CHAPTER SIX

NOTATION AS PROCESS:
INTERPRETATION OF OPEN SCORES
AND THE ‘JOURNEY FORM’

LAUREN REDHEAD

The performances which inform this discussion of graphic, text, and open notation took place between 2010 and 2014, and primarily from February to May 2014. Since 2010 I have commissioned and performed twenty new works for the organ, and for the organ and fixed media or organ and live electronics, with a special focus on scores which contain some element of open notation. In addition to new commissions I have also performed a number of works suitable for organ (and electronics) which have been composed during this time, primarily by British composers. This has allowed me to become highly involved in the process of the creation of the music from the point of the commission to the performance, including the possibility of discussion with the composers before the composition of the work, collaboration during its composition and in preparation for the performances, and ongoing evaluation throughout the process. The nature of organ performance is that radical differences in instrumental sound, construction, and concert space and acoustic are experienced from location to location and this has encouraged constant re-evaluation of the music and its performance as the music has travelled; this aspect of the experience of performing these pieces has encouraged further reflection, and it is from these experiences and this reflection that this discussion draws its information. Although the individual process of preparation and interpretation of open notation may be seen to be personal and individual from performer to performer, I wish to address the ways in which repeated performances of open scores reveal something about the compositions themselves and the interpretative process of engaging with the notation. It is the contention of this chapter that interpretation, in the context of this notation, is not a singular and linear process which begins when the performer first comes into contact with the score and ends with the performance, but an ongoing and iterative process, and a process which involves the composer, performer, and the score at every instance. This discussion will, then, seek to address the ‘work concept’ in the case of music, and to define the ‘work’ as a process.

Discussions of interpretative issues associated with graphic notation are commonplace, and more recently discussions of individual collaborative relationships, which develop as a result of these types of notation, have become more prominent. In opposition to the discussion of interpretative issues, attempts to present such notation as artworks, or as archetypes of a graphic notational style,

---

1 From this point I will use ‘open scores’ to denote notation in which at least one element, but usually more than one, is open to decisions by the performer. This, then, encompasses works from those of space-time notation or those for non-specified instrumentation to graphic notation or text instructions. It is recognized that these scores could also be seen as part of a spectrum which involves traditional notation at one end.

can also be found. John Cage’s book *Notations*, although undoubtedly important in documenting the many directions in graphic notations by the 1960s, also divorces the scores presented from their perception as music by presenting ‘highlights’ out of context and without the expectation that they will be performed. There is no doubt that these are ways of notating but there can be some doubt as to whether in this particular presentation they are all *notation*: broadly understood as communication of music intended for performance in western music. Similarly, Teresa Sauer’s *Notations 21* project fulfils a similar function today, documenting many new directions and ideas in notation. Investigations of individual collaborations, on the one hand, and Cage’s and Sauer’s taxonomies, on the other, provide either very detailed consideration of single works or very general consideration of graphic notation as an almost singular compositional strategy. An exploration of the middle ground is needed.

It is sometimes assumed that graphic notation offers performers a *tabula rasa*: the freedom to make any decisions and perform any actions that they like. This is simply not true. Cardew’s assertion that the score of *Treatise* (1963–7) is itself the music, and that any performance is a new work entirely, may be somewhat responsible for this. It also may be true that in the early days of the New York School the interpretative challenge of open notation was presented as it had not been before, and performers such as David Tudor readily took up this challenge. However, even if the same invitation is offered by this notation today, its context has radically changed. Over 70 years of history and tradition within the performance of this notation mean that any performer cannot help but be aware of the soundworlds, approaches, and historicity of experimental music within this tradition. As such, any and all decisions that they make take place within this context and composers who offer their notation for performance also cannot fail to be aware of this. This, then, must influence any discussion of ontology with respect to this music. Graphic notation may throw up questions about the authorship and ownership of music, of scores and their performance, and about the ontology of music itself, but such questions are not themselves new, nor are they re-newed by each new instance of graphic notation. Therefore, a brief description of a possible ontological position will be given here, in order to highlight some of the potential issues that can be addressed by an investigation which does not consider graphic notation in the abstract but in terms of the actual outcomes and realities of the music.

Historically, ontology has not been seen to be as simple in the case of music as in other artforms. Nineteenth-century theorists, such as Hegel, chose to make a special case for music, and many discussions of art and aesthetics choose not to discuss it at all, or focus on a narrow definition of the work (score) of absolute instrumental music of which performances are only a representation. Although the ‘work’ of music has been considered in a number of ways most of these ways require it to be in some way associated with an object: this is why music is thought to be a special case,

---


7 Georg Wilhelm Friedrich Hegel, *Aesthetics Volume II*, trans. by T. M. Knox (Oxford: Clarendon Press, 1975), pp.893-909. It is my belief that most of the special cases made for music stem from this definition although earlier examples could be mentioned.
since a number of objects seem to belong to the ‘work’ of music, including scores, performances, and recordings. While the work concept is increasingly scrutinized and called into question, and while many musicological approaches now privilege experience and performance, the approach to graphic notation frequently retains both the composer-as-author and work-as-score models which are said to be disputed by the creation and performance of graphic and open notation.

The Polish philosopher Roman Ingarden—despite never directly addressing graphic notation—writes that in many traditional conceptions of musical works,

the work itself remains like an ideal boundary at which the composer’s intentional conjectures or creative acts and the listener’s acts of perception aim [...]. At that ideal boundary, the work remains one and the same in contrast to the many concretions in specific performances and thus [...] it is in some respects de-individualized, although it does not cease to be individual.

Ingarden therefore describes the ‘work’ of music as an ‘intentional object’, and notes that perceiving the work of music as an artistic work at all relies on a social exchange: music is ‘an intersubjective aesthetic object’ which is reliant on the correct behaviours and attitudes of performers and listeners in order to be received as an artwork. The idea of social exchange is one of central importance to the consideration of graphic notation, from Cardew’s early politics at the time of the composition of Treatise to Pauline Oliveros’s employment of notation as a social critique in her Postcard Theatre (1974) composed with Alison Knowles. In the case of performance art, Nina Sun Eidsheim writes that a problem of focusing merely on notation as the source of information in musical experience means that, ‘the abstractly yet fixedly notated overshadows the concrete, ever-shifting experience of music.’ Similarly, Ingarden writes that unnotated but performable characteristics of music remain ‘existentially potential’ when music remains ‘in the form in which it has been notated [...] as though there were only a possibility of their future realization in individual performances’.

Despite these points, Ingarden’s ontology retains a focus on the musical ‘work’ as a singularity. It also focuses mainly on the objects which can be said to be part of the ‘work’: scores, recordings, and representations of these (performances). That graphic notation asks questions about the ‘work’ and its relationship with itself in its performance, then, is not particularly surprising: it simply

---


10 Ibid., p.120.

11 Ibid., p.122.


13 Ibid., p.116.

14 Ingarden dismisses recordings altogether as being contributive to the identity of the work. Instead, he finds them to be representative of, rather than the work, one particular performance, and thus only as useful to his investigation as a single performance would be. This is a point with which I do not agree since the performing and listening contexts of works may radically alter them.
highlights that these questions remain unanswered for music as a whole. Many of the questions raised arise because an idea of the ‘work’ begins with the score. If performances of a single work were, for example, to be considered as a group which gives rise to a score that notates their common elements, and therefore cause the ‘work’ to be thought of as a multiplicity, such questions may seem less problematic. Indeed, it may seem unusual for a discussion of graphic scores not to focus heavily on their notation, but this change of perspective may provide tentative responses to these questions which examination of notation has left unanswered.

In order to address this work concept as a process, I will discuss performances of three works, their change over time, and their contribution to an understanding of the role of process within an ontology of music. The three are Scott McLaughlin’s *Music in Two Dimensions: No. 2a* (2010), Adam Fergler’s *Image Music Text* (2012), and Caroline Lucas’s *[Unnamed Maps Series]* (2009-2012). Mc Laughlin’s piece was written for organ specifically and also for me as a performer; Fergler’s is open to interpretation by any instruments but commissioned by me for the organ; and Lucas’s is also open to any instrumentation, although I have performed this work on the organ more times than any other performer for any other combination of instruments. All three works employ graphic or text notation, and the uses of text and graphics are quite different in each piece.

Scott Mc Laughlin’s *Music in Two Dimensions: No. 2a* is a set of specific text instructions, with some openness for interpretation. I have performed this piece four times in different spaces, and previously performed an earlier version of the piece for chamber organ and bassoon.

There are two specific ambiguities in the piece that need to be addressed by the performer: its harmonic content and its rhythmic content. The piece calls for a single ‘complex chord’; there could be many interpretations of this instruction. It could be a tonally polyvalent chord, a cluster, or be considered complex with respect to the instrument. In three of the performances I opted for a chord that combined different harmonic qualities: at the lower end of the chord, a cluster is formed between the left hand and the pedals, but the chord is also open at its higher end to allow more perception of difference in the upper partials of the sound. The single note held by a weight also does not appear in the chord so there is no octave doubling and possibilities for the maximum number of upper partials in the sound. In the fourth performance I opted for a chord of three major seconds each separated by a fourth. As well as exploring possible variation in the sound of the piece, the practical reasons for this were the smaller size of the instrument and the less resonant space.

The rhythmic ambiguity of the piece can be addressed in two ways. Within the piece there are two perceivable rhythms: that of the beating heard in the instrumental sound—which is a consequence of both equal temperament and of a combination of organ stops; and that of the stop changes which are determined by the organist. I decided it was necessary to plan the rhythm to accommodate these two competing layers, since it is easy to perform ‘with’ the sound of the instrument if one is not careful; the stop changes settling into a regular pattern with the beating of the instrument. As well as avoiding mimicking this beating, I wanted the rhythm to be interesting in and of itself and so created a rhythmic cycle that I could employ in performance using changes of tempo and metric feel. Because of the differences between instruments, this rhythmic and harmonic work needs to be re-done for each performance. What is not
Figure 6.1: Scott Mc Laughlin, *Music in Two Dimensions: No. 2a*, © 2010, reproduced by kind permission of the composer.

explained or revealed about the piece in the notation is that it is very instrument-specific. To be effective the instrument in the space needs to be considered first.

When I put this to the composer, his response was as follows:

I think your [...] point about the piece being different for every instrument and space is something I was only becoming aware of then, it seeped into this piece by intuition rather than careful consideration, but it’s an early example of something that has become central to my work.15

This piece is a good introduction to the consideration of the role of process in an ontology of music because of the relative simplicity of the notation compared with the complexity of the aural outcome of the music, the nature of the music itself as process, and the clear link of process with instrumentality that is only revealed in the performance of the work. This music is both itself a process and one which reveals other processes. When considering performances of this work as a group, then, they testify to the nature of the score as Ingarden’s ‘ideal boundary’ and the music as Ingarden’s ‘intersubjective aesthetic object’.

Mc Laughlin’s score is an ideal boundary of the piece *Music in Two Dimensions: No. 2a* since it expresses the majority of the paradigm of the piece within its notation. The notation is instructional rather than explaining the sound of the music which can only be discovered in performance. This is not a quality that is unique to Mc Laughlin’s work: George Kennaway finds this to be true when considering all musical scores as instructions, further observing that the context of the performer and composer may greatly alter their understanding and interpretation of these instructions.\(^{16}\) So, despite its eloquence, the focus on notation in Mc Laughlin’s work does eschew the experience of the music as Nina Sun Eidsheim feared. *Music in Two Dimensions: No. 2a* can also be considered as an intersubjective aesthetic object in particular because of the relationship between the performer, space, and instrument that is highlighted in performance. It also highlights the social dimension of close and careful, or ‘virtuoso’, listening that is often associated with experimental music that deals with large scale structures and small changes over time. While this notation can be considered open, as it allows some decisions to be made by the performer, it is also specific and its outcome in performance, although variable, is fixed in certain elements of the perception of the music.

Music which uses notation that is open to a variety of outcomes still poses more problems in terms of performance, interpretation, and ontology. The next two examples are open in precisely this way. Therefore, in order to assess these still unanswered questions, an expansion of the theoretical model is required; the ideas of the ‘ideal boundary’ and ‘intersubjective aesthetic object’ can be augmented. Nicholas Bourriaud’s *Relational Aesthetics* provides the possibility for further development of these ideas.\(^{17}\) Bourriaud describes a relational art as, ‘an art taking as its theoretical horizon the realm of human interactions and its social context, rather than the assertion of an independent and private symbolic space.’\(^{18}\) It is this difference between public and private that also highlights the difference between the process of preparing work for a performance and the work-as-process. In the second case process can be understood as something in which the composer, performer, listener, and ‘work’ take part.

In order to address some of the possible issues of interpretation in the notation of the scores I am examining, I will begin with my own general process of interpretation. At first, I investigate the different ways to interpret the symbols or instructions, and catalogue the sounds and approaches that I could attach to them. In combining these, I explore the different paths that are available to take through the score as a journey. This approach could be understood as that which Nicolas

---


\(^{18}\) Ibid., p.14.
Bourriaud calls the ‘journey form’. Bourriaud describes the ‘journey form’ as something which forges a link between the finished artwork and the artist’s personal process, and this in itself can be considered to be an artistic aim. The ‘journey form’ links time and space not as concurrent but as a single material with possibilities for exploration, topological fluidity, and temporal bifurcation within single artworks. With respect to this ‘journey form’ Bourriaud writes, ‘[t]he artist has become the prototype of the contemporary traveller, homo viator, whose passage through signs and formats highlights a contemporary experience of mobility, displacement, crossing.’ Therefore the distinction between space and time becomes blurred within the ‘quotation’ of personal history that takes place in the creation of works, or in my case in the performance of works: the ‘work’ (score) and performance(s) become a kind of psycho-history on the behalf of the composer and the performer. This relates specifically to the performer of graphic notation as the materials she works with in performance are not only the score, any electronic materials, and her instrument, but also the artefacts of all previous performances (public and private) which build a repertoire of materials belonging to the work.

By choosing to focus on performance as concurrent with notation in this way, the issue of authorship should also be briefly discussed. It is assumed, here, that the authorship of the music is not in question, and that the performer offers her experience as the interpretation of music which has a recognizable, and singular, composer. Nevertheless, discussion of authorship may help to pinpoint the disjoints between the traditional conception of the composer-as-author in the work of music and the case of authorship of open notation. Foucault’s reasoning in his essay ‘What is an Author?’ is that it is not enough to conclude that the author ‘has disappeared’ but that we must also ‘locate the space left empty by [this] disappearance’. In defining an ‘author function’ which allows for the existence of those relationships which suppose the author, Foucault accepts that there is something which is in need of definition in the space where the author needs to be: there is no ‘empty space’ and thus there must be something in need of definition in the elimination of the author. Foucault also outlines the problem of the ontology of the work when he writes,

> [h]ow can one define a work amid the millions of traces left by someone after his death? A theory of the work does not exist, and the empirical task of those who naively undertake the editing of works often suffers in the absence of such a theory.

What becomes of interest in the case of graphic notation, then, is not recognizing the performer-as-author but acknowledging the conditions of authorship that are supposed by this music. My description of relation of the ‘journey form’ to the performer of graphic notation above also highlights that the conditions of authorship for the performer are the same as those for the composer. What this means is not that the authorship of the scores of music, or of performances, should be contested, but that the status of the score and performances as musical objects or works can be contested: these do not stand apart from each other but are instances of the same process.

My second example, Adam Fergler’s *Image, Music, Text*, presents twenty-four pages of images constructed from text or parts of text, blurring the boundaries between text and graphic notation. Fergler writes in his instructions for the score that: ‘[p]erformers are encouraged to explore a complex network of information, inference and understanding, as well as the relationship between

---

20 Ibid., p.113.
22 Ibid., p.104.
Fergler’s further instructions emphasize the openness of the notation, but also draw the attention of the performer to structural relationships in the score. I have now performed the work ten times; the first four performances were for solo organ and the latter performances included a fixed media part that I created from sounds made using my voice. The change in the performance type (acoustic to mixed media) only represents part of the development of this music in performance: this development has also included the selection of different sections of the work, the development of a harmonic language for performance, and a structural development from a form containing contrasting materials to a mono-thematic form based on the articulation of the developed harmonic, rhythmic, and structural language. The stated importance of ‘information, inference and understanding’ to the work and the composer mean that the previous performances, although perhaps not even of the pages of the score addressed at the time, are part of the artefact of the piece.

Figure 6.2 is an image of Page 12 of the score. This page combines text, which here allows more linguistic interpretation than some of the other pages, a recognizable symbol (the interroband), and the implication of text-as-image. Whilst this page of the score has not taken part in every performance of Image, Music, Text, its inclusion in the third performance led to the specific development of a structural ‘language’ linked not only to the expression of proportion but to a

---

relationship between gesture and the distribution of text on the page. This was further augmented by
the construction of the fixed media part which now accompanies my performances of the score.
This part comprises unprocessed vocal performances of each page of the score which are layered:
this, then, expresses the complexity of the structural relationships in the score whilst obscuring their
linear perception. It also provides an additional layer of structural language with which the live
organ performance might interact, and further augments the performance by ensuring that a
realization of each printed symbol is now always heard at every iteration.

This journey of performance-development has also included a very public narrative of
performance-composition when all of the iterations are heard together. While none of the
performances can be considered more correct than any other, taken together these do highlight a
‘passage through signs and formats’ as described by Bourriaud, and as a group could be described
as an ‘experience of mobility, displacement, crossing’: while the identity of the work is fixed across
all performances, these audibly and publicly interact with and cross-reference each other, finally
resulting in a performance-artefact which is both always present and functions as a quotation and
statement of the compositional and interpretative process. This makes audible the work-as-process.
Fergler’s score can then be thought of as Ingarden’s ‘ideal boundary’ not because it presents all of
the information needed to realize the piece (although, arguably, it does this in the same way as Mc
Laughlin’s) but because it is a complete and yet abstract expression of itself. In this way the score,
as much as the music, also functions as an ‘intersubjective aesthetic object’.

The final work for discussion, Caroline Lucas’s [Unnamed Maps Series], consists of three
handmade cartographic scores, acetate overlays, two fixed media parts, and a suggestion that the
space might be incorporated into the performance, with the combination of these things and the title
of the eventual performance left open to the performer. I have performed the work for organ and
tape in this combination fourteen times in thirteen spaces in total.

A piece such as Lucas’s [Unnamed Maps Series] cannot help but draw the context of a
performance into consideration partly as a result of its notation (see Figure 6.3); its focus is on a
present and experienced geography. The journey form approach described earlier allows for
multiple individual performances that approach the notation as a constellation. This reflects the
approach I took in the first two performances; in the third performance I came to primarily consider
the complex image in the centre of one of the scores and its significance within this system. I took a
non-linear and holistic approach to the notation, reducing many similar actions into one action, in
effect subsuming the previous performances into the performed psycho-history of the work. After
the third performance, Lucas provided me with more parts of the score, allowing me once again to
direct my efforts outwards from the image. As well as defining the interpretation of the piece as an
evolving process in which I came to understand more about the notation and my relationship to it
with each iteration, this later development caused me to contemplate the way in which location had
affected my performance. It was the pressure of the change of location (and therefore space and
instrument) that caused me to further the ‘journey’ of my relationship with the notation, and this
process which caused me to consider place and geography as actors in the performance itself.
On each occasion, when working with the organs, I looked for imperfections in the instrument. Since all instruments are different, these must be worked out for each performance. At the premiere, the organ had two sets of pipes so there was beating associated with some stops. At the third performance there was little possible extraneous noise due to the good condition of the instrument, but it was possible to get beating from the low pedals and I made this a feature of the performance, which has subsequently remained a part of my performance of this piece. In the fourth performance, the electronics had been carefully spatialized to make the most of the acoustic in the church and it was necessary to work with this to enhance the organ sound. Further performances have also incorporated videos that I made using images of and from the scores themselves, different soundtracks using the audio provided by the composer, and which furthered this journey by inviting the audience to consider the relationship of my performance with the scores during the performance itself. As in Fergler’s work, these multiple performances have resulted in the development of a structural and gestural ‘language’ for the piece which is both specific and self-referential.

This development has been similarly performative and compositional as I have taken on Lucas’s invitation to edit and intervene in the work to create the possibility for longer, shorter, and more multi-media performances. Again, my intention is not to conflate the roles of ‘composer’ and ‘performer’ within the work but to understand composition as performance and performance as composition: something that makes sense if both are journey forms. Lucas directly addresses exactly this issue in her PhD thesis when discussing the anonymity of the composer that is fostered first by this open approach to intervention in the performance and interpretation of the work, and second by signing the instructions for this work ‘The Cartographer’ rather than ‘The Composer’ or even her name. She writes:
Modes of anonymity were not intended to suggest that there is no person behind a work, but the act of obscuring, through the masking of the composer, consciously becomes part of the construction of the work. Positioning the composer as one of the material forces in the facilitation of a piece is not intended to negate the initial creative intentions of the composer, but instead recognises their limitations in shaping the individual’s experience of a piece. The composer as ‘facilitator’ becomes someone that contributes towards the creation of the conditions for a particular experience, without having the power to define what that experience actually is. The aim of this is to recognise the intrinsic loss of control (and to some degree ownership) involved in the process of transferring ideas from the private realm of the creative mind to the multiple public sites of creative expression (sketches, scores, performances, etc.).

Lucas’s score, like Fergler’s, is an example of Ingarden’s ‘ideal boundary’ as it can be considered to contain all of the information needed for performance or, in her terms, for the ‘facilitation of experience’. In these terms it also has the same status as *Image, Music, Text*: an ‘intersubjective aesthetic’ object in its abstraction. The explicit openness of the composer both in her presentation of the score’s (very minimal) instructions and in her reflection on her creative practice in her PhD thesis also testify to the ‘domain of human interactions’ being at the ‘theoretical horizon’ of this work: it is relational. She addresses this explicitly in the above quotation when she describes the composer as a ‘material force’ in the work; presumably the same could be said of its performers. This further testifies to an equality of perceived relationship and autonomy of the composer and performer, not through the claim to co-authorship but through the claim to an equality of compositional and performance process in the work.

Zubin Kanga testifies to similar experiences to mine when he describes the numerous levels of precision that have gone into his interpretation of David Young’s score (an extremely large watercolour painting) for the piece *Not Music Yet* (2012), which result in a performance that sounds ‘free’ and yet ‘complex’. Kanga writes:

The choice of notation guided me to create a sound world with relatively little work compared to if the same piece had been conventionally notated, which would have become extremely complicated on the page, extremely difficult and time-intensive to learn, and more difficult to achieve the same spontaneity of expression. This efficiency of creation, communication and interpretation of the notation confirmed Young’s assertions to me on the advantages of graphic notation. The creative stagnation that could have resulted from this efficiency was counterbalanced by injections of creative resistance, forming a body of work-specific performance practice, imparted by Young in the workshops, that was crucial to my interpretation of the score.

---


26 Ibid., p.21.
As Lucas does, Kanga notes that Young’s consideration of the role of the performer is of an equal partner in the work but that he also does not place ‘composer’ and ‘performer’ in a hierarchy which can only be reconciled by acknowledging the performer’s contribution as somehow compositional. In both cases the works can be considered relational since it would be correct to state that the ‘domain of human interaction’ is at their ‘theoretical horizons’. Of course, some composer–performer interaction may be considered implied by any open notation, but what is important here is not the potential for interaction in the interpretation of the music but the suggestion of performance-as-interaction.

These observations have been drawn primarily from my own practice, but they do not only refer to my practice: there is potential for them to be relevant to the consideration of all open notation and, as originally observed, this notation simply makes explicit what might be a condition of all notation.

The ‘journey form’ described in this chapter is itself a process. It is one without a defined beginning and end point: a process in which both the composer and performer take part in order to create the ‘work’. Even the first example, by Scott Mc Laughlin, can be considered in these terms. Aside from the musical process composed into the score the performance-derived understanding of the work that I have described can also be seen as a journey form. Roman Ingarden’s conceptions of the score as the ‘ideal boundary’ and as an ‘intersubjective aesthetic object’ are, therefore, accurate. But they are accurate with respect to the score when considered as a single musical object rather than the work of music considered as a whole. In connection with this, Rancière’s assertion that, ‘[p]olitics and art, like forms of knowledge, construct ‘fictions’, that is to say material rearrangements of sign and images, relationships between what is seen and said, between what is done and what can be done’,27 is relevant. The work itself can be said to be one such fiction, represented in these ‘material rearrangements’. This discussion has suggested that the ontology of the work of music might be better expressed as the work-as-process, of which the score-as-process and performance-as-process are iterations, rather than a process-of notation, or a process-of interpretation.