REFLECTIONS ON EPHEMERALITY AND NOTATION IN MY RECENT WORK

MICHAEL STEPHEN BALDWIN

A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the degree of Masters of Arts by Research in Composition

THE UNIVERSITY OF HUDDERSFIELD
August 2012
Copyright statement

i. The author of this thesis (including any appendices and/or schedules to this thesis) owns any copyright in it (the "Copyright") and s/he has given The University of Huddersfield the right to use such copyright for any administrative, promotional, educational and/or teaching purposes.

ii. Copies of this thesis, either in full or in extracts, may be made only in accordance with the regulations of the University Library. Details of these regulations may be obtained from the Librarian. This page must form part of any such copies made.

iii. The ownership of any patents, designs, trademarks and any and all other intellectual property rights except for the Copyright (the "Intellectual Property Rights") and any reproductions of copyright works, for example graphs and tables ("Reproductions"), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property Rights and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property Rights and/or Reproductions
# Table of Contents

## THESIS:

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>iii</td>
</tr>
<tr>
<td>Manifestations of Ephemerality: <em>S[h/c]attered Shards of Experience: Ephemer</em></td>
<td>1</td>
</tr>
<tr>
<td>Aspects of the Notational Image: Performer/Notation Engagement</td>
<td>16</td>
</tr>
<tr>
<td>Bibliography</td>
<td>41</td>
</tr>
</tbody>
</table>

## COMPOSITION PORTFOLIO OF SCORES:

i. Seven Miniature for Solo Pianist (2010-11)
   - For solo piano. Duration: 9'.
   - Premiered by Ermis Theodorakis, Huddersfield, 1 March 2012.
   - Performed by Ben Brezinski, Huddersfield, 5 July 2012.

ii. *what ~lurks beneath~* (2011)
    - For bass clarinet (Eb clarinet), C trumpet (Bb piccolo trumpet), trombone (alto trombone). Duration: 3'40".

iii. *Various Terrains (≡ degrees of similarity)* (2011)
     - For solo voice. Duration: 2'/6'.
     - Premiered by Amanda DeBoer Bartlett, Bowling Green, OH, 21 April 2012.

iv. *marginalization* (2011)
    - For trombone, percussion, piano. Duration: 5'30".

   - For saxophone trio (2 soprano, 1 baritone). Duration 4'.
   - Workshopped by Anubis Quartet, April 2011.

    - Instrumentation: variable. Duration: variable.
      - *Ephemer* #1 — For solo piano. Duration: 40".
      - *Ephemer* #8 — For any trumpet. Duration: variable.

## MEDIA: AUDIO CD

i. *what ~lurks beneath~* (2011)

ii. Seven Miniatures for Solo Pianist (2010-11)
    - Performed by Ermis Theodorakis, Huddersfield, March 2012.

iii-v. *Various Terrains (≡ degrees of similarity)* (2011)
   - i. [iteration 1 — panel order 1-2-3]
   - iv. [iteration 2 — panel order 2-1-3]
   - v. [iteration 3 — panel order 3-2-1]
     - Performed by Amanda DeBoer Bartlett, Bowling Green, OH, April 2012.
Abstract:

The following thesis and the accompanying portfolio of compositions represent two recent strands of musical interest: ephemerality and the role of notation. Throughout this thesis I explicate the various ways I have engaged with these concerns and their application in my work. Additionally, I aim to situate my work within the context of contemporary compositional practices as a way of showing both origins of influence and ways in which my own work extends/expands on these influences. This thesis will address issues regarding the materiality impermanency of scores, documentation, interpersonal relationships, performative situations, and the performer/notation interface.
MANIFESTATIONS OF EPHEMERALITY: 
S[H/C]ATTERED SHARDS OF EXPERIENCE: EPHEMERA 1-

This paper discusses my recent and ongoing project, S[h/c]attered Shards of Experience: Ephemer a 1- (2012 -), a series of one-of-a-kind scores (Ephemer a) sent to different recipients.1,2 Each score is individually hand-crafted and used as a means of correspondence between the recipient and me. The project explores a number of issues related to ephemerality such as impermanency, materiality, interpersonal relationships, and singularity. I look at the different ways that ephemerality manifests itself throughout this project including score production (methodology), material construction, means of dissemination, and documentation. The paper finishes by discussing future directions the project is likely to take.3

Outline Of The Project

To understand the different ways in which ephemerality manifests itself in this project I suggest an adaptation of Brian Chappell’s definition: “ephemeral means a short existence in terms of our expectations and the intentions of the designers” (original emphasis).4 Chappell's short definition invites a multiplicity of contextual understandings of ephemerality, which prove invaluable for this project. At the onset, ephemerality was directly related to the limited-edition nature of the scores and my inability to make copies after their dissemination. The idea is that the score takes on a life of its own and is subject to impermanency beyond my control. There is no stipulation that the recipient perform the score, further removing my control over the score's life. Through my investigation into other artists working with issues of ephemerality in a number of ways, my definition of

---

1 To date seven Ephemer a have been written. This paper will discuss Ephemer a #1, Ephemer a #2, Ephemer a 1/2/2.2[3.3] 3.3 , Ephemer a 6, and Ephemer a #8.
2 ’Ephemer a’ (capital E and italicized) and ’Score’ will be used interchangeably throughout the remainder of this paper.
4 Chappell goes on to propose a more architecturally oriented definition of ephemerality. The definition provided here is an attempt to define ephemerality in broader terms. This allows the definition to be easily transplanted to into a musical context by substituting “designers” with “composers.” Brian Chappell, “Ephemer al Architecture,” http://www.scribd.com/doc/44042590/Ephemeral-Architecture (accessed May 1, 2012).
ephemerality has expanded. Chappell’s definition helps to facilitate this expansion by prioritizing artistic intention. This allows me, to differing degrees, to highlight a number of issues related to ephemerality in my work.

Score Production (Methodology)

Ephemera #1, is the outlier in this series because of its stable material construction, its ease of reproduction, and its ability to be performed multiple times. Regardless, this Ephemera is useful for illustrating the compositional methodology followed at the beginning of this project. When I first started work on this score (unaware that it would lead to a whole series) the impetus was to write a short piece for a friend. At the time I was exploring the use of erasure marks as a compositional/notational tool. During this investigation I encountered Robert Rauschenberg’s Erased De Kooning (1953), a De Kooning drawing erased by Rauschenberg. The sense of impermanency implied in Rauschenberg’s work (the destruction of another artist’s art object intended to be permanent) fascinated me and spurred my exploration of ephemerality in a musical context. Furthermore, Philip Fisher points out the fact that Rauschenberg’s act of effacement is the opposite of the act of copying (reproducing—a central concern of this project).

Physical engagement with the score through the act of erasure also intrigued me. In the visual arts, namely painting, the physical artifacts resulting from the painter’s brush strokes are important to an understanding of the work’s aesthetic concerns. However, attention to the composer’s physical trace is not often seen as a primary concern for notation. Furthermore, I was interested in the resultant permanency of a mark often associated with impermanency (the erasure mark) as the result of a physical trace. Prior to Erased De Kooning, Rauschenberg explored using the eraser as a "graphic, or anti-graphic

5 My recent exploration into the erasure mark as a compositional tool is an outgrowth of my re-notation project with Disintegration (2011).
8 For more information on the role of physical trace in a musical context see Michael Pisaro, “Writing, music,” in The Ashgate Research Companion to Experimental Music, ed. James Saunders (Farnham, Surrey: Ashgate, 2009).
implement.”9 The use of the eraser can be seen as serving an anti-graphic function, removing the traces of both De Kooning and Rauschenberg.10 I instead use erasure as a way of foregrounding the physical artifacts of production. With that said, Ephemera #1 only makes use of erasure in the first sketch but the role of erasure is more significant in Ephemera #2.

The initial sketch of Ephemera #1 explores "layered-notation," where one instrumental line is notated, partially erased, and the second instrumental line is written over top.11 The first sketch is a quick, one-off, inscription of a musical idea for alto flute and viola. Although it isn't pictured, it should be noted that this quick sketch is titled and signed, suggesting a finished work. It might seem fitting to end the compositional process here; and in a way, this sketch can be seen as the actual Ephemera. However, when starting this project, the actual time it took to inscribe a musical idea was of little importance to me in expressing ephemerality.12 Instead, the singularity of the end object was more important.

The notation used in the first sketch is problematic in terms of interpretation. Several unconventional markings have been made with no instructions given. In some places the score verges on representing a graphic score. Despite the notation's ambiguity, a simple dichotomy between dense music and sparse music can be discerned between the alto flute (partially erased) and viola (normal). In the second sketch this dichotomy is made more explicit with a highly detailed/physically involved piccolo part and a more lyrical/melodic part for the viola. In the final sketch/score the lyrical aspect of the previous two sketches comes to the foreground. However, it is interesting to see that there are still remains of the more physical material from the first two sketches. This is illustrated by the sharp dynamic shift towards the end and a physical dampening of the string gesture. In

---

10 Although the surface has been completely erased, the back of Erased De Kooning still contains some remnants of the original drawing. Robert Rauschenberg on “Erased De Kooning,” 2010, http://www.youtube.com/watch?v=nGRNQER16Do (accessed June 1, 2012).
11 'Layered-notation' here does not refer to a physical layering of pages, but instead a layering of written music. In Ephemera #2, and many of the Ephemera that follow, the idea of layering takes on different guises and is more directly related to the physical layering of materials.
12 In contrast, Ephemera #2/Ephemera #2.2, and Ephemera 1/2/2.2[1-3.3] have no sketches and only a final score. The notion of a fleeting musical idea expressed through a one-off musical inscription is explored in these pieces.
some ways it can be argued that the final score, despite being a solidification of musical ideas through revision, is in fact an ephemeral artifact of the first sketch, or of the compositional process in general.

*Ephemera 1/2/2.2[1]3.1-3.3* takes my interest in physically engaging with the score during the production process as its point of departure for exploring ephemerality. This is a direct extension of my interest in physical traces, explored previously with erasure marks. This score has a five-line staff inscribed on the inside of a lamination pouch. After making the inscription I quickly crumple the sheet creating a jagged and creased surface. At intersections caused by creases, points are marked with a pigment pen. Any point fitting inside the stave is turned into a note-head and is assigned an accidental.\(^{13}\) Marks made outside of the stave are then used as points of activation for a disruptive and violent physical pen stroke towards the notes in the stave. Scores produced through scattering points along the page that are then used to generate music can be traced back to many of John Cage’s scores (*Winter Music* [1957] and *Atlas Eclipticals* [1961] in particular). In *Water Music*, Cage marked points on the page where there were imperfections, thus making the visual image a byproduct of direct contact with the material object (score), in this case, paper.\(^{14}\) In my own score, the creases created through the physical engagement with the lamination pouch become points of imperfection. Whereas Cage did not aim to impose physical imperfections, content to simply highlight the imperfections already present, with this *Ephemera* I was more interested in creating the imperfections myself. The imperfections are later wiped away through the lamination of the pouch, making the physical engagement ephemeral. Additionally, the material combination of pigment ink and a glossy surface mirrors the physical ephemerality through making the score itself subject to visual impermanency.\(^{15}\)

\(^{13}\) Accidental marks move from controlled to completely arbitrary through the use of question-marks. Question-marks as accidentals leave the choice of accidental for a given note to the performer.

\(^{14}\) Pisaro, “Writing, music,” 27.

\(^{15}\) Pigment ink on a glossy surface is prone to smearing. The life-span of the score is directly related to the care the recipient invests in the score.
Material Construction

Starting with *Ephemera #2* the use of pigment ink in addition to lamination pouches has become an important material combination. On the back of the laminated score, a personal message to the recipient is written in pigment ink. The score itself is a layering of four semi-transparent sheets of paper, each containing a graphic notation written and partially erased with a graphite pencil. In the realization of the score, the recipient is required to hold the laminated score up to a light source and physically bend the score in order to catch partial glimpses of the other layers. Prior to performance, the ink inscription on the back of the score is required to be wiped away after reading the message so the text does not interfere with the notational image when put against a light source. The removal of the ink inscribed message can be seen as another application of my interest in erasure. In addition to the necessary removal, the text is already sent partially smudged thus minimizing the recipient's attachment with the text.

Although the work of South African artists Willem Boshoff was unknown to me at the time of writing *Ephemera #2*, his installation, *Writing in the Sand* (2000), has played an important role in shaping later *Ephemera*. The installation is a series of stencilled words in both black and white sand positioned on the floor of the museum. The use of sand, while emphasizing the work’s ephemerality, takes on a second layer of meaning when one considers its composition. Boshoff’s sand is composed of “...silicone and grounded,

---

16 The use of lamination pouches can be compared with transparent sheets which have been prominent in John Cage's work. Of particular interest are the works from the *Variation I-IV* (1958-63). In these works, Cage gives the performer a set of transparencies that are then subjected to a random order of layering determined by the performer. This type of performative involvement and engagement with the score is also evident in the scores discussed in this section. For more information on these works see Pisaro, “Writing, music”; Douglas C. Wadle, “Meaningful Scribbles: An Approach to Textual Analysis of Unconventional Musical Notations,” *The Journal of Music and Meaning* 9 (2010), www.musicandmeaning.net/articles/JMM9/DouglasWadleJMM9.pdf (accessed June 1, 2012).


18 The term “fugitive-media” is used by conservators to describe materials (here, sand) that are prone to impermanency. many conservators refer to this impermanency as an “inherent-vice”. Hornbeck, “A Conservation Conundrum,” 55. This seems to suggest a disdain for works that defy the traditional role of a museum to preserve society's cultural artifacts. See Tim Barringer and Tom Flynn, eds., *Colonialism and the Object: Empire, Material Culture and the Museum*, 1st ed. (New York: Routledge, 1997); Allyson Purpara, “Framing the Ephemeral,” *African Arts* 42, no. 3 (Autumn 2009). This mindset of conservators is an interesting strand of discussion that can be extended into the concert hall and its particular social construction. However, the scope of this paper does not allow for a full discussion of the complex museological and
oxidized ore-silicone conjuring the notion of the fleetingness of computer generated fleetingness of computer generated writing."  

Furthermore, over the course of the exhibition the work's visual integrity disintegrates, a fact that Boshoff accepts, even accepts even insisting that at the end of the exhibition the installation be swept away.  

I have attempted to create a parallel material situation in *Ephemera #6*, subtitled *window shopping*. Here, pigment ink and lamination pouches are again used to obtain a smearing effect. However, unlike *Ephemera #2* or *Ephemera 1/2/2.2[!]3.1-3.3*- where the ink is either removed prior to or between performances, *Ephemera #6* requires the recipient to smudge/remove the ink during a performance situation. On the outside of the lamination pouch there is a graphic notation written in pigment ink. Accompanying the score is a "window" (a piece of paper cut to resemble a window) that is dragged along the surface of the score. The portion of the score visible through the window may be performed, and through the act of dragging the window along the surface of the score, the ink smears. A performance of the score ends once the entire surface has been wiped away, leaving behind only the score's ontological trace: title, my name, and the location of creation.  

At this point, I would like to suggest the possibility that these scores be seen as visual-art. Or rather, I would like to posit the idea that these scores can become objects in themselves, an idea not uncommon in several new music scores.  

---


20 Willem Boshoff, “Writing in the Sand,” http://www.willemboshoff.com/documents/artworks/writing_in_the_sand.htm (accessed June 1, 2012). Despite Boshoff's willingness for visual disintegration, conservators repeatedly repaired any damage that the installation incurred. It is also interesting to note that at the end of the exhibition several members of staff helped in sweeping away the installation proceeded to collect portions of the sand in glass jars, further solidifying the notion of a conservator's inclination to preserve art. Hornbeck, “A Conservation Conundrum,” 55.

21 In Jean-Charles François' “Writing Without Representation, and Unreadable Notation,” *Perspectives of New Music* 30, no. 1 (January 1, 1992), François makes reference to John Cage's exhibition of scores in an art gallery and his book *Notations* (1969). He goes on to explain that Cage's intuition was to consider scores as "multidisciplinary objects." François argues that Cage's desire to elevate the importance of visual representation of the score speaks to the "crisis of notation," saying: "As long as notation remains a means of access to sound... it stays in the background and is never shown." This implies that there is a fetishisation of the visual importance of scores in contemporary music (a sentiment that resonates with Richard
terminology, one could consider these scores autographic works, rather than purely allographic works. Reasons for this shift in thinking include: the singularity of the work, the inability to reproduce the score without it losing its original material characteristics, the emphasis on the history of production behind a score, and the stipulation that the work does not need to be instanced through performance. It would, however, be foolish to completely dismiss the fact that many of the Ephemera can in fact be treated like an allographic work and be performed multiple times. Therefore, while I would like to consider these scores to be more in alignment with visual-arts and autographic works, I must add the caveat that they also have undeniable allographic qualities.

**Means of Dissemination**

Allowing for the distinction of these works as visual-art objects, and bearing in mind that they are also used as a means of correspondence between me and a recipient, a link between my work and the work of Ray Johnson can be drawn. Johnson, an American artist commonly considered the father of Mail Art, was concerned with removing the hierarchical

---

Taruskin). Richard Taruskin, *Music in the Late Twentieth Century: The Oxford History of Western Music* (Oxford University Press, USA, 2009): 475-476. Through my insistence that the score be a visual-art object, it is hard to deny the claims presented by both François and Taruskin. However, I contend that these scores can also serve the secondary representation of sound, and that there is still musical significance to the notation employed. A full discussion on the complexities of notation's function is beyond the scope of this paper, but are raised here to provide some context on the complex issue. For papers that take an opposing stance towards François and Taruskin see Pisaro, “Writing, music”; Stuart Paul Duncan, “Re-Complexifying the Function(s) of Notation in the Music of Brian Ferneyhough and the ‘New Complexity’,” *Perspectives of New Music* 48, no. 1 (March 31, 2010). Also see Theresa Sauer, *Notations* 21 (New York: Mark Batty Publisher, 2009); Mark Poliks, “mrlr,” http://wildervoice.org/articles/mrlr/ (accessed May 1, 2012).


23 I am making the argument here that the material on which the notation is inscribed plays a crucial role in the identity of these works. Clearly, it is possible that a performer can inscribe the notation onto another material surface through their own handwriting or through a notation software program (such as Finale or Sibelius), and in these cases the score is open to multiple interpretations regardless of the material impermanency of the score. However, for me, the material construction of these scores and their notation are so intrinsically intertwined that to simply transcribe the notation would in fact create a new piece. Additionally, on the topic of handwritten scores, an argument can be made that the visual image represented via the personal handwritten inscription of music can convey musical information beyond the symbols used in the notation. See Pisaro, “Writing, music,” 30; Andrew R. Lee, “Handwritten vs. digitally engraved scores, an opinion post by R. Andrew Lee,” http://www.icareifyoulisten.com/2012/03/handwritten-vs-digitally-engraved-scores-an-opinion-post-by-r-andrew-lee/ (accessed April 1, 2012).

structures of art imposed by museums and making art that was “experience-bound,” striving to create art that “…explored spontaneity and mobility as an extension of everyday experience.” Johnson was also quite happy to have his art considered a “throwaway gesture,” that forfeits fame and posterity. The idea of creating art that is less concerned with posterity and more concerned with interpersonal communication is particularly important in the way that I think about my project and draws parallels with the means by which Johnson disseminated his Mail Art. Mail Art was sent via the postal service in an attempt to create meaningful personal interactions through a communication service that, during Johnson’s time (1960-70), was seen to be “…a longstanding institution of impersonal sendings and receipts.”

I send my scores via the postal service as well; however, my reasoning for this means of dissemination is somewhat different from Johnson’s. There is an element of ephemerality, which becomes particularly evident when looking at Johnson’s 1970 Whitney’s exhibition where none of the original works have been recovered. Additionally, in today’s society, with the advent of e-mail and social media (or more generally, the internet), I perceive the sending of mail via the postal service as a more personal means of communication. I would like to make the suggestion that this is due to the lack of physical tangibility in electronic media, and that items having a personal touch are seemingly more valuable.


---

28 Norie Neumark, “Introduction: Relays, Delays and Distance,” in *At a Distance: Precursors to Art and Activism on the Internet*, ed. Annmarie Chandler and Norie Neumark (Cambridge, MA: The MIT Press, 2006). It should also be noted that this is the time period that the label Mail Art was first used and where the majority of Johnson's work falls.
29 Sava, “Fine Art of Communication,” n.16. Sava, also makes note that there is little photographic documentation of Johnson's work or this exhibit when makes the Mail Art movement, in general, somewhat ephemeral. Ibid, 126. The issue of documentation will be discussed in the following section.
Werder's *stück 1998* is a collection of four-thousand pages each lasting eight minutes that can be performed by any number of performers and with any instrumentation. Each page must be performed in succession, and each performance continues where the previous performance ended. The piece is conceived as a single "intermittent performance" with performers sending the specific duration they would like to perform to Werder, thus determining the number of pages received. Since each page can only be performed once, the physical makeup and dissemination of the score can be seen as ephemeral. At some point, every page will be performed, thus terminating the piece. Once this happens, the piece will only exist through the written and aural documentation of performances. This piece also provides an example in which the material presentation of the score becomes a key factor in understanding the work's life and function, imparting a sense of heightened listening to each instance of the piece. One becomes keenly aware of each sonic event, and its once-in-a-lifetime quality. Even though the work is ephemeral in its material dissemination and construction, a sense of community begins to develop around the work amongst performers. This is a result of the sharing in the performance of the whole work over time. Werder also comments on the presentation of the score saying "the presentation is always an invitation for people to meet" and that "with the performance succession I intend to balance 'performance moment' and 'non-performance moment', finally to balance the performance moment and life."  

Saunders takes the idea of distribution further with *Distribution Study* (2011), where a limited number of scores are distributed from Pinakothek der Moderne. Once the pieces have been distributed Saunders makes no effort to promote the performance of the work. Because of this, the score takes on a life of its own, much like my own works in this project. In *Distribution Study* the recipients of the scores are asked to perform the piece for another recipient, and then pass the piece along to them. This chain goes on indefinitely.

---

31 Ibid, 76.
and requires a direct personal and musical engagement with the people participating in the project. The chain-of-event nature Saunders' project takes on is very similar to Johnson's work where he sends Mail Art to a recipient that requires the recipient to complete a series of events before sending the Mail Art to either a predetermined recipient or a recipient unknown to Johnson. This relationship with Johnson is even more pronounced in Saunders' series, *circulated books* (2008-). Each book contains instructions, usually related to the act of writing, in words, a musical sound, that the recipient is required to follow. After finishing the instructions the recipient sends the book to another recipient unknown to Saunders. This continues until the final page of the notebook has been filled. Once filled, the notebooks are sent back to Saunders who then organizes a performance of the work, representing a collective collaborative compositional process, that link several disperse participants through one musical event.

Saunders, Werder, and Johnson all share the desire to move the event, be it music or art, into the realm of everyday-life, and to destabilize the established organizational hierarchies of museums and concert halls, respectively. The means of dissemination utilized by these artists plays an important role in facilitating this desires; desires that I share in the context of this project. Furthermore, due to the dissemination practices employed in these works, and a lack of reproductive control on the artist's part, the role of documentation becomes critical.

**Documentation**

Both Werder's and Saunders' use of documentation are worth mentioning at this point. In *stück 1998*, each performance is documented on Werder's website, tracking the progression of the performance of the overall work. The information logged for each performance includes location/date of performance, duration, and instrumentation. Saunders' method of

---

34 Sava, “Fine Art of Communication”; Gangadharan, “Mail Art.”
35 There are four circulation pieces in this series: *239 instances of loss* (2008-), *ways of making sounds described in fewer than twenty words* (2009-), *x sequential pitches* (2011-), and *78 duos* (2011-). None of the works sent out have been returned to Saunders at this point. More information can be found at James Saunders, “circulated book pieces | James Saunders,” http://178.18.116.10/~jamesau1?page_id=238 (accessed June 1, 201).  
36 Ian Vine uses a somewhat similar method of documentation for his piece *over 5,000 individual works* (2007). For more information see Ian Vine, “ian vine | over 5000 individual works (2007),” http://www.ianvine.com/over5000.htm (accessed
documentation is much more involved. For *Distribution Study*, Saunders has designed an entire website devoted to explaining and providing documentation for the project.  

On each score, Saunders has provided contact information, and participants are encouraged to write to Saunders detailing the location of performance, their name, and their experience of performing the work. In some cases, the performer has also indicated the person that they passed the score on to. This information is then put into Google Maps, showing the physical trajectory of the scores. In addition to this location-oriented documentation, Saunders also provides photographic documentation and textural descriptions for the first three studies.

While my project is not aimed towards self-promotion or professional development, the representation of my artistic output and development is still necessary. This representation is only made harder when engaging with scores that do not lend themselves self to widespread reproduction/dissemination. In order to facilitate the visual representation of my work I have employed simple means of documentation. For each *Ephemera* a complete collection of photographic documentation of the sketches and final score remain in my possession. Several artists working with ephemerality also maintain photographic documentation and provide it openly as a means of representing their work.

The work of Goldsworthy is particularly interesting in terms of the function the photographic documentation serves. Goldsworthy is a British land artist who works with nature-based sculptures and installations. Many of his earlier works are highly ephemeral, only lasting for a few hours and existing mainly through photographic documentation. Goldsworthy has also made several permanent works that explore ephemerality in different

---


ways, usually focusing on the degradation of the material construction over a more extended period of time.\textsuperscript{39} Additionally, these permanent works function as a means of establishing his artistic output beyond the mere photographic representation of his work. Considering the fact that Goldsworthy is also concerned with one's engagement with the physical presence of his artwork, photographs alone make this an impossibility.\textsuperscript{40} And while it makes logical sense for Goldsworthy to provide this photographic documentation in order to present his work to a larger audience, there is a sense of spuriousness in regards to the work's ephemerality.

Lenore Metrick makes the argument that Goldsworthy’s photographic documentation leaves a permanent trace of the work and is “emphatically not ephemeral.”\textsuperscript{41} She goes on describe that the way in which Goldsworthy work is photographed is important to understanding the work and the role of photography. Metrick explains that Goldsworthy photographs the work at what she terms to be “the perfect moment.” This is the moment when the sculpture attains “...fullness—before any portion of the sculpture has begun to fade, move, crack—and suspends it [the sculpture] in its perfection.”\textsuperscript{42} This type of “perfect moment” photography is also similar to the work of Richard Shilling, another British land artist. Shilling says:

> Every sculpture is photographed in natural light, using normal camera equipment and without any photoshop trickery. Each photo accurately depicts how each sculpture appears, at its most vibrant moment, before the elements reclaim the materials back to nature (my emphasis).\textsuperscript{42}

Joseph Beuys, a German Fluxus artist, was also rather particular about the way in which his sculptures were photographed, preferring “under- or over-exposed, blurry, slightly off-focus...” photographs.\textsuperscript{43} For all three artists, the presentation and quality of the photograph

\textsuperscript{39} John Beardsley, forward to \textit{The Andy Goldsworthy Project}, by Molly Donovan and Tina Fisk (London: Thames & Hudson, 2010)

\textsuperscript{40} Tina Fiske, “Andy Goldsworthy.”


\textsuperscript{43} Metrick, “Andy Goldsworthy’s Art,” n.37.
is important to the function the photograph serves. Metrick claims that by framing this precise perfect moment, Goldsworthy's photographs transcend the "...inevitable life cycle," and make the ephemeral into something no longer ephemeral, but instead permanent. Given the deliberate and artistic means of photography, Metrick deems the photograph an artwork in its own right.\footnote{Ibid. Using Metrick's logic it is possible to argue that both Beuy's, and Shilling's photographs are artworks as well.}

In my own work, although I maintain complete photographic documentation, I chose not to make that documentation easily accessible and widespread. I also make no effort to make the photographic documentation artistic. In general, the photographs are very matter of fact, and simply provide proof of the score's existence. The reason for inartistic photographs is to ensure that they do not end up being presented as artworks. The photographic documentation is for reference only, and should not be viewed as art. Instead, the score itself is the true artwork. And while it can still be said that by photographing these works, I am removing the possibility for true ephemerality; I assert that due to the lack of widespread accessibility and concern over the way the photograph is taken, the documentation does not in fact impinge on the work's ephemerality.

**Future Directions**

In *Ephemera* #8 I have gone one step further in the aim to make the score an ephemeral material object. The score is a panel of balsa wood with music inscribed with pigment ink. This is the most unconventional material used so far in this project, and serves a specific function. The score, if it is performed, is to be burnt during the performance, making both the score and the performance intertwined with ephemerality.\footnote{This work can also be seen as somewhat related to the 'element pieces' by Rhodri Davies: *wind harp* (2004), *water harp* (2007), and *fire harp* (2007). In particular, the fire harp piece, where an unusable harp is set on fire as a means of exploring the sonic possibilities of the harp. For a brief elaboration on these pieces see Rhodri Davies, "hcmf/ 2010: string theories: rhodri davies q&a," http://www.hcmf.co.uk/String-theories-Rhodri-Davies-QA (accessed July 1, 2012).} The speed of the performance is dependent on the rate by which the fire consumes the score, making it impossible to perform without adhering to the instruction to burn the score. It is also worth noting that balsa wood absorbs the moisture of the pigment ink almost instantaneously,
making a reproduction of the score through a transfer of the ink from one surface to another impossible.

This desire to work with more ephemeral materials is a direct extension of my recent interest in Oscar Muñoz's work. The work of the Columbian artist is focused on memory, and in particular on attempting to re-establish a sense of cultural memory in Columbia.\textsuperscript{46} The idea of heightening the listening experience and engaging with the way in which one remembers the work (their memory of the work) is important for me. In \textit{Re/Trato}, Muñoz repeatedly, over the span of a twenty-eight minute video, attempts in vain to draw his self-portrait with water on a hot pavement.\textsuperscript{47} Just as one portion of the drawing begins to solidify in one's mind, it is evaporated, and a new aspect of the drawing comes into focus. Over the course of the twenty-eight minute video presentation of this attempt, the drawing is never allowed to complete itself and instead the audience is left with a fragmented mental construct of the portrait. The work also takes on more poetic means of expression; more specifically, the attempt to "fix one's image,"\textsuperscript{48} and the Sisyphean struggle it that evokes.\textsuperscript{49}

An idea for a future \textit{Ephemera, drawing on the Sisyphean struggle implicit in Muñoz's work, might be the creation of a collection of parts (material objects) which constitute a single work that are all highly prone to impermanency. If, for example, the recipient received seven similar parts of a single work that where each notated on balsa wood, the recipient might be required to burn all seven parts of the work in the same performance. As with \textit{Re/Trato}, where the artist is constantly attempting to create a permanent image with materials that are highly prone to impermanency, the recipient of


\textsuperscript{48} Ibid, 15.

this work is constantly fighting against impermanency during the act of creating a sonic result.

**Concluding Remarks**

As has been established in this paper, the scope of this project is quite large and sprawling, touching on several different artistic disciplines. Given the fact that the project is ongoing, and in relatively early stages of development, the shape and nature of this project is likely to undergo more changes. However, through investigating the initial inquiry into ephemerality and its different manifestations in the realms of score production (methodology), material construction, means of dissemination, and documentation, a suitable framework for understanding this project has been established. With this framework in mind, future developments can be seen as an outgrowth of my expanding engagement with the nature of ephemerality.
ASPECTS OF THE NOTATIONAL IMAGE:
PERFORMER/NOTATION ENGAGEMENT

Over the last several years I have had an increasing and evolving interest in notation and its affective potential. Two recent pieces of mine, Various Terrains (≡ degrees of similarity) (2011) and Disintegration (2011/rev.2012), demonstrate recent notational developments, with Various Terrains (≡ degrees of similarity) representing a culmination of particular notational tendencies found in my earlier work¹ and Disintegration a re-thinking/examination of notational practices previously employed. Both pieces explore the relationship between notation and performer, with notation serving as a nexus for heightened performative mediation and engagement. Notational strategies employed in these works include multi-parametric (decoupled) notation, performative impossibilities, and intentional ambiguities.² This paper focuses on performative situations created through notation and issues related to interpretation of engagement with notation.

Various Terrains

I. Framework

Various Terrains (≡ degrees of similarity), for solo voice, is composed of three panels, each containing nine measures of music spanning two pages. Each panel contains a different number of “musical strands”: independent strands of musical material that are each hierarchically equal yet distinct. The three strands notationally “deconstruct” the physiological makeup of the voice into a number of constituent parts that are each assigned


² Multi-parametric (or decoupled) notation entails the separation of various constituent parts of either instrumental or vocal production into different staves, usually, but not always, with distinct rhythmic identities. Parametric in this context should not be confused with musical parameters such as dynamics, rhythm, pitch, tempo, and articulation. Instead, multi-parametric notation focuses on the physical decoupling of sonic production. Several composers have written on the topic of multi-parametric notation. For a small sampling of applications of this notation see Wieland Hoban, “Towards the Semantification of Instrumental Technique,” in Polyphony and Complexity, ed. Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig (Hofheim: Wolke Verlag, 2002); Klaus K. Hübner, “Expanding String Technique,” trans. Frank Cox, in Polyphony and Complexity, ed. Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig (Hofheim: Wolke Verlag, 2002); and Aaron Cassidy, “Determinate Action/Indeterminate Sound Tablature and Chance in Several Recent Works,” in Facets of the Second Modernity, ed. Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig (Hofheim: Wolke Verlag, 2008).
their own stave with different rhythmic profiles and trajectories. Every strand is designed to have a distinct sonic identity by virtue of the variety of vocal deconstructions. For example, each strand has a distinct pitch-quality identity. The third strand contains a pitch stave giving the strand a strong pitch identity; the second strand has no prescribed pitch identity; and the first strand represents an in-between identity through the combination of mouthed consonants and whistle inflections, producing diffuse, weak, and variable sonic/pitch results. Furthermore, each strand has a self-contained and limited collection of mouth-shapes. These collections are loosely grouped into types with the first strand making use of highly sibilant consonants (z, s, v, tʃ, j, ʒ), the second strand using more abrasive fricative consonants (θ, f, k, x, r, b), and the third strand consisting of only vowel shapes (i, ɑ, ɑ, i, ʌ, m).

The first panel (Fig. 1) contains three musical strands that the performer is required to, as much as is possible, simultaneously articulate, a blatant performative

---

3 This deconstruction results in a highly “prescriptive notation” in contrast to “descriptive notation.” In other words, the notation signifies how to produce a sound rather than what sound to produce. This is in alignment with my attempt to emphasize the performer’s physiological relationship to the notation, by bringing to the foreground the very means of producing vocal sounds. There are still several descriptive elements at play in this piece, but the how-to of sonic production plays a much more significant role here than in most traditional vocal music. For more information on prescriptive and descriptive notation see Charles Seeger, “Prescriptive and Descriptive Music-Writing,” The Musical Quarterly 44, no. 2 (April 1, 1958); Mieko Kanno, “Prescriptive Notation: Limits and Challenges,” Contemporary Music Review 26, no. 2 (2007); Phillip Thomas, “A Prescription for Action,” in The Ashgate Research Companion to Experimental Music, ed. James Saunders (Farnham, Surrey: Ashgate, 2009); and Douglas C. Wadle, “Meaningful Scribbles: An Approach to Textual Analysis of Unconventional Musical Notations,” The Journal of Music and Meaning 9 (2010): 51-53. Also see Stephen Davies, Musical Works and Performance: A Philosophical Exploration (Oxford: Clarendon Press, 2001), 100-150, where Davies argues that all notation is prescriptive. For a thorough breakdown of the voice’s constituent parts see Michael E. Edgerton, The 21st Century Voice: Contemporary and Traditional Extra-Normal Voice (Lanham, MD: Scarecrow Press, 2004).

4 This combination of contradictory actions (whistles with conflicting mouth-shapes) is what Evan Johnson, in the preface of his score A general interrupter of ongoing activity for solo voice, would call an “overwriting” effect. Both of these actions can not simultaneously exist without the other influencing the nature of the other. In other words, they act in tandem with each other, creating an often unstable and unpredictable sonic result. Similar types of overwriting can be found in Hans-Joachim Hespos’ IKAS (1982). See Franziska Schroeder, “The Voice as Transcursive Inscriber: The Relation of Body and Instrument Understood through the Workings of a Machine,” Contemporary Music Review 25, no. 1-2 (February/April 2006).
Fig. 1: Various Terrains, Panel I (first half).
impossibility which will be elaborated on in greater detail later. Each consecutive panel is composed of the same musical material from the previous panel, i.e., panel two takes material from panel one's second strand and redistributes it across both strands one and three, and panel three merges together all three strands from panel one into a single musical strand (Fig. 2). Each panel can be viewed as a repetition of musical material with repetition here taking on a slightly expanded definition. The structure of the piece is essentially three repetitions of the same musical material presented in three different notational constructions. However, due to the splicing and redistribution of previous strands in panels two and three, the music is not a literal repetition of material. Instead, each panel contains musical material that has the potential to be sounded in the previous panel. Regardless of whether or not each sound is repeated is not important. What is important is that each subsequent panel represents musical material that could be a repetition of the previous panel.

II. Interpretation and Performative Situations

As mentioned above, the performer is instructed to simultaneously articulate all three strands in the first panel (and the two strands in panel two) during a performance of the work. This is clearly a physical impossibility and leaves the performer with several questions regarding not only execution but more importantly the role of interpretation, making it immediately clear that the performer needs to reassess the very nature of performance practice. The performer is required to rapidly shift in and out of each musical strand, as if shifting into different “performative gears,” changing both the performer's mental and physical state with each shift. As the work progresses, the number of strands reduce and the number of possible sonic outcomes are restricted. The final panel represents a compositionally controlled “interpretation” of the first panel with all three original strands distributed along one composite musical strand (Fig. 3). Throughout this work the performer is effectively being asked to “project” the tantamount physiological and psychological struggle of simultaneously performing multiple, disconnected, musical events. For me, this “projection,” one that is subject to certain failure, creates a distinct performative situation.
Fig. 2: Redistribution Process from Panel 1 to Panel 3. Each color indicates a different strand of material. Blue: Strand 2, Green: Strand 1, Yellow: Strand 3.
The function of notation here is to constantly adjust the degree to which this performative situation asserts itself, thus acting to re-contextualize the music with each repetition. Furthermore, the notation’s super-abundance of musical information and material acts as a nexus for continued mediation and reflection. As a performer engages with the score their relationship to localized material in turn shapes the way they engage with more global issues of form and phrasing.

While Various Terrains was being written, it was conceived that the notation would move from opacity to transparency, or rather, move the performer along an “interpretive freedom” spectrum from complete performative freedom to minimal freedom through compositionally controlling the number of strands available and thus the level of sonic indeterminacy. It is important to keep in mind here that the number of strands has a direct correlation on the indeterminacy of a panel. Due to the fact that the performer is required to rapidly shifting in and out of each strand, the end sonic result can only be a partial representation of the sum totality of the possible sounds. With three strands, the number of strands not sounding at any given point is higher than with two strands. And with one strand this indeterminacy is radically reduced, leaving only the indeterminacy that arises from conflicting performative actions via the use of multi-parametric notation.\(^5\)

This idea of a transparent relationship between notation and reception is itself, of course, a practical impossibility, and runs the risk of equating a performance that merely executes instructions, rather than engaging with and interpreting instructions, as an acceptable, even ideal, performance. If we define interpretation as the filtering process, or translation/transcription, that takes place during the actualization of a concept, then every performance, excluding the medium of fixed electronic composition, can be viewed as an interpretation inherently tempered by a performer’s subjective inclinations.\(^6\) In fact, any attempt to “efface” the subjectivity of interpretation in the aim of an objective representation of notation is a subjective gesture. The only “objective” approach towards

\(^5\) For more information on ways in which multi-parametric notation can engender indeterminacy see Cassidy, “Tabulature and Indeterminacy”; and Pedro Rebelo, “Notating the Unpredictable,” Contemporary Music Review 29, no. 1 (February 2010).

performance is one that acknowledges and confronts one's subjectivity as a performative force to be reckoned with.\textsuperscript{7}

This is not to say though that the performer is free to disregard the notation and simply "fake" their way through the work, assuming that, since a literal execution of the score is impossible, the end result is of little consequence, or even worse, the composer will not be able to tell the difference between an improvised performance and an authentic engagement with the music. In fact, this could not be further from the truth. There are still performative responsibilities required of this work, and furthermore, to simply gloss over the details and the intense mental/physical engagement required would miss the point of the work entirely.\textsuperscript{8} The performer must commit themselves to grappling with the difficulties presented in the work, even if it is explicitly known that no "perfect" interpretation is attainable. This "struggle" to overcome the notation while still making an expressive and musically captivating performance is a central concern of this piece.

Furthermore, regarding the initial idea of an "interpretive freedom" spectrum, it is quite clear that at no point in the final score does the notation suggest complete performative choice. While it would be easy to view the first panel as a section of complete performative freedom, with the performer's movement in and out of each strand as determined by their own volition, this is actually quite removed from the performative situation imposed by the notation. What the notation suggests is in fact a wide spectrum of potentialities, be it sonic, physical, or otherwise. The actualization of these potentialities are not to be predetermined by the performer and instead they are to be spontaneously reconstructed anew with each performance. Despite this indeterminacy, the work still has a clear sonic identity with each performance. Indeed, each performance of the work—in particular strands one and two—can be seen as a fractal of the work's multitude of possible interpretations.


\textsuperscript{8} A full discussion on responsible performance practice for works involving complex performative decision making is beyond the scope of this paper. For a highly detailed proposal of such a practice see Frank Cox, “Notes Towards a Performance Practice for Complex Music,” in Polyphony and Complexity, ed. Clause-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig (Hofheim: Wolke Verlag, 2002).
In effect, the notation represents a type of pre-individual state, in the Simondonian sense of the phrase, containing several disparate, and seemingly incompatible, singularities that must interact with one another towards the creation of the individual. During the rehearsal stage of a traditionally notated work, the performer is engaging in the individuation process (the phase between pre-individual and individual) towards the creation of an individualized sonic representation of the work. With this work though, the performer is never able to reach the point of the individual and is instead constantly positioned in a state of individualization. No matter how long a performer works with the score/notation they will never be able to come to a final resting place of performative security and stability; each performance is a glimpse into the in-between state of pre-individual and individual: individuation. Or in other words, the performer/notation relationship is constantly renewing itself, or rewriting itself; suggesting that the notation, as a musical text, is a living text, in the Derridean sense, that provides the performer with continued feedback, but never situates itself as a fixed entity despite the fixed visual nature of the text.

Another work that establishes a similar performative situation is Iannis Xenakis' Evryali (1973) for solo piano. The work contains extended passages of material that are impossible for any human performer to execute. This is due to both the physical

---


10 Simondon would assert that there is no real arrival at individualization, and that instead humans reach points of meta-stability. Meta-stability entails a phase where the process of individuation is not taking place, but one that can enter into that process at any given point depending on the interactions of outside forces acting as catalysts for individuation. The individual is only a construct of the mind and humans are instead either in a state of individuation or meta-stability. For the purposes of this paper I will use the term individualization more liberally as a reference to an ideal-state, where the performer feels confident in their ability to successfully reproduce a work on command, thus entailing a stable relationship with both performer and notation.

11 The idea of notation as a musical text is not restricted to works that explore complex performative situations. See Marcel Cobussen, “Music Is a Text,” http://deconstruction-in-music.com/proefschrift/100_outwork/120_music_is_a_text/music_is_a_text.htm (accessed June 1, 2012). However, it is striking that several performers that engage with music that does explore these types of situations make reference to the idea of the performer/notation relationship as a relationship that is in a constant state of flux. See Steven Schick, “Developing an Interpretive Context: Learning Brian Ferneyhough’s Bone Alphabet,” Perspectives of New Music 32, no. 1 (January 1, 1994); and Christopher Redgate, “A Discussion of Practices Used in Learning Complex Music with Specific Reference to Roger Redgate’s Ausgangspunkte 1,” Contemporary Music Review 26, no. 2 (2007). In many ways, this relationship can be characterized as a conversation of sorts that takes place between the performer and the notation. See Rebelo, “Notating the Unpredictable.”
span of Xenakis' chords and the rate at which the material passes by. Marc Couroux describes the performative situation saying: “...the performer is always required to engage with the larger sonic picture adequately enough so as to give the 'impression' that everything in the score is being played.”\textsuperscript{12} While many composers write about the physical impossibilities of a work and the Sisyphean struggle they take on, there is still the possibility for many of their works to be realized at a much higher fidelity rate years later once performance technique has come to match the challenges posed by their works. However, in the case of Evryali, the physical impossibilities posed by the notation will never be possible to resolve without resorting to a performative supplement outside of Xenakis' intentions. There will always be some portion of the notation that is not “realized” during a performance, thus, much like the performative situation established in Various Terrains, the performer is placed in a state of constant individualization.

Both Evryali and my own work present a unique situation for both the performer and audience. The performer is taken outside of their comfort zone and placed into a position of vulnerability. In a way, the works are transplanting a part of performance practice often relegated to the realm of practice rooms (rehearsal) into the concert hall; explicitly highlighting human imperfection as a type of expressivity. This position of vulnerability is one that the concert audience rarely sees a performer in and, equipped with this knowledge, the audience member can come to the work with both fresh ears and eyes towards not only the music but also the performative situation.

Peter Ablingier's Wachstum und Massenmord (2010), for title, string quartet and program note, brings to the foreground this transplantation by making a rehearsal the performance. For the first performance the quartet is given the score just before going on stage and what follows is a natural rehearsal session between the members of the ensemble. The quartet is not to pay any attention to the audience aside from their entrance and exit; making the performance a glimpse into something both private and personal amongst the members of the ensemble.\textsuperscript{13} It is also a glimpse into a very direct and tangible

\textsuperscript{12} Marc Couroux, “Evryali and the Exploding of the Interface: from Virtuosity to Anti-virtuosity and Beyond,” Contemporary Music Review 21, no. 2–3 (2002): 57. The idea of 'impression' is directly related to my use of the term 'projection'.

\textsuperscript{13} Sadly, during its premier at the 2010 Donaueschingen Festival, the performance was meet with strong resentment from the audience and the quartets commissioned to perform the work were clapped, laughed, and booed off the stage. Jennie
performer/notation relationship: the point of first contact. Regarding subsequent performances by the same ensemble, Ablinger writes: “Can the piece be performed another time by the same quartett[sic]? I would say, yes, as long there is something left to rehearse.” What interests me the most about this work is that there is still a possibility for the work to grow and evolve, and in fact this evolution of the performer/notation relationship is completely isolated to the performance of the work. Each performance of the work then becomes a point on the spectrum of transformation from pre-individual to individual, with the life of the work ending just short of an ensemble's arrival at a point of individualization.

In both Wachstum und Massenmord and Various Terrains one may be tempted to view the performatve situation as merely a social-sciences experiment, as if the performer is a lab rat being scrutinized by both the composer and audience. And in particular with Various Terrains, considering the notational challenges presented in the work, there is a temptation to view the situation as one that puts the performer through a series of impossibly difficult tasks for the sake of experimentation, rather than a defined purpose. However, this is a rather cynical perspective on the situation at hand. And whilst the performative challenges presented in Various Terrains via notation are considerable, these challenges are not used solely a means of frustrating and exploiting the performer. Instead, as has been explicated, the notational strategies used throughout aim to construct multiple performative obstacles as a means of encouraging the performer to formulate their own unique solutions to, and pathways through, the notation.

---

Gottschalk, “Donaueschinger Musiktage 2010 (3/3)—Peter Ablinger: Wachstum und Massenmord,” http://www.soundexpansion.com/donaueschinger-musiktage-2010-33%E2%80%94peter-ablinger-wachstum-und-massenmord/ (accessed May 1, 2012). One could make the argument that this in turn becomes part of the piece, and that once the private and personal situation has been broken, the piece transforms into something else altogether. It is also interesting to note that subsequent performances of the work were not meet with the same level of (outward) resentment, thus allowing the performance to indeed be a true glimpse into an often marginalized aspect of music production.

Disintegration

I. Re-consideration

Disintegration, for saxophone trio,\textsuperscript{15} represents a re-thinking/examination of many of the notational strategies utilized in my previous work, with Various Terrains being the most recent manifestation of those tendencies. The work was written in 2011 and was one of my first explorations into multi-parametric notation. After further investigation into the use of multi-parametric notation, and unsuccessful attempts to acquire performances of the work (largely due to notation problems), I decided to revisit the work with the aim of clarifying the notation. The initial idea was to take the knowledge I had gained from my extended exploration into multi-parametric notation since Disintegration and make minor adjustments to the work’s notation. However, this re-investigation lead to a radically different way of visually representing the work. These changes are predicated on changes and discoveries gleaned from my recent work.

Two adjustments in particular helped to move the re-notation project toward its final direction. The first was a re-consideration of the importance of having independent rhythmic strands to specify auxiliary performance actions (mouthpiece placement, mute position, trigger location, etc). My work marginalization (2011), written directly before this reassessment, is the first work to abandon the use of multiple rhythmic strands in the trombone part; specifying both mute and trigger positions/actions using spatial notation rather than rhythmic notation.\textsuperscript{16} The second re-consideration was the idea of separating out air-quality into a separate stave and what exactly constitutes air-quality. A questioning of this approach derives from my experience of using a similar notational strategy in my work what \textsuperscript{“}lurks beneath\textsuperscript{”} (2011) where the resultant sound is not in fact a type of air-quality change but rather the result of some other physical action.

\textsuperscript{15} Two soprano saxophones and one baritone saxophone.

\textsuperscript{16} The spatial notation of these actions are still based on a specific rhythmic profile/trajectory. The notation though does not represent those specific rhythmic proportions. This change was made to allow the performer to focus more on the primary musical material at hand. Furthermore, the physical actions in the sections of marginalization that utilize this type of decoupling are more concerned with the general sonic picture rather than the collision of multiple physical performative actions.
This realization lead to one of the more substantial changes in my way of engaging with notation. The first change was a move from an independent rhythmic strand with several air-quality gradients to a graphic representation of a binary relationship between pure and diffuse tone quality. However, the relationship to the musical material was still somewhat tenuous. This lead me to explore the idea of erasure as a compositional tool. The handwritten score contains portions that are either lightly or heavily erased, with the amount of erasure related to the amount of tone diffusion. Using erasure as a notational tool lead to two previously unexplored notational situations. The first was the very real physical engagement with the score, one that, for me, seems to suggest both a more direct, or visceral, indication of the desired sound, as if I am an active participant in the performance of the work. The second by-product of this physical trace is a resultant notational ambiguity. This comes across on two levels. First, that the visual image of the notation becomes slightly illegible and unclear therefore leading to the possibility of indeterminate pitches; second, that what exactly the performer is required to do in face of an erasure mark is left somewhat open.

In addition to these changes, the process of engaging with a previous work though a re-notation project allowed me the ability to more carefully consider the role of prescriptive and descriptive notation in my work. In many of my previous works, the use of prescriptive notation was used to highlight both the physiological aspects of performance and to induce a sense of sonic indeterminacy through the occlusion of conflicting physical actions. This work though is rather uninterested in the physicality of performance with more focus on an attempt to create a more transparent relationship between image and sonic result.17 However, much of the resultant sonic indeterminacy that emerged through my application of highly prescriptive notation in previous works still interested me when revisiting this work. Therefore, instead of inducing indeterminacy through the seemingly contradictory physical actions of instrumental production, I decided to explore sonic ambiguity through a more descriptive approach. And more to the point, a descriptive

17 I am not suggesting that the notation creates a direct and transparent relationship between notation and sonic result, a fact that I explicated earlier. What I am suggesting is that the notation is simply more representative of the sonic result in comparison to the notational strategies used in my previous work.
approach that was rather open ended in what its application might be. This ambiguity, as mentioned above, is most readily seen in the use of erasure marks, which indicate a collection of possible performative options, all descriptive in nature, that the performer can select from dependent on the surrounding musical contexts.

II. Re-notation (a case study)

Here I will provide a brief “case study” of Disintegration, highlighting the different stages of the re-notation process as a way of showing the notation’s evolution from its original state to its current notational manifestation.

![Fig. 4: Annotated Excerpt of Original Score](image)

Figure 4 represents a single instrument from the original score for the means of detailing the notational construction of actions. The bottom stave represents the pitch content and, to a lesser extent, the general fingering sequence for the performer. This stave is the most “traditional” of the three staves and acts as a point of stability that gets obscured (or disintegrates) due to the other two staves’ operations. The next stave up is the air-quality stave. Moving from bottom to top, the air to pitch ratio increases from marginal air mixture to the point of almost pure air and no pitch, with a rest indicating pure pitch with no air mixture. Finally, the last stave indicates the performer’s mouth-placement on the reed and the amount of pressure to apply to the reed (the dynamics in the quotation marks). Again, the rest indicates no physical action and a return to the normal mouth-placement/pressure for the given pitch. Moving from bottom to top, the mouth moves from the tip of the reed to a fully swallowed position.
The original notation (Fig. 5) contains little visual correlation between the notation and the different physical operations being carried out by the performer. Each stave looks nearly identical to the last one, and furthermore the level of specificity for each of the ‘auxiliary’ staves is too high for purely practical reasons (the reed is not long enough for five discrete positions, and air quality tends to work best in a binary fashion—or at least not nearly as differentiated as asked for here). Additionally, the terminology used in the original score is confusing: the phrase ‘air-quality’ is actually quite problematic and not representative of the desired sonic outcome. Therefore, in later examples, the term air-quality has been exchanged for the term ‘tone-quality’ to indicate a diffusion of tone clarity. Furthermore, one of the most notable problems with the original notation is that the sound world that would be created from a faithful performance of the work would be far from the conceived sound world. The resultant sound world would be something along the lines of very soft and delicate sounds in the pitch stave being obliterrated by loud/uniform (regardless of pitch) “squawks,” which does not fit the character of this piece most of the time.

Figure 6 represents the first stage of the re-notation process. During this initial stage my main concern was making a clearer visual representation of the notation.
The resultant notation is a literal re-notation of the previous material. The air quality stave has been turned into a continuous stream of data that changes based on a gradient scale, with white indicating pure pitch and black indicating almost all air vs. pitch. Air-quality's stave has also had its rhythmic profile striped and turned into a graphic representation of changes. The mouth-placement/pressure stave has been separated and the amount of variation between amounts of pressure and number of placements have been dramatically reduced. In this example the top portion represents the amount of pressure the performer is to apply, with thicker beams indicating an excess in pressure and no beam indicating minimal pressure. The bottom portion is a simple graphic representation of the placement of the mouth on the reed, with the bottom indicating the tip of the reed and the top indicating a fully swallowed position.

Figures 7-9 represent a number of additional sketches that resulted during the initial stage of re-notation. Figure 9, and the sketch marked '1' is of particular importance due to the fact that this notation carries over into the next stage of re-notation. It takes the mouth-placement/pressure staves from figure 6 and combines them into one single stave. While none of these re-notations solve any of the practical problems that are present in the original notation, the visual correlation between notation and action is much clearer. This notation is also a much more intuitive representation of the actions the performer is required to carry out.
Fig. 8: Additional Preliminary Re-notation Sketches: (2), (3) and (4).

Fig. 9: Additional Preliminary Re-Notation Sketches: (1).

Fig. 10: Second Stage of the Re-notation Process.
Figure 10 represents the second stage of the re-notation process. The largest difference in this second stage is that the way of getting in and out of the physical actions, and their relationship with/impact on the main pitch material is made clearer. The physical actions in the mouth-placement/pressure strand are much more of an outgrowth of the main material instead of a separate autonomous layer of activity. This notation also eliminates the use of rests, a notable problem with the original notation. However, at this point in the re-notation process there are still a number of fundamental problems; the main one being that fact that the sonic disparity between the sonic conception and the sonic result the notation suggests is still considerable. Additionally, the notation still seems to suggest three (or two, depending on how one looks at it) separate strands of activity instead of one strand of material that is being distorted and becoming destabilized.

Despite the improvements of figure 10 over the original notation I was still generally dissatisfied with the fact that the tone quality strand in the previous re-notations was so far apart from the actual musical material and that its impact was not more immediate. The idea of using erasure of a notational tool comes into play at this point. As outlined above, the use of erasure marks introduced a level of both ambiguity and illegibility that intrigued me. Furthermore, the erasure seemed to represent a closer correlation to the desired sound world (Fig. 11).

![Fig. 11: Erasure (tone-quality).](image)

Figure 12 illustrates the final result of the re-notation project. In the final score, the only portion of the original notation that has remained unchanged is the pitch strand. Two additional performative indications have been added (singing, diaphragm
vibrato), and the use of mouth-pressure has been removed. Furthermore, the mouth-placement stave has been radically simplified with an image of the reed given to specific the bandwidth of physical activation and a graphic representation of the movement along that span indicated by a line dictating general contours. The mouth-placement stave also introduces an additional degree of placement ambiguity in regards to both rhythmic placement and location of physical activation.

In this final manifestation of the re-notation process, the physical actions required of the performer seem to be more of an outgrowth of the main material (the pitch stave), rather than additional layers of physical actions unrelated to the main material. There also seems to be a clearer relationship between the desired sonic result and the notational image set out. And while this relationship is made clearer here, that there is still a level of notational ambiguity (as outlined above) derived from the use of erasure marks that leads to a constantly renewing relationship between performer and notation engagement.
III. Physical Engagement

Regarding my interest in the physical trace, two recent works by composers Claudia Molitor, *Voice Box* (n.d.), and Charlie Sdraulg, *hush* (2011-12), take unique approaches towards the physical production of/engagement with their scores. *Voice Box* is a collection of works that “...[explore] the ‘music score’ as a site in which the conventions of notation, the qualification of sonic phenomenon and the historical hierarchies of sound are interrogated.”\(^{18}\) There is a master (reference) score (Fig. 13) written using traditional notation, with the other scores in the collection resulting from a re-transcription/inscription of the reference score. This takes place under different states of physical duress that act to alter the notational image. The states of duress include inscription of the master score while on a train, riding through Alpine tunnels, trampolining, not looking, not lifting the pen, attaching the pen to a two meter rod, and with her feet (Fig. 14) and left hand (Fig. 15). Each of the scores have a radically different visual representation of the same musical material as a direct result of this physical interaction. Furthermore, each of these scores require the performer to engage with the same musical material de-contextualized from its master score.

![Fig. 13: Claudia Molitor, Voice-box (master score).](image)

Fig. 14: Claudia Molitor, Voice-box (with foot).

Fig. 15: Claudia Molitor, Voice-box (pen attached to 2m rod).
While the visual appeal of Molitor’s collection of scores is rather striking and influential in developing my interest in physical interaction with the creation of a score, there is an openness to the notation that I found somewhat problematic. Or, to put it another way, the lack of control that Molitor imposes on the interpretation of the re-transcribed scores begs the question of how a performer is to make any meaningful interpretive decisions other than a mere surface representation of the notation’s character. There is an ambiguity to the notation that interests me, but I find that since the ambiguity is not tempered by a more restrictive force, the notation tends to illicit a more improvisatory performance situation rather than a situation that emerges from an active engagement with the notation.

Sdraulig’s work on the other hand takes on a much more controlled notational construction while still inducing a level of ambiguity through his physical interaction with the score. Hush, a duo for harp and cello, explores a fragile and tenuous sound world, verging on near inaudibility. The layout of the score is in computer engraved notation with almost every aspect of the score input into the computer (Fig. 16). This includes pitches, amount of bow length to be used, bow speed, bow position, and several other indications. On top of that notation is a handwritten line in each part that indicates the distance between the strings of both the harp and the cello, and the wooden drumstick (the harpist’s activating implement) and bow. The lighter the line the further away from the string these implements are and the darker the line the closer to the strings they are. The further away the implement is from the string the less likely a sound will be heard. However, there is room for the trembling of the performer’s hand to lightly activate the string, highlighting physical imperfections. The thickness of the line is directly related to Sdraulig’s own physical imperfections with the pen. As Tim Rutherford-Johnson puts it: “This [performative] imprecision is communicated by hand-drawn lines on the score which are themselves written with the pen just above the page and subject to similar physical fluctuations.” Rutherford-Johnson goes on to suggest that the notation “…bring[s] composer and performer closer together…directly trac[ing] the required result.”

My own work is situated somewhere in-between these two works. *Disintegration* is not as open ended in regards to interpretation as Molitor's work, but is also not so unambiguous as to what the erasure marks indicate, in the way that Sdraulig's handwritten lines are. Throughout the score there are different gradations of erasure types and different types of "erasure strokes," which might suggest different interpretive strategies for different performers. The preface provides the performer with a collection of possible interpretations of an erasure mark, and the option to extend these options if the performer finds that there is a more fitting way to demonstrate the type of diffusion asked for. However, the ambiguity here, one that represents an ambiguity closer to the type created in *voice box* is nested within a much more determined and controlled musical context, therefore not allowing the performer to simply "stray" into any type of sound they find fit. They are required to constantly balance the determined with the indeterminate, creating a type of performative tension between two types of notational engagement.

In addition to the physical engagement that I exert on the score in the production process, the performers also take part in the literal physical disintegration of the
score. Each ensemble that receives the score for this work receive an original copy of the hand-copied score and three photocopied scores. They perform from the photocopied version of the score and upon completion of their performance they are required to make additional erasure marks to the original hand-copied score. The hand-copied score is then sent back to me and for the next performance the new ensemble will receive the score that has been partially erased by the last ensemble along with three photocopies of that score.\textsuperscript{20}

In this way, the performative baggage of each performance is carried throughout to future performances. Furthermore, each performance is a variation of sorts on the original score, allowing an aural disintegration of the work over time to unfold.

It should be clear that the performer of this work is partially taking on the role of composer. They are, in a way, becoming co-composers of the work. In this regard a small link can be drawn between my work and the work of Douglas Wadle, in particular his works \textit{Logos prior Logos} (2007) and \textit{Amphiboly} (2004), which demonstrate a strong composer/performer relationship with notation serving to directly engage the performer in the composition process. Both works are “ur-scores” that require the performer to construct their own performance score as a response to the graphic score provided by Wadle. In these works, the hierarchy between composer and performer, and what constitutes an “authentic” work, are put under great scrutiny.

In \textit{Disintegration} the concept of authenticity is interrogated in a more processual fashion rather than a performance specific fashion. The work, and its authorial origin, is gradually evolving and re-contextualizing itself as a result of interacting with a growing number of performative forces, each of which further obscure and dematerialize the work's ontological identity. Additionally, there is an element of democratization at play in this work (and the work of Wadle); one that can be linked to the Wandleweiser “collective.”\textsuperscript{21} This can be seen in the sense that performers of this work play a significant role in shaping

\textsuperscript{20} Additional photocopies of the work will remain in my possession. Each ensemble is allowed to retain their photocopies of the work and continue to perform that version of the work. On a program there should be no indication that the work is different from any other version. In effect there will be several different versions of the work in circulation, all of which are valid representations of the original work. Eventually the hand-copied version of the score will be entirely erased (or lost/damaged) with the only remnants of the score left behind by the photocopied scores.

the work's trajectory and contribute to the performative baggage of each subsequent performance. Through this democratization and the ongoing dematerialization of the score's ontological identity, the work, in both a physical and aural sense, takes on a lifespan of its own, complete with unpredictable resultant notational ambiguities beyond my control.

**Some Concluding Remarks**

In both *Various Terrains* and *Disintegration* notation plays an important role in establishing a heightened sense of performative engagement between the notation and the interpreter. It is striking to me that both works adapt a significantly different notational image in order to facilitate the different types of engagements outlined above. It is my feeling that the visual differences found in these works are central towards shaping these situations due to their effect on performative psychology and physiology. For me, this difference, and the impact it can have on performer/notation engagement, serves as testimony to the idea that notation, in its several different manifestations, can function as more than a document of instructions for execution, but can also have affective properties; helping to shape the way a performer engages with notation and consequently the end sonic result.
Bibliography

Written Text
Beerkens, Lydia. “Nothing but the Real Thing: Considerations on Copies, Remakes and Replicas in Modern Art.” Tate Papers 8 (October 1, 2007).

Chappell, Brian. “Ephemeral Architecture.”

Cobussen, Marcel. “Music Is a Text.”
http://deconstruction-in-music.com/proefschrift/100_outwork/120_music_is_a_text/music_is_a_text.htm (accessed June 1, 2012).


Daniels, Dieter. “The Art of Communication: From Mail Art to the e-mail.”


Deleuze, Gilles. “Review of Gilbert Simondon’s L’individu et sa genesse physico-biologique.”


———. “Re-Complexifying the function(s) of Notation in the Music of Brian Ferneyhough and the ‘New Complexity.’” Perspectives of New Music 48, no. 1 (March 31, 2010): 136-172.


Musical works


Barrett, Douglas. "A Few Marlenes (Where Have all the Flowers Gone?)." 2010. For three performers. Self Published.
———. "A Few Silence location, date time of performance.) 2007. Indeterminate. Self Published
Cassidy, Aaron. "Because they mark the zone where the force is in the process of striking." 2008. For solo trombone. Self Published.
———. "What then renders these forces visible is a strange smile." 2008. For solo trumpet. Self Published.
———. "The Juniper Tree." 1981. For flute, oboe, percussion, piano and mezzo-soprano. Self Published.
Hoban, Wieland. "Threnody (in memoriam James Avery)." 2010. For bass flute, cello and double bass. Self Published.
Iddon, Martin "Karya." 2011. For midi-grand piano and electronics. Self Published.
———. "émoi." 2010. For solo bass flute. Self Published.
———. “One Flat Thing, reproduced.” 2010. For oboe, violin and percussion. Self Published.
———. “Apparatus.” 2009. For bass clarinet, cello and piano. Self Published.
———. “Voice Box.” n.d. For solo voice. Self Published.
——— “78 duos.” 2011-. Indeterminate. Self Published.
——— “x sequential pitches.” 2011-. Indeterminate. Self Published.
——— “ways of making sounds described in fewer than twenty words.” 2009-. Indeterminate. Self Published.
——— “with paper.” 2006/8, 2009-. For paper. Self Published.
——— “239 instances of loss.” 2008-. Indeterminate. Self Published.
Sdraulig, Charlie. “carousel.” 2012. For three players. Self Published
Zamprona, Edson. “EVOLO.” 1999. For flute, Bb-clarinet, cello, double bass and two percussion players. Self Published.