

Extended Methods of Notation

in Josh Levine's *Les yeux ouverts* and Daniel Tacke's *einsamkeit*

by

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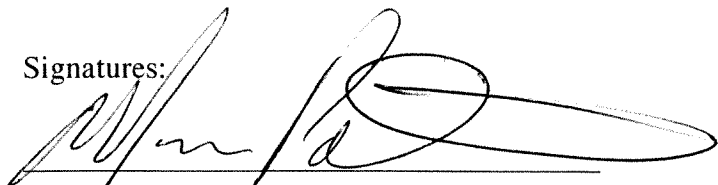
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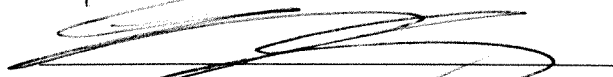
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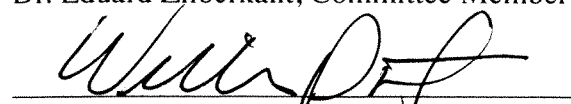
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## Extended Methods of Notation

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### Overview

From its genesis, solo percussion literature has propelled the traditional Western notational system beyond its limits. Percussion was an outlet for composers and performers to express radically new musical structures, interpretations, techniques, and sounds. Solo percussion in the mid 20<sup>th</sup> century was a fresh platform, one that needed fresh blue prints for notation. Additionally, the wide range of extended techniques employed in percussion solos commonly required new notational symbols and, in many cases, an entirely new notational system altogether. For example, three of the earliest works written for solo percussion by John Cage (1912-1992), Karlheinz Stockhausen (1928-2007), and Morton Feldman (1926-1987) are unconventionally notated. Furthermore, there are few similarities between the notational systems used. Morton Feldman's *The King of Denmark* (1964) uses a grid in which numbers, letters, Roman numerals, and note-heads indicate different sound qualities and sonic activations. John Cage's *27' 10.554"* (1956) assigns one minute to each page and indicates seconds above fragments of sounds, notated by simple dots which are defined by their sound quality (i.e. skin, metal, wood). Karlheinz Stockhausen's *Nr. 9 Zyklus* (1959) is more of a drawing than a musical score. The score is spiral bound and may be performed forwards, backwards and/or upside down.

These three pieces demonstrate the trend of extended percussion notation into the 21<sup>st</sup> century while highlighting the fact that percussion, with its inherent ambiguity, is ill-suited for the notational conventions standardized in the 17<sup>th</sup> century.

Percussion solos were not the only pieces that saw radical experimentations in notation throughout the 20<sup>th</sup> century. Various composers experimented with graphic scores for pieces of many instrumentations. Examples include Helmut Lachenman's (b. 1939) *Pression* (1969) for solo cello, Cathy Berberian's (1925-1983) *Stripsody* (1966) for solo voice, or Cornelius Cardew's (1936-1981) *Treatise* (1963-1967) for any instrumentation. The introduction of electronic music into the Western sphere also influenced new ideas for visually representing sonic ideas. The score to John Cage's *William Mix* (1952) uses various shapes placed on numbered lines in order to show the different pre-recorded sounds that were cut and pasted together.

This paper will examine the systems of notation in two recent works for solo percussion, the background of these works, and the effects of their notation in regard to the evolving relationship between composer, interpreter, and receiver. Both written in 2009, these compositions hovered under the radar of percussionists and musicians for the past five years, having received fewer than three performances each. These works, which lie on distant ends of a compositional spectrum, contain extended methods of notation. Daniel Tacke's (b. 1980) *einsamkeit* (2009), for bass drum and various object-instruments, removes traditional elements of notation (e.g. bar lines, meter, rests, durations) motivating a freer, more subjective interpretive approach from the performer. Consisting of layers of small fragments (or motives), the increase in the density of layers results in the performer's inability to play all the fragments as they are notated. The lack of notational indicators, paired with consciously implemented impossibility

from Tacke, amplifies the subjective nature that is so integral to the composition. Ultimately, the performer must navigate through territory comprised of unfeasible tasks and conceptual contradictions resulting in a direct conflict between representation and personal expression. Josh Levine's *Les yeux ouverts* (2009-2010) materializes in the form of an intensely prescribed score containing extreme performative difficulties that linger on the fringe of physical possibility. Where *einsamkeit* removes many instructive notational elements, *Les yeux ouverts* expands on them, often pushing the use of notational symbols to the extremes of their meaning. An example includes the functional reversal of musical elements such as tempo and rhythm: in the initial section, tempo is used variably creating a rhythmic sensibility while rhythm is notated almost exclusively in eighth notes. Levine's inscription of tempo and rhythm in this manner conflicts with the predominant way of interpreting and internalizing these musical entities. Tempo is traditionally the stable musical entity while rhythm, typically applied in relation to tempo, varies.

Prior to the mid 20<sup>th</sup> century, a standard system of notation effectively communicated the musical ideas of composers across a wide range of musical philosophies. This conventional system satisfied the expressive needs ranging from Baroque composers of the mid 17<sup>th</sup> century to various music created today.<sup>1</sup> Joseph Haydn (1732-1809) and Igor Stravinsky (1882-1971) composed pieces of tremendous contrast but they used the same visual tools. The juxtaposition of two scores by Haydn and Stravinsky against Levine's *Les yeux ouverts* or Tacke's *einsamkeit* would obviously highlight a substantially wider gap in visual differences. As radical and eclectic musical concepts required new visual systems, the relationship between the composer, the interpreter, and the receiver evolved at a rapid rate. Today yields a complexly dynamic

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<sup>1</sup>The standard notational system, of course, went through centuries of experiments before arriving at its conventional state. Other notational systems and reforms were developed. However, the extension of notation in the 20<sup>th</sup> century tended to be geared locally towards experimentation in regard to specific compositions rather than for the establishment of a universal system.

relationship between music notation and these three facets of music. Tacke discusses notation's influence on composition, interpretation, and reception:

There is more to this than simply recognizing notation as an outlet for creative energy: it is also a process that is not without certain resistances, simultaneously freeing and limiting one's imaginative capacities. Notation is so finite, so absolute – the need for specificity in making real the unsounded depths of imagination also imposes limitations on the unbounded potential of nebulous thought. Yet this situation is likewise not without certain merits. On the one hand, musical expression and meaning might be compromised by the visual concreteness that is necessarily a part of notational processes; on the other hand, notational images might carry the potential for previously unimaginable musical possibilities.<sup>2</sup>

In regard to the composer, Tacke suggests that the way in which musical ideas are inscribed has influence on *what* is inscribed.<sup>3</sup> For the interpreter, notation concurrently restricts the interpretation to specific parameters while motivating thoughtful and potentially new musical expressions. For a receiver, the awareness of the notation system provides detail that may go unheard otherwise. By associating sonic events with visual representations, the receiver is more informed, more aware of the musical constructs, and as Tacke states, aided in conceiving potentially new musical possibilities. The extent of these influences on composers, interpreters, and receivers became an increasingly local phenomenon in the mid-20<sup>th</sup> century due to the increased variability in notational systems. The idea of composing within a conventional system became much less popular, especially in the percussive sphere.

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<sup>2</sup> Daniel Tacke, *Notation as a Compositional Tool: Three Exemplary Pieces*, (PhD diss., University of California San Diego, 2012), 116.

<sup>3</sup> This is not exclusive to composers of the mid-20<sup>th</sup> century. The relationship between the composer and the score has been unique and complex throughout history. However, due to the exponential increase in new notational systems, the influence of notation often became more extensive, liberating, and capable of communicating ideas that were otherwise inconceivable within the conventional format. Ultimately, the conventional notational system became restrictive in the mid-20<sup>th</sup> century, limiting the expressions of composers.

Beyond the boundaries of the “New Complexity” within Josh Levine’s *Les yeux ouverts*  
(2009-2010)

*Les yeux ouverts* was commissioned by the New York ensemble, Either/Or, co-directed by percussionist David Shively. The composition was written in 2009-2010 and premiered by Shively at the Oberlin Conservatory in November of 2011. The performance at the University of Alaska Fairbanks on April 2, 2015 as part of the completion of this Master’s degree was the second time the piece was performed. The composition was initially conceived under the title ‘*Regarde également les yeux fermés, pour mieux te voir regarder*’ (Look, too, through closed eyes, the better to see yourself looking) and in two parts that are played simultaneously: one for solo vibraphone and the other for a trio of found-percussion instruments. However, the trio component was never completed. The general idea is presented by Levine:

The work’s basic premise involves the simultaneous presentation of two significantly different incarnations of the “same” piece, one for solo vibraphone and the other for a trio of mostly non-standard and found percussion instruments. The piece for vibraphone, which may also be played as an independent solo work under the title *Les yeux ouverts* (Eyes open), will articulate superimposed layers of material through the highly detailed musical grammar typical of much of my work. In the simultaneous percussion trio, the materials and structure of the vibraphone’s music will be transformed and reconfigured, often radically, using diverse compositional and notational strategies. Its unified spatial focus will spread, of course, to multiple locations. Its carefully controlled chromatic pitch world will spread into the realm of microtonality (e.g., tuned pipes and glass bottles), inharmonicity (various resonant metallic objects), and noise. Its tight rhythmic specificity will loosen. At times its textures and contours will be simpler and dilated, at other times more complex. Its fixed formal organization may well become a mobile form. I imagine this trio as the vibraphone’s wake and harbinger, its memory and a dream... its sight through closed eyes.<sup>4</sup>

The notation of *Les yeux ouverts* is rooted in traditional conventions though it expands on many fundamental elements such as tempo, rhythm, phrasing, and slurs. Levine’s compositional style contains characteristics of the “New Complexity.”<sup>5</sup>The term was standardized by the late

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<sup>4</sup>Josh Levine, (composer) in discussion with the author, March 2015.

<sup>5</sup>Paul Griffiths, *Modern Music and After* (New York: Oxford University Press, Inc., 2010), 298.

1980's as it appeared in the article "Four Facets of the 'New Complexity'" by Richard Toop (b. 1945), though Toop claims not to have been the first to use the term.<sup>6</sup> The term is traced further back to an interview with Michael Finnissy (b. 1946) who claims Belgian musicologist Harry Halbreich (b. 1931) was the first to use the term.<sup>7</sup> Notable composers who are considered representational of the New Complexity include British composers Brian Ferneyhough, Michael Finnissy, Chris Dench (b. 1953), and Richard Barrett (b. 1959). Though these composers pioneered the New Complexity and all hail from the United Kingdom, the advancements seen in the New Complexity were not motivated by the United Kingdom's musical scene. Brian Ferneyhough was well-established abroad prior to receiving any significant recognition in his home country. Dench spent his formative years in Berlin as a guest of the DAAD Berliner Künstlerprogramm and now resides in Australia. Barrett found influence at the Internationale Ferienkurse für Neue Musik at the Darmstadt school. Music critic Paul Griffiths (b. 1947) places Ferneyhough as the leader of New Complexity school, describing him as re-igniting the dwindling flame that was Boulez's, Stockhausen's, and Bruno Maderna's (1920-1973) Darmstadt of the 1950's and early 1960's.<sup>8</sup> Boulez's influence on Ferneyhough is apparent in Ferneyhough's early compositions. However, Griffiths highlights key differences in their compositional philosophies stating, "Where Boulez was in arms against the past, crashing through the models of Beethovenian sonata or French good taste, Ferneyhough's intensity is typically more creative than destructive."<sup>9</sup> To exemplify this, Boulez sought to the complete demolition of the

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<sup>6</sup> Richard Toop, "Four Facets of the 'New Complexity,'" *Contact* 32:4-8, 1988, 1.

<sup>7</sup> 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, 2010, 139.

<sup>8</sup> Griffiths, 299.

<sup>9</sup> *Ibid.*

musical forms of his predecessors. In conversation with Célestin Deliège, he states, “ History as it is made by great composers is not a history of conservation but of destruction—even while cherishing what has been destroyed.”<sup>10</sup> Conversely, Ferneyhough’s early compositions very obviously expand on the instrumental forms and compositional systems of Boulez himself. As Ferneyhough developed his compositional style and employed the use of new and extended techniques, musicologists such as Stuart Paul Duncan (b. 1983) placed Ferneyhough as the head of a second-generation avante-garde. The notation of Ferneyhough’s *Time and Motion Study II* (1973-1976) for solo cellist and live electronics exemplifies this as the notation is complexly prescribed to the point of unplayability. The notation of *Time and Motion Study II* sparked debates among composers, performers, receptors, and musicologists on the practicality of such notation and the score’s role in regard to these three facets. Following the Briton composers, many others of varying nationalities continued these notational and philosophical extensions and are placed within the walls of the New Complexity. Figures include American composer Jason Eckardt (b. 1971), French composer Mark André (b. 1964), and German composers Matthias Pintscher (b. 1971) and Claus-Steffen Mahnkopf (b. 1962). However, there is much debate as to what commonalities these composers share and why, specifically, they are grouped together as a whole.

Similar to many titles and -isms (e.g. “Romanticism” or “Expressionism”), The term “New Complexity” is ambiguous and uninformative. The defining characteristics of the New Complexity are difficult to encapsulate. Stanford lecturer in music Erik Ulman argues that there is little connection between the New Complexity composers when he states “one could hardly confuse, even on the most desultory acquaintance, the sonic and philosophical worlds of, for

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<sup>10</sup> Pierre Boulez, *Conversations with Célestin Deliège*. London: Eulenburg, 1977, 21.



example, Brian Ferneyhough, Michael Finnissy, Chris Dench, and Richard Barrett.”<sup>11</sup> The complexity in “New Complexity” was initially assigned to the visual complexity seen in the scores of compositions, often referred to as “black scores” due to the sheer density of notes and the complication of rhythms.<sup>12</sup> The initial idea was that “notational complexity simply reflects the need to match the complexities underlying compositional processes.”<sup>13</sup> By this definition, Duncan states that “complexity, according to Halbreich, became synonymous with the term complication, reducing its ephemeral and ambiguous nature to a concrete depiction through the notes on the page.”<sup>14</sup> Essentially, an entire school of musical thought was founded exclusively on the hyper-visual representation of organizational systems. These compositional systems contrast greatly from composer to composer and, in many cases, from piece to piece. However, they maintain a large degree of visual similarity. Identifying these composers within the same musical group is perhaps the late-twentieth century equivalent of pairing Haydn and Stravinsky together based on the visual similarities of their scores. The radically contrasting sonic, philosophical, and systematic differences are hardly taken into account. To this point, *what* is inscribed is undermined by *how much* is inscribed. This analysis of the New Complexity composers established a musical reputation seen as overly-calculated, elitist, and composer-centric. This view establishes the interpreter as subservient to the composer, who struggles with the composers intellect while failing to represent it accurately in performance. In performance, the receiver perceives a wash of sound so overwhelmingly complex that even the simplest idea is

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<sup>11</sup> Erik Ulmann, “Some Thoughts on the New Complexity,” *Perspectives of New Music* 32, No. 1, 1994, 202.

<sup>12</sup> Harry Halbreich, Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability*. Netherlands: Job Press, 1990, 24.

<sup>13</sup> Duncan, 137.

<sup>14</sup> Ibid.

drowned by the anxiety of incomprehension. The receiver may wonder how relevant a performance is if the piece is unable to be played and understood. From this, it is clear why musicologists such as Roger Scruton would label the visual complexity of these scores as derived from “kitschophobia.”<sup>15</sup> However, these musicologists failed to realize the broader and deeper impacts of notational extensions on the interpretive and receptive spheres. In doing so, these composers, musicologists, performers, and listeners who share this mentality have settled complacently in their own “emotional laziness.”<sup>16</sup> The increase in notational prescription was not implemented at the hands of composers seeking to control every musical aspect. Control is not the underlying principle guiding the New Complexity composers. Rather, a focus on the force of articulation is. Griffiths expresses this idea in regard to the music of Fernyhough, stating that expression and system do not conflict with one another but rather that “expression happens by, through, and in system—or rather, by, through, and in the entrapping of a human being (first composer, later the performer) with system.”<sup>17</sup> An increase in notational prescription and complexity has often paralleled the increasing intellectualization of music over time.<sup>18</sup> The use of polyphony and new harmony required a more precise notational system resulting in bar lines and clefs. The exploration of rhythm motivated the 13<sup>th</sup> century German music theorist Franco of

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<sup>15</sup> “I should say that kitsch art is art produced by someone who has no idea of what art is--of its expressive and spiritual potential--but who seeks by artistic means to falsify reality and to confirm a habit of emotional laziness” (Scruton 1996, 346).

<sup>16</sup> Roger Scruton, “The Aesthetic Endeavor Today,” *Philosophy* 71, No. 277, 1996, 346.

<sup>17</sup> Griffiths, 299.

<sup>18</sup> Though this was not always the case. For example, the counter-culture movement in 1950’s New York consisting of composers such as John Cage, Morton Feldman, Christian Wolff, and Earle Brown (known as the New School) composed scores that were relatively less instructive and contained elements of chance operations and indeterminacy. The results exposed interpretive complexities rather than technical ones. This movement is often presented against the Darmstadt serialists who are considered major influences of New Complexity school.

Cologne to establish a more complex and precise temporal system.<sup>19</sup> The continuation of this progression resulted in the standardization of the conventional notational system used today. By the definition that New Complexity is merely the increase of prescription and detail hardly warrants further discussion. However, the New Complexity composers offered more: just as the creation of a precise temporal system yielded unmeasurable musical advances, the extension of conventional notation from the New Complexity composers resulted in musical advancements for composers, interpreters and receivers. Duncan clarifies this when he states, “the complexity these composers seek, in fact, resides in the interstices between the composer and score, score and performance, and performance and reception.”<sup>20</sup> The complexity of notation is not the central element of the New Complexity. Rather, it is the attempt from composers such as Ferneyhough and Levine to “reflect the inherent complexities of the world that surrounds us.”<sup>21</sup> This motivation, in relation to the three musical facets, can be seen in the words of Ferneyhough and Levine, both of whom discuss the influence of performance physicality and self-identification as a listener in their compositions. In *Four Miniatures* for flute and piano (1965), Ferneyhough explains, “the flute part contains several very specific rhythmic configurations whose purpose is to focus the performer’s mind on that particular dimension at very precise junctures.”<sup>22</sup> Griffiths creates a synonymous relationship between performer and composer by stating, “Similarly, the purpose of complex musical architectures is to focus the composer’s mind

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<sup>19</sup> Richard Taruskin and Christopher Gibbs, *The Oxford History of Western Music: Collegiate Edition*. New York: Oxford University Press, Inc., 2013, 82.

<sup>20</sup> Duncan, 137.

<sup>21</sup> Ibid.

<sup>22</sup> Griffiths, 299.

at the very precise juncture of inscription.”<sup>23</sup> This exemplifies Tacke’s suggestion that how musical ideas are inscribed influences what is inscribed while new notations can guide new interpretations and motivate new expressions.

Levine is in line with the statements from Ferneyhough and Griffiths when he states that “the physicality of musical performance and our emotional identification as listeners with its energy, gestures, and implicit drama are driving forces of my work.”<sup>24</sup> From this, it is clear that Levine’s complex notational approach is not motivated by a composer-centric mentality. Rather, it is an attempt articulate and visibly represent the pre-existing complexities between the three facets within the context of his works. To an extent, exposing these inherent complexities results in an exponential increase in revelations. The hyper-articulation of the composer’s compositional processes demands, to a basic extent, the interpreter’s and receiver’s awareness of the composer’s processes. The performer, given a willing attitude, may take on the demanding tasks set forth by the composer. In doing so, they become vulnerable at a personal and performative level. The result of their dedication results in an increase of technical ability, the increased force of articulacy in their performances, and a heightened awareness of musical complexities. Any percussionist having performed Ferneyhough’s *Bone Alphabet* (1991) for solo percussion will acquire a substantial increase in technical ability and articulacy of complex rhythms. Similarly with the receiver, one may surrender to the anxiety of incomprehension or defy their incomprehension through the awareness of the score and its implications.

*Les yeux ouverts* prescribes rhythm, time signature, tempo, duration, dynamics, and timbre in extreme detail. The time signature changes every measure and is often irrational (e.g.

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<sup>23</sup> Griffiths, 299.

<sup>24</sup> Josh Levine (composer) in discussion with author, March 2015.

2/8 + 7/32 or 4/4 + 1/16). Duration is controlled using specific pedal markings as well as slurs, dotted (gestural) slurs, and ties. Levine prescribes timbre by instructing the performer to strike the vibraphone with either the head of the mallet or the shaft of the mallet. Levine also designates striking areas: most commonly in the center of the vibraphone bar but on the node in order to create a “veiled” and “disembodied” sound.<sup>25</sup> The double bar at H notates an F-natural to be struck and and pressed with the head of a hard mallet in order to bend the pitch. Simultaneously, the left of hand must tremolo a minor second between G-flat and F-natural; the head of the mallet repeatedly strikes the G-flat while the shaft of the same mallet strikes the F-natural.

Section I of *Les yeux ouverts* consists of trichords that are interrupted by *sforzando* tetrachords:

The harmony begins with complementary hexachords: [ 0 3 4 6 7 8 ], which I then made into trichordal subsets, and [ 1 2 5 9 T E ], which I used to create tetrachords. I arranged both hexachords in cycles of “chord multiplications”, i.e., transpositions of the same to each of the set’s constituent pitch classes:

- Cycle A
- a) 0 3 4 6 7 8
  - b) 3 6 7 9 T E
  - c) 4 7 8 T E 0
  - d) 6 9 T 0 1 2
  - e) 7 T E 1 2 3
  - f) 8 E 0 2 3 4
- Cycle B
- (8 E 0 2 3 4)
  - g) E 2 3 5 6 7
  - a) 0 3...
  - etc.

Rather than just cycling through the cycles (which increasingly contain chords from the earlier ones, as you can see beginning to happen in the example I gave above), worked through them in layers, each always repeated in linear order but interweaving, so something like:

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<sup>25</sup> Josh Levine, *Les yeux ouverts*. Oberlin, Ohio: Josh Levine, 2009-2010, 26.

a b c d e f | a b c d etc.  
g a etc.<sup>26</sup>

These trichords, discussed by Levine, are used in the first 29 measures and are played short and at a soft dynamic while cycling through different vertical orderings. The *sforzando* tetrachords break the progression of the trichords followed by rests of varying lengths resulting in phrases. The explanation of the initial section's pitch development highlights Levine's use of systematic processes as a compositional foundation. Through this calculated system, the progression of trichords, which undergo constant vertical re-orderings, produce underlying melodies. The direction of these subtle melodies are scattered and terraced, similar to the frequent tempo changes that occur. As the section progresses, rhythmic integrity breaks down as the pedal is utilized, the duration of tones are increased, and the rate of interrupting *sforzando* tetrachords increases. Tempo changes abruptly and frequently, often many times per measure (See Figure 1). Conversely, rhythm is consistent as the trichords progress at the rate of eighth notes throughout measures of varying time signatures. Consequently, tempo and rhythm trade the basic functions that are applied to them. Pitch and rhythm are usually the variable musical entities within an unchanging temporal framework (i.e. tempo). Rhythm is now relatively constant while tempo fluctuates rapidly and constantly. The use of tempo in this manner is the largest extension of a notational element seen in this piece. The use of tempo variability to this extent is not seen in the works of Ferneyhough, Finnissy, Barrett, or Dench. The prescription of tempo in this way is extremely difficult to perform accurately as there is no foundation for the interpreter to relate the increase or decrease in tempo.<sup>27</sup> Karlheinz Stockhausen's *VIBRA-ELUFA*

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<sup>26</sup>Josh Levine (composer) in discussion with the author, March 2015.

<sup>27</sup>The rhythmic relationship of adjacent tempos is approximately 11:12, which can not be clearly conceived due to the quick nature of the tempi.

(2005) may be the closest example in relation to the use of tempo in *Les yeux ouverts* (See Figure 2). Tempo changes sporadically and without preparation. However, the musical material is predominantly monophonic and each tempo change contains fragments of new musical material whereas the musical material is consistent in *Les yeux ouverts*. Another example is Brian Ferneyhough's *Fanfare for Klaus Huber* (1987) (See Figure 3). In Ferneyhough's composition, irrational time signatures change almost every bar, requiring the performer to interpret complex rhythms against a rapidly changing backdrop. But in the case of Ferneyhough's duo, the performers are still able to interpret the changes in meter as rhythmic relationships. Levine's use of tempo in this manner effects the three musical facets in different ways. When inquiring to Levine about notation of tempo, he stated:

In my own mind, I think I associated the technical virtuosity, notational rigor, and the ostensible intellectual precision of the vibraphone solo with the need to have one's eyes peeled all the time. a semblance of cold rationality and alertness. But I wanted the seeds of instability to undermine that condition even at the outset—so there's the affective part of the answer to your question about the rash, unpredictable tempo changes in the first section! Of course, the piece doesn't sustain its initial "mechanical" behavior; the increased breaking up of chords and the addition, at rehearsal letter D, of a layer of dyads to the trichords and tetrachords lead to a dissolution of the opening texture's integrity. A metaphor that comes to mind is that the vibraphone begins to "close its eyes," starts to lose control of its materials and begins to dream them...<sup>28</sup>

This initial explanation highlights Levine's modes of expression through system. In calculating a temporal and pitch framework, Levine creates a direct dichotomy between rational alertness and expressive instability for the performer. In this context, "One's eyes peeled all the time" applies to both performer and listener; the slightest slip in focus results in the loss of detail in presentation and reception. As the introductory mechanisms break down through Levine's own compositional "expressions," the performer, too, appears to break away from the cold rationality

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<sup>28</sup> Josh Levine (composer) in discussion with the author, March 2015.

of chords implied in the initial section. The specific use of tempo in regard to structure is explained in depth by Levine:

The other part of the answer to the question of tempo variability is structural rather than affective. The initial premise was that the trichord layer should appear almost exclusively as even note values (eighths). However, the points at which the tetrachord accents intervene was conceived as an independent temporal layer, which I required fitting a certain number of trichords (predetermined) into the phase length determined by the time between tetrachord attacks. I got as close as I could to those timings within the constraint of using eight notes on a limited scale of proportionately related tempo.<sup>29</sup>

The frequent tempo changes in *Les yeux ouverts* and their inability to be interpreted as rhythms presents an extremely rigorous interpretive process for the performer. The internalization of the given tempi is critical as the performer must be able to move from one tempo to another instantly and without hesitation. If there is the slightest inconsistency in the distance of chords following a change, the terraced nature of the tempi is lost and may be perceived as a simple accelerando or decelerando by the receiver. Due to this specific format of tempi and rhythm, agogic emphasis must be placed on every chord since it falls on a beat, regardless of the variable distance between chords. This requires a consistent downward motion from the performer opposed to an upward motion that would result from a chord placed off of the beat. Paired with the fast nature of the indicated tempos, the result is spastic downward motions with short preparatory upstrokes. This must be adhered to with a strict and exaggerative attitude in order for a receiver to comprehend the difference between a change in tempo and a change in rhythm. Gesture is critical; the slightest change, aside from the necessary motion needed to move from chord to chord, communicates a different function. Therefore, the use of tempo in this manner is perfectly valid, and in fact, the only way to communicate Levine's affective desires by, in, and through the use of

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<sup>29</sup>Josh Levine (composer) in discussion with the author, March 2015.



his system. For the receiver, the awareness of the score allows for the anticipation of such differences.

As the section progresses, the *sforzando* dyads intervene within the phrasing of trichords (See Figure 4). Additionally, the dyads become more prevalent and arpeggiated. Levine notates the trichords and dyads on two separate staves in order to show opposing temporal layers. Dynamic contrast between the trichords and dyads aid in establishing two independent layers sonically; the *sforzando* dyads are heard between the trichords without being connected to them. As Section I concludes, the initial layer of trichords is overthrown, succumbing to the dissolution of material. The interjecting layer becomes the main component of musical material and ultimately paves the way for the complete breakdown of the first section at rehearsal letter H (See Figure 5). In the second section of the piece, the material appears to be polar opposite. The progressive, fluctuating, and intense nature of the first section arrives at a sudden halt. Tempo and rhythm reverse roles, settling back into their usual musical functions. Tempo stabilizes at  $q=60$  while various polyrhythms are nested complexly within one another and accompanied with grace notes paired in twos, threes and fours (See Figure 6). The pitch material is reduced to only two notes: the minor second F and G-flat. In opposition to the first section, this section creates a feeling of stasis, meandering back and forth at varying rates between the two pitches. However, this section is more similar to the first section than the surface-level may show. The temporal framework of the first section is re-contextualized in the second section. Similarly to the first section, this section contains two layers of material. One layer is notated strictly as nested polyrhythms while the other consists of “pseudo-indeterminate” accented notes that are placed in

the gaps between the underlying rhythmic layer.<sup>30</sup> The pseudo-indeterminate notes are beamed as eighth notes, though the distance between notes varies in order to represent the varying space between attacks. The beaming of these notes in this manner is meant to highlight the similarity between the trichords at the beginning of the piece and the accented F-naturals in the second section. Levine has reincarnated the temporal framework in the first section with the use of an F-natural only. This juxtaposition of material, essentially comprised of the same pre-determined system, serves as a quintessential example of Griffiths mode of expression occurring by, in, and through system in regard to the composer. For the performer, recognizing these systematic foundations, their differences, and applying expression through them is essential. Levine goes beyond his systematic use by implementing the initial temporal layer of eighth notes as pseudo-indeterminate accented attacks on F-natural. The performer must find spaces, which are occasionally incomprehensibly short, to insert this layer within the precisely notated underlying rhythms. The F-naturals are perceived independently above a quick, nebulous, and constantly fluctuating rhythmic layer. The rhythms of the secondary layer are “improvised variations” according to Levine.

In the 2<sup>nd</sup> main section, which extends from H until O—the structure of each successive (rehearsal-lettered) block incorporates the structure of all of the blocks that have preceded it, including itself. (This doesn’t mean the surface level-rhythms, which I think are improvised variations on what came before, but the “frames” they activate.) The blocks get longer, but consequently also get more fragmented.<sup>31</sup>

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<sup>30</sup> “Pseudo-indeterminate” is a word I use to label the notes that Levine composed and notated precisely and accurately, however, due to the visual notation, the performer must estimate the point of attack. This helps to differentiate between the two layers. Now that varying rhythms are placed within a stable tempo, agogic emphasis varies. Since the accented layer is notated spatially rather than with specific rhythms in relation to a beat, the downward gesture applied to the trichords at the beginning of the piece apply to the accented F-naturals as well. Therefore, Levine has reincarnated the beginning of the piece structurally and gesturally.

<sup>31</sup> Josh Levine (composer) in discussion with the author, March 2015.

As the section concludes, Levine condenses the overall idea of the section to a single measure and reverses the the determined and pseudo-indeterminate material. An F-sharp sounds repetitively while an impossibly fast layer of pseudo-indeterminate pitches is nested within the sixteenths (See Figure 7). This structural idea overlaps into the third section at rehearsal letter O, occurring just before P on repeating G-sharps, before Q on D-naturals, and before R on D-naturals. New material at O communicates a similar feeling of stasis between the major seventh D-sharp and E. Section III is an extension of section II, lasting as long as the next block of material would have lasted had it existed in Section II. The conclusion of the piece begins with a coda activated by a four note cluster sounding in the upper register of the vibraphone. As the cluster decays, short fragments of material are played using the fingers, the back of the mallet, or with the mallet head on the node of the bar (See Figure 8). The ending is a complete degradation of the systematic material, “disembodied and veiled” as Levine says, which continues into the silence following the complete decay of the final *sforzando* cluster.

Josh Levine’s *Les yeux ouverts* presents the performer and receiver with a complexly prescribed score articulating extensively formulated musical concepts. The notation, though primarily conventional, is expanded on through the complexity of rhythm, the use of gestural slurs, and the re-assignment of musical entities such as tempo and rhythm. The extreme prescription of visual detail does not function as a motivator for an accurate representation devoid of interpretive expressions. The increased complexity demands a heightened awareness of musical complexities, through which the performer generates expression:

The notation does not present a single path but rather a labyrinth with multiple entrances and exits... ..for Ferneyhough, notation can never be an exact encoding of the aural experience; notation is the beginning of a process, not the end. The performer has to engage with the work, making decisions as he or she traverses the various technical challenges.<sup>32</sup>

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<sup>32</sup>Duncan, 163

Duncan's statement of Ferneyhough's notation describes similar functions in the notation of *Les yeux ouverts*. The role of the notation is not solely to motivate the performer in achieving exactitude. Instead, the performer must approach the piece with an equal amount of fidelity that is apparent in the conception of the work, navigating through extreme musical detail, and occasionally compromising with the score's demands. The interpretation ultimately takes form in a dialogue between performer and score rather than a representation of the score from the performer. In regard to Levine and the New Complexity school, the extension of notational conventions unify the three facets in a visual, sonic, and perceptual awareness of the inherent musical complexities. The unification of these three facets lies in the interstices between the three facets, and as Brian Ferneyhough mentions, where the work's true identity lies:

What can a specific notation, under favorable conditions, hope to achieve? Perhaps simply this: a dialogue with the composition of which it is a token such that the realm of non-equivalence separating the two (Where, perhaps the 'work' might be said to be ultimately located) may be sounded out, articulating the inchoate, outlining the way from the conceptual to the experiential and back.<sup>33</sup>

The demands of *Les yeux ouverts* are steep for the performer and receiver as both must navigate through an array of prescribed complexities. Both facets must entangle themselves in the system in from which their expressions are inserted, and in doing so, navigate their own path through an extended dialogue with the score. Tacke's *einsamkeit* is approachable through similar means. However, the solo manifests in extreme contrast to *Les yeux ouverts* in conception, interpretation, and reception.

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<sup>33</sup>Ferneyhough, Brian. *Collected Writings—Contemporary Music Studies*. Oxford: Routledge, 2003, 7-8.

### Isolating the Three Facets in Daniel Tacke's *einsamkeit* (2009)

Tacke's *einsamkeit* lies in opposition to Levine's *Les yeux ouverts*. Where Levine's solo for vibraphone prescribes inherent musical complexities in great detail, Tacke's work for solo percussion hides them. However, Duncan's view of notational influence of the New Complexity on the relationships between composer and score, score and performer, and performer and receiver is not exclusive to the New Complexity composers. *Einsamkeit* contains a plethora of its own complex notational and musical advancements. Additionally, the interpretive and receptive spheres influence Tacke's compositional style, similarly to Levine and Ferneyhough. However, this influence materializes through a much different mode of expression. Where Levine and the New Complexity composers sought to reveal the inherent complexities surrounding the three facets, Tacke is more inclined to filter them through subjective modes of expression. The approach taken by the interpreter is also contrasting. A performance of *Les yeux ouverts* contains a virtuosic and extroverted articulation of prescribed musical complexities. This is in line with Jonathan Hepfer (b. 1983) when he describes, "the amount of effort elicited by the performer equals the complexity of the aural result."<sup>34</sup> *Einsamkeit* demands extreme technical facility equal to that of *Les yeux ouverts*. However, due to its quiet nature and the use of thimbles, the complexities presented to the performer are not as readily apparent. The receiver interprets a delicate and relatively simplistic performance. Therefore, a more introverted virtuosity results and as Hepfer describes, "there exists a disconnect between what the listener perceives to be happening musically and the effort that the performer must make in order to produce this effect."<sup>35</sup>

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<sup>34</sup>Jonathan Hepfer, *Notes on Walter Zimmermann's Riuti: Rodungen un Wüstungen* (2009), 5.

<sup>35</sup>Ibid, 6.

The first version of *einsamkeit* was composed by Tacke in 2007 at the request of percussionist Matthew Jenkins for a project entitled “Music for a Small Room.” This project was meant to include a limited number of audience members in an intimate space, giving them the opportunity to see and hear the private world of quiet music in close proximity. However, the piece did not receive its premiere in this setting. *Einsamkeit* was premiered five years later at the University of Alaska Fairbanks in November 2014. The title of the piece is taken from a poem of the same name by Rainer Maria Rilke (1875-1926):<sup>36</sup>

Die Einsamkeit ist wie ein Regen.  
Sie steigt vom Meer den Abenden entgegen;  
von Ebenen, die fern sind und entlegen,  
geht sie zum Himmel, der sie immer hat.  
Und erst vom Himmel fällt sie auf die Stadt.

Regnet hemieder in den Zwitterstunden,  
wenn sich nach Morgen wenden alle Gassen  
und wenn die Leiber, welche nichts gefunden,  
enttäuscht und traurig von einander lassen;  
und wenn die Menschen, die einander hassen,  
in einem Bett zusammen schlafen müssen:

dahn geht die Einsamkeit mit den Flüssen...

Loneliness is like a rain.  
It rises from the sea to meet the evening;  
from the plains, which are far and remote,  
it ascends to the sky, which it ever holds  
And from the sky it falls upon the city.

It rains down into the twilight hours  
when the sidestreets are turning to the morning  
and when bodies, that have found nothing,  
disappointed and sad, let go of one another;  
and when those, who hate each other,  
must sleep together in the same bed:

the loneliness flows with the rivers...

Translation: Edward Snow

Rilke’s poetry resonates deeply with Tacke’s overall compositional style. Rilke’s works are contemplative and introverted while reaching towards ineffability. *Einsamkeit* is also rooted in introverted and contemplative qualities. The set-up requires the performer to move around the bass drum, often times with their back to the receiver. This communicates the performer’s lack of awareness for the receiver as the performer is always looking inward towards the drum rather than communicating outwardly. The piece is very quiet. Tacke indicates a preference for fingers or thimbles in the score though does not completely rule out the use of sticks. Only occasionally

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<sup>36</sup>Marie Rainer Rilke, “Einsamkeit.” *Book of Images*. New York: North Point Press, 1994, 41

do dynamic events rise above a soft level. These louder moments are quick, seeming to collapse underneath their own weight and falling quickly back down to a soft level.

The instrumentation for *einsamkeit* includes a bass drum, four crotales, and twenty “object-instruments.”<sup>37</sup> The crotales and object-instruments are placed on a small circular table around the bass drum. The performer moves around the set-up striking, rubbing, and scraping the object-instruments. The bass drum with the table may not be longer than the interpreter’s arms as there are crucial moments when the interpreter must reach across the set-up to strike object-instruments. The crotales, which are compass points, separate the object-instruments into four groups of five instruments and serve as activators for the instrument groups within the performance. The selection of object-instruments are left to the discretion of the performer within certain parameters. The instruments are determined either by the type of material or the quality of sound. Tacke’s guidelines are:

**IV:** The most resonant collection of instruments—preferably metal

**III:** Slightly less resonant collection of instruments that provide an engaging sound when scraped. Gritty would be nicer than smooth

**II:** Not overly resonant, but able to provide a humming sound when rubbed. Smooth would be nicer than gritty

**I:** The least resonant, but not entirely dead—preferably wood.<sup>38</sup>

Though the guidelines appear to allow a significant amount of freedom in the choice of instrumentation, the nature of the set-up eliminates many possibilities immediately. For example, finding five instruments that are capable of being rubbed and struck that also fit on a table approximately three inches in width proves difficult. Furthermore, the choice of instrument has

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<sup>37</sup> An object-instrument is an object that is not a standard instrument; a found object. Examples include a piece of scrap metal or wood. Some of the instruments used in the premiere of *einsamkeit* are more standard instruments, such as a small gong or almglocken. However, due to the manner in which Tacke designates instrumentation—by sound quality or the means of activation—they will all be referred to as object-instruments.

<sup>38</sup> Daniel Tacke, *einsamkeit*. University of California San Diego: Daniel Tacke, 2009, 4.

large implications on how fragments are to be interpreted: different instruments create different sounds which generate differences in associations regardless of the way they are activated. Tacke specifies certain sound qualities in group II and III though he doesn't demand that all instruments be comprised of the same material. This leaves the interpreter to determine how much contrast should occur locally within a group of instruments. The set-up used in the premiere employed metal bars for group I that are all the same. Conversely, group III is comprised of different materials, all of which are scraped.

The largest obstacle of *einsamkeit* is the notation. Tacke revised the notational layout of the piece between 2007 and 2009. Prior to this revision, the notation was relatively conventional and, to a certain degree, contained notational similarities seen in the New Complexity composers (See Figure 9). However, the revision removed many notational indicators and details. (See Figure 10). In removing these instructions, Tacke restricts an attempt to articulate the seemingly endless complexities that surround composer, interpreter, and receiver. The result requires the interpreter to approach the score with a subjective and experiential filter. This difference is discussed by composer Kaija Saariaho (b. 1952):

It is true that the world is complex, as are also our perceptive mechanisms through which we are receiving fragments of the reality around us. Should our music reflect the endless information surrounding us, or should it reflect our personal way of filtering the world?<sup>39</sup>

The score to Helmut Lachenmann's *Interieur I* (1966) for solo percussion is similar to that of *einsamkeit* (See Figure 11). There are no bar lines and though traditional note heads are used, they do not indicate an exact length of time. Musical material is similarly fragmented. However, there are substantial differences. Lachenmann's score is generally more instructive. He specifies

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<sup>39</sup> Kaija Saariaho, Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation and Performability* (Netherlands: Job Press, 1990) 34.



the exact instruments, mallets, and the length of certain gestures are specified in seconds.

Lachenmann also uses conventional expressive and dynamic markings. Furthermore, the overall material is quite different. Rarely do multiple notes sound at the same time. Therefore, determining the relationships in the layering of fragments is not a substantial issue in interpreting the score.

Due to the lack of indicators in *einsamkeit*, the placement of fragments over time is complicated. Tacke's only instruction in regard to time is that each page should last approximately 15 seconds. Vertical relationships are occasionally specified using dotted lines in order to indicate a simultaneous attack between instruments. Furthermore, the speed of rhythms are difficult to determine because there is no point of reference. The speed of the rhythms are determined by the space between notes. Two different rhythms may be beamed with two lines (indicating sixteenths), but the space between notes may differ. Therefore, these rhythms may not be interpreted at the same speed. One may be sixteenth notes and the other may be sixteenth note triplets. However, the performer is unable to determine this and should not conceive of rhythms in this manner. I initially constructed a template which divided each page into 15 segments, creating "measures." For fragments occurring within the same space, the insertion of lines (local subdivisions) reveal the exact placement of each note in relation to another (See Figure 12). The hope was that I would be able to place all the material within pages of fifteen bars, each segment equal to one second. When I inquired to Tacke about approaching *einsamkeit* in this manner, he stated:

Once when Cornelius Cardew was asked by a group of performers working on *Treatise* if they would discover anything about the true nature of the music if they put in the time to measure all of the visual distances in the notation, he replied by telling them that yes, they would discover something: they would learn that everything had been measured when it was drawn! I guess I feel similarly. The precision of the spacing in the notation, I hope, demands a certain amount of carefulness (perhaps even anxiousness) in rendering the gestures as significant sounds, but I view

this much more as a kind of mood device than a responsibility to learn the rhythms as they were originally invented. The move to a freer notation was a turning away from this kind of machinery in favor of a performance practice that is more... human.<sup>40</sup>

Tacke occasionally indicates a five above one of the most prevalent motives (See Figure 13). However, this does not instruct the performer to interpret the rhythm in relation to a foundational pulse. Rather, it is a “mood device.”<sup>41</sup> The mood Tacke is instructing lies in a certain amount of agogic emphasis; the five notes should be grouped together rather than conceiving of the figure as any kind of division (e.g. 4 + 1). The interpreter conceives of the rhythm as a quintuplet but does not conceive of its relationships to a foundational pulse. This is reiterated by the fact that the spacings between the notes vary from quintuplet to quintuplet. Excluding the quintuplet motive, rhythms do not have numerical indications above them. Due to this and the lack of a temporal frame, rhythms must be interpreted in relation to one another rather than in relation to a pulse.

Similarly to rhythm, dynamics are not notated conventionally. Rather than denoting dynamic levels with traditional markings, Tacke indicates dynamics by the size of the note heads. Larger note heads are played louder while smaller note heads are played softer. Occasionally, *sforzando* markings appear. However, *sforzando* markings that appear under fragments notated with small note heads are contradictory. The interpreter should see this as an indication of energy rather than loudness. Tacke will occasionally indicate transfers of energy in this manner using either dynamic markings or through the use of dotted slurs from one fragment to another. Fragments can sound while appearing loud depending on the speed and gesture in which the sounds are activated. Furthermore, certain fragments may be connected to one another through

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<sup>40</sup> Daniel Tacke (composer) in discussion with the author, March 2015.

<sup>41</sup> Ibid.

the use of a continuing gesture from one object to another though sound may not occur between attacks.

The lack of indicators juxtaposed against the awareness of Tacke's precise measurements during inscription puts the interpreter on a fault line between expressive freedom and accurate representation. The anxiousness Tacke describes is derived from the interpreters awareness of a precise compositional method against the inability to determine the exact measurements. The interpreter must determine rhythms, dynamics, and spacings to the closest approximation and conceive of the finite details individually (i.e. how much faster? How much quieter? etc.). The pursuit of accuracy resulted in a creation of a temporal template applied to each page (discussed above). However, as seen in Figure 11, musical fragments fall in odd places in relation to the divisions. This makes the rhythmic placement of material difficult to determine and must still be approximated though to a smaller degree. Furthermore, segmenting each page may drastically change the interpretation of the fragments. Fragments occurring on division points may influence the interpreter to add a certain amount of agogic emphasis that may have not been perceived otherwise. Rather, the fragments should maintain a sense of agogic neutrality or at the very least, any kind of agogic emphasis should be local to the fragment itself, as a mood device, rather than its placement within a larger temporal context. Even in the attempted application of applied visual aids, the piece retains its demand for, as Tacke expressed, a less mechanic and more "human" interpretative approach.

System, form, and structure are ambiguous due to the fragmented nature of the material. Therefore, interpretational decisions are not derived from systematic means and are certainly not meant to be validated by external forces. Tacke goes so far as instructing the performer to perceive the audience as a threatening force when he states, "The performer should always face

the bass drum, as though concerned for its safety and desperately trying to protect it from the audience. Never abandon the object of your affection.”<sup>42</sup>Tacke understood the set-up’s direct role in communicating the introverted nature of the piece. This isolates the interpretive and receptive facets from one another. However, the intent of isolating the three facets is not directly in contrast to the unifying nature of *Les yeux ouverts*. Tacke, in regard to his compositional style in general, explains the function of solitude in the context of composition, interpretation, and reception:

While art is often a powerful tool for communication and community, it can also be profoundly alienating—even at the same time. The long, and often lonely, process of composing the work (and, one can imagine, of learning to perform it!) confirms this, but I think experiencing a performance of the piece can have a similar effect for the audience. This is not necessarily a bad thing! Sometimes the most profound and meaningful experience are those we have in isolation, even in the midst of a public performance.<sup>43</sup>

Applied to the three facets, *einsamkeit* exemplifies the idea of alienation through a public yet isolated experience. However, this relationship does not completely contrast the relationship between the three facets seen in Levine’s *les yeux ouverts*. *Les yeux ouverts* unifies the three musical facets by generating expression through system. Tacke’s *einsamkeit* unifies the three musical facets by generating expression through subjectivity and solitude. The lack of notational indicators in the score separates the composer and his thoughts from the interpreter, motivating the interpreter to generate expression through their own personal modes of expression. Furthermore, by perceiving the receivers as a threatening force, the interpreter, rather than communicating outwardly, communicates their musical expressive decisions inwardly. As Tacke

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<sup>42</sup>Tacke, *einsamkeit*, 3.

<sup>43</sup> Daniel Tacke (composer) in discussion with the author, March 2015.

states in the score, “you are doing this for yourself, not for them.”<sup>44</sup> In perceiving this mode of expression, the receiver becomes an intruder, which amplifies their awareness of their own presence. As it is clear the performer is not communicating to the receiver, the receiver must perceive the piece through their own subjective lenses.

### Conclusion

Josh Levine’s *Les yeux ouverts* and Daniel Tacke’s *einsamkeit* demonstrate the contrasting effects that new and extended forms of notation have on the composer, interpreter, and receiver. Though these two pieces chart radically different paths in their conception and visual representation, they both unify the three facets through their means of expression; *Les yeux ouverts* through system and *einsamkeit* through isolation. More importantly, they contribute to the evolving complexities residing in the interstices between composer and score, score and performer, and performer and receiver. As new music arises in the twenty-first century, the awareness of a composition’s visual representation is an increasingly important aid in a receiver’s conception of a work. For the interpreter, the awareness of the notation’s function is increasingly important in developing a long-term dialogue with a work as well as a successful and captivating presentation of it. The misinterpretation of a notation’s function does not only result in misrepresentation but also in potentially negative analyses of a piece. This was seen in the initial analyses of Brian Ferneyhough’s notational advancements and is still debated today. The perception of Levine’s *Les yeux ouverts* solo as an overly-prescribed and composer-centric work directly restricts the possible expressive outlets. Similarly, the application of precise temporal measurements to Tacke’s *einsamkeit* hinders the ambiguous yet curious nature of

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<sup>44</sup>Tacke, *einsamkeit*, 3.

subjectivity on the interpretive and receptive sphere. Ultimately, visual notation continues to function as a communicative unifier between composer, interpreter, and receiver. As notation has become more extensive and complex, so have the interstices between the composer, performer, and receiver. The awareness of notational symbols, notational differences, and their meanings is now more important than ever in realizing and receiving new forms of musical expression. The weight of a given notational symbol's meaning has increased drastically. Furthermore, solo percussion literature continues to push the boundaries of notation and these ideas. As seen in the percussion solos of Josh Levine and Daniel Tacke, percussion remains a forceful medium in discovering new visual, interpretational, and receptive musical ideas while unifying the experiential nature of the composer, performer, and receiver,

Appendix

Sean Dowgray, Extended Methods of Notation in Josh Levine's *Les yeux ouverts* and Daniel Tacke's *einsamkeit*

*Les yeux ouverts*

The musical score consists of four staves of music, each with various tempo markings and dynamic markings. The tempo markings are enclosed in boxes and include: 82, 67.5, 82, 74, 90, 82, 99, 74, 82, 90, 74, 82, 67.5, 82, 74. The dynamic markings include: *p*, *mf*, *f*, *sfz*, *ff*, *mp*, *pp*, *mf*, *mp*, *mf*, *mp*, *mf*, *sfz*, *p*, *sfz*, *mf*, *sfz*, *sfz*. The score also features various musical notations such as slurs, accents, and articulation marks. The first staff (measures 17-22) shows a tempo of 82, then 67.5, then 82, 74, and 90. The second staff (measures 23-27) shows a tempo of 99, then 74, and 82. The third staff (measures 28-29) shows a tempo of 82. The fourth staff (measures 30-33) shows a tempo of 90, then 74, 82, 99, 67.5, 82, and 74. The score is written in a complex rhythmic structure with various time signatures and rests.

Figure 1. Josh Levine, *Les yeux ouverts*, extreme changes in tempo, bars 17-33. Oberlin Ohio: Josh Levine 2009-2010, 2.

# VIBRA - ELUFA

Stockhausen

The musical score for 'Vibra - Elufa' consists of 15 measures, each with a circled measure number and a boxed tempo marking. The tempo markings are: 60, 53.5, 63.5, 50.5, 47.5, 85, 45, 56.5, 71, 75.5, 80, 63.5, 67, 60, 53.5, 63.5, 50.5, 47.5, 85, 60, 45, 56.5, 71, 75.5, 80. The score includes various dynamics such as *mf*, *pp*, *f*, *mp*, *ff*, *p*, *rit.*, *gliss.*, *chrom.*, *lang*, *hart*, and *weicher*. It also features performance instructions like *chrom.*, *gliss.*, *lang*, *hart*, and *weicher*. The score is written for Vibra and includes various musical notations such as slurs, accents, and dynamic markings.

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Werk Nr. 9 | ex. 64

1

Figure 2. Karlheinz Stockhausen, *VIBRA-ELUFA*, similar changes in tempi, 1. Kürten, Germany: Stockhausen-verlag, 2005.



# FANFARE for Klaus Huber

Brian Ferneyhough (1987)

Instrumentation is at the discretion of the performers. On the 2-line system there are five instruments of the same type, always with rapid decay and staggered from high to low. At each large letter, the performer changes to a new five-instrument timbre. Each player may choose instrumental timbre independently or in combination with his colleague.

On the single lower line are notated a series of UNIQUE SOUNDS i.e. no sound may be repeated. Each player chooses his own set, regardless of the other's choice. A notehead followed by a dotted tie indicates a unique sound which may but need not resonate on after being struck. The piece is finished when the last of these sounds (if any) has died away. Sicks are left to the discretion of the performers, as is dynamic level.

$\text{♩} = 54 \text{ ca.}$

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FANFARE may be played several times in succession, but always with new unique sounds.

Figure 3. Brian Ferneyhough, *Fanfare for Klaus Huber*, temporal similarities to *Les yeux ouverts*, bars 1-10. Brian Ferneyhough, 1987.

Les yeux ouverts

75  $\bullet = 82$   $\bullet = 74$   $\bullet = 61.5$   $\bullet = 90$   $\bullet = 99$   $\bullet = 74$

81  $\bullet = 99$   $\bullet = 82$   $\bullet = 56$   $\bullet = 61.5$   $\bullet = 67.5$

84  $\bullet = 82$

*p*, *mf*, *mp*, *f*, *pp*, *sfz*, *non troppo lunga*, *lunga*

Figure 4. Josh Levine, *Les yeux ouverts*, interjections nested within trichord layer, bars 75-88. Josh Levine 2009-2010.

*Les yeux ouverts*

**H** ♩ = 60

Pitch bend: strike the note near the end of the bar, then, pressing as hard as possible, slide the head of the mallet from the node toward the center of the bar. Once the pitch is bent downward as far as possible, keep the pressure on the mallet until the note is no longer audible. (The duration given below is approximate only.)

173 *p* *ffz* *p* *sfz* *ffff* *pppp*

176 *mp* *(sim.)* *pppp*

179 *ppp* *pppp*

Figure 5. Josh Levine, *Les yeux ouverts*, end of first section and the beginning of the section section, bars 173-180. Josh Levine 2009-2010.

Les yeux ouverts

**K**

181

*pp* *mp*

\*) *Accidentals*  
From m.181 (rehearsal letter K) through m.235, accidentals apply through the entire measure.

\*\*) *Pedaling*  
From m.181 (rehearsal letter K) until m.244 (rehearsal letter O), the pedal should be down, except to articulate the given rhythms (rests are rests, not resonance) or where specific pedal markings are provided.

\*\*\*) *Proportional notation*  
1. Notes in the upper part to be held for a specific duration relative to the rhythmically defined lower part as indicated by a solid line extending from the notehead; the note should cease where the line stops.  
2. All other notes are very short.

183

-----> 0

*p*

1/2

**L**

186

*pppp* *pp*

14

Figure 6. Josh Levine, *Les yeux ouverts*, tempo and rhythm reverse roles. The temporal framework is re-contextualized, bars 181-189. Josh Levine 2009-2010.

Les yeux ouverts

The image displays a musical score for the piece "Les yeux ouverts" by Josh Levine, covering measures 238 to 243. The score is written for two staves, likely representing different instruments or voices. Measure 238 features a complex rhythmic structure with a 5:3:2 ratio and a 3:3 ratio, marked with a piano (*p*) dynamic. The second staff shows a series of notes with a *f sub.* dynamic. Measure 241 includes a tempo marking of ♩ = 48 and a forte (*fff*) dynamic. Measure 243 features a tempo marking of ♩ = 60, a motor section with a wavy line and "motor tacet!" instruction, and dynamics ranging from *ppp* to *mp*. A footnote at the bottom right states: "\* ) Add some fingernail to all notes played with the hand in order to obtain greater pitch focus and loudness".

Figure 7. Josh Levine, *Les yeux ouverts*, rhythm and pseudo-indeterminate notes reverse roles and are condensed to one bar, bars 238-243. Josh Levine 2009-2010.





*einsamkeit*

The image displays a musical score for the piece "einsamkeit" by Daniel Tacke. The score is organized into several distinct sections. At the top left, the title "einsamkeit" is written in a cursive hand. Below it, there are two staves of music. The first staff contains a melodic line with several notes, and the second staff contains a rhythmic or accompaniment line. To the right of these staves, there are several smaller musical fragments, some of which are connected by curved lines, suggesting a sequence of short phrases or motifs. Below these fragments, there are three larger staves of music. The first of these staves is marked with a circled cross symbol and contains a series of notes with a long horizontal line above them, possibly indicating a sustained or glissando effect. The second staff is also marked with a circled cross and contains a series of notes with a long horizontal line above them, similar to the first staff. The third staff is marked with a circled cross and contains a series of notes with a long horizontal line above them, similar to the first staff. Below these three staves, there is a large graphic staff consisting of two horizontal lines. The left side of this staff is marked with a circled cross and contains a series of notes with a long horizontal line above them. The right side of this staff is marked with a circled cross and contains a series of notes with a long horizontal line above them. The overall layout of the score is complex and abstract, with a focus on the visual representation of musical elements rather than traditional notation.

Figure 10. Daniel Tacke, *einsamkeit*, each instrument group is represented on its own staff. Temporal indicators aren't present, 7. Daniel Tacke 2009.



The image displays three systems of handwritten musical notation for Helmut Lachenmann's *Interieur I*. Each system includes a piano part (Mittl.) and a vibraphone part (Vib.).

- System 1:** Features a piano part with a melodic line and a vibraphone part with complex rhythmic patterns. Performance instructions include "Ped. PP" and "Ped. an". A tempo marking "Piu Calmo" is present.
- System 2:** Continues the piano and vibraphone parts. It includes a section labeled "Linder (3B)". Performance instructions include "Ped. PP", "Ped. an", and "Vib. an". A handwritten note "M 34730" is written across the system.
- System 3:** Shows further development of the piano and vibraphone parts. Performance instructions include "Ped. alle Ausdämpfungen (!) deutlich!" and "Pedal immer schneller!". A handwritten note explains: "alles nur immer klar lassen / PPP umfassen (statt aus Ausdämpfen) / ab Vib. dieses Symbol / PPP instead of damping".

Additional handwritten notes and markings include "bevorzugt unversetzt / kein Schwere", "tempo giusto", "die ... gehen ohne ... (bezeichnet)", and "Vib. an". The score is marked with various dynamic levels (ppp, p, f, ff) and includes a list of rhythmic patterns at the bottom.

Figure 11. Helmut Lachenmann, *Interieur I*, notational similarities with Tacke's *einsamkeit*, 3. München, Germany: Edition Modern, 1967.

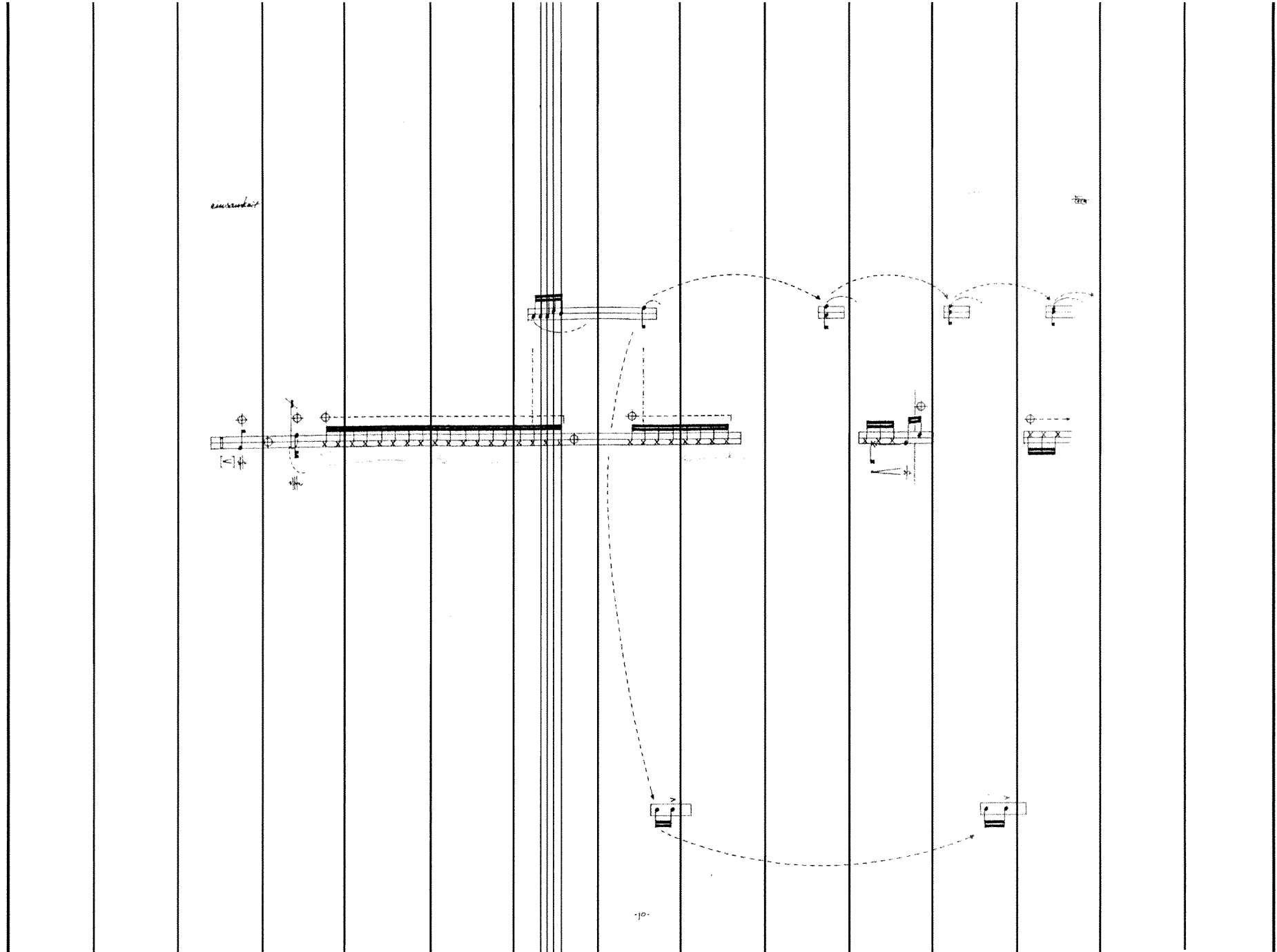


Figure 12. Daniel Tacke, *einsamkeit*, pages divided into fifteen segments (one second per segment) while smaller divisions aid in determining rhythmic relationships between fragments of material, 10. Daniel Tacke, 2009.

einsamkeit



5



14

Figure 13. Daniel Tacke, *einsamkeit*, numbers are placed over groupings of notes indicating mood devices, 2. Daniel Tacke 2009.

## Bibliography

- Boulez, Pierre. *Conversations with Célestin Deliège*. London: Eulenberg, 1977.
- Duncan, Stuart Paul. "Re-Complexifying the Functions(s) of Notation in the Music of Brian Ferneyhough and the 'New Complexity.'" *Perspectives of New Music* 48, No. 1, 2010.
- Ferneyhough, Brian. *Fanfare for Klaus Huber*. London, England: Peters Edition Limited, 1987.
- Ferneyhough, Brian. *Collected Writings—Contemporary Music Studies*. Oxford, England: Routledge, 2003, 7-8.
- Griffiths, Paul. *Modern Music and After*. New York: Oxford University Press, Inc., 2010.
- Halbreich, Harry. Questionnaire response in *Complexity in Music? An Inquiry into its Nature, Motivation, and Performability*. Netherlands: Job Press, 1990.
- Hepfer, Jonathan. *Notes on Walter Zimmermann's Riuti: Rodungen un Wüstungen*. University of California San Diego, 2009.
- Lachenmann, Helmut. *Interiur I*. München, Germany: Edition Modern, 1967.
- Levine, Josh. Composer in discussion with the author, March 2015.
- Levine Josh. *Les yeux ouverts*. Oberlin, Ohio: Josh Levine, 2009-2010.
- Saariaho, Kaija. Questionnaire Response in *Complexity in Music? An Inquiry into its Nature, Motivation, and Performability*. Netherlands: Job Press, 1990.
- Scruton, Roger. "The Aesthetic Endeavor Today," *Philosophy* 71, No. 277, 1996.
- Stockhausen, Karlheinz. *VIBRA-ELUFA*. Kürten, Germany: Stockhausen-verlag, 2005.
- Tacke, Daniel. *einsamkeit*. San Diego, California: Daniel Tacke, 2009.
- Tacke, Daniel. Composer in discussion with the author, March 2015.
- Tacke, Daniel. *Notation as a Compositional Tool: Three Exemplary Pieces*. PhD diss., University of California San Diego, 2012.
- Taruskin Richard, and Gibbs, Christopher. *The Oxford History of Western Music: Collegiate Edition*. New York: Oxford University Press, Inc., 2013.
- Toop, Richard. "Four Facets of the 'New Complexity,'" *Contact* 32:4-8, 1988.

Ulmann, Erik. "Some Thoughts on the New Complexity," *Perspectives of New Music* 32, No. 1, 1994.