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Thinking Through Music: Wittgenstein's Use of Musical Notation

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The importance of aesthetics in the development of Ludwig Wittgenstein's philosophy has become a topic of increasing interest for aestheticians and Wittgenstein scholars alike. Although aesthetics as a distinct topic received limited attention (concentrated as it is mostly in Wittgenstein's early writings and his middle-period lectures), and despite his remarks on aesthetic matters being scattered across his Nachlass, scholars argue that Wittgenstein's thinking about aesthetics, and in particular his frequent use of musical examples and analogies, was conducive in one sense or another both to his thinking about language and the mind, and to his philosophical method and writing. This paper contributes to this growing body of literature by exploring a collection of intriguing yet hitherto overlooked items in the *Nachlass*, in which Wittgenstein employs musical notation as a means by which to convey and ponder about philosophical ideas. We aim to show that this diverse collection of original musical fragments attests to two different ways of integration of thinking about, and through music with Wittgenstein's philosophical writing. Some of the fragments are used to give musical form to ideas that, while arising quite naturally in music, are not musical in their subject matter, while others are used to deploy considerations of musical composition and style, self-reflectively and self-critically, as metaphors for intellectual creativity.

Wittgenstein composed five musical fragments during his transitional middle period (1929–36). Only one of these, the *Leidenschaftlich* theme (Wittgenstein 1998, 19), has been made available to a general readership and has captured the imaginations of both scholars and musicians.² The other four, however, have thus far remained in the relative obscurity of Wittgenstein's *Nachlass*, concealed from scholarly view. Wittgenstein jotted down all five pieces in his pocket notebooks, which he regularly carried around with him so he could capture his thoughts. This interdisciplinary essay studies the complete set of these thought-provoking rarities critically for the first time. The nature and form of this sort of primary material calls for a methodological caveat. The pocket notebooks record initial inscription of ideas and thoughts as they occurred to Wittgenstein at different times. Some are developed more than others; some are interspersed with notes, additions and alterations jotted down on a later occasion. Oftentimes, the manuscript facsimile (Wittgenstein 2019) affords visual cues (such as writing on the margins or between the lines, the use of different pens, differentiation in the handwriting

or in applying pressure on the pen, etc.) for the structure of thought underlying this primary material. In rare cases, when Wittgenstein deemed his initial pronouncement of his ideas complete, he would copy an entire segment from the pocket notebooks to his other notebooks for further elaboration. In other cases, the primary thoughts and ideas would enter a period of gestation and would resurface in some form in later texts and contexts.

In studying Wittgenstein's musical fragments in their original form, we faced a threefold challenge. First and foremost, the need to approach them from a musically informed standpoint despite some notational anomalies and other idiosyncrasies. Having determined that these are original materials for the most part,³ our aim was to render transparent what Wittgenstein set himself to show by means of the musical progression. For this purpose, we produced transcriptions of these musical specimens directly from the manuscript facsimiles, which we give below in either a diplomatic version (where appropriate) or a normalized one.⁴ In addition to the transcriptions and analytic commentary on the notation, we also provide a musical analysis and evaluation of the material regarding Wittgenstein's use of pitch, rhythmic figures, repetition, voicing, and musical execution, as well as allusions to different styles of music.

Our second challenge was to determine Wittgenstein's philosophical point in introducing a musical fragment into the flow of the text in the pocket notebooks. We identify and explain the relevant philosophical context in which these pieces of musical notation are embedded and, in turn, relate the musical content to that context. This required the consideration of other contemporaneous texts, lectures, and diary entries. In the process we were encouraged by the fact that Wittgenstein often used a variety of graphic representations in his notebooks as thinking aids, and in particular, that around the time of composing this set of fragments he was on record for saying to his students that he had "a natural propensity to think about ideas which arise in music" (2016, 9:40).⁵ Finally, our third challenge was to evaluate the philosophical point in the context of the broader trajectory of Wittgenstein's philosophical development, considering the fact that his middle-period yielded some preliminary pronouncement and harbingers of ideas that fully bloomed only in his later philosophy (from *Philosophical Investigations* onwards). Our aim was to determine how the philosophical ideas, which were prompted or articulated by using musical notation at the time, fit in later developments in his philosophy.

Thus, due to the nature and characteristics of this primary material, and to the shifting grounds of Wittgenstein's rapid development during his middle-period, the best that we could hope for in this kind of study is a suggestive construction, perhaps not unlike the work of an archeologist. While the musical fragments may at most provide a fairly limited deepening of our understanding of the philosophical ideas themselves, they do suggest various ways in which thinking through music interlinked with, and was conducive to Wittgenstein's attempt at the time to work through certain ideas and broad themes, which would become staples of his later philosophy. In sections I–IV, we present, analyze, contextualize, and discuss the five musical fragments. In section V we offer a broad account, based on our findings, of Wittgenstein's varied deployment and philosophical use of his skill in notating music; we then present general conclusions in section VI.

I. THE LIGHTNING-LIKE SPEED OF THOUGHT

The context for the first musical passage (Figure 1) is an early occurrence of Wittgenstein's phrase "the 'lightning-like speed' of thought." Wittgenstein begins with the idea that "one could always speak with the expression of conviction even without the conviction; but we don't do this" (MS 156b: 20v–21r). Wittgenstein added a remark in brackets: "The thought came to me half asleep," and asks a straightforward question: "What is the lightning-like speed of thought?" The following musical fragment then occurs:



Figure 1: MS 156b: 21r (normalized transcription)⁷

In the present context, the concept of "the lightning-like speed of thought" suggests itself, according to Wittgenstein, when, in cases of sudden understanding, we have a tendency to mystify the word "thought" by assuming that there must be some extremely accelerated inner process that runs in the background of our mind, as if the whole thought and its future development must be contained in an instant (cf. Wittgenstein 2009, §§ 318–20). The justification for this conviction, when we suddenly understand how to continue, is closely related to Wittgenstein's discussion of following a rule (addressed in section II below). He makes the point that when we are prompted to discuss the speed of thought (e.g., when a thought flashes through our head or a solution to a problem becomes clear), there is a tendency

to uphold a separation between the thought qua inner process and its overt expression. Wittgenstein's musical passage gives concrete form to such a tendency, but also betokens a response: if a solution becomes immediately obvious, as some sort of peculiar, temporally abbreviated form in one's mind, how does one know that this is what the abbreviation refers to?

The musical passage presents the nucleus of an idea: a leap, whose complementary interval is then filled with a stepwise motion. This suggests an opening figure and its initial development, setting up a context for the establishment of a key, as well as providing the potential for further elaboration. Such a compositional technique is very typical of composers of the common practice era (approximately 1650 to 1900) and provides an important context for Wittgenstein's response. For instance, Beethoven begins his second piano sonata with a leap of a fourth (A–E), and the complementary interval E–A is then immediately filled with a stepwise motion (Figure 2).



Figure 2: Ludwig van Beethoven, Piano Sonata, Op. 2/2

As in Beethoven's opening, Wittgenstein thinks through an instance of this sort of "lightning-like" solution. If one understands the two-step musical statement, one has acquired not only a sense of the key, but also, most significantly, a musical idea, which can now be followed with confidence. Wittgenstein's intention, it seems, was that we recognize that the circumstances justifying the conviction that one knows how to continue with the musical idea have nothing to do with something peculiar occurring in one's mind; instead, one's conviction is justified by one's past training and performance—by what one is capable of doing.

It is noteworthy that Wittgenstein explicitly associated the problem of the lightning-like speed of thought with music in his discussion of Mozart's remark that when he composed, he could sometimes behold the whole work in his mind at once before writing it down (MS 116: 101f; MS 180: 7r; MS 124: 216f; MS 164: 160f; see Biesenbach 2014, 371–72; Hacker 1993, 161–64). Wittgenstein's point about Mozart is that the whole development of the piece

occurring to him in a flash is not indicative of the fact that he suddenly does something at lightning speed (e.g., inwardly hearing the whole composition in a single moment), but that he is suddenly able to go on and do something overtly—namely, writing down or playing the piece. For how would Mozart know that a piece of music (as read in a score or performed in real time) corresponded to what he purportedly heard in his mind?

In relation to this, it is important to note that Wittgenstein's anti-cognitivist stance undercuts traditional theories of composition, which postulate a primary stage in which a complete plan or sketch of a work presents itself in the composer's mind as a complete whole, which can then be realized and elaborated externally in the score. For Wittgenstein, it is a mistake to assume that understanding how to elaborate the music in the score is "an instantaneous grasping of something from which later we only draw consequences which already exist in an ideal sense before they are drawn" (1974, § 55; cf. 2009, § 188).

II. FOLLOWING A RULE

The context for the next musical example (Figure 3) is Wittgenstein's discussion of the difference between following a rule and merely acting in accordance with it. Wittgenstein introduces the musical notation as part of setting up the following question:

How are the words "follow the rule" used? Do they mean a process? [...] Is it in what I do that I have followed the rule, or is it that the following consists in our acting regularly in accordance with the rule? (MS 157a: 42r)

Wittgenstein felt obliged to reject the idea that rule-following is merely acting in accordance with a rule. We thus get an infinite regression of rule formulations, which culminates in the assertion of the paradox of rule-following (Wittgenstein 2009, § 201). In the immediate context of the musical passage in the manuscript, Wittgenstein also voices his reservations about the idea that understanding how to correctly follow the connection between signs, that is, "getting the system right," indicates "a [crossed out: hypothetical] inner process of 'understanding'" (MS 157a: 41r; cf. 2009, §§ 143–84).

It is important to note that Wittgenstein's reservation connects this passage with the context of "the lightning-like speed of thought" discussed above (see Figure 1). Wittgenstein's intention is to undercut the philosophical tendency to reify sudden understanding as an inner process. Indeed, it has seldom been noticed in the extant literature that Wittgenstein precedes

his celebrated rule-following discussion in *Philosophical Investigations* with a remark on music (2009, § 184), which highlights a case of "the lightning-like speed of thought."

In the pocket notebook manuscript, Wittgenstein points to notions of use and practice:

We are tempted to say: the sign is composite [*zusammengesetzt*] when its constitution yields its sense. But what is its sense? By "sense" we think of something that lies outside the sign. The use, as it occurs outside the sign. (MS 157a: 41r–41v)

He proceeds to critically consider this "temptation" (which is demarcated on the page by vertical dashes):

The sign of the command is composite when we can gather from its constitution what we have to do. (MS 157a: 41v)

He responds to this as follows:

What we have to do is, in a sense, a picture of the action, which we construe according to the composite sign. (MS 157a: 41v)

In light of this, the following question may arise: can such a "picture" be gathered from the constitution of the sign itself? If not, then in what sense could the sign be said to be composite? Wittgenstein introduces a graphic example (MS 157a: 41v):

$$\longrightarrow$$
 X \longrightarrow X X \longrightarrow

This is the beginning of a series. If this is a composite sign, then according to the idea under discussion, we should be able to gather from its constitution what we have to do ("a picture of the action"). However, it is evident that no clear picture emerges.

To determine the correct way to continue this series, "to get the system right," we need to ascertain, first, whether we can recognize one of the two constituents of the sign as an operator and the other as an argument, or whether both are operators. We must also determine what the double arrow on the right indicates. Is it a new operator or just multiple applications of the same operator (i.e., twice or many)? Or perhaps it tells us to keep on to infinity. The leftmost arrow is also ambiguous; it seems to tell us that order is important and that some previous reasoning has taken place, i.e., that "X" has been derived from previous arguments. However, even if were possible to gather the entirety of that information from the constitution of the sign itself, it would still be possible to follow the command in various ways, all of which are equally plausible. The second arrow could signify that, by the same reasoning, "X" implies

"XX," so that "X" can prefix anything and hence that we need to continue the series: XXX, XXXX, etc. Alternatively, the second arrow could imply that "X" can be "doubled," in which case we need to continue the series: XXXX, XXXXXXXX, etc. Of course, if the arrow has other, different, functions, then there will be many more ways in which the series might be continued. Here, "the use, as it occurs outside the sign," becomes crucial for knowing how to continue the series correctly; this is the point that Wittgenstein is making.

The musical passage shown in Figure 3 follows immediately after this notation. The unconventional marking of *Anfang* (beginning) suggests that Wittgenstein believed this fragment to be the start of a series, in line with his previous example.



Figure 3: MS 157a: 42r (normalized transcription)¹⁰

The notation presents the beginning of a musical theme in the key of A minor. We first have an upbeat, consisting of the pitches C and A. It leads to a long E, which opens the first measure. These three pitches are cast in a rhythmic pattern of I to create a motive, which establishes a reference to the pitch of A as the keynote and which serves as the basis for the continuation of the "series" to the next measure. The restatement of the upbeat at the end of the first measure leads to tension, which is created by the central pitch B and the leading tone G-sharp. Together with the following pitch, E, this group generates the dominant of A minor, setting up a tension to be resolved in the next step of the "series."

Understanding the assertion of the dominant (in A minor) in the series of pitches that begins the second measure is enabled by the establishment of the tonic beforehand (in the first measure). It is, moreover, required for experiencing the musical necessity of resolving the tension thereafter. Otherwise, it would be difficult for one to anticipate what may occur in the next step in the "series," which Wittgenstein does not provide in the notation. However, following the rule here presupposes knowledge of that which occurs outside the written signs, namely, "a practice" (cf. Wittgenstein 2009, § 202)—the culturally entrenched sense of an organized system of pitches around a central tone, which defines the tonal language of common practice era Western music. Understanding how one should continue hinges on our social and historical "way of living" (cf. Wittgenstein 2009, § 337; Wittgenstein 1996, 335–50).

Thus, Wittgenstein introduces the musical passage to earmark two ideas that were to become very important to him. The first of these is the difference between commands (as in the arrows example) and rules (as in the musical passage). The latter are inherently general, governing a multiplicity of occasions that may often be unlimited. Second, in the case of the musical "series", it is important that we may also speak of the way in which one develops "a feeling for the rules" (Wittgenstein 1966, 1:15), and that one can thereby reevaluate, negotiate, and even contest the proceedings in question. ¹¹ The rules of harmony may be constitutive of the game of composing tonal music, but, Wittgenstein contended, the practice remains patently open-ended and indeterminate. "Could any reason be given at all for why the theory of harmony [Harmonielehre] is the way it is?" Wittgenstein asked. "And, first and foremost, must such a reason be given? It is here and it is part of our entire life" (MS 157a, 24–26).

III. PERCEIVING AN ASPECT

The musical example shown in Figure 4 is the only one in the collection that is devoid of any immediate context in the manuscript. It is likely that the musical notation is earlier than the surrounding text, which Wittgenstein later copied, minus the music, in its entirety to MS 115 (107). Nonetheless, the musical passage appears as a carefully calculated exercise in the technique of producing a minor echo.



Figure 4: MS 157a: 17av (diplomatic transcription)

The first four measures introduce an arpeggiated melody in C major; this is then immediately echoed in the tonic minor. The melody consists of long values only (a dotted half note followed by a quarter note and a whole note). In the absence of any shorter notes, the melody appears to be sustained or lingering, which befits Wittgenstein's marking of Langgezogen ("long drawn-out"). The presentation of a melody in the major mode, which is immediately echoed in the minor mode, is characteristic of certain works by Mozart and Schubert, among others. Wittgenstein's familiarity with this compositional technique in Schubert is shown in a later remark in which he notes, in reference to the composer's music,

that "one and the same theme has a different character in the minor than in the major" (Wittgenstein 1998, 96).

We maintain that the philosophical context for Wittgenstein's musical experimentation en passant with the difference in character between the major and the minor modes is his career-long interest in aspect perception. In the most general terms, Wittgenstein renders aspects as spaces of possibilities that are there to be perceived. According to Floyd (2018), the initial impetus for Wittgenstein's career-long engagement with the theme of aspects was his push against Russell's notion of acquaintance, which draws us to the private realm of sense data. Wittgenstein attempted to return Russellian acquaintance to its everyday home, the sense in which we may be acquainted with a person. For this purpose, Wittgenstein developed early on what Floyd calls 'a master simile,' likening the notion of an 'aspect' in logic to the 'look' or 'character' of a face, a facial expression or feature. 12 Importantly, noticing an aspect hinges upon the activity of characterization, which "requires a choice, an effort to get the initial steps right, to find the right level and combination of charactery so as to succeed in illuminating something definite within the space of possibility that is there to be seen and developed" (Floyd 2018, 374). Wittgenstein most typically refers to musical experience in terms of characterizing physiognomy: "A [musical] theme, no less than a face, wears an expression" (Wittgenstein 1998, 59).

Beside the remark on Schubert, which is also integrated in his *Remarks on Colour*, Wittgenstein made various other comments concerning the difference in character between the major and minor modes in the context of his grammatical investigation of aspects (2009, 220 § 226; 1990, §§ 735, 739–41, 754; 1993, 90). For Wittgenstein, perceiving an object under an aspect is quite different from applying a concept to it; the aspect cannot be detached from the object as experienced, from the particular way in which we characterize it. The musical passage, complete with Wittgenstein's overt instruction to play and hear the unfolding shift in character as if it is sustained, demonstrates his idea of the role we play in effecting and sustaining the physiognomy of that which presents itself to us in perception by the particular way in which we attend to it.

Of the minor echo, Wittgenstein said that "it is quite wrong to speak generally of a character belonging to the minor" (1998, 96). Although we tend to say that the minor mode is "sad," he points out, "in Schubert the major often sounds sadder than the minor" (1998, 96). This is an aesthetic judgment; as Baz observes (2020), there is a kinship between aspects in

Wittgenstein and Kant's notion of beauty, in the sense that Wittgenstein's aspects are characterized, importantly, by the possibility that a fully competent perceiver may fail to observe what are called on to see in the object, which they otherwise see as well as anyone else. In this sense, perceiving aspects is subject to the will, according to Wittgenstein.

We can surely use the words "major" and "minor," as musicians and music theorists often do, "purely to describe a perceived structure" (Wittgenstein 2009, 220 § 226). In Wittgenstein's musical passage, that would be tantamount to noting the small change of pitch from E (in measures 1 and 3) to E-flat (in measures 5 and 7). We might even notice the potential of this minute change for further compositional elaboration. To Wittgenstein, such an attitude toward the minor echo is "purely acoustical": he describes it as "a description that applies when you can reproduce exactly what you've heard, leaving all other [non-acoustical] relations out of it" (1990, § 749). In such a limited sense, "major' and 'minor' are compared here with 'acute-angled' and 'right-angled', for instance" (§ 740). However, Wittgenstein's important point about aspect dawning is that it is holistic. As Baz argues (2020, 8), "the internal relation [is] between [the aspect's] elements, wherein the perceived significance of any element of the perceived significance of other elements, and of the perceived significance of the whole." What is to be discerned in this sort of open-ended texture is not an object, fact, or concept, but rather an expression or a gesture, a total field of significance (Floyd 2010).

Wittgenstein's recurrent and philosophically potent analogy between a musical theme and a face captures this idea: both wear an expression (cf. 1998, 59). Saying that "in Schubert the major often sounds sadder than the minor" is analogous to saying "I can think of this face (which gives an impression of timidity) as courageous too" (Wittgenstein 2009, § 536). Wittgenstein's conclusion is that "the reinterpretation of a facial expression can be compared to the reinterpretation of a chord in music, when we hear it as a modulation first into this, then into that, key" (Wittgenstein 2009, § 536). The analogy is significant in that it represents a point of convergence in Wittgenstein's philosophy between his bold suggestion (in the *Philosophical Investigations*) to compare understanding a sentence in language with understanding a theme in music (2009, § 527ff). It is also reflective of his sustained engagement with the important topic (in the philosophy of music) of musical expression as a constitutively indeterminate interaction (*Wechselwirkung*) between music and language, in the sense of complex correlated moves in interrelated language games that run the gamut of "the whole field of our language games" (Wittgenstein 1998, 59–60). Ultimately, when we consider "the

way music speaks," Wittgenstein says, we must remember that "it is not employed in the language game of informing" (1980, § 888). In giving voice to the sadness of a Schubert melody in a major key, we normally seek not to "inform the other person" but rather to come in contact with, or "find," the other (§ 874).

IV. PHILOSOPHIZING AMID CULTURAL DECLINE

In contrast to the musical examples considered thus far, the remaining two belong to an altogether different type. Rather than embodying or articulating an aspect of a philosophical idea, they represent a genuine attempt at personal expression, i.e., the composition of music; in this sense, they can be considered independently. Wittgenstein composed the *Leidenschaftlich* theme (Figures 5 and 6) in 1931; this was the first piece of music that he composed. He introduced it in the paragraph immediately follows it in the manuscript:

That must be the end of a theme which I cannot place [das ich nicht weiβ]. It occurred to me today as I was thinking about my work in philosophy & said to myself: "I destroy, I destroy—". (MS 154: 25r; 1998, 19)

The paragraph in the pocket notebook that precedes this musical fragment concerns the kinship between Brahms and Mendelssohn, where Wittgenstein points out that Brahms' composing exhibits more rigor and fewer flaws than Mendelssohn's (MS 154: 24v; 1998, 18; cf. 27, 29).

The context of the remarks before and after the musical fragment suggests the deeply personal connection in Wittgenstein's mind at the time between musical acculturation, the perils of modernity, and his self-doubt concerning the challenge of philosophizing amid cultural decline (Guter 2019b). In this context, Brahms epitomized for Wittgenstein an ideal of motivic through-composition that Wittgenstein felt he was essentially incapable of emulating in his philosophical writing. Mendelssohn, on the other hand, occupied for Wittgenstein the lesser, denigrated, category of mere "talent," and a purely reproductive mind (Wittgenstein 1998, 23, 27, 40, 43).

At the time of composing this fragment in its specific ideational context, Wittgenstein's philosophical state of mind was strongly under the influence of Oswald Spengler's *The Decline of the West*, which Wittgenstein read with great interest in May of 1930. Spengler's ideas about

the morphological study of cultures propelled (albeit by way of criticism) Wittgenstein's growing fascination with the possibility of philosophizing by means of making illuminating comparisons, and as Wittgenstein's lectures in Cambridge in the 1930s make evident, this exerted a particular influence on his conception of aesthetics. Furthermore, according to Von Wright (1982, 118), under the influence of Spengler, "Wittgenstein [...] thought that the problems with which he was struggling were somehow connected with 'the way people live,' that is, with features of our culture or civilization to which he and his pupils belonged. [...] His way of doing philosophy was not an attempt to tell us what philosophy, once and for all, is but expressed what for him, in the setting of the times, it had to be." In the passage to the time of civilization (as opposed to culture), Wittgenstein believed, we lose a community, an inheritance, a shared sense of life, and natural (as opposed to artificial) forms of interaction and expression. 16 He expressed his trepidations about philosophizing amid cultural decline quite openly to his students in Cambridge at the time. "Philosophy is reduced to a matter of skill," he said in his opening lecture for Michaelmas Term in 1930 (Wittgenstein 2016, 5:2). "This doesn't mean that progress has occurred; but that style of thinking has changed = nimbus of philosophy has been lost. [...] The moment a method is found, one way of expressing personality is lost. And there's no reason to be sorry for this. General tendency of this age is to take away possibilities of expression: which is characteristic of age without a culture."

Yet, according to Cavell (1996), far beyond dwelling in mere lamentation for all the cultural manifestations prescribed by the form of progress in a time without culture—compulsive over-structuring and obfuscation, and with it, a fragmentation into calculable objects that leaves no room for the expression of personality ("none for nimbus")—Wittgenstein's own philosophical course from that point onward to *Philosophical Investigations*, became a preoccupation with the very features of civilization that Spengler thought of as typical of cultural decline, carrying out his intention to combat the conditions of cultural decline as they manifest themselves in the misuses of language that characterize the errant thoughts of philosophers. Wittgenstein once referred to his relation to the past of philosophy by saying that his work replaces philosophy (Cavell 2022). This gives a poignant, indeed double-edged philosophical sense to Wittgenstein's exclamation "I destroy, I destroy, I destroy—" upon thinking about his work in philosophy.

The *Leidenschaftlich* theme is more substantial and musically elaborate than Wittgenstein's other musical fragments. Owing to its more expansive nature and the noticeable attempt to achieve a certain level of musical expression, Wittgenstein's handwritten notation

discloses a number of interesting anomalies and deficiencies (Figure 5). The most conspicuous anomaly concerns a metric-rhythmic error; Wittgenstein's choice to begin the first two measures with a dotted half note seems evidence of a mistake in the metric-rhythmic organization of the musical idea, which normally would not allow the fifth quarter note in each of these measures to be accented. It is impossible to synchronize the various elements of pitch, rhythm, and meter coherently following this notation, and one needs to alter the rhythmic value of the opening note as a corrective to this.



Figure 5: MS 154: 25r (diplomatic transcription)



Figure 6: MS 154: 25r (normalized transcription)¹⁷

In contrast to the musical examples discussed thus far, which for the most part lack expressive features, this fragment, taken as is, exhibits musical gestures akin to the opening of a nineteenth-century piano concerto, and does not give the impression of "the end of a theme," as Wittgenstein wrote. Quite the opposite: it begins with the sweeping gesture of an arpeggiated tonic chord, set in a typical pattern, which reaches the dominant only to give way to a dramatic rest at the end of the first measure. This gesture is repeated in the second measure and is intensified further by pitch changes. Taken together, the two opening measures set up the potential for motion and tension.

The third measure strikingly curtails this potential, breaking the continuity established by the first two measures. Although there is a reduction of tension in terms of pitch, Wittgenstein develops the rhythmic pattern but also indicates that it needs to be repeated four times; this results in an increase in rhythmic intensification but also in uncertainty about what is to be expected next. The disjointed third measure seems to contain materials in shorthand, laid out for a musical idea that would hypothetically come later within a broader compositional plan, perhaps indicated by Wittgenstein's marking "etc." at the end of the fragment (Figure 5).

The secondary units in the third measure are dense, suggesting the intensification and development of elements that have been introduced in the opening gesture. Taken as a sketch, rather than as a self-standing piece of notation, the third measure may reasonably indicate the potential for compositional expansion, with the implementation and reworking of the materials occurring at a later stage in the prospective piece.

The overall layout of this fragment seems to be original, but it clearly evokes the musical style of Robert Schumann; in particular, an affinity between the *Leidenschaftlich* theme and Schumann's Violin Sonata No. 1 (Op. 105) can be found, the latter of which is also in the key of A minor and which has a first movement entitled, unusually, *Mit leidenschaftlichem Ausdruck*. It is curious to note that what seems like some sort of grand opening gesture in the first two bars of the *Leidenschaftlich* theme evokes the end of the first movement of Schumann's sonata (Figure 7).



Figure 7: Robert Schumann, Violin Sonata No. 1 in A minor, Op. 105: end of first movement

Schumann's first movement is set in 6/8, which has a particular rhythmic division. Throughout the movement, the piano part mainly consists of sixteenth notes set in arpeggiated chords, the higher notes of which propel the melody. This intensifies toward the end of the movement: the arpeggiated chord that is reminiscent of the *Leidenschaftlich* theme comes in the fourth measure before the end. It is quite possible that the distinctive flow of the piano part in Schumann's piece reminded Wittgenstein of how pitches might be set within the rhythmic division of the 6/8 meter (with its two main units of dotted quarter notes). In Schumann's case, this is subdivided into sixteenth notes, lending the piano a distinct underlying flow to the violin part. Such a reminder could also account for the character of the incomplete third measure in Wittgenstein's fragment. It is noteworthy that in the fourth measure before the end of the first

movement of Schumann's sonata, the dotted quarter note is combined with the sixteenth notes, while the violin plays long notes; this renders the piano part more dominant in the overall texture and may be interpreted as holding back the tempo in preparation for the end of the movement. This may explain why this particular gesture has been recollected by Wittgenstein.

Although the rhythmic framework in Wittgenstein's notation is somewhat different from that in Schumann's piece, this is attributable to the metric-rhythmic misdirection that we noted above. It is clear that a meter of 6/8 would have made better musical sense in Wittgenstein's fragment. Wittgenstein also clearly changed the harmonic progression, thus creating an original melodic line, indeed an opening gesture, as argued above. We contend that what Wittgenstein confusingly referred to as "the end of a theme which I cannot place" was an impression of the end of the first movement from Schumann's violin sonata. Wittgenstein's marking of *Leidenschaftlich* was not accidental.

The evocation of Schumann, unwitting as it may have been, aligns with the highly specific context of the *Leidenschaftlich* theme. In a remark written on October 10, 1929, a year or so before composing the highly expressive *Leidenschaftlich* theme as part of the same train of thought in the pocket notebook, Wittgenstein voiced his doubts about whether his cultural ideals were new (contemporary) or whether they belonged to the world of Schumann (1998, 4). Considering Wittgenstein's Schumannesque fragment and the self-directed frustration at being out of sync as a thinker with current times, one cannot escape the double-edged poignancy of Wittgenstein's rumination "I destroy, I destroy, I destroy" on consideration of his work in philosophy. In a similar remark (this time relating to Mahler), Wittgenstein wrote: "You should not entertain such a comparison [of one's work with the great works of former times] at all. For if today's circumstances are really so different, from what they once were, that one cannot even compare your work with earlier works in respect of its *genre*, then you equally cannot compare its *value* with that of the other work. I myself am constantly making the mistake under discussion" (Wittgenstein 1998, 77). This loss of measure takes the form of an uncertainty over whether his work is conservative or radically progressive.

Let us now turn to the second musical passage in this subgroup (MS 156b: 33r, circa 1932–34), and note, first, that the written remarks enveloping the musical notation belong to the same context as the *Leidenschaftlich* theme. In the paragraph that precedes the passage, Wittgenstein muses self-reflectively about "philosophizing with a toothless mouth," seeing a likeness between himself and Karl Kraus, and wondering if this ought to be recognized as

"decay" (MS 156b: 32v). In the paragraph following the passage, he again raises his doubt concerning one's ability to recognize "the decline of the world." This is followed by a famous quotation from the prologue to Friedrich Schiller's *Wallenstein's Camp*: "Posterity weaves no garlands for the Mime." Wittgenstein's denigration of "the actor" who merely reproduces, in comparison to "the artist" who really creates, is once again self-directed (MS 156b: 33r–34v).

Of the five musical examples, Wittgenstein rewrote only this one. He crossed out an earlier version (Figure 8) and immediately went on to compose another that presumably better captured his intention (Figure 9). His reasons for abandoning the first version are very clear: there are two glaring errors in his notation. First, the time signature of 6/8 does not fit the rhythmic values used, and second, his choice of pitches does not correspond to the tonal direction of the A minor key. The F as a dotted half note in the second measure creates an emphasis that renders the C in the first measure meaningful. If the key is intended to be A minor, then the syntax of Wittgenstein's first version indicates a problem in the tonal orientation, a mishap that is only aggravated in the fourth measure, which ends on F. Wittgenstein must have noticed by then that he had gone wrong, so he crossed out the passage and started afresh.



Figure 8: MS 156b: 33r—crossed-out version (diplomatic transcription)

The new version shows Wittgenstein's attempt to improve both issues (Figure 9). First, Wittgenstein realizes that his basic rhythmic unit is a quarter note, so he again crosses out the time signature of 6/8 (carried over from the crossed-out version) and changes it to 6/4. Thus the first measure, which consists of three quarter notes, becomes an upbeat. Furthermore, he corrects the tonal orientation in the first measure by replacing the third upper-voice pitch, which is now D-sharp (instead of E). This leads clearly to the assertion of the long dominant tone, E, at the beginning of the second measure (instead of the weaker pitch F in the crossed-out version); this is complemented by the addition of a lower voice, which further reinforces the tonality of A minor. These changes lead more cogently to the assertion of the stable pitches A, C, and E in the fourth measure.



Figure 9: MS 156b: 33r—final version (diplomatic transcription)

As noted above, this musical example shares a contextual affinity with the *Leidenschaftlich* theme; it is somewhat surprising, then, that the two pieces also share a purely musical affinity. We again have a passage in A minor and at least an initial impetus to evoke the rhythmic framework of 6/8. This may reflect the original evocation of Schumann's first violin sonata, as suggested above. In terms of pitch intervals, the corrected final version demonstrates an affinity with the *Leidenschaftlich* theme, the melody of which is similarly structured in intervals of seconds and thirds. It is quite possible that this later fragment, as set in its highly specific ideational context in Wittgenstein's pocket notebook, is a musical afterthought; perhaps it was even meant to be introduced in a later movement of the imagined piece for which the sketch of the *Leidenschaftlich* theme serves as the opening gesture.

V. COMPOSING WITH PEN AND PAPER, AND BY HEARING WITHIN

Wittgenstein's musical notations provide a unique measure by which we might appraise his musical craftsmanship, both in and of itself and in relation to his philosophical ideation. His notational skill, rudimentary as it was, demonstrates no technical impediment in and of itself. The first three specimens, which we have presented and discussed above, indicate that he was able to think musically with pen and paper when it came to ideas that are not musical in themselves. In the first specimen, he elaborates on the notion of the lightning-like speed of thought by means of a two-step musical statement, which shows how acquiring a musical idea enables one to continue aptly and fluently. In the second, he explores the extent of the social or communal nature of rule-following by introducing the beginning of a musical theme; this demonstrates that the ability to anticipate its correct continuation rests on a culturally entrenched sense of an organized system of pitches around a central tone, which defines the tonal language of common practice era in Western music. In the third specimen, Wittgenstein pioneers a consideration of aspect change by means of introducing an arpeggiated melody in C major that is then immediately echoed in the tonic minor.

These musical fragments are conducive to Wittgenstein's thinking in quite a concrete way. The first two are in effect a distinctly new stage—concise in its initial musical

formation—in the train of thought that they occupy. The third stands out as a complete thought in itself, to be recalled and worked out in later discussion. Therein lies their musical effectiveness: they are musically solid, sophisticated, and virtually flawless from a technical point of view, and, most importantly, they are conducive to the development of philosophical ideas. In a sense, they serve a purpose akin to the famous ladder analogy in Wittgenstein's *Tractatus*: he has climbed up on them once he has forged ahead in his philosophical thinking, to the point of being able to discursively tap his original thought, which is conveyed by the music.

With regard to the other two musical examples discussed in this essay, the case is quite different. These fragments show a floundering attempt to organize an inherently musical idea in accordance with the notational conventions of Western music. The kind of musical craftsmanship that is required for this purpose is much more comprehensive; it requires not only the ability to play music and the skills of musical hearing, but also a knowledge of the rules of composition and an ability to follow them in accordance with the appropriate musical style. Although Wittgenstein displays some capacity to compose an original musical idea, the task exposes his limitations, which are shown very clearly in the notational errors and reorientations discussed in the previous section.

However, it was precisely this musical impediment that tormented Wittgenstein in the explicit context of reflecting on his ability as a philosophical writer. This is also manifest in other contemporaneous remarks in the *Nachlass*, as well as in copious diary entries from around that time. On April 28, 1930, not long before composing the *Leidenschaftlich* theme, Wittgenstein wrote in his diary (2009, 9–10):

I often think that the highest I wish to achieve would be to compose a melody. Or it mystifies me that in the desire for this, none ever occurred to me. But then I must tell myself that it's quite impossible that one will ever occur to me, because for that I am missing something essential or the essential. That is why I am thinking of it as such a high ideal because I could then in a way sum up my life; and set it down crystallized. And even if it were but a small, shabby crystal, yet a crystal.

Wittgenstein's crystal metaphor brings together the art of composing a melody with life itself, complete (in his case) with its intellectual desires, pangs of self-doubt, and a sense of failure. For him, summing up one's life, goals, and purpose, and seeing it as a unified whole, is a task

worthy of the skills and creativity of a composer of genius, a status that he was painfully aware could not be afforded to him (Guter 2019b).

In considering what composing a melody entails, this metaphor also frames what Wittgenstein thought he was lacking in his philosophical writing, namely a steady, regular, step-by-step progression, and a sense of cohesion and direction. Wittgenstein openly reflected on his inability to compose well, observing this fault in the *Tractatus* and in later failed attempts to write a philosophy book (2003, 30–31; 1998, 11). Setting his "movement of thought" in writing seems to have been a major obstacle: "[Being] in love with my sort of movement of thought in philosophy," he confessed, "does not mean [...] that I am in love with my style. That I am not" (2003, 100–101).

As noted above, Brahms epitomized for Wittgenstein the tormenting aesthetic ideal of motivic through-composition; he repeatedly cites "the strength of the musical thinking in Brahms" (1998, 27) and his "overwhelming skill" (29). Writing in his diary in 1930, Wittgenstein noted that Brahms is said to have composed with pen and paper (or at the piano), while Bruckner is said to have composed exclusively by inner hearing and imagining the full orchestra playing (2003, 76–77). For Wittgenstein, this difference "must bear a completely different character, & create a completely different sort of impression" (Wittgenstein 2003, 85). Brahms' extensive motivic development manifests a conscious, reflective, highly directed compositional process, whereas Bruckner's method of composing seems to be creative, amorphous, and perhaps unconscious. The point is that Wittgenstein was interested in what struck him as peculiar about Bruckner's way of composing, namely that Bruckner's control over the process of musical development seems to have been out of line with his free-spirited creativity.

A subsequent remark on the difference between Brahms and Bruckner suggests the real issue at hand: creativity. Wittgenstein believes that Brahms' themes are black and white, colorless, while Bruckner's are colorful. Brahms' orchestral colors are "trail markers," writes Wittgenstein (2003, 87); in a sense, they are external to the themes, they serve to mark structural divisions in order for the composer to keep a grip on the overall compositional process. Strikingly, Wittgenstein realized that Brahms' characteristic strength betrays a crucial weakness: firm control over the continuity of the process comes at the expense of a lack of authenticity. According to Wittgenstein, Brahms' colors come across as peculiar sound effects,

"while one senses Bruckner's sounds as the natural clothing of the bones of these themes" (2003, 115).

Wittgenstein came to an uneasy understanding that, for him, creative, free-spirited "hearing within" must be in opposition to the compositional discipline to which he aspired, and which consists of directing all one's efforts at crafting seamless continuity by means of the development of variation. Shortly after penning the diary entry on Brahms and Bruckner, Wittgenstein expressly entertained this very thought: after admitting that he was in love with his own movement of thought but not with his own style, he added: "Perhaps, just as some like to hear themselves talk, I like to hear myself write?" (2003, 109).

Thus, the broad context of presenting the *Leidenschaftlich* theme (and its companion musical fragment), which hinges on Wittgenstein's trepidation about the possibility of a highly personal interlacing of style and method in his way of philosophizing, reveals him as embodying the ancient dilemma concerning writing depicted in Plato's *Phaedrus* (McGuinness 2002, 197): how can hearing oneself write be expressed in written form (cf. Wittgenstein 2003, 35)? This dilemma seems to have occupied center stage in the intensely collaborative work that Wittgenstein initiated with Francis Skinner shortly after. As the editors of the recently published Wittgenstein–Skinner manuscripts attest, "it is as if, at one tonal level, his dictations and remarks to his amanuensis are aimed at being the musical score that he struggles to compose in his mind, and Skinner is writing the score, as Wittgenstein performs it" (Gibson and O'Mahony 2020, xxi). Wittgenstein faced a dauting task at the time: to forge a philosophical writing style that would be akin to hearing within—that is, to align the course of his written text with his own creative movement of thought.

VI. CONCLUSION

Our critical examination and interpretation of Wittgenstein's use of musical notation in its immediate and broader contexts enable us to make the following general points about the ideas that arose for him in relation to music on these rare occasions. These musical examples attest to two strata in the integration of musical thinking with his way of philosophizing: (a) giving musical form to ideas that, while arising quite naturally in music, are not musical in their subject matter; and (b) deploying considerations of musical composition and style, self-reflectively and self-critically, as metaphors for intellectual creativity.

The first stratum suggests how Wittgenstein's used musical notation to articulate certain aspects of his discussion of some of his most celebrated philosophical ideas (the push beyond the inner/outer picture, the problem of rule-following, and aspect perception). In the three musical fragments presented in Figures 1, 3, and 4, Wittgenstein seems self-assured and capable as he deploys his musical skill for this purpose. It is important to note that these musical examples generally concern a core issue in Wittgenstein's aesthetics (in his lectures from the 1930s and beyond), namely his understanding of aesthetic judgment in terms of an open-ended, nuanced, dynamically rich human conversation. Whether we consider the sudden understanding of a musical idea, the ability to proceed correctly in developing a musical idea, or the giving voice to a particular characterization of a musical idea, it behooves us, according to Wittgenstein, to account for the collaborative activity involved in making something surveyable – a way of representing that allows us to see things together and helps locate the reasons for our puzzlement in particular cases.

The second stratum demonstrates just how important broad aesthetic notions such as style and composition concerning the very possibility of philosophizing were to Wittgenstein. Here, the last two musical fragments discussed above (Figures 5-6, and 8-9) relate to an endeavor in which (the middle-period) Wittgenstein seems to have faltered and been unsure of himself. As David Stern has argued (2017), one cannot even begin to interpret Wittgenstein's remarks without taking a position on questions about texts and style, voice, and authorship. Thus, we maintain, it is important that Wittgenstein explicitly thought of his own style of philosophizing in terms of a musical style that needs to evolve. "My style is like a bad musical composition," he complained at one point (1998, 45).

This fact lends support to internalist readings of Wittgenstein, which seek out the amalgamation of style and method, rather than to externalist readings, which wish to exempt the notion of "style" as a placeholder for all those aspects of Wittgenstein's writing that are not germane to the expository project of explicitly stating his problems or laying out his arguments. Musical style concerns the execution of the musical work as a fusion of formal features (such as form, texture, harmony, melody, and rhythm) and cultural practices, which are conditioned by historical and social factors, embedded in performing resources and conventions and embodied in creative renditions. Given that Wittgenstein made such a robust analogy between writing music and writing philosophy, one cannot simply dismiss his style of philosophizing (in particular, the emergence of his mature interlocutory style) as being irrelevant to his

philosophical method. By his own admission, his philosophical method and his composing style had to be internally related. 18

REFERENCES

- Appelqvist, Hanne. 2023. Wittgenstein and Aesthetics. Cambridge: Cambridge University Press.
- Arbo, Alessandro. 2013. Entendre comme: Wittgenstein et l'esthétique musicale. Paris: Hermann.
- Baker, Nancy Kovaleff. 1977. "The Aesthetic Theories of Heinrich Christoph Koch." International Review of the Aesthetics and Sociology of Music 8, no. 2: 183–209.
- Baz, Avner. 2000. "What's the Point of Seeing Aspects?" *Philosophical Investigations* 23, no. 2: 97–121.
- Baz, Avner. 2020. Wittgenstein on Aspect Perception. Cambridge: Cambridge University Press.
- Biesenbach, Hans, ed. 2014. *Anspielungen und Zitate im Werk Ludwig Wittgensteins*, rev. ed. Sofia: St. Kliment Ohridski University Press.
- Cavell, Stanley. 1979. *The Claim of Reason: Wittgenstein, Skepticism, Morality, and Tragedy*. Oxford: Oxford University Press.
- Cavell, Stanley. 1996. "Declining Decline." In *The Cavell Reader*, edited by S. Mulhall, 321-352. Oxford: Blackwell.
- Cavell, Stanly. 2022. "A Scale of Eternity." In *Here and There: Sites of Philosophy*, edited by N. Bauer, A. Crary, and S. Laugier, 279-286. Cambridge, MA: Harvard University Press.
- Eggers, Katrin. 2014. *Ludwig Wittgenstein als Musikphilosoph*. Freiburg im Breisgau: Karl Alber.
- Floyd, Juliet. 2010. "On Being Surprised: Wittgenstein on Aspect-Perception, Logic, and Mathematics." In *Seeing Wittgenstein Anew*, edited by W. Day and V. Krebs, 314–37. New York, NY: Cambridge University Press.

- Floyd, Juliet. 2018. "Aspects of Aspects." In *The Cambridge Companion to Wittgenstein*, 2nd edition, edited by H. Sluga and D. Stern, 361–388. New York, NY: Cambridge University Press.
- Gibson, Arthur and O'Mahony, Niamh, eds. 2020. *Ludwig Wittgenstein: Dictating Philosophy. To Francis Skinner—The Wittgenstein-Skinner Manuscripts*. Cham: Springer.
- Guter, Eran. 2015. "The Good, the Bad and the Vacuous: Wittgenstein on Modern and Future Musics." *The Journal of Aesthetics and Art Criticism* 73, no. 4: 427–39.
- Guter, Eran. 2017. "Wittgenstein on Musical Depth and Our Knowledge of Humankind." In Wittgenstein on Aesthetic Understanding, edited by Garry L. Hagberg, 217–48. Basingstoke: Palgrave Macmillan.
- Guter, Eran. 2019a. "Measure for Measure: Wittgenstein's Critique of the Augustinian Picture of Music." In *Wittgenstein and the Limits of Language*, edited by Hanne Appelqvist, 245–69. London: Routledge.
- Guter, Eran. 2019b. "A Small, Shabby Crystal, Yet a Crystal': A Life of Music in Wittgenstein's *Denkbewegungen*." In *Wittgenstein's Denkbewegungen*. *Diaries 1930–1932/1936–1937: Interdisciplinary Perspectives*, edited by I. Somavilla, B. Sieradzka-Baziur, and C. Hamphries, 83–112. Innsbruck: StudienVerlag.
- Guter, Eran. 2020. "The Philosophical Significance of Wittgenstein's Experiments on Rhythm, Cambridge 1912–1913." *Estetika: The European Journal of Aesthetics* 57, no. 1: 28–43.
- Guter, Eran, and Inbal Guter. 2021. "Susanne Langer on Time and Music." *Estetika: The European Journal of Aesthetics* 58, no. 1: 35–56.
- Hacker, P. M. S. 1993. Wittgenstein: Meaning and Mind. Vol. 3 of An Analytical Commentary on The Philosophical Investigations. Part II: Exegesis §§243–427. Oxford: Blackwell.
- Hagberg, Garry. 2011. "Wittgenstein's Philosophical Investigations, Linguistic Meaning and Music." *Paragraph* 34: 388–405.
- Hagberg, Garry. 2017. "Wittgenstein, Music, and the Philosophy of Culture." In *Wittgenstein on Aesthetic Understanding*, edited by Garry L. Hagberg, 61–98. Basingstoke: Palgrave Macmillan.

- Heijerman, Eric. 2005. "Three Bars by Wittgenstein." Muzikologija 5: 393–95.
- Langer, Susanne K. 1953. Feeling and Form. London: Routledge and Kegan Paul.
- McGuinness, Brian. 2002. Approaches to Wittgenstein: Collected Papers, London: Routledge.
- Soulez, Antonia. 2012. Au fil du motif—autour de Wittgenstein et la musique. Paris: Delatour.
- Stern, David G. 2017. "Wittgenstein's Texts and Style." In *A Companion to Wittgenstein*, edited by Hans-Johann Glock and John Hyman, 41–56. Oxford: Wiley-Blackwell.
- Szabados, Béla. 2014. Wittgenstein as Philosophical Tone-Poet: Philosophy and Music in Dialogue. Amsterdam: Rodopi.
- Wittgenstein, Ludwig. 1966. Lectures and Conversations on Aesthetics, Psychology and Religious Belief. Berkeley, CA: University of California Press.
- Wittgenstein, Ludwig. 1974. *Philosophical Grammar*. Berkeley, CA: The University of California Press, 1974.
- Wittgenstein, Ludwig. 1980. *Remarks on the Philosophy of Psychology*, Vol. 1. Oxford: Blackwell.
- Wittgenstein, Ludwig. 1990. *Last Writings on the Philosophy of Psychology*, Vol. 1. Chicago, IL: The University of Chicago Press.
- Wittgenstein, Ludwig. 1993. *Last Writings on the Philosophy of Psychology*, Vol. 2. Oxford: Blackwell.
- Wittgenstein, Ludwig. 1996. *Remarks on the Foundations of Mathematics*, rev. ed. Cambridge, MA: The MIT Press.
- Wittgenstein, Ludwig. 1998. Culture and Value, rev. ed. Oxford: Blackwell, 1998.
- Wittgenstein, Ludwig. 2003. "Movements of Thought: Diaries, 1930–1932, 1936–1937." In *Public and Private Occasions*, edited by J. Klagge and A. Nordmann, 3–225. Lanham, MD: Rowman & Littlefield.
- Wittgenstein, Ludwig. 2009. *Philosophical Investigations*, rev. 4th ed. Oxford: Wiley-Blackwell.

Wittgenstein, Ludwig. 2016. Wittgenstein: Lectures, Cambridge 1930–1933, From the Notes of G. E. Moore. Cambridge: Cambridge University Press.

Wittgenstein, Ludwig. 2019. "Wittgenstein Source" (website). http://wittgensteinsource.org/.

Wright, Georg Henrik von. 1982. "Ludwig Wittgenstein in Relation to his Times." In Wittgenstein and his Times, edited by B. McGuinness. Chicago: The University of Chicago Press.

¹ For recent work on these various broad concerns, see Appelqvist (2023), Arbo (2013), Eggers (2014), Guter (2017; 2019a; 2020), Hagberg (2011; 2017), Soulez (2012), and Szabados (2014).

² In 1981 Walter Zimmermann composed an improvisation for piano on the *Leidenschaftlich* theme, entitled *Musik für Wittgenstein #1*. The "world premiere" of a realization of the original fragment for string quartet was given at Emmanuel College, Cambridge in 2003 (Heijerman 2005).

³ The only exception is the *Leidenschaflich* theme, which we discuss in section 4 below.

⁴ A diplomatic transcription represents exactly what occurs in the manuscript with no editorial intervention. Our normalized transcription rectifies omissions in Wittgenstein's handwritten notation (e.g., by introducing clefs, time signatures), and also addresses other notational anomalies or errors in the original.

⁵ References to Wittgenstein's 1930-1933 lectures are henceforth according to the original pagination of G. E. Moore's notes.

⁶ References to the *Nachlass* (Wittgenstein 2019) are henceforth according to G. H. von Wright's catalogue. All translations from the *Nachlass* are our own, unless otherwise indicated.

⁷ The normalized transcription includes the clef and the time signature, which are absent in Wittgenstein's handwritten notation. We interpret this piece as being notated in the treble clef due to its registral characteristics. The time signature follows from the durations indicated by Wittgenstein.

⁸ Wittgenstein later also brought the discussion of the lightning-like thought to bear on the idea of meaning-blindness (1980, § 173ff). This goes beyond the context of the musical passage in the pocket notebooks, so we shall not pursue it here.

⁹ For instance, the theories of Johann Georg Sulzer and Heinrich Koch in the eighteenth century (Baker 1977), and also Susanne Langer's idea of the "commanding form" (Langer 1953). See our (Guter and Guter 2021) discussion of Langer's position in light of Wittgenstein's critique.

 $^{^{10}}$ The normalized transcription includes the time signature, which is absent in Wittgenstein's handwritten notation.

¹¹ Wittgenstein's example is Brahms' rejection of Josef Joachim's suggestion for an alternative opening to his fourth symphony (Wittgenstein 2016, 9:30).

¹² In fact, noticing a face, and the similarity between faces and facial expressions, are Wittgenstein's most paradigmatic (and philosophically potent) examples for aspect perception, contrary to the common reference to his onetime duck-rabbit example. According to Baz (2000, 100), it is simply not typical of aspects that they "will come in pairs, and that most people will be able to see the two, and to flip back and forth between them at will. It is also not typical of aspects that they will be elicited from us as part of a psychological experiment or a philosophical illustration." See also Cavell 1979, 354ff.

¹³ The minute change of pitch creates a substantial leap in the circle of fifths. In a fully-fledged composition, such a leap would open up access to more distant keys, thereby enriching the harmonic span of the composition. ¹⁴ Presumably, Wittgenstein refers here to enharmonic modulation as in MS 146, 44 (12.12.1933). In tonal music, there are sonorities that can be reinterpreted enharmonically in a different key, and the listener can hear this reinterpretation when these chords resolve.

¹⁵ For a detailed discussion of interrelated language games in relation to musical expression, see Guter 2017.

¹⁶ See Wittgenstein's sketch for a forward to *Philosophical Remarks*, written around the same time (Wittgenstein 1998, 8-9). For an extensive discussion of Wittgenstein's critical consideration of the music of his time in line with Spengler, see Guter 2015.

¹⁷ Our normalized transcription consists in the musical standardization of Wittgenstein's original notation and the introduction of a meter, without intervention in the aforementioned anomaly. With respect to the time signature, it differs from the transcription prepared by Fabian Dahlström (Wittgenstein 1998, 101), reflecting our preference for not interpreting the metric-rhythmic error in Wittgenstein's notation. At any rate, Dahlström's suggestion for a time signature does not solve the problem.

¹⁸ We thank Radmila Schweitzer (Wittgenstein Initiative, Vienna) for drawing our attention to Wittgenstein's musical fragments. We are indebted to Ariane Jeβulat (UDK Berlin) for her invaluable assistance in transcribing Wittgenstein's unruly handwriting in the pocket notebooks, and to Alexander Wilfing (Austrian Academy of Science, Vienna) for helpful advice concerning translation. We are also grateful to Dean Lorenz (IBM Research, Haifa) for much needed mathematical clarification concerning Wittgenstein's arrows example.