unrealizable perfection. In order to attempt such a realization, Taruskin claims that composers presume an infinite capacity for technical development and notational realizations that push past all rational boundaries when considered by performers and listeners. This view, which has gained a certain amount of traction in the scholarly world, asserts that the music of New Complexity is divorced from performers and listeners, and that the composers are instead interested solely in the blackness of the score and the construction of abstract compositional systems.4

In this paper I offer a broad examination of these issues in order to construct defensible grounds for distinguishing the challenges of New Complexity from the integral-serialist concepts and practices of the 1950s and '60s. Such an examination cannot exhaustively cover the issues it seeks to resolve. Instead, this paper draws attention to these issues and lays groundwork for future research. In particular, this paper will consider three main areas: 1) the unsympathetic responses to New Complexity that presume direct, transparent relationships between composer and score, score and performer, and performer and listener; 2) the representation of 1980s Darmstadt as a embodiment of the earlier period of the 1950s and '60s and consequently a depiction of Ferneyhough's role as a continuation of Karlheinz Stockhausen's—in teaching as well as in music; 3) responses by sympathetic performers to the works of New Complexity that reveal a different performance practice eschewing the notion that transparent relationships exist.5

These areas are not mutually exclusive, and as we shall see, the reactions by unsympathetic performers to the works of New Complexity are fueled by issues of notational representation most prominently represented by Stockhausen in Europe and Milton Babbitt in America. This issue, which resulted from the technological advancements made during the 1950s, encouraged performers to view the score as a set of instructions that elicited accuracy in all domains (especially the rhythmic domain). Therefore, scholars viewed Ferneyhough's tenure at Darmstadt (as composition coordinator between 1984-1994) as a continuation of Stockhausen's (during the late 1950s and '60s). As a consequence, scholars have associated Ferneyhough's music with the same performative mentality, a mentality that Frank Cox examines: "The performer has an absolute responsibility to perform all notes, all rhythms, all dynamics, etc., precisely as notated, and that an absolute one-to-one relationship between notation, responsible realization, and ideal perception is the only acceptable musical situation."6 However, as Cox notes, this interpretation of notational representation as a "transparent"
link between compositional conception and ideal realization is problematic when applied to the performance of New Complexity. In short, the complex role notation plays in the works of New Complexity is not synonymous with the transparent role required by certain composers during the 1950s and ‘60s. Requiring such a role represents a fundamental misinterpretation of the function of notation in New Complexity scores, where a need for a transparent relationship is rejected. Instead the relationship between performer and composer via the score is explicitly made more complex.

The articles by sympathetic performers imply a performance practice that engages with the ideas and convictions of the New Complexity composers—away from a need to render all notational instructions with absolute accuracy—opening up new avenues of interpretation. If we are to provide a responsible examination of New Complexity, we must move beyond appealing to some idealized transparent communicative chain where, beginning with the composer and ending with the listener, the score and performer become passive agents that respectively embody a set of instructions and an accurate performance devoid of interpretation. What is complex about New Complexity is not just the notation, but also the complexification of relationships between composer, score, performer, and listener via the notation.

At first glance, works that fall under the label of New Complexity present the performer with a multitude of notational challenges. The quantity of these challenges necessitates hundreds of hours of practice and their quality requires development of new performance techniques. If the performers place themselves in the position of having to realize the score as if it were a set of instructions, then it is understandable when they complain that the combination of solving both the quantity and quality of notational challenges minimizes their freedom to interpret. This freedom is lost as a cost of producing an accurate rendition of the score. As one particularly disgruntled clarinetist, Roger Heaton, attests: "The absurdity of the excesses of the New Complexity lies not merely in the precise notation of 'expression,' but in the subjugation and manipulation of the performer, who can only conclude that his efforts are ultimately secondary." Moreover, frustration enters as performers, such as the vocalist Brenda Mitchell, face music that requires departures from pre-existing techniques that they have spent many years perfecting: "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."

This frustration results from adherence to a one-way relationship between score and performer, viewing the score as a set of instructions. The works of New Complexity conversely invite a two-way relationship, or dialogue, between the performer and score, where the role of interpretation shapes the learning process rather than excluding it. The distinction made here is that there exists a certain ideology within performance practice in the 20th century that places the technical learning of the piece above any interpretational concerns (and in some examples excludes interpretation altogether when

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7 Roger Heaton, "The Performer's Point of View," Contact 30, (Spring 1987): p. 33; Heaton's polemical reaction is brought into focus by Christopher Fox, who on attending an open rehearsal of a work by fellow composer Hans-Joachim Hespos, performed by Heaton, was "struck by [Hespos'] concern for the quality of the performers' experience in playing new music," Christopher Fox, "A Darmstadt Diary," Contact 29, (1985), p. 45.

the score is viewed absolutely as a set of instructions). This approach can be seen in the performance practice surrounding the conductor and performer Arthur Weisberg. In his book *Performing Twentieth-Century Music*, Weisberg emphasizes technical mastery, primarily focused on rhythmic accuracy both by performers and conductors: "Nothing that one does in music should be because of a lack of technique, and only when technique has been mastered is one able to choose objectively." By adopting this Weisbergian mentality, the performer not only attempts a technically perfect rendering of the score but also places emphasis on a single performance. In his discussion of Ferneyhough's *Bone Alphabet*, Steve Schick engages with an idea of a dialogue between the performer and score that challenges this need to reach technical perfection before the performance, thus viewing the process of learning and interpretation over a greater period of time that moves beyond the premier of the work. The resulting increase in gestation period prior to performance allows for a dynamic interaction, or dialogue, between performer and score:

The point of learning difficult complex music for me is in fact to slow down the process of learning. And, in specific, to prolong the very rich period of learning where the piece is still 'soft.' … With me in the case of *Bone Alphabet*, that gap [between seeing a score for the first time and being able to perform it publicly] covered about 1200 hours of practice. This extremely prolonged soft phase meant that piece had a lot of time to exert its force on me and the reverse. This "soft phase" moves beyond the reflexes needed to perform technically demanding notation, allowing for an interpretational concerns to develop: "If the goal of learning and playing music is to change your life—and why should it be any less than that—then this soft phase of learning, where music is more than just actions taken and ideology explicated, is necessary." With this "soft phase of learning" in mind we see that, far from excluding the performer's contributions, the music of the New Complexity invites, indeed requires them.

Nevertheless, couldn't it be equally argued that such a relationship has always existed within the classical tradition? Surely classical works offer new technical challenges that require careful approaches to the learning process and invite a life-long relationship equal to that of the works of New Complexity? The works of New Complexity differ in that composers explicitly employ a notational representation that channels the performer into making decisions and taking ultimate responsibility for their interpretation. Although sharing an affinity with classical performance practice, these pieces counter the interpretational (or rather non-interpretational) performance practices espoused under the influence of Stockhausen, Babbitt, and other immediately post-WWII serialists.

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11 Ibid., p. 10.
12 Mahnkopf contends that "Complexicism [his term for New Complexity], true to the principals of integral, structural, polyphonic, and immanent composition, is (necessarily) a continuation phenomenon of post-WWII serialism," in Claus-Steffen Mahnkopf, "Complex Music: An Attempt at a Definition," Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig, eds., *Polyphony & Complexity, New Music and Aesthetics in the 21st Century*, vol. 1, (Hofheim: Wolke Verlag, 2002), p. 61. I would argue that the New Complexity is explicitly reactionary against serialism rather than its continuation. Moreover, Mahnkopf is
In "The Composer as Specialist," Babbitt requires accurate renditions of every note; otherwise, as he points out, "an incorrectly performed or perceived dynamic value results in destruction of the work's dynamic pattern." However, not only does this incorrectly performed dynamic cause problems within the dynamic domain (as conceived separately from other musical domains), but, as Babbitt contends, it creates an incorrect relationship with other musical domains: "[leading to a] false identification of other components … with corresponding components of other events, so creating incorrect pitch, registral, timbral, and durational associations." This function of notation, in which the score becomes a notated set of instructions and therefore each note denotes a specific aural outcome, was also intimated by Stockhausen when teaching: "They [the students] should learn that in a Stockhausen score a note should not be shortened before the rest, but held exactly to the value that is written. Notation should be studied in particular scores, and only those scores, otherwise you get totally confused [emphasis mine]." Cox's paper concerning contemporary performance practice alludes to how performers responded to this conceptual approach by treating each individual musical domain with absolute accuracy, seeking utmost clarity and transparency. Cox refers to this approach as a High-Modernist Model of performance practice, where the performer feels the need to project a noise-free, 'transparent' relationship between [conception, notation, performance, and reception], with a direct functional relationship between 1) notation, as indicating tasks demanding responsible technical mastery, 2) what the author will call an adequate 'realization,' in which all the notes are correct, all the rhythms are accurately realized, all the dynamics, phrasing marks, etc., are audibly projected, and so on, and 3) ideal perception, which should be able to measure, based on the score, the correspondence of the former two aspects, and even more ideally, perceived composed relationships from responsible realizations.

Ferneyhough's early music during the 1960s and '70s elicited non-sympathetic reactions by performers who attempted such "noise-free" and "transparent relationships" not only keen to promote the validity of the connection between New Complexity and serialism, but also to further his own compositional agenda by claiming that "The complexist aesthetic holds fast to a holistic vision … of what music should be. [emphasis Mahnkopf's]" ibid., p. 63. This is a dangerous claim that has no doubt fueled critics like Taruskin and led other composers of New Complexity to distance themselves from Mahnkopf's politically-laden musings. Yet more recently Mahnkopf has moved beyond the stepping stone of New Complexity towards his vision of a "Second Modernity" which ultimately sidesteps the majority of New Complexity composers in favor four factors the third being "As today's culture continues to be postmodern … the art of second modernity stands in opposition to this in its emphasis on seriousness and artistic truth," [emphasis mine] in Claus-Steffen Mahnkopf "Second Modernity—An Attempted Assessment," Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig, eds., Facets of the Second Modernity, New Music and Aesthetics in the 21st Century, vol. 6, (Hofheim: Wolke Verlag, 2008), p. 10.

15 It is important to note that the ideals of performative accuracy were not new to the post-WWII serialists (composers such as Stravinsky had already advocated for a one-to-one relationship between notation and its realization). Instead, Babbitt and Stockhausen could take advantage of a body of performers who were already exploring, if not dedicated to, the ideal of accuracy.
16 Cox, "Notes Toward a Performance Practice for Complex Music," p. 72.
by interpreting the score as a set of instructions. Indeed the allure of this pseudo-scientific approach to performance practice and the ideals of perfecting performance led performers, such as the pianist Roger Smalley, to map out an evolutionary trajectory tracing the historical increases in notational specificity. John Butt, a scholar of the philosophy and criticism of historical performance practice, sums up the latter end of this historical narrative, suggesting that the typical view depicts "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's conclusion is telling as it presents yet another way in which the ideal of perfection became such a concern for a general population of composers and performers of the WWII generation. He suggests that "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." This grand narrative of perfection, used to criticize Ferneyhough in the 1960s and '70s through to his tenure at Darmstadt during the 1980s, encompassed not only notation and performance, but also reception. Stockhausen's need to accurately represent sounds via notation draws from his belief that "Music must be complete and resolved – that is, perfect." This perfection requires a commensurate level of musical enculturation if the listener is to comprehend the music:

Try taking someone who has no culture and no 'ear,' as they say, to a concert. Sirius is to be played, and this person won't be able to identify the notes, the sounds; or distinguish four or five different layers of sound. If anything, he'll be able to follow one of them, with the risk and danger of losing himself as if in a jungle.

The works of New Complexity explicitly contradict this need for perfection couched in a "clear communicative chain" that values the one-to-one relationships between composer, score, performer and listener. Instead, New Complexity complexifies the very relationships that the immediate post-WWII serialists sought to simplify, or make "transparent." Furthermore, being lost in a jungle is an important aspect of experiencing a New Complexity work, where as a listener you become active rather than passive. According to Ferneyhough, his works: "demand a high level of active engagement on the part of the listener, above all the ability and desire to move rapidly from level to level of the texture, the tolerance of a high degree of ambiguity (multiple meanings) [emphasis

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20 Ibid., p. 141.
22 Ibid., p. 91.
23 A term originally used by Cox in "Notes Toward a Performance Practice for Complex Music."
Taruskin intimates a Stockhausen-like listener expectation towards Ferneyhough's complex language. Viewed through such a lens, it is therefore understandable that the complex language of Ferneyhough seems so intricate that no listener could hope to grasp the music; ultimately the listener has to abandon all personal perceptions in order to begin to unravel the musical sound world. However, Ferneyhough is constantly aware that a listener brings his or her own perceptions of the world to the piece and that these views should not be abandoned:

Try and remember that, no matter how strange or daunting, no music stands alone in the world. There may be no genre-dictating norms of expectation satisfaction; anything that remains is a valid approach, no matter from what apparently distant domain of experience it may come. Works of art act, in some deep sense, as 'meaning-magnets;' they should embrace, not thrust away, the personal perceptions of the listener … Ambiguity—or, rather, the constant awareness of ambiguity—is always something that my music presupposes: embrace it, but not uncritically. One should not hesitate to make instantaneous decisions as to listening direction; at the same time, though, every attempt should be made to retain the sensation of multiple realities which the layerings of process and texture provide.25

In the 1990s arguments concerning the function of notation in the score and its consequent performance and reception continued to follow the same conceptual lines laid down by Babbitt and Stockhausen. A series of polemically charged exchanges between James Boros and Fred Lerdahl reveals how scholars continued to criticize the music of New Complexity on the basis that the underlying constructional methods cannot be heard; yet, the function of notation in New Complexity scores does not require, or even aim at, the goal of transparent transference between the underlying compositional system and the listener. Boros states:

Lerdahl continues to express his concerns regarding what he calls 'the gap . . . between composers' methods of construction and how listeners understand the music that results in part from those methods.' … This entire (non-)issue strikes me as bizarre. Personally, I couldn't care less about the 'audibility' of the 'elementary mathematical operations' used by many composers! (I certainly have no interest in 'aurally grasping a tone row' despite the implicit lure of erotic pleasure.) Nor would I ever strive to 'understand' music in a strictly mechanical way, i.e., in terms of 'information transfer.'26

This topic of "methods of construction" was used as an all-too-simple link between 1950s and 1980s Darmstadt. According to Anne LeBaron's and Denys Bouliane's review of Darmstadt in 1980:

When a contemporary musician hears the word 'Darmstadt,' he automatically associates it with a certain school of thought rooted in the

25 Ibid., p. 391.
highly structured musical languages of the 50s...participants attended the courses there to
gain knowledge of the concepts and systems then being developed.27

Furthermore, Benedict Weisser, in his recent dissertation on "Notational Practice in
Contemporary Music," observes that: "as composition director at
Darmstadt...Ferneyhough inherited his initial base of power from the post-Webern
serialists."28 Lisa Dominick's discussion of Darmstadt in 1984 draws together LeBaron's,
Bouliane's, and Weisser's views mythologizing Ferneyhough's participation as equivalent
to that of Stockhausen in Darmstadt's earlier generations:29

The naïve but prevalent assumption that somewhere there existed a perfect system,
infinity adaptable, served as Darmstadt's decoy; one went there to be taught by the few
fortunate enough to believe that they were in possession of such wealth. Darmstadt's
ideology was at once both authoritarian and idealistic: authoritarian in its defense of the
few who 'had it,' idealistic in its belief in a perfect system.30

These "methods of construction," ideologically loaded with the specific goal of
perfection, was used to underpin New Complexity as an "evolution" of an integral-
serialist compositional practices and Adornian aesthetics. Taruskin insists that the "[New
Complexity composers] manifestos...were worthy successors to the original Darmstadt
blast..."31 wherein one such "blast" consists of Theodore Adorno's appeal to the internal
integrity of the compositional system: "Responding only to what Adorno called 'the
inherent tendency of musical material' rather than to any call from the wider world,
twelve-tone music seemed to embody a perfect artistic 'autonomy.'"32

Aside from the obvious implication that these composers sought perfection
through the autonomy of their compositional systems, there is another aspect to this
perfection. For this aspect we must return to the opening quotation of the paper, by
Taruskin, where we can tie perfection not only to an underlying system but also to its

27 Denys Bouliane and Anne LeBaron, "Darmstadt 1980," Perspectives of New Music 19, no. 1/2 (Autumn
28 Benedict Weisser, "Notational Practice in Contemporary Music: A Critique of Three Compositional
Models (Luciano Berio, John Cage, and Brian Ferneyhough)," (PhD dissertation, City University of New
29 As Christopher Fox points out: "In music history there are canonical Darmstadts, the Darmstadt of serial
experiment in the 1950s, the Darmstadt of Stockhausen hegemony in the 1960s, the Darmstadt of New
Complexity in the 1980s, but there are other Darmstadts too. Some of these other Darmstadts consist of no
more than informal groupings constructed around friendship or enmity, the exchange of music and
information. There is, however, a territory between the canonical and the informal, inhabited by
constellations of individuals and their ideas whose significance has emerged over time, in spite of their
absence from, or mis-representation in, canonical accounts of Darmstadt," in Christopher Fox, "Other
Stockhausen's hegemonic status is warranted given the mis-representation of Fox's "informal" Darmstadt's
outside of this paper's jurisdiction, however what is important to note is how current scholarship
(including the position that Taruskin takes at the beginning of the paper) views Ferneyhough's composition
director status as equivalent to the mythologized Stockhausen of the 1960s, a view that will shortly be
examined.
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31 Taruskin, Music in the Late Twentieth Century, p. 475.
32 Ibid., p. 17.
realization through notational representation. In other words the composers are indicted with searching for the exact notational representation to match these underlying constructional methods. This understanding of the function of notation as a direct representation of the composer's ideas is contradicted in the works of New Complexity. 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." Therefore, rather than trying to make a transparent relationship between the compositional system, notational representation, and its aural realization, New Complexity instead seeks to make explicit their problematic nature.

Boros' discussion on New Complexity contrasts the view that these composers were searching for the perfect system of composition and transmission:

The aspect of 'complex' music that I find most appealing is the one which others seem to find troubling, namely that much of it has ragged, tattered edges, foregoing the 'hot licks' and glossy, synthetic sheens characteristic of the typical mass-produced regurgitation in favor of laying bare its imperfections, its flaws, its intrinsic awkwardness.

Such "imperfections," "flaws," and "ragged, tattered edges" are contrary to the notion of unity or the search for perfection that Dominick suggests. Furthermore, these tattered edges provide the space in which the performer can navigate the score as the imperfections engender a wide choice of interpretive paths. Boros explicitly describes the resistance to creating the perfect system:

In resisting the temptation to reduce art to, or to produce art from, that which is strictly quantifiable, whether in terms of off-the-shelf emotional states or prepackaged pitch and rhythmic relations, a composer finds her- or himself engaged in the most intimate of dialogues with her or his materials, often exchanging an attitude of dominance, typically manifested in the air of authority exuded by many professionals, for a willingness to attend to the needs of these materials in a humble and respectful way.

The skepticism towards viewing the compositional process as a means to finding the utopian system is offered by Chris Dench: "When someone says, 'Oh, there is enormous profundity in the way Schoenberg manipulates a particular series,' I look at it and say, 'But God, that's not a lot more interesting than the inside of my toaster.'" Indeed, even if the inside of the toaster is extremely complex, such composition devices cannot serve as 'the work': "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." In other words, the focus of the music, at least for Dench but arguably for the other New Complexicists, does not ground itself in the complexity of the compositional process and the perfection of the system.

33 Ferneyhough, *Collected Writings*, p. 3.
35 Ibid.
37 Ibid., p. 5.
The clarinetist Arjan Kappers offers a metaphor that will aid in further defining the relationship that New Complexity scores of the 1980s offer to the performer. On the one hand, the composer who offers "extreme performance difficulties or excesses of demand," according to Kappers, is akin to a sergeant (the composer) who orders his recruits (the performers) to "scrub the street with a toothbrush," which the recruit would carry out, though "he prefers a broom, which he unfortunately doesn't have." Contextualized in this manner, the relationship between composer and performer "results in [an] unwillingness [to perform], and justifiably so," a view that resonates with Heaton's argument. On the other hand, if the sergeant is recast as an archaeologist (the composer), who explains the existence of "an extremely significant golden mask … in the sands," the student of archeology (the performer) in order "not to damage it … must scrape away the sand carefully with toothbrushes." While Kapper's argument reconsiders the generally offered dictatorial view of the New Complexity composer, he undermines the complex interaction between performer and score that the notational representation explicitly enacts, reducing the role of the performer to that of a receiver whose role is to replicate the compositional system at the expense of any personal interpretation, thus forcing the relationship between score and performer into a one-way communication. This type of realization is summed up by Schick, who states,

If one takes the attitude that representing a composer's score is the ultimate responsibility, then performers feel that their own personality should not intervene between the score and the audience. Unfortunately, this often invites the kind of bloodless, almost anonymous performances that have so characterized the performance of recent contemporary music. Furthermore, Kapper's argument advocates that a true rendition exists buried beneath the complexity of the notation. The problem with this argument, however, is that Kapper presupposes a certain relationship between ends and means, akin to Cox's direct chain of communication. Whereas the process of excavation always reveals something slightly different, the process determines the product.

A second issue in need of reconsideration concerns the alleged similarities between a mythologized 1950s and '60s Darmstadt and Ferneyhough's 1980s tenure. What can be inferred from such a generalization is that Ferneyhough's directorship at Darmstadt was equivalent to the role played by Stockhausen during the 1960s. Yet this description of Darmstadt as authoritarian, the prevalent view of previous decades, does not reveal the whole story of 1984, a year which brought about a dramatic change in the program:

What actually happens at Darmstadt these days? Well, one thing that is quite definitely not on the agenda is the protracted expositions by senior composers of their compositional practice. Instead of Stockhausen, Ligeti, Xenakis, et al. discoursing for

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39 Ibid.
three or four days on their latest work, the predominant format in 1984 was a 90-minute lecture, afforded to about 35 composers, giving them the opportunity to introduce particular compositional preoccupations and play a few pieces.41

In addition, the sheer diversity of composers present, such as Cage, Feldman, Glass, Kagel, Radulescu, Rihm, Volens, and Zimmerman, attests to the diversity of musical approaches. From the domination of a few composers, the Darmstadt of the 1980s developed a spontaneous environment bustling with ideas, according to Robin Freeman's report in 1986: "The vitality, resourcefulness and spontaneity of Darmstadt, qualities few outsiders ever seem to associate with the place, had overcome all obstacles, or all but a few."42 This change continued to resonate through the '80s, with Keith Potter noting a new direction "to replace those of the 1950s and '60s," with "a need for a different sort of Darmstadt in the eighties to reflect the current state of compositional confusion that goes under such names as pluralism or postmodernism."43 The sense of pluralism and distance from the "old Darmstadt" is summed up by Fox:

If the most realistic view of the new music world today is one which acknowledges the pluralist nature of the world, then Darmstadt is surely right to attempt also to be pluralistic in its policy for inviting musicians. Consequently, in 1986 there were appearances by composers as various as Michael Nyman, Trevor Wishart, Alvin Curran, Morton Feldman, Alain Bancquart, and Helmut Lachenmann…One notable omission was any composer with a direct connection with the old serial Darmstadt; nor was any of the music from that era performed. At one level, this is quite understandable—we live in a brave, new, uncertain world—but the time has perhaps arrived when a reassessment of work which, after all, constitutes a significant part of the recent history of music in Europe, would be fruitful for both composers and performers.44

Nora Post, the resident oboist at Darmstadt, welcomed the departing of the "old guard" who came to see the dramatic changes enacted in the 1982 season rather than to control it: "a sweeping transformation [at Darmstadt had] occurred and, somewhere along the line, the famed post-war German serialist stronghold known as the Darmstadt School rolled over and quietly died. Of neglect, I suspect."45 Unfortunately, the hope that a new era of pluralism would finally blow away the cobwebs of Darmstadt's perceived authoritarianism did not come to pass. According to Post, composers banded together into distinct groups divided along aesthetic lines. The "Ferneyhough group" was accused of being unapproachable for the listener due to their use of complexity; the minimalists ("nearly anyone not related in some way to serialism") were charged with being too simple; while the "neo-tonalists" were indicted as being "pretentious and self-indulgent." Post writes:

The worst aspect of this stylistic polarization was the sense that instead of learning from other styles, some composers and performers took on the role of aesthetic exterminators,

41 Christopher Fox, "A Darmstadt Diary," Contact 29 (1985), p. 44.
organizing factional groups, preparing their boos, bravos and paper airplanes before the first note of a piece was played. One young English serialist was booed so severely by the minimalists after the premiere of his string quartet that he broke down publicly and cried.\(^{46}\)

Although Ferneyhough's purview of Darmstadt led to a return to the discussion of the compositional system, unlike Dominick's I do not believe such a discussion was based on finding the perfect system. Rather, if it can be shown that such a search for the perfection of the compositional system was not at the center of New Complexity aesthetics, then we can address the concerns of those performers who base their criticism on this misinterpretation. The following pages examine three performers' approaches to Ferneyhough's *Bone Alphabet* (1991-92) for percussion solo, Redgate's *Ausgangspunkte* (1981) for solo oboe, and Dench's *Sulle Scale della Fenice* (1986-89) for solo flute. These accounts reveal a complex relationship between the score and the performer where the notation, rather than requiring a rigid realization and a continual striving for complete accuracy, conversely offers a multitude of interpretational challenges, each with a variety of possible solutions.


Schick's relationship with *Bone Alphabet* reveals a sympathetic approach to the highly complex notation employed by Ferneyhough. More importantly, however, Schick does not attempt to render a transparent relationship between score and performance through accuracy in all musical domains or view the score as a set of instructions: "Ironically, in a score which seems so rigorously determined certain idiosyncratic decisions on my part in the first few days of practice reveal a path through the thicket of Ferneyhough's notation that inevitably gives my interpretation of *Bone Alphabet* a wholly personal and rather intuitive aura."\(^{47}\) In giving up the need to "perfect" a piece before the premier, Schick is able to develop the piece over a longer time, he notes that after thirty-or-so performances he is "reminded of how different [his] mental conception of the piece

\(^{46}\) Ibid., par. 6-7.

has become...since it emerged from the practice room." Ferneyhough's *Bone Alphabet* offers a relationship that continues beyond the work's premiere, where future performances are not aimed at perfecting, or achieving complete accuracy, but at continuing to reveal new interpretative avenues of the score:

One too often thinks of interpretation as a localized event—what a given performer does in a given performance. It can also be seen as a process of growth over a longer period of time—as a charting of the physical and emotional changes of a player over the course of his or her long-term involvement with a piece.49

*Bone Alphabet* encourages interpretative latitude by allowing the performer to choose the instrumentation, albeit under a set of predefined conditions. Schick admits that under these conditions there are not a plethora of solutions; however, his choices ultimately affect the pitch contents of the work through differences in drum sizes. Within a rhythmically saturated work such as *Bone Alphabet* it may seem unusual that Schick focuses on the melodic aspects of the instrumentation "in order to project the strongly vectorial nature of the melodic line."50 This melodic line is part of an interpretation that seeks to build an "interpretive skeleton" counteracting an audible complexity that "threatens to collapse into a single and singularly unappealing mass," and allows for a shaping of formal elements.51

Schick's approach to learning and interpreting the piece revolves around solving and memorizing complex rhythmic problems, and it is not surprising that for some, "cutting out each bar and gluing it on graph paper" to calculate the rhythms and memorizing each one individually is a step too far: "Painted in broad strokes, it seems to me that the act of learning a piece is primarily one of simplification, while the art of performance is one of (re)complexifying."52 Three processes of simplification allow Schick to focus on projecting a melodic trajectory from the amalgamation of complex rhythms, feeding an "interplay of musical behaviors."53 The first works out the least common multiple of all the individual polyphonic lines and applies simple grids onto the score (Example 2). Secondly, if the first approach does not work due to a lack of a workable common denominator, then multiplying out one of the irrationals through altering the tempo allows Schick to reapply the first approach. The third approach, which ultimately adds the most interpretational effect to the overall material, involves casting one of the lines as a "strong foreground in nature against which other rhythmic lines act ornamentally."54

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48 Ibid., p. 133.
50 Schick, "Developing an Interpretive Context," p. 135.
51 Ibid., p. 145.
52 Ibid., p. 133.
53 Ibid., p. 141.
54 Ibid., p. 137.
Example 2: Schick's grid approach to complex rhythms in Ferneyhough's *Bone Alphabet*, m. 1

The example above shows the first approach to simplifying the learning process. Here a 10 in the time of 12 sixty-fourth notes tuplet against a non-tuplet rhythm is calculated via the common multiple shared by both rhythms. Although this shows how complex tuplets are internalized without rewriting any of the material, in order to make it easier to play, Schick notes that there is a certain amount of approximation and "therefore the acceptance of rhythmic inaccuracy." One might be tempted to conclude from this statement that attempting to learn these rhythms accurately is beyond human ability and hence only a computer could really perform it accurately, yet Schick is not deterred: "The ear, the traditional means of learning, hearing, and ascertaining the accuracy of rhythms, was still of primary importance in learning even very complex rhythms." Although Heaton and Smalley would perhaps respond to this admission as proof against specific notation, in fact Schick does not get trapped in this issue and instead focuses on the larger way in which the rhythms interact in a living polyphonic structure where the "different speeds and subdivisions seem to have different rhythmic auras."

Grazilea Bortz's thesis examines the extent to which undergraduate and graduate teaching prepares the student for the performance of complex rhythms. Grazilea states that textbooks did not "provide tools for the performer willing to develop rhythmic reading and coordination skills to approach a more complex notation." Therefore these approaches are unique to Schick and are designed to serve his goal of projecting a melodic line through the landscape of interweaving rhythmic lines. One could imagine a different interpretation where the performer attempts to treat all rhythmic lines equally rather than projecting a single line, and given this the performer would have to adopt an equally unique learning process. The use of complex notation in this score places a

55 Ibid., p. 141.
56 Ibid.
57 Ibid., p. 137.
greater need to reflect on the learning process and faced with having to develop approaches performers are often set on getting through the learning process as quickly as possible. Schick asserts that "the learning of a piece becomes the necessary expedient of performance, but is rarely savored for its own unique qualities," unique qualities that ultimately shape future performances. Weisser also reviews Schick's earlier article on Bone Alphabet, concluding that Ferneyhough's notational practice

is after something different, something much riskier, much more difficult to attain, and much more ephemeral. He eschews the notion of clear notational transmission simply because he is not interested at all in communicating any thing in particular.  

Yet Weisser's statement does not elaborate on the purpose of the notation. It seems to me that such a purpose lies in the dialogue that the work engenders with the performer, a dialogue underlying a broader New Complexity, one that is both ephemeral and difficult to attain—akin to the "ambiguity" referred to by Ferneyhough earlier—primarily because such a dialogue is necessarily implicit rather than explicit, hidden and not seen.

Christopher Redgate's article on complexity and performance addresses similar issues, noting that

the need to interpret the music without getting bogged in the purely technical at the expense of the musical is of course paramount in the mind of the performer... The complexity of much of this music is not gratuitous but is a central part of the composer's aesthetic. This is a vital issue for the performer to grasp, as this will have a marked effect upon the approach taken to learning and performing.  

Further to Schick's belief that the learning process extends beyond the first performance, Christopher Redgate notes that complex works often engender a series of "re-learnings." These re-learnings take onboard new techniques and interpretations, developed beyond the premier of the work, and continue to feed the dialogue between score and performer. While for Schick there was no overarching twentieth-century performance practice for percussion, thus inviting new approaches to learning and interpreting, for Redgate the oboe conversely had a well developed and perhaps entrenched twentieth-century persona:

Traditionally the oboe is considered to be a melodic and lyrical instrument with a particularly evocative sound. The performance culture that surrounds the oboe world is still focused upon these traditional values and remains, to a large extent, conservative in its ideals and aims. It should be no surprise to learn, then, that many of the developments in the oboe world have remained on the periphery of the culture and are embraced by only a small section of the community. At the same time, however, as these developments have taken place there has been a considerable growth in the technical standards of performers and in the number of oboists working as virtuoso soloists.

Re-learnings, though piece-specific at first, can later be extended to other pieces, creating a general tool-box of approaches for a variety of complex pieces and problems. Further development of these techniques, according to Redgate leads to the technical development of the instrument, in terms of new fingerings, embouchure positions, etc. Christopher Redgate's performances of Roger Redgate's *Ausgangspunkte* led to multiple re-learnings, which is particularly apt in relation to the translation of the title *points of departure*.

Example 3: Excerpt from Redgate's *Ausgangspunkte*, score courtesy of Editions Henry Lemoine, Paris

In Example 3 an accelerating eleven-note figure is enclosed within a fourth-level 5:4 tuplet, which is shared amongst a third-level 10:8, a second-level 6:7, and an upper level of fifteen thirty-second notes in the time of twelve. Such a passage challenges the performer to be able to hear such rhythmic relationships, yet Christopher Redgate still finds it essential to "get the rhythms into the ear" as Schick had done with *Bone Alphabet*. Rhythmic complexity is not the only area developed by the composer; in terms of pitch the composer extends the range of the oboe to D7 quarter-sharp (in an earlier passage), written as long sustained notes as well as within rapid passages. On examining college-level textbooks and more generalized texts, Christopher Redgate found that fingerings above C7 were unavailable. Therefore, this passage enters the unperformable realm; the composer is asking for something that is not currently in the instrument's parlance. To extend this range of the oboe's vocabulary, Redgate developed new techniques by applying the teeth to the reed. Although he admits such an approach might be seen as dangerous in performance, with the possibility of the note not sounding, the nature of the material allows for and even invites this sense of danger:

Much of this section is written well above the official range of the instrument and there is a sense of 'will the oboist survive or will he fall off? This sense of intensity, of 'will he survive' is very important in the work—there is a risk of danger. These ideas are more important and much more significant in the work than the idea of a performer

demonstrating their technique and appearing to be in control of every aspect of the performance.  

As with Bone Alphabet, the realization by each performer of Ausgangspunkte is a unique instantiation of the work and must avoid a solely technical response through an active engagement in dialogue with the score. Striving for complete accuracy alone would cause all performances to tend towards the same end result, fulfilling a generic realization. It is not about whether a particular performer manages to navigate any particular passage successfully but rather how and in what ways this dialogue affects the larger presentation of the piece. Richard Barrett's description of Roger Redgate's music demonstrates how a generic response can be countered, through not only a questioning of this dialogue between performer and score, but also the work's realization and subsequent reception:

This music has an oblique but compelling beauty about it, without which the most incisive and profound intellectual qualities are a waste of time. It is a difficult music in almost every sense, one whose appreciation (not to mention composition) requires a questioning, at all levels, of the nature and potential of the musical experience, its internal and external relationships, the possibility (if there is one) of "understanding": this shouldn't be too much to ask.  

Such a questioning of the nature and potential of the material is explicitly evoked by the notation employed, requiring a far higher level of interaction than other, less complex music, but offering the performer far more responsibility.

Dench, the third of the composers to be examined in this paper, is also skeptical of seeing complex notation as necessitating a precise outcome: "The written detail is to be seen less as a 'philologically' exact notation equivalent of a precise executative outcome, than as a metaphorical representation of, indeed a symbolic trigger to, a particular expressive gesture." His position is reflected by the flautist Laura Chislett, who, having recorded all of Dench's flute works, offers an experienced opinion on one of his works, Sulle Scale della Fenice: "Being an interpreter, most of my comments on Sulle Scale della Fenice have necessarily been about the difficulties I encountered … This in no way reflects my reaction to the piece, which is one of enduring delight." The difficulty of these scores is an important aspect for both Christopher Redgate and Chislett toward developing their interpretations, a difficulty that prolongs the learning phase, which as we have seen in Schick's article generates the basis on which a dialogue between performer and score can form. Schick's comments on the long-term development of dialogue, beyond the premier of the work, are mirrored by Chislett: "[Sulle Scale della Fenice] opens up such boundless interpretative possibilities through the balance of premeditated and spur-of-the-moment performance decisions which the sheer difficulty and multilayering provoke." The premeditated and in-the-moment performance

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68 Ibid., p. 94.
decisions describe not only Dench's flute works but the scores of New Complexity in general. In particular, it is these two elements that make each performance unique and offer a different mantra than the one which views the success of performance as a product of its accuracy alone.

Chislett's article focuses on Dench's use of "a colouristic overlay of harmonics, split octaves, diaphragm accents, or multiphonics," an approach that seems all the more important in exploring the dialogue between the internal monodic nature of the score and its external polyphonic projection. The resulting tension between these two elements, along with the rhythmic domain in constant "flux—a sort of contemporary rubato," reflects Dench's fascination with "pieces of a music as if they were, or resembled, living things engaged in metabolic activity."

Example 4: Excerpt from Dench's *Sulle Scale della Fenice*. Used with permission of United Music Publishers Ltd.

The excerpt above, taken from the second-to-last page of the score, reveals several of Chislett's described "colouristic overlays" effecting an underlying G quarter-sharp which moves towards the A quarter-flat in the second of the two measures via a G sharp. Multiphonics, split octaves, and grace-notes offer trajectories away from this central pitch space in the work, forming the multilayering described by Chislett and offering a multitude of interpretational paths in which the role of the underlying G quarter-sharp could be strengthened or weakened on the local level. Furthermore, a G sharp in the same octave plays a role throughout the work as a member of a 14-pitch "reference" set in Toop's description of the technical construction of the work. For Chislett, "*Sulle Scale della Fenice* is primarily concerned about the emotive capabilities of the tone colors and secondly about the power of melodic contour," which allows "plenty of scope for uncovering new interpretative ideas, and hence the details of any two performances need never be the same."

The three previous performers' articles lend support to questioning the preconceived notion that the aim of performing complex works is to attain absolute

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69 Ibid., p. 95.
70 Ibid.
72 Toop, "Sulle Scale della Fenice," *Perspectives of New Music* 29, no. 2 (Summer 1991), p. 82.
73 Chislett, "Sulle Scale della Fenice," p. 94.
74 Ibid., p. 95.
accuracy. The trombonist Toon van Ulsen suggests that although it is possible to get through the majority of the challenges in Ferneyhough's music, 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 describes the act of failure (through the "unobtainability" of perfection) as positive, whereas Ivan Hewitt in *Fail Worse; Fail Better* finds the idea of failure untenable. Hewitt's view of New Complexity, as represented by his reaction to Richard Barrett's music, is indicative of those who see the increase of complexity as a method for controlling and dictating what is both performed and heard: "Barrett's entire project is essentially a negative one. It is not a case of asserting his view of things, is more a case of denying our own. This he achieves by disabling and humiliating all those human faculties and powers that create the sense of socially constituted self." 76

New Complexity is often criticized for being too intellectual, especially considering the earlier discussion on Darmstadt during the 1980s, yet Hewett condemns Barrett for his anti-intellectualism. Referring to the string quartet *I open and close*, Hewett states, "This explains the anti-intellectualism of [his] music. Any kind of thought about the world requires some notion of salience—the notion that some things matter more than others. Barrett's hyper-complex textures destroy this sense." 77 Barrett's apparent textural density evokes a strong reaction from the author leading to the conclusion that "the listener is humiliated"; 78 given the large amount of effort that went into composition and performance, "the interest we can summon up for it … [is] tepid and intermittent." 79

However, the listeners are far from humiliated in the sense that they are deprived from making their own judgment, although they are offered a mass of information to work through. This mass explicitly problematizes the relationships between the score, the performer, and the listener, as Christopher Fox attests: "Besides emphasising the problematic nature of performance itself, the music also demonstrates that the notion of composition is equally problematic." 80 Just as the performer is a "relativizing filter," so the listener's status is drawn from a passive position to an unnerving active one. Therefore it is understandable that critics mistakenly impose Barrett's bleak "Beckettian" outlook upon the active listener, a listener who requires an "aesthetic tolerance" according to Fox, which is necessary "to appreciate that a music which often mocks its own endeavours is not necessarily mocking them." 81 Neither is it "mocking" the performer, as Barry Webb's discussion of Barrett's works attests:

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77 Ibid., p. 149.
78 Ibid., p. 150.
79 Ibid., p. 148.
81 Ibid., p. 156.
One might be forgiven for thinking that the 'complex' composer gives the performer little freedom to interpret, since the information communicated in his or her score is so detailed. And yet Barrett's works abound in expressive imagery, making it very clear to the performer that his music is neither primarily a vehicle for virtuoso display nor the musical equivalent of a circus act… His directions in the scores are a positive invitation to infuse the music with meaning and purpose.\(^8\)

The performance of New Complexity works, rather than reflecting a one-to-one realization of the score, points towards a multifaceted expression of the individual approach made by the performer, who filters the various notated forms of the composer's encapsulation of endless information. These performances both draw from and add to a larger general pool of continually developing techniques (for their individual instruments) and pedagogical concerns facing interpretation with its role in "complex" music. The larger gestational learning period required by a "complex" score leads to a select few performers who are willing to engage in these scores, and thus many complex works are written for a specific performer in mind, adding to a sense of a personal interpretation. However, through both the complexity of the notation and the extension of the learning period beyond the first performance of a work, as Christopher Redgate's re-learning attests, a dialogue between the score and the performer is formed. This dialogue challenges performance practices that seek to promote a "transparent" relationship between score and performer. Furthermore, this dialogue, which exists between the composer and score, score and performer, and performer and listener, can form the basis for future research that moves beyond appeals to perfection or infinity.

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