

Roy Oppenheim*

The Musical Experience: The Experience *in* Time or an Experience *of* Time?

Dedicated to Prof. Edna Ullman-Margalit

"Space seems to be either tamer or more inoffensive than time; we're forever meeting people who have watches, very seldom people who have compasses. We always need to know what time it is but we never ask ourselves where we are" [Perec (1997), p. 85]

[Prelude]

The musical experience is usually described as a temporal series of auditory objects, its sounds - images on a background of time. I challenge this description by examining our attitude to time through inquiring how one can characterize the space between two notes of a melody. In other words, I will describe the distance between 5 o'clock and 5:01 – this will therefore be a study of melodies and clocks.

I will use the musical experience as a laboratory in which to research the temporal experience and shed new light on the terms "Musical Tone" and "Duration", terms central to the musical and temporal experience, in this manner clarifying basic, erroneous, assumptions concerning the musical experience and the concept of time. One of my central arguments is that most of the philosophical difficulties concerning the concept of time, and, as a result, concerning the concept of musical experience, derive from setting up musical (real) time, i.e., "duration" - over space and measurement - converting it into physical and linear time.

For this purpose, I will present a phenomenological analysis of the musical tone and the musical rest. My analysis will necessitate a change in the generally accepted perception of the musical tone as an auditory object while serving as "a door to beyond" the acoustic interference. Deducting from the tone its acoustic interference will reveal the musical duration, exposing the temporal background that allows the musical experience to take place: **"The unheard of the heard"**.

My basic assumption is that any musical experience is first and foremost a **temporal experience**, but not necessarily an aesthetic one – a work of art.¹ This article will, indeed, investigate the musical act (not necessarily the artistic one), examining whether it is an experience, like other daily experiences, which has a certain duration, or the experience of duration itself: an experience *in* time or an experience *of* time.

1) [To grasp a Tone]²

A Phenomenological Analysis of The Musical Tone

The initial, trivial description of musical experience is that of an auditory experience. Therefore, the phenomenological analysis must commence by questioning the meaning of perceiving noises/sounds as music.³ What are the manners by which noises/sounds in the world and in music are given? I claim that we perceive noises and sounds in two central modes of perception, **none of which** includes the way in which we perceive music:

- a. Noise/sound as an auditory characteristic of X.
- b. Noise/sound as a symbol of X.

The first mode of perception relates to sounds and noises as characteristics of objects: “This is the noise of a motorcycle”, “This is the ring of my cellular phone.” The ringing of a phone is perceived as a characteristic of the device (even if it plays or sings, as modern devices do) – “the ring of X” - not as an act of music. This mode of perception even sneaks into the concert hall: Before the musical experience begins (when sounds are indeed perceived as music), when the musicians tune their instruments, their sounds are perceived as characteristics of the instruments, not as tones (There exists a perceptual difference between listening to a violinist tune a violin and listening to a melody played on the violin).⁴ The second mode of perception relates to noise/sound as a symbol – a noise with a meaning (like language). When a man whistles to a woman on the street, the whistle is not perceived as music but as an effort at communication – a noise with a meaning. The noise “sus” is perceived in the Hebrew language as a signifier of the animal “horse”. In the same manner, for a Hebrew speaker, the noise “semaforo” is only noise, whereas for a Spanish speaker it means “traffic light.”⁵ This mode of perception sneaks into the concert hall without being confused as music, too. When we are **called** to return to the hall at the end of the intermission, the tone (a descending major chord) is not perceived as music, but as a signal to return to the hall.

My main point is that perceiving noises/sounds as tones (as music) constitutes a third mode of perception, **not** contained in either of the preceding two. Musical tones are not perceived as characterizing an object and signify nothing. There is no object or meaning to the series of notes “C-D-C.” Music is not “**hieroglyphs of sound**”, a language with a hidden meaning that must be decoded.⁶

Hence, the act of music can be described thus: An arrangement of noises/sounds perceived as tones, and neither as auditory characteristics of objects, nor as meaningful symbols. This negative description indeed differentiates between modes of perception, but tells us little of the nature of the musical tone, since, when there is no meaning or object “behind” the musical tone, why is it not simply identical with acoustic interference itself?

At this point one must ask: If we deduct from musical tone its acoustic interference, will there be anything left? If the answer is positive, therein lies the essence of the musical tone.⁷

I claim the answer is indeed positive. When we deduct from a musical tone its acoustic interference, we are left with the musical rest, what can be generally called “The Temporal Duration.”

2) **[To Grasp a Rest] 4’33”**

A Phenomenological Analysis of the Musical Rest⁸

Why is an empty page in the middle of an article incomprehensible? Considered an error? It is because it is not a part of the logic of the article's jargon. A rest in the day-to-day, spatial and language, sense is a divider, a boundary, a gap, whereas the concept of the rest in the musical experience is absolutely different. Our daily perception of the rest is that of a separator, producing a gap **between** things: a break at school, an intermission at the cinema, time out, a commercial break and yet the musical rest does not function like the former ones. The musical rest functions as a tone among tones, and its spatial perception as “a divider of tones” is therefore erroneous and misleading. The musical rest, present within the musical piece (as opposed to the break between pieces) functions **as a tone devoid of acoustic interference**, as a part of the melody.⁹ Its function is identical to that of the other tones despite its slightly different characteristics (the musical rest, indeed, lacks pitch and timbre, but it has a number of duration measurements, exactly as do the other melody tones)¹⁰.

To demonstrate the character of the musical rest, I will focus on the beginning of Beethoven's fifth symphony as an extreme example of the musical rest.



(Illustration 1)

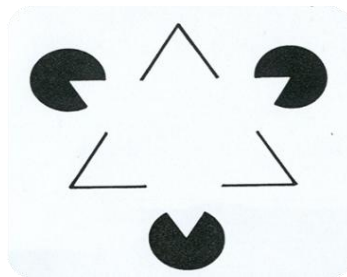
The “Fate” motif that opens Beethoven's fifth symphony is not a motif of two tones, the first of which repeated three times: “G-G-G-E flat”. The motif's first “tone” is the musical rest of a duration of an eighth note, after which there is the triple repetition of the second tone (G), followed by the third tone (E flat). That is to say that the motif is “rest-G-G-G-E flat” (Illustration 1). **Not playing** the musical rest will change the character of the motif as a kind of triplet constituting already a variation on the motif.¹¹



(Illustration 2)

This example, wherein the musical experience begins with a musical rest, existing **not** between two tones but “between” the silence preceding the onset of the music and the first tone that bears acoustic interference, requires the rejection of the musical rest's meaning as a “gap between”, a divider, a boundary or a separator.

In my perception, should we wish to find the musical rest's visual parallel phenomenon, we could compare it to the white triangle in Illustration 3. We see the white triangle despite it being sides-less, just as we hear the musical rest despite it being devoid of acoustic interference. **Just as the white triangle is perceived as a form, the rest is perceived as a tone.** In both cases it is an absence that is present.



(Illustration 3)

Rejecting the musical rest's meaning as a gap or border, and its description **as a tone devoid of acoustic interference** necessitates on the one hand, a change in the usual perception of the musical tone as an auditory object, an acoustic interference. If the musical tone has no object to refer to (it is not a characteristic of), no meaning (it is not a symbol of) and may even be devoid of acoustic interference, how can this absence be described as an object, as something?¹² On the other hand, inasmuch as the rest is a “transparent” tone, devoid of acoustic interference, it facilitates an “entry to beyond” the acoustic interference, thus exposing the musical duration – the temporal background that makes the musical experience possible. In other words, the “**unheard of the heard**”.

At this point in the discussion I shall characterize musical duration, the temporal background, as exposed by the musical rest, the space between two tones. Only later will I seek to answer questions regarding the meaning and essence of musical tone.

My main claim is this: perceiving a musical tone as an auditory object, a musical ‘building block,’ intermixes temporal with spatial concepts. This categorical error leads us astray, making us perceive music as an experience *in* time, rather than as the experience *of* time.

3) [To Grasp a Duration]¹³

3a. A Phenomenological Analysis of Musical Duration – The Space Between Tones

What is the nature of musical duration, as exposed through the musical rest? What tools are there to measure the distance, or space, between the notes C and D? Is it a difference of frequency? A measure of quantity? When we hear a melody, do we paint the tones of the melody in our minds consecutively, following one another, like points in space, to which the listener arrives by jumping over intervals, each time traversing an empty space separating them? Or are the sounds one continuum, pure quality?

“If the sounds are separated, they must leave empty intervals between them. If we count them, the intervals must remain though the sounds disappear: how could these intervals remain, if they were pure duration and not space?” [Bergson (1910), p. 87].

One of Bergson’s central arguments in his book *"An Essay on the Immediate Data of Consciousness"* is that most of the philosophical difficulties concerning the concept of time originate from the arrangement of real time, i.e. duration, over space, to which I add that most of the philosophical problems to do with the musical experience are rooted in the need to observe them, to say something about them, and to try to preserve them.

Bergson distinguishes between two “types” of time:¹⁴

1. **Measurable Time** – time intermixed with space – a spatial concept of time for the purpose of "acting upon" time, the creation of consciousness.
2. **Duration (Real Time)** – qualitative, and therefore immeasurable.

These are the two possible concepts of musical duration. In the latter explanation (2), Bergson refers to pure duration, clean of any mixture, while in the first explanation (1) “space” finds its way in. However, what is musical duration? Would it be possible to speak of musical duration without spatial terminology - without intervals, pitches, forms, scales and structures?

To do this, I endeavor to clarify the differences between the basic assumptions behind, and the characteristics of, the two kinds of time; by so doing, I will place musical experience and time as either **time itself** or as **in** time. Bergson claims that measurable time is a kind of “second stature” of the duration – in contradiction to today’s widespread concept. Measurable (physical) time adds basic assumptions that are not connected to the quality of duration inasmuch as they allow for quantification, for measurement. Bergson indicates that time is measurable, spatial only when setting down two basic assumptions:

1. **Homogeneous**ness – uniformity of the points of the present in time (a state in which no point of the present is favored over others).
2. **Discontinuity** of duration.

I point out that these assumptions are irrelevant to musical experience.

[To Grasp Tones and Sheep]

3b. "Defilement of Musical Time" – The Measurable Time

If we wish to characterize a flock of sheep as such, we will need to assume that all the sheep are identical (all are sheep, with no wolf, goat or zebra among them). We have to make an **assumption of the homogeneousness** of the flock. Furthermore, we will want to say that the sheep are **different** from each other from the point of view of the place they occupy in space. Both assumptions, put together, allow for the **ability to measure, to count**. "For we must understand what is meant by the *discontinuity* of number. It cannot be denied that the formation or construction of a number implies discontinuity... " [Bergson (1910), p. 82]. The acts of measuring and counting also assume that the **basic unit (the sheep) is non divisible**. It is perceived as a mathematical point, with an empty space separating it from the next one – this is the space between one sheep and the next. Only with the help of these assumptions is it possible to characterize the flock as a flock of sheep and the melody as a collection of tones. "The unit is irreducible while we are thinking it and number is discontinuous while we are building it up" [Bergson (1910), p. 83].

The measurement and number assuming homogeneousness and discontinuity (differentiation) therefore assume the **concept of space**. "Space is, accordingly, the medium in which our mind places it (the number)...all addition implies a multiplicity of parts simultaneously perceived" [Bergson (1910), pp. 84-5]. In other words, when the measuring and counting of the flock of sheep began, we also assumed the meadow - the juxtaposition of the sheep. The act of measuring enforced on duration includes concepts of space, not characteristic of time, allowing one to "act upon" time on one hand, yet changing its quality and its temporal essence, by "taming" it, on the other."...we are compelled to borrow from space the images by which we describe what the reflective consciousness feels about time and even about succession ; it follows that pure duration must be something different." [Bergson (1910), p. 91]. "...When we make time a homogeneous medium [...] we abstract it from duration." [Bergson (1910), p. 98].

Duration, examined in a homogeneous environment, is a hybrid term, contaminated with the concept of space in an attempt to "tame" it, to "freeze" it. "...Time, conceived under the form of a homogeneous medium, is some spurious concept, due to the trespassing of the idea of space upon the field of pure consciousness." [Bergson (1910), p. 98].

Therefore, in what manner do we grasp the concept of musical duration (the space between two tones)? Is it as basic, pure duration, devoid of any mixture, or could it be that the concept of space has crept into it? "Might it not be said that, even if these notes succeed one another, yet we perceive them in one another, and that their totality may be compared to a living being whose parts, although distinct, permeate one another just because they are so closely connected ? The proof is that, if we interrupt the rhythm by dwelling longer than is right on one note of the tune, it is not its exaggerated length, as length, which will warn us of our mistake, but the qualitative change thereby caused in the whole of the musical phrase. We can thus conceive of succession without distinction, and think of it as a mutual penetration, an interconnexion and organization of elements, each one of which represents the whole, and cannot be distinguished or isolated from it except by abstract thought." [Bergson(1910), pp. 100-101].

Observing melody tones as objects existing one next to the other is deceiving, distorting the nature of musical duration, due to the “stealthy” inserting of the concept of space into it. This observation sees a collection of tones similar to a flock of sheep. In order to measure tones, one must make them homogeneous, separated, space-related, “kinds of sheep”; but the nature of the melody tones is different to that of the sheep. Tones, as opposed to noise/sound and sheep, comprise of the whole melodic “flock” as anticipation and retention (inasmuch as the hand carries with it the arm and shoulder).¹⁵ Musical time, as opposed to the flock of sheep, is a becoming in which each moment is charged with the past, carrying amidst it the future. From its very essence, musical time is **heterogeneous, continuous and non measurable.**



(Illustration 4)

The homogeneousness and discontinuity assumptions mean that the qualitative is turned into quantitative, in an attempt to measure and count – turning the durational into spatial. Duration is both an identical and a changing “entity”, allowing for the consecutive and concurrent, and therefore intrinsically lacking any concept of space. "In obtaining the measurement we, as it were, forget what has been measured as such so that nothing is to be found except distance and number" [Heidegger (1996), p. 384].

We clock-users and note-readers have been trained to use the homogeneous measurable time, the mixture of duration and space, and this is a kind of constant obsession of ours. "We project time into space" [Bergson (1910), p. 101] and music into the geometric. We turn the “following tone” into the “adjacent note”, the “adjacent note” into the “high-or low note”, the measure (bar) into a place, the musical rest into a gap and the scale into something constructed of interval following interval, in order to climb up and escape from the essence of duration into spatial time.¹⁶ Nevertheless, **“...it (duration) is not a quantity, and as soon as we try to measure it, we unwittingly replace it by space.”** [Bergson, (1910), p. 106].

[To Grasp Notes]

3c. Of Symbols Serving Measurable Space-Oriented Time

"If, finally, I retain the recollection of the preceding oscillation together with the image of the present oscillation, one of two things will happen. Either I shall set the two images side by side, and we then fall back on our first hypothesis, or I shall perceive one in the other, each permeating the other and organizing themselves like the **notes of a tune**, so as to form what we shall call a continuous or qualitative multiplicity with no resemblance to number. I shall thus get the image of pure duration ; but I shall have entirely got rid of the idea of a homogeneous medium or a measurable quantity." [Bergson, (1910), p.105]. Musical experience is defined by Bergson as undifferentiated, qualitative, a multiplicity. Between melody tones there is no gap, interval or boundary, but an **affinity**, meaning they penetrate each other, as opposed to physical, spatial objects, e.g. sheep. Sound heterogeneousness and consecutiveness do not allow for measurement and quantification.

"There is no form, since form is immobile and the reality is movement. What is real is the continual *change* of form: *form is only a snapshot view of a transition*." [Bergson (1911), p. 301].

Therefore, the musical discussion itself, saturated with spatial time expressions, changes our comprehension of the musical time (duration). Musical form, for example, in musical discussion, is reduced to visual form. Musical works and movements are conceptualized by visual symbols: notes, words and letters (such as ABA as in Minuet-Trio-Minuet). It is as if it were assumed that juxtaposition, i.e. being one next to the other, is identical in meaning to being one later than the other.

Symbols and notes, by nature, must be spatially located one next to the other, in complete opposite to sounds and musical movements, which occur one later than the other, a relation of affinity which is a kind of qualitative synthesis. The musical duration, as previously mentioned, is a constant act of becoming, where each moment is charged with the past and impregnated with the future. For example: The reprise in sonata form appears later than the development section and is placed neither next to it nor after it, thus rendering it different to the exposition which appears earlier, even if the same sounds are played in it, marked as "A-B-A".¹⁷ **"Before and afterwards are not necessarily earlier and later, are not ways of temporality"** [Heidegger (1992) p. 18].

In my perception, the note (the system of musical notation) is the central opening from which space sneaks into musical duration. The notation system's role is to preserve and conceptualize the musical experience (allowing us to imagine it) – precisely what the musical tone does **not** allow. Notation, similar to a photograph, “freezes time”, granting it a permanent, visible, shape, a spatial place for what is, by nature, changing and “displaced”, transitory. Notation, therefore, preserves the music, but, just as it exposes it, it hides it. While notation exposes the “pitch” of sounds, it, simultaneously, hides the affinity between them, creating the illusion that “being beside” and “being later” are identical relationships, that tones are objects with spaces between them which can be drawn (Illustration 5).



Illustration 5 “Fugue in Red”, Paul Klee

The role of every set of symbols is to point out objects. In my perception, in the case of the musical experience, it is the musical notation **itself** that creates objects. Musical notation obscures the continuity and constructs an illusion of (non existing) gaps between the tones, represented as objects. The illusion stems from our space-oriented conceptualization of musical time, a categorical error, creating a fictitious problem.

The musical melody and action are experienced as motion, as a becoming, not as a series of objects in time. The premise in the musical discourse that the melody and musical movement are a collection of sounds - of auditory objects - is misleading. Melody tones are produced **only** when the melody's motion is frozen, when endeavoring to preserve it, in retrospect. The attempt to preserve motion, to preserve a transient becoming, establishes the creation of “bizarre” auditory objects, grasped neither as properties nor as symbols of anything.

I claim that the musical experience is first and foremost an experience of becoming, of temporal motion, not the movement in time of a series of objects. And so, if we still insist on describing it in visual terms, the most accurate way will be as a **background with no figures**: the musical experience as the temporal background of human existence with no space and no objects.

Therefore, its comparison to pictures, such as that of Klee, showing the motion in the musical experience is misleading, as is the comparison of reading music notes to that of reading a book or watching a film. Literature and cinema are experiences in time, as it is possible to discern easily between real time, i.e. the duration it takes to read the story or to watch the film, and the time of happening of the plot. This is not the case with the musical experience! In the musical experience there is complete correspondence between real time (duration) and the time of the musical action, and therefore **tones cannot be perceived as figures on a temporal background (as objects or symbols), but as an auditory embodiment of time, of duration itself.**¹⁸

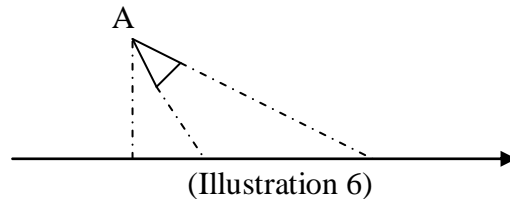
The notes, symbols and language lack the ability to grasp real time, musical duration, without freezing its motion and turning it into a collection of moments, a collection of sounds. "...It has no sign to express what strikes our consciousness in succession and duration. It no more applies to becoming, so far as that is moving, than the bridges thrown here and there across the stream follow the water that flows under their arches." [Bergson (1911), p. 338].

We tend to solidify and freeze our impressions in order to convey them, using signs and numbers; Thus we "tame" real time, a taming that borders on the distortion of the essence of musical duration. "...A duration whose moments permeate one another. By separating these moments from each other, by spreading out time in space, we have caused this feeling to lose its life and its colour. Hence, we are now standing before our own shadow." [Bergson (1910), p. 133]

3d. An External Point of View: Observation and Listening

For the purpose of clarifying the problem of the erroneous, however almost obvious, comparison between continuous duration and a line in space, between concealed musical form and spatial form and the axioms and premises that accompany it, Bergson presents the following example: A physical point "A" moves in a line. If this point is aware of its movement, it would sense that it was changing and would engage in a kind of tracing process. But would this tracing bear the form of a line? The answer to that question is positive **only** if the point can rise above the line it is traveling along and simultaneously perceive a number of points positioned next to each other. Such a point needs to be not only aware of itself, but also of the space around it, and to do this, it would need to set down a plane on which the line is situated (like the shepherd who can see the flock as a flock, or a sheep that has got lost, like a swimmer who can look back at the trail of water he or she has created).

"Succession exists solely for a conscious spectator who keeps the past in mind and sets the two oscillations or their symbols side by side in an auxiliary space." [Bergson (1910), pp. 108-109], and to this I add – and not one after the other!



That is to say, in order to perceive a line as such, or a flock as such, one (or a point having awareness) must be located **outside of it**. A point having awareness but lacking the concept of space (i.e. not located outside of its own movement) will not be able to perceive the tracing processes of situations or tones in the form of a line. "But its sensations will add themselves dynamically to one another and will organize themselves, like the successive notes of a tune by which we allow ourselves to be lulled and soothed... pure duration might well be nothing but a succession of qualitative changes, which melt into and permeate one another, without precise outlines, without any tendency to externalize themselves in relation to one another, without any affiliation with number: it would be pure heterogeneity... [because] from the moment when you attribute the least homogeneity to duration, you surreptitiously introduce space." [Bergson (1910), pp. 103-104].

Therefore, one must distinguish between two manners of hearing: **Observation** and **Listening**. One cannot **observe** music as duration, only as time intermixed with space (measurable, homogeneous time). It is, however, possible to **listen** to time as duration without intermixing it with space: this is the fundamental action of the pure musical experience. The aforementioned is not observation from an outside viewpoint but attentive listening, a manner of hearing that does not sneak spatial concepts into duration, or quantitative observation and homogeneousness into qualitative and continuous motion of the duration. The description of musical time, as I present it, based on Heidegger and Bergson's perception, challenges Kant's perception of time as a form of observation or a model by which reality is interpreted; a model allowing for the organization of objects and events in specific structures. In Heidegger and Bergson's perception, time (duration) does not belong with observation. Time is a framework that takes precedence over the distinction between observation and thought. A deviation from it, a viewpoint outside of it, is meaningless. "He who installs himself in becoming sees in duration the very life of things, the fundamental reality" [Bergson (1911), p. 317]. "...Time [Duration] is the reality itself". [Bergson (1911), p. 34].

In my perception, "auditory observation" "outside" of music, a hearing diluted with observation, replaces the pure musical experience, the listening to duration devoid of the mixture of concepts of space. This observation turns the experience of duration into an experience which has a certain duration, the experience of musical time into a musical piece in time.

3e. Back to the Musical Rest

The musical rest that started this discussion by challenging the meaning of musical tone and exposing musical duration, is also the best and most extreme example of permeation, of the defilement of time with space, changing its essence.

Describing the rest as **a tone devoid of acoustic interference** stresses several points that arose in the discussion of musical duration and measurable time to an absurd point.¹⁹ The musical rest clarifies the lack of homogeneousness and differentiation of melody, of the "tonal-flock". The assumption of homogeneousness somewhat dissipates when the rest be conceived as a melody tone (despite its lack of acoustic interference) just as a black sheep is not a regular sheep although it is a part of the flock. In

addition, if the musical rest is not a gap between tones, but a tone like other tones, the assumption of dissimilarity – the lack of continuousness – would also dissipate. Thus, the example of the musical rest turns the possibility of “auditory observation” and measurement into something that is devoid of any content to do with musical duration, and the question of the gap between the sounds into a meaningless one; for although it is represented in notes, nobody would consider asking what the gap or boundary between the tone and the rest is...²⁰

In conclusion: measurable (physical) time is time intermixed with space, allowing for premises of homogeneousness, separateness and discontinuity. To grasp it, one must take an outside viewpoint, observing it as if it were an object, a structure. This is time that is constructed as a second stature, on top of duration, on scaffolding that are not its own, but borrowed from spatial concepts. **Linear, homogeneous time was conceived as the result of our obsessive need to observe, measure and quantify, thus imposing on musical duration traits that are not its own, which we currently accept as obvious, fundamental characteristics of the musical experience.** "The deep-seated conscious states [as melody] have no relation to quantity, they are pure quality; they intermingle in such a way that we cannot tell whether they are one or several, nor even examine them from this point of view without at once altering their nature. The duration which they thus create is a duration whose moments do not constitute a numerical multiplicity.." [Bergson (1910), p. 137].

Unlike measurable time, **Musical Duration**, is continuous (non divisible), heterogeneous, and, thus, immeasurable and not given to quantification. Musical duration is not a kind of object. In contrast to spatial time, musical duration "...avoids ideas of flux and flowing, which make us think of a liquid substance and announce the possibility of the measure of time" [Levinas (2000), p. 7].

Musical duration is a “being” unlike other objects, a "being" at a constant act of becoming, continuous motion without any movement that exceeds itself; motion that embodies the temporal background of human existence, the unheard of the heard. **The musical experience and duration, unlike the musical piece as derived from spatial time, are not in time but are time itself – an experience of duration itself, and not an experience having a certain duration.**

4) [To grasp an hour]

4a. Back to the Musical Tone and Its Meaning

The musical tone in musical discourse must therefore be rephrased, based on the phenomenological analysis presented above. Tones are created **only** when motion is frozen, put to preservation, as a second stature to the experience of duration. I find that the meaning of musical tone resembles that of a knight in a game of chess. The chess knight spatially points at its movement possibilities from its current position on the board, just as the tone points to movement possibilities of melody. It embodies the motion-potential as an infinite continuum of finite progressions. A professional chess player doesn't require the chess pieces to plan his potential moves, just as an improviser in music doesn't need the tones to consider his options of 'transgressing' his musical position. Refining the question that started this discussion, we see that it seeks an action or object that can point (through space) **only** at temporal motion possibilities, not spatial ones. Therefore, since the musical experience sounds time (is not an experience in time) and we seek to clarify the musical tone's meaning within the musical experience, we must seek a parallel discussion, an experience which shows time devoid of space, and, with its help, redefine the musical tone's meaning.

4b. Of Tones and Hours, Melodies and Clocks

"...It is not easy, in thinking of time, to escape the image of the hour-glass." [Bergson (1911), p.18]

My central claim is that should we understand what constitutes the musical experience, we could comprehend time and duration's capability to 'expose' themselves. This discussion is parallel in many ways to Heidegger's discussion of the concept of time, using a phenomenological analysis of the clock in "Being and Time" (clauses 78-83) as well as his 1927 seminar (BPP) (clauses 19, 20). Heidegger does not ask what time is, but how it appears. According to Heidegger, 'understanding a clock' means asking what are its uses. [Heidegger (1992), p. 2]. He claims that if we clearly understand **what a clock is**, we could understand how time "receives an opportunity" to expose itself (pre-science). Heidegger points at two key uses of the clock: measuring time, and pointing to the now. In everyday life, the clock is used to calculate "how much time is left or passed". The clock is associated with "when" and "how much" and thus measures and counts time. But as we read what time it is, we take another action (one that **precedes** measuring time) – we position ourselves in the now, point at the now. Our action is so

primordial, obvious, and lacking practical use that we sometimes forget it. In this action, **the clock serves as a compass showing the now**. Much like the compass's pointing to the north, in relation to which we pinpoint the other directions, the clock and the current hour point at the now, using it we position "early" and "late", ourselves in the temporal duration.²¹

If we understand the clock **only** as its primordial use, as a compass of the now, with no need or option of measurement and space, we could parallel it to the musical experience as the experience of duration and not an experience having a certain duration. Whereas in musical discourse, distinguishing an experience of musical time from a musical experience in time is vague, there is no vagueness in distinguishing between the questions "what is the time?" and "how much time does it take to read a clock?": That is exactly the difference between the experience *of* time and an experience *in* time, the difference between playing tones and reading notes.

Reading the time in a clock is like reading tones in a melody, the meaning of the time "4:40" is like the meaning of the tone "C"; both do not denote quantity, do not point to an object or symbolize anything exceeding themselves. The musical tone and the clock hands and numerals act as different means to "observe" temporal duration through space. Their only meaning is their attempt to point, capture and preserve the now.²²

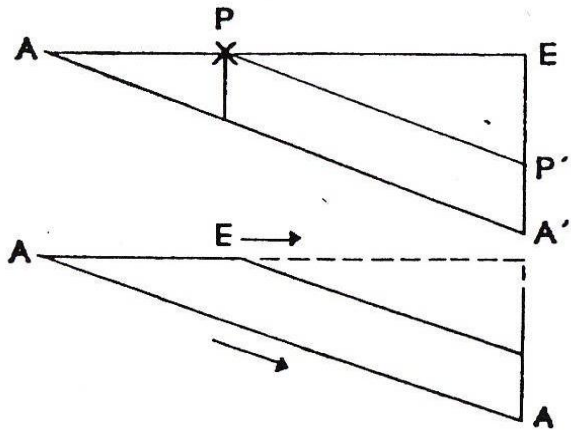
Therefore, I suggest considering the musical experience as an auditory clock (lacking measuring), and not as a temporal background containing a series of auditory objects (such as a musical piece, an object in time). Just as the clock shows temporal duration, the musical experience sounds it. This is a unique, neither verbal nor spatial, experience which exposes human temporality.

I find that looking at a clock and listening to a melody are both akin to searching for the now, attempting to confirm the self, the temporal existence, prior to being any figure, object or narrative. The musical experience and the clock expose our being "of duration". The futile attempt to grasp the musical tone as an object resembles the futile attempt to hold on to the now, or in other questions, to ask: "*What is the time?*"

Appendix

The model used by Husserl in his 1905 the lectures:

“The Running- Off Phenomena - The Diagram of Time” (clause 10, page 28)



- AE – The series of now points.
- AA' – Sinking into the past.
- EA' – Continuum of phases (Now-point with horizon of the past).
- E → – The series of nows perhaps filled with other objects.

References

1. Bergson, H.(1910), *Time and Free Will: An Essay on the Immediate Data of Consciousness*, (F.L. Pogson, M.A., Trans.). London: George Allen and Unwin .
2. Bergson, H. (1911), *Creative Evolution*, (Arthur Mitchell, Ph.D., Trans.). New York: Henry Holt and Company.
3. Heidegger, M. (1988), *The Basic Problems of Phenomenology*, (A. Hofstadter, Trans). Indiana University Press.
4. Heidegger, M. (1992), *The Concept of Time*. Blackwell Press.
5. Heidegger, M. (1996), *Being and Time*. (J.Standbaugh, Trans.) Albany, N.Y. State: University of New York Press.
6. Husserl, E. (1991), *The Lectures on the Consciousness of Internal Time from 1905*. Kluwer.
7. Levinas, E. (2000), *God, Death and Time*, (B. Bergo, Trans.). Stanford University Press.
8. Perce, G. (1997), *Species of Spaces and Other Pieces* (J. Sturrock, Trans.). New York: Penguin Classics.

Notes

Roy Oppenheim is a conductor and lecturer at Tel Aviv University, the Hebrew University and the Jerusalem Academy of Music and Dance on the philosophy of music, the philosophy of education, and aesthetics

¹ Not every musical experience is an aesthetic experience, but every musical experience is necessarily a temporal experience (consider a whistle as an example of a musical experience).

² "Tone" is to be defined for the purpose of this article as sound or noise perceived as part of a musical experience, however, not necessarily related to western tonal systems. (Notes are referred to as the symbols for tones in the musical notation system).

³ The distinction between noise and sound is that sound has a determined pitch (both, however, can be perceived as tones).

⁴ For additional examples, listen to "Money" by Pink Floyd or to musique concrète, e.g. Pierre Schaeffer's "Etude Aux Chemins De Fer" from "Cinq Etudes De Bruits". These examples show the transition between two modes of perception – noise as a characteristic of something and noise as musical tones.

⁵ Similarly, a man knocking on a table ". . . - - - . . ." is calling for help in Morse code, not creating music.

⁶ Listen to Steve Reich's "Clapping music" as an example – while the auditory subject matter is clapping hands, it must lose the characteristic of applause to be perceived as music. Conversely, no one would read any deeper significance into the sound of clapping as heard in the piece.

⁷ This act is identical to Husserl's phenomenological reduction – the demand to subtract reality, to transfer the object to imagination. Discussions of this nature usually characterize musical tone as an intentional auditory object, as presented by Husserl, Ingarden, Scruton, Borelli and others. They all, unlike me, assume that tones are the building blocks of music, thus leaving unanswered the questions of the musical motion and the space between the tones.

⁸ Listen to: John Cage's "4'33", Schnittke's 2nd Sonata for Violin and Piano.

⁹ As opposed to the first, one can cough and applaud in the second.

¹⁰ Listen to: Chopin's Prelude in E Minor.

¹¹ Beethoven, indeed, uses these inverted variations of the motto as a triplet, appearing later in the symphony, mostly in the third-and fourth movements (listen to the entry of the horns in the third movement).

¹² This raises difficulties regarding the musical tone's main trait, as opposed to noise, i.e. its transcendence, intentionality (Husserl, Ingarden, Scruton, Borelli and others). The characterization I suggest rejects that of Husserl's 1905 model (see appendix). The model cannot explain the musical rest as a tone, as it cannot address its transcendence, retention or protention. This is especially true in cases where the rest opens a piece – such as in Beethoven's Fifth symphony. These difficulties emphasize the problem in perceiving a tone as the building block of music and show that despite Husserl's correct intuitions, the construction of a visual/spatial model of time necessitates introducing basic concepts of space (probably Bergson's main criticism of the model – **the musical rest is duration transcendence without** retention or protention).

¹³ A previous version of this chapter was printed in "Music in Time," a journal published by the Jerusalem Academy of Music and Dance.

¹⁴ Paul Ricoeur's book "Time and Narrative" will refer to them as "physical time" (of the world) and "temporality" (of the subject), based on Heidegger's differentiation between "vulgar" (physical) time and temporality, as the primordial time in "Being and Time". Ricoeur, as Heidegger, will add a third form of time bridging between the two – historic and narrative time, parallel to Heidegger's world time. The principle difference between Ricoeur and Heidegger, as opposed to Bergson, is that they find temporality final, but this difference is irrelevant to our discussion.

¹⁵ Similarly to Husserl's 1905 model (see appendix). The model isn't presented in this article, as this it takes into account space and the sounds as building blocks of musical experience, in contradiction to my perception that musical duration takes precedence over tones from a phenomenological point of view. The transcendence is of duration itself; the establishment of tones is the result of an attempt to preserve and grasp (by way of observation) the experience and the musical duration.

¹⁶ The musical term "measure" (bar) refers to measurement. The question is: what is there to be measured?

¹⁷ It would be preferable for musicians to relate to the concept of musical form as Aristotle views the concept of form: as purpose, a final implementation, not reducing this concept to a visual form which, in addition to reducing the concept, misleads and deceives as to the nature of musical duration.

¹⁸ In the musical experience there is no possibility of summarizing, of acronyms, as in books or films. While "RIP" and "Rest in Peace" bear the same meaning, their temporal experience and their duration and even their acoustic interference are different. One cannot find acronyms in the Schenker method or in the harmonic analysis because they do not carry the obligation of the experience itself, its whole meaning which is its temporal being.

¹⁹ Husserl's 1905 model (see appendix) cannot describe the musical rest as a tone because it is a spatial model. The constant transcendence in musical experience comes from musical duration, not from the musical tone.

²⁰ Returning to the motto of Beethoven's Fifth Symphony: the image of the motto as "fate knocking on the door" not only fails to promote to understanding of the musical motif (intermixing different modes of perception – noises & tones) , but also renounces the role of the musical rest in the motto. (In what sense could a rest – a silence of a defined duration – exist when knocking on a door?)

²¹ Heidegger defines two modes of time similar to Bergson's, as presented in the beginning of this article:

- a) Vulgar (physical) time (measurable, spatial time)
- b) Temporality (duration)

²² Duration cannot be established as a series of now-moments.