Performing Beethoven’s musical dynamics

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ABSTRACT: Twentieth-century musicology frequently invoked the music of Beethoven to validate its work-centred, textualist and structuralist agenda. This article re-orientes Beethoven’s music towards the performance studies paradigm, which places the music making body and material contexts of performing at the centre of its disciplinary epistemology, by weaving a novel discursive context around the composer’s unusual dynamics markings. Through a historical case study of the premiere of his Op. 70 No. 2 piano trio, I explore the connections between the performance experience of Beethoven’s dynamics and some of the philosophical and cultural discourses emerging in Europe during the early nineteenth century on the body and the self, and thereby construct novel meanings for his expressive performance practice. By bringing together interdisciplinary historical scholarship, phenomenological reflection, analytical thought and practice-based enquiry, I open up a neglected area of research that lies at the intersection of the performance experience of musical dynamics, sensory history and somatic musical archeology.

KEY WORDS: Beethoven’s piano trio Op. 70 No.2, embodied cognition, Maine de Biran, musical dynamics, phenomenology, Schenker
Musicology, Beethoven and the performative turn

Few composers have been invoked as frequently as Ludwig van Beethoven (1770-1827) in the construction and preservation of the master narratives and dominant discourses of musicology during the twentieth century. In seeking validation for the disciplinary agenda, many scholars, including Hugo Riemann (1849-1919), Heinrich Schenker (1868-1935) and Theodor Adorno (1903-1969), have repeatedly resorted to the “Beethoven paradigm” (Goehr, 1992, p. 205), identifying in the composer’s practice a transformative historical moment that shifted not only what it means to compose, to perform and to listen to music, but also what “music” means. In the words of Lydia Goehr,

Ultimately, he changed, and was believed to have changed so many things having to do with how musicians thought about composition, performance, and reception, that the subsequent Beethoven mania, or the Beethoven Myth as it has come to be called, is justified, if such a thing is ever justified, on much more than aesthetical grounds alone. (Goehr, 1992, p. 208)

The web of ideas within which Beethoven’s music became entangled as a source of justification for them indeed represent philosophical attitudes and assumptions that encompass more than the aesthetic. They collectively represent the textualist and structuralist disciplinary ideology of twentieth-century musicology that promoted the ontological primacy of the musical work, the epistemological dominance of the musical text, the aesthetic veneration of musical autonomy, the analytical as well as experiential sovereignty of musical structure, and the creative supremacy and authority of the composer.¹ The belief at the foundation of this ideology that music is in essence a form of writing, and that musical meaning resides in the structural relationships encoded by the composer in the score, at the same time introduced deep hierarchies into the discipline, subordinating performance to the musical text, and the music making body to the analytical mind; it also legitimized “practices of the mind” (Cusick, 1994, p. 16) as the only valid path leading to scholarly knowledge about music.

The so-called “performative turn” (Auslander, 2006, p. 100)² that swept through music scholarship and ushered in a paradigm shift around the turn of the twenty-first century, challenged the priority of the musical text as the carrier of objective meaning, fixed and finalized by the composer. In acknowledging the crucial role of the act of performing in the generation of various kinds of meaning in all musical encounters, it has also led to the denunciation of the ideological rifts created by disciplinary hierarchies (e.g. Cook, 2013, pp. 8-32). Music performances, the music making body, the social and cultural contexts of performing, and embodied/performative ways of knowing music are now largely recognised and valued as bearers of musical meaning in their own right. The remarkable widening

¹ For discussions concerning the role of Beethoven’s music in the construction of some of these musicological notions, see, for example, Goehr (1992), Dahlhaus (1989), Burnham (1995), and Bonds (2014). Burnham argues, for instance, “that Schenker’s concept of fundamental line is closely linked to Beethoven’s music, and that the Fifth Symphony in particular helped shape that concept” (1995, p. 90).

² For a discussion of the different forms which the performative turn took in musicology, see Cook (2013, pp. 70-85).
scope of research that emerged from this performative turn released our scholarly attempts to understand musical phenomena in all their rich manifestations from the grip of the twentieth-century textualist and structuralist paradigm. Performance studies scholars approach musical phenomena with the understanding that anything in the environment of a musical event can potentially have an effect on the emergent meanings of the particular musical encounter, and that “There are no rules of irrelevance. Everything counts, until proved otherwise” (Cook, 2013b, p. 324). New discursive contexts in research that are aligned with this new disciplinary attitude reveal novel, imaginative and unforeseen meanings and significations in music from the western art music repertoire, which have been traditionally regarded as having fixed meanings deposited in their scores (e.g. LeGuin, 2006; Beghin, 2007; Montague, 2011). In some of my earlier research, I explored Beethoven’s music – in particular, the second movement of the Pathétique piano sonata Op. 13 (Doğantan-Dack, 2008), and the Arioso dolente from his piano sonata No. 31 Op. 110 (Doğantan-Dack, 2015) – in terms of the connections between the embodied experience of making music and the various layers of interpretative activity that go into the preparation of a performance. In this article, I continue re-orienting Beethoven’s music towards the performance studies paradigm and offering new ways of experiencing it – this time by discussing the composer’s unusual dynamic markings through a historical case study. In an article titled “Theorizing musical meaning” published in 2001, Nicholas Cook wrote that

music never is “alone”, that it is always received in a discursive context, and that it is through the interaction of music and interpreter, text and context, that meaning is constructed, as a result of which the meaning attributed to any given material trace will vary according to the circumstances of its reception. (Cook, 2001, p. 180)

Placing Beethoven’s music in a new discursive context, the origins of which go back to the early nineteenth century, I aim to shed new light on the composer’s expressive practice, constructing new meaning potentials for it, and highlighting what could have been an alternate route of development for the discipline of musicology.

While variation in perceived loudness has been recognized and employed as a powerful expressive tool in musical practices since ancient times (Kovacs, 2013; Jackson, 2005, p. 134), its indication in musical scores in the west is a relatively recent phenomenon. The period between the seventeenth and nineteenth centuries is particularly notable for the rise in the number and variety of dynamic markings in instrumental music, motivated in part by the developments in instrument design (Jackson, ibid.). Intensifying the sophisticated tonal adventures composers began to undertake, such dynamically enriched musical surfaces – involving both subtly varied and strongly contrasted levels of loudness – contributed significantly to the establishment of instrumental music as an art form with dramatic and narrative potential during the late eighteenth and early nineteenth centuries. In this connection, Beethoven’s music, brimming with instructions for loudness variations, represents the coming of age of musical dynamics as a remarkable means of musical and affective significance and communication.

The proliferation of expressive markings in Beethoven’s scores is well known, and has been noted particularly in the context of discussions concerning the changing status of musical notation from “unstandardized and incomplete” to “complete and adequate” (Goehr, 1992, p. 121 and p. 231) around the late eighteenth century, which came to buttress the emerging concept of “the musical work” (Goehr, 1992; Bujic, 1995). In an
article that explores the first-movement exposition of Beethoven’s piano sonata Op. 101, Amanda Stringer Sauer reminds us of the extent of this burgeoning and points out the “overwhelming number of musical instructions” within the first 34 bars, which include “six p markings, seven indications to either crescendo or diminuendo, a sforzando in measure 24”, as well as a plethora of complicated articulations (Sauer, 2007, ¶14). Similarly, David Huron’s comparative study of increasing and decreasing dynamics in Beethoven’s piano sonatas identifies 11,508 dynamic markings within the 102 movements of the 32 sonatas (Kalmus edition), with a mean density of a notated dynamic every two bars (Huron, 1990). Such notationally dense, richly diverse and frequently unconventional instructions for the use of differing loudness levels in performance, which have been characterised by various scholars as “curious” (Steinberg, 1994, p. 229), “awkward” (Cox, 2016, p. 1), “fly[ing] in the face of musical common sense” (Cassedy, 2010, p. 20), and even “perverse” (Kerman, 1967, p. 308), “makes Beethoven’s music especially suitable for a study of dynamic changes” (Huron, 1990, p. 397). Nevertheless, within the vast historical and analytical literature on his music, scholarly attention given to Beethoven’s dynamics has been limited. Most conspicuous is the complete absence of any research on the nature of the physical experience, and the attendant meanings, of performing Beethoven’s dynamics from the performer’s perspective – arguably a consequence of the absence of research on what it is like to make and render audible different kinds of musical dynamics in general.

In this article, I draw together interdisciplinary historical scholarship, phenomenological reflection, analytical thought and practice-based enquiry in order to open up this area of research that has been unduly neglected. Taking the performance experience of Beethoven’s unusual dynamic markings in the infrequently performed Piano Trio Op. 70 No. 2 in E flat major as my point of departure, I present a reading of them that embeds the composer’s dynamic ventures within some of the scientific and philosophical discourses on the body and the self emerging in Europe around 1800, emphasizing analogical connections between them. Using as a historical case study the premiere of the Op. 70 No. 2 trio, which took place during the Christmastide of 1808, I argue that this event can be understood to have happened at a significant historical juncture where notable musical, philosophical and cultural developments of the period converged. The early nineteenth-century discourses I draw from in order to shine a light on the significance of Beethoven’s practice within this historical moment are at odds with the twentieth-century musicological discourses that have constructed a textualist and structuralist understanding of his music; and they present a stark image of an alternative disciplinary path that could have been. The choice of Op. 70 No. 2 as a case study has been motivated not only by the lack of scholarly attention to this marvelous piece of music – hailed as “an exquisite study in chamber-music writing from beginning to end” (Abraham, 1979, p. 622), yet overshadowed by its popular companion trio Op. 70 No. 1 in D major famously known as “the Ghost”\(^5\) – but also by my intimate

\(^3\) Publicized as “Urtext” by the publisher. Kalmus edition of Beethoven’s piano sonatas no longer includes an editorial preface. The original 1898 edition, also advertised as “Urtext”, included a foreword and editorial notes by the pianist and pedagogue Carl Krebs (1857-1937).

\(^4\) In addition to the two studies already mentioned, the slim literature on Beethoven’s dynamics includes Dietz (1971), Luoma (1976), Sheer (1990; 1992; 1998) and Cox (2016).

\(^5\) The Op. 70 No. 2 trio has been eclipsed also in the context of the performance history of
knowledge of it acquired through many performances, which is essential for any investigation of what it is like to embody music in performance. The heart of practice-led or artistic research is constituted by such intimate knowledge, which is not merely analytical or cognitive, but also corporeal and affective: in the case of the Op. 70 No. 2 piano trio, it is rooted in the highly idiosyncratic opportunities the making of Beethoven’s dynamics offer for interacting with one’s instrument – that is, in the ways the composer connects the instrument and the performer.

Particularly since the rise of music performance studies in the twenty-first century, there has been growing scholarly interest in exploring the role of the body in musical experiences. In addition to the substantial research literature on performers’ body movements and gestures in the emergence of musical meaning from the perspective of listeners (e.g. Davidson, 1994, 2002, 2005; Godøy, 2010, 2017 2018), there is also a relatively small but steadily growing literature on the role of corporeal-performative thinking in performance making, which brings the lived experience of the music-making body to the fore as an epistemologically crucial basis for musical understanding (Bamberger, 1976; Schick, 1994; Cox, 2002; Fisher & Lochhead, 2002; Beghin, 2007; Doğantan-Dack, 2011, 2015; Montague, 2011, 2012; Bungert, 2015; Ötersjö, 2017). The recognition of the critical role the body plays in the making and reception of music, coupled with the recent emergence of so-called “sensory history”, which explores how a particular sense would have shaped the worldview and meaning attribution of contemporaries in a certain historical period and attempts to recover some of the immediacy of subjective experience from the past (e.g. Classen, 1993; Picker, 2000; Gowing, 2003; Smith, 2007; Woolgar, 2007; Ashbrook, 2015), also engendered a new kind of scholarly enquiry: a somatic musical archeology that involves the investigation of a sensory musical past in order to understand the historical, and historically contingent forms of being and fashioning music-performing and listening bodies (e.g. LeGuin, 2006; Erlman, 2010; Davies, 2014; Varwig, 2018). The narrative account I present with regard to the performance of Beethoven’s dynamic markings cuts across these areas of scholarship and draws from both historical and performative-phenomenological investigation: my reflections on my own sensory experiences, as well as on the experiences of my piano trio partners in making dynamics in performance, inform my reading of the cultural and sensory history behind the Op. 70 No. 2 trio.6

Although one needs to be wary of making assumptions about historical modes of sensing and having a body based on one modern researcher’s phenomenological observations – after all “cultural and historical specificity shapes all of the senses” (Smith, 2007, p. 847) – it is not unwarranted to imagine that there would be some noteworthy similarities between the non-conceptual, bodily felt experiences of an early-nineteenth- and an early-twenty-first-century violinist, for example, in creating one of Beethoven’s unusual dynamics. Even granting the changes in instrument design, venue acoustics, playing techniques and performance styles over the last two hundred years – as well as the

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6 I would like to thank my piano trio partners, the members of the Marmara Piano Trio, cellist Thomas Gregory and violinist Mona Kodama, for their insights concerning the performance of Beethoven’s unusual dynamics in the Op. 70 No. 2 piano trio.
personal idiosyncrasies of performers – dynamic nuances are still created through physical labour and experienced subjectively as more or less effortful. The structure of these embodied commonalities behind the delivery of different kinds of loudness variations in different historical periods constitute certain basic experiential invariances from the performer’s perspective – with regard to the gestures and the effort involved – that can be regarded as the foundation of a historical phenomenological enquiry. Consequently, one of my aims in this article is to propose new ways of thinking about the Beethovenian music-making body and mind based on these experiential invariances, rather than to attempt the near-impossible task of offering an authentic phenomenology of the early-nineteenth-century performing body.7

In preparation for the case study regarding the performance of the unusual dynamic markings in Beethoven’s Op. 70 No. 2 trio, the next section introduces some phenomenological characteristics of making musical dynamics and evaluates these in the context of the musical language of functional tonality. This historical background is followed by a narration of the premiere of the E-flat trio as an event that represents a significant moment in cultural history that aligns a new kind of expressive performance practice with the emerging anti-dualist philosophies of the period, and emphasizes the bodily and sensuous basis of the cultural work Beethoven’s dynamic nuances perform. In the concluding section, I return to twentieth-century musicological discourses, with particular emphasis on Schenker, and consider the implications of Beethoven’s remarkable dynamics for musical thought. One of the arguments to emerge from my discussion is that contrary to the work-centred, textualist and structuralist evaluation of his music, Beethoven in fact brings the performer, the music-making body, as well as the musical surface to the fore as epistemologically, aesthetically and culturally crucial foundations for musical encounters.

**Historical background: tonal expressive grammar and effort-shapes**

For both listeners and performers, the experience of musical dynamics involves a pronounced viscerality and immediacy. Although dynamics, pitch and timbre are totally intertwined in the production and reception of musical sounds – every pitch is necessarily embedded within a timbral and dynamic context – it is arguably loudness variations rather than other musical parameters that play the most elemental role in eliciting an instinctive response from listeners and performers alike, calling forth an immediate bodily engagement with music. For example, at a basic level, the metric accents in dance music are first and foremost felt with the body, which entrains to their repeating pattern. Contemporary accounts of the dramatic Mannheim roller employed by the famous eighteenth-century Mannheim orchestra attest to its bodily power – to the physical shock it generated in

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7 In this sense, I adopt the phenomenological procedure employed by Heidegger and Merleau-Ponty, who believed that a sustained and complete bracketing or eidetic reduction – demanded by the Husserlian method – of the so-called “natural attitude”, i.e. of the common-sense views and assumptions that we take for granted, is impossible, since we are always necessarily beings-in-the-world, embedded inextricably in our social-historical contexts. In other words, I assume that a total bracketing away of the modern subject when undertaking historical phenomenological enquiry is impossible. For further discussion of this point, see Luft (2012) and Cerbone (2012).
listeners, sweeping them off their feet. The dazzling effect of Franz Liszt’s playing was frequently associated with his overwhelming levels of *fortissimo*; and the palpable impact of musical dynamics becomes manifest in the magical “pin-drop” phenomenon that is sometimes experienced through a communal hush in a concert hall following an exquisitely performed *pianissimo*.

From the perspective of performers, there is an embodied sense in which the making of musical dynamics is experienced as *effort-shapes* that are related to but distinct from the pitch-timbre content of musical sounds. I have introduced the notion of effort-shape in a recent publication (Doğantan-Dack, 2018) to refer to a qualitative aspect of the lived temporality of the music-making body: the performer’s subjective experience of the felt quality of the bodily movements and gestures she makes in producing musical sounds. The spatio-temporal shape of these movements and gestures are thoroughly intertwined with and determined by the degree of effort the performer exerts during tactile interaction with the musical instrument. Put differently, effort-shape refers to the subjectively felt intensity curve of the self-initiated and sustained force driving a unit of performative action. The making of different kinds of musical dynamics – sustaining an already established level of loudness, for example, or changing it gradually as in *crescendo*/*decrescendo* or suddenly as in *subito piano* or *sforzando*, or articulating subtly or more crudely the metric accents – require different kinds of effort-shapes. When the causal connection between the force the performer exerts and the ensuing loudness level is broken, as in the case of the organ for example, the phenomenology of performing musical dynamics would be characterized by a different kind of embodied experience. In the case of acoustical instruments that support this causal relationship, the making of musical dynamics in performance manifests the music-making body’s constantly changing expenditure of force, and the continuous attunement between the effortful body and the material of the instrument that poses a counterforce. Consequently, in the creation of the dynamic topography of a musical

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8 Among the famed idiosyncrasies of the Mannheim orchestra were the “Mannheim rocket”, referring to a rapidly rising scalar or triadic melody, and the “Mannheim roller”, designating a crescendo that accompanies a rising melodic line involving tremolando figures. See, Carew (2016, pp. 169-170); Van Boer (2019, p. 80 & p. 219).

9 While the term “effort-shape” evokes the categories of “effort” and “shape” that are part of Laban movement analysis, I use it to refer to an indivisible experiential Gestalt rather than two distinct parameters of human movement. As noted by philosopher Maxine Sheets-Johnston, the qualitative structures of movement that have to do with effort, space and time “are separable only reflectively; experientially, they are all of a piece in the global qualitatively felt dynamic phenomenon of self-motion” (Sheets-Johnston, 2011, p. 124). In this article I am concerned with effort-shapes behind the delivery of dynamics in instrumental music, on instruments that allow the force exerted by the performer and the resulting level of loudness to be directly related.

10 Dynamic markings can also act as stimuli for the manipulation of expressive parameters other than loudness – for example, articulation, timing, vibrato, and so forth. See, for example, Poli (2010), Kim (2012), and Cox (2016). More research is needed to understand how and to what extent the making of dynamics prompts changes in other expressive parameters.

11 Recent research suggests that the listener’s perception of changes in loudness in music may be related to the perception of the force exerted by the performer, and that the listener’s experience of musical dynamics might consequently involve motor representation. See, Eitan & Granot (2006),
surface in performance, there is a simultaneously emerging bodily, kinaesthetic topography. Historically, as musical dynamics became more varied and numerous between the seventeenth and nineteenth centuries, so did the effort-shapes required to deliver them in performance: musical dynamics have always been, and continue to be, one of the fundamental factors in the construction of music performing bodies.

The lived experience of embodying musical dynamics in performance is typically characterized by *habitualness*, rooted in an expressive grammar that emerged over the course of several hundred years and came to regulate the musical surface in the western art music tradition. Especially from the eighteenth century onwards, theories of rhythm and accentuation, as well as instrumental pedagogies, evince attempts to standardize the *unnotated* variations in loudness for purposes of both expression and clarity in performances of tonal music. One of the characteristic features of performance pedagogy as established by eighteenth century authors, including Johann Joachim Quantz (1697-1773), Carl Philipp Emanuel Bach (1714-1788), Friedrich Wilhelm Marpurg (1718-1795) and Daniel Gottlob Türk (1750-1813), is the idea, summarised by Leopold Mozart (1719-1787) in his *A Treatise on the Fundamental Principles of Violin Playing* of 1756, that a performer has to know “how to change from piano to forte without directions and of one’s own accord, each at the right time” (Mozart, [1756]/1951, p. 217). Accordingly, such knowledge concerning the application of the correct degree of loudness and softness of tone in the absence of any notated instruction serves not only the portrayal of the expressive character of a piece of music\(^\text{12}\) but also the clarification of musical structures in performance\(^\text{13}\) – including metric hierarchies, rhythmic grouping, and tonal tension and resolution. Performative means that emerged historically in order to render tonal music intelligible to listeners include creating the feeling of duple or triple meter through regular dynamic variations, separating rhythmic units through differing loudness levels at their beginnings and ends, and using dynamic nuances to enhance the feeling of melodic and harmonic arrival and closure. The expectation that performers should employ unnotated loudness variations, including accentuation and more gradual modulations, in order to clarify the structural parameters of music, generated long-lasting consequences for music analytical thinking. One of the most significant consequences in this regard has been the subordination of performance expression to musical structures, and the transformation of stylistic habits into syntactic rules. Between the eighteenth and twentieth centuries, musical structure gradually acquired the status of an ontological musical essence that determines performance expression in a rule-bound manner. The execution of dissonances more loudly than consonances, which

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\(^{12}\) In his *School of Clavier Playing* of 1789, Türk identified “the suitable degree of loudness and softness of tone” as an indispensable feature of expressive playing, noting that “even with the most painstaking markings, it is not possible to specify every degree of loudness and softness of tone. The player must himself feel and learn to judge what degree of loudness and softness of tone is required by the character of the music to be expressed in any given case. The degree of loudness must exactly correspond to each of the sentiments being expressed.” (Türk, [1789]/1982, pp. 338-339).

\(^{13}\) I use the term “musical structure” to refer not to some immanent characteristic of the music that is encrypted in notation, but to formal qualities such as closure, repetition, beginning, stopping, etc. that pitch-based and rhythmic elements have the potential to suggest.
functions to enhance tonal tension – and which refers to a typically unnotated dynamic nuance – is one example for a general rule of performance that emerged during the eighteenth century. During the course of the nineteenth century, other systematic correlations between musical parameters and performance expression began to be established, most notably between melodic contour and dynamics such that a rising contour came to be associated with crescendo and a falling one with decrescendo. Significantly, authors also started to invoke the “naturalness” of such correlations.

While it might be the case that there is in fact nothing natural or necessary about the relationships established and endorsed since the eighteenth century between musical structures and performance parameters, and that they are merely stylistic traits – particular cultural-historical options and contingent models as Nicholas Cook has recently argued in the context of the practice of phrase-arching (Cook, 2013b, pp. 176-223) – it is, nevertheless, difficult to overstate the importance of deeply engrained expressive habits in shaping performances of tonal music. Over the course of the last four hundred years, tonal syntax appears to have effected its expressive grammar and accustomed us to expect certain dynamic nuances to accompany certain metric, rhythmic and tonal patterns, generating a feeling of familiarity and ease for their delivery in performance. For example, the correlation of the release of melodic and/or harmonic tension at the end of a musical phrase with a certain decrease in loudness is a deeply rooted feature of such an expressive grammar. Unless instructed to do otherwise, the great majority of performers would (instinctively) deliver a tonal phrase, such as the one shown in Example 1, through a decrease rather than an increase or continuation in loudness from the first chord to the second one in bar 10; the fact that the local closure of the phrase happens on a “weak” beat – which would standardly be identified as a “feminine ending” – would prompt the

14 “In general, it can be said that dissonances are played loudly and consonances softly” (C.P.E. Bach, [1753]/1949, p. 163). Quantz proposed a hierarchy of loudness in relation to the degree of dissonance: the harsher the dissonance, more forceful its delivery in performance (Quantz, [1752]/1966, pp. 255-256).

15 Among the authors who endorsed this connection are Hummel (1827), Kalkbrenner (1832), Czerny (1838-9), Lussy (1874), Riemann (1878, 1884, 1888). The establishment of such systematic connections between composed music and loudness variations in performance constitute the historical background for theories of expressive music performance proposed during the twentieth century, including Neil Todd’s theory of phrase arching, which related the dynamic as well as the temporal shaping of a phrase in performance to its presumably pre-composed musical structure (Todd, 1992).

16 Lussy referred to the “natural tendency of tones” and argued that since a rising melodic contour represents a force against the natural tendencies of the tones, the performer would have to fight this force by deploying more energy and thereby deliver the rising melody with an increased intensity or crescendo; a descending passage, on the other hand, yields to the natural attractions of the tones without effort and thus calls for a decrescendo. According to Lussy, “dynamic nuances are in such intimate relationship to the contexture of the phrase that it is impossible to separate them. For each phrase only a [certain level of] intensity is suitable and no other” (Lussy, 1874, p. 138). Translation from the French original by the author.

17 “Phrase arching” refers to the practice of “getting faster and louder as you play into a phrase and slower and softer as you come out of it” (Cook 2013b: 5).
performer to regard a certain decrescendo towards the final B flat as the expressively appropriate response.

Example 1. St Anthony Chorale, attributed to Haydn (ca. 1780). Excerpt from Ludwig Stark’s arrangement for solo piano of Johannes Brahms’ Variations on a Theme by Joseph Haydn for orchestra Op. 56a (Berlin: N. Simrock, 1881)

Many of the dynamic variations that performers routinely introduce in playing tonal music thus do not need to be notated; they are implicitly assumed as part of a long tradition of music making. The repeated experience of corroboration between structure and expression generates ingrained associative habits, and these stable and constant patterns form the bedrock of the situated knowledge – drawn from stylistic familiarity with a particular tonal idiom – that performers employ in creating artistic performances.

One of the most profound implications of such associative habits generated through the regular corroboration between loudness variations and structural parameters – connecting expressive grammar to tonal syntax – concerns the functioning of the performing body, as they bring about reliable kinaesthetic regularities and expectations to the making of dynamic nuances in performance. As in other motor habits and skilled behaviour, once such kinaesthetic regularities are established, phenomenologically the body becomes largely transparent or an “absent presence” (Leder, 1990, p. 13), receding to a lower level of awareness of its own movements and gestures in performing them. There is an “experiential disappearance [of the body] that accompanies the incorporation of skills” (ibid., p. 31), and the performance – of dynamics in this case – becomes more or less automatic: to borrow late nineteenth-century psychologist William James’ words, habitual gestures proceed “through the effortless custody of automatism” (James, 1890, p. 122). They can even become “inauthentic” or “un-owned” [uneigentlich] (Heidegger, 1962, p. 222), to use a term from the twentieth-century philosopher Martin Heidegger (1889-1976), similar to many everyday skilled activities relying on tacit knowledge such as driving a car or climbing stairs, which are performed stereotypically. Habitual effort-shapes behind the creation of a dynamic musical surface in performance thus cease to occupy the foreground of the performer’s conscious activity. This does not mean, however, that the skilled musical performer does not continue to closely monitor the sounds of the dynamic shapes she creates, or to feel the presence of her performing body in the act of making musical...
dynamics as part of well established expressive habits and expectations. It just means that she does not need to consciously or closely attend to the proprioceptive and kinaesthetic sensations accompanying the making of habitual movements (Colombetti, 2017, p. 118). The habitualness of the body movements in rendering musical dynamics also does not prevent the performer from making the artistic experience a unique event, or from entering a state of flow by getting fully absorbed in it – whereby “the body is not forgotten but experienced as actively immersed in a demanding but not overpowering pursuit” (ibid., p.131). Nevertheless, the bodily movements and gestures driving such habitually-created dynamic nuances still emerge from a lower-level conscious attention – they have become part of the expert performing body that shapes music expressively, and the performer can let her body do the work, as it were.

It is in the context of this relationship between the music-making body and the typically unnotated musical dynamics, where the latter habituates the former to certain kinaesthetic and gestural experiences or effort-shapes, that the extraordinary dynamics Beethoven composed begin to display their musical and cultural significance. By rendering the familiar strange, not only aurally but physically in performance, they also open up new ways of feeling the music, experiencing the performing body and being with the musical instrument. They invite performers and listeners alike to a new expressive realm, and, as I argue in the next section, also introduce a fresh perspective on musical agency and embodied selfhood.

**An evening at Krugerstrasse No. 1074, Vienna, Christmastide 1808**

During the Christmastide of 1808, as Beethoven was giving, with the violinist Ignaz Schuppanzigh (1776-1830) and cellist Joseph Linke (1773-1837), the premiere of his newly completed piano trio in E flat major at his close friend Countess Anna Maria von Erdödy’s (1779-1837) apartment in Krugerstrasse No. 1074 in Vienna, a quiet epistemological transformation was underway in Europe. In 1807, in his winning entry to a competition of philosophy organized by the Berlin Academy – in an essay titled “De l’aperception immediate” – the French philosopher Marie-François-Pierre Gonthier Maine de Biran (1766-1824) challenged the deeply-rooted Cartesian idea that the existence of one’s body, unlike the existence of one’s thinking mind, can be the subject of skeptical doubt (Maine de Biran, [1807]/2005). Drawing for the first time a distinction between one’s own body known objectively, as others would know it through the senses of sight and surface touch, and known through what he termed “le sense intime” or a subjectively experienced feeling of effort, movement and resistance, Maine de Biran argued that the latter constituted the irreducible basis of the self or the “I”, with all other knowledge rising upon this foundational embodied subjectivity: “I am” not because “I think”, but because “I can”. The body

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18 In his collected letters, the German composer and music critic Johannes Friedrich Reichardt (1752-1814) provided an enthusiastic account of a performance of the Op. 70 trios under the date “31 December 1808”, which may or may not be the actual date on which the premiere took place. See, Reichardt (1810, p. 285). Angus Watson gives 11 December 1808 as a possible date for the premiere of Op. 70 No. 2 without citing a source for this information (Watson, 2010, p. 168). The Beethoven biographer Alexander W. Thayer (1817-1897) specified the date of the first performance of the Op. 70 trios more generally as “the Christmastide of 1808”, which is the date I have adopted in this article (Forbes, ed., 1967, p. 451). Other information about the premier is from Keller (2011, p. 57).
experience in my attempt to move or do something is not objective in the sense of being physically external to me as an extended object; it is rather a lived body constituted through the inner sense of movement, effort, and resistance.

Even though Antonio Damasio typically gets most of the credit in contemporary neuroscience for having revealed Descartes’ error in assigning the body a secondary and derivative role in the experience of the “I” as well as in knowledge acquisition (Damasio, 1994, 1999, 2003); and while the twentieth-century French philosopher Maurice Merleau-Ponty (1908-1961) receives frequent mention for having emphasized the primacy of corporeality in perception, consciousness and knowing the world (Merleau-Ponty, 1945), it was in fact Maine de Biran who put forward the first philosophically rigorous challenge to the Cartesian cogito, and presaged the notion of the “lived body” that would become one of the foundational notions of phenomenology in the twentieth century. In a later publication—in his Essai sur les fondements de la psychologie of 1812—Maine de Biran wrote that the reality of the body “is just as certain as that of our own existence from which it is inseparable” (Maine de Biran, [1812]/2001, p. 142, quoted in Sinclair, 2011, p. 185).

In their introduction to a recent special issue of German Life & Letters on “Embodied Cognition around 1800”, Engler-Coldren, Lore Knapp and Charlotte Lee write that “The period around 1800 offers sophisticated, diverse accounts of how the body shapes thought and knowledge” and that the ways the authors debated the mind-body problem in the early nineteenth century “bear marked affinities with the key premises of modern cognitive science” (Engler-Coldren et al., 2017, p. 413 & p. 417). Stirrings of anti-dualist epistemological tendencies that hinted at the crucial role of the corporeal within the mental can already be identified during the eighteenth century, particularly in discussions concerning the sense of touch—for example, in the writings of the English philosopher David Hartley (1705-1757), the French philosophers Étienne Bonnot de Condillac (1714-1780) and Denis Diderot (1713-1784), and the German philosopher Johann Gottfried Herder (1744-1803) (Immerwahr, 1978; Riskin, 2002; Wade, 2005; Paterson, 2006, 2007; Waldow & DeSouza, 2017). While these discussions typically treated touch as an exteroceptive, that is outwardly-oriented sense functioning primarily at the cutaneous level, the early nineteenth-century witnessed a decisive shift of emphasis towards the interoceptive or inwardly-oriented somatic and muscular sensations in conceptualizations of the sense of touch.19 This venture towards the incorporation of diffuse and often vague feelings deep inside the body into the tactile sense, gradually supported by empirical evidence from the sensory physiology of the period (Young, 1990; Smith, 2011), had profound epistemological

19 The identification of these somatic sensations as “kinaesthetic”, that is relating to the awareness of the movement of parts of the body through muscular effort, and “propiroceptive”, that is relating to the awareness of body’s position felt as muscular tension, happened during the late nineteenth and early twentieth centuries. The terms “kinaesthesia” and “proprioception” were introduced respectively by the English physiologists and neurologists Henry Charlton Bastian (1837-1915) in 1888, and Charles Scott Sherrington in 1906. An earlier version of the term “kinaesthesia” appears in 1794 as “cenesthesia” in a dissertation written by Christian Friedrich Hübner, who defined it in dualistic terms as the faculty “by means of which the soul is informed of the state of its body, which occurs by mean of the nerves generally distributed throughout the body” (quoted in Starobinski, 1989, p. 353).
consequences: it substantiated not only the idea of the irreducible integration of mind and body, but also the irreducibility of our experience of our own tactile and motor activities. With early contributions from the German philosophers Johann Gottlieb Fichte (1762-1814) and Friedrich Wilhelm Schelling (1775-1854), French philosophers Pierre Jean Cabanis (1757-1808) and Antoine Destutt de Tracy (1754-1836), and the English physician Erasmus Darwin (1731-1802), the topic of the muscular sense [Muskelsinn, Muskelgefühl, sens musculaire] generated a very large body of literature during the course of the nineteenth century.

One of the most significant ideas that Maine de Biran put forward in this context was that the awakening of the individual will is related to the muscle sense, and that the foundations of the self are thereby located in the body, or more specifically in the feeling of resistance the world presents to our movements, which the mind encounters as volition. This hypothesis generated much debate throughout the century, propounded in essays by the German physiologists Johann Georg Steinbuch (1770-1818) and Karl Friedrich Burdach (1776-1847), the Scottish philosophers Thomas Brown (1778-1820) and Alexander Bain (1786-1903), as well as the English philosopher and biologist Herbert Spencer, among others. Spencer, in his The Principles of Psychology (1855) wrote that “The perception of resistance is fundamental … as being the perception into which all other perceptions are interpretable, while itself interpretable into none” (Spencer, 1855, p. 277). The awareness of personal physical effort, regarded as the epistemological foundation of the self-conscious self, was conceptualized by these authors in terms of the interaction between a force originating from within one’s body, or musculature to be precise, and a force from outside – an encounter perceived as resistance, as well as otherness. The centrality of the experience of resistance for the lived body and the human subject was later recognized and scrutinized in detail by twentieth-century German phenomenologists Edmund Husserl (1859-1938), Max Scheler (1874-1928) and Heidegger. The unique insight Maine de Biran contributed to this literature, which proved “extremely influential” as the nineteenth-century century progressed (Sinclair, 2011, p. 188), identified the source of both the perception of the world and sense of self in the subjective feeling of muscular effort and resistance: the distinctive “felt” phenomenology of corporeality he articulated would provide the crucial spark for the gradual transformation of western epistemological thought. Indeed, a century later, the French philosopher Henri-Louis Bergson (1859-1941) would refer to Maine de Biran as the greatest metaphysician France produced since Descartes and Malebranche (Meacham & Spadola, 2016, p. 2). While it is unlikely that Beethoven would have known Maine de Biran’s writings, there is a compelling analogy between the French philosopher’s ideas concerning the corporeal experience of effort and resistance, and the lived experience of the

20 According to Husserl’s analysis of resistance, our bodily awareness of “I can” always appears with an attendant feeling of resistance, that is an experience of effort in encountering a counterforce. In the words of Scheler, “Reality is given in the experience of resistance. The experience of resistance conditions every sensation and possible drive impulse” (quoted in Davis, 2017, p. 168).

21 As an avid reader he might have encountered some of the anti-dualist ideas being debated at the time. For a discussion of contemporary literary and philosophical influences on Beethoven, see Kinderman (2009).
During the early nineteenth century, accompanying the enquiries on the subjective, inner feel of movement, effort and touch was a growing interest in the outward signs of inner life. As an era that witnessed “a concerted effort to map and codify bodily experience” (Goss, 2013, p. 5), this period saw flourishing activity in capturing the gestural and postural bodily manifestations of inner experiences, most notably emotions, through visual images. During the course of the century, human bodies came to be regarded as “theaters of motion” (Rabinbach, 1992, p. 97). The best known example in this context is the Scottish anatomist and artist Charles Bell’s *Essays on the Anatomy of Expression in Painting* of 1806 that included his own memorable drawings and discussed the function of muscular variations behind bodily expression. Roger Smith has recently argued that “Self-consciousness about bodily posture and movement, was ... not always present: it has a history” (Smith 2011, p. 220). The late-eighteenth and early-nineteenth centuries mark the beginning of this history, as well as the dawn of a systematic recognition of the role of the active, effortful body in shaping the self and subjectivity in cultural, scientific and philosophical discourses. Although, as Bettina Varwig recently argued (Varwig, 2018), the body was very much part of seventeenth- and eighteenth-century discourses on the mind, reason, emotion and thereby music making, this was not yet a body understood as the basis for the individuated, subjective identity of the self (Koschorke, 2008). The period around 1800 ushered in a new conceptualization of the human body and the mind, their anti-dualistic existential core residing in the muscular sense, as well as in the accompanying feelings of effort, movement and resistance. It is this new understanding of bodyliness that prompts a re-thinking of the embodiment of music during this period.

In December 1808, as violinist Schuppanzigh prepared the Op. 70 No. 2 trio for its premiere, he would not have been entirely astounded that Beethoven had written an unusual dynamic marking in bars 6-8 of the slow introduction, *Poco sostenuto*, of the first movement: a crescendo-subito piano, in this case on a descending melodic line (Example 2). He would have encountered this dynamic gesture already in the Op. 18 and Op. 59 string quartets, which he had premiered with his ensemble in 1800 and February 1807 respectively (Jones, 2016); and by 1808 the crescendo-subito piano marking would have become a recognizably Beethovenian expressive indication on notation (Cox, 2016, pp. 43-46).
Example 2. Beethoven, Piano Trio Op. 70 No. 2, mvt. i, bars 1-11. Henle edition, 1967.

It is not unwarranted to assume that during the premiere of the Op. 70 No. 2 trio Schuppanzigh and Linke would have attempted to create all the dynamic nuances provided in their parts. It is well documented that Beethoven was particularly fastidious about the careful observation of his expressive markings in performance: according to his pupil and personal assistant Ferdinand Ries (1784-1838), when he

left out something in a passage, a note or a skip, which in many cases he wishes to have specially emphasized, or struck a wrong key ... [Beethoven] seldom said anything; yet when I was at fault with regard to the expression, the crescendo or matters of that kind, to the character of the piece, he would grow angry. (Riess, in Sonneck, 1967, p. 52)

Similarly, in a letter addressed to actor and opera singer Friedrich Sebastian Mayer (1773-1835) in April 1806, the composer complained about the lack of attention to his dynamic markings during the rehearsals of his opera Leonore and wrote in exasperation that “all desire to compose anything more ceases completely if I have to hear my work performed like that!” (in Anderson, 1961, letter no. 130). Beethoven’s presence as the pianist during the premiere of Op. 70 No. 2 would have further prompted Linke and Schuppanzigh, the latter renowned for adhering closely to the score (Hellsberg, 1979), to pay particular attention to notated expressive details.

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25 The first performance would have been based on unpublished parts, as the trio was published by Breitkopf & Härtel in October 1809. See, Charlton (1989, p. 62).
26 As Cox (2016) has shown through his analyses of recorded performances of Beethoven’s Op. 130, some performers choose to ignore the dynamic markings in a musical score. And there is certainly no law against ignoring notated expressive indications. My discussion of selected dynamic markings from Beethoven’s Op. 70 No. 2 piano trio assumes performers who attempt to deliver them.
Even though Schuppanzigh and Linke would have had delivered it in previous performance contexts, the *crescendo-subito piano* marking, which appears various times in the first movement (for example, bars 38-39 and 147-148; see Example 3 and Example 4 respectively), would still have interrupted the habitualness and flow of action that they would typically experience as skilled performers in delivering musical phrases. The familiarity of this dynamic gesture *on notation* would not have hindered the emergence of its bodily unusualness in performance as the violinist and cellist played against the dynamic inclination of a descending melodic line and the weight of the arrival on the downbeat of bar 8, shown in Example 2; delivering this dynamic gesture would still have felt unfamiliar because the overwhelming majority of dynamics musicians would have created in making music around the first decade of the nineteenth century would have required familiar and habitual gestures, and the habitual effort-shapes associated with these gestures. There is the possibility that the performance style around 1808 would have been more “rhetorical” than “structural”, involving the creation of a dynamically intricate and rich musical surface that places expressive emphasis on those moments that the performer deems emotionally important or intense – a style perhaps more like what we hear on recordings prior to the First World War than the modernist ones with “cleaner” and “simpler” surfaces that we are accustomed to (Cook, 2013b, 2014). Even if this were the case, Beethoven’s *crescendo-subito piano* gestures would not have been an established and widely shared part of such a “rhetorical” performance style: working against the expected manner of rendering *structural* relationships clear, these dynamics gestures would have thrown the moment of their delivery into experiential relief for the performer.

*Example 3.* Beethoven, Piano Trio Op. 70 No. 2, mvt. i, bars 36-41. Henle edition, 1967.
Example 4. Beethoven, Piano Trio Op. 70 No. 2, mvt. i, bars 140-150. Henle edition, 1967.

The *crescendo-subito piano* markings in these examples prompt gestures that complicate the epistemic security music-making bodies normally have with regard to the relationship between dynamic nuance and pitch-based structures; they can also be understood to interrogate the “naturalness” of the relationship between structure and expression, as well as the “naturalness” of the effort-shapes and gestures involved in music making. In *Parallels and Paradoxes: Explorations in Music and Society*, which he co-authored with the late Edward Said, Daniel Barenboim has written that the delivery of the Beethovenian *crescendo-subito piano*

\[ \text{requires a lot of courage and energy to really go with the crescendo to the end, as if you’re going to the precipice and then to stop short. The easy way out is, toward the end, to let the energy go… This is the most difficult thing – to have control of the crescendo, the gradual build-up, so that there is enough left for the end…. It’s not ethical to make a crescendo only with your brain; your whole body has to be involved in that. (Barenboim \\& Said, 2003, pp. 143-144).} \]

Indeed, since the delivery of the *crescendo-subito piano* in Examples 2-4 requires a sharp, sudden action at the point of dynamic change – relatively quicker action in the latter two examples due to the faster tempi – it necessitates more effort and conscious control than a smoothly continuing gesture: a particular effort-shape characterized by a sudden change in muscular energy that recoils physically and affectively, by abruptly turning its back, so to speak, to the level of loudness attained by the crescendo and arresting an ongoing movement. Significantly, the recoiling gesture is not predictable from the internal structure
of the unfolding musical and dynamic movement up to the point of dynamic change; in unexpectedly and suddenly breaking the tonal expressive grammar, the making of the crescendo-subito piano attracts the performer’s awareness to the moment of its making, and to her bodily sensations in making it. The particular effort-shape involved emerges as a “self-intimating” experiential state with a high degree of “self-luminosity” (Zahavi, 2005, p. 61) by foregrounding bodily feelings, which, metaphorically, “glow from within” (ibid.) without requiring any extrinsic source of illumination such as a reflective act of consciousness. In its suddenness, the making of this dynamic gesture “tears”, to use Fredric Jameson’s words, “the present time out of its continuum and allows it to subsist in a kind of strange autonomy” (Jameson, 2002, p. 190).27 Phenomenologically, such suddenness represents not only a qualitatively experienced temporality, but also a distinctively felt “kinetic quale” accompanied by a distinctive “affective aura” (Sheets-Johnstone, 1999, p. 259). In performance, the sudden turns in action that these crescendo-subito piano gestures involve surface as moments that articulate not just a labouring body, but one that is aware of its own labouring. If Maine de Biran could have been present at the premier of the E-flat major piano trio, he might have recognized in Beethoven’s unusual dynamics the sonic imprints of the newly emerging conception of the body across Europe, and identified, in the active, effortful, unpredictable interaction of the performers with their instruments, the poignant embodiment of his own notion of effort-movement-resistance as the primary, irreducible source of self and agency.

As for the performers, they might have had a fleeting inkling that they were part of a cultural history in the making: having performed Mozart’s chamber works, which encourages the construction of an unobstrusive, self-effacing and quiet music-making body as the “locus of eloquent expression” (Breene, 2014, p. 247) by suppressing the visible traces of effort and labouring in accordance with the culture of sensibility (DeNora, 2006), Schuppanzigh and Linke might well have noted the ways Beethoven’s music and dynamics were reorienting them with respect to their instruments, performing agencies, and musical norms, by bringing to the fore a “dashing, visceral and energetic” performing body (ibid., p. 115), as well as “new modes of psychic energy and resolve” (ibid., p. 109). It would, nevertheless, have required an impossible foresight, or flight of fancy, for them to contemplate that something in the nature of their experience of performing Beethoven’s dynamics in the Op. 70 No. 2 trio during the Christmastide of 1808 – prompted by the suddenness and expressive transgression of certain dynamic gestures – would come to instantiate one of the most significant ideas in twentieth-century phenomenology: the idea, put forward by Martin Heidegger in his Being and Time published in 1927, that the primary epistemic mode of being arises from a deep phenomenological familiarity with the world, which in turn emerges from skilled practical activity, or “smooth coping”28 in encountering

27 Similar experiential states can arise also in the making of pitch-based, i.e. melodic and harmonic, shapes that the performing body is not accustomed to gesturally and kinaesthetically.

28 Michael Wheeler writes that “Smooth coping, as Heidegger explains it, is not the outcome of a process in which detached, general-purpose reason considers its options in the light of certain internally represented goals and then plans what to do next. Rather, smooth coping is a process of real-time environmental interaction involving the subtle generation of fluid and flexible context-specific responses to incoming sensory stimuli. Crucially, those responses are not the product of
entities as *ready-to-hand*; and that when the habitualness of this mode of being is disturbed by an unexpected change in the functioning of the ready-to-hand encounter, that moment is phenomenologically lit up, so to speak, as entities lose their transparency and reveal the subject’s separateness from them by drawing attention to their distinct nature. The world becomes, temporarily, *un-ready-to-hand*, just as the music-making bodies and their relationship with musical instruments momentarily appear as un-ready-to-hand as they deliver Beethoven’s unusual dynamics. The basic premise of Heidegger’s thought – the idea that in the primary mode of being, the world appears always already familiar and intelligible because the body as it acts is phenomenologically given and not inferred by some mental act or argument – would have already been available for contemplation through the writings of Maine de Biran to any musician interested in the epistemological debates surrounding touch and the muscle sense during the early nineteenth century; and this basic premise would have offered them a critical context for recognizing that, as in Maine de Biran’s “lived body”, the music making body does not function merely as a transparent carrier of some mental activity or meaning, but is rather the vital foundation that enables the emergence of meaningful musical encounters and experiences.

If Schuppanzigh and Linke happened to notice that the new kinds of energy, force and capability behind the gestures they made in delivering Beethoven’s dynamics in effect refashioned their performing bodies, would they have further recognized this new kind of performing body as, in essence, a male body inscribing “masculine activity, aggression, strength and power” as DeNora suggested (2004, p. 191)? In his review of the Op. 70 piano trios, published in the *Allgemeine Musikalische Zeitung* on 3 March 1813, music critic E. T. A. Hoffmann refers to a certain “talented lady” who played to him “so beautifully” the first trio from the set (Charlton, 1989, pp. 300-324). There is no mention in Hoffmann’s review of any unusual dynamics, even though the first trio certainly included the *crescendo-subito piano* gesture, as well as dynamic markings ranging from *ppp* to *ff*. Whether the gifted lady – who could not have been, in the words of the eighteenth-century German pianist Andreas Streicher (1761-1833), one of those ladies who “did not wish to play Beethoven” (Streicher quoted in DeNora, 2006, p. 113) – attempted to deliver all these dynamics, veering, at times abruptly, between delicacy and forcefulness, or retained a more Mozartean performing body with minimal, if any, display of force, power and energy, avoiding Beethoven’s dynamics due to gender-related expectations in performance demeanour, we shall never know. It is, nevertheless, significant that the only reference to dynamics Hoffmann makes is in the context of a discussion of the thematic features of the finale of Op. 70 No. 2, where he notes the “introductory idea, with its loudly punctuating chords from the violin, cello and piano left hand” (Charlton, 1989, p. 320). Whether Hoffmann disregarded the unusual dynamic markings or not when he played through the trios to himself, the fact that he effaced them, together with the performing (and gendered) body from his critical discourse is significant as an early instance of a line of thought that gradually led to the work-centred, textualist musicological paradigm of the twentieth-century that sought musical meaning in

representation-based or reason-based control” (Wheeler, 2005, p. 134).

29 “With what joy I received your Opus 70, the two noble trios, for I knew so well that after a little practice I could play them to myself so beautifully” (Hoffmann, in Locke & Hoffmann 1917, p. 130).
abstract, mental constructs.

While early nineteenth-century music criticism was thus advancing an aesthetics of autonomous instrumental music, which was distinctly disembodied in its aspiration and sought musical essences in abstract structural relationships communicable only from one mind to another mind, or from heart to heart—an aesthetic perspective supported by the “propensity to ‘idealist’ structures of thought in the German-language philosophy of the period” (Grey, 2016, p. 46) – those present at the premiere of the E-flat major trio at Krugerstrasse No. 1074 in Vienna in December 1808 would have observed much in Beethoven’s performance at the piano that would prompt a strongly embodied experience of the music and of the composer, more in line with the anti-dualist and materialist epistemologies emerging across Europe. Contemporary accounts of Beethoven’s piano playing attest to his tremendous power, brilliance and orchestral conception (Skowroneck, 2010). The Czech composer and pianist Václav Tomášek (1774-1850) narrates in his autobiography how he was unable to touch a piano for days after hearing Beethoven perform in the Konvikt Hall, Prague, in 1798, so powerfully overcome he was (Bateman, n.d.). There are also descriptions of Beethoven snapping the strings and splitting the hammers of his pianos while playing. I was not able to find any information about the particular piano Countess Anna Maria von Erdödy had in her Vienna house and on which Beethoven performed the premiere of the E-flat major trio in December 1808; but if we accept Czerny’s assertion that the pianos before 1810 were “still extremely weak and imperfect” and “could not endure [Beethoven’s] gigantic style of performance” (Czerny quoted in Thayer, 1921, p. 91), the instrument on that occasion would have had a lighter and shallow action, and posed less resistance to the composer’s bodily exertion compared to later metal-framed instruments. Nevertheless, the last movement of the trio, the only one that prompted Hoffmann to mention dynamics, involves dynamic markings demanding a display of forceful engagement with any piano, and takes the quality of unusualness to a new level of virtuosity.

The extraordinary dynamic gesture in bars 236-237 of the finale (Example 5) highlights the performance skill involved in the delivery of such remarkable nuances. This is a recurring dynamic motif in the Allegro finale of the trio, involving a very short forte upbeat chord repeated on the downbeat of the following bar at a piano dynamic level, all happening

30 Ian Bent remarked that “the review published by E. T. A. Hoffmann in 1810 of Beethoven’s Fifth Symphony stands, of course, as a monument of music criticism, unprecedented in its command of technical detail, and marked out for its statement on the autonomy of instrumental music, and for its organic imagery” (Bent, 1996, p. 115).

31 This famous image is articulated in E. T. A. Hoffmann’s “Beethoven’s Instrumental Music”. Hoffmann also promoted a non-visual mode for listening to chamber music, encouraging a disavowal of the embodied aspects of music making; for further discussion of this point, see November (2013, pp. 13-14).

32 Anton Reicha recounted his experience of turning pages for Beethoven in a concerto performance in the mid-1790s and wrote: “I was mostly occupied in wrenching out the strings of the piano which snapped, while the hammers stuck among the broken strings... Back and forth I leaped, jerking out a string, disentangling a hammer, turning a page – I worked harder than Beethoven” (in Skowroneck, 2010, p. 164).
within a fast tempo. It is a difficult virtuoso effort-shape that requires an extreme withdrawal of action at the point of dynamic change, necessitating superb muscular control: effecting the dynamic change from *forte* to *piano* while repeating the chord very rapidly tends to arrest the upper and lower arm muscles, but if a *piano*-level sound is to be achieved in the repeated chord these muscles need to remain free and relaxed. An almost impossible task at an *Allegro* pace.

![Example 5. Beethoven, Piano Trio Op. 70 No. 2, mvt. iv, bars 236-243. Henle edition, 1967.](image)

Based on Ferdinand Ries’s memoires where he noted that “at times [Beethoven] would hold the tempo back in his crescendo with ritardando, which made a beautiful and highly striking effect” (Reis quoted in Gerig, 2007, p. 87), one can speculate that in the case of some of the *crescendo-subito piano* gestures in the trio, where the texture allows for timing fluctuation in the piano part of the score, Beethoven might have employed a certain deceleration before the *subito piano* and thus eased its abruptness. The dynamic gesture in Example 5 does not leave any room texturally for such manipulation, however, given the need to synchronize with the other two instruments in a fast (*Allegro*) tempo. Even with the weaker and lighter piano Beethoven would have played on during the premiere of the trio, through its abruptness and immense difficulty, this unusual dynamic gesture would have drawn attention to the sheer physicality and the determined will involved in its making – to the body’s presence and its striving corporeality – rather than to an aesthetically autonomous artwork communicated from one mind to another and rendering the performing body transparent: it would, indeed, have provided a superb artistic and aesthetic expression of the epistemological transformation beginning to stir across Europe, and placing the body at the foundation of mental phenomena. With his passion for capturing different varieties of bodily expression, Charles Bell, if he could have been there, would have been fascinated by the expressive riches Schuppanzigh, Linke and Beethoven would have offered that evening in 1808 to his artistic imagination, as they manifested the vigorous, temporal and living qualities of the human body through a visual display of unusual effort-shapes, aligning this unfamiliar aesthetic phenomenon with the rising theories of human subjectivity rooted in feelings of resistance and effort originating in the muscle sense.

One particular kind of dynamic marking Beethoven wrote in the third movement of the
Op. 70 No. 2 trio (Example 6) is especially pertinent as an artistic embodiment of the physiologically informed psychological theories of the self in early nineteenth-century thought, in particular those that related muscular feelings of resistance to the awakening of the individual will. The dynamic markings shown in Example 6, from the third movement of the trio, introduce an altogether remarkable and new kind of resistance for performers, in addition to the familiar material resistance their instruments pose to their physical movements in making music. The main melody, first presented by the violinist, is a simple one, organized as a 4+4 phrase: structurally, the antecedent unfolds through a rising contour that spans a perfect fifth from the dominant E flat, in the key of A flat – the key of the movement – to the supertonic B flat in bar 3, which is elaborated on the third beat of the bar through an upper-lower neighbouring motion supported by a tonic harmony. The onset of the supertonic chord on the downbeat of bar 3 is the culminating point of the antecedent as the melody introduces the highest and longest pitch of the phrase so far, coming in on the strongest beat of the bar. This is the point where phenomenal, structural and metrical accents converge, marking a strong point of arrival within the antecedent part of the phrase, with the melodic material in bars 1 and 2 leading or pointing to it. If one plays, or sings, the melody without Beethoven’s dynamic indications, one would typically not get louder beyond the onset of this moment of climax. Yet, this is precisely what Beethoven asks the players to do: to resist with their performing bodies the psychologically grounded experience of the powerful gravitational pull of this moment that, by force of habit, compels the performer towards either a decline in or a short continuation of the established loudness level before softening towards the end of the unit on the downbeat of bar 4. In the context of this discussion, it is an expressive instruction to manifest the epistemological primacy of the bodily over the mental, in line with emerging notions of the self and human agency. The realization of this dynamic marking in performance is not characterized by the rather brusque energy shifts and the jagged effort-shapes encountered in the case of the earlier examples I explored. While its smoothly growing energy level and the continuous effort-shape required to bring it about within a moderate tempo (Allegretto ma non troppo) might appear to conform to the phenomenology of a typical gradual crescendo in performance, the delivery of this dynamic gesture generates a radically different experience through the unexpected surge of energy and bodily effort it deploys beyond the moment of psychological climax on the downbeat of bar 3: in the former case, the bodily effort in getting louder characteristically corroborates the increasing psychological intensity generated by the musical materials, whereas in the latter, getting louder contradicts the psychological intensity the music implies. In the delivery of Beethoven’s unusual dynamic markings in Example 6, the individual artistic will of the

33 In the autograph score, the diminuendo in bar 3 starts somewhere between the second and the third beats in the violin part, and on the second beat in the piano part. They are aligned from the first edition onwards. The autograph score is available through the digital archives of Staatsbibliothek zu Berlin: <digital.staatsbibliothek-berlin.de>

34 Here, I adopt the definitions given by Lerdahl and Jackendoff (1983) for these three kinds of accent. See, Fred Lerdahl and Ray Jackendoff, A Generative Theory of Tonal Music (Cambridge, MA: MIT Press) pp. 17-18. Accent is regarded as a psychological phenomenon, arising when a musical event “stands out and captures a listener’s attention” (Drake & Palmer, 1993, p. 344).
performer pierces through the musical surface with bodily effort and resistance. There must
remain the possibility of a hermeneutical realm where this dynamic gesture is understood in
terms of Beethoven’s own resistance to his diminishing physical capacity to hear the outside
world, by fashioning a performing body that leads the mind and the artistic will, rather than
one that disappears behind their presumed primacy. And the construction of an analytical
narrative of Op. 70 No. 2 around the expressive function of these unusual dynamic markings
within a predominantly gentle, dolce musical language throughout the work, as well as a
discussion of the opportunities these dynamic markings generate for musical and social
interaction among the trio members, need to be a topic for another article.

Example 6. Beethoven, Piano Trio Op. 70 No. 2, mvt. iii, bars 1-14. Henle edition, 1967.

A new Beethoven for a new paradigm

Heinrich Schenker’s (1868-1935) monograph on Beethoven’s Ninth Symphony, published in
1912, is well known in musicological scholarship for the role it played in the evolution of
Schenkerian theory, as well as its polemical and ideological content (e.g. Treitler, 1980;
Rothstein, 1984; Cook, 1995; van den Toorn, 1995). Presenting an acrimonious criticism of a
particular interpretative approach to the symphony promoted by Wagner, and fiercely
attacking the hermeneutical discourse the German musicologist and music critic Hermann
Kretzschmar (1848-1924) espoused in his popular concert programme notes, the
monograph has attracted attention as an “irreversible event” (Cook, 2010, p. 254) in the
reception history of the Ninth Symphony. However, a particular detail from the same text –
one especially astounding and “extraordinary claim” (Cook, 1995, p. 105) Schenker made – sparked much less scholarly debate:

If, for example, the Ninth Symphony had come down to us – like most of the works of Sebastian Bach – without express dynamic symbols, an expert hand could nonetheless only place those symbols – according to the content – exactly as Beethoven himself has done. (Schenker, 1992, p. 10)

Schenker’s seemingly innocuous assertion is remarkable in concealing the ideological baggage that I discussed at the beginning of this article: forming the pillar of much of twentieth musicological thought, the hierarchizing, essentializing, and mythologizing discourse of this ideological baggage subordinates performance expression to the musical text, the music making body to the analytical mind, and the musical surface to deep structures. Most significantly, it serves musicology’s structuralist paradigm: the belief that a composition’s meaning and essence reside in the abstract structural relationships into which it is analyzable, and that performing music is the projecting of structural relationships in sound. The structuralist paradigm in fact appropriates the long tradition of associating tonal grammar and performance expression, which I discussed earlier, and posits that the expressive details of a performance are determined by musical structures. By surmising that knowledge of musical structure automatically leads to knowledge of correct performance expression, the structuralist paradigm disregards the embodied, skilled, tacit, artistic knowledge that drives music making, and renders music performing an act of “mechanical realization” à la Schenker. It also creates the myth of the “expert hand” mentioned in Schenker’s quote, most likely representing the all-knowing subjectivity of the music theoretist/analyst who is able to place all dynamic markings exactly as Beethoven has done.

However, even as the deeply engrained expressive habits associated with tonal grammar create expectations for certain loudness variations in performance, these do not constitute necessary implications of tonal structures: there is no universal and natural bridge that connects knowledge of musical structure and (knowledge of) performance expression. The latter can always thwart expectations and be otherwise. Consequently, it is not possible to divine the remarkable dynamic markings Beethoven noted by contemplating the pitches and the rhythms on the page: the analytical fantasy presented by Schenker of deducing dynamic nuances from the notated pitch-rhythm content of the music denies Beethoven’s unusual dynamics their legitimate role in creating the identity of his music. Irrespective of philosophical debates about the ontological identity of musical works in the absence of the expressive indications of composers, these dynamic nuances can materialize in performance only if they are specified in notation, as they work against

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35 This is an assumption that characterized much of the analysis and performance literature of the 1980s. Some of the best-known examples representing this perspective include Cone (1968), Janet Schmalfeldt (1985), Narmour (1988), and Berry (1989).

36 Schenker ends the very first paragraph of his *The Art of Performance* by equating performing to mechanical realization: “The mechanical realization of the work of [musical] art can thus be considered superfluous.”

37 Given that he belonged to the “long tradition of disparaging performers” (Cook, 2013b, p. 18), it is difficult to imagine that Schenker would have had performers in mind when he wrote about “the expert hand”.

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established habits and expectations regarding the employment of unnotated loudness variations.

In case any reader might think that Schenker’s quotation from the Ninth Symphony monograph concerns only the Ninth Symphony and cannot be regarded as a generalization, it should be emphasized that Schenker did in fact attempt the extreme regulatory control of performance expression that the structuralist paradigm implies by arguing that
dynamics, like voice-leading and diminution, are organized according to structural levels, genealogically, as it were. For each level of voice-leading, whether background or foreground, and for each level of diminution, there is a corresponding dynamic level of the first order, second order, so forth. (Schenker, 2000, p. xv)

Schenker was certainly not alone in twentieth-century musical thought in seeking to regulate the topography of the performed musical surface. The same discourse, and the ideology of naturalness that causally connects compositional parameters with performance expression, is also manifest in the work of the German music pedagogue and theorist Alexander Truslit (1889-1971), who argued in his Bewegung und Gestaltung in der Musik (1938) that

It is not sufficient to execute a crescendo, for example, by increasing the intensity of the tones in some arbitrary fashion. The dynamic development must arise as expression of a natural movement, in which case the appropriate agogics will also appear, so that the tone sequence assumes a living, true, and eloquent expression... To shape music completely ... the artist must shape the work out of the original motion [Ur-bewegung]...
Expressive markings in the score are generally imprecise and more a danger than a help to the performer. (Truslit, in Repp, 1993, pp. 268, 271 & 276)

One of the most important consequences of these attempts to sanitize the sensuous richness, complexity and non-uniformity that emerges in artistic performance by homogenizing – and mechanizing the emergence of – performance expression has been the removal of the physical labour of the performing body from the discourses on musical experience and even the idea of music itself.38 Beginning with the writings of nineteenth-century critics such as Eduard Hanslick (1825-1904), E. T. A. Hoffmann, and Robert Schumann (1810-1856), who were “all too eager to dismiss any hint of the body from their conception of music” (Zbikowski, 2012, p. 165), the labouring music-making body vanished behind the abstract idea of the musical work. This is very much related to an idea that was “repeatedly stated throughout the nineteenth and twentieth centuries” (Cook, 2013b, p. 15) on the role of the performer in music critical and musicological discourses: the idea that “as a mediator, the performer’s highest ambition should be self-effacement...[and] invisibility” (ibid.). In this connection, Cook refers to the writings of E. T. A. Hoffmann, Hector Berlioz (1803-1869), Arnold Schoenberg (1874-1951), Schenker and Theodor Adorno (1903-1969), which have been instrumental in the construction of an image of performing as a subjugating act. The ideal of self-effacement in performance, which began to emerge during

38 These discourses are consistent and continuous with the modernist performance practices and criticism. In Cook’s words, “twentieth-century performance practice cleaned up the local idiosyncracies of period performance, source criticism regularised the articulation and orthography of eighteenth-century scores, and academic and critical practice disciplined the meanings it was permissible to attribute to classical music.” (Cook, forthcoming)
the nineteenth century, as well as the subsequent notion of performance as mechanical realization, are at least partly about concealing and devaluing the physical effort of making music; this in turn can be understood as “a reflection of deeply embedded cultural and aesthetic assumptions about the relationship between the mental and the physical” (Cook, 2013b, p. 308). When viewed from the perspective of the anti-dualist epistemologies that began to emerge during the late eighteenth and early nineteenth centuries, and endeavoured to place the body at the foundation of all kinds of mental phenomena, particularly the activity of the will, such dismissal of the body in musicological discourses also amounts to renouncing the artistic will of the performer.

In this connection, Beethoven’s unusual dynamics are thoroughly anti-Schenkerian — and anti-Cartesian — not only in putting the music-making body firmly at the centre of musical experience and understanding, but also in marrying the artistic volition to it inseparably. They compose into the music, and inscribe in notation an intensified performer agency. By creating opportunities for the performer to interact with her instrument in unexpected ways and through a rich variety of effort-shapes that draw attention to their making, these expressive transgressions at the same time become a means of affirming the performer’s presence and authorial voice in the emergence of musical meanings: as such, they undermine the tradition of disparaging performers during the twentieth century that Cook talks about, and resist any attempt to portray performing as a self-effacing act of mechanical realization. From the traditional perspective of musicology that regards notation as a repository for the composer’s intentions, and as the locus of the musical artwork, the idea that notation can involve enhanced performer agency might appear paradoxical, since the performer would be able to exercise her agency only by realizing the composer’s intentions — in this case, Beethoven’s unusual dynamic markings. However, the paradox disappears once we understand musical notation not as a fixed text produced in order to represent the composer’s intentions and finalized creation, but as one musician’s written invitation to other musicians to “mobilize” (Schuiling, 2019) their bodies, feelings, practical skills, musical knowledge, artistic taste, sociality, curiosity, critical attitude, musical instruments, knowledge of and attitudes towards musical traditions, and sensual experiences in order to enable the emergence of an intersubjectively constructed sounding phenomenon.39 Within the new paradigm of music performance studies that disavows traditional ontological, epistemological, aesthetic and institutional-political hierarchies, Beethoven would not be constructed as an authority figure domineering over performing musicians, nor would his scores be taken to represent a complete art work. His music would rather be regarded as an intersubjective experience that emerges from the non-hierarchical encounters between composers, performers, listeners, the musical materials including

39 Such an understanding of the score, or of musical notation, presents a more inclusive and less dogmatic approach to written documents compared to the role that theatre studies or the broader area of performance studies assigns to texts. As Cook noted when he emphasized “the reciprocality of text and act”, “in asserting its disciplinary autonomy, its independence from traditional, text-based studies, performance studies has tended to create the impression that the meaning generated in the act of performance is the only meaning that matters... But we don’t have to follow [in music performance studies] the model of theatre studies, which by seceding from literary studies left the latter as an unreconstructed discipline and divided text from act” (Cook, 2014, p. 6).
Beethoven’s extraordinary dynamics, which create an aesthetics of the richly sensuous musical surface that cannot be gleaned from “deeper” structures, sit uncomfortably also with the analytical discourses that construct his music as well as artistic genius in terms of hierarchical structural relationships. Erupting through analytically-fantasized depths to the surface, they disrupt the discursive landscape of nineteenth- and twentieth-century musical thought that sought to subordinate performing to the work, body to mind, and practice to theory: they indeed remind us that music making happens in a messy, highly differentiated and fluid phenomenal world inhabited by fleshly and willful individuals – a world that continually resists being fully grasped through such disciplinary hierarchies.

The twentieth-century musicological view of Beethoven’s music denies the performative, embodied and cultural significance of his dynamics, which in fact bring the performer, the music-making body, as well as the musical surface to the fore as epistemologically, aesthetically and culturally crucial foundations for musical encounters. While traditional musicological thought often turned to Beethoven’s music to legitimize the discipline’s dominant ontological, epistemological and aesthetics assumptions, as well as to validate its scholarly discourses characterized by naturalizing and universalizing tendencies with regard to the essence of music, of performance expression, and the performer’s role in musical communication, in actual fact, through the unusual expressive performative surfaces he created, Beethoven questions and problematizes these disciplinary assumptions: not only in the sense of merely complicating them cognitively, but more significantly – and along the lines of philosopher and social theorist Michel Foucault’s (1926-1984) notion of “problematization” – in the sense of defamiliarizing phenomena accepted as natural, with the aim of gaining hitherto unimagined perspectives and awareness of them, and revealing their value-laden characteristics (Barnett, 2015).

While in his review of Beethoven’s Op. 70 piano trios, E. T. A. Hoffmann’s main concern was to demonstrate the deep unity of Beethoven’s music, which appears disjointed on the surface, it is interesting to speculate if and how musicology’s basic epistemological and ontological premises might have evolved along a different path from the nineteenth century onwards if he intended the richly suggestive images and metaphors he used in talking about these works to refer not merely to the music’s harmonic adventures, structural complexities, and spiritual meaning, but to its splendidly sensuous surface that unfolds through astonishing dynamic variations, and to the carnality behind its making:

Like someone wandering along the labyrinthine pathways of some fantastic park, hedged in by all kinds of rare trees, shrubs and exotic flowers and becoming more and more deeply absorbed... I am still unable to extricate myself from the extraordinary twists and turns of your trios. The enchanted siren voices of your music, sparkling with colour and variety, draw me deeper and deeper into its spell. (in Charlton, 1989, p. 100)

Perhaps music scholarship would not have waited until the rise of music performance studies during the twenty-first century to make the sensuous qualities of music, the

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40 For a detailed discussion of the metaphor of depth in German musical thought, see Holly Watkins, *Metaphors of Depth in German Musical Thought: From E.T.A. Hoffman to Arnold Schoenberg* (Cambridge: Cambridge University Press, 2011).
sensuous ways of knowing it, and the corporeal and affective characteristics of performing, – in short, all the non-conceptual, non-linguistic and embodied processes involved in music making and listening – an integral part of its disciplinary agenda. The good news is that significant work has already been undertaken in this vein. I hope this article will inspire further research not only to explore if and how dynamics in other musics from the late eighteenth and early nineteenth centuries might reflect wider cultural phenomena, but also research to better understand how the body and the senses constituted musical experiences, practices and discourses in past eras, and continue to do so in our current culture.

REFERENCES

Abraham, G. (1979). *The concise Oxford history of music*. Oxford: Oxford University Press.

Anderson, E. (Ed.) (1961). *The letters of Beethoven*, volume 1. New York: W. W. Norton.

Auslander, P. (2006). *Musical persona*. *TDR: The Drama Review*, 50(1), 100-119.

Bach, C. P. E. (1949). *Essay on the true art of playing keyboard instruments*. Translated by W. Mitchell from the German original, *Versuch über die wahre Art das Clavier zu spielen*, 1753. New York: W. W. Norton.

Bailes, F. et al. (2012). Mental imagery for musical changes in loudness. *Frontiers in Psychology*, 3, 121-129.

Bamberger, J. (1976). The musical significance of Beethoven’s fingerings in the piano sonatas. *Music Forum*, 4, 237-280.

Barenboim, D. & Said, E. (2003). *Parallels and paradoxes: Explorations in music and society*. London: Bloomsbury.

Barnett, C. (2015). On problematization: Elaborations on a theme in late Foucault. *Nonsite*, 16, 1-31. Retrieved 1 October, 2019, from www.nonsite.org/article/on-problematization

Bateman, A. (n.d.). Beethoven and the Piano. Retrieved 1 September, 2019, from www.musicunwrapped.co.uk/filemanager/Beethoven_Spread.pdf

Beghin, T. (2007). “Delivery, delivery, delivery!” Crowning the rhetorical process of Haydn’s keyboard sonatas. In T. Beghin & S. M. Goldberg (Eds.), *Haydn and the performance of rhetoric* (pp. 131-171). Chicago: University of Chicago Press.

Bell, C. (1806). *Essays on the anatomy of expression in painting*. London: Murray.

Bent, I. (1996). Plato-Beethoven: A hermeneutics of nineteenth-century music? In I. Bent (Ed.), *Music theory in the age of romanticism* (pp. 105-124). Cambridge: Cambridge University Press.

Berry, W. (1989). *Musical structure and performance*. New Haven, CN: Yale University Press.

Breene, S. (2014). The instrumental body in the age of Mozart: Science, aesthetics and performances of the self. *Early Music*, 42(2), 231-47.

Bonds, M. E. (2014). *Absolute music: The history of an idea*. Oxford: Oxford University Press.

Bujic, B. (1995). Notation and realization: Musical performance in historical perspective. In M. Krausz (Ed.), *The interpretation of music: Philosophical essays* (pp. 129-140). Oxford: Clarendon Press.

Bungert, J. (2015). Bach and the patterns of transformation. *Music Theory Spectrum*, 37, 98-119.
Burnham, S. (1995). *Beethoven hero*. Princeton, NJ: Princeton University Press.

Carew, D. (2016). *The companion to the mechanical muse: The piano, pianism and piano music, c. 1760-1850*. London: Routledge.

Cassedy, St. (2010). Beethoven the romantic: How E. T. A. Hoffmann got it right. *Journal of the History of Ideas*, 71(1), 1-37.

Cerbone, D. R. (2012). Methods in phenomenology after Husserl. In S. Luft & S. Overgaard (Eds.), *The Routledge companion to phenomenology* (pp. 276-286). London: Routledge.

Charlton, D. (Ed.) (1989). *E. T. A. Hoffmann’s musical writings: Kreisleriana, the poet and the composer*. Cambridge: Cambridge University Press.

Classen, C. (1993). *Worlds of senses: Exploring the Senses in History and across Cultures*. London: Routledge.

Colombetti, G. (2017). *The feeling body: Affective science meets enactive mind*. Cambridge, MA: MIT Press.

Cone, E. T. (1968). *Musical form and musical performance*. New York: W. W. Norton.

Cook, N. (1995). Heinrich Schenker, polemicist: A reading of the Ninth Symphony monograph. *Music Analysis*, 14(1), 89-105.

Cook, N. (2001). Theorizing musical meaning. *Music Theory Spectrum*, 23(2), 170-195.

Cook, N. (2010). Analysing performance, performing analysis. In N. Cook & M. Everist (Eds.), *Re-thinking Music* (pp. 239-261). Oxford: Oxford University Press.

Cook, N. (2013a). Bridging the unbridgeable? Empirical musicology and interdisciplinary performance studies. In N. Cook & R. Pettengil (Eds.), *Taking It to the bridge: Music as performance* (pp. 70-85). Ann Arbor: The University of Michigan Press.

Cook, N. (2013b). *Beyond the score: Music as performance*. Oxford: Oxford University Press.

Cook, N. (2014). Between art and science: Music as performance. *Journal of the British Academy*, 2, 1–25.

Cook, N. (forthcoming). *Sonic encounters: Hearing the relational in music*. The British Academy.

Cox, F. (2002). Notes toward a performance practice for complex music. In C-S. Mahnkopf, F. Cox & W. Schurig (Eds.), *Polyphony and complexity* (pp. 70-132). Hofheim: Wolke Verlag.

Cox, O. (2016). *The interpretation of unusual dynamic markings in Beethoven’s string quartet in Bb major, Op. 130: A study of selected twentieth-century recordings*. Unpublished PhD thesis. Cardiff University, School of Music. Retrieved 1 October, 2019, from [http://orca.cf.ac.uk/100042/](http://orca.cf.ac.uk/100042/)

Cusick, S. (1994). Feminist theory, music theory, and the mind/body problem. *Perspectives of New Music*, 32(1), 8-27.

Czerny, C. (1838-9). *Vollständige theoretisch-practische Pianoforte-Schule Op. 500*. Vienna: A. Diabelli.

Dahlhaus, C. (1989). *The idea of absolute music*. Trans. R. Lustig. Chicago: The University of Chicago Press.

Damasio, A. (1994). *Descartes’ error: Emotion, reason, and the human brain*. New York: Putnam.

Damasio, A. (1999). *The feeling of what happens: Body and emotion in the making of
consciousness. New York: Harcourt Brace.

Damasio, A. (2003). Looking for Spinoza: Joy, sorrow, and the feeling body. New York: Harcourt Brace.

Darwin, C. (1872). The expression of the emotions in man and animals. London: John Murray.

Davidson, J. (1994). What type of information is conveyed in the body movements of solo musician performers? Journal of Human Movement Studies, 6, 279-301.

Davidson, J. (2002). Communicating with the body in performance. In J. Rink (Ed.), Musical performance: A guide to understanding (pp. 144-152). Cambridge: Cambridge University Press.

Davidson, J. (2005). Bodily communication in musical performance. In D. Miell, D. J. Hargreaves & R. MacDonald (Eds.), Musical communication (pp. 215-237). Oxford: Oxford University Press.

Davies, J. Q. (2014). Romantic anatomies of performance. Berkeley: University of California Press.

Davis, Z. (2017). Max Scheler and pragmatism. In O. Svec & J. Capek (Eds.), Pragmatic perspectives in phenomenology (pp. 158-172). New York: Routledge.

DeNora, T. (2004). Embodiment and opportunity: Bodily capital, gender and reputation in Beethoven’s Vienna. In W. Weber (Ed.), The musician as entrepreneur 1700-1914: Managers, charlatans, idealists (pp. 198-220). Bloomington, IN: Indiana University Press.

DeNora, T. (2006). Music as agency in Beethoven’s Vienna. In R. Eyerman & L. McCormick (Eds.), Myth, meaning and performance: Toward a new cultural sociology of the arts (pp. 103-120). London: Routledge.

Dietz, H-B. (1971). Relations between rhythm and dynamics in works of Beethoven. In C. Dahlhaus, H. J. Marx, M. Max-Weber & G. Massenkil (Eds.), Bericht über der Internationalen Musikwissenschaftlichen Kongress (Bonn, 1970) (pp. 47-53). Kassel: Bärenreiter.

Doğantan-Dack, M. (2008). Recording the performer’s voice. In M. Doğantan-Dack (Ed.), Recorded music: Philosophical and critical reflections (pp. 292-313). London: Middlesex University Press.

Doğantan-Dack, M. (2011). In the beginning was gesture: Piano touch and the performing body. In A. Gritten & E. King (Eds.), New perspectives on music and gesture (pp. 243-266). Aldershot: Ashgate.

Doğantan-Dack, M. (2015). The role of the instrument in performance as research: The piano as a research tool. In M. Doğantan-Dack (Ed.), Artistic practice as research in music: Theory, criticism, practice (pp. 169-202). Aldershot: Ashgate.

Doğantan-Dack, M. (2018). A sketch for a hermeneutic phenomenology of the piano. In M. Doğantan-Dack & J. Dack (Eds.), Music and sonic art: Practices and theories (pp. 45-58). Newcastle upon Tyne: Cambridge Scholars Press.

Drake, C. & Palmer, C. (1993). Accent structures in music performance. Music Perception, 10(3), 343-78.

Eitan, Z. & Granot, R. Y. (2006). How music moves: Musical parameters and listeners’ images of motion. Music Perception, 23, 221-247.

Engler-Coldren, K., Knapp, L. & Lee, C. (2017). Embodied cognition around 1800:
Article

Introduction. *German Life and Letters*, 70(4), 413-422.

Erlman, V. (2010). *Reason and resonance: A history of modern aurality*. New York: Zone Books.

Fisher, G. & Lochhead, J. (2002). Analyzing from the body. *Theory and Practice*, 27, 37-67.

Forbes, E. (Ed.) (1967). *Thayer’s life of Beethoven*. Princeton, NJ.: Princeton University Press.

Gerig, R. (2007). *Famous pianists and their technique*. Bloomington, IN: Indiana University Press.

Godøy, R. I. (2010). Gestural affordances of musical sound. In R. I. Godøy & M. Leman (Eds.), *Musical gestures, sound, movement and meaning* (pp. 103-125). London: Routledge.

Godøy, R. I. (2017). Postures and motion shaping musical experience. In M. Lesaffre, P-J. Maes & M. Leman (Eds.), *The Routledge companion to embodied music interaction* (pp. 113-121). London: Routledge.

Godøy, R. I. (2018). Motor-mimetic features in musical experience. In P. Veroli & G. Vinay (Eds.), *Music-dance: Sound and motion in contemporary discourse* (pp. 207-221). London: Routledge.

Goehr, L. (1992). *Imaginary museum of musical works: An essay in the philosophy of music*. Oxford: Clarendon Press.

Goss, E. (2013). *Revealing bodies: Anatomy, allegory, and the grounds of knowledge in the long eighteenth century*. Lewisburg, PA: Bucknell University Press.

Gowing, L. (2003). *Common bodies: Women, touch and power in seventeenth-century England*. New Haven: Yale University Press.

Grey, T. (2016). *Absolute music*. In S. Downes (Ed.), *Aesthetics of music: Musicological perspectives* (pp. 42-61). London: Routledge.

Harvey, S. A. (2015). *Scenting salvation: Ancient Christianity and the olfactory imagination*. Berkeley: University of California Press.

Heidegger, M. (1962). *Being and Time*. London: SCM Press.

Hellsberg, C. (1979). Ignaz Schuppanzigh (Wien 1776–1830): Leben und Wirken. Unpublished PhD dissertation, University of Vienna.

Hummel, J. N. (1827). *Ausführliche theoretisch-practische Anweisung zum Piano-Forte-Spiel*. Vienna: Tobias Haslinger.

Huron, D. (1990). Crescendo/diminuendo asymmetries in Beethoven’s piano sonatas. *Music Perception*, 7, 395-402.

Immerwahr, R. (1978). Diderot, Herder, and the dichotomy of touch and sight. *Seminar: A Journal of Germanic Studies*, 14(2), 84-96.

Jackson, R. (2005). *Performance practice: A dictionary guide for musicians*. London: Routledge.

James, W. (1890). *The principles of psychology*. New York: Henry Holt & Company.

Jameson, F. (2002). *A singular modernity: Essay on the ontology of the present*. London: Verso.

Jones, D. W. (2016). *Music in Vienna: 1700, 1800, 1900*. Suffolk: Boydell Press.

Kalkbrenner, F. W. (1832). *Pianoforte-Schule Op. 108*. Leipzig: Kistner.

Keller, J. (2011). *Chamber music: A listener’s guide*. Oxford: Oxford University Press.

Kerman, J. (1967). *The Beethoven quartets*. New York: Norton.

Kim, D. H-S. (2012). The Brahmsian hairpin. *19th Century Music*, 36(1), 46-57.

Kinderman, W. (2009). *Beethoven*. Oxford: Oxford University Press.
Koschorke, A. (2008). Physiological self-regulation: The eighteenth-century modernization of the human body. *Modern Language Notes, 23*, 469-484.

Kovacs, G. A. (2013). Stringed instruments in fifth-century drama. In G. W. M. Harrison & V. Liapis (Eds.), *Performance in Greek and Roman theatre* (pp. 477-500). Leiden: Brill.

Leder, D. (1990). *The absent body*. Chicago: The University of Chicago Press.

Leech-Wilkinson, D. (2012). Compositions, scores, performances, meanings. *Music Theory Online, 18*(1). Retrieved 1 October, 2019, from http://mtosmt.org/issues/mto.12.18.1/mto.12.18.1.leech-wilkinson.html

LeGuin, E. (2006). *Boccherini’s body: An essay in carnal musicology*. Berkeley: University of California Press.

Locke, A. W. & Hoffmann, E. T. A. (1917). Beethoven’s instrumental music. Translated from E. T. A Hoffmann’s “Kreisleriana” with an introductory note. *The Musical Quarterly, 3*(1) (1917), 123-133.

Luft, S. (2012). Husserl’s method of reduction. In S. Luft & S. Overgaard (Eds.), *The Routledge companion to phenomenology* (pp. 243-253). London: Routledge.

Luoma, R. G. (1976). The function of dynamics in the music of Haydn, Mozart and Beethoven. *College Music Symposium, 16*, 32-41.

Lussy, M. (1874). *Traité de l’expression musicale: Accents, nuances et mouvements dans la musique vocal et instrumentale*. Paris: Berger-Levrault & Heugel.

Maine de Biran, M-F-P. G. (2001). *Essai sur les fondements de la psychologie*, *Oeuvres vol. VII*. Paris: Vrin.

Maine de Biran, M-F-P. G. (2005). *De l’aperception immédiate: Mémoire de Berlin, 1807*. Paris: Librairie générale française.

Meacham, D. & Spadola, J. (Ed. and Trans.) (2016). *Maine De Biran: The relationship between the physical and the moral in man*. London: Bloomsbury.

Merleau-Ponty, M. (2012). *Phenomenology of perception*. Translated by D. A. Landes from the French original *Phénoménologie de la perception*, 1945. New York: Routledge.

Montague, E. (2011). Phenomenology and the “hard problem” of consciousness and music. In D. Clarke & E. Clarke (Eds.), *Music and consciousness: Philosophical, psychological, and cultural Perspectives* (pp. 29-46). New York: Oxford University Press.

Montague, E. (2012). Instrumental gesture in Chopin’s Étude in A-flat major, Op. 25 No. 1. *Music Theory Online 18*(4). Retrieved 1 October, 2019, from www.mtosmt.org/issues/mto.12.18.4/mto.12.18.4.montague.php

Mozart, L. (1951). *A treatise on the fundamental principles of violin playing*. Translated by E. Knocker from the German original, *Versuch einer gründlichen Violinschule, 1756*. London: Oxford University Press.

Narmour, E. (1988). On the relationship of analytical theory to performance and interpretation. In E. Narmour & R. Solie (Eds.), *Explorations in music, the arts, and ideas: Essays in honor of Leonard B. Meyer* (pp. 317-340). Stuyvesant: Pendragon Press.

November, N. (2013). *Beethoven’s theatrical quartets* *Opp. 59, 74 and 95*. Cambridge: Cambridge University Press.

Östersjö, S. (2017). Thinking-through-music: On knowledge production, materiality, embodiment, and subjectivity in artistic research. In J. Impett (Ed.), *Artistic research in music: Discipline and resistance* (pp. 88-107). Leuven: Leuven University Press.
Paterson, M. (2006). Seeing with the hands, touching with the eyes: Vision, touch and the enlightenment spatial imaginary. *The Senses and Society, 1*(2), 225-243.

Paterson, M. (2007). *The senses of touch: Haptics, affects and technologies.* Oxford: Berg.

Picker, J. M. (2000). The soundproof study: Victorian professionals, work space, and urban noise. *Victorian Studies, 42*, 427-453.

Poli, R. (2010). *The secret life of musical notation: Defying interpretive traditions.* Milwaukee: Amadeus Press.

Porter, R. (2001). History of the body reconsidered. In P. Burke (Ed.), *New perspectives on historical writing* (pp. 232-260). Cambridge: Polity.

Quantz, J. J. (1966). *On playing the flute.* Translated by E. R. Reilly from the German original, *Versuch einer Anweisung die Flöte traversiere zu spielen,* 1752. Boston: Northeastern University Press.

Rabinbach, A. (1992). *The human motor: Energy, fatigue and origins of modernity.* Berkeley: University of California Press.

Reichardt, J. F. (1810). *Vertraute Briefe: Geschrieben auf einer Reise nach Wien und den Österreichischen Staaten zu Ende des Jahres 1808 und zu Anfand 1809.* Amsterdam: Kunst- und Industri-Comtoir.

Repp, B. (1993). Music as motion: A synopsis of Alexander Truslit’s (1938) *Gestaltung und Bewegung in der Musik. Psychology of Music, 21*(1), 265-278.

Riemann, H. (1878). *Der Ausdruck in der Musik.* Leipzig: Breitkopf & Härtel.

Riemann, H. (1884). *Musikalische Dynamik und Agogik: Lehrbuch der musikalischen Phrasierung.* Hamburg: D. Rahter.

Riemann, H. (1888). *Katechismus des Klavierspiels.* Leipzig: M. Hesse.

Riskin, J. (2002). *Science in the age of sensibility: The sentimental empiricists of the French enlightenment.* Chicago: University of Chicago Press.

Rothstein, W. (1984). Heinrich Schenker as an interpreter of Beethoven’s piano sonatas. *19th-Century Music, 8*(1), 3-28.

Sauer, A. S. (2007). Cognitive dissonance and the performer’s inner conflict: A new perspective on the first movement of Beethoven’s Op. 101. *Music Theory Online, 13*(2). Retrieved 1 August, 2019, from [http://www.mtosmt.org/issues/mto.07.13.2/mto.07.13.2.sauer.html](http://www.mtosmt.org/issues/mto.07.13.2/mto.07.13.2.sauer.html)

Schenker, H. (1976). The Largo of J. S. Bach’s Sonata No. 3 for unaccompanied violin. Translated by J. Rothgeb from the German original in *Das Meisterwerk in der Musik* (1925), 63-73. The *Music Forum, 4*, 141–159.

Schenker, H. (1992). *Beethoven’s Ninth Symphony: A portrayal of its musical content, with running commentary on performance and literature as well.* Translation by J. Rothgeb from the German original, *Beethovens Neunte Sinfonie: Eine Darstellung des musikalischen Inhaltes unter fortlaufender Berücksichtigung auch des Vortrages und der Literatur* (1912). New Haven: Yale University Press.

Schenker, H. (2000). *The art of performance.* H. Esser (Ed.), I. Schreier Scott (Trans.). Oxford: Oxford University Press.

Schich, S. (1994). Developing an interpretive context: Learning Brian Ferneyhough’s Bone Alphabet. *Perspectives in New Music, 32*(1), 132-153.

Schmalfeldt, J. (1985). On the relation of analysis to performance: Beethoven’s Bagatelles Op. 126, Nos. 2 and 5. *Journal of Music Theory, 29*, 1-31.
Schuiling, F. (2019). Notation cultures: Towards an ethnomusicology of notation. *Journal of the Royal Musical Association*, 144(2), 429-458.

Sheer, M. (1990). The structural functions of dynamics in Beethoven’s instrumental works. *The Beethoven Newsletter*, 5(3), 62-66.

Sheer, M. (1992). Patterns of dynamic organization in Beethoven’s Eroica symphony. *The Journal of Musicology*, 10(4), 483-504.

Sheer, M. (1998). Dynamics in Beethoven’s late instrumental works: A new profile. *The Journal of Musicology*, 16(3), 358-378.

Sheets-Johnstone, M. (1999). Emotion and movement: A beginning empirical-phenomenological analysis of their relationship. *Journal of Consciousness Studies* 6(11-12), 259-277.

Sheets-Johnston, M. (2011). *Primacy of Movement*. Philadelphia, PA: John Benjamins Publishing.

Sinclair, M. (2011). Embodiment: Conceptions of the lived-body from Maine de Biran to Bergson. In A. Stone (Ed.), *The Edinburgh Critical History of Nineteenth-Century Philosophy* (pp. 187-203). Edinburgh: Edinburgh University Press.

Skowroneck, T. (2010). *Beethoven the Pianist*. Cambridge: Cambridge University Press.

Smith, M. M. (2007). *Sensory History*. Oxford: Berg Publishers.

Smith, R. (2011). The “sixth sense”: Towards a history of the muscular sensation. *Gesnerus* 68(1), 218-271.

Sonneck, O. (1967). *Beethoven: Impressions by his contemporaries*. New York: Dover.

Spencer, H. (1855). *The principles of psychology*. London: Longman.

Starobinski, J. (1989). A short history of bodily sensation. S. Matthews (Trans.), In M. Feher, R. Naddaff & N. Tazi (Eds.), *Fragments for a history of the human body*, Part 2, (pp. 350-370). New York: Zone.

Steinberg, M. (1994). String quartet in B-flat Major, Op.130. In R. Winter & R. Martin (Eds.), *The Beethoven quartet companion* (pp. 227-244). Berkeley: University of California Press.

Thayer, A. W. (1921). *The Life of Ludwig van Beethoven*, volume 2. New York: The Beethoven Association.

Todd, Neil. (1992). Dynamics of dynamics: A model of musical expression. *Journal of the Acoustical Society of America*, 91(6), 3540-3550.

Treitler, L. (1980). History, criticism, and Beethoven’s Ninth Symphony. *19th-Century Music*, 3(3), 193-210.

Türk, D. G. (1982). *School of clavier playing or instructions in playing the clavier for teachers and students*. Translated by R. H. Haggh from the German original, *Klavierschule, oder Anweisung zum Klavierspielen für Lehrer und Lernende, mit kritischen Anmerkungen* (1789). Lincoln, NE: University of Nebraska Press.

van Boer, B. (2019). *Music in the classical world: Genre, culture, history*. New York: Routledge.

van den Toorn, P. C. (1995). *Music, politics and the academy*. Berkeley: University of California Press.

Varwig, B. (2018). Heartfelt musicking: The physiology of a Bach cantata. *Repercussions* 143(1), 36-62.

Wade, N. J. (2005). Guest editorial: The persisting vision of David Hartley. *Perception* 34: 1-6.
Waldow, A. & and DeSouza, N. (2017). *Herder: Philosophy and anthropology*. Oxford: Oxford University Press.

Watson, A. (2010). *Beethoven’s chamber music in context*. Woodbridge: Boydell.

Wheeler, M. (2005). *Reconstructing the cognitive world: The next step*. Cambridge, MA: MIT Press.

Woolgar, C. M. (2007). *The senses in late medieval England*. New Haven: Yale University Press.

Young, R. M. (1990). *Mind, brain and adaptation in the nineteenth century*. Oxford: Oxford University Press.

Zahavi, D. (2005). *Subjectivity and selfhood: Investigating the first-person perspective*. Cambridge, MA: MIT Press.

Zbikowski, L. (2012). *Music, dance and meaning in the early nineteenth century*. *Journal of Musicological Research*, 31, 147-165.

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