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UNIVERSITY OF CALIFORNIA, SAN DIEGO

Defining Templates for Musical Reproduction: Case Studies on Musical Performance

A Thesis submitted in partial satisfaction of the requirements for the degree Master of Arts

in

Music

by

Keir David GoGwilt

Committee in charge:

Professor Amy Cimini, Chair Professor Anthony Burr Professor Clinton Tolley

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University of California, San Diego

2017

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ABSTRACT OF THE THESIS

Defining Templates for Musical Reproduction: Case Studies on Musical Performance

by

Keir David GoGwilt

Master of Arts in Music

University of California, San Diego, 2016

Professor Amy Cimini, Chair

This essay presents a philosophical account of musical performance within the tradition of European art music. Although the 19th and 20th century formulation of performance as reproduction has been critiqued in recent scholarly texts, I will argue the case that reproduction—when not exclusively conceived of as the reproduction of the musical work—still provides a useful and accurate characterization of the performance process.

The questions that logically follow are "who" and "what" is reproduced? Answering the question of "who," I will refer to Naomi Cumming's account of subjectivity as it is maintained in the synthesis of musical signs. Answering the

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question of "what," I will diagram the work's object ontology proposed by Theodor W. Adorno. Having followed these nuanced approaches to the development and maintenance of music's subjects and objects, I will propose that it would be useful for scholars and musicians to think of *templates* for musical reproduction. The template concept on the one hand draws attention to the technical and technological nature of performance, the structures of which emerge historically. On the other hand, templates index the subject's unique cultural position and voice.

To this end, the essay will look at three case studies of templates for performance: Fritz Kreisler's distinctive lilt (deriving from Viennese Ländler and Waltz rhythms), elements of Jascha Heifetz's bodily formalism (tracking these specifically from some of his teacher, Leopold Auer's, pedagogical instructions), and Hilary Hahn's conformity to a metric and sonic consistency as it appears represented in notation.

Introduction: Locating Templates Between Musical Subjects and Objects

This essay presents a theoretical account of musical performance as reproduction. Referring to performance as "reproduction" may at first seem somewhat unfair to performers who are by all rights considered creative musicians. While it would of course be inaccurate to think of a musician's performance as mechanical reproduction, there are nonetheless technical or technological elements involved in performance: the technique of the performer and the technologies of the instrument or notation. Unlike Walter Benjamin's characterization of mechanical reproduction, which eliminates the auratic quality of the singular work in its photographic or phonographic reproductions, thinking of performance as reproduction admits its technical basis while also acknowledging the singularity of a performer's technique, or the uniqueness of her idiomatic use of technology. The technical provides a structural basis for reproduction—maintaining some degree of consistency from one reproduction to the next—while still indexing the individual subject doing the reproducing.

Technique presents a mediating term between the performing subject and the reproduced musical object. A singular technique such as the twelve-tone technique is often spoken of as a transferable object. However, any usage of the twelve-tone technique relies on its interpolation into an individual composer's technique—it does not stand alone as an object, nor is it something entirely subjective.

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¹ Walter Benjamin, trans. J. A. Underwood, *The Work of Art in the Age of Mechanical Reproduction* (London: Penguin, 2008).

Given that there is a subject reproducing using the mediating forms of technique, what is the object that is reproduced? The musical "work" concept has object status in certain traditions, but in others, such an object for reproduction never emerges. One example might include the case of free improvisation collectives, which reproduce variable patterns of interactions without necessarily defining an object.² In other instances, reproduction might more accurately be viewed as the reconstruction of musical practices on instruments that remain after the violent cessation of the regulatory musical traditions.³ In these instances in which the object ontology of the work concept is weaker or non-existent, it is not always possible or even desirable to point to a reproduced musical object. Yet, something still guides reproduction; over the course of this essay, I will suggest that we can identify various *templates* structuring reproductions.

For the purpose of this essay—the definition of the template concept—I will focus specifically on the work-based, European classical/modern tradition. This is not because the template, as a guiding tool for both musical analysis and reproduction, is limited to this musical tradition. In fact, as I have suggested above (and will bring up again in the conclusion), it is perhaps even easier to recognize the use of the template concept for improvisational or experimental practices in which there is no definite object (such as the work) that is reproduced. I will suggest that the template—like

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² David Borgo, *Sync or Swarm: Improvising Music in a Complex Age* (New York: Continuum International, 2005).

³ Rob Thorne's essay on his musical practice discusses the manner in which the traditional Māori *taonga puoro* "lacks a consistent, fixed body of instrumental musical learning" due to the disruptive processes of rapid colonization and modernization. Rob Thorne, "The Vesica Piscis of Past and Future Tradition," *Writing Around Sound* 2 (2016), 7.

technique—mediates between subject and object, and can guide musical reproduction in the absence of objects that lay claim to some degree of autonomy from subjects (performers, interpreters, listeners).

In fact, the European concert music tradition is an interesting case study precisely because of the strong object ontology of the work. The historical reification of the work (which Lydia Goehr locates around the year 1800)⁴ is such that characterizing performance in this tradition as reproduction seems to suggest that performance is only the secondary reproduction of the primary activity: the production (composition) of the musical work. Certainly, works are reproduced in performance, but composition relies on reproductive techniques and technologies as much as performance. Characterizing performance as reproduction by no means brackets off composition as the mere production of works.

The following diagram illustrates the basic components and processes at play in music generally conceived as reproduction:

⁴ Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Clarendon Press, 1992).

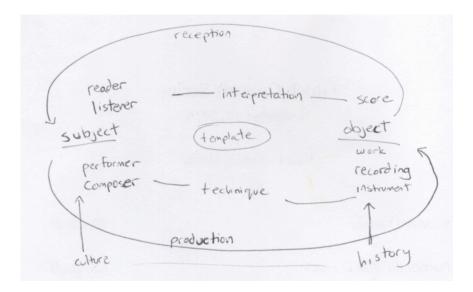


Figure 1: Template, between subject and object

On the side of production, the subject is the performer or composer, who works through technique as a mediating term to create various musical objects: work, instrument, score, or recording. Of course, these are very different types of objects, but those differences will be addressed later in the essay. On the side of reception, the musical objects pass through interpretation as the mediating term between the object and the listening/reading subject. Templates sit somewhere between reception and production, subject and object.

The changing location of the template is best illustrated by an example. The template of the musical staff guides the composer's technique, structuring choices in pitch notation. This might seem to be closer to the object pole—an inherited element of notation. On the other hand, the musical staff has historically been adapted and modified to index changes in the sonic materials of the composer or the differing requirements of the performer. In common practice composition, the musical staff might lean more on the side of the object—a mere tool for the rendering of pitch and

rhythmic values, which index the subjective decisions of the composer. The four timpani strikes in the beginning of Beethoven's violin concerto (1806) reflect a subjective awareness of the framing template: four quarter notes on the note D, played by the most regulatory, percussive instrument in the orchestra, draw attention to the meter (four notes of a quarter note value) and the key signature of D Major. In instances such as Lachenmann's *Pression* for solo cello (1972),⁵ the template of the musical staff is radically modified to index Lachenmann's personal sonic idiom. The markers of history and culture (in the diagram) represent the temporal dimension, along which subjects and objects, and the mediating terms of interpretation, technique, and templates, continue to change and shift.

Staying momentarily with this same example, we can see that the musical staff is a template both received and produced. It guides not only composition, but also the communication and reception of pitch (or in certain cases, un-pitched) material. The template, as a historically and culturally determined form, grounds the communicability of the object to various subjects. The template is also the vehicle for modifications of the object's standard usage; in the case of *Pression*, the techniques of playing the cello, determined and normalized by historical development, are radically changed. The modified templates of the musical staff and clef formalize the communicability of these "extended techniques" (as they are called in contemporary performance practice).

⁵ Helmut Lachenmann, *Pression für einen Cellisten* (Wiesbaden: Breitkopf & Härtel, 2010).

Existing Accounts of Musical Performance and Interpretation; Summary of the Argument

There is a plethora of books and articles dealing with the question of musical performance and interpretation from different methodological angles. On the scholarly side of things, attempts have been made to account for interpretation and technique. Many attempts often observe the gaps between the empirical or technical analysis of musical objects (recordings, texts, works) and a hermeneutic approach to the construction and performance of subjectivity. My hope is that the template concept—as both mapping an understanding of technical reproduction and intensely indexing subjectivity—may fill in some of these gaps.

One of the more prominent examples of scholarship on musical interpretation is Lawrence Kramer's *Interpreting Music*. Kramer celebrates the manner in which the act of interpretation opens and differentiates musical meaning. Notably, he likens the idea of critical interpretation to the interpretation of a performer, suggesting that in each case subjectivity is performed. Interpretation is thus a process or event that produces experience rather than the mechanical repetition of structure.

As a possible corrective to Kramer's reliance on the analogy between critical interpretation and the performer's interpretation, Jerrold Levinson devotes an essay to the differences between what he calls critical and performative interpretation (or CI versus PI). As Levinson puts it, "a PI is not inherently a view of or about a work, its meaning and structure, nor, as we shall see, can it be said to include or indicate such.

⁶ Lawrence Kramer, *Interpreting Music* (Berkeley: University of California Press, 2011).

A PI will often reflect, spring from, be guided by a performer's critical conception of a work, to be sure, but it need not do so." Whereas a CI comments on and presents a view on the work, a PI presents a sensuous realization of it. Views that are salient in the CI are often not registered on the level of the PI. Furthermore, one can have a CI about a PI. And so on. In the last section of the essay, Levinson adopts the attitude of one going about using his CI to inform his PI; he interprets Bach's Andante from the second violin sonata as signifying various possible affects: tension, drama, distress, or lightness, as seem appropriate to the structural features of the movement. He details the manner in which this critical interpretation informs choices of tempo, tone quality, and emphasis.

This problem of distinguishing between the salient features of the theorist's and the performer's analysis is one that Nicholas Cook addresses at great length in his book, Beyond the Score, 8 which is one of the most comprehensive treatments of the subject to date. The book starts with several chapters devoted to critiquing the approach of page-to-stage, in which it is assumed that a textual analysis will simply translate into performance (Levinson is certainly guilty of this). He includes this under the rubric of the "structuralist paradigm," which does not work inductively from recordings, but rather compares what is done in performance to some structural conception, mapping but also "filtering out everything that won't map." Cook includes within this a critique of his own analysis of Furtwängler's recording of

⁷ Jerrold Levinson, "Performative versus Critical Interpretation in Music," in *The* Pleasures of Aesthetics (Ithaca: Cornell University Press, 1996), 67.

⁸ Nicholas Cook, *Beyond the Score* (Oxford: Oxford University Press, 2013).

⁹ Cook. Beyond the Score, 55.

¹⁰ Cook, Beyond the Score, 55.

Beethoven's 9th Symphony, tracking fluctuations in tempi against Heinrich Schenker's analysis of the same composition. While the empirical analyses do filter out most considerations other than tempi, they are still meaningful and interesting because of the historical context: Furtwängler was a devotee of Schenker's, both reading his performance instructions on the work and studying analysis with him.

These analyses are undoubtedly of interest to any performer curious about the historical exchange between analysis and performance. Furthermore, the macrostructural analysis of tempi nicely complements the performer's usual approach to analyzing other performances, which works inductively but misses out on the larger structural contours operating at a time level not necessarily coherent with a performer's moment-to-moment considerations. This is related to Cook's reflections on John Rink's notion that a performer's analysis aims "to discover the music's 'shape,' as opposed to structure." A theorist's analysis of musical structural takes the composition out of its performed time, but this does not mean that structural analysis is entirely unhelpful for the performer; Rink thus advocates a "middle path between the equally absurd propositions that musical structure as understood by theorists has nothing to do with performance, and that it has everything to do with performance."

Cook argues that the page-to-stage mistake is repeatedly made because musical performance is conceived as reproduction. Referencing Schenker's *The Art of Performance* and Adorno's *Towards a Theory of Musical Reproduction*, Cook

¹¹ Cook, Beyond the Score, 48.

¹² Cook, Beyond the Score, 48.

suggests that this model of reproduction is incompatible with the rhetorical style of performance that they both advocated for: "As I see it, the basic problem with both Schenker's and Adorno's approaches to performance...lies in their common reliance on the paradigm of reproduction. I see this as incompatible with any adequate theory of musical performance, but especially the kind of performance epitomized by 'old school' playing—to which Adorno, despite being thirty-five years younger than Schenker, seems to have been equally attached." Moreover, he links this paradigm to the page-to-stage mistake: "It is the paradigm of reproduction that leads to the assumption that what happens on the page should be reflected on the stage. Set that aside, and it becomes as plausible to think of performers complementing the qualities of a notated script as replicating them." Cook advocates for a musicology that stops treating texts as the primary objects of analysis (and this includes treating recordings as texts).

According to Cook, moving away from this paradigm of textual reproduction supposedly frees us up to view performance as the richly textured and layered complement to notation. In Chapter 10, he quotes Philip Auslander's statement that one need not perform something; often we perform someone. In other words, the work need not be the object of performance—a musician can perform personas and subjectivities. Cook's subsequent attempt to combine performance theory with empirical/technical analyses of performing bodies mostly falls into this reading of the different subjects performed.

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¹³ Cook, Beyond the Score, 89.

¹⁴ Cook, Beyond the Score, 129.

Given that this essay is explicitly an account of musical performance as reproduction, it would seem that the project is diametrically opposed to Cook's rejection of the reproduction paradigm. However, Cook's objection is to conceiving of performance as the reproduction of musical objects such as the work. This is understandable given the manner in which musicologists and philosophers tend to characterize performances as mere versions of the work. What I take issue with in Cook's response to this is the manner in which he flips—taking a cue from Auslander—from the performance of something (an object or text) to someone (a subject or persona). This jumps from object to subject without considering the middle ground: the manner in which the body is instrumentalized for technical reproduction, manifesting the performer's motivating understanding of what constitutes the musical domain. Throughout his book, Cook is very good at piecing together performers' templates for understanding music from their own critical interpretations; I would argue that the analyses of video recordings in Chapter 10 are less successful.

The template concept might be inserted between the flip from an empirical analysis of objects (texts and works) to a hermeneutics of subjectivity. That is to say, I am in some way attempting to formalize the kind of inductive analysis of performance that Cook advocates for, which neither treats the recording according to reductive structural parameters nor devolves into a hermeneutics that pieces together various performing personas. In Part IV of this essay, I will examine three different templates of performance: Kreisler's distinctive rhythmic lilt (deriving from Viennese Ländler

¹⁵ Peter Kivy's essay on performance treats performances "arrangements" or "versions" of the work. Peter Kivy, "And the Performance thereof" in *Introduction to a Philosophy of Music* (Oxford: Oxford University Press, 2002).

and Waltz rhythms), elements of Heifetz's bodily formalism (tracking these from his teacher, Leopold Auer's, pedagogical instructions), and Hahn's conformity to a metric and sonic consistency as it appears represented in notation. These templates are observable features of their performances that also manifest an understanding of music's domain (i.e., as a topical musical style, a rigorous attention to bodily discipline, or an adherence to a sonic and metric ideal).

Cook's historical meditation on the shifts between "structuralist" and "rhetorical" styles of performance deals directly with what I would consider templates for musical reproduction—that is, guiding forms that move in the space between reified objects and interpreted subjects. Whereas the "structuralist" style of performance (emerging most dogmatically in the second half of the 20th century) advocates for somewhat constant tempi throughout performance, the "rhetorical" style (heard in recordings of or testaments about the interpretations of d'Albert and Joachim) is "predicated on the communication of moment-to-moment expressiveness." This maps roughly onto what Adorno marks as the "abstract-symbolic" and mimetic/gestural poles of performance.

Cook's critique of reproduction is premised on the assumption that it refers to the reproduction of text or work, but performers such as D'albert and Joachim were as much reproducing the text as they were the rhetorical manner of playing that they heard as part of the lived performance tradition. The template concept accounts for the

¹⁶ Cook, Beyond the Score, 70.

¹⁷ Adorno, Theodor W., trans. Weiland Honban, ed. Henri Lonitz, *Towards a Theory of Musical Reproduction: Notes, a Draft and Two Schemata* (New York: Wiley, 2014), 168.

reproduction of such traditions, both rhetorical and structuralist, in relation to structural texts, inter-textual topics, disciplined bodies, and sonic ideals. Cook's tendency to focus on performers' own analyses as opposed to readings of the operant templates in their performances neglects the manner in which a performer's idiomatic or technical tendencies are often on some level unconsciously developed.

On the side of technique, many articles have treated the movements of performing bodies as textual objects that can be empirically measured. Specifically, researchers (including Marcelo Wanderley, Caroline Palmer, and Erwin Schoonderwalt, to name but a few) in the fields of music technology and psychology quantify movement in order to learn more about the mechanisms at play. These studies are largely divorced from questions of subjective or cultural meaning, and so lie somewhat outside the scope of this essay (although it would be interesting to return to such studies in further developments of the project). Engineers such as Jim Woodhouse have studied the complexities of the bowed string, taking the instrument-performer interactions manifest in string vibration as a textual object. One notable example of a performer interested in combining empirical and pedagogical approaches to string vibration and bodily technique was Knut Guettler, who was the principle bassist of the Oslo Philharmonic, but also moonlighted as an acoustician.¹⁸

Others have found German media theory fruitful ground for thinking about technique from a cultural perspective. Alex Rehding's introduction to a recent colloguy on "Music and Media Theory after Kittler" describes two of the paths taken

¹⁸ "Knut's Acoustics," last modified May 30, 2013, http://knutsacoustics.com/index.html.

after Kittler's provocative claims that culture and subjectivity can be conceived of as medial systems, which simply select, store, and transmit information. The camp of "media archaeology" works from objects to knowledge, whereas the "cultural techniques"²⁰ camp works from the human activities preceding systems and knowledge. Peter McMurray's article on what he calls "sonic archaeology"²¹ nicely flips the formulation of media archaeology to ask how the cultural technique of listening can undertake its own archaeological work. Roger Moseley likens media archaeology to period performance practice for the manner in which—as a set of cultural techniques—it turns historical research into invention, moving it away from linear narratives of development and toward the "wave-like periodicity with which particular assemblages of signals, technologies, and techniques tend to recur."²² In this light, the turn to media productively disrupts narrative and teleological histories of musical works, which treat performances as mere reproductions of said works.

This is also suggested in Roger Moseley's *Keys to Play*, ²³ which presents an account of musical performance as play. Moseley draws on theorists such as Bateson, Huizinga, and Caillois to elaborate different categories of play within musical practices, opening up an exploration of "ludomusical" practices from Mozart sonatas to Dance Dance Revolution, which elaborate the interweaving of text and practice.

¹⁹ Alex Rehding, "Introduction," in "Colloquy: Discrete/Continuous: Music and Media Theory after Kittler," Journal of the American Musicological Society 70-1 (Oakland: University of California Press, 2017), 225. ²⁰ Alex Rehding, "Colloquy," 226.

²¹ Peter McMurray, "Meta-aurality: A History of Listening to Listening," in "Colloquy," 234.

²² Roger Moseley, "Rehear(s)ing Media Archaeology," in "Colloguy," 247.

²³ Roger Moseley, Keys to Play: Music as a Ludic Medium from Apollo to Nintendo (Oakland: University of California Press, 2016), 187.

Such an approach self-consciously moves beyond the fetishistic treatment of scores in favor of a historical reading combining these texts with bodily and instrumental practices at play, instead advocating for the kind of simulation and modeling approach typical of media archaeology.

Moseley gives a convincing account of the practical knowledge involved in deciphering 17th century manuscripts of Couperin and d'Angelebert, noting the manner in which they differ in levels of mensural incompleteness. Couperin's neumic conclusion to his "prelude in G minor" in particular relies on a circle of professionals acquainted with keyboard conventions of the time to tease out what is unwritten. Moseley's accounts of Mozart's shifts between a prescriptive and transcriptive use of notation also highlights the manner in which—under the urgency of musical engagements—play around conventions shuttled rapidly between textual and instrumental inscriptions.

Thinking of performance as medial play certainly helps to move beyond a paradigm that fetishizes authenticity in terms of one's proximate location to the lived tradition. It emphasizes the performer's agency as a subject capable of acquiring knowledge and working through and against restrictive schools of thought through the extensive properties of medial play.

If this account has a weakness, it is that in his advocacy for the liberating qualities of medial play, Moseley runs the risk of over-emphasizing the importance of performer's personal decisions about how they perform. That is to say, there are moments in which it seems that Moseley does not properly account for the manner in which performers are subject to certain objective constraints or inherited historical

materials such as pedagogical frameworks, expectations of the audience and the music industry, or physical limitations of what a body can learn and un-learn. For example, while the rhetoric of many performers including Leopold Auer seems in line with the kind of fetishistic treatment of works that Moseley critiques, it becomes clear from the performances of Auer's students that the somewhat ahistorical treatment of these works (i.e. the undifferentiated qualities of a performance of a Beethoven or Mozart sonata) follow different imperatives hooked into a highly developed aesthetic of instrumental playing. That is to say, Auer's ahistorical treatment of scores is itself a historically situated moment in the progression of instrumental pedagogy as a semi-autonomous mode of musical practice. The structuring templates of these practices still remain in our ears and bodies, even if only to be resisted.

James Davies' book on performance fills in this history of performance pedagogy, focusing on pianists and singers circa 1830. *Romantic Anatomies of Performance* examines historical accounts of virtuoso's hands and voices in performance, making the point that bodies are constantly being interpreted. In fact, the documents for Davies' analysis are textual, including notes, journal entries, and reviews of performances, suggesting that the cultivation of virtuosic bodies is discursive: "Materiality itself must be conjured, not only by performer-virtuosos themselves but also by those circles of opinion external to them; bodies themselves must be made sense of in environments of intense social debate. This is to say that the issue of who controls voices and hands is less than self-evident."²⁴

²⁴ James Q Davies, *Romantic Anatomies of Performance* (Berkeley: University of California Press, 2014), 6.

In the three chapters concerning pianists, aesthetic and methodological differences between pedagogues and critics come into view including: a focus on the beauty of the virtuosic hands versus the denial of "handedness" in favor of a spiritual approach; systematic approaches to technique versus anti-systematic approaches appealing to desires and drives; and touch as a passive and sympathetic "feel" rather than an active, personal voice. Liszt's pedagogy signaled a movement away from a traditional disciplinary treatment of the body. Students described his hands as having "no fixed position," moving across the keyboard in such a way that they seemed to deny both its instrumental limitations as well as the fact of Liszt's own handedness: "It is an accidental circumstance, of no importance, that Liszt happens to play the piano at all."

This denial of the body—its systems and positions—was in direct contrast to the pedagogue and virtuoso Friedrich Kalkbrenner's fastidious attention to the shaping of the hands and his "mania for system" implying "a love of accumulation." Davies argues that Kalkbrenner's approach "followed enlightenment models of language learning or instruction in the arts of rhetoric" he sought comprehensive taxonomies of "expressive quantities" and technical figures, even instructing pupils to "memorize key signatures in relation to visible parts of their own bodies." ²⁸

Such differences in pianistic methods (or their denial) reveal "romantic anatomies" of 19th century performers to be detailed and diverse, and in many cases

²⁵ Davies, *Romantic Anatomies of Performance*, 170.

²⁶ Davies, Romantic Anatomies of Performance, 106.

²⁷ Davies, Romantic Anatomies of Performance, 106.

²⁸ Davies, Romantic Anatomies of Performance, 106.

more rigorously considered than contemporary Romantic ideologies. Davies critiques Romanticized notions of the "voice" in both mainstream conservatory culture and musicology, looking instead to the historical attention given to the body's cultivation. These bodies' cultivated differences are erased in the Romantic idealization of the voice as individuality materially manifest:

...it seems useful to register how Barthes has been (mis)read and how naturalized his conception of 'pure voice' has become...One could cite many examples...by quoting the everyday pronouncements of conservatory vocal coaches and piano teachers. In popular literature, a remarkable case is Reneé Fleming's biography of her own voice aptly entitled *The Inner Voice: The Making of a Singer* (2004). For Fleming, one disciplines the self in order to achieve a kind of 'universal appreciation that transcends taste...One cultivates one's voice, in other words, in order to apprehend its supernature."²⁹

Fleming states that with proper training and discipline, the voice will be able to emanate a "kind of innate authority"³⁰ emanating from the "whole heart and soul."³¹ As Davies points out, this ideology of voice does not limit itself to the aesthetic domain of its cultivated tradition, but rather argues that the right training unlocks the universal. Fleming shares assumptions of universal expressivity with pianists of the early 19th century, but perhaps because the universality of the classically trained voice is no longer an uncontested assumption (even within classical music circles, one would hope), the stakes seem lower. That is to say, whereas

²⁹ Davies, Romantic Anatomies of Performance, 5.

³⁰ Davies, Romantic Anatomies of Performance, 5.

³¹ Davies, Romantic Anatomies of Performance, 5.

disagreements between Liszt and Sigismond Thalberg's disciples about the nature of such a disciplining (or in-disciplining) were rooted in contemporary scientific debates about the very nature of the human's capacity for sensation and reason, our contemporary retrospective Romanticism seems grounded in an ahistorical nostalgia and a culture of hyper-individualism. Davies makes the point that our modern pedagogical truisms about the individual "voice" or "touch" are impoverished in comparison to the diversity of touches and conceptions of touch present in the early 19^{th} century—it would seem that the assumption of this music's universality raised the stakes for articulating knowledge about the site (material or ideal) and method (or absence of method) for its reproduction.

While Davies offers reasonable critiques of our retrospective Romanticism, he frames the overall approach of the book as not critical but rather historical and "realist." That is, though he starts from a position denying the existence of an essential or natural voice, he then rebuilds plural conceptions of voice by drawing connections on historical texts. However, I would argue that Davies premises his argument on a deconstructive move—though not in such a way that it is detrimental to his stated project—by taking the materiality and presence of a technical body as something conjured and cultivated. In his theoretical framework, material presence itself is subject to textual interpretation, to the point that not even the pianist is the sole agent in the workings of his or her voice or hands. Davies couples this treatment of presence or materiality as discursively determined (in homage to Judith Butler's work?)³² with

³² Gender Trouble

his self-described "avowedly realist" approach—"avowedly realist" in the sense that it looks at the stated claims of historical pedagogues, students, and critics about how they conceive of and cultivate their bodies.

It is certainly true that some amount of imagination or interpretation must be at play in any attempt to describe what and how a body does what it does—Peter Szendy uses the term "effiction" to characterize the way in which our descriptions of and actions as bodies are always imaginative reconstructions or interpretations: "The Nephew owes all his appearance to the *effiction* Diderot gives of it, in the sense of that old figure of rhetoric (effictio) that designated the verbal description of a body, in general from head to toe..."34; "My body-to-body experience [corps á corps] with the keyboard would then become the moment that representations of bodies, up until then only pending, were waiting in order to *precipitate*."³⁵ According to Szendy, effictions sculpt the body—they are words and representations that possess and interpret the performing subject. This might be one way to conceive of Davies' claim that the materiality of the body is conjured discursively by multiple people and texts. Davies' "realism" meets Szendy's more personal and "effictional" account at the point where we begin to imagine the practical cultivation of presence and materiality in relation to our own bodies.

In bringing these texts together, it becomes clear that both interpretation and technique are variably treated as textual objects and subjective processes. Part of this

³³ Davies. Romantic Anatomies of Performance, 2.

³⁴ Peter Szendy, trans. Will Bishop, *Phantom Limbs* (New York: Fordham UP, 2016), 15.

³⁵ Szendy, Phantom Limbs, 16.

essay will be devoted to some ontological clarification of technique and interpretation in relation to objects such as works, texts, and recordings. Viewing bodily technique and musical texts as media storing and transmitting information seems useful, but as a starting point for further musical analysis it does not provide a very nuanced account of the different types of objects, systems, and subjects involved in musical practice.

I will draw heavily from two accounts: Naomi Cumming's *The Sonic Self*, which provides a thorough account of subjectivity as it is constructed through the interpretation of sonic signs; and Theodor Adorno's *Towards a Theory of Musical Reproduction*, which discusses the historical dialectic between music's abstract and gestural elements as they sometimes develop and sometimes arrest the various media of music's reproductions (primarily notation and bodily technique). I hope to synthesize these two approaches—one focused on the semiotic construction of subjectivity, the other on objective historical materials—to illustrate templates as the operative guides in performance that both mark historical formations and index subjective proclivities.

This essay proceeds in four parts. Part I will review Naomi Cumming's Peircean account of musical subjectivity and signification, *The Sonic Self*. Using Peirce's triadic sign, consisting of object, representamen, and interpretant, as well as his three sign categories—the index, icon, and symbol—Cumming sets up a compellingly nuanced case for how sound comes to signify for performers and listeners, accounting for the ways in which sound can mean in reference to identifiable abstract gestural figures (such as the appoggiatura), in reference to the gestures of the performing body (which themselves index emotional states), or in reference to the

conventional symbols of musical language (such as the V-I cadence in the Classical and Romantic style). Underlying Cumming's book is a subtle but insistent feminist critique of notions of sonic subjectivity that have taken form in a historically maledominated musical discourse. Throughout, Cumming asserts that music's particular performance and sounding are as structurally meaningful as its notated form for musical analysis.

Cumming focuses on the interpretation of musical signs in the moment of their sounding; it is not within the scope of her project to either pass judgment on how specific performers interpret the composer's notated material, nor to provide an account of the historical consciousness embedded in musical material as it drives music's development and reproduction. In Part II, I will review Theodor W. Adorno's account of musical interpretation in his notes and draft, Towards a Theory of Musical Reproduction. This monograph was never completed and only published posthumously. The scope of the project is vast, but revolves around a central dialectic between musical fixity and movement: musical notation, in its attempt to abstract and preserve, also suppresses the mimetic, bodily gestus that is central to music's dynamism. In the background of this monograph is Adorno's argument in *The* Philosophy of New Music that music's autonomy (the independent development of its forms and materials) is what allows it to truthfully reflect developments in society, as some historical consciousness is always embedded within its materials. Interpretive fidelity to the musical work both preserves this autonomy while also bringing it back

into society; a "true interpretation"³⁶ is both the work's retrieval of its idea (the societal truth that it reflects) and also its disintegration as it is drawn back into society's system. Within the impossibility of retrieving or reproducing the work without altering or destroying its sense, Adorno notes some cursory observations about what constitutes a truthful performance (as well as what constitutes a negligent or irresponsible interpretation).

Part III of this essay recognizes the differences in these accounts while also suggesting that the arguments are not mutually exclusive or even contradictory. Cumming explains how music is communicated and received within a system of signs; Adorno describes the manner in which musical performances reflect different negotiations of the historical dialectic between musical fixity and dynamism. Both Cumming and Adorno draw from their personal perspectives as practitioners: Cumming recounts anecdotes from her time as a violin student and teacher in order to set up more systematic explanations of the anxieties stemming from the understanding that sound can come to reflect something of one's subjectivity; Adorno writes from the perspective of one heavily invested in performerly debates about tempo and rubato, while linking these debates to larger issues of music's abstraction and commodification. It is worth noting that both Cumming and Adorno deal with a specific historical understanding of performance as interpretation. However, this understanding of musical interpretation is still operant in contemporary musical practice, and so it is worthwhile to devote this essay to a further investigation of the historical forces and ideological frameworks holding in place this understanding.

³⁶ Adorno, Towards a Theory of Musical Reproduction, 48.

Part III will suggest that what both of these accounts neglect are specific analyses of performers' means of production: that is, the technical frameworks that allow performers to accurately reproduce (and alter) music. This notion of "accuracy" is not meant to suggest any strict disciplinary notions of what is musically right or wrong, but rather that performers have ways of formulating some kind of inner consistency from performance to performance that are determined both by ideological systems and individual explorations (in other words, technique). It is in order to analyze the technical frameworks that guide and form musical interpretation and reproduction that I develop the notion of musical *templates*.

The term, template, is more than a metaphor but also less than an overarching theory of performance. Rather, it is meant to facilitate some kind of analytical understanding of practice as it mediates between the material and the abstract. That is to say, the template holds together an identifiable tendency in material practice (for example Fritz Kreisler's distinctive rhythmic lilt) and the inferred understanding guiding this tendency (Kreisler's hearing of the Viennese Ländler); the template itself is Kreisler's interpolation of these repeated hearings into his technique. As an irreducible limit, this template guides musical reproduction as a repeated tracing. There is of course slippage and shifting in the tracing—it is not any kind of mechanical reproduction. And furthermore, the template is retroactively changed and transformed, just as material practice transforms incrementally over time. As such, the identification of multiple templates can map technique—which otherwise seems like something of a black box—as the underlying structure of musical practice that is developed over time and changed only slowly.

Part IV of this essay will undertake specific analyses of templates for performance, identifying Kreisler's distinctive lilt (deriving from Viennese Ländler and Waltz rhythms), elements of Heifetz's bodily formalism (tracking these specifically from some of his teacher, Leopold Auer's, pedagogical instructions), and Hahn's conformity to a metric and sonic consistency as it appears represented in notation. These templates are all socially determined, in some way conditioned by cultural, industrial, or pedagogical systems. Re-tooling Cumming's use of Peirce's indexical sign, part of the reason these elements of performance *mean* is that they index the ideological forces shaping their production and reproduction. On the other hand, these templates mark something unique about each violinist's way of playing that derives from their particular way of hearing and understanding music. This is not an unequivocally Romantic notion of individual voice—these modes of hearing and understanding, while individual, are also largely shaped by larger social forces, which individual determination cannot override. That is to say, Hillary Hahn, who it would seem can play pretty much anything, cannot revert back to Heifetz's sense of timing/phrasing, which is largely connected to the formalism of his bodily technique, which is in turn connected to a whole physiological and ideological complex specific to the social and historical conditions of his training and concertizing.

Something that concerns Adorno throughout his writings on music is the manner in which music's reproduction in performance and recording alters and transforms elements of a work's structural integrity that he deems essential to a proper engagement with it. This anxiety about the work's truth being lost in its recontextualization can seem like a retreat to Platonic idealism, except that this anxiety

is premised on the understanding that the musical work is not a stable identity existing separately from its material instantiations. Rather, each reproduction reflects some alteration of the work. Thinking in terms of musical templates acknowledges that Adorno is right to point to some loss of structural integrity in certain performances, while also showing the manner in which these performances exhibit a different (and often competing) kind of structural integrity. The most prominent example of this is Heifetz, whose recording of the Brahms concerto with Toscanini loses an awareness of Brahms' reconciliation of harmonic conventions with the principle of developing variation, largely because choices of phrasing, timing, and articulation are overridden by structural concerns proper to instrumental technique and sound. The templates of bodily formalism that Heifetz follows reflects both an industrial approach to violin pedagogy, but also a different kind of musical literacy in which we can appreciate the inventiveness of his virtuosity, his musical upbringing, and the conditions of his musical reproductions (taking place in hundreds of cities each year).

One thing that remains unclear is to what extent templates for musical reproduction are conditioned by fatalistic circumstances of one's sociohistorical position, and to what extent they can be altered or shaped by self-determination. The answer to this will be left somewhat open, except to note that whatever the case, the slow work of consciously altering and organizing the templates that guide musical practice begins and ends with their deliberate critique and reflection.

Part I: The Sonic Self

Naomi Cumming's book uses Charles Peirce's philosophy in order to provide a pragmatic account of the interaction of musical signs and subjectivities. While she explicitly builds a bridge between the academic fields of music theory and philosophy, her work also offers correctives to a few interrelated mistakes in the naïve theory perpetuated in musical pedagogy and practice. Cumming herself does not frame these as "correctives," but the pervasive and deleterious effects of these mistakes warrant some attention:

- i. "Cartesian solipsism"³⁷: imagining that musical sounds/signs are expressing something interior or fundamental to the performing subject;
- ii. The uncritical division of technique and interpretation.

In line with Peirce, Cumming locates the identity of the subject not within some "inner" space, but rather as an "intrinsically social, interactive, and mobile experience." The ability to express or emote is thus not linked to something immutable and essential about a subject's identity, but rather to the negotiation of one's socialization and bodily practice. This specification of subjective identity is potentially liberating: "In the process of questioning my musical capacities, I gain a self-reflexive knowledge, a new ability to refute the beliefs implicit in my social behavior, and a possibility of entering freely into an expressive domain that had been

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³⁷ Naomi Cumming, *The Sonic Self: Musical Subjectivity and Signification* (Bloomington: Indiana University Press, 2000), 10.

³⁸ Cumming, *The Sonic Self*, 10.

'foreign' to me."³⁹ Difficulties in expressing one's "self" might be more productively viewed as the slow process of reflecting on and negotiating socially and ideologically conditioned habits.

In her introduction, Cumming recounts a violin teacher from university who employed, in his weekly technique class, the ideas of a pre-Soviet Russian mystic, George Ivanovich Gurdjieff. This violin teacher would attempt to create "crises" that would shock a student out of their rational tendencies and habitual approaches. The inducement of one such "crisis" was attempted through the cruel demonstration of repeatedly dropping Cumming's violin on a desk in front of him. Whether or not this constitutes an effective pedagogical approach, this memory leads Cumming to reflect on the inseparability of habitual technique and expression: "Radically change a student's basic technique, and you have also altered his or her expressive medium."40 This inseparability of technique and expression adds to the first point that the performer's subjectivity is to a great extent engineered through a technical negotiation of signs: "The performing 'self' is thus formed in practice through the mastery of kinesthetic signs."⁴¹ While the artificial division of interpretation and technique may have practical pedagogical purposes, the reification of such a division leads to essentialist notions of one's "musicality," which again rely on the Cartesian solipsism locating subjectivity within an interior space of personhood rather than as the negotiation of socially and materially negotiated "kinesthetic signs."

The Triadic Sign

³⁹ Cumming, *The Sonic Self*, 11.

⁴⁰ Cumming, *The Sonic Self*, 7.

⁴¹ Cumming, *The Sonic Self*, 34.

Peirce's sign is in three parts: the *object*, *representamen*, and *interpretant*.

Cumming utilizes this triadic sign to develop an account of sonic signification that acknowledges the manner in which the particular and present nature of sound usually defies neat verbal representations.

She begins to show the facility of the triadic sign through reviews of two CD's: Sarah Chang's "Lark Ascending" by Vaughan Williams and Miriam Fried's Sibelius Concerto. These reviewers describe the violinists' sounds as "innocent" or "warm." Cumming explains that the idea that a violin sound could be expressive of "innocence" unearths a key difference between verbal and musical terms: while verbal terms "convey the idea of a quality of character, or a state of mind, with some degree of abstraction," musical sounds only "present such qualities." The description of musical sounds as presenting describes the immediacy of the listening experience, which is not conducive to the kind of reflective thinking with abstract terms characteristic of language. The object of the sonic sign is tied to the specificity of its presentation—its representation as "innocence" or "warmth" only upon reflection links this presentation to a general idea. The general idea ("warmth" or "innocence") in itself—that is, without the particular presentation of the sound—does not adequately capture the sound's presentational form.

The "embedded 'object" in Fried or Chang's sound conveying some "quasi-vocal 'innocence' or 'warmth'" is only discernable within a discourse that links

⁴² Cumming, The Sonic Self, 74.

⁴³ Cumming, *The Sonic Self*, 75.

⁴⁴ Cumming, *The Sonic Self*, 75.

⁴⁵ Cumming, *The Sonic Self*, 75.

violin sounds with vocality. If the timbral quality of the particular violin sound is the *representamen* and the *object* is the heard object of "warmth," then the *interpretant* is the learned association that grounds the sign's comprehensibility within the community's discourse. Cumming describes the interpretant as "that which brings a sign into connection with its object, not depending on any individual mind, or psychological attitude, for its operation." Within the particular framework of violin sound, interpretants account for a cultural familiarity of the violin's associations with vocal expression and emotionality necessary to hear Fried's sound and identify it as "warm." They translate the immediacy of the individual's listening into the reflective terms understood by a community.

Exploring a further taxonomy of Peirce's categories, Cumming elucidates the three ways in which an object may be related to its sign: as an *icon*, *index*, or *symbol*.

The general domain of the *icon* is associated with "an aspect of the presentational form giving rise to [a putative likeness to some object]," involving "a putative likeness to some object (either 'naturally' or by convention)." According to Cumming, the icon suggests connotative possibility: "To understand them [icons], it is certainly necessary that a listener not close his or her mind to the connotative dimensions of any musical element, and that a critic be prepared to deal with the uncertainty of explicating contents that cannot be stated strongly as 'facts.'" The icon suggests some metaphorical possibility of hearing *as*—the critic's characterization of Fried's sound brings timbral quality into iconic association with its

⁴⁶ Cumming, *The Sonic Self*, 68.

⁴⁷ Cumming, The Sonic Self, 86.

⁴⁸ Cumming, *The Sonic Self*, 102.

possible understanding as "warmth." The icon can associate objects with a perceived likeness in timbral qualities of sound, singular gestures, or conventional figures (e.g. hearing the resolution of dissonance in Classical/Romantic music as "release").

In contrast, the *index* is described as: "a 'causal' or directional connection to the object, established by context." Unlike the icon, the index is affected by its object: Peirce gives the example of the weather vane as an indexical sign that is affected by its object (the wind). Cumming contextualizes the index in musical practice as such: "A relatively 'strong' sound...may index the high degree of force used by a player... When used deliberately, they [these indices] retain the capacity to suggest altered affective states." The index is thus in Cumming's account often subsumed within the iconic likeness: while the index gives information about physical gesture or movement in sound, what is often taken as more important is the emotional information iconically connoted. One counterexample given by Cumming is the music of Brian Ferneyhough, in which notation deliberately exceeds the physical possibilities of the instrumentalist, foregrounding material limitations. Many scores using what Mieko Kanno describes as "prescriptive notation" also draw interest by deliberately addressing bodily gesture rather than representing notes or sounds. 51

Peirce's *symbol* refers to stipulated connections between objects and signs, most clearly seen in the usage of nouns as arbitrary signs for things. Cumming sees musical symbols in conventional signs such as the V-I cadence. In Romantic music,

⁴⁹ Cumming, *The Sonic Self*, 86.

⁵⁰ Cumming, *The Sonic Self*, 91.

⁵¹ Mieko Kanno, "Prescriptive Notation: Limits and Challenges," *Contemporary Music Review* Vol. 26 Issue 2 (2007).

such a structural cliché might be obscured or hidden, while "postmodern works" might instead exploit "a former cause of stylistic embarrassment to great ironic effect." In Adorno's essay on late Beethoven, the use of musical conventions devoid of their normal function (such as a long trill that does not cadence) takes on immense historical importance. This will be unpacked later in the essay, but this again is the emergence of an iconic possibility. While Cumming, in her analyses of musical works, reads such knowing uses of conventional signs as narrating the drama of a subjective persona formed within the musical context, Adorno reads these as the unfolding of a larger historical narrative—the "persona" of *Geist* (both subjective and societal spirit) as it is reflected in the development of musical material.

Icons are interpreted as signs of some possible likeness; indices point to some actual occurrence; and symbols assert a set of conventions. This taxonomy of signs gives a nuanced account of the ways in which we perceive qualities of sound, physical gestures, and conventional sequences as meaning. The three part division of icon, index, and symbol will provide illumination in parsing some of Adorno's assertions and in further elucidations of the templates guiding musical practice.

The Template as Refracted Image of the Interpretant

Cumming's use of Peircean semiotics provides a valuable metatheory of musical interpretation. The synthesis of different signs allows for complex accounts of musical signification. For example, the interplay of harmony and voice leading, which works around legislated signs (symbols), can suggest the iconic possibility of a specific affect. As Cumming writes:

⁵² Cumming, The Sonic Self, 95.

Spending time in the contemplation of how the voices work, and how they combine at times to form a composite entity, can be 'informative' not only about the structural facts but also about the performative options they allow, with their emergent effects. In this way, it is *expressively* informative. It is not merely coincidental that Hanslick was so attached to the notion of contemplating abstract forms. It is in their very contemplation that new 'depths' of expressive play, and subtleties of affect, can be discovered, to yield insight into states not previously 'known.' 53

This semiotic approach accommodates the complexities of musical formalism without cordoning this discussion off from the possibility that these structures can connote affective qualities. As any performer will attest, reading some kind of narrative or dramatic unfolding in musical structure is fundamental to its interpretation (unless you are really a formalist through and through). Qualities of musical timbre and sound can also be interpreted as signifying some conditional meaning, which is again inseparable from the specific context of its presentation. Indexical signs that tell the listener something about the performing body's state of producing sound may also be interpreted iconically, heard as signifying some affective state. Finally, all three signs can be synthesized in the interpretive process between composer, performer, and listener—a composer's play with legislated conventions of musical structure may be heard in iconic association with the performer's gestural emphasis.

Much can be gained from Cumming's metatheory of musical interpretation, but it is also productive to reflect on what it omits. As a pragmatist, Cumming

⁵³ Cumming, The Sonic Self, 240.

provides a convincing explanation for the basis of musical signification, taking into account both its notated and performed manifestations. What is most obviously not attempted is the kind of historical overview of musical signification that Adorno gives in his *Philosophy of New Music*, which chronicles "autonomous" music's changing relationship with the possibility of its meaning. Additionally, Cumming does not discuss the social forces, technologies, and institutions through which the structures and meanings of music are modified as it is reproduced in performance or recording (addressed more specifically in Adorno's *Towards a Theory of Musical Reproduction*). This will be examined more closely in Part II of this essay, but for now I will note the possibility that sonic signs can index not only bodily gesture, but also the kind of historical and social shifts that Adorno draws attention to.

Secondly, the semiotic approach deals more effectively with musical interpretation on the side of reception rather than production. That is to say, within the Peircean triadic sign, interpretants are introduced as passive elements facilitating shared understandings, rather than as active interventions modulating or reinforcing associations between gestures/sounds/structural elements and their interpretations. This is where the *template* is useful: it is less concerned with accounts of possible significations in the present moment of interpretation and more specifically focused on the formation of structural properties of bodily technique.

This diagram illustrates the difference and affinity between the interpretant and the template:

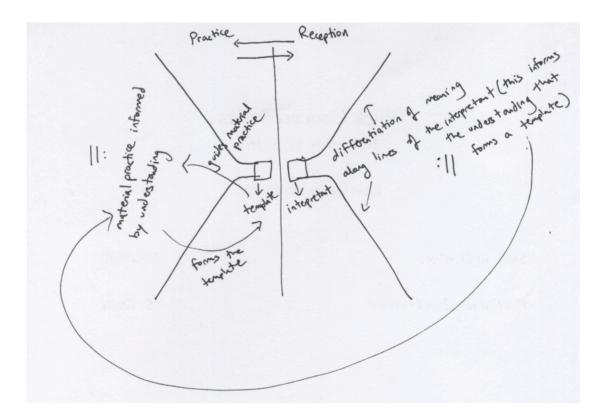


Figure 2: Template as refracted image of the interpretant

The right side of the diagram is the side of reception. The interpretant, as what grounds the communal understanding of signs, expands outward into a differentiation of possible meanings and associations. The repeat sign takes us to the left side of the diagram, which represents the manner in which this differentiated field of possible meanings drawn from the interpretant meets and affects the material practice of musical production. That is to say, material practice is informed by the understanding and communication of musical signs. The differentiated forms of material practice are in turn grounded in the template, which guides but is also formed by practice. This double movement is reflected in the two arrows between practice and reception: the template guides practice, which differentiates along its lines, which in turn creates a diversity of possible meanings, which in turn modify the interpretant as the reception-

equivalent of the template; at the same time, the interpretant differentiates into possible meanings, the diversity of which inform material practice, which in turn modify the template as the production-equivalent of the interpretant.

The line between template and interpretant represents the barrier that divides and connects template and interpretant. The template and interpretant may be seen as refracted versions of the other; the barrier represents the manner in which the template as a guide for musical production becomes the shared basis for the socially communicated sign. And yet, each is of a qualitatively different kind. Whereas the template guides and is formed by material practice, the interpretant is the basis for the understanding of a sign. As Cumming notes, "No matter how sophisticated the description of material components becomes, it will never add up to an account of the emergent level of 'sign,' which is of a different kind" (243). Whereas the interpretant is the basis for an understanding of the sign (as the association of representamen and object), the template, while affected by such understandings, operates independently of them.

To give a concrete example, Fritz Kreisler's distinctive rhythmic lilt derives from the template of the Viennese Ländler. On the production side, the Ländler (or his individual understanding of it) is a template that guides Kreisler's performances and compositions, all of which present specific differentiations of the Ländler's rhythmic identity. On the reception side, this Ländler inflection (as heard in his performances) is an interpretant bringing together the distinctive rhythm, the dance steps of the Ländler (or the Waltz, which derived from the Ländler), or accompanying emotional associations (nostalgia, as a crude example).

This second diagram clarifies the affinity and difference between template and interpretant:

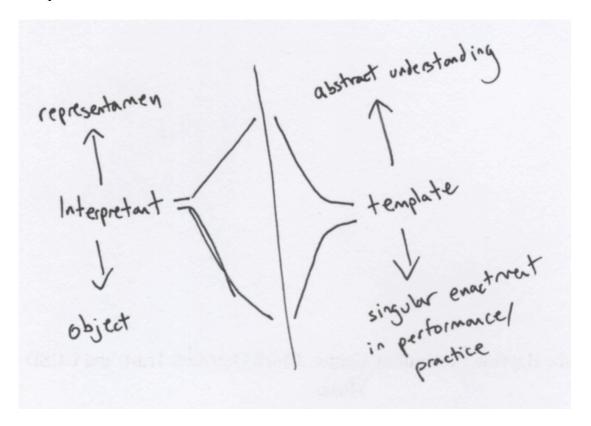


Figure 3: Parallel structure of interpretant and template

On the left side, the interpretant brings into association the representamen (Kreisler's distinctive Ländler lilt) and the object (nostalgia). On the right side, the template brings into association the abstract understanding (Kreisler's abstract and probably to some extent unconscious or involuntary understanding of rhythm, as formed through his early exposure to the Ländler) with the singular enactments of it in performance/practice. The lines coming out of the interpretant again represent the proliferation of possible understandings of the Ländler rhythm; these socially communicated understandings of the Ländler at a certain point turn over into material practice. The lines narrowing down into the template represent Kreisler's interpolation

of his multiple hearings of the rhythm into experiments in material practice, which over time form the template that guides his distinctive rhythmic interpolation of the Ländler.

This preliminary illustration of the template will be fleshed out in the following parts.

Part II: Towards a Theory of Musical Reproduction

Adorno's project for *Towards a Theory of Musical Reproduction* is to provide a philosophically informed account of the performers' responsibilities in interpreting the musical score—an account that he found lacking in the literature produced by performers themselves. While many parts are only provisionally sketched out in the notes and draft, this monograph marks a project of the same size and scope as his *Philosophy of Modern Music*, providing the groundwork for what Adorno viewed as the modern performer's interpretive responsibilities.

Framing performance as a mode of "reproduction" raises the obvious question: reproduction of what? The overly hasty reader might dismiss this characterization as only confirming the perception of Adorno as unfairly privileging composition over performance.⁵⁴ However, he is not referring to the reproduction of a score, nor is he referring to the reproduction of an immutable work. Rather, the objectivity of the work is premised on its historical transformation: "True interpretation consists not in the perspectival observation of a work that is given once and for all; rather, the work itself incorporates the dialectic of its observation and thus grants it objectivity through change." Interpretation confirms the work's objectivity, not by hypostatizing it, but

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⁵⁴ Tia de Nora outlines these three common critiques of Adorno: that his definition of the culture industry is overly general, that he unduly emphasizes the importance of musical works (to the exclusion of their practice and reception), and that he focuses on what music *might* do, such that his musical examples "'illustrate' (rather than drive) the direction of his theory." Tia de Nora, *After Adorno: Rethinking Music Sociology* (Cambridge: Cambridge UP, 2003), 30.

⁵⁵ Theodor W. Adorno, trans. Weiland Honban, ed. Henri Lonitz, *Towards a Theory of Musical Reproduction: Notes, a Draft and Two Schemata* (Cambridge: Polity, 2006), 213.

rather by understanding that the interpretive demands that would render the work in its objectivity change with the development of historical consciousness. The title of Adorno's essay does not refer to the reproduction of the monolithic musical work, but rather the reproduction and synthesis of different and often opposing signifying elements of music's writing and performance.

While Adorno considers the category of a historically contingent and mutable work to be valid and necessary for musical practice, the fundamental drive of reproduction—both in performance and notation—is the continual dialectic of music's mimetic and abstract qualities. The mimetic nature of music has "always stimulated imitation through gestures, whether those of dance or of work."56 The gestus (the mimetic element) contains within it music's magical, uncanny remembrance of something not wholly apprehended by the rational mind. Cumming warns against the over-simplified notion of musical gesture as simply mapping human bodily movements, rather advocating that musical patterns can also invoke a gesture that "captures the propensity of listeners to hear in short, directed motions the evidence of a sometimes expressive agency in movement."⁵⁷ Adorno's notion of the *gestus* also does not refer specifically to bodily movements, but it does not necessarily attribute specific "expressive agency" to the performer, the composer, or even a dramatic persona within the musical work. Rather, he reads gestural elements in musical compositions as recollections of human experience that elude our propensity for rational and abstract thought—on this atomistic level, Adorno attributes musical

⁵⁶ Adorno, *Towards a Theory of Musical Reproduction*, 169.

⁵⁷ Cumming, *The Sonic Self*, 165.

gesture not to a willful individual human subject, but to the involuntary reflex, the "animistic shudder" that occurs when one is confronted with the uncanny, with the wholly inexplicable other.

On the other hand, music is notable in its ability to capture traces of this *gestus* via its rational and abstract properties through notation. Notation, as the "rationalization of magic," is the means by which European art music achieves autonomy: "For it was only able to develop to the stage of autonomy, and thus its entire expression, through its graphic transmission..." Notation, in its capacity for abstract representation, reifies musical material, developing its own practicable discipline, and thus the separation from its ritualized performance that makes it capable of its own rational development. Recapitulating the argument in the *Dialectic of Enlightenment*, the rational drive towards notation in turn threatens to become totalitarian. At the same time as being responsible for music's autonomy, notation "regulates, restrains and represses whatever it serves" namely, the dynamic, mimetic *gestus* proper to musical practice.

This dialectic between the abstract and the mimetic manifests itself in both performance and notation. Within notation, this dialectic plays out between its neumic and mensural characters. The neumic, originally the image of the gestures of cheironomy, is mimic in nature: "Oskar Fleischer looked for the development of mere

⁵⁸ Adorno, *Towards a Theory of Musical Reproduction*, 170.

⁵⁹ Adorno, Towards a Theory of Musical Reproduction, 170.

⁶⁰ Adorno, Towards a Theory of Musical Reproduction, 173.

⁶¹ Adorno, Towards a Theory of Musical Reproduction, 173.

accent-markings to complicated neumes 'not as notation, but rather in the practice of the choral conductor who indicates pitch movements through hand-gestures." The neumic elements of notation derive from the mimetic gestures of choral conducting. The mensural components of music, on the other hand, refer to the fixing of pitch and rhythmic values. The mensural is "abstract-significative," in that it presupposes a musical system, which individual melodies and lines merely re-combine. Adorno connects the invention of mensural and letter-notation to the possibility of polyphony, which needed clear representations of individual notes, not just sequences of gestural events. Adorno traces this dialectic between the mimetic and the abstract from cheironomy to notation, and back to modern conductors, suggesting that in a conductor like Furtwängler, the right hand fulfills the mensural/abstract function of beating time, while the left hand traces the progress of the music mimetically and expressively.

Another way to frame this dialectic would be within Cumming's Peircean system: neumic elements of notation or performance index or point to some gestural understanding of the music. Mensural elements such as the lettering of notes are symbols, stipulated in an arbitrary way and according to convention. Within this semiotic understanding, Adorno asserts a historical argument about the evolving role of the gestural and abstract. That is, the lettering of musical notes is music's pseudomorphosis toward language. This is the Christianization of music—the attempt to move it closer to intention, meaning, and therefore eternity: killing "music as a

62 Adorno, Towards a Theory of Musical Reproduction, 174.

⁶³ Adorno, Towards a Theory of Musical Reproduction, 176.

natural phenomenon in order to preserve it, broken, as spirit."64 Whereas pre-Christian music is framed as expression unconcerned with meaning, sacred music and its move toward mensural notation attempts to synthesize the unambiguity of meaning and the immediacy of expression. Separating the material from the spiritual, the arbitrary symbols of notation (borrowed from language) turn the "rationalization of writing into the organ of subjectivity."65 Furthermore, what is a symbol and what is a gestural image (or index) changes given its historical context. Noteheads, for example, were once images of the beat, but became the most rational element of pitch and rhythm value; ligatures began as the image of melodic curves, but in modern notation (as beams) freeze successive musical shapes in abstract fixity. And yet, utilized in Schoenberg's *Erwartung* as "convulsive demisemiquaver-groups," these integrated elements have now "become images once more for the anxiety gestus of this music." 66 Music's mimic and abstract elements are not neatly fixed as different components of notation, but rather manifest these elements differently based on their context, use, and interpretation.

It is within this historical understanding of the dialectic between the shifting elements of the mimetic and abstract that Adorno's account of the performed interpretation of musical works should be understood. Notation's abstract nature is what gives music its autonomy; it is a disciplinary system that guides musical practice according to its own immanent principles. However, this abstraction means that some

⁶⁴ Adorno, Towards a Theory of Musical Reproduction, 178.

⁶⁵ Adorno, Towards a Theory of Musical Reproduction, 178.

⁶⁶ Adorno, Towards a Theory of Musical Reproduction, 190.

essence of music—its mimetic *gestus*—is also suppressed by notation. Interpretation thus cannot be a literal reading of the score.

Reproduction versus Presentation

Adorno refers to literal readings of the score as "presentations," opposed to reproductions. Musical presentations do not take into account the work's changing axes of expression and meaning through the historical development of performance and listening. This is given first in the example of the "older German way of making music" (165)⁶⁷ that Wagner critiques in his essay on conducting. This style of presentation maintained a firm and unbending beat as "the rigid mirror image of the dominant compositional approach in the age of figured bass."68 Adorno argues that this literal and inflexible mode of interpretation is a reflection of its contemporary style of composition: one that treated music as the layering of harmonic and melodic identities, rather than the synthesis of non-identical elements (such as mid-period Beethoven's repetition of themes, which, barely recognizable as identities, emphasize the process of their development over their repetition). ⁶⁹ What this mode of presentation misses is that the work's objectivity is premised on change, not fixity: "The work demands a change of representation for the sake of its own objectivity, and precisely one that is antithetical to the traditional understanding of objectivity: this is the paradoxical aim of Wagner's demand."70 In contrast to presentation, which sees

⁶⁷ Adorno, Towards a Theory of Musical Reproduction, 165.

⁶⁸ Adorno, Towards a Theory of Musical Reproduction, 165.

⁶⁹ This argument comes up in the *Philosophy of New Music*: the development of thematic non-identity, more than the repetition of thematic identity, comes to manifest subjective spirit in mid-period Beethoven.

⁷⁰ Adorno, Towards a Theory of Musical Reproduction, 165.

the musical representation in notation as objectively fixed, reproduction changes the work, maintaining its objectivity as something that unfolds historically.

As an example, Adorno provides Wagner's description of the older German way of interpreting, which had not yet taken into account the changes responsible for Viennese classicism. This mode of presentation had not yet accounted for the compositions' "incorporation of cantabile melodies into instrumental textures" and its subsequent demands of flexibility in tempi and the singing quality of instrumental playing. But Adorno's argument is not merely that interpretation must conform to whatever period of music it performs. Rather, the work's interpretive demands change according to what comes after it: "the past is affected by the present." For example, Adorno argues that the delicate and subtle repetition in the final movement of Bach's Italian Concerto is seen differently in light of the classical rondo form: "the Mozartian rondo changes that Bachian presto by elevating its latent formal idea, as it were, to a manifest architecture." Similarly, Adorno states that a "contemporary of Lully would have seen particularly clearly the chordal characteristics in Palestrina...which were still entirely buried within the part-writing in Palestrina's own day."⁷⁴ Shifting to his own present, Adorno claims: "Whoever does not understand Schönberg today cannot understand Beethoven."⁷⁵ Such a performer does not understand the continuation of what in Beethoven's time was shocking and discordant: a necessary critique of the

⁷¹ Adorno, *Towards a Theory of Musical Reproduction*, 165.

⁷² Adorno, Towards a Theory of Musical Reproduction, 191.

⁷³ Adorno, Towards a Theory of Musical Reproduction, 192.

⁷⁴ Adorno, Towards a Theory of Musical Reproduction, 192.

⁷⁵ Adorno, *Towards a Theory of Musical Reproduction*, 194.

"self-glorifying subjectivity and its expression." This performer, Adorno argues, only presents Beethoven's reified effects for the contemporary listener, rather than reproducing the inner force of this critique.

Another example of "presentation" rather than reproduction that Adorno provides is Arturo Toscanini's conducting style. Toscanini's fidelity to the abstract representation of the score means that his performances are "dislocated from all structure...a hundred dryly correct details are strung together through the endeavours of a technological temperament to produce escalations and explosions."⁷⁷ Adorno is not blind (or deaf) to the merits of Toscanini's conducting, seen (or heard) within a specific context: "The effect of Toscanini's first performances in Germany had something liberating about it, and there is no doubt that he achieved a new level of precision and functionality that is appropriate to the current state of orchestral technique."⁷⁸ However, within the context of the mid 20th century American culture industry, the streamlined nature of his performances lends more to the technical/technological dislocation of music's sensuality from its form, rather than to the de-mystification of the "ornamental rubble" of German Romantic conducting. In any case, this mode of interpretation as "presentation," unlike a truthful reproduction, somehow fails to take into account the demands of the work in its historical unfolding.

According to Adorno, Toscanini, in his mode of presentation, fails to synthesize the three media of music's appearance: its abstract/significative notation, its

⁷⁶ Adorno, *Towards a Theory of Musical Reproduction*, 195.

⁷⁷ Adorno, Towards a Theory of Musical Reproduction, 196.

⁷⁸ Adorno, Towards a Theory of Musical Reproduction, 197.

⁷⁹ Adorno, Towards a Theory of Musical Reproduction, 197.

mimetic *gestus*, and the "tone language" of its performance. His literal reading of musical symbols loses the gestures underlying their construction; instead, he manufactures "escalations and explosions" in a technical fashion, based on his reading of superficial aspects of the musical score. The "tone language" is thus divorced from any kind of structural reading. Adorno considers only a synthesis of structure, gestus, and the performer's personal "tone language" to be a truthful retrieval of what is covered by notation: the "x-ray image of the text," or the "objectivity [of the work] located within the subjective spontaneity of the performer."⁸⁰

What Adorno means by this "x-ray image" or "objectivity" in the performer's "subjective spontaneity" is elucidated in specific examples. These examples, however, also betray the filter of his personal orthodoxies. In his notes for the draft, Adorno critiques a recording of Heifetz, Feuerman, and Rubinstein playing Beethoven's B flat major trio: "the sensual euphony of the sound eclipses the realization of the construction...the transitional model towards the end of the 1st movement, immediately before the second subject, loses the quality of distance, of not quite being there." Adorno's argument is that sensual elements of the sound cover the structural integrity of Beethoven's writing. Beyond this, he argues that the lack of resistance to motion in the last movement eliminates the possibility of the dissolution of this resistance in the coda: "The last movement too quick, too fluid, without the element of disturbance, resistance, the 'Flemish' (Rubinstein misses a number of the long coda lies

⁸⁰ Adorno, Towards a Theory of Musical Reproduction, 202.

⁸¹ Adorno, Towards a Theory of Musical Reproduction, 75.

precisely in the *dissolution* of the element of resistance in motion. If that resistance is missing, the motion cannot ensue: so there is an interaction between character and musical context."82 Listening to the recording, it is apparent that Rubinstein has a tendency to gather forward momentum in sixteenth-note runs throughout the last movement (and certainly preceding the coda, when the resistance to such fluidity dissolves, in Adorno's opinion). While the three of them are impressively coordinated, this tendency to move ahead does lead one to imagine what effect the sudden movement from a restrained *Allegro moderato* to the *Presto* and *piú presto* of the coda would have. Adorno insists that such interpretive choices (or oversights, as he characterizes them) are not matters of taste, but of responsibility, analogous to the responsibility of composers. It is clear in this recording that there are aesthetic imperatives about sound and timing (or "tone language") on the part of the performers that are to some extent overriding interpretive ones. This is heard, for example, in the tendency to move through runs and to occasionally obfuscate marked accents.

In the background of these sketched out criticisms is Adorno's much larger-scale critique of the culture industry and its popular glosses of "classical" music (a term Adorno derides for its generality). Indeed, one wonders if this recording of the "Archduke" Trio was not in his mind when he wrote in *The Philosophy of New Music*: "Since the culture industry has educated its victims to avoid straining themselves during the free time allotted to them for intellectual consumption, they cling just that much more stubbornly to the external framework of a work of art which conceals its essence. The prevailing, highly polished style of interpretation, even in the field of

⁸² Adorno, Towards a Theory of Musical Reproduction, 76.

chamber music, willingly makes concessions in that direction."⁸³ One can see here again his view that superficial tendencies (euphony of sound, polish of style)—what he views as symptoms or indices of the commercialization of culture—obscure the structural integrity that comes from historical knowledge and considered introspection.

If the Heifetz/Rubinstein/Feuerman trio doesn't do it for him, who does? In his notes for the monograph, Adorno mentions three names: Kreisler, Kolisch, and Caruso. Whereas Heifetz, Rubinstein, and Feuerman depart from the responsibility of interpretation, Kreisler, Kolisch, and Caruso hit that sweet spot in which responsibility to the structural integrity of the music and the idiomatic component of the instrument or voice align, finding objectivity through the performer's subjective impulses: "Kreisler and Kolisch do not speak their language despite but rather through rigour, and this is the legitimate place for the performer's subjectivity. Categories such as violin tone, attack etc., in general the idea of speaking the instrument's language. Also Caruso. No great interpretation without this component', (56). A further comparison of recordings by Heifetz and Kreisler will be undertaken in part IV.

Adorno's Work Ontology as Clarifying the Template Ontology

Adorno's work ontology, as it is maintained between notation and performance, mimetic *gestus* (or its image) and the abstract-significative, comes into focus in this draft. I will diagram the terms at play in this ontology, which in turn gives us another way to frame the template concept.

⁸³ Theodor W. Adorno, trans. Anne G. Mitchell and Wesley V. Blomster, *Philosophy of Modern Music* (New York: Seabury Press 1973): 10.

⁸⁴ Adorno, Towards a Theory of Musical Reproduction, 56.

Adorno's distinction between musical reproduction and presentation makes the point that the primary purpose of notation is not to represent music. Rather, notation itself is a reproduction that—just like interpretation—grapples with the dialectic between music's mimetic and abstract qualities. Notation is not a mere aide to memory, but rather from its origin "an imitation of disciplinary musical systems" (172). As a further rationalization of musical practice, notation enforces and extends these disciplinary systems. Notation and performance develop semi-autonomously, and yet they are interrelated in that technical and structural developments in each practice retroactively change the work (and thus maintain its objectivity as something dynamic).

This is a more subtle account than the commonsense idea that the performer merely plays what is represented in the score. Instead, the work takes form between performance and the notated score. The following diagram plots the dynamic qualities of the work's interpretation:

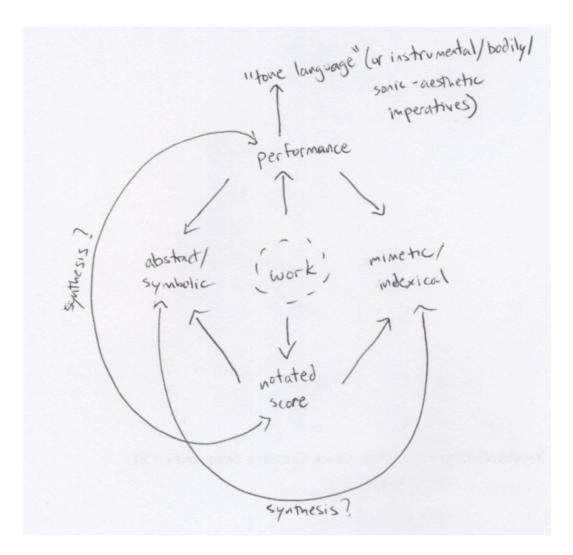


Figure 4: Adorno's work ontology

The work is neither the notated score (which to some extent suppresses what it captures: the mimetic *gestus*) nor its performances (which, in bringing the autonomous work back into society necessarily alters its truth). Rather than notation as the work's representation and performance as its presentation, both notation and performance are subject to the dialectic between the mimetic and the abstract. Notation and its interpretation maintain the work through this mediation, on one hand tracing music's dynamic *gestus* indexically, and on the other hand re-coding and de-coding the

symbols that preserve it. The abstract/symbolic pole pre-supposes system: both the system of notes and scales in the case of notation, and the system of bodily technique in the case of performance. The mimetic pole refers to the tracing guided by these systems, which nonetheless in some way shifts or changes the system over time.

Performance is slightly different in that Adorno includes a third term: the "tone language" of the performer, which can be thought of as instrumental, bodily, or sonic/aesthetic imperatives that run the risk of overriding structural considerations drawn from the mediation between the abstract and the mimetic. In his notes, Adorno suggests that Kreisler/Kolisch/Caruso are able to reconcile this third term with the other two, unlike Toscanini, whose literal reading of the score's superficial symbolic elements is paired with sonic eruptions that are dislocated from a proper structural reading. Such a structural reading involves the synthesis of the abstract, mimetic, and sonic/instrumental imperatives, which in turn synthesizes the dialectic between musical performance and writing as two heterogeneous structures.

It is important to note that it is only in the notes that Adorno actually specifies performers (Kreisler/Kolisch/Caruso) who might perform this synthesis; in the draft, such a possibility is always speculative or hypothetical, as in his parenthetical aside that the "two hands in piano-playing" are "in a certain sense...a 'writing' of music." Musical reproduction—as the mediation between music's abstract and mimetic terms—is after all premised on the suspended dialectic between the *gestus* and its abstraction in notation. The work itself, as maintained by musical reproduction, also relies on this dialectic. This is because the work's aura is circumscribed by its

⁸⁵ Adorno, Towards a Theory of Musical Reproduction, 175.

irretrievable historical situation; any interpretation begins with acknowledging the impossibility of this retrieval. Elements of the work's gestural and mimetic qualities can be recuperated through the abstract/symbolic, but any reproduction is also necessarily an alteration of the work. The work's objectivity is premised on the fact that it cannot be hypostatized as an immutable, *a priori* object.

Although this notion of the work's object-ontology is a topic of concern in Adorno's monograph, it is not Adorno's primary point: he is less concerned with particular, closed works, than he is with the modular *templates* guiding musical practices of performance and composition. Templates, which guide musical practice, are not closed in the way that works are, in that their usage is transferable between and outside of works. The following figure diagrams the template:

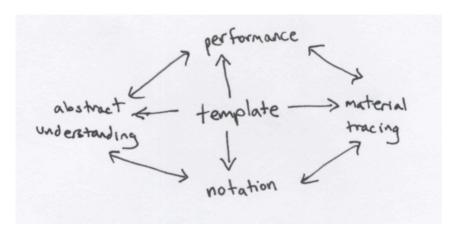


Figure 5: Template ontology

Adorno claims that notation from its origin is in imitation of disciplines of musical practice—its function is not to represent but to structure the discipline of composition. There is thus always an element of material tracing involved in notation: for example, a practice of contrapuntal writing that traces the contours of rules of voice leading along the lines of the musical stave. Against this material tracing is the abstract

understanding of the symbols and rules that are traced. This is represented in the horizontal axis of the diagram, which mirrors the poles of the abstract/mimetic in the work ontology diagram.

By positioning the template between performance and notation in the vertical axis, it can be shown that, while the template guides the disciplines of performance and notation semi-autonomously, these templates also have the capacity to affect and change each other. Perhaps the most concise example of this in Adorno's text is that neumes historically trace the hand gestures of cheironomy, while in the modern era the left hand of the conductor traces written music's gestural drama. Another example of this double-movement is the manner in which Helmut Lachenmann employs quasitablature notation in his solo cello piece, *Pression*, 86 mapping the instrument in notation in order to establish independence of the left and right hands and to notate percussive and noisy sounds that cannot be represented in conventional staff notation. Such an alteration of the template of the staff for notation was necessitated by an alteration of the use of instruments: Lachenmann's notion of "instrumental musique concrete"87 is to find new instruments through the exploration of unconventional techniques on existing instruments. Practical exploration of the instrument's sounding capacities necessitates modifications of templates for notation, and vice versa, the notation requires the cellist to re-think her or his structuring templates for extended techniques.

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⁸⁶ Helmut Lachenmann, *Pression für einen Cellisten*.

⁸⁷ This is a term that Lachenmann has discussed in several interviews and short articles, most notably: in the essay "Hearing [Hören] is Defenseless—without Listening [Hören]." Helmut Lachenmann, "Hearing [Hören] is Defenseless—without Listening [Hören]," *Circuit: musiques contemporaines* 13.2 (2003): 27-50.

Of course, the degree to which templates work autonomously between performance and notation changes historically. The template, as a tool for analysis, is best utilized as it traces some historical progression of musical reproduction. Adorno gives an account of the manner in which abstract and mimetic elements of notation develop an autonomous discipline of composition, relating performance to structures of musical writing. What he largely omits in this account is the manner in which the practice of performance also develops its own autonomous discipline.

The separation of the disciplines of music and its notation is premised on the abstraction of notation, which gives the possibility of an autonomous discipline of composition, but also renders music and notation as heterogeneous systems. The divisions of abstract/mimetic and performance/notation seen in the first diagram are thus left un-reconciled to lesser and greater degrees throughout the historical progression of musical practice (and of course, depending on the performers and composers in play). One obvious example of this shift can be tracked in the progression of instructional treatises for musical performance. CPE Bach or Johann Joachim Quantz's treatise do not separate matters of performance from those of structural interpretation; the progression of violin treatises from Geminiani, to Mozart, to Baillot, to Auer, shows a gradual reification of the division between interpretation and technique. In Auer's case, which I will go over in some detail, this division is such that he has two instructional books, one focused on matters of instrumental technique (Violin Playing as I Teach it) and the other on matters of interpretation (Violin Master Works and Their Interpretation). Tellingly, the treatise on interpretation is virtually

devoid of any kind of structural analysis of the compositions, instead mostly discussing the relevance of particular musical figures for the practice of violin playing.

Adorno's work concept and the template navigate similar dialectics of musical practice. Both of them take place between performance and notation, and between music's abstract features and its material contingencies. Both the template and Adorno's work concept are retroactively modified by what follows their inception.

That is, structural features of works are sometimes clarified by following works (in the case of Mozart's rondo elucidating Bach's presto), in other cases, accumulated hearings and understandings of works need to be cleared away in order to apprehend the work in its full structural clarity (as in the cases of the over-played works of Beethoven on the radio). The template also unfolds historically: the progression of notation's mensural and neumic elements shows this quite clearly. Furthermore, like the work, there is something irretrievable about the template that is linked to the historical context of its creation or use.

The difference between the work and the template is that the work is closed, meaning that—although it unfolds historically, changing with its reproductions—its structural integrity is such that its appearance or performance is contingent upon its being presented as a unified whole. On the other hand, a template—such as the staff of the score representing determined pitch values—is necessarily partial or unfinished. The template is partial in that many templates are at play in any musical practice; it is unfinished in that it is only a guide for practice, and never a fully determining system (though Webern's use of the 12-tone technique comes the closest to this). Templates facilitate the composition of a closed work (as well as its communication to multiple

performers and interpreters within the tradition) by grounding it within a larger system of musical reproduction. Such a system is of course never fully elaborated—its flexibility is what gives its manifestations the possibility of spontaneity. Templates are open in that they are transferable from work to work. As identifiable elements of the historical material embedded within the practices of composition/notation and performance/interpretation, they frame a more nuanced discussion of the structures guiding such practices than does the work concept.

Templates moreover manifest the imprint of ideology, social structures, and aesthetics, without necessarily being filtered through the subjective lens of interpretation. That is to say, musicians do not necessarily consciously think about the templates guiding their practice; on the other hand, it is only through these templates that the possibility of subjective expression takes form.

Part III: Elaborating the Template Theory

In this section, I will use both Cumming and Adorno's accounts of musical interpretation to elucidate the concept of the *template* as guiding musical reproduction. I will do this by showing how Peirce's interpretant and Adorno's ontology of the musical work may be synthesized in the template. Using specific examples of performances and treatises on performance, I will address what both Cumming and Adorno to some extent neglect: a structural reading of the performing body, independent of structures of musical writing. Along these lines, I will briefly review recent notable musicological texts that address the performing body's relation to musical and discursive texts, demonstrating how the template as an analytical tool might contribute to a historical and structural account of instrumental practice and pedagogy.

Interpolation: How Interpretants and Works Elucidate the Template

The two accounts of musical interpretation by Naomi Cumming and Theodor Adorno come from very different philosophical and musical disciplines: whereas Cumming draws upon Peirce's pragmatic account of semiotics and her own training as a violinist and musicologist, Adorno's work draws upon a Kantian/Hegelian tradition of German aesthetics and phenomenology as well as his musical studies with Alban Berg and Eduard Steuermann. Their work goes a long way in productively bridging these philosophical and musical discourses; furthermore, these two theoretical accounts of musical interpretation can be seen as complementary.

Cumming's triadic account of icon, index, and symbol (often combined and subsumed within each other) provides a metatheory of musical signification that

frames Adorno's more specific readings of the historical progression of musical notation. The category of the symbol is very useful in understanding Adorno's notion of music's abstract elements, in that these elements are to some degree arbitrarily stipulated. The category of the index as pointing to or tracing some bodily or gestural figure helps to clarify Adorno's notion of the mimetic *gestus*.

As much as Adorno and Cumming accomplish in terms of providing a comprehensive theory of musical interpretation, examining the limits of both theories clarifies the role of the template and its necessity as an analytical term. At the end of Part I, I indicated that Cumming accounts for the reception and communication of musical signs, but not for the production of these signs. I used the following diagram to illustrate the manner in which the template performs a similar function to the interpretant, albeit on the practice rather than reception side of musical interpretation:

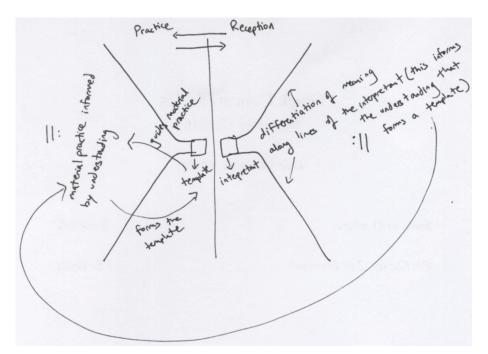


Figure 2: Template as refracted image of the interpretant

The interpretant is the refracted image of the template: a template guides musical practice for the composer or performer; the interpretant grounds the common understanding of musical signs between performer, composer, and listener. For example, the musical stave guides composition along the lines of pitch values. This serves as an interpretant, associating the abstract symbols of the stave's lines with their corresponding position and pitch on the instrument. Another example would be Kreisler's rhythmic lilt deriving from Viennese Ländler: as a template it informs his manner of playing (and composition, as seen in miniatures such as *Liebeslied* or Caprice Viennois). 88 When listeners familiar with the Ländler or Viennese Waltz rhythms hear it, this template becomes an interpretant, linking their understanding of this rhythmic irregularity with whatever association it evokes (perhaps nostalgia for Kreisler's local inflection, admiration for his unique grace, horror at the self-satisfied nature of his Viennese bourgeois lifestyle, or in my own case memories of trying to recreate his sound and style after hearing his LP records at my uncle's house).

The movement of the template becomes an interpretant that differentiates into social and personal meanings; this then informs material practice, which, in turn is guided by the template. Kreisler's template of the Ländler rhythm guides his highly personal and idiosyncratic style (and is based on his own hearing and interpolation of the Ländler into his performances and compositions). As a young violin student hearing recordings of Kreisler, this becomes an interpretant that links me to a

⁸⁸ In her biography of Kreisler, Amy Biancolli makes the connection between his Ländler inflected playing and the manner in which the rhythms of many of his compositions could be directly mapped onto traditional Austrian *ländler* or Schuchplatter. Amy Biancolli, Fritz Kreisler: Love's Sorrow, Love's Joy (Portland: Amadeus Press, 1998), 32-33.

community of listeners who have identified this rhythmic irregularity and attributed some meaning to it. This hearing, to various degrees consciously and unconsciously, is interpolated into my musical practice. Perhaps I develop some noticeable rhythmic irregularity that in turn can be identified and cultivated as a template or smoothed over as an unwanted mannerism.

This circular movement between template and interpretant, musical practice and reception, is operant in both axes of Adorno's dialectic—the vertical axis of notation/performance and the horizontal axis of the abstract/mimetic:

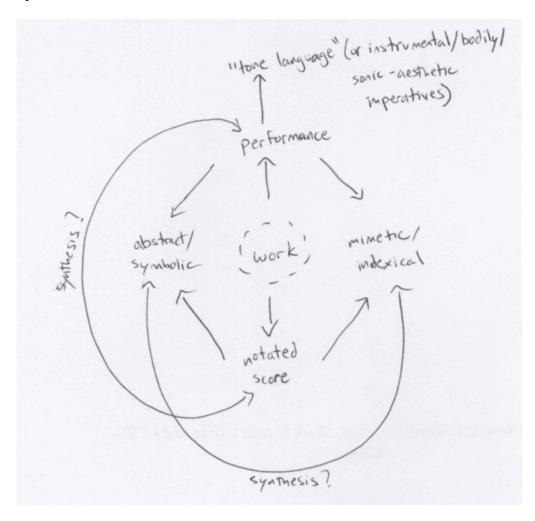


Figure 4: Adorno's work ontology

An example that may clarify the relevance of the template/interpretant in this regard is the manner in which a performer deals with the compositional template of staff notation. Staff notation is a template for musical composition (Adorno points out that abstract pitch notation is a necessary disciplinary precondition for early forms of European polyphony). In the movement between notation and performance, staff notation relies on interpretants associating note values with their sounding position on the instrument. The performer, in turn, interpolates this abstract notation into her own system of musical production (i.e. her bodily technique).

A good example of the labor that goes into this interpolation of graphemes into bodily technique is found in Gerhard Mantel's treatise on cello technique, in which he suggests that a cellist should make a diagram that maps discrete notes onto an image of the fretless fingerboard. Although such an abstract diagram is necessarily reductive, it clarifies shifts in hand positions by giving a representative map of the instrument in relation to pitch values. The template of the staff becomes an interpretant for the symbolic sign linking pitch value and bodily position; this interpretant is then renotated as an indexical sign in order to clarify its interpolation as a template for the cellist's technique. What Adorno highlights on a more historical scale is the manner in which the musical work is maintained in this interpolative movement of templates and interpretants between the heterogeneous systems of notation and bodily/instrumental discipline—a movement whose labor is often rendered invisible by traditional historical narratives of musical works. This interpolative movement also goes the other way: it is no secret that composers often hear something in a performer's playing that they attempt to capture in notation. One famous example of this is the

composition of Berg's violin concerto: before writing it he asked Louis Krasner to improvise on his instrument in another room while Berg sat in his study taking down notes.⁸⁹

The other diagram (seen before in Section I) comparing template and interpretant manifests a clarifying relationship with Adorno's horizontal axis of the abstract/mimetic:

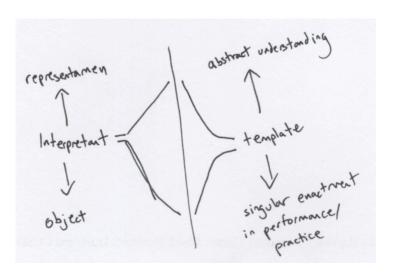


Figure 3: Parallel structure of interpretant and template

The template in this diagram is the mediating term between the abstract understanding (such as the image of the fingerboard) and the singular enactment in performance, or framed slightly differently, the abstract elements clarifying musical practice and the gestural/mimetic contingencies involved in actual playing or composing. The template of Mantel's fingerboard diagram is the mediating term in that it clarifies some aspect of the larger but un-representable system of bodily technique, guiding this abstract psycho-physical understanding in its singular enactment of a shift in hand position,

⁸⁹ Anthony Pople, *Berg: Violin Concerto* (Cambridge: Cambridge UP, 1991).

with all the gestural or mimetic contingencies of this shift in the context of whatever musical piece it occurs in.

In the template diagram, this mediation draws together the horizontal axis of the abstract/mimetic (represented as the vertical axis in the above diagram):

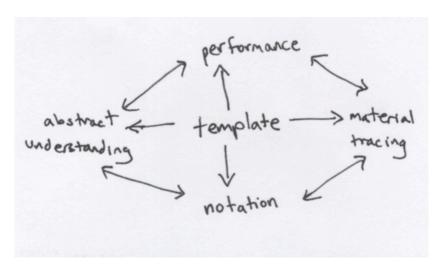


Figure 5: Template ontology

However, as explained earlier, this mediating template also brings together performance and notation, interpolating one template guiding musical composition/notation (the staff) into another very different system of musical production: that of performance/bodily technique.

Template and Technique; Technique and Work

Why is it necessary to define the term, template, rather than simply looking at specific practices of musical reproduction as they arise?

What the template concept adds to the analysis of practices of musical reproduction is the understanding that observable habits or features of musical practice are grounded in technical systems. This is especially important for something like a performer's bodily technique, which is in many respects un-representable, and whose

theorization and analysis is less developed than compositional technique. The following diagram makes this clear:

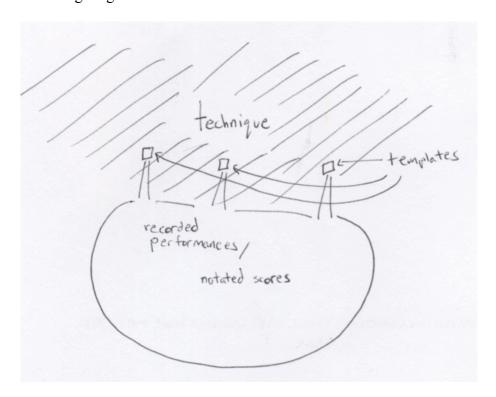


Figure 6: Technique, templates, and performances/scores

The solid line around performances and scores highlights the manner in which these are representable/recordable and analyzable objects. They are materially bounded and finite. The shading of technique represents the manner in which technique is unrepresentable, not bounded within a recorded performance or written representation. Technique is real in that it guides and structures performance, but it is never itself materially manifest. Templates are in the middle: they are not singular instantiations of a materially bounded object (like scores or recordings of performances), but unlike technique they are identifiable as specific structures guiding practice. This is to say,

templates are not actually material things that the performer traces; they are virtual entities connecting some mental structure or representation with bodily practice.

Templates are thus the elements of technique that can be abstractly represented, whereas technique, as the broader systematic organization, is un-representable in its entirety.

The impossibility of fully representing technique is made clear by the necessary incompleteness of any technical manual of composition or performance. Looking at Leopold Auer's treatise on technique for example (Leopold Auer was Jascha Heifetz's teacher at the St. Petersburg Conservatory), he has many detailed instructions about how to hold the violin. However, none of these instructions can represent what a comfortable position feels like, as this differs from person to person and instrument to instrument. Furthermore, discussing the position says nothing about the contingencies involved in moving with the instrument. Gerhard Mantel's treatise on cello technique (1971) addresses the dialectic between bodily forms and movements in a more complex way, but there is a point in his explanations in which figurative language (some metaphor or heuristic) is more helpful than any structural diagram or representation.⁹⁰

In this regard, technique shares certain features with the work. Both the work and technique are to some extent un-representable, only maintained through their material instantiations or representations. This maintenance occurs in each case through the dialectic of indexical tracing and abstract representation: in the case of the

⁹⁰ Gerhard Mantel, *Cello Technique: Principles & Forms of Movement* (Bloomington: Indiana UP, 1975).

work's interpretation, one is tasked with synthesizing the score's symbolic and gestural aspects; in the case of technique, the musician works through the dialectic of the abstract forms (such as Auer's instructions for how to hold the violin, or any number of compositional forms such as the sonata or rondo) and the singular movements that interrupt and develop these forms. Both work and technique take form through the dialectic of the mimetic/indexical and abstract/symbolic.

It is in this manner that interpretation and technique cannot be separated as categories: interpretation is rather the mediation of this dialectic common to both the maintenance of the work and technique.

Furthermore, this dialectic of reproduction attests to the auratic element of both the work and an individual's technique: some quality proper to their singular configurations that is mechanically un-reproducible and un-transferable. It is this element of aura that marks the un-reproducible elements of Kreisler's distinctive lilt, which is so embedded in a particular historical and social manner of hearing and playing that it cannot be authentically recreated by another violinist.

How do technique and the work differ? While both change over time in their various reproductions, the work represents some (historically situated) desire for a fixed object of music. There is an extent to which technique, like Heidegger's characterization of technology, stands in reserve for the production and reproduction of works. ⁹¹ However, the relationship between technique and the work changes in its

⁹¹ In "The Question Concerning Technology," Heidegger notes that modern technology reveals the actual as "standing-reserve." This instrumental treatment of nature is destructive and threatening—at the end of the essay he posits that the destructive tendency of technology can be challenged by another kind of revealing:

various historical configurations. In the case of Heifetz, it is quite clear that technical considerations of violin tone often override structural considerations of the work.

Often times he deliberately chooses works that showcase the bombast and sensitivity of his technique in remarkable and affecting ways. In Adorno's *Philosophy of New Music*, this balance between technique and work changes throughout Schoenberg's compositions: works from the Expressionist period hardly appear as structured works at all, rather appearing as direct indices of the unconscious. In this case, the artifice of harmonic technique is deliberately cast off and subverted; however, this cannot last, as material begins to repeat and become convention rather than direct expression. The next step is the development of twelve-tone technique: the emancipation of dissonance is assured through the most un-free structuring of order.

The twelve-tone technique is not equivalent to technique as I am defining it, but rather works as a template for composition, in that its basic rules and parameters can be represented and defined. Technique in the broader sense incorporates the twelve-tone technique as a template into its larger un-representable system. In "The Composers" section of *Philosophy of New Music*, Adorno goes over the various usages of the twelve-tone technique in the works of Berg, Webern, and Schoenberg. In the works of Berg and Schoenberg, this template guides compositional technique without determining it. In both cases, a compositional procedure works independently of the twelve-tone technique: Berg utilizes the technique by disguising it within a language that still appears to recognize consonance and dissonance; Schoenberg uses

that of *poeisis*. *Poeisis*, as the operation of the work of art, reveals truth without positing a rational and immutable order of things. Martin Heidegger, ed. David Farrell Krell, *Basic Writings: Martin Heidegger* (London: Routledge, 2011), 325-26.

it as a pre-compositional method, on which he continues composing "as though there were no such thing as the twelve-tone technique." Webern is the only for whom the 12-tone technique in practice approaches a totally rational, determining system. In his case, the template of 12-tone technique does almost encompass his entire compositional technique, to the point that Adorno claims that he "thus no longer composes." According to Adorno, his final works "are schemata of the rows translated into notes. He expresses his concern for the indifference between the row and the work through his particularly artistic selection of rows." In Webern's case, thematic relationships and developments are dictated in the construction of the rows, such that the work seems to be a mere working out of the technique. Rather than the technique standing-in-reserve for the construction of the work, the work seems to be only a singular elaboration of the technique.

The following diagram illustrates the relationship of the technique, template, and work, drawing it in relation with the two dialectic axes of notation versus performance and the abstract versus the mimetic:

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⁹² Adorno, Philosophy of New Music, 110.

⁹³ Adorno, Philosophy of New Music, 110.

⁹⁴ Adorno, Philosophy of New Music, 110.

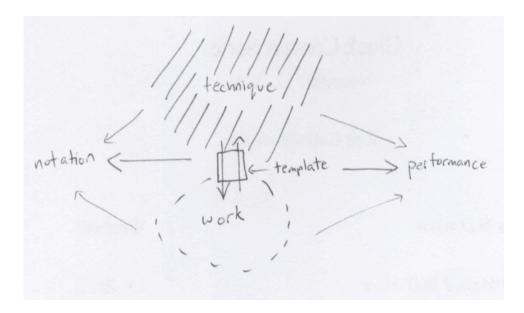


Figure 7: Technique and work

The template is situated between technique and work—it is a specific, representable element of both technique and the work, each of which is never manifestly present in any singular performance or notated edition. For example, an identifiable template (informed by his hearing of the Ländler) guides Kreisler's distinctive rhythmic lilt. This guiding template belongs to the larger structural organization of his bodily technique, which is impossible to describe or represent in its entirety. This template manifests in both performance and notation—one can hear it in Kreisler's recording, or see some notated representation of it in some of his miniature compositions, which attempt to capture this rhythmic sensibility in the necessarily abstract form of notation. This is illustrated by the arrows drawn from the template along the horizontal axis of performance/notation.

In the context of a musical work such as the Brahms violin concerto, this template also acts as an interpretant for Kreisler, connecting Brahms's composed

figures (representamen) with Kreisler's Ländler-informed lilt (object). He interpolates this understanding into his practice—the composed figures of the work are fused with his technique; the template/interpretant connects work and technique. It is probable that a similar (but nonetheless irreducibly individual) hearing of the Ländler informed Brahms's writing of the concerto, considering that he was also a resident of Vienna and composed several waltzes (such as the Waltz in A-flat Major opus 39 no. 15 or the Liebeslieder Waltzes Opus 52 and 65). This hearing was no doubt an element of Brahms's technique (informing both his performances and compositions), evident for example in the 3/4, Waltz-like passages where Kreisler's lilt is most pronounced. Such an interpretant is also interpolated into a template guiding Brahms's compositional technique and identifiable within analyses of his works.

The double arrows from technique to work and work to technique represent the fact that in certain cases technique stands in reserve for the work or vice versa. For example, in Leopold Auer's book, *Violin Master Works and their Interpretation*, he discusses two aspects of Bach's solo violin works: on the one hand, unlike pieces by Corelli and Tartini, they "were not born directly 'out of the violin' itself," but on the other hand, they provide "especially valuable" challenges for the training of violin technique. For Auer, it is precisely the "ideal" nature of Bach's violin works (by which he simply means that they were composed along polyphonic principles), which demands ever-more exacting technical attention by the violinist. Some lip service is given to the spirituality of Bach's polyphonic writing, which in this context seems like

⁹⁵ Leopold Auer, *Violin Master Works and Their Interpretation* (New York: Carl Fischer, 1925), 21.

an excuse to omit any kind of structural analysis of this writing and instead view these pieces as standing in reserve for the training and exposition of the violinist's technique.

Auer thus treats Bach's solo sonatas and partitas as resources for the establishment of templates guiding technique (for example, the E Major "Preludio" for "the incomparable practice it affords for the use of the right wrist in connection with the forearm"⁹⁶). On the other hand, it could be argued that this is in service of training a violinist's technique such that it can stand in reserve for the performance of the work. In any case, the somewhat antagonistic relation between technique and work is on display here; it is not as neatly reconciled as in the case of Kreisler's performance of the Brahms concerto.

A further point about the shifting relations between technique and work is made clear in Auer's re-notation of the first few measures of the "Ciaccona," illustrating what he considers the correct division of three and four note chords:

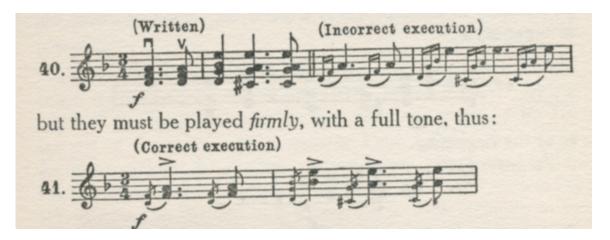


Figure 8: Auer's re-notation of the "Ciaccona"

⁹⁶ Auer, Violin Master Works and Their Interpretation, 29.

This re-notation, like Mantel's re-notation of the cello fingerboard, reveals the labor of interpolating notated structures into templates for performance. This re-notation serves as a template, guiding what Auer considers the correct interpretation of Bach's score. Instead of providing structural or theoretical analyses of the pieces (for example, the division of the "Ciaccona" into thirty-two, eight-bar variations), Auer fills us in on the material considerations of playing these scores: the iterative, corporeal practice that these pieces engender. Auer's commentary provides gestural details not available in the notated material, elaborating his own templates for musical reproduction.

Of course, many violinists with even passing knowledge of conventions of period performance practice now consider this interpretation to be totally wrong, showing again the manner in which a work's objectivity is maintained in the dynamism of its historical unfolding. Their reasoning is that a lute or guitar player would never break chords in this way—furthermore, this division of the chord in two parts makes it more difficult to emphasize the polyphonic nature of the chord (by, for example, emphasizing the bass note gesturally and rhythmically). This interpretive shift reveals the changing values in instrumental pedagogy: from one that emphasizes bodily technique and discipline to one that is more invested in the structural reading and interpretation of the work. These shifts will be further elucidated in Part IV.

Part IV: Case Studies

Having spent the first three parts framing the template concept with Cumming's use of the Peircean interpretant and Adorno's work ontology, this part puts the concept to use as an analytical tool. Though I have contextualized the interplay of technique and work, notation and performance, the symbolic/abstract and the indexical/mimetic, with cursory examples, this section will lay out the historical and social background of both Kreisler and Heifetz's musical practices in more depth. I also reflect upon how these histories are intertwined with Adorno's experiences, and how the social forces shaping their ways of playing also shaped Adorno's philosophy.

After providing this historical context, I will undertake two analyses, identifying different templates for musical reproduction at play. These templates, manifest in the material actions of performance, can be connected to historical and social forces.

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Delving more deeply into Adorno's comparison of Kreisler and Heifetz (and his clear preference of Kreisler) reveals some of the unevenness in the historical narratives of musical composition, performance, and philosophy. Fritz Kreisler was born in Vienna in 1875 to Anna and Salamon Kreisler. Though his father was Jewish, Kreisler largely denied his Jewish heritage (he was baptized and married as a Catholic). It has been suggested that this may have had as much to do with his wife's anti-Semitism as with his family's at least partial desire for him to assimilate. ⁹⁷ His father was an amateur violinist and hosted chamber music readings attended by

⁹⁷ Amy Biancolli, Love's Sorrow, Love's Joy, 183-84.

Viennese intellectuals including Sigmund Freud. Fritz Kreisler himself was a child prodigy and was enrolled in the Vienna Conservatory at the age of seven, winning the conservatory's gold medal for violinists at age ten. While in Vienna, he frequented a musician's club of which Johannes Brahms was the president. There were numerous occasions on which Kreisler sat in a trio or quartet to try out passages in Brahms's newest chamber works.

While Kreisler studied composition with Anton Bruckner, he seemed entirely un-invested in (perhaps even unaware of) the rivalry between Brahms's classicism and the sprawling works of Mahler and Bruckner. While Kreisler knew Arnold Schoenberg in his Vienna days (there is a picture of Kreisler in a quintet of musicians adorned in traditional Austrian costume—the cellist pulling a face in the picture is Schoenberg), even taking credit for suggesting the composer split his *Verklärte Nacht* into a sextet rather than a trio, ⁹⁹ he was not a fan of Schoenberg's later expressionist and serial works. ¹⁰⁰ Whereas Schoenberg agitated for aesthetic radicalism on a grand scale, Kreisler was content to preserve the past, and indeed, a largely fictive one. That is to say, all the characteristics that Kreisler was often praised for—his grace, eloquence, and nobility—were charms deriving from an unapologetic nostalgia for the old Vienna as a city of beauty and culture. His ability to separate art from the worldly contributed both to admirable and questionable deeds. In 1933, Kreisler refused to

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⁹⁸ Biancolli, Love's Sorrow, Love's Joy, 27.

⁹⁹ Though Kreisler was a notorious fibber. Biancolli, *Love's Sorrow*, *Love's Joy*, 149. ¹⁰⁰ Biancolli refers to an interview for the *International Musician* in which Kreisler is quoted as saying: "you can't read the scores of atonalists up and down—just horizontally or, rather, slantingly, as one instrument takes over from another. It's my opinion that science is having an evil influence on art." Biancolli, *Love's Sorrow*, *Love's Joy*, 150.

perform with Wilhelm Furtwängler in Germany following a ban against "non-Aryan" performers (though Kreisler's refusal to play was ironically accompanied by his choice not to disclose his own "non-Aryan" background), stating that "'Art is international and I oppose chauvinism in art wherever I encounter it.""¹⁰¹ On the other end, this separation of art from the worldly and political allowed Kreisler to admire and befriend Benito Mussolini for his devotion as an amateur violinist, to go along with his wife's early support of the Nazi regime (they only left their house in Berlin after Kreisler was drafted by the German army), and to fight as an officer in WWI for Emperor Franz Josef, who Kreisler ceaselessly defended throughout his life. ¹⁰²

Kreisler's disdain for musical modernism and his problematic separation of art and politics might seem incompatible with Adorno's convictions. However, in his notes on interpretation, Adorno was viewing Kreisler quite narrowly as a violinist. If anything, Kreisler represented a link to Adorno's own love for the Viennese bourgeois past. Adorno—who also had a Catholic mother and Jewish father—himself studied composition with Alban Berg and piano with Eduard Steuermann in Vienna. Against the background of the Second Viennese School, Berg was a Romantic who looked toward the past. His use of Ländler themes in *Wozzeck* and the violin concerto mirror the heavy influence of the Ländler on both Kreisler's composed miniatures and the rhythmic lilt characteristic of his performances.

Another incongruity was Kreisler's total immersion in the culture industry that Adorno so vehemently critiqued. Kreisler gained international celebrity levels of fame

¹⁰¹ Biancolli, Love's Sorrow, Love's Joy, 193

¹⁰² Biancolli, Love's Sorrow, Love's Joy, 198

through his 78 rpm recordings with the Victor Phonograph Company, which perfectly suited his talents as a personable miniaturist. As Amy Biancolli writes, "no one…was better suited for mass consumption, simply because no one boasted that same insouciant knack for delivering a catchy tune…He was just the sort of performer that the audience wanted to bring home—and thanks to the gramophone, they could." ¹⁰³

Adorno's soft spot for Kreisler reveals his acknowledged contradictions as a thinker committed to Marxist critique as well as to the musical inheritance of his bourgeois background. That is, while he formulated a critique of the culture industry, he was nonetheless bringing home (and likely enjoying) Kreisler and Caruso's 78's. Of course, none of this in any way invalidates or even comments on the merits of his philosophical arguments—it is only meant to give background to a subsequent formal analysis of Kreisler and Heifetz's recordings of the Brahms violin concerto.

While Kreisler and Heifetz were both very much implicated in the machinations of the American culture industry, Jascha Heifetz's name eventually became synonymous with the heroic virtuoso, offering a hyper-individualistic view of musical practice. Heifetz went so far as to make appearances in Hollywood films, "They Shall Have Music," he swoops in at the last minute to save a music school for children from foreclosure, and the movie culminates with him playing a concert (the last movement of the Mendelssohn concerto) with the school orchestra.

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¹⁰³ Biancolli, *Love's Sorrow, Love's Joy*, 71.

¹⁰⁴ *They Shall Have Music*, directed by Archie Mayo (Los Angeles: Samuel Goldwyn Company, 1939), Film.

¹⁰⁵ Carnegie Hall, directed by Edgar G. Ulmer (2005; New York: Federal Films, 1947), DVD.

In contrast to Kreisler's amateurish approach (he famously disliked practicing), his love for improvisation, and his tendency to re-write passages to suit his strengths (and disguise his technical deficiencies), Heifetz's technical abilities defied all reasonable expectations of what a virtuoso violinist could achieve. As Biancolli notes, many violinists credit Heifetz with (or discredit him for) raising the expectations for aspiring professional violinists. Thus, Heifetz's untouchable technical facility became the most visible symbol of the kind of glossy professionalization of music that Adorno critiques in his writings on music and the culture industry.

However, rather than merely viewing Heifetz as an ungodly fiddling phenomenon (or as the sleek symbol of classical music's destructive commercialization), it is important to acknowledge the very different conditions of his musical background and education. Heifetz was born in Vilnius in 1901, which was at the time part of the Pale of Settlement of the Russian Empire, where permanent residency was legal for Jews (though still illegal in some cities). Heifetz—like Kreisler—was also the son of a violinist. Jascha's father, Ruvin, was not an amateur—he made a living as a shoemaker and a fiddler in klezmer orchestras and weddings. Ruvin Heifetz had no higher or conservatory education; when he later enrolled in the St. Petersburg conservatory for residency purposes (to stay with his son during the period of his education), his proficiency exams indicated that he had no knowledge of elementary solfége or music theory. 108

¹⁰⁶ Biancolli, Love's Sorrow, Love's Joy, 235, 248, 256.

¹⁰⁷ Galina V. Kopytova, *Jascha Heifetz: Early Years in Russia* (Bloomington: Indiana UP, 2013), 6.

¹⁰⁸ Kopytova, *Jascha Heifetz*, 62.

Heifetz eventually enrolled at the St. Petersburg conservatory, at a time when being a musician was one of the few respectable professional opportunities available for Jews living in the Russian Empire. Heifetz's early talent, combined with the political connections of his proponents within the conservatory (including his violin teacher Leopold Auer and the composer and then-director of the conservatory, Alexander Glazunov), allowed him to live and study in St. Petersburg, and eventually to escape with his family to the United States during the Russian Revolution.

By all accounts, Auer's lessons and studio classes were marked by an extreme discipline and reverence. Students were expected to be punctual and well dressed, and were subject to Auer's frequent temper tantrums. In contrast to the somewhat quotidian pronouncements in Auer's books on violin pedagogy and interpretation, accounts of his lessons reveal a quasi-mystical approach to teaching in which much was left unsaid:

Auer had such an all-encompassing ability to teach that neither Heifetz nor any other student could articulate exactly how he imparted his knowledge. Often, his students reported, he seemed to correct a student's playing with merely a look, a movement of the eyebrows, or just a wave of the hand. Paul Stassevich recalled the comments of an American student who, after taking some lessons with Auer, complained that "he doesn't do anything." Two weeks later, the American said in a puzzled tone: "He doesn't do anything, but I certainly play better than I ever did before."

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¹⁰⁹ Kopytova, Jascha Heifetz, 106.

¹¹⁰ Kopytova, *Jascha Heifetz*, 112

Notably, this mimetic relation of music to gesture resembles Adorno's comments on cheironomy as a mediating point between music and notation, as a kind of gesturing that "passes in time with music, but as something visual that can be spatially fixed and 'written down.'"

The idea that a mere look or "movement of the eyebrows" could correct a student's playing also resembles Adorno's own quasi-mystical pronouncements of the mimetic relation of facial expression to music: "Music is mimic in so far as certain gestures, a certain play of facial muscles, automatically produce musical sounds."

While this statement is strange and perhaps indefensible in a philosophical context, it suggests that Adorno was perhaps attempting to articulate some truth that is—as a matter of practical musicianship—non-verbally communicated in the studio.

The simplistic way to mark this difference between Heifetz and Adorno's musical values would be to say that Adorno, who studied composition with Alban Berg and piano with Eduard Steuermann in Vienna (where he also befriended Rudolf Kolisch), was trained to think as a composer and theorist, whereas Heifetz, through his studies with Auer and his very early professionalization, was trained as a virtuoso violin prodigy. From a practical point of view, Heifetz's musical "reproductions" took place in hundreds of cities every year and were toured around the world, whereas Adorno's musical "reproductions" took place in the privacy of his living room, in the company of close friends and collaborators, in his published writings, and in the seminars and lectures that he gave to music students and scholars. However, as the

¹¹¹ Adorno, Towards a Theory of Musical Reproduction, 175

¹¹² Adorno, Towards a Theory of Musical Reproduction, 179

curious alignment between Auer's pedagogy and Adorno's comments on musical mimesis show, Adorno attempted to articulate some truth about musical performance and practice that could not be summed up by music theoretical accounts. It is easy enough to point out that in Auer's treatise on interpretation, he makes no use of specific musical analysis to justify interpretive decisions. However, Adorno is largely guilty of the same deficiency, forgoing specific analyses in favor of more general arguments and critiques.

In the following analysis of two recordings of the Brahms violin concerto, I will fill in some of the detail lacking in Adorno's monograph, fleshing out his criticisms of "literal" interpreters, his discussion of rhythmic resistance, and his notion of the "personal language" of the interpreter that finds the musical object within the performing subject. There are significant differences in Kreisler and Heifetz's performances that Adorno, as a highly cultivated listener picks up on. There is also a direct affinity between Kreisler and Adorno's musical understanding that, while perhaps arising from a shared cultural milieu, is also characteristic of some real and separable notion of music's object and ontology. However, following this analysis, I will also suggest another reading of Heifetz's playing that both reveals blind spots in Adorno's account of musical reproduction, as well as the unexpected affinity of Adorno's thoughts on the antagonism between musical notation and bodily gestus with Heifetz's technical abilities.

Analysis #1: Kreisler and Heifetz

In a recording of the Brahms Concerto with Sir John Barbirolli, one can hear Kreisler's distinctive Viennese lilt, which, squared against the flow of the orchestral

accompaniment, gives the rhythmic "resistance" lacking in the aforementioned trio recording of Heifetz, Rubinstein, and Feuerman. One example of this "resistance" occurs in measures 179-182, as the violin embellishes the melody carried by the flutes (although in Kreisler's 1936 recording, the balance is so skewed toward the violin sound that it gives the impression that the flutes are backing up the solo violin's melody):



Figure 9: Brahms Violin Concerto, measures 179-182

Audio 1: Kreisler Brahms 179

Kreisler's distinctive "language" is clear, as Adorno observes, in his "violin tone" and "attack," but also in the rhythmic play of resistance against fluidity (which Adorno again observes as lacking in the aforementioned trio recording). In measure 179, Kreisler holds back the fluid progression of the melody in a violinistic shift up to the C# that starts from the lower finger on the G. However, rather than merely being a violinistic move, this emphasizes the tension of the C# and delays its arrival to the D.

The balance makes it difficult to hear, but the flutes arrive at the high D on the downbeat of measure 180 before Kreisler—his late arrival on the note resists the flow of the orchestral material. The uneven metrical lilt is in this case the product of his emphasis on the melody—by prolonging the first note of every triplet in measure 180 (D, C#, B), he creates a distinctive rhythmic gesture as he rushes the second two notes of each triplet to make up time. This is in juxtaposition to the next measure, which he plays so evenly as to make a point that only the first and last notes of the measure have melodic significance. The slight elision of the last G# in measure 181 catches up to the melody, taken up here by the violins. In measure 182, Kreisler again reverts to a somewhat less exaggerated lilt emphasizing the melody notes.

A 1935 recording of Heifetz with Toscanini and the New York Philharmonic takes a much more fluid and even approach to this section:

Audio 2: Heifetz Brahms 179

Heifetz and Toscanini are much more fluid in this performance, and whenever Heifetz takes a bit of time he immediately makes it up to coordinate with the orchestra on the next beat.

Another example is in measures 224-231:



Figure 10: Brahms Violin Concerto, measures 224-231

Audio 3: Kreisler Brahms 224

Audio 4: Heifetz Brahms 224

The pizzicato accompaniment in the strings in this section is more explicitly waltz-like, and Kreisler's Ländler-inflected lilt is here especially pronounced. Kreisler plays with shifting the emphasis from the lower to the upper note in these repeating two note figures. For example, in measures 224 and 225, he performs the figure quite evenly, as if pointing out the pedestrian nature of the V7-I resolution. Even mid-way through measure 224, however, the motif starts to lose its metric center as he shifts emphasis

between the bottom note off-beats and the top notes. Still, Kreisler retains a metric ambivalence through the F dominant 7th to B Flat Major resolution in 226-227. However, the lilt stabilizes somewhat with an emphasis on the upper notes (both in terms of articulating them and giving them more time) in measures 228 and 229. This, in conjunction with an increased urgency of tone and dynamic highlights the solo violin's role as a pedal point to the D dominant 7th shift to a D# diminished 7th, signaling the eventual modulation to an unstable and ominous E minor section.

Adorno claims that Kreisler speaks the "instrument's language" not despite but rather "through rigour [of a structural interpretation of the composition]"; this claim certainly seems supported by Kreisler's interpretive choices.

Heifetz, on the other hand, plays the passage relatively evenly, though he takes time in 227 to make the same kind of violinistic shift from the Bb to the D as does Kreisler (it is very possible that Heifetz had heard Kreisler do this and imitated it—Heifetz idolized Kreisler as a boy and heard him perform live several times prior to emigrating to the USA). Heifetz makes a dynamic swell before the D# diminished chord, anticipating the tension before it arrives in the orchestra. He plays his line as less a pedal point than a solo voice portending harmonic uncertainty. He backs off from the emphasis when the diminished chord actually arrives, and then observes the marked swell and crescendo in a much more literal way than does Kreisler, who instead accents the top notes in 230 and 231 (C, A, and F), linking the descending minor triad figure back to the solo violin's opening gesture in measure 91. One recalls Adorno's critique of Toscanini as too literal of an interpreter, and also Auer's

insistence that one study and observe every dynamic and articulation marking in the scores of Beethoven.

Heifetz's version is sleeker in that the intonation is more precise, the vibrato is more constant, and the tempo is more fluid. And yet one can hear the manner in which certain violinistic moves such as the shift from the Bb to D in measure 227, the anticipatory swell before the diminished chord, or the greasy slide coupled with the marked crescendo in measure 231 seem to be less about the harmonic structural development of the piece and more about a somewhat superficial adherence to Brahms' dynamic markings, or to an individualistic marker of the violinist's idiom. Furthermore, he takes an exaggerated amount of time to hit the high C in measure 230, which seems motivated by a sonic aesthetic (such as the singer's habit of taking time when hitting a high note for dramatic effect) rather than any kind of musical structural imperative. Heifetz certainly has his own sound and "language," but in a way it seems less reasoned and grounded in compositional structure than does Kreisler's.

Kreisler's drastic play with time and emphasis defies a literal reading of a notation that represents all eighth notes as even. The mimetic "gestus" of the music is clear in Kreisler's rendition—one hears its dialectic resistance to the inhibiting symbols of notation in his shifting play of on and off-beats, in his improvisatory lilt. There is some clear manner in which Kreisler synthesizes the abstract and mimetic qualities of the music with his own "tone language": this is the kind of structural reading that Adorno considers a truthful interpretation of the work.

Perhaps Adorno's love for Kreisler and his disdain for Heifetz are not simply matters of *habitus*, of their respective training and social circles, but also matters of a

deeper resemblance and cohesion. That is, Adorno's insistence on the dialectic nature of composition and interpretation—the objective in the subjective, obedience through disobedience, the spontaneous through the technically determined—coheres with Kreisler's ability to maintain a wonderfully idiosyncratic and personal sense of microtiming while resisting against the flow of the orchestra. His lilt is precise and accurate (in that it feels different and necessary every time it is repeated)—the result of a personal introspection. His resistance against the flow of the orchestra marks the resistance of the dialectic: the resistance of thought against the fluidity of consensus. Such a musical resistance marks every dialectical turn in Adorno's writing. In opposition to Stravinsky's strict and flowing meters, his mechanical conducting style, his facile borrowings from ragtime and jazz, or against Heifetz's virtuosic flourishes and sleek, flowing performances of Brahms and Beethoven, Kreisler and Schoenberg insist on a personal, subjective time pulling against the inadequate fragments of notated meter. The resistance of the latter two coheres not only with Adorno's scheme for the relation of composition and interpretation, but with every dialectical thought Adorno puts through the wringer.

And yet, there is a certain sense in which Adorno's own musical training and values limit his particular judgments about performers such as Heifetz. I will make the case that Adorno's criticisms of Heifetz & co.'s playing neglects another structural mode of music's reproduction: the bodily technique of performers. While his monograph on interpretation addresses bodily gestus as in opposition with notation, his particular observations do not properly account for the disciplined body as itself structurally organized. For example, his brief note on Kreisler or Kolisch's "tone" and

"attack" constituting an "instrument's language" says nothing about the means of production of this tone or attack.

In other sections of his draft, the body (specifically the face) manifests the mimetic impulse in a quasi-mystical way: "Music is mimic in so far as certain gestures, a certain play of facial muscles, automatically produce musical sounds; music is, one could say, the acoustic objectification of facial expressions... Music is in the middle, so to speak, between the theatre of the heavens and that of the face."113 The other notable mention of the body is cheironomy, which Adorno claims mediates between music and writing: "This would therefore make cheironomy the mediating factor between music and writing: it passes in time with the music, but as something visual that can be spatially fixed and 'written down.'"114 Both of these examples demonstrate Adorno's acknowledgment of the performing body as hugely important (music as miming facial expression, as an objectification of this extremely sensitive physiological index of mentality), but also his failure to account for this importance in a structural way, as he does for interpretive choices of timing, dynamic, and articulation in relation to the score. His neglect of the body in favor of "interpretive" choices implicitly treats bodily technique as a tool that transparently produces the interpretive choices at hand (though this implicit separation of technical and interpretive responsibility is contrary to any such separation in his discussions of composition).

¹¹³ Adorno, Towards a Theory of Musical Reproduction, 179.

¹¹⁴ Adorno, *Towards a Theory of Musical Reproduction*, 175.

A structural reading of Heifetz's bodily technique allows us to acknowledge both the validity of Adorno's criticisms and the manner in which Heifetz's virtuosity is compelling and highly developed (though adhering to very different structural templates than Adorno's aesthetics). For this second analysis I will compare Heifetz and Hillary Hahn's performances of Paganini's 24th caprice. As a caprice, this piece showcases the violinist's wizardly technique; its completeness as a "work" is grafted onto templates of a performing body in a more obvious way than the Brahms concerto, which completes itself through compositional structures such as the narrative drama of sonata form. To the extent that the Paganini 24th caprice can be thought of as a work, it is one that deliberately stands in reserve for technique, rather than in the case of the Brahms concerto, in which Kreisler's technique animates the living qualities of the work.

Perhaps because the structural demands of the work are less evident in Paganini, this leaves more room to analyze the structural qualities and features of Heifetz and Hahn's technique. In this analysis I will identify templates guiding their reproductions, such as elements of Heifetz's bodily formalism that are traceable to Auer's pedagogical instructions. These templates manifest an understanding proper to and motivating the violinist's individual technique. These templates also mark the interpretant: the socially shared understanding that is interpolated in the formation of the individual's bodily technique. I will link the individual nature of these understandings to the larger social contexts that they reflect.

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This reading starts with the basic antagonism between music's notation and its performance, each of which adheres to its own structural constraints, its own pedagogies and values. This antagonism follows from what Adorno identifies as a rupture between the musical "signified" and "signifier": "In other words: the sign system of verbal writing and language itself belong to one homogeneous system, while music and its writing belong to two different ones."115 For Adorno, whereas speech and writing are homogeneous, music and its writing are unnaturally paired—musical writing even relies on imported fragments of language in order to name the notes of the scale system. (It should be noted that Adorno seems only to address phonetic languages in this draft.) Adorno attributes this heterogeneity of music and its writing to the non-intentional nature of music. Presumably, this is because whereas verbal speech and writing are united in their common attachment to some referenced object, music and its writing have no common object of reference—they are rather continually negotiating the very domain of music. The unity of music and its writing is not given but practiced, and this practice itself continually shifts the site on which music draws its structured contours. 116

Notation thus operates in its own structural domain, separate from and interrelated with the practicing body. They are separate in that practicing the rules of voice-leading has nothing to do with practicing scales on the violin; they are

 $^{\rm 115}$ Adorno, Towards a Theory of Musical Reproduction, 168.

¹¹⁶ Adorno wrote this before the post-structuralist turn to language, before Derrida famously critiqued phonocentrism for holding writing as the signifier of signifying speech, and thus doubly removed from the so-called signified. This begs the question of what Adorno means by music as a signified. Is it simply presently performed music? Or is it the X-ray image of the score that has to do with some originary mimetic impulse?

interrelated in that the exercise of polyphonic writing (enabled by notation) caused violinists to greatly expand and improve their technical facility (and vice versa, expansions in technical facility allowed for more imaginative musical writing for the violin).

When Adorno claims that the Kreisler/Caruso/Kolisch trifecta manages to responsibly speak the "instrument's language" in such a way that it coheres with the composed structures, he is thus talking about a specific kind of musical literacy that works from templates of composition (and specifically German compositions): micro and macro-structural features such as transitions, themes, codas, ornaments, etc. For example, he critiques the Heifetz/Rubinstein/Feuermann trio for their euphony of sound and fluidity of tempo, which glosses over structural features of Beethoven's composition, specifically emphasized off-beats, or the dissolution of rhythmic resistance in the trio's final coda. In the Brahms concerto comparison, Kreisler draws details of his interpretation and personal language from the harmonic and melodic structure of Brahms's writing in a much more obvious way than does Heifetz.

This is not altogether surprising, considering Heifetz's musical background.

Later in life, Heifetz attempted to obscure the nature of his father's work as a Klezmer and folk fiddler, instead referring to him as "concertmaster" of his hometown symphony (they did not have one at the time the family still lived in Vilnius)

[citation]. Certainly, elements of Heifetz's training can be read as indexing an industrial approach to the kind of virtuosity easily appreciated by consumers of mass culture. However, his playing also reflects more interesting musical resources and

¹¹⁷ Kopytova, *Jascha Heifetz*, 16.

innovations stemming from a highly developed aesthetic rooted in sound, inflection, and bodily technique.

Analysis #2: Heifetz and Hahn

Adorno critiques Rubinstein/Feuerman/Heifetz for a "sensual euphony of sound" eclipsing the compositional structure of Beethoven's trio, but there is arguably another structure eclipsed—the technical body that undertakes the musical reproduction. I will use as a point of reference, this video of him playing Paganini's 24th caprice:

Video 1: Jascha Heifetz plays Paganini Caprice No. 24

A good place to start with this analysis is the way Heifetz holds the violin. The hold of the instrument was after all given a great deal of importance by Heifetz's teacher, Leopold Auer, who in *Violin Playing as I Teach It* writes: "The very start of all violin playing—the apparently simple matter of holding the instrument...has a wide range of possibilities for good or for evil." He continues on to directs not only the arm and fingers in relation to the instrument, but the gaze: "...the first thing to bear in mind is that it should be held in such a position that the eyes may be fixed on the head of the instrument, and the left arm should be thrust forward under the back of the violin so

¹¹⁸ Leopold Auer, *Violin Playing As I Teach it* (New York: Frederick A. Stokes Company, 1921), 31.

that the fingers will fall perpendicularly on the strings."¹¹⁹ The cameraman's attunement to this gaze is shown in the pizzicato variation, giving the cockpit view of the instrument. The very clear formalism of Heifetz's posture conforms to the instructions of his teacher (not to mention the moralizing terms with which he treated such matters). Any still shot taken of Heifetz unerringly conforms to Auer's specifications: the violin is raised up high, the face always turned to the scroll.



Figure 11: Heifetz's posture

The violin protrudes out from under a chin that lies so squarely and flatly on the instrument that the instrument seems like its natural extension. And indeed, the instrument moves as an appendage of the body—the motion of Heifetz's head back and forth tilts the violin right and left.

This drastic tilting motion of the violin transpires against the absolute formalism of Heifetz's posture. Rather than rigidifying his playing, such a posture

¹¹⁹ Auer, *Violin Playing As I Teach it*, 32.

makes the drastic and quick motions of the body and instrument seem all the more explosive. And within the formalism of his posture there is a great deal of looseness and flexibility. In the following clip, at an interval between variations, Heifetz's left hand bends back at the wrist. The base of the palm supports and pushes up the violin and the chin briefly comes off the instrument, showing the changing hold of the instrument between the chin and left hand. Directly following this movement, the fingers of the left hand spread in anticipation:

Video 2: Heifetz hand spread

This motion resembles a finger-strengthening exercise of Heifetz's teacher, Leopold Auer, involving a similar layout of the fingers across the fingerboard: "To avoid an incorrect finger position in the first...and at the same time to strengthen the fingers...place the four fingers on the four strings,—the first on the F of the E-string; the second on the C of the A-string; the third on the G of the D-string; and the fourth on the D of the G-string." Heifetz's fingers do not mark this position exactly, but the transition between their closeness and the spread to set the next variation demonstrates the kind of fluidity and flexibility that Auer's exercise was meant to train. Auer's name is prominently displayed at the beginning of the video as the editor/arranger of the violin part; to some degree he arranges both musical text and the technical body encountering and assimilating this text.

¹²⁰ Auer, Violin Playing As I Teach it, 35.

Heifetz maintains the formalism of his posture through these re-distributions and resets of his body, showing that Auer's prescribed templates such as finger position, the angle of the violin, the direction of the gaze, only work when they are worked through. That is to say, these templates are, like the notated kind of musical writing, what both facilitates and suppresses the nature of music as impulsive movement—they require their own interpretation and assimilation into the drastic and spontaneous capabilities of the body in movement. Thus, Adorno's dialectic between mimetic/diachronic and abstract/synchronic plays out in the technique (which turns out to have its own *interpretive* element) of Heifetz.

Within Heifetz's bodily technique, there is an interpretation and assimilation of templates concerning a structural pedagogy of the body's forms and movements. How does this then come into contact with the structures of the musical writing—the interpretation of notated musical structures into movement and sound? The fact that Heifetz is already playing Auer's arrangement of Paganini's 24th caprice for violin and piano accompaniment shows that he is not overly concerned with a faithful reproduction of the "original" (which of course, as we know from Adorno, is always an absent or non-existent). Variations are treated as substitutable and modular, revised in order to show off the ever new-reaching heights of the modern violinist's virtuosity. This is all the more clear given the way we listen and watch his performance.

Occasional blips in sound quality occur—the very first note is noticeably scratchy, and the group of four sixteenth notes at the end of this short clip is out of tune and thrown away.

Video 3: Heifetz scratchy and thrown away

However, in context, we do not hear these as mistakes because they do not hold as their point of reference a prescribed text, but rather follow from the constant and drastic motion of the instrument in relation to the body, which develops its own markers of accuracy. That is to say, following the logic of the formal body in dialectic resistance with its spontaneous impulsiveness, these are not mistakes at all, but part of the thrilling controlled indeterminacy of Heifetz's playing.

Of course Heifetz's performance to some extent does reproduce abstract quantifiers of musical pitch and rhythm, but it does this in such a way, that many of the musical figures feel determined not by an abstract concept of meter, but by the motion of his body. A good example of this is the end of the theme:

Video 4: Heifetz rubato

Heifetz shifts up an octave to hit an E on the D string, then shifts down an octave on the G string to cadence on the A. Heifetz's shifting motion, rather than being ornamental or added on, determines the timing of this V-I cadence.

The timing of the first variation—an exercise in up-bow staccato—also seems largely determined by the inertia of the bouncing bow. Rather than controlling each individual note and its timing, Heifetz to some degree allows the bow to bounce on its own accord, creating an impulsive fluidity. The fast tempo of this variation was also likely the optimal speed for this technique:

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Video 5: Heifetz 1st variation

The last up-bow staccato run to the cadence on the A rushes forward, and Heifetz

conspicuously hits the note before the piano accompanist, Emanuel Bay (who is doing

an admirable job, considering the circumstances). This forward momentum ties

together the impulsive motion of this staccato technique and the musical decision to

contrast with the second repetition of this cadence, which slows down rather than

speeds up.

What Adorno dislikes about Heifetz's facility—his fluid tempi and impetuous

runs, his dynamics and rubato that do not always conform to the specifications of the

compositional structure—is precisely what allows Heifetz to integrate so fluidly the

mimetic impulses of the body in performance. That is, the body's formalism and

spontaneity makes the time, building the structure of the music out of its own

structured discipline.

A video of Hilary Hahn playing the 24th caprice offers a striking contrast.

Right from the first theme, we can perceive very different ideas of the musically

reproduced object:

Video 6: Hahn theme

Video 7: Heifetz theme

Hahn keeps the sound homogeneous by using less variation of bow speed (as well as less bow, generally) and a very narrow and fast vibrato. From the very beginning it is clear that this consistency of sound is a central object of her reproduction. In the first iteration of the first phrase, Hahn sets up this consistency, giving utmost attention to the articulation and timing of each note. Her hooked bow pick-ups and sixteenth note figures are much more even and controlled than Heifetz's, which often rush ahead. Hahn from the start establishes a consistent and organizing pulse as a much stronger presence than does Heifetz—whereas Hahn's *rubato* comes off as a deviation from her consistent pulse (matched by the consistency of her sound and articulation), Heifetz's *rubato* is as much an expressive deviation as it is the fluid nature of his instrumental language. Depending on one's point of view, this might come off as careless or characterful—either way, it is clear that Hahn has established a template of rigorously adhered to clock time, conforming bodily gestus to an abstract notion of temporal consistency in a way that Heifetz does not.

In the second iteration of the first phrase of the theme (still in the above video), Hahn changes the character of the phrase, dropping the dynamic and varying the bow pressure in the sixteenth-note runs to slightly aerate the sound. At this point, her head starts to move back and forth, in time with the quarter note pulse. The rhythmic motion is not isolated to the head, and moves to the torso and hips. In the second phrase, the back-and-forth motion expands in amplitude, mapped onto the clear points of emphasis in her phrasing, such as the sixteenth-note anacrusis leading to the F in measure 9:



Figure 12: Paganini Caprice, two measures of the theme

Heifetz also exhibits a back-and-forth movement, but rather than being linked to phrasing, emphasis, and steady pulse, it is linked to the direction, speed, and placement of the bow. The motion of the head seems to balance against the movement of the bow arm. While Hahn's movement does change the angle of the violin, its impetus is maintaining clarity of pulse and phrasing rather than an ergonomic coordination of the instrument in the left hand with the bow in the right hand. Additionally, Heifetz's movement and posture barely change in the character and dynamic shift from the first iteration of the phrase to the second. He exhibits an intense discipline and coordination of the body, which takes notated symbols and molds them to the contours of his bodily technical system. In terms of Adorno's dialectic between notated symbols that suppresses the bodily gestus, Heifetz views the consistent appearance of notation (in terms of evenness of notes) as mutable, instead reproducing a musical object located within the domain of the disciplined body. This is not at all to say that Hahn does not have a disciplined technical apparatus (her playing is as impeccable as it gets), but she reproduces the consistency of notes and sound as they are abstracted through notation, and she subsequently views an evenness of pulse and a clarity of phrasing as immutable objects, molding her bodily technique accordingly.

This difference is clear throughout the caprice. As another example, here are their renditions of variation 5:

Video 8: Heifetz variation 5

Video 9: Hahn variation 5

In the fifth variation, Heifetz clips the eighth notes, such that at certain points both the eighth notes and the sixteenth notes sound like sixteenth-note sextuplets with rests on the second and fifth beats. The sixteenth notes—played over two strings—are so compressed that they almost sound like octave double-stops (though it is clear from the video that he is still breaking them).



Figure 13: Paganini Caprice, Variation 5

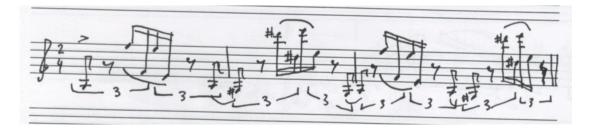


Figure 14: Heifetz's rhythm

At the end of the second half of the fifth variation, Heifetz squares the gestures to their notated rhythm, and as he slows down, the octave string-crossings no longer resemble

double stops. Again, Emanuel Bay does an extraordinary job of staying with the ambiguity of Heifetz's rhythmic play, somehow squaring the circle in such a way that he provides metric resistance to Heifetz's sextuplet rhythm without getting off from him entirely. When Heifetz slows down and cadences in the notated rhythm, Bay hits the notes precisely with Heifetz, as if justifying Heifetz's departures from the 2/4 meter in the accompanying piano through this metric resolution.

The reason for this distortion of the notated rhythm seems linked to the circular shapes of Heifetz's right hand holding the bow. The quasi-sextuplet rhythm fits with the momentum of the right arm as it moves back and forth between the lowest and highest strings. Heifetz's virtuosity is understood on a somatic level, as we sense this distortion of notated rhythm is conforming to the swinging motion of the body.

Hahn, on the other hand, plays the rhythm as notated, giving the eighth notes their full value and strictly adhering to the 2/4 meter. Again, her bodily motions correspond to her clarity of phrasing and steady pulse. Unlike Heifetz, who plays the sixteenth notes and the lower eighth notes in roughly the same dynamic, Hahn brings out the melodic contours of the eighth notes (moving in contrary motion to the sixteenth notes in the first half of the variation, and in parallel motion in the second half). The sixteenth notes, which mostly embellish and color the harmonic progression laid out in the eighth notes, are given less emphasis.

Throughout the caprice, it is clear that Heifetz and Hahn are operating with different templates for musical reproduction. Heifetz allows the motion of his body to make the time—that is, to re-make the abstractly notated rhythm and meter of the variation; on the other hand, Hahn conforms her bodily movements to an immutable

concept of pulse and phrasing. Whereas Heifetz manifests a bodily formalism that allows for an impulsive virtuosity deriving from his bodily-technical setup, Hahn's formalism follows from homogeneity of sound, a disciplined marking of pulse, and a careful attention to shaping hierarchies of phrasing and emphasis.

These differences are not only stylistic or generational; they are symptomatic of these violinists' fundamental understandings of the musical domain, of musical structure and its mode of reproduction. Heifetz's less strict adherence to time and emphasis as it appears in notation shows that he does not view the "original" to be reproduced as contained within the symbols of the notated score—this is also evident in the fact that he is playing an arrangement of this caprice with piano, which alters the notes and implied harmonies in many of the variations. The notion of an original work to be reproduced was less of a concern, whereas matters of violin technique were put in terms of "good" and "evil" (at least in Auer's case). In contrast, Hahn is reproducing general principles of sonic and metric consistency, and playing the original version of the caprice. Structure is imposed upon the body, not as a bodily pedagogy independent of musical notation, but as principles of consistency deriving from the abstract-significative pole of notated meters and an image/ideal of sound divorced from a formal study of the body.

A dialectical reading of Hahn's performance would recognize, on the one hand, an exaggerated form of "literal" interpretation, in which the abstract symbols of the score are adhered to so closely that they suppress the gestural, dynamic character that Heifetz renders through his more liberal reading of the score. On the other hand, Hahn's attention to the structure of the caprice and the clarity of phrasing coupled with

an inhuman technical facility is somewhat refreshing in relation to Heifetz's performance. Whereas Heifetz makes no pretense of situating the 24th caprice as anything but an exposition of his bodily technique, adapting it to suit his manner of playing, Hahn's performance seeks to balance the scales by grafting her bodily movements onto the structural framework of the composition, thereby expressing a more reverent fidelity to the caprice as a work.

Moreover, these performances manifest the templates connecting their understandings and their material practice. The pedagogical templates pointed out in Auer's treatises guide Heifetz's bodily formalism. His unique sense of timing follows from this formalism, which holds its own musical imperatives apart from the abstract character of the mensural notation. On the other hand, Hahn follows templates of consistency: a homogeneous sonic texture and a clock-time pulse. She of course deviates from these, playing around these guiding templates, but they are set up to frame the deliberate nature of any variations in phrasing.

Concluding Remarks

By considering two approaches to musical interpretation—the semiotics of its communication and reception, and the dialectical understanding of its reproductive ontology—I have attempted to firstly draw out the value of these theories as a discursive ground for musical practitioners and scholars, and secondly, framed the template as a useful term of analysis.

The template draws together the semiotic and the dialectical approaches. As the refracted image of the interpretant as introduced by Cumming (via Peirce), the template shows the manner in which Cumming's communicative signs become incorporated into their systematic production. The interpretant holds together representamen and object; the template connects abstract understanding and material practice. This abstract understanding is informed in some communicative exchange of signs, for example, the pedagogical instructions of Auer (a series of bodily-musical signs) as they form the understanding motivating Heifetz's performances. Along the lines of Adorno's dialectic of music's mimetic and abstract qualities, one could frame Auer's didactic instructions or exercises as abstract and static forms, which Heifetz animates in the dynamism of his playing. Conversely, verbal accounts of Auer's teaching suggest that his bodily, mimetic gestures in lessons were able to correct his students' abstract understanding of a musical piece.

The template as refracted image of the interpretant also elucidates Adorno's point about the heterogeneity of music and musical writing. That is, there is a mutual understanding of signs between composer and performer held in place by interpretants, but when it comes to the production of these signs, each of these heterogeneous systems (musical performance and musical writing) imposes its own disciplinary constraints. A process of interpolation is required in order for the templates guiding the composition (the disciplinary constraints of notating material) to become templates guiding performance (the disciplinary constraints of playing an instrument or singing). That is to say, the interpretation required of performers is more than interpretation in the literary sense: it involves the reckoning of an antagonistic relation between two practices, each with its own motivating understandings and guiding templates.

Finally, the template helps to map out technique, which is itself a largely unrepresentable and unknowable system for musical production. The template provides coordinates—Kreisler's Ländler lilt, Heifetz's bodily formalism, Hahn's maintenance of a homogeneous sonic texture and clock-time pulse—that connect their material movements in performance to a larger understanding that is linked to historical, social, and cultural formations. Identifying such templates both acknowledges technique as an un-representable structure proper to the individual, as well as a diachronic structure that moves historically between people and traditions. This draws together both textual and bodily understandings of templates and their interaction.

One can thus easily imagine several extensions of this project: for example, providing a genealogy of certain templates for musical production. One could track the development of instrumental technique through treatises and verbal accounts, as it develops from a discussion of how to render certain musical figures in practice (as in CPE Bach's keyboard treatise) to a more focused discussion of bodily technique (as in Auer's texts). The development of more sophisticated accounts of instrumental technique (as seen, for example, in Gerhard Mantel's treatise on cello technique), could be read in tandem with the tendency of high modernist compositions to follow techniques largely divorced from historical considerations of conventions of performance and interpretation (such as total serialism, aleatoric writing, or graphic scores). This break from the historical considerations of textual interpretation in modern instrumental pedagogy and composition could be read as divergent symptoms of the exaggerated division of labor between composition and performance. It could

also be read in tandem with the period performance practice movement as a reaction to these exaggerated divisions, premised as they are on an ahistorical approach.

The other possible extension of this project is in practices of musical improvisation. Although I have elaborated the template through examples drawn from the European tradition of musical works, the template highlights the manner in which notation can function as prescriptive, descriptive, or transcriptive. That is to say, rather than putting the notated score first, there is a mutually informing relationship between practice and notation. In many cases notation may only come after the fact of performance, and may only be used as a conditional or incomplete tool for expanding a range of improvisatory templates. Furthermore, improvisation is premised on a psychophysical technique that is as much an un-representable black box as bodily technique in the case of score-based practices. Templates help to identify coordinates of this technique, mapping it out historically and culturally. Their ability to speak to the changing relationship between the disciplines of performance and notation within the European classical tradition suggests that, while real differences exist between improvisation and score-based practices, they exist on the same dialectical spectrum of music's abstract and dynamic qualities.

Bibliography

Adorno, Theodor W. *Towards a Theory of Musical Reproduction: Notes, a Draft and Two Schemata*. Translated by Weiland Honban. Edited by Henri Lonitz. Cambridge: Polity, 2006.

Adorno, Theodor W. *Philosophy of Modern Music*. Translated by Anne G. Mitchell and Wesley V. Blomster. New York: Seabury Press, 1973.

Auer, Leopold. *Violin Master Works and Their Interpretation*. New York: Carl Fischer, 1925.

Auer, Leopold. *Violin Playing As I Teach it*. New York: Frederick A. Stokes Company, 1921.

Bach, Carl Philipp Emanuel. *Essay on the True Art of Playing Keyboard Instruments*, Translated and edited by William J. Mitchell. New York: W.W. Norton & Company, 1949.

Baillot, Pierre Marie François de Sales. *L'Art du violon*. Translated and edited by Louise Goldberg. Evanston: Northwestern University Press, 1999.

Beethoven, Ludwig van. *Piano Trio No. 7 in B Flat Major, Opus 97*. Emanuel Feuermann, Jascha Heifetz, and Artur Rubinstein. EMI ALP 1184. LP.

Benjamin, Walter. *The Work of Art in the Age of Mechanical Reproduction*. Translated by J.A. Underwood. London: Penguin, 2008.

Biancolli, Amy. Fritz Kreisler: Love's Sorrow, Love's Joy. Portland: Amadeus Press, 1998.

Borgo, David. *Sync or Swarm: Improvising Music in a Complex Age*. New York and London: Continuum International Publishing Group, 2005.

Brahms, Johannes. *Violin Concerto in D Major, Opus 77*. Fritz Kreisler and the London Philharmonic Orchestra conducted by Sir John Barbirolli. EMI COLH 35, 1936. LP.

Brahms, Johannes. *Violin Concerto in D Major, Opus 77*. Edited by Hans Gál. Leipzig: Breitkopfy & Härtel, 1926.

"Brahms Violin Concerto op. 77 – Heifetz – Toscanini – NYP – 1935," YouTube video, 38:35, posted by "Goodmanmusica," September 30, 2011, https://www.youtube.com/watch?v=nH4orwL6XZs&t=658s.

Cook, Nicholas. Beyond the Score. Oxford: Oxford University Press, 2013.

Cumming, Naomi. *The Sonic Self: Musical Subjectivity and Signification*. Bloomington: Indiana University Press, 2000.

Davies, James Q. *Romantic Anatomies of Performance*. Berkeley: University of California Press, 2014.

de Nora, Tia. *After Adorno: Rethinking Music Sociology*. Cambridge: Cambridge University Press, 2003.

Geminiani, Francesco. *The Art of Playing on the Violin*. Edited by David D. Boyden. London: Oxford University Press, 1951.

Goehr, Lydia. *The Imaginary Museum of Musical Works: an Essay in the Philosophy of Music.* Oxford: Clarendon Press, 1992.

Guettler, Knut. "Knut's Acoustics." Last modified May 30, 2013. http://knutsacoustics.com/index.html.

Heidegger, Martin. Edited by David Farrell Krell. *Basic Writings: Martin Heidegger*. London: Routledge, 2011.

"Hilary Hahn Paganini Caprice No. 24," YouTube video, 4:30, posted by "TheyCallMeBruce," October 26, 2013, https://www.youtube.com/watch?v=Lkn4eBjQ6eU.

"Jascha Heifetz plays Paganini Caprice No. 24," YouTube video, 5:41, posted by "Sam Lee," July 8, 2006, https://www.youtube.com/watch?v=vPcnGrie__M.

Kanno, Mieko. "Prescriptive Notation: Limits and Challenges." *Contemporary Music Review* Vol. 26 Issue 2, 2007.

Kivy, Peter. *Introduction to a Philosophy of Music*. Oxford: Oxford University Press, 2002.

Kopytova, Galina V. *Jascha Heifetz: Early Years in Russia*. Bloomington: Indiana University Press, 2013.

Kramer, Lawrence. *Interpreting Music*. Berkeley: University of California Press, 2011.

Lachenmann, Helmut. *Pression für einen Cellisten*. Wiesbaden: Breitkopf & Härtel: 2010.

Lachenmann, Helmut. 'Hearing [Hören] is Defenseless—without Listening [Hören]: On Possibilities and Difficulties'. *Circuit: musiques contemporaines* 13.2 (2003): 27-50.

Levinson, Jerrold. The Pleasures of Aesthetics. Ithaca: Cornell University Press, 1996.

Mantel, Gerhard. *Cello Technique: Principles & Forms of Movement.* Bloomington: Indiana University Press, 1975.

Mayo, Archie. *They Shall Have Music*. Los Angeles: Samuel Goldwyn Company, 1939. Film.

Mozart, Leopold. *Versuch einer gründlichen Violinschule*. Translated by Editha Knocker. Oxford: Oxford University Press, 1948.

Moseley, Roger. Keys to Play: Music as a Ludic Medium from Apollo to Nintendo. Oakland: University of California Press, 2016.

Paganini, Niccolo. *24 Caprices for Solo Violin, Opus 1*. Edited by Carl Flesch. Leipzig: C.F. Peters, 1900.

Pople, Anthony. Berg: Violin Concerto. Cambridge: Cambridge UP, 1991.

Quantz, Johann Joachim. *On Playing the Flute*. Translated by Edward R. Reilly. London: Faber and Faber, 1966.

Rehding, Alexander, Sybille Krämer, Gundula Kreuzer, Peter McMurray, and Roger Moseley. "Colloquy: Discrete/Continuous: Music and Media Theory after Kittler." *Journal of American Musicology* 70-1 (2017): 221-256.

Szendy, Peter. *Phantom Limbs*. Translated by Will Bishop. New York: Fordham University Press, 2016.

Thorne, Rob. "The Vesica Piscis of Past and Future Tradition." *Writing Around Sound* 2 (2016): 3-8.

Ulmer, Edgar G. Carnegie Hall. New York: Federal Films, 1947. Film.