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Roger Redgate's Grammatology: Structure and Process in *+R*

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Abstract
This article explores the complex and multifaceted nature of Roger Redgate's compositional methods, examining both his approach to musical notation and his compositional systems and processes. Redgate's work challenges the conventional understanding of notation as a transparent medium for communicating musical ideas, arguing that it actively shapes the compositional process. Drawing on theories of complex systems and the post-structuralist concepts of *différance*, *trace*, and *exscription*, the first part of the article suggests that Redgate's scores result from intricate generative processes that give rise to "emergent material"—musical elements that cannot be fully anticipated or controlled. The second part puts forward an analysis of Redgate's *+R* (1990/94), a composition for solo clarinet, focusing on the distribution of musical material in relation to constantly changing time signatures, a characteristic feature of the work. Employing the concept of *entropy*, this analysis aims to highlight the structure and processes that underlie Redgate's compositional approach and the expressive potential of his music.

Keywords: musical notation, emergent material, compositional process, complex systems

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1. Introduction

Engaging with Roger Redgate's music unveils a degree of complexity, a term that, as the composer himself posits, signifies "material generated through the intricate interplay of various generative processes" (Redgate, 2017, p. 118). What distinguishes Redgate's work from other composers of his generation is the kind of approach to musical material, which is generated as "something inherent in the notation, but not explicit" (Redgate, 2017, p. 148). The function of music notation is central to issues such as performance, composition, improvisation, analysis, or aesthetics; however, it is often left unquestioned. The first part of this article explores ideas around music notation, as elaborated by musicians and philosophers, aiming to contextualise Redgate's own attitude with regard to compositional processes and musical material. The second part proposes an analysis of one of Redgate's most notable compositions, *+R* for solo clarinet, composed in 1990/94. This analysis is preliminary in two senses: firstly, it is the first such attempt in the literature (other than the composer's own writings; Redgate, 2017; 2020), and secondly, it does not attempt to offer a complete account of the work, but rather to unveil the structure and processes of its composition, as well as Redgate's handling of his own system—a point where, as the composer says, composing begins (Redgate, 2017, p. 126).

2. Notation and Writing

2.1 Composition and Improvisation

When discussing notation, not as an isolated activity but as one aspect of many in a living musical com-

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munity, one frequently deals with correlative activities, such as composition, improvisation, and performance. That is, not only is it usually more effective to define one activity in relation to another, but it is quite conceivable to consider that musicians often do both. Of these, composition and improvisation tend to make a good pair, existing in a continuum, where the written form of composition—the score—lies at one end, and the momentary, evanescent creativity of improvisation lies at the other. One reason for such a pairing might be the common conception of both composition and improvisation as creative acts, while performance or analysis of notated works are conventionally seen as mere execution or explanation. This article does not address performance practice of complex scores or the performer-notation relationship,[1] but rather concentrates on the composer-notation interface. An early form of the debate around the function of notation is that set forth by Busoni (1911), who considered notation to be subordinate to performance:

> Notation, the writing out of compositions, is primarily an ingenious expedient for catching an inspiration, with the purpose of exploiting it later. But notation is to improvisation as the portrait is to the living model. It is for the interpreter to *resolve the rigidity of the signs* into the primitive emotion. [...] What the composer's inspiration *necessarily* loses through notation, his interpreter should restore by his own. (Busoni 1911, pp. 15–16)

Busoni (1911) considered that notation necessarily distorts the original idea (which is to be re-instated by the performer): "every notation is, in itself, the transcription of an abstract idea. The instant the pen seizes it, the idea loses its original form" (p. 17). To complicate things further, Busoni interestingly pushes the idea of transcription, stating that even a performance of a work is itself a kind of transcription, leaving the ontological status of the work unaltered: "the performance of a work is also a transcription, and still, whatever liberties it may take, it can never annihilate the original" (p. 18).

Although not referencing Busoni explicitly, Benson (2003) seems to agree that notating music is a transformative process: "the process of writing would itself play an important part in shaping the contours of a musical work" (p. 56). Benson's approach is of the the post-structuralist kind: notation intervenes between composition and improvisation, and a score is a form of writing that "presents us [...] no more than a trace of the other's presence" (Benson, 2003, p. 182). The work, as a living reality, includes more than one voice (albeit as a *trace*). He also states that performance, as the translation of the score to living presence, is essentially improvisational in nature, in the sense that there is no one-to-one mapping from score to sound.

Hamilton (2000) argues for a certain reciprocity between improvisation and composition, which stand in a Hegelian dialectic as inter-penetrating opposites. On the one side of the spectrum lies the work-concept of classical music, and on the other the "imperfect art" (a term borrowed from Gioia 1988) of improvisation. This spectrum is found *within* a genre, ranging from fixed electronic compositions to J. S. Bach's scores, or from structured jazz to free improvisation. Extending these concepts to composition, Hamilton (2000) contrasts loosely constructed studio works to recorded improvisations, arguing that placing works and improvisation at opposite sides of the spectrum may be too simplistic (p. 172). Rather, he turns his attention to spontaneity and introduces the idea of *improvised feel—a leap into the unknown* in Steve Lacy's words—opposing the view of improvisation as instant composition (Hamilton, 2000, pp. 181–185). However, the "alleged[ly] unique spontaneity of improvised music" (Hamilton, 2000, p. 176) should not be taken at face value. Where improvisers are allowed significant amounts of freedom (*macro-freedom*), classical performers are given a certain *micro-freedom*, enough to make a performance of a composed work sound fresh and unique. In fact, great performances can feel like a leap into the known, as if improvised in real time.[2]

Redgate is himself also a performer and an improviser, and as such he is influenced by the way improvisers deal with instrumental techniques (usually extended),

[1] Duncan (2010b) offers a treatment of such issues.

[2] A parallel can perhaps be drawn here with Kirby's (2002) acting/not-acting continuum—a spectrum where, at one end, lie performances of persons who do not attempt to impersonate a character (e.g. in a Happening), and at the other, those performances that entail the "feigning" or impersonating of a character ("I am this thing" as opposed to simply "doing these movements"). I thank theatre studies scholar Philip Hager for pointing me towards this reference and for his own invaluable insights on this.

structure, pitch, tempo, and so on. Thus, the ideas of improvised feel, macro- and micro-freedom are relevant. Furthermore, Redgate's compositional attitude relates to an implicit kind of improvisation, of an "improvised, gestural scanning of the material" (Redgate, 2017, p. 117), which allows him to generate novel types of musical material. However, before I explore this, I will discuss the idea of musical material in direct relation to notation itself.

2.2 Notation and Emergent Material

The above discussion suggests that the act of notating is not a neutral stage in the compositional process. Notation is not a transparent interface between musical thought and expression. The question for a composer aware of and sensitive to such problematics is how to deal with this subversive take on the matter: if notation is itself a transcription (and not a recording) of an idea, and if improvisation, performance, and composition are not mutually exclusive spheres of musical activity, how can a composer continue to rely on the presumed effectiveness of musical notation when it comes to "transmitting" one's own musical ideas? One choice seems to be to rely on oral (and aural) tradition, whereby performers are instructed how to perform what cannot be precisely, or at all, notated (as exemplified by Mahler's famous dictum that "what is best in music is not to be found in the notes"). Alternatively, one may strive to "extract" what is not entirely possible to notate via other criteria, although from the standpoint of a composer that might not be entirely satisfactory.

Redgate's work invites a more nuanced take on the debate. He also accepts that performing is more than executing, stating that "notation […] inevitably involves a certain degree of entropy through realisation in performance" (Redgate, 2019b, p. 44). According to Cilliers (1998) "entropy can be seen as a measure of 'disorder' in a system" (p. 8). Thus, low or high entropy indexes relative degrees of order or disorder. Redgate here refers to the state of entropy in performance; his scores allow or even necessitate such entropy due to their complex surface. However, as I will demonstrate in the analytical section, the entropic progression from order to disorder is also attributable to the multi-layered processes that generated these scores, not solely to performance. Perhaps the best-known 20th-century composer to formally employ the concept of entropy and the order/disorder dichotomy is Iannis Xenakis. While in his early compositional career Xenakis formalised processes of controlling degrees of (dis)order via (Markovian) stochastics (Xenakis 1992, pp. 43–78), he also related these concepts more broadly to those of symmetry/asymmetry and determinacy/indeterminacy. Xenakis had articulated a position similar to Redgate's regarding the interpretation of notated music, wherein no performance is ever replicated precisely, rendering what appears predictable fundamentally unpredictable. More significant and particularly pertinent to this article is Xenakis's suggestion "to see how the problem of the unforeseeable—of surprise—was anticipated at the compositional level; how determinism was treated during the writing of a piece and to what extent it constituted an integral part of the composition" (Xenakis, 1996, p. 143). That is, entropy may also be located within the compositional process itself. Of course, Xenakis and Redgate provide radically different solutions to addressing this issue: the former developed mathematical approaches to control transitions between states of disorder; by contrast, the latter developed an intuitive method—which, as will be elaborated, may itself be conceived as a performative act.

To Redgate, notation shapes the compositional process in ways that subvert its conventional conception as a record of or means of communicating ideas. Commenting on Busoni's statement that notation is always a transcription, thereby altering the original idea, Redgate (2019a) states: "for me as a composer what might be perceived as 'not the same' has more potential as material, as a strategic distancing from an initial […] impulse […]. Any attempt to trace an idea back to its fictive […] origins, therefore, becomes rather speculative and redundant" (p. 21). Further, Redgate's scores result from complex systems that are often impossible to "hear" in their entirety. Hence the idea of *emergent material* (Redgate 2017), that the composer borrows from the theory of complex systems. According to Cilliers (1998), a complex system "cannot be fully understood by simply analysing its components" (p. viii). What is more crucial, though, the relationships between these components "are not

fixed, but shift and change" (p. viii), which results in what the author terms *emergent properties*. For Redgate, emergent properties do take the form of musical material, a term that encompasses aspects of notation, which "intervenes" in various ways that affect the expressive potential of the work. Thus, notation, as an inherent element of the work, subverts conventional ontological approaches, which do not normally account for emergent material. Such material emerges in performance, not in silent auditions of the score, as actual performances involve physical aspects inherent in the gestural potential of the work and instrument(s).

Referring to the expressive qualities of emergent material, Redgate (2017) sometimes uses the term *impurities* (p. 118). These impurities are not a fortuitous by-product of the creative process but are intentionally incorporated by the composer. Although they might not be entirely controlled, these impurities are direct consequences of "degrees of latitude in performance" (p. 118) due to the complex nature of the notation. This might initially seem strange: how desirable is such latitude for the composer, performer, listener, or analyst, and what degree of leeway is permissible? For Redgate, accepting this seems to be a direct consequence of understanding the function of notation as more than just a recording of musical ideas that the composer has already heard in their mind. After all, this latitude in performance is what allows for novel performances and new interpretations of works.

2.3 Notation as Exscription

Cilliers (1998) draws parallels between language and complex systems, employing Derrida's (1981) concepts of *différance* and *trace*. The former implies that linguistic meaning is never statically present, and that any system of differences (Ferdinand de Saussure's *langue*) is also a system of continual deferral. *Traces* allow for *différance* as the "play of differences" (Derrida, 1981, p. 27) in a system of signifiers whose meaning has no fixed origin. Extending such concepts to complex systems, such as neural networks, reveals how systems emerge from elements that interact with one another "on the basis of the trace within [them] of the other elements of the chain or system." (Derrida, 1981, p. 26). Cilliers's main argument is that the dynamics of complex systems are best described with Derrida's concepts. As he states, "meaning is determined by the dynamic relationships between the components of the system" (Cilliers, 1998, p. 46). For Derrida writing must no longer (can no longer) be considered as subordinate to speech or *logos*—to what he called the "metaphysics of presence." This term stands for a fundamental tendency in Western philosophy to privilege immediate, directly accessible presence as the foundation of meaning and truth. Such immediately accessible presence is exemplified by speech—which for Derrida is always already conditioned by difference and non-presence, that is, writing.[3] Extending this, subverts the hierarchy of musical idea over notation. Thus, although Redgate might seem to agree with Busoni (in that every notation is indeed a transcription), he differs when it comes to the hierarchy of the "living model" over the "portrait." Indeed, Schoenberg's response to Busoni here seems more relevant: "the portrait has higher artistic life, while the model has only a lower life" (as cited in Stuckenschmidt, 2011, p. 226).

If notation is not simply a straightforward inscription of an idea, but itself an inherent part of the compositional process, what is it, then, that notation inscribes? Redgate (2019a) clarifies:

> As an improviser myself, I don't subscribe to the theory that improvised music can be notated, as the complexities of notation create a very different kind of psychological space. However, the kinds of techniques explored and developed by improvisers inform some aspects of my approach to material. (p. 24)

Thus, even if improvised musical structures cannot be notated, what notation inscribes are performance techniques, which may have (and frequently indeed have) been primarily developed by improvisers. This approach highlights the gestural-technical aspect of notation, which seems to trace a certain instrumental technique, as much (or even prior to) the sound result itself. Redgate would go as far as to consider this technical-instrumental aspect as a form of notation in

[3] Derrida has used this concept in numerous of his writings; see for instance Derrida, 1997, p. 22.

itself. In an email interview, he explained that:

> There are further some materials, which cannot be notated, often explored by improvisers, where to me, the instrument becomes a form of notation. After all it is a kind of tablature. The actual borderline between these structures is not so important; it's the possibility of finding new materials, structures and forms, and how they relate to concepts, knowledge and the imagination as forms of expression, which interests me. (R. Redgate, personal communication, July 3, 2017)

To Derrida, writing is any act of "inscription in general" (1997, 9). To Nancy (2000, p. 8), writing relates as much to language as a system of signs (accepting the *différance* between them), as to the material world in which language exists (as the "outside" of the world in the world). Because of this dual status of writing, as the limit between language and the technical apparatus as an instance of the material world, Nancy prefers the term *exscription*, which complements that of inscription with an opposite movement: away from language as a system of signs, towards the material manifestation of the world. In other words, writing rests "outside of the meaning it inscribes, in the things of which this meaning is supposed to form the inscription" (Nancy, 1997, p. 79; as translated by Morin, 2012, p. 132). As Morin (2012) succinctly put it, "what is inscribed [...] is at the same time exscribed, placed outside of language by its contact with a material instance or a technical apparatus"; and clarifies this further as contact with what "remains outside of or resists signification, that is, as this singular material event" (p. 132). By tracing certain kind of instrumental techniques, inspired by music structures that cannot be notated, Redgate's (2017) notation exscribes itself to an "open-endedness" of new musical sound-worlds, exposing the composer to "the generation of possibilities [they] might otherwise never have thought of" (p. 124).[4]

To Redgate (2019a), improvising and interpreting indeterminate (e.g. graphic) music scores are not identical activities: "I always question whether such scores actually invite improvisation, as opposed to some other kind of performative freedom" (p. 20). This coincides with Cavell's (1976) take, who makes a further crucial observation that "the context in which we can hear music as improvisatory is one in which the language it employs, its conventions, are familiar or obvious enough [...] that at no point are we or the performer in doubt about our location or goal" (p. 201). Certain performative freedom (from the score) does not imply improvisation, as there is no clear shared convention in terms of form and structure between musician and audience. I propose to reinterpret Redgate's concept of emergent material through a different concept theorised by Cavell, that of *chance*. Taking his cue from the practice of John Cage, Cavell defines chance as a process by which one accepts, and invites others, to take certain risks. By allowing for certain openness in the realisation of a work, the composer gives up control and "takes [their] chances" (Cavell, 1976, p. 199), inviting performer(s) and audience along. Such open-endedness fits with the performance latitude that Redgate talks about with regard to his scores. Emergent material is not prescribed in the score (nor in the composer's mind); indeed, such "impure" emergent materials constitute risks that one is willing to take.[5] This, Cavell points out, implies an ethical stance to the extent that performers and audiences are willing to follow the composer in taking their chances: the composer's invitation is ultimately based on a promise that "risks those who trust you can't have known they would take, will be found to yield value they can't have known existed" (Cavell, 1976, p. 199).

2.4 Notation and Unconscious Scanning

The above discussion has tangentially referred to issues relating to the performance of complex scores; however, this discussion extends beyond performance concerns. As Duncan (2010b) has shown, the complexity that characterises Redgate's (and other associated composers') scores lies not only between score

[4] Redgate refers to this idea with regard to compositional systems and the composer's reaction to them, on which I will elaborate later.

[5] With regard to indeterminate scores, Redgate (2019a) comments that aspects of the work will be realised *in* performance and not *though* it (p. 20). Compare this to Cavell's (1976) thinking that the invocation of chance seems to indicate that "his work does not come from *him* but *through* him" (p. 202).

and performance (or performance and reception), but also between composer and score. My focus here is on the latter. How is a composer to negotiate the demands and potential restrictions of his own complex compositional systems and the materials thereby produced? Ferneyhough (1995), one of Redgate's composition teachers, suggests that all notation can achieve is "a *dialogue* with the composition of which it is a token such that the realm of non-equivalence separating the two [...] be sounded out" (p. 13; emphasis in original). Redgate's (2019b) response also involves a kind of dialogue, in the form of scanning of the generated material, which the composer describes as "a spontaneous and constant mental processing of generated materials similar to the process of unconscious scanning that a painter might use when reviewing a painting" (p. 57). Redgate (2019a) has also used the term "audiative scanning," *audiation* being a term introduced by Gordon (1999) as an alternative to *aural perception* or *aural imagery*. The reference to painting points to Ehrenzweig's (1971) term *unconscious scanning* in the context of modern art, and to Russell's (1989) application of the concept to the creative working methods of Francis Bacon. According to Russell, unconscious scanning indexes the "active but unfocused attention as a result of which we make discoveries and establish correspondences which are denied to 'normal', concentrated, focused attention" (p. 22).

Ehrenzweig (1971) draws upon Paul Klee's proposition to distinguish between two modalities of attention: one that is focused and conscious and another that "does not focus on detail, but holds the total structure of the work of art in a single undifferentiated view. [...] The content of this scattered attention appears essentially blank and empty to conscious memory" (p. 23). Klee's analogy with music is particularly interesting; he introduced the term "polyphonic" hearing to account for a mode of undifferentiated listening, wherein attention is scattered "over the entire musical structure" (Ehrenzweig, 1971, p. 25). Ehrenzweig theorises this distinction in the context of musical reception. However, we can conceive of a kind of listening that is distinct from the performance of music: the silent listening, or audiation, that the composer engages in with regard to their own compositional material (or in which any score reader participates). For Redgate, not only is the nature of notation crucial in shaping audiation, but the complex compositional systems and processes he employs produce material best apprehended by yielding to a kind of undifferentiated *unconscious audiation*—an alternative term to Redgate's *unconscious* or *audiative scanning*. As Ehrenzweig conceptualises, such unfocused audiation constitutes the sole means of grasping the entirety of possibilities and decisions that are excluded from conscious audiating. Ehrenzweig calls the structure of such unconscious mechanisms *serial*. In the following passage it is instructive to substitute the word "audiation" for "vision": "While surface vision is disjunctive, low-level vision is conjunctive and serial. What appears ambiguous, multi-evocative or open-ended on a conscious level becomes a single serial structure with quite firm boundaries on an unconscious level" (Ehrenzweig, 1971, p. 32). The use of the term "serial" is not fortuitous, as it also suggests modern music's turn to serial structures, as exemplified by Pierre Boulez, whose influence has been acknowledged by Redgate (2017), for example with recourse to the former's chord multiplication technique for the pitch material in *+R* (p. 121).[6] Ehrenzweig (1971) observes that "perhaps the most elegant example in art of an undifferentiated serial structure, which from the outset contains an unlimited number of variations, is afforded by the technique of serialisation in modern music. In serialisation the same elements are scrambled up in every possible sequence so that their relationship becomes quite obscured to conscious hearing" (p. 33–34).

In analysing Francis Bacon's approach, Russell (1989) draws upon de Bono's (1971) distinction between *vertical* and *lateral* thinking. The former suggests one's tendency to adhere to known ways and patterns, only in order to "to dig an already-existing hole deeper" (Russell, 1989,p. 23). By contrast, lateral thinking suggests new ways forward by yielding control, opening space for the unforeseeable or even chance. This latter point is relevant to my earlier argument on Redgate's "impurities," which I reinterpret through Cavell's theorisation of chance. That is, lateral thinking allows for risks that one is only able to seize by loos-

[6] Pitch organisation in *+R* is not examined in this article.

ening the tight control of vertical thinking. An instructive analogy can be drawn between lateral thinking and Klee's polyphonic hearing or, more accurately, between vertical thinking and "vertical hearing." Ehrenzweig (1971) considers vertical hearing a poor choice of approach to complex polyphonic musical structures: that is, assuming that horizontal hearing is "merely the normal vertical hearing multiplied" (p. 26). Transposing such approach to the compositional domain, I suggest that Redgate's unconscious audiation presumes a kind of lateral thinking or horizontal hearing. In this context, these approaches shape the composer's response to their own systems and materials. Such a response can be understood as performative, insofar as it departs from the rationalist and calculated orientation of vertical or conscious thinking. The risks assumed by the composer belong not only to the domain of performance and its reception, but extend to the act of composition itself. The analysis that follows seeks to identify such moments *+R*.

3. Interlude: Musical Structure and Possibility Space

Lochhead (2016) moves beyond a conception of structure as a static"unity" with a "fixed origin" (p. 78). Instead, she proposes the term *structuring*, to emphasise the temporality of the work's becoming. As she states, "structure is not an unchanging feature of the work but rather something that *emerges* as a structuring in particular circumstances of listening. Analysis, then, focuses not on 'a structure', but on the emergent structurings—the possibility space—that a musical work generates" (Lochhead, 2016, p. 97; emphases added). She borrows the concept *possibility space*, as a correlative to that of *emergence*, from DeLanda (2011). DeLanda discusses the latter as a consequence of interactions between component parts of a system but makes the crucial point that these interactions themselves "include complex relations that go beyond simple causal relations" (Lochhead, 2016, p. 97). Further, Lochhead finds a resonance between Derrida's proliferating "play of structure" (Lochhead, 2016, p. 63) and the generative structural function of the series in Boulez. This resonates with Adorno's (1982, p. 173) conception of structure as distinct from the concrete elements of the work, but arising from them (Lochhead, 2016, pp. 48–49). I propose to think of Redgate's emergent material in these terms. Redgate himself describes his works using the analogy of "the surface of a river, where what we see is the result of so many forces beneath the surface: currents, obstacles, wildlife, the depth, rate of flow, etc." (R. Redgate, personal communication, February 19, 2025). Such analogy aptly corresponds to Lochhead's idea of *structuring*: neither the underwater forces nor the surface itself are static unities. The latter is wholly or partly formed as emergent material, while the former goes beyond simple, linear, or causal relations. The work as a possibility space includes not only the score of the work, but also its different performances, recordings, existing analyses, and accommodates a certain degree of performative latitude, actual or potential. In line with Agawu's (2004) Adorno-inspired attitude, the following analysis assumes a *strategic deferral* of a "constantly receding target" (p. 273), accepting that there will always be a remainder at the end of any analytical process. Viewing a work as a possibility space means that there is no ultimate interpretation of a work, neither in performance nor in analysis. As mentioned, the ensuing analysis does not attempt to provide a comprehensive account of the work (for instance, it does not engage with pitch or rhythm). Moreover, in light of the preceding discussion, this analysis does not seek to establish a single authoritative reading of the work. Rather, it represents one of many analytical approaches, seeking to enrich the work's possibility space alongside other analyses, performances, recordings, and alternative modes of interpretation. Note also that part of the analysis draws on the composer's pre-compositional sketches, as well as on personal communication. However, its core findings and hypotheses, such as the process of material distribution, are provided here as my own interpretations. That is, the fact that I have consulted unpublished sketches does not confer an authoritative status that might preclude other interpretations.

[7] Its provisional, shorter, version was composed during the composer's tenure as the Norther Arts / University of Newcastle upon Tyne Composer Fellow; it was performed by Roger Heaton on May 15 1990 in the Es Festival, Milan. The completed, revised, version

4. Structure and Process in *+R*, for solo clarinet

Roger Redgate's *+R*, for solo clarinet, was composed in two stages, in 1990 and 1994,[7] and it is a formative work to him (Redgate, 2017, p. 119). The 1990 version extends to the midpoint of the work at m. 96. As I will demonstrate in the analysis, the second half (composed in 1994) exhibits a more radical approach to the entropic tendency outlined above, potentially signaling Redgate's reinterpretation of his own compositional systems and processes. The analysis presented here is not exhaustive but will focus on its most characteristic features: the constantly changing time signatures, the two kinds of compositional material, and the underlying formal and informal compositional processes. Beyond the aforementioned unpublished sketches and personal communication, this analysis also draws on recent articles by Redgate (2020; 2017) that elaborate on certain compositional aspects.[8]

The title is borrowed from Derrida's (1987) book *Truth in Painting*, where he elaborates on overturning the polarity between the work and *parergon*, which refers to the decorative or framing elements of the work (p. 54). *+R* points to Derrida's own reference to a drawing by Valerio Adami, *Noyèe* (1975), engaging in a play of back-and-forth references: the latter cites Derrida's (1986) work *Glas*, playing on the consonant cluster "gl"; in turn, Derrida (1987) "transposes" this to "tr" (p. 169) and further to "consonant plus *r*" (p. 159). As Exarchos (2010) points out, the performance technique of circular breathing, where "more and more air" is required, echoes Derrida's "*+r effect*" (*plus air*, *plus d'air*).

+R extends for 192 measures with a new time signature for each measure, ranging from 1/16 to 6/8.[9] There are six sections, or cycles, that permute these time signatures according to a determinate process. This process is initially obvious; however, as the work progresses it becomes progressively less clear, mainly due to secondary substitution processes (or even manual interventions by the composer). Each of the six cycles consists of 32 measures and is subdivided into measure groups according to their length (i.e. measures per group). There are two such kinds of measure groups for each of the two contrasting kinds of musical material, labeled "A" and "B." The first measure group of material A comprises the opening seven measures of the work (see Figure 1) that were "intuitively conceived in response to the required character of the material and the implications of the temporal aspects" (Redgate, 2017, p. 119). Following this, both materials were projected onto the pre-defined measure cycles under analysis. Thus, the term *cycle*, denotes both a structural section and the cyclical process whereby the composer responds to the generated material. As the work progresses, the distinguishing features of the two materials become increasingly blurred. As I will show later on, this results in an overall transformation via a gradual *entropic* process, which is the central hypothesis of the present analysis. For now, however, it should suffice to provide a provisional definition of the two types of material in the opening cycle, based on Redgate's (2017) own description (p. 121):

Material A	Material B
No use of quarter-tones	Use of quarter-tones
Fixed tempo	Changing tempo
More or less constant dynamic profile	More varied dynamic profile
More static	More dynamic
No additional features between occurrences	Additional features between occurrences
Frequent use of interlocking rhythmic lines; wide range	Varied playing techniques, often extended

was performed four years later (12th of May 1994) at the British Information Center, London, by Andrew Sparling (Redgate, 1995). There are currently three recordings of the work by Sparling (1994), Borch (2007), and Dunsmore (2025).

[8] There are no published analyses of *+R*. Barrett (1995) provides critical analyses of excerpts from Redgate's works from the 1980s, offering a personal, interpretive examination of compositional methodologies from the perspective of fellow composer and collaborator. Duncan (2010a) offers a detailed analysis of Redgate's first published composition, *Genoi Hoios Essi*, demonstrating how the work embodies a sophisticated dialectic between linear "becoming" and retrograde rhythmic palindromes.

[9] Very rarely two consecutive measures will have the same time-signature, but this is a result of a secondary substitution process, on which I will elaborate later.

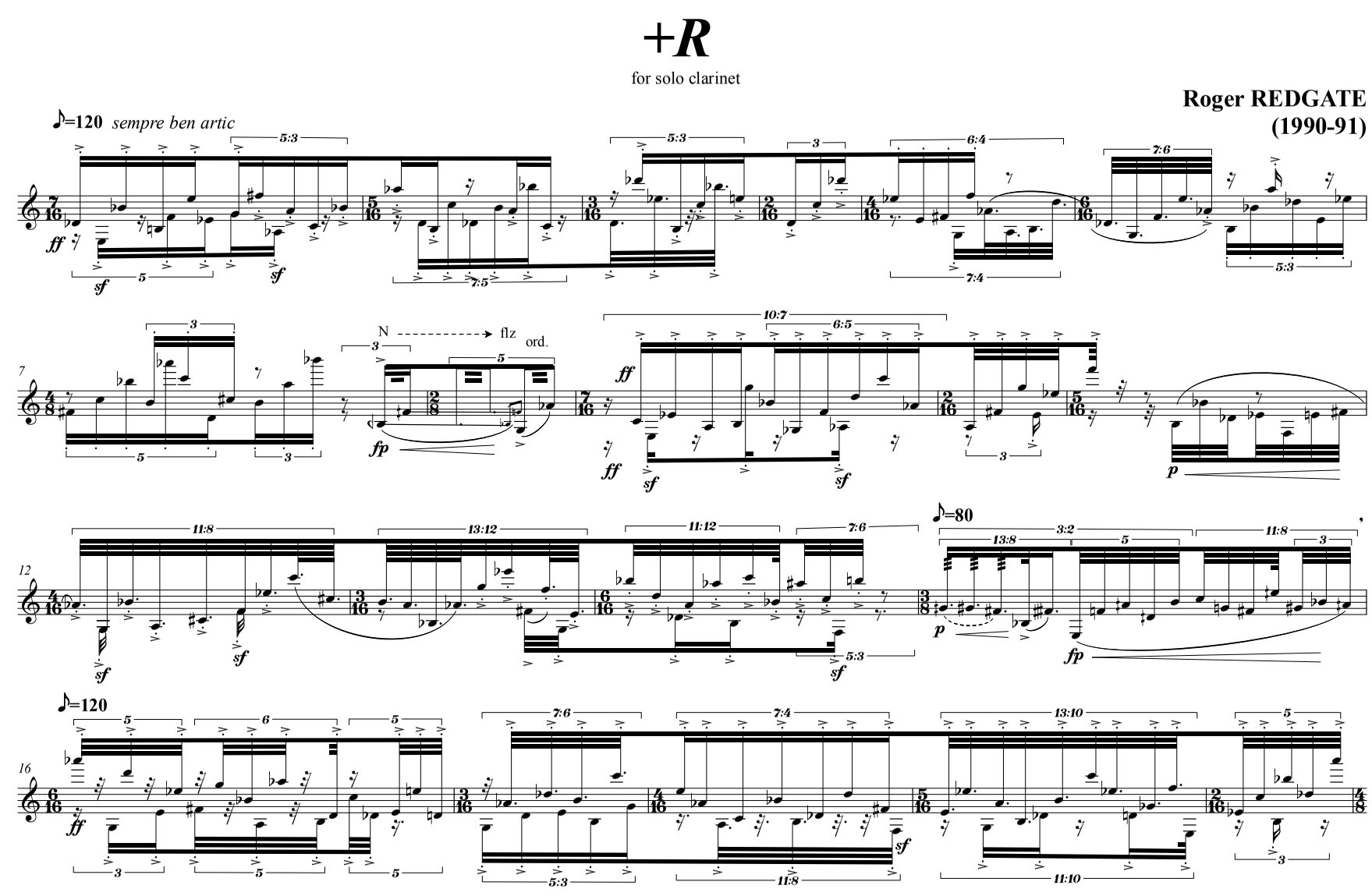


Figure 1: *+R*, mm.1–20. Reproduced by kind permission of Éditions Henry Lemoine, Paris.

The work is structured on two levels: first, in six measure cycles, within which the two contrasting materials alternate according to multi-layered processes; and second, in two parts overall, comprising cycles 1–3 and cycles 4–6. In these two parts, the application of such processes is quite different.

The overall structure of measure cycles in the work is founded on an alternation between measure groups of material A and single measures of material B. There are two processes determining the distribution, length, and character of these materials. Each operates dually on musical material and time signatures: a primary process of distribution (mostly via permutation, but also augmentation, diminution, or omission), and a secondary process of substitution. The primary process governs the entire structure of the wowrk: first, it distributes material A into measure groups of varying length (ranging from 2–7 measures), each separated by a single measure of material B; second, it allocates time signatures to each measure within these groups, assigning between 2–8 sixteenth-notes per measure for material A and between 5–24 thirty-second-notes per measure for material B. Within each group, time signatures are permuted according to a predetermined plan. The secondary process starts to operate from the midpoint of cycle 3, obscuring the primary process by replacing single measures of material A with material B, thereby gradually increasing the presence of material B. This process also involves the substitution of time signatures, independently of the material.

Importantly, alongside these processes, there is an informal process that reflects the composer's creative engagement with the generated material. Through employing unconscious scanning and a process of "cross-fertilisation" (on which I will elaborate later), the distinction between the two types of material becomes blurred until their individual identities are less clear. Such creative processes are more elusive in nature but are profoundly significant. As Redgate (2017, p. 126) remarks: "it would be reasonable to assume [...] that this music is totally determined by such pre-compositional devices. In practice it is only when these processes have done the first part of their job that the real act of composition begins."

4.1 Primary Process: Distribution of Musical Material

Recall that each cycle extends for 32 measures, while its internal organisation includes groups of measures of material A that span from 2–7 measures. This primary distribution process permutes these groups and appends a single measure of material B. Table 1 exemplifies this process. Each "o" sign stands for a measure of material B, whereas each empty cell denotes a measure of material A. Note that even though the work presents only 6 measure cycles, the original plan, based on research of the sketches and Redgate (2017), includes 7 cycles. The final cycle has not been used as such.[10]

Material A is arranged in rotating measure groups of different lengths, according to a permutational logic. As shown in Table 2, the first cycle of the work arranges the groups in descending order: 7, 6, 5, 4, 3, and 2 measures for each group of material A, with single-measure interpolations of material B in between. In the table, underneath each cycle's material A group there is a description that indicates the permutation of the values in relation to the previous cycle. The first two cycles are identical in this respect (7 measures of material A, followed by one measure of material B, followed by 6 measures of material A, and so on). The permutation indices work as follows: each value indicates the sequential position in the previous cycle (e.g., 3 indicates the value in the third sequential position in the previous cycle; say the third value in the previous cycle was 5), while its sequential position indicates the sequential position in the new cycle (e.g., if 3 is the second value, 5 is now in the second sequential position). Thus, the permutation in the third cycle, 135642, indicates that:

- The first value in the new cycle is the one that was first in the previous cycle (identical)
- The second value in the new cycle is the one that was third in the previous cycle

[10] Cycle 7 was likely used in one or more of the other compositional processes that are not covered in the present article, such as the generation of timelines (see Redgate, 2017, p. 123).

m.:	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*10*	*11*	*12*	*13*	*14*	*15*	*16*	*17*	*18*	*19*	*20*	*21*	*22*	*23*	*24*	*25*	*26*	*27*	*28*	*29*	*30*	*31*	*32*
Cycle 1								o							o						o					o				o		
Cycle 2								o							o						o					o				o		
Cycle 3								o						o				o			o					o						
Cycle 4						o							o					o				o			o							
Cycle 5				o								o						o					o							o		
Cycle 6			o				o							o						o								o				
Cycle 7					o			o								o							o						o			

Table 1: Distribution of material B (primary distribution process).

Table 2: Measure groups of material A for each cycle; each number indicates the number of measures in each group.

Cycle	Measure groups of material A
1	7 6 5 4 3 2 (descending)
2	7 6 5 4 3 2 (perm. 123456) (identical)
3	7 5 3 2 4 6 (perm. 135642)
4	5 6 4 3 2 7 (perm. 265341)
5	3 7 5 4 6 2 (perm. 461325) (perm. of 3: 312564)
6	2 3 6 5 7 4 (perm. 615324)
7	4 2 7 6 3 5 (perm. 615324) (perm. of 5: 462513)

- The third value in the new cycle is the one that was fifth in the previous cycle
- The fourth value in the new cycle is the one that was sixth in the previous cycle
- The fifth value in the new cycle is the one that was fourth in the previous cycle
- The sixth value in the new cycle is the one that was second in the previous cycle

Note that cycle 2 maintains the order of cycle 1; thus, the permutation index is 123456, which leaves all values unchanged.

There does not seem to be a consistent pattern that connects all cycles. However, we can observe a tendency toward disorder in terms of the temporal allocation of musical material: on one level, from the middle of the work the distribution of material A becomes less predictable; on another level, the entire system of material distribution, including both types A and B, is masked by the composer's interventions, which impose secondary substitution processes, alterations on the character of the materials, and creative decisions that lie outside—or even negate—his own system.

The original arrangement (cycle 1, repeated in cycle 2) is in descending order; that is, the groups of material A decrease in size consistently. Cycle 3 divides the cycle into two segments of three groups each, those with odd and those with even number of measures, starting with the highest odd value. The odd-numbered segment of three descends (7-5-3) and is followed by the even-numbered segment that ascends (2-4-6); thus, the length of each A material group first decreases in odd numbers of measures and then increases in even numbers of measures. This symmetrical structure is also evident in its permutation index, when viewed in segments of three (135 642) and in terms of their consecutive distances (+2,+2 followed by -2,-2). Thus, there is a symmetrical structure to the first three cycles (cycles 1 and 2 being identical, in descending arrangement). However, from this point on, the symmetry is disturbed: cycles 4 and 6 negate a clear pattern. Thus, the entropic process mentioned earlier is built into the process of material distribution, that is, the temporal distance of material A distribution through the cycles of the work.

The fifth cycle re-introduces the odd/even segments of cycle 3, maintaining the retrograde relation between them, but reversing the ascending/descending arrangement, with one further alteration: the two highest values of each segment are reversed (3-7-5 as opposed to 3-5-7, followed by 4-6-2, as opposed to 6-4-2). The symmetric structure is again evident in its permutation index in relation to cycle 3 (312 564) and

its successive distances (-2,+1 followed by +1,-2). Cycle 6, as mentioned, breaks this symmetry once again, which will return in cycle 7: an even segment of descending/ascending arrangement followed by the odd segment retrograded, with the further alteration that exchanges the two middle values (4-2-7 as opposed to 4-2-6 followed by 6-3-5 as opposed to 7-3-5). The permutation index relative to cycle 5 (462 513) and the successive distances (+2,-4 followed by -4,+2) also indicate this symmetry. Recall, however, that Cycle 7 was not finally used (although certain of its aspects may have been incorporated in other ways). Although this is an abstract arrangement that is not easy to grasp (if at all) for various reasons that I will discuss later, the rationale of introducing a symmetrical structure in order to move away from it, is a defining aesthetic principle of the work, and as I will show, operates also on more foreground levels.

4.2 Primary Process: Distribution of Time Signatures

The first part of the work (cycles 1–3) exhibits a clear permutational process also in the manner that time signatures are distributed internally. This permutational process is evident both in the internal structure of each measure group of material A and in the transition between single measures of material B. The first three cycles of the work follow the scheme shown in Table 3. The fourth column of the table, "Material A time signatures," lists the length of each measure in sixteenth-notes; the column to its left, "Measure group," indicates the number of measures in each group (cf. Table 2, here shown in Roman numerals); the one to its left, "Order," indicates the sequential order in which these groups are placed in the work (separated by one measure of material B). The "Description" column analyses the internal structure of each group, similar to the analysis above, as does the column to its right, "Permutation," with the added information indicating altered values, compared to the previous cycle. The table provides the same kind of information for material B, only this type of material is notated in thirty-second-notes. Note that in the second part of the work there is no clear permutational logic. Thus, the transition to cycle 4 (m. 98) marks a point of no return in the entropic process of increasing disorder.

The internal structure of cycle 1's first group follows the same rationale as the arrangement of the entire cycle 3 that we saw above: descending odd values followed by ascending even ones (notated "odd ↓ / even ↑"). Thus, the internal structure of the opening measure group prefigures that of the entire structure of cycle 3. Note that while the former values refer to measure lengths (in sixteenth-notes), the latter values refer to the number of measures. The second group in cycle 1 removes the longest measure (8) and permutes the remaining values in a symmetric way so that the arrangement "odd ↓ / even ↑" is maintained—however, now the odd and even values are interlaced (note the successive distances in the permutation index 142536: +3,-2,+3,-2,+3). Each subsequent measure group of material A simply retrogrades the previous group, also eliminating its longest measure (although the final two groups are too short to exhibit any symmetry). Note how with each retrogression either the "odd / even" or the "↓ / ↑" relationship is inverted. In terms of the first cycle's material B, each new entry adds 4 thirty-second-notes to its length.

Cycles 2 and 3 continue to alter the internal structure of each group based on the same permutation. More precisely, the first group in each cycle arranges the even and odd measures based on the first group of cycle 1. In cycle 2 the first group results from adding one sixteenth-note to the measures of the first group of cycle 1; in cycle 3, the same group arises from removing 2 sixteenth-notes. In both cases, the result swaps odd and even, resulting in an "even ↓ / odd ↑" pattern. Following this, the remaining groups of material A in both cycles follow the same rationale as in cycle 1: removing the highest value and alternating even and odd values by simple retrogression. However, an additional alteration here slightly obscures this process. In cycle 2, from the second group onward, value 2 is subtracted and added alternately; in cycle 3, value 4 is added and subtracted alternately. In terms of material B, cycle 2 is more ordered, simply adding 3 thirty-second-notes to each new entry, whereas cycle 3 moves away from this rationale slightly with the arrangement of 13 15 17 12 and 11 thirty-second-notes.

	Order	Measure-group	Material A time signatures (16th-notes/measure)	Description	Permutation / alteration	Material B time signatures (32nd-notes/measure)	Alteration
Cycle 1	1	vii	7 5 3 2 4 6 8	odd ↓ / even ↑		8	
	2	vi	7 2 5 4 3 6	odd ↓ / even ↑ interlaced	142536	12	(+4)
	3	v	6 3 4 5 2	even ↓ / odd ↑ interlaced	65432	16	(+4)
	4	iv	2 5 4 3	even ↑ / odd ↓ interlaced	5432	20	(+4)
	5	iii	4 3 2	even ↓ / odd (↑) interlaced	341	24	(+4)
	6	ii	2 3		32	(end)	
Cycle 2	1	vii	8 6 4 3 5 7 9	even ↓ / odd ↑	+1	5	
	2	vi	6 1 4 3 2 5	even ↓ / odd ↑ interlaced	142536, -2	8	(+3)
	3	v	7 4 5 6 3	odd ↓ / even ↑ interlaced	65432, +2	11	(+3)
	4	iv	1 4 3 2	odd ↑ / even ↓ interlaced	5432, -2	14	(+3)
	5	iii	5 4 3	odd ↓ / even (↑) interlaced	341, +2	17	(+3)
	6	ii	1 2		32, -2	(end)	
Cycle 3	1	vii	6 4 2 1 3 5 7	even ↓ / odd ↑	-2	13	
	6	vi	10 5 8 7 6 9	even ↓ / odd ↑ interlaced	142536, +4	(end)	
	2	v	5 2 3 4 1	odd ↓ / even ↑ interlaced	65432, -4	15	(vii +2)
	5	iv	5 8 7 6	odd ↑ / even ↓ interlaced	5432, +4	11	
	3	iii	3 2 1	odd ↓ / even (↑) interlaced	341, -4	17	(v +2)
	4	ii	5 6		32, +4	12	(iv +1)

Table 3: Internal distribution of time signatures in part 1 (cycles 1–3).

One final observation regarding material A: note that in cycle 3, the temporal order of groups (Arabic numerals: 1 6 2 5 3 4) differs from the table's arrangement (descending Roman numerals). The table presents a theoretical descending order, while the score unfolds chronologically—indexing the deeper connection between cycle 3's overall A material group arrangement (cf. Table 2) and the work's opening measure, thus balancing the symmetrical structure of the first part.

4.2.1 Symmetry and Tempo Markings in Part 1

Regarding tempo markings, the first part of *+R* is similarly symmetric. Cycle 1 goes through a determinate process of decreasing tempo for measures of material B: 120, 80, 60, 48, and 40 (all tempo markings in the work are based on the eighth-note), while material A groups have a steady tempo of 120. The increasing length of material B measures (according to the ratios 2:3:4:5:6) balances out the decreasing length of material A groups (35, 27, 20, 14, 9, and 5 sixteenth-notes). Figure 2 displays the effect of decreasing tempi for material B, so that the first cycle effectively exhibits a balanced exposition of the two kinds of material. Each tick in the graph represents a sixteenth-note. The lower line accounts for tempo marking changes, scaling each material B measure to correspond proportionally to material A measure groups. To further illustrate this relationship, a hypothetical cycle 1 at a steady tempo of 120 would have produced the following arrangement, counted in sixteenth-notes:

A	B	A	B	A	B	A	B	A	B	A
35	4	27	9	20	16	14	25	9	36	5

This shows numerically what Figure 2 shows visually, suggesting that the opening cycle is appropriately the most symmetrical in the work. The following two cycles are quite regular in this respect, each having a single tempo marking 90 and 60 respectively,[11] the latter being the longest running in the entire work.[12]

4.3 Secondary Process: Substitution of Musical Material

The end of cycle 3 constitutes a tipping point of entropy increase, as the additional secondary processes commence (alongside the primary distribution processes described above). Furthermore, Redgate's creative engagement with the musical material also becomes evident in this cycle.

The material substitution process is built into the structural plan of the work and starts to take place from the middle of cycle 3, somewhat obscuring the deeper connection to the opening measure group of the work. Figure 4 shows the complete compositional design in terms of measure groups, time signatures, distribution (permutation) processes, and substitution processes.[13] Figure 5 shows all six cycles of the work in terms of measure length (counted in sixteenth-notes).[14] In both figures, red typeface stands for material B. In Figure 4, material B measures from the primary permutation appear in bold red typeface. Normal red typeface indicates material B resulting from a secondary substitution process, replacing predicted material A. Each measure of material B maintains its place in the next cycle; e.g., in Figure 4 m. 79 has material B due to the fact that in the previous cycle, at m. 47 right above, a measure of material B had been predicted by the permutation process. Each new cycle accumulates such extra material B measures. Thus, cycle 3 has 2 extra measures of material B (cycles 4–6 have 6, 9, and 13 extra measures, respectively). In the score, material B in m. 79 is actually the continuation of the gesture in the preceding measure, where material B was assigned by the primary permutation process (see Figure 3). In m. 94, material B also appears due to its corresponding position in the previous cycle (m. 62). By this point, however, the distinction between material A and B is less clear, due to the aforementioned informal process that takes place gradually as the work unfolds.

[11] In measure 59, the beginning of the fifth measure-group of cycle 2, there is a tempo marking of 105 in brackets. Redgate's sketches indeed include this tempo marking, but it seems that it was not finally included. Note that a complete account of the compositional processes that gave rise to the tempo markings of the work is beyond the scope of the present article.

[12] Scaled according the tempo markings, the first three cycles run for 200, 187.33, and 330 sixteenth-notes, respectively.

[13] "C" stands for cycle. Between mm. 191–192, time signature 2/16 is found in the sketches and in Redgate, 2017, p. 122, but was not finally used.

[14] This graph has not been scaled according tempo changes.

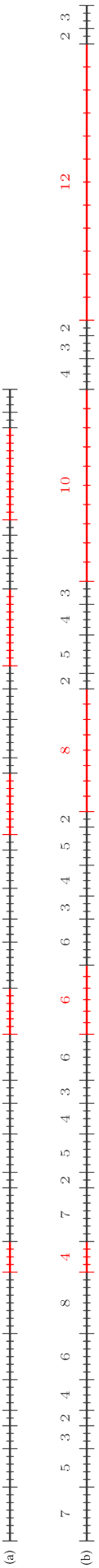


Figure 2: Cycle 1, material B shown in red; (a) = unscaled, (b) = material B scaled according to tempo markings.

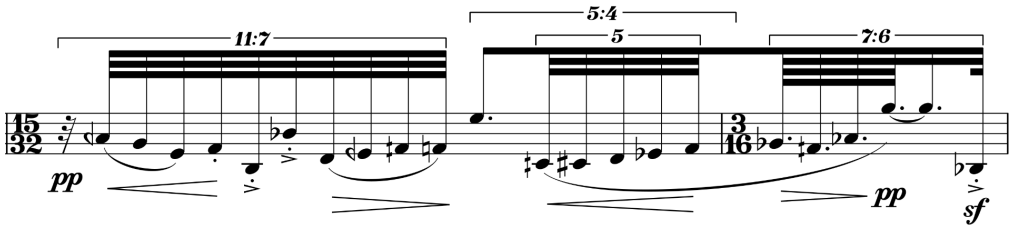


Figure 3: *+R*, mm. 78–79. Reproduced by kind permission of Éditions Henry Lemoine, Paris.

4.4 Secondary Process: Substitution of Time Signatures

Figure 4 further illustrates the secondary substitution process that affects time signatures directly (and therefore the length of the corresponding measures). From cycle 4 onward, certain material B measures initiate a process of determining time signatures in the corresponding position in subsequent cycles, by subtracting or adding a thirty-second-note. So, the time signature in m. 103 affects the time signatures in mm. 135 and 167 (and in the hypothetical corresponding measure of cycle 7),[15] by subtracting a thirty-second-note each time. In cycle 4, this takes place for all material B measures except for the third one. Similarly, in cycle 5, this process takes place for all material B measures except for the last one (now adding one thirty-second-note). Thus, this process overrides the primary distribution process's predictions. The same is true for the measures indicated by a downward arrow, also starting in cycle 4. The time signatures of mm. 100, 104, 108, and 123 are carried over to the corresponding positions in cycle 5 (mm. 132, 136, 140, and 155). Note that, while maintaining material A, all these time signatures are of the type that had only been associated with material B in the permutation process. From cycle 5, this process is further carried over to the next two cycles (unless blocked by material B measures from the primary distribution process) with the added alteration of the actual value (11 and 17 in m. 172 and the corresponding one of cycle 7, inverted in m. 187 and the corresponding measure of cycle 7). An additional such time signature appears in m. 178 of cycle 6. This substitution process significantly obscures that of the permutation process to a great extent, already from cycle 4. Perhaps only in the longer measure groups of cycle 4 is a linear rationale noticeable, such as the opening or the closing groups (mm. 98–102 and 124–129), but the fundamental characteristics of the primary process have been substantially lost.

4.5 Cross-fertilization of Materials and Entropy

By this stage, it should be clear that the compositional system that was established at the beginning of the work is gradually dissolving; there is an entropic process of moving away from order to a more fluid process. This is due to the secondary substitution process built into the compositional plan. But there is an additional, informal factor: the composer's own response to the compositional system. In Redgate's (2017) own words, such systems and processes "form an infrastructure on which the work is based; a reservoir of potential, or set of creative grids, to which I as the composer can react at any given moment" (p. 124).

One crucial effect of such a creative process in the case of *+R* is the blurring of the distinctive features of the two kinds of material. This is a gradual process and takes place as the work unfolds. As I mentioned earlier, *+R* was composed during two phases separated by a couple of years. One memento of this temporal gap is the repeated time signature in mm. 96 and 97 (see Figure 4). The first provisional version of the work ran up to m. 96 (R. Redgate, personal communication, February 19, 2025). This coincides with the conclusion of cycle 3 and the first part of the work. As I have argued, this part is more symmetrical in its structure and clearer in its process, in contrast to the second part. It seems that once the composer resumed the compositional process, he must have recomposed m. 96 as m. 97, offering a reinterpretation of the material from

[15] Note that the measure numbering in this article corrects a typographical error in the published score: measure 100 should be numbered 101, with subsequent measures adjusted accordingly through the score's end.

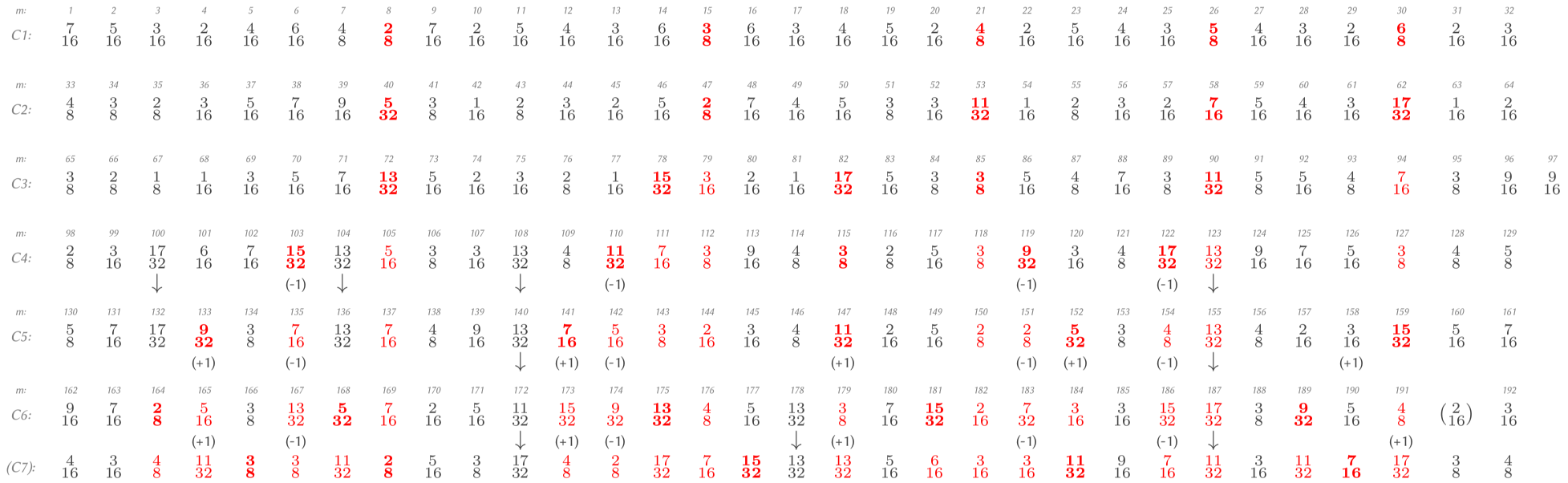


Figure 4: Measure groups, materials, time signatures, and substitution processes in *+R*.

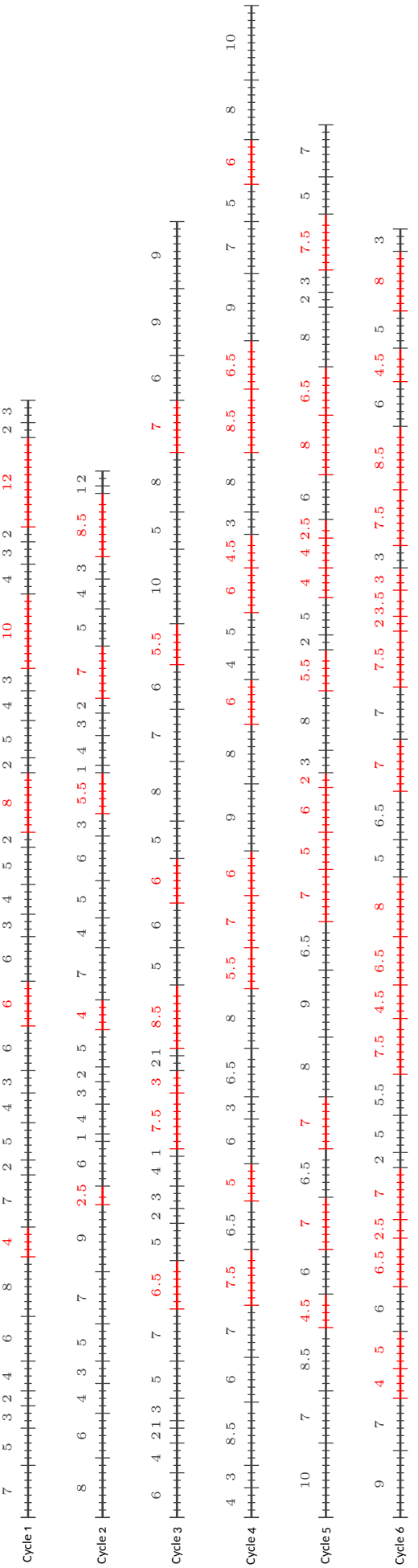


Figure 5: Measure group length and distribution of materials in +*R*.

the former, thus making a mark of this moment in time, and perhaps signalling a shift in Redgate's creative strategies. Figure 6 includes these two measures, which are assigned material A as determined by the two aforementioned processes. However, one can see the difference in their dynamic profile, as the latter measure resembles more the profile normally associated with material B. The ensuing measures (not included in the figure) continue with similar erratic dynamic changes as mm. 97.

My argument here is that the second part of the work re-interprets the materials of the first and amplifies the entropic process that was already built into the compositional system. This process takes the form of what Redgate calls "cross-fertilisation" between the two types of material (R. Redgate, personal communication, February 19, 2025): defining features of one gradually appear in the other, to the point where the system that Figure 4 represents serves the role of a canvas, on which the composer exscribes the musical ideas generated by his personal creative processes. As mentioned, this process becomes evident from cycle 3 and in particular after its midpoint. Figure 6 starts with the penultimate measure of material B in cycle 3, m. 85 and includes the final two complete measure groups of material A (mm. 86–89 and 91–97; cf. Figure 4). Determining precise criteria of cross-fertilisation between the materials may not be straightforward. However, one can see in this excerpt moments where properties previously associated with material B appear in passages where material A is normally determined by the compositional system. Such moments can be seen, for instance, in the use of glissandi, grace notes, and quarter-tones in mm. 86–88; or breathy sounds in mm. 91 and 94. One could further observe that such a process had already started earlier, in cycle 2, where the two materials seem to merge in mm. 38–40 (not included in the figure). My point is that such cross-fertilisation takes place gradually and with increasing frequency.

One further feature that distinguishes cycle 4 as radically new is the frequent use of "irrational" tempo markings and *accelerandi* (and one *rallentando* at the end of the cycle). The term irrational is meant to indicate the mathematically precise yet perceptually complex temporal ratios. This is evident if one compares the tempo markings of cycle 1 and their aforementioned ratios of 2:3:4:5:6 with the tempo markings of Figure 7 (arrows indicate *accel.* or *rall.*). As the opening cycle of the work assigns different tempo markings only to material B, whereas material A is performed at a steady tempo, one may assume that the varying tempo is a property associated with former, rather than the latter. Even if setting such a criterion precisely is not possible—or even desirable—we can observe that the more complex character of material B is gradually dominating the work, despite actual material distribution. Thus, given that the first three cycles have a uniform profile in terms of tempo, as discussed above, the radical temporal profile of cycle 4 and beyond suggests an increase in the entropic tendency that governs the entire structure.

5. Intention and Attention: Concluding Remarks

The term "process" in the title of this article carries at least two distinct meanings regarding Redgate's compositional approach to *+R*, and potentially to other works as well. One such meaning is informal, as it heavily relies on the composer's own interpretation of his formal processes. The present study has only explored a portion of both the formal and informal processes involved, the full extent of which is greater. One process that this article has omitted relates, for instance, to the formation of timelines and the role these might play in the development of musical material (i.e., what aspects of one type of material might carry over to the other). Redgate's own comments testify to the complexity of both such processes:

> Since timelines introduce an additional layer derived from time signatures, they similarly give rise to a secondary layer of materials, thereby enriching the available material through a continuous process of cross-referencing. […] Added to this, there is my choice at any one point as to what I want the surface gesture to be; in other words, how I interpret these materials. They themselves might also be subject to transformation processes, such as unfolding pitch sequences depending on the level of priority or structural emphasis desired. (R. Redgate, personal communi-

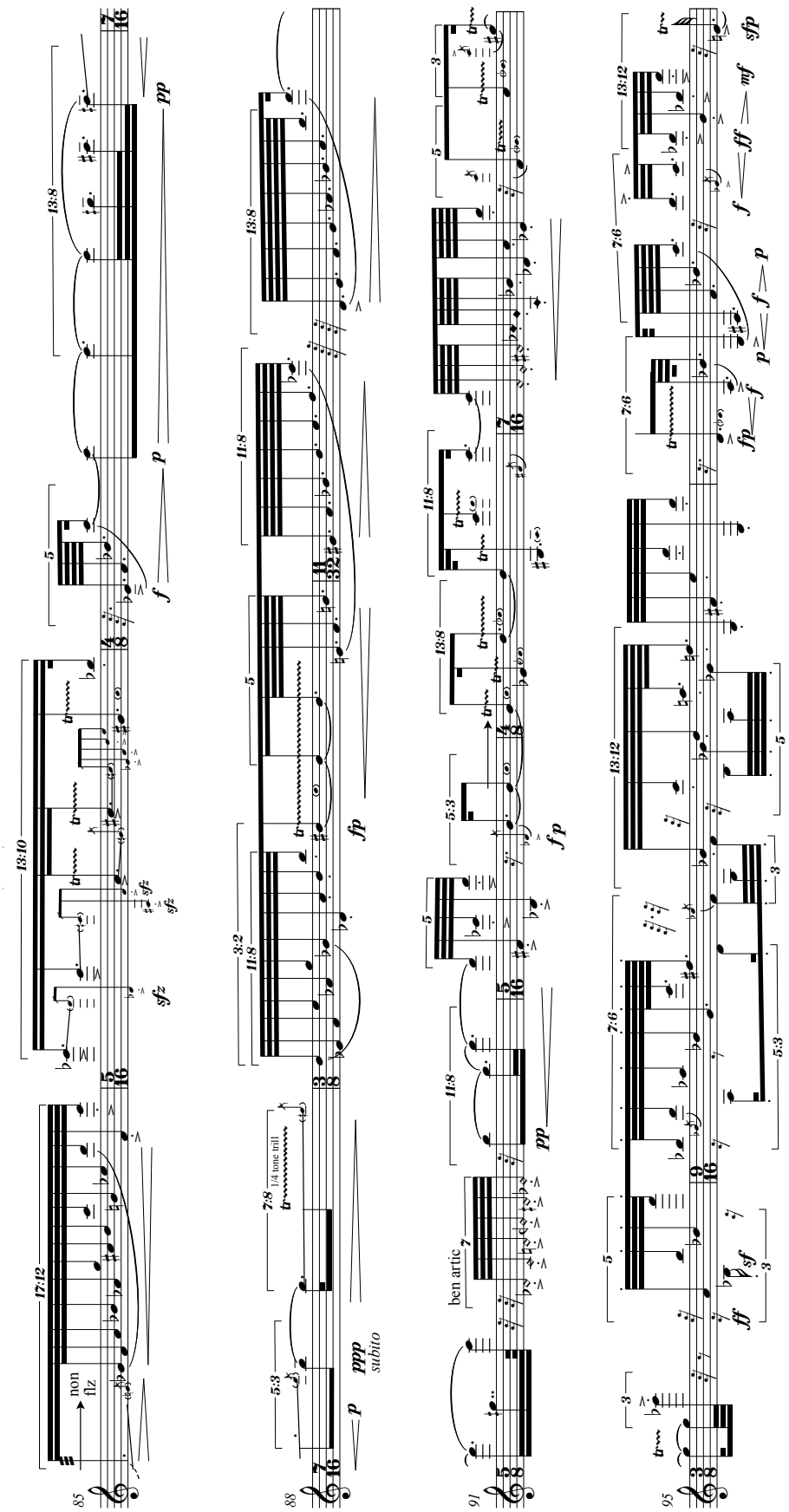


Figure 6: *+R*, mm. 85–97. Reproduced by kind permission of Éditions Henry Lemoine, Paris.

cation, February 19, 2025)

At what point might one kind of material lose its identity? There is no easy answer. I will take two examples from cycles 4 and 6. The former involves what Redgate (2017) calls "melodic lines" (p. 123), which is a new element of material B. These are only found in cycle 4 and are the only context in which *accelerando* has been used so far:[16] mm. 99–100, 112, 117–18, 121–122, 124, and 128–129 (see Figure 8; compare with Figure 7).[17] Note that Figure 4 assigns material A to these measures. These fragments of material B are certainly distinct from A, although they are quite different from any of the material B that has preceded them. There have been similar fragments in cycle 3; however, the clear contour and expressive character of these melodic fragments, with their relatively long-held pitches, varied dynamic profile, and *accelerando*, are quite distinct from both types. It seems to me that the composer intervened here in reinterpreting the materials in a way that generated something entirely new, perhaps using rhythmic elements from A, but in ways that are very distinct from it—especially as these melodic lines tend to be followed by contrasting versions of material A. Also note that this is the beginning of the part that was composed later in time, which might help to see this as a new phase in the lifespan of the work's creative cycle (and perhaps Redgate's own creative phase). The other instance of radically new material is found in cycle 6, the only other type of material where *accelerando* is used throughout the entire work. This material consists in "microtonal/timbal variations of a single pitch" (Redgate, 2017, p. 123), where the performer changes fingerings while on the same pitch. As Redgate (2017) points out, such instances are distant versions of material B, which is "losing its identity" (p. 123). These are found in mm. 167–169 (see Figure 9), 173–174, 177–178, and 180. Note also that, once again, this intervention by the composer goes against the processes defined in Figure 4, which assign material B only to the first two of these instances. One is here tempted to describe these fragments as variations of the melodic lines of cycle 4, where not pitch but timbre provides the contour—radical instances of *Klangfarbenmelodien*.

Do such interventions that result in new materials partake in the process of emergence? Indeed, Redgate is clear when saying that emergent material is formed *in* performance, problematising silent audiation or analysis of the score. Could we consider the composer's response to the work's generated material also as an emergent process, thus extending the notion into the heart of the creative process? To attempt a response I suggest to invoke the notion of intention, on which I have only tangentially touched earlier, with regard to Redgate's (2017) theorisation of emergent material as *impurities*: "'Impurities' in performance or degrees of latitude in realisation, can nevertheless be seen to function as material, as the intentions of the composer" (p. 118). As with Ehrenzweig's conceptualisation of polyphonic hearing, I propose to transpose Redgate's concept of emergent material from the domain of reception to that of composition. There is a parallelism between horizontal hearing (during performance) and unconscious audiation (while composing), as in both cases one employs an undifferentiated kind of attention, so as to be receptive of structures and possibilities that on a conscious level might go unnoticed. Thus, the intention of the composer to allow for impurities in performance, may also allow for such impurities in the compositional stages of the work. In that sense, the act of composition is a kind of performative act in its own right. Redgate (2017) references implicitly such compositional stages when discussing "the relationships obtaining between complex compositional processes and a more informal or intuitive, even *improvised*, gestural scanning of the material" (p. 117; emphasis added). In the work of composers like Redgate it seems impossible to distinguish between the composer and the performer—not only because Redgate is also an improviser, but crucially, as the composer assumes the role of an improviser on their own material, *during* the compositional process.

[16] The melodic line of mm. 128–129 uses *accel.–rall.*

[17] One more instance could also be included here: a curious *accelerando* over a brief single held pitch in m. 102 (from the upbeat of the end of m. 101)—an extreme compression of a melodic idea?

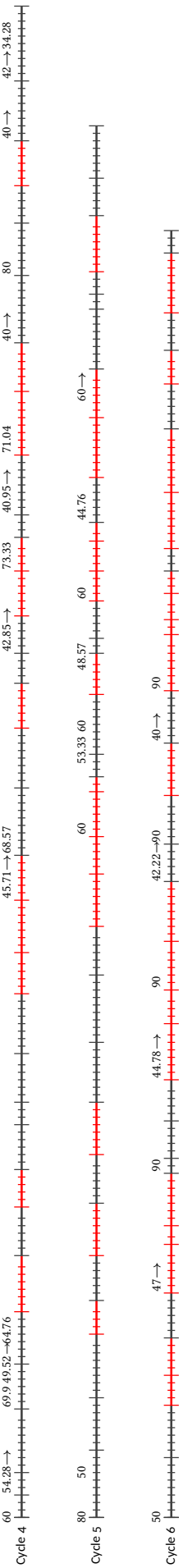


Figure 7: Tempo markings in part 2 of *+R*.

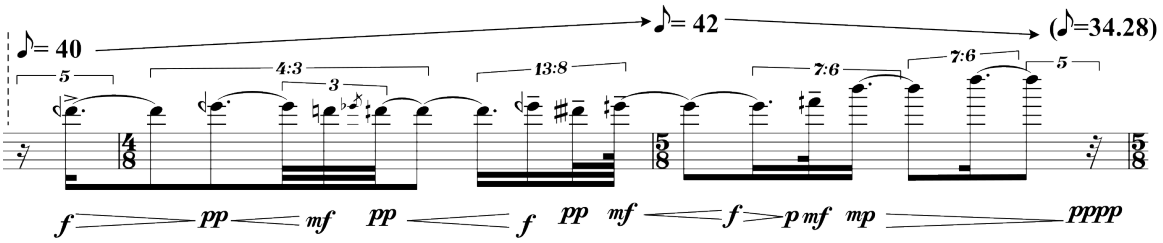


Figure 8: *+R*, mm. 128–129. Reproduced by kind permission of Éditions Henry Lemoine, Paris.

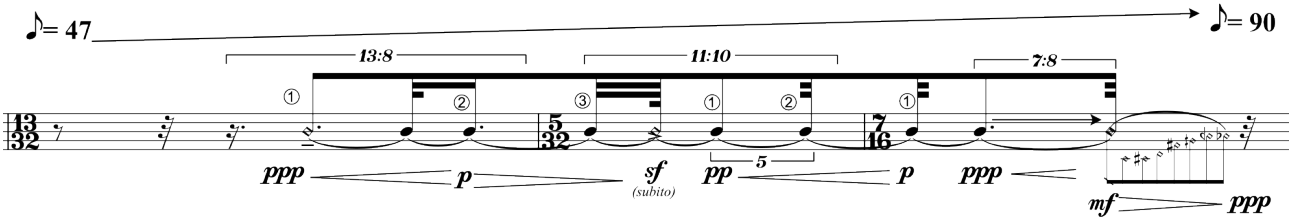


Figure 9: *+R*, mm. 167–169. Reproduced by kind permission of Éditions Henry Lemoine, Paris.

The composer's unconscious scanning of the generated material complicates the question of what was intended or not (consciously or unconsciously). Redgate considers that impurities in performance are intended, although he has no complete control over emergent material. Such yielding of control is also a fundamental function during composing, precisely during unconscious audiation. The intention of the composer is thus channeled through the performative act of employing undifferentiated attention, essential for grasping all possibilities. What appears to be a negation of intention or control, is in fact enriching one's possibilities. This lateral approach to composing may proceed in directions different from those originally intended. Russell (1989) remarks on how Francis Bacon "would begin [...] with one intention and would then be led by the nature of the mark on the canvas to end up with quite another" (p. 24). Cavell's (1976) theorisation of intention is relevant: in works of art, the artist may be *guided by* their intention, as opposed to intention being a "prior mental event causally connected with outward effects" (p. 226). In the case of *+R*, as I have shown, unconscious audiation seems to initially refer to the scanning of the intuitively composed opening measures of the work and subsequently to all compositional stages thereafter.

Notation plays a crucial role in the cyclical process of material generation and unconscious audiation. Redgate is not interested in composing what might have already been conceived in the mind; rather, he seeks to establish practices that can generate possibilities he might otherwise never have thought of. Notation plays a major role in the creative process, as the act of notating an idea is already a transcription. Such transcription greatly affects the result, particularly with the complex ideas and systems that characterise Redgate's compositional practice. My choice to reframe notation as exscription is meant to help conceptualise this process of previously "unheard" possibilities. In a double movement of inscription into a system of signs and exscription into the material instance of instrumental technique, the act of notating lies on both sides of the borderline that separates the composer's mind and the work being composed. In other words, notation mediates the musical ideas and structures in a constant shift of back-and-forth exchange between what is being transcribed and what is being composed. Recall that for Redgate the latter begins only when compositional systems have served as canvas of possibilities. Beyond the kinds of compositional systems this analysis has presented, notation itself operates in ways that enable such new possibilities.

Redgate described unconscious scanning—or audiating—as an act akin to improvisation. Defining improvisation is a rather intricate task, and this article does not attempt a comprehensive definition. Among numerous theorists, Cavell (1976) offers a key insight: improvisation is conceivable only with the

mutual participation between performer and audience, who share the same conventions, so that both are clear about the location and goal of what is being improvised (p. 201). Solitary compositional practices can only accommodate implicit improvisation, lacking the performer-audience dimension; yet Hamilton claims that even fully notated compositions can have an improvised feel. Cavell (1976) further suggests that improvisation exhibits a strong sense of resourcefulness and spontaneity, which in turn relate to chance, where a mistake is a chance to be seized (p. 201). In that sense, there is a direct link between improvisation and chance (although the latter does not necessarily imply the former). In terms of Redgate's compositional practice, this resourcefulness is located precisely within the cyclical process of notating and composing. If, as Cavell suggests, chance relates to the taking of risks—and as Russell argues, chance operates within lateral thinking—then Redgate's responses to his own compositional systems emerge as such risk-taking moments.

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