Chapter

Encoded and Embodied Rhythm: An Unprioritized Ontology

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Encoded and Embodied Rhythm

An Unprioritized Ontology

Peter Cheyne

1. Rhythmic description, not prescription

Since Richard Wollheim's *Art and Its Objects* appeared in 1968, philosophical aestheticians have debated the ontology of art objects in terms of the type–token distinction, later joined by the work–performance distinction between compositions and their historical instances.[1] These analytic debates are foreshadowed by Sartre's famous ontology of the musical work being an "unreal" object existing primarily in imagination—the work being an ideal object that can be physically and historically instantiated indefinitely within loosely defined parameters.[2]

A contemporary position that prioritizes performance draws primarily from continental traditions, sometimes also drawing on process philosophy, to articulate an important line of thought about the intricacy of performed rhythm. While I think that position can often be misleading, it comes at root from a perennial experiential insight that I would hate to see go undefended. Indeed, if it were not promoted by exponents in this volume such as Christopher Hasty and Deniz Peters,[3] and elsewhere by musicologists such as Nicholas Cook,[4] I should give it more defence myself as an expression of the vital, human sense of subjective rhythm, though one that is very difficult to articulate logically and correctly.

While rhythm that is heard and felt can rightly be described as the "flow" of performance, many qualities of this embodied, subjective sense starkly contrast with what I shall call encoded rhythm, or rhythm in an objective sense. Encoded rhythm refers to the signification of temporal patterning in such documents as musical scores, printed or manuscript poems, film screenplays and storyboards, dance notation, and so on. It is important that encoded rhythm (e.g., scores) be unlike embodied rhythm (e.g., performances), and, as I shall argue, keeping the encoded

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[1] Wollheim, *Art and Its Objects*; Davies, *Works and Performances*.
[2] Sartre, *The Imaginary*.
[3] See Chapter 15, Hasty, "Complexity and Passage"; and Chapter 7, Peters, "Rhythm, Preceding its Abstraction."
[4] Cook, *Beyond the Score*.

and embodied forms separate, rather than making the encoding more like the final performance, adds to performative freedom.

Being a bipolar construction, what I call the embodied–encoded dichotomy comprises two opposite viewpoints, plus a third, which I shall defend, prioritizing neither pole but rather their interdependence. To take the viewpoint from the encoded pole is to prioritize the formalism and abstraction of theoretical, critical, and notational objects: the score, the outline, the written work, the analysis, etc. Defenders of the opposite viewpoint emphasize that only performed, embodied rhythm is actual rhythm, as opposed to potential. A corollary of this view is that while rhythm remains unperformed, encoded in conventional description, its non-flowing timelessness means that it is held in a non-dynamic state of limbo in which the encoded form lacks the necessarily temporal, felt features of embodied, performed, *actual* rhythm. Described, encoded rhythm, the argument goes, is abstract, and therefore secondary to performance, the concrete reality. More specifically, the concern is that conventional descriptions of rhythm such as the familiar musical score and objective analyses that focus on unit-based constructions, cannot, as Hasty says, "capture an intricacy that is always on the move."[5]

Indicating the essentially abstract nature of the description of rhythm, Hasty calls it an "intellectual construction . . . involving naming, description, analysis"[6] whose inevitable atemporality debars it from what is most essential and alive in rhythmic performance, namely, the engaging course or flow of artistic works which he calls "the active and characterful creation of things or events."[7] His main complaint is that because traditional descriptions of rhythm lack the intricacy of rhythmic performance, they suggest a false notion of rhythm as a timeless element separable from actual rhythm, which latter he finds only in performance. Suggesting a wider importance to the debate, Hasty argues that conventional doctrine regarding the description of rhythm adamantly holds onto the dead part and denies the living, rhythmic performance. To remedy this complaint, he argues that the traditional priority of objective description (the conventional score; critical, theoretical abstraction) over the subjective interpretation given in performance gets things the wrong way round.

One might object here that it is possible for a musical score to be drafted before any instance of its actual performance, and that the score therefore has at least chronological priority. However, Hasty is likely correct in observing that any codified composition in fact entails its own performance as it is actually being made. That is, the composer, as the original describer, must be doing something like hearing the rhythm in imagination, or tracing it rhythmically in the air by hand while composing––creating and transcribing––the descriptive document. Yet, while it weakens arguments for the absolute priority of the score, the view of

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[5] Hasty, "Complexity and Passage," 235.
[6] Hasty, "Complexity and Passage," 235.
[7] Hasty, "Complexity and Passage," 241.

composition as imaginative transcription does not imply the straight reversal of ascribing necessary priority to performance; rather, it suggests objective–subjective (score–performance) co-generation.

While upholding an unprioritized view, my main concern is not primarily to dispute the logical and chronological priority of actual over described rhythm, or vice versa. I aim, rather, to defend the ability of conventional description to preserve the essentials of rhythm-involving artworks, most notably, their *flow*, albeit in an encoded way. I shall further argue that conventional description favors intuitive and expressive interpretation, where more detailed prosodic or musical notation would be too strictly prescriptive for interpretive leeway. The current chapter, then, promotes an unprioritized view that emphasizes equally (a) the ability of conventional description to preserve musical works while keeping them open enough for creative and sensitive interpretation, and (b) the not only valuable but also necessary interpretation involved when performers bring a composition to life.

I contend that while rhythm is perceived through the senses as patterned temporality (involving repetition, pause, continuation, return, etc.) that retains the past and moves towards a future, none of this intricacy need be lost in conventional codified description. It is therefore better to retain conventional description for its referencing advantages and the interpretive freedom it allows. The intricacy of the actual rhythm can as little prevent its description in objective form as it can prevent its performance by another skilled performer who is present and listening attentively. That is, if another musician can hear the performed rhythm and then perform it anew, it can also be encoded in objective form without requiring any revolutionary techniques of notation.

The subtleties of performance can powerfully affect the listening (and performing) subject, but there is nothing capricious or magical about them. Or rather, as the nineteenth-century pioneer of musical expression Matthis Lussy remarked,

> Composers, in accentuating their works, are obedient to sentiment—to unknown laws, and not to caprice, though indeed, what is caprice but unconscious obedience to an impulse from some unknown cause?[8]

Nuances can be transcribed according to a formal system that relates discrete elements so that they become part of a flowing whole when performed by a sensitive and talented musician. The formal—i.e., notateable, conventional, and coherent—properties of the structure as a whole outperform the sum of the parts taken as discrete units, in a way analogous to how the geometrical structure of an arch provides resilience ordinarily beyond that of the materials from which it is composed. Much as the resilience of an arched bridge or an egg maximizes that of its materials, an artwork taken as a compositional whole has a power that exceeds that of its parts. Both holistic property kinds—structural resilience in the arch and compositional

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[8] Lussy, *Musical Expression*, 3.

power in the artwork—exist as formal, detectable properties in the respective objects themselves, though their existence is perceived only in experimental or experiential context, as when a bridge or egg undergoes a heavy load or when an artwork is performed to critical or popular acclaim. Intricacy, then, can be as much an objective quality of the description or encoding of rhythm as it is of the embodied performance. Thus, while performance-priority proponents are right to caution against allowing discussion of rhythm obstinately to maintain the separable discreteness of its elementary units and thereby forget the flow that is its most essential characteristic, it would be misguided to replace traditional description—e.g., the conventions of Western sheet music, or those of prosodic terminology—with an alternative system of coding that added all the extra nuances of expression, timing, note grouping, accents, offbeat stresses, etc. that many composers in the nineteenth and early twentieth centuries increasingly tried to notate to ensure greater control.

Here, in the tension between notation and interpretation, each with a rightful claim to intuition and expressivity, one must beware the siren call of a pseudo-problem––as the Vienna Circle and Wittgensteinians would have said––inherent in the nature of description, and what description of a practice must inevitably leave out. More precisely, while there is nothing *in particular* of a practice, of performance, that description *must* leave out, it is nonetheless inevitable that description must leave *some* things out and remain incomplete––or open, depending on one's viewpoint––as the description necessarily cannot capture all the minutiae of what is described. For this, one has technique.

Technique, as Adorno said, is how art thinks.[9] In poetry, say, the particulars of form—as specified as the sonnet or as spontaneous yet musically structured as free verse—provide a metrical and compositional frame once a rhythm becomes established as a trellis over and around which ideas and feelings grow, take shape, and interact. Form does not constrain good poetry, nor is it merely an aid to get creativity going. Musical and poetic forms are rhythmic and experimental ways of thinking and working through problems of comprehension and expression, much as in philosophy syllogism, analysis, dialectic, and dialogue are ways of thinking and working through problems of understanding and knowledge. The formal structure (meter, rhythm, technique) and the living part expressed (ideas, feeling, mood) interpenetrate, preventing the two theoretical sides from being truly held apart in any simple dichotomy.

Through technique, structured levels of meaning and enjoyment are created, inviting a discovery of thought in the work so that it is encountered as already thoughtful. Without technical structure imposed by the artist, such thought as the work does in fact contain could only be reached after considerable conceptual struggle. With the technically structured artwork, however, the composer presents the thought for more immediate aesthetic access, as the result of much thought is presented. The thought that the audience then discovers in the work gives a

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[9] Adorno, *Aesthetic Theory*, 129, 279, 283; Jarvis, "What Does Art Know?"

seemingly miraculous intensity even to, indeed especially to, the simplest artworks. The understanding and refinement of this structure is the work of prosody, which reverse-engineers creative technique and works out a more penetratingly perceptive system of commentary and annotation that can certainly aid appreciation of technical aspects in the work, and can sometimes help future composition through the insights into structure it provides. Yet this very precision, converting the organic expression into the structuring trellis it originally grew around, can if taken too far also stifle creative and appreciative possibilities.

Rhythm makes content more accessible. Even when the ideas are not comprehended, entrance into the mood and aesthetic train of the music is more or less universal, so long as the listener has at least some cultural acquaintance with the forms and conventions used. Whether the rhythm is established solo or in concert with other performers, rhythmic expression allows easier access for participatory enjoyment, be it through dance, foot-tapping, or head nods carried through or imperceptible. Awareness of rhythm in any communication, whether through art, games, conversation, or simply being together, embodies consideration of others and invites their fuller involvement. An unconcern for rhythm can lead to unkindness, neglecting the welcoming changes of tempo that make space for others to join in, and omitting those polite pauses for reflection and assent, which also permit considered disagreement, rephrasing, and repositioning. This is the open dance of give-and-take that rhythm creates. In the sense that it is created with the attentive participation of others in mind at even the most basic, bodily level, rhythm is, as Andy Hamilton argues, a humanistic phenomenon.[10]

On the other hand, an exhaustive, per impossibile, prosodic rendering would reduce the humanistic element of rhythm by limiting the freedom of access to the work to one highly specified interpretation. Although notational or prosodic instruction can lift barriers to sometimes difficult or archaic works, a tendency to increase the quantity of information encoded in a work, and the annotations to it, would create more barriers and constraints to performance than it removed, creating instead a jealous proto-performance, i.e., a code permitting only one entrance and way of proceeding. An exhaustively complete rendering would be too "thick," to use the parlance Stephen Davies borrows from ethics, in that the work would become overdetermined, i.e., too rigidly prescribed, allowing only one access to perform faithfully the "sonic detail of its accurate instances."[11]

To be performed, embodied, more than once, a work must be encoded (even if only in memory, but more usually in a text). It would be doubly mistaken, however, to replace conventional ways of describing rhythm with ones that more exactingly aligned description to performance, adding ever-infinitesimal detail. First, doing so would overload the description, creating an unwieldy apparatus. Secondly, this new descriptive system (the jealous proto-performance) would be so radically

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[10] Hamilton, "Rhythm and Stasis."
[11] Davies, *Works and Performances*, 20.

particularized that it would be far more prescriptive than any conventional score. It is in fact largely by not detailing every possible nuance of expression that conventional description leaves the variables of living rhythm open to the interpretative art of the actual performance.

I am therefore arguing that the infinitesimal variations borne of living, performative expression are best left, as they are in traditional descriptive systems, to the intuitive sensitivity of the performer. The relative lack of complexity in traditional, abstract description––relative, that is, to a more finely detailed account of the nuances of any specific performance––constitutes the important quality of openness to interpretation that allows conventionally described works to be brought to life in so many different yet meaningfully expressive ways. The conventional description of rhythm thus avoids rigidly prescribing the very flow that comes alive only in the performance. The original artifact, the score, for example, or the poetic text, is therefore a descriptive document that supports innumerably many and different actual or possible performances. In virtue of this formal document, which is open to innumerable varieties of becoming actual, temporal performance, the original description has a priority over subsequent performances. But this is not the full story.

2. An Unprioritized view

An analogy between photography and music from the master photographer and printer Ansel Adams––also a proficient pianist––illustrates this point about one original description supporting and encouraging many possible expressive interpretations in actual performance, where the encoded comes alive in the embodied:

> I have often said that the negative is similar to a musician's score, and the print to the performance of that score. The negative comes to life only when 'performed' as a print.[12]

It should be noted that there is, and can be, no such thing as a "straight print" from a negative, just as there is, and can be, no such thing as a "straight performance" of a score. The duration of exposure to the overhead light is always a matter of judgment. The master printer in the darkroom might use a wand to prevent certain parts of the photographic paper from receiving too much light. He or she might use techniques such as feathering in certain areas and borders. The paper itself has to be chosen, and this choice affects qualities such as micro-contrast and macro-contrast.

One might object, nonetheless, that in music a read-through does in fact involve a "straight" playing, which consists in playing the notes without any pre-considered

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[12] Adams, *The Print*, 2.

interpretation. A read-through, however, unlike a performance for an audience, need not be done in real time, and often involves moving quickly through slower passages, and more slowly through rapid, or otherwise difficult sections. Perhaps sight-reading––performing *a prima vista*––is more pertinent, but even then it is practically impossible to deliver a "straight performance." Indeed, as Louis Armstrong described highly skilled musicians, "they might read a Fly Speck, if it get in the way."[13] Playing *a prima vista* must be done in real time, so even skipping notes, or playing wrong ones––which itself involves interpretation––would be more acceptable than losing the rhythm. There can, then, be no such thing as a straight print from a negative, a straight reading of a poem (however, characterless an actual reading might seem), or a straight performance from a score. Straight performance is impossible because any performance from a description requires an interpretation that necessarily contains a degree of openness. An exhibition that hung photographic negatives on the walls or a performance that consisted only in distributing the sheet music to the audience to imagine the work in relative silence might count as conceptual art, but the practice would not become conventional.

Against those who argue that performance is primary, Adams' analogy illuminates the mutual importance of the codified description (the negative or the musical score) that is necessarily the antecedent original and any rhythmic performances that are then produced. This is not to argue that performances are simply inferior copies of an archetypal and more perfect original. Even a photographic connoisseur who admires a negative for its exposure and composition does so with the understanding of how this serves the quality of the print, and much the same can be said of the admirer of a musical score. Like the negative, the score primarily has instrumental value, whereas the performance (like the print) has intrinsic value. But if the performance has intrinsic value, and the score has primarily instrumental value, does that not therefore mean that the performance has priority? The answer must be no, because of an inescapable asymmetry. While the performance depends on the score for its very existence, the score does not likewise depend on the performance for its existence. However, in the unprioritized view that I am presenting, while the score may be chronologically prior to performance (this is not true for improvisation, but even here there is often an initial idea and outline), it nevertheless depends upon performance for its actualization, which is in an aesthetic sense its completion.

Although the score in itself, as a concrete artifact, has only instrumental value, it is the fundamental prerequisite that subsequent performances depend on before any intrinsic value can be realized. It is the work that has intrinsic value, and the musical composition as work of art is a composite of co-dependent encoded form and actual or imagined performance. Perhaps the performance never entirely realizes the work, which is always, as Sartre suggested, held in "the imaginary"; thus it never quite exists concretely as accomplished, once and for all. If this view

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[13] Armstrong, *His Own Words*, 26.

is correct, while the performance effects the completion of the work, it never quite achieves its perfection. The score, then, encodes, though necessarily incompletely, with gaps concerning expression, nuance, grouping. What one might call the arch-performance is created by the composer in imagination and is ever and anew appreciated, rediscovered, in the imagination of the performers and the audience.

The musical score and the photographic negative are both creations of their respective composing artists. As encoded, prototypical artifacts, they have a uniqueness that performances do not, in that the original encoded version is the one from which any number of performances develop. Note, however, that it is not because the score or the negative are each one, and only one, whereas the performances are many, that the prioritizing of performance is prevented. Copyright allowing, the score is often published and facsimiles can be reproduced from film negatives. Still, these copies remain multiplied tokens of the one prototype. A question also arises from multiple editions of the composer's score leading to the quest for scholarly editions to construct an Ur-text out of various manuscripts, proofs, and prints. The point concerning the uniqueness of the encoded prototype is that although performance-prioritizing theorists wish the descriptive artifact to be understood as secondary, and although it is only as performance that the art achieves intrinsic (actual not potential) value, it is the encoded artifact that originates and inspires worthwhile performance. Accepting this co-dependence of form and performance is key to the unprioritized view of encoded and embodied aesthetic qualities such as musical rhythm.

My assertion of an unprioritized account amounts to defending encoded–embodied (description–performance) co-dependence. It is based on the argument that a conventional descriptive text holds open the possibility of many different performances that might embody it, rather than minutely describing expressive nuances such as the finer points of timing, note grouping, offbeat stresses, etc. Indeed, the method of increasingly minute and burgeoning description would, paradoxically and unfortunately, become the ideal if some original, authoritative performance were always prioritized over the encoded prototype. The job of such a minutely finessed, burgeoning description would be to convey every nuance and particular of that performance. While one can commend the scholarly quest to construct the most accurate description of the composer's intentions, it should also be noted that those intentions often change as a composer returns to a score over many years, so further questions inevitably arise as to whether any one of these can have priority over another. Further, the existence of multiple editions might produce interesting historical and scholarly questions, but these are of lesser importance to the performing artist, who is, and ought to be, free to explore perceived nuances across different texts that variously suggest alternative expressive responses and resonances in the performer. Thus the unprioritized view has value here, being an account where the rights of the work are balanced in co-dependence with the sensitive intuitions and expressive instincts of the interpretive performer.

It could, however, be argued that the existence of multiple texts supports the opposite view, that particular performances have a uniqueness that is almost completely missed by the atemporality and universality of conventional description. Each performance is a one-off event that that can be recorded but not repeated, while a musical score can easily be photocopied and is essentially repeated, with added nuance, by becoming embodied with each performance. Performances involve different maestros or even the same ones but on good and bad days; the synergy of all involved is such that small differences in some factors can affect the power of the whole. So while performances can rightly be said to be interpretive iterations of the score, they are necessarily unrepeatable in terms of the many particulars involved and how they add up to an aesthetic whole. Certainly analogue or digital reproduction is possible, but that is quite different from the (impossible) repetition of the event. The unity of the text, however, even if there are multiple versions from which to choose, is performance generative, without itself being in any normal sense of the word a performance.

Performance, aside from improvisation, develops from code—the text—but the issue of priority is not such a vital quarrel. Each is necessary for the more-or-less faithful reproduction of embodied rhythm from an encoded composition. A good score never performed is wasted, almost a nullity. And a performance of a composition is equally dependent on the score, however radically the performer departs in expressive interpretation. Those who radically prioritize performance aim, quixotically, I believe, toward a reversal of values that not only promotes the particular and embodied (there is nothing wrong in that), but which also denigrates the powers of form as timeless agents of perpetual identity (which I consider to be tilting at windmills). But all this sounds like fighting an imaginary Platonic bogeyman,[14] as if one should, like a good Nietzschean, fear shadows that threaten to engulf the living world of matter and bodies. What is really being opposed here? If the enduring identity of the text were instead to become, per impossibile, as unrepeatably nuanced as the temporal performance, then the text could not be the performance-generative artifact that it undoubtedly is.

Nobody seriously argues that the score––or any text intended to generate performance––dictates or ought to dictate each detail and expressive nuance of every possible performance. As T. V. F. Brogan diplomatically but decisively judges the matter, with respect to poetry:

> It is natural to want to enrich scansion with other kinds of analyses which capture more of the phonological and syntactic structure of the line . . . But all such efforts exceed the boundary of strict metrical analysis, moving into descriptions of linguistic rhythm, and thus serve to blur or dissolve the distinction between

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[14] Cook, *Beyond the Score*, 8–32, blames what he sees as the traditional prioritizing of score over performance on "Plato's Curse."

meter and rhythm. . . . Scansions which take account of more levels of met-
rical degree than two, or intonation, or the timing of syllables are all guilty of
overspecification.[15]

Those who wish to enrich scansion all too easily end up "guilty of overspecification"
through blurring the distinction between meter and rhythm and jealously
prescribing not only precise timing, but also tongue movements, etc. Yet, though
one might annotate a rhythmic, rather than just a metric, scansion, a greater
freedom of experiment and expression in rhythm exists, perhaps counterintui-
tively, in remaining with the more basic, binary metrical scansion. Greater freedom
is afforded by simple metrical scansion, marking only ictus (/), i.e., the metric beat
or pulse, and non-ictus ($\smallsmile$, or $\times$), because by not prescribing any rhythm, the re-
citer is left free to experiment and discover rhythmic possibilities without needing
to fixate on any particular one as *the* rhythm. This is not to deny that the lines
strongly lend themselves to a particular rhythmic reading, indeed, I contend that
reasons for favoring one reading over another already lie objectively in the text or
in the cultural context. Yet it is equally true, however, that some lines are deliber-
ately inflected with the ambiguity of multiple, contradictorily rhythmic readings.
It therefore bears reflecting, against overspecified scansion and rhythm analysis,
that, as William Empson said: "The machinations of ambiguity are among the very
roots of poetry."[16] These insights return me to Adams' analogy of the photographic
negative, whereby the print is the performance, which serves well to show that the
text (the score, or negative) is not a code that dictates exactly how the performance
ought to turn out in each detail and in every instance.

   Could there be more at stake, then, in the argument for the living reality of actual,
temporal, flowing presence than the apparently not very vital question of which
of two necessary components is to be given priority? The foregoing discussion
suggests that what is at stake is an assertion of personality, vitality, of spirit above the
dead letter. My response is that such vitality requires an alternative to prioritizing
terms on either side of the debate. An unprioritized theory of objective–subjective,
descriptive–performative co-dependence is free to pursue atemporal and tem-
poral aspects of the artwork. The atemporal form is the imagined ideal, that which
allowed Sartre to insist of Beethoven's Seventh Symphony: "I do not hear it ac-
tually," because it is "outside existence," such that "I listen to it in the imaginary,"
where beauty is possible.[17] The unprioritized, co-dependence view of rhythm and
other aesthetic qualities is at once common sense, in defending the openness and
utility of traditional conventions, and dynamic (opposing merely static forms), in
celebrating the fact that every new performance brings the ideal creation that is the

[15] Brogan, "Scansion," 1118.
[16] Empson, *Seven Types of Ambiguity*, 21.
[17] Sartre, *The Imaginary*, 193.

artwork (Sartre's "imaginary") into an aesthetic, embodied reality that actualizes the power of the work to touch and move audiences intellectually and viscerally.

3.   The objective reality of rhythm

With the unprioritized view, I am defending the sense of rhythm as a representable objective pattern. The fact that rhythm can be embodied across different forms and for different human senses––sound, sight, and touch being the most pertinent–– shows that it is an objective property perceivable by more than one sensory channel and that it is therefore quantitatively analyzable and describable. This objective sense is what Locke called a primary quality, one that exists objectively, can be expressed numerically, and consists in "*Bulk, Figure, Number, Situation*, and *Motion, or Rest*" of bodies, "whether we perceive them or no."[18] It is only because of this objective basis that rhythm in one art form perceivable primarily through one sensory channel can be translated into or illustrated by another, so that in ballet, contemporary, or popular dance, for example, the rhythm in the dance often corresponds to the rhythm in the music in the objective terms of magnitude, figure, number, situation, motion, and rest. These correspondences are intuitively apparent, but harder to explicate in words or formulae.

Central to calculus, the mathematics of such transformation or correspondence is continuous as opposed to discrete, typically using "t" as the time axis moving from left to right. Magnitude is the simplest variable to measure with respect to time, and can also be done with sound (in decibels), light (in lux), and force (in pressure—"P," bars, or p.s.i.—felt through touch). These are all objectively describable in terms of number and mathematical convention, as is figure (shape). The primary quality of figure, represented for instance by pirouettes or whirls in dance, resembles rapidly repeating phrases in music by a topological dynamics. The formulae underlying this continuous mapping of "various 'repetitiveness' properties"[19] of the motion to the music would take considerable effort to calculate, yet would be superfluous to the audience, who need no proof of correspondences that they perceive and enjoy. An example of the highest one-to-one correspondence between rhythm as heard and as seen is the display of a graphic equalizer. These objective qualities are what would remain, in a recording for example, even in the absence of any living mind. One might not want to say that rhythm in such circumstances would remain "living," but it would nonetheless remain real, as does the rhythm encoded in the score and other texts.

To argue for the reality of objective rhythm and its importance is not to denigrate the subjective sense of rhythm, but only to emphasize that the subjective

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[18] Locke, *Essay Concerning Human Understanding*, Bk 2, Ch. 8, §23, 140.

[19] Anosov, "Topological Dynamics." McGinnis and Newe, "Topological Dynamics: A Framework," and Sutil, "Topological Movement," discuss topological dynamics as a framework for dance notation, drawing on the pioneering choreography and movement notation of Rudolf Laban.

depends upon the objective. Flow, or fluxion, the essence of rhythm, far from inaccessible to objective, mathematical analysis, is the very core of calculus. The connection between music and mathematics has been appreciated and often venerated since ancient times. There must first be a something heard, seen, or otherwise sensed before that thing is then felt in terms of meaning and value. Only then, with the objective rhythm established, can a subjective sense of it arise as the mode in which the rhythm affects the subject, prompting the subjective repetition of the rhythm. With this repetition, a meaningful quality with a felt value is added, such as calmness, solemnity, or jubilation, which is experienced at the same time as the rhythm. These subjective qualities or feels, however, are not themselves rhythmic, because what cannot be given quantitative analysis and description might be a response to rhythm, but cannot itself be rhythm. Thus while a rhythm may be calm or jubilant, calmness and jubilation are not rhythms.

The foregoing argument can also be used against the subjectivist assertion that there is no rhythm without its actual appearance. To hold that there is no X without the actual appearance of X is a form of subjective idealism that is indefensible except when X is itself an appearance in the subject. For example, to say that a trumpet does not exist until someone hears it is indefensible, but to assert that the particular sensations that this trumpet creates in person Y exist only when person Y hears that trumpet is at least not logically indefensible. (It could be admitted, however, that stimulating a certain pattern on the subject's auditory cortex might activate those particular sensations, or that a recording of the trumpet could produce the same effect.) To reiterate, a rhythm has objective qualities that exist in the absence of a subject. The fact that that the most aesthetically important effects of rhythm are its feeling, meaning, and value as felt by the subject does not give logical priority to the subjective sense of rhythm, which remains dependent on the objective qualities of the rhythm. That the subjective sense of rhythm depends on the objective sense (on the primary qualities of the series of events) is in fact the usual relation of subjective and objective qualities. The objective qualities exist first and their emotional, significant, or axiological resonance in the subject follows. This view is entirely consistent with agreeing, as I do, that meaning is found in the engaging course or flow of things.

This meaning in rhythm is, I believe, a discovery of the harmonic resonance of things in the world within oneself. Indeed, to understand how music––or any rhythmic happening or creation––stimulates sensations and thoughts that refer to meaning and value is to have an at least implicit metaphysical understanding. Perhaps the historically first explicit metaphysical understanding of how the objective and subjective unite in musical phenomena remains the deepest, where the rational (ratio) is felt in the qualitative (quale). According to legend, Pythagoras, gripped in difficult mathematical thought of balance and measures,

walked by a smithy, and by divine chance, heard the hammers beating out iron on the anvil and giving off in combination sounds which were most harmonious with one another . . .[20]

Thus Pythagoras marveled, the story goes, at how objective mathematical ratios (of rods, pipes, and strings) are sensibly intuited across harmonious musical intervals. Each sonorous ringing is perfectly harmonized in the listener's mind with the numerical ratio describing the placement of the grip that divided the rod into struck and unstruck portions. From this he understood that a law governs how change in the latter accounts for a correspondent change in the former and that this account is ultimately rational. The qualia and the numerical ratios are correspondences, resonances in fact, that are ultimately connected to the same nature, so that what in the subject is experienced as a musical note, is in the object the physical expression of a ratio.

Yet one need not be a Pythagorean (mathematic or acousmatic)[21] to hold that the objective in rhythm is prior to the subjective, such that quantitative properties precede qualitative ones insofar as the objective, mathematical properties of music determine what becomes the subjective sound of music and the qualities of its flowing parts. Another way of stating this is to say that subjective rhythm is how objective rhythm is experienced. This formulation allows a clearer view of the mind's role, whether projective or intuitive, in the experience of emotional timbre in rhythm. Thus some rhythms promote a slow pensive mood, others light-hearted moving around without much thought at all. Objective qualities in rhythms can make one piece of music stir one emotion, while another evokes a quite different mood.

The meanings of progression and return, ascent and descent, and so on, are conveyed in objective rhythm and can be straightforwardly indicated. Return to a musical motive, for example, can convey a sense of remaining, or lingering, but with greater variation it will convey a similarity that progresses or one that regresses. It is quite natural, when experienced by a thinking being with life projects, that these objective qualities in rhythm will stir thoughts and feelings related to the *advancing through, enjoyment of, regression to*, or pensive *dwelling around* those life projects. The rhythm does not convey what is to be thought about, i.e., the content, but it influences the form and manner, which is to say the mode and the mood, of one's thinking.

Thus a very clipped performance that crisply enunciates the separation between each note or unit encourages a marching mood that does not linger on the past; emphasizing action over memory and thought, it thereby avoids being deeply affected. By contrast, a melody played rubato promotes a more comprehending, pensive mood in which less gets left behind. For instance, John Cage instructed

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[20] Nicomachus, *Manual of Harmonics*, 83, the earliest extant record of the account (83–97).

[21] The "mathematicians," with their more scientific Pythagoreanism, opposed the "acousmatics," who followed the sayings—however cryptic—of the master on authority without need of mathematical proof or reasoning: see Riedweg, *Pythagoras*, 107–8. The acousmatic thesis in current aesthetic theory holds that music does not move, or if so, moves only metaphorically. The acousmatic theory is named in allusion to the Pythagorean acousmatics who heard the teachings of the master only through a veil or screen. Thus an acousmatic account of music makes no reference to anything beyond the sounds qua sonic phenomena.

that his haunting, returning and gathering, composition "Dream" (1948) be performed

> Rubato: Always with resonance; no silence, tones . . . freely sustained, manually or with pedal, beyond noted durations . . .[22]

In such a gathering, synthesizing style, ideas build into a greater, cohering whole, with a wider, pulsing now retaining remembered presence. Understoodthus, rhythm does not present any specific content of thought or meditation, but instead presents thought or meditation itself. The fundamental meanings of departure and return, and of expectation and surprise, can be conveyed in the music, and can help comprise a basic, largely aesthetic comprehension of life, its necessities, and contingencies.

These fundamental meanings, which are essentially musical, invite reflection, yet they are more basic and embodied than any conceptual assertion. Such meanings can be conveyed in musical and poetic structure, with elements such as tone, tempo, resonance, and pause adding significant nuances to the meaning. The meaning of rhythmic expression is directly related to its form, being composed of the formal, objective qualities already embedded in the description before they have become embodied in the performance with the addition of expressive elements added in the performer's interpretive process.

Remaining with the topic of merging and separateness in rhythmic flow, I return now to a specific contention in Hasty's argument, to address his challenge against what he calls the "traditional construal of beats and offbeats as ultimately separate . . . entities."[23] Hasty wishes to replace this discourse of separate entities with a sense of each beat enduring through the arsic and anacrustic offbeats until their dynamism is passed on to the next beat. But is he not here challenging a straw man? It is already implicit in most understandings of musical rhythm that the beat commences a duration that endures until the next beat. And surely it is already generally accepted, certainly by those who hold that music in some sense "moves" (literally or metaphorically), that the pulsing of arses and anacruses propels the motive and the phrase in a movement that comes to life in the subjective sense of rhythm.

This sense of the beat persisting through the movements of the offbeat until the next beat is not new. In 1874, Mathis Lussy published his theory of the formal qualities of rhythm as foundational for performative expression. To perfect expression, he required that nothing be added to the formal qualities of the musical phrase that was not capable of being generated from the formal description itself. Thus Lussy was an early demystifier of the processes of performative expression. One need not look for something mysterious or capricious in the soul of the performing artist to explain the intricacies and effects of the expression, as these are, rather, evolved

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[22] Cage, "Dream," instructions at top of score.
[23] Hasty, "Complexity and Passage," 239.

from the already objectively described phrasing itself. As Lussy puts it, "the cause of the expression resides and must be sought in the structure of the musical phrase,"[24] so that even if the composer omitted all marks of expression and notated no slurs or accents,

> the true artist would play as if they were there, since their *raison d'être* would still exist. This is supported by logic, and daily confirmed by observation. As the generating causes of expression exist in the musical phrase, they must evidently act upon the purely material forms which are susceptible of observation and of submission to analysis and synthesis.[25]

The cause, then, of the expression would still exist objectively, even if only entailed by, rather than explicitly stated within, the musical score as read by a sensitive and talented performer.

Comparable to the enduring of the beat through the offbeats, Lussy portrays rhythm as the music "breathing." In his analogy, as the music "breathes," the downbeats are the inevitable exhalation, his point being that rhythm is the pulsation of building up and relaxation, a process as vital to music as breath is to life. Each downbeat carries on the impulse from previous beats, passing them on through the offbeats in a continuous flow. So long as he or she has more than merely mechanical ability, the performer intuitively appreciates all this, even though the signs of expression—the accents and so on—may be absent from the score.

Throughout his essay, Hasty asks a series of questions about the enduring of past events of a musical series in the present, i.e., the moment being performed right now. When is one to let go? Is that even possible? When to move to the next level or at least to a more fully new one? It is true that conventional descriptive models might seem to encourage "letting go," but I contend that this only helps the performer to exercise sensitivity and tact. Conventional description in fact neither forces nor prevents the loosening and binding, the holding onto beats, phrases, motives, and other forms, that constitute the enduring, lifelike, breathing qualities of music that do not merely unfold time, but seem almost to enfold time, so that the past and the future are also in the present as resonance, memory, and expectation.

But is one to believe, as Hasty argues, that conventional descriptive structures are in fact destructive, designed to prune natural growth, and cut off the past from living in the present? I have argued the contrary, that conventional descriptive structures leave enough openness in the system for performative expression and judgment by in fact not prescribing exactly where, when, and how to bind, loosen, cut, remember, and so on. Whether notation by the composer, or annotation by a critic or instructor, to create a new system of description that added so much extra information would be to prescribe too much. Such rigorous prescription made on behalf of

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[24] Lussy, *Musical Expression*, 2.
[25] Lussy, *Musical Expression*, 3.

"living rhythm" would be counterproductive, constraining the expressivity of the artist, reducing latitude for interpretation, and intruding on the performing artist's sensitivity for what, as Lussy explained, already resides "in the structure of the musical phrase." The existing conventions of description have evolved not to prune the outgrowths of memory, nor to excise the living rhythm, but rather to allow the artist at sensible or unexpected junctures to cut or not to cut and to bind or not to bind, according to a sensitive intuition of possibilities already there in the musical score. Thus Lussy celebrates, rather than bemoans the fact, that: "In music there are no special signs to mark the rhythm."[26] The reality is that such questions as when one should let go of a beat, let it peter out through its successors, or move onto the next level, are addressed afresh in each instance to the spontaneous artistic conscience. One should therefore resist giving prescriptive answers, let alone inscribe them as a new notational norm. If conventional descriptions and encodings such as traditional scores did indeed note where to let go of a beat and its memory, when to stop its pulse and begin a new level, and notate every accent and emphasis, etc., then that would stem experimental and creative performance and result in an artifact with much more information than is needed for an elegant encoding of music to be performed and thus embodied.

Works Cited

Adams, Ansel, *The Print* ([1950]; New York, 1995).

Adorno, Theodor W., *Aesthetic Theory* ([1970]; London, 2013).

Armstrong, Louis, *In His Own Words: Selected Writings*, ed. Thomas Brothers (Oxford, 1999).

Anosov, D. V., "Topological Dynamics," in Michiel Hazewinkel, ed., *Encyclopedia of Mathematics: Supplement 3* (Dordrecht, 2002), 413–14. Revd article: https://www.encyclopediaofmath.org/index.php?title=Topological_dynamics&oldid=17008.

Brogan, T. V. F., "Scansion," in Alex Preminger and T. V. F. Brogan, eds, *The New Princeton Encyclopedia of Poetry and Poetics*, (3rd edn, Princeton, 1993), 1117–20.

Cage, John, "Dream" [1948], sheet music for solo piano, in *Piano Works 1935–48*, EP 67830 (London, 1948).

Cook, Nicholas, *Beyond the Score: Music as Performance* (Oxford, 2014).

Davies, Stephen, *Musical Works and Performances: A Philosophical Exploration* (Oxford, 2001).

Empson, William, *Seven Types of Ambiguity* ([1930]; 2nd revd edn, London, 1953).

Hamilton, Andy, "Rhythm and Stasis: A Major and Almost Entirely Neglected Philosophical Problem," *Proceedings of the Aristotelian Society*, 111.1 (2011), 25–42.

Hasty, Christopher, "Complexity and Passage: Experimenting with Poetic Rhythm," in Peter Cheyne, Andy Hamilton, and Max Paddison, eds, *The Philosophy of Rhythm: Aesthetics, Music, Poetics* (Oxford, 2019), C15.

Locke, John, *An Essay Concerning Human Understanding*, ed. Peter H. Nidditch ([1690]; Oxford, 1998).

Jarvis, Simon, "What Does Art Know?," in Peter de Bolla and Stefan H. Uhlig, eds, *Aesthetics and the Work of Art: Adorno, Kafka, Richter* (New York, 2009), 57–70.

Lussy, Mathis, *Musical Expression, Accents, Nuances, and Tempo, in Vocal and Instrumental Music*, tr. M. E. von Glehn ([1874]; London, 1892).

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[26] Lussy, *Musical Expression*, 44.

McGinnis, Peter M. and K. M. Newe, "Topological Dynamics: A Framework for Describing Movement and Its Constraints," *Human Movement Science*, 1.4 (1982), 289–305.

Nicomachus, *The Manual of Harmonics of Nicomachus the Pythagorean* [*Enchiridion harmonices*], tr. Flora R. Levin ([*c*.100 AD]; Grand Rapids, 1994).

Peters, Deniz, "Rhythm, Preceding Its Abstraction," in Peter Cheyne, Andy Hamilton, and Max Paddison, eds, *The Philosophy of Rhythm: Aesthetics, Music, Poetics* (Oxford, 2019), C7.

Riedweg, Christoph, *Pythagoras: His Life, Teaching, and Influence*, tr. Stephen Rendall ([2002]; Ithaca, 2005).

Sartre, Jean-Paul, *The Imaginary: A Phenomenological Psychology of the Imagination*, tr. Jonathan Webber ([1940]; London, 2004).

Sutil, Nicolas Salazar, "Rudolf Laban and Topological Movement: A Videographic Analysis," *Space and Culture*, 16.2 (2013), 173–93.

Wollheim, Richard, *Art and Its Objects: An Introduction to Aesthetics* (London, 1968).