

Metre in the Music of Anton Webern

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Abstract

In this thesis, I examine Anton Webern's metrical practice. Metrical issues seem to have been a preoccupation for the composer, evidence of which is found in, among other sources, sketch material (Bailey 1995) and metrical features of the published works, as I will show. While scholars have acknowledged the richness of metre in Webern's works (e.g., Berry 1976, Boulez 1991), relatively little metrical analysis has been undertaken; in particular, analyses that account for entire works are relatively rare, and no attempt has been made to investigate metre in depth across Webern's œuvre. In this investigation, I aim to make progress on both of these fronts.

The heart of this investigation is its two analytical chapters, in which I discuss metre and metrical issues in four earlier works—opp. 3/i, 5/i, 7/iii, and 11/i—and five later works—opp. 21/i, 22/ii, 28/ii, 29/i, and 31/v. One of the central concerns in this investigation is the relationship between musical surface and notated metre, an issue that arises frequently in existing metrical analyses of Webern's works. I discuss the different manifestations of this relationship and what these indicate about Webern's conceptions of metre. Among the themes that arise in this investigation are the mitigation of metrical structure, connections between metre and form, the “spatialization of meter” (Hasty 1997), metrical ambiguity, “non-committal” metre signatures, the fragmentation of the musical surface, and the employment of “metrical cells.”

Résumé

Dans ce mémoire, j'examine la pratique métrique d'Anton Webern. Les aspects métriques semblent avoir été une considération importante pour le compositeur, ce que l'on voit clairement, entre autres, dans ses esquisses (Bailey 1995) et à travers les caractéristiques métriques de ses œuvres, comme je le démontrerai. Bien que la richesse de la métrique dans la musique de Webern soit déjà reconnue (Berry 1976, Boulez 1991), peu d'analyses métriques ont été entreprises; d'ailleurs, celles qui tiennent compte d'œuvres entières sont relativement rares, et il n'existe aucune analyse approfondie de la métrique sur l'ensemble de son œuvre. Dans ce mémoire, je vais tenter de combler ces deux manques.

Le cœur de cette investigation consiste en deux chapitres analytiques, dans lesquels je discute de la métrique et des enjeux métriques qui émergent de quatre morceaux de la première moitié de l'œuvre de Webern (opp. 3/i, 5/i, 7/iii, et 11/i) ainsi que de cinq morceaux de la deuxième moitié de son œuvre (opp. 21/i, 22/ii, 28/ii, 29/i, et 31/v). L'une des questions les plus importantes de cette étude consiste en la relation entre la surface musicale et la métrique telle qu'écrite. Cette question revient souvent dans les analyses existantes des œuvres de Webern. J'analyse les multiples aspects de cette relation et ce qu'ils indiquent par rapport aux conceptions de la métrique de Webern. Parmi les thèmes que l'on retrouve dans cette discussion sont l'atténuation de la structure métrique, les connections entre la métrique et la forme musicale, la « spatialisation de la métrique » (Hasty

1997), l'ambiguïté métrique, les chiffrages de mesure « non-committal », la fragmentation de la surface musicale, et l'emploi des « cellules métriques ».

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Introduction

An investigation of metre in the music of Anton Webern may seem like a strange undertaking. The metrical qualities of his music are typically not the most salient; indeed, for much of his music one might question whether it is metrical at all: in some works the musical surface is too diffuse to discern a metre, in others the texture is too sparse, and in still others the gestures are too ambiguous. Nevertheless, Webern always notated his music metrically—that is, he employed a notational system whose presentation reflects metrical organization. It may be wondered, then, What is the relationship in his music between the metre as notated and the musical surface? Is the notated metre simply employed by convention, as some have suggested, or does it bear some integral relationship to the musical surface—and if so, of what nature?

This investigation is motivated by the intuition that the metrical aspects of Webern's music play a significant role in its expression. This notion has been explored but little in Webern scholarship—a surprising lack, as metre seems to have been a preoccupation for the composer. This preoccupation is manifest in numerous ways throughout his music: for example, in his careful shaping of the rhythm of melodic lines with respect to the notated metre, in his avoidance of strong metrical articulation, and in the presence of certain patterns found in a number of his works. In this investigation, then, I examine the following themes: the role metre plays in the expression of Webern's works, typical features of the

metrical organization of his music, and the conceptions of metre that seem to lie behind the metrical disposition of his musical surfaces.

The richness of Webern's music with respect to metre has not gone unnoticed. According to Wallace Berry, "it is very possible that Schoenberg's vast influence with respect to the organization of pitch content in post-Romantic music, an influence reaching dominantly across the century, is equalled by Webern's influence . . . in the direction of increasing metric flexibility."¹ Pierre Boulez singles out Webern from among the composers typically considered as the Second Viennese School—Arnold Schoenberg, Anton Webern, and Alban Berg—for his innovations in this domain: "Only Webern—for all his attachment to rhythmic tradition—succeeded in breaking down the regularity of the bar by his extraordinary use of cross-rhythm, syncopation, accents on weak beats, counter-accents on strong beats, and other such devices designed to make us forget the regularity of metre."² Christopher Hasty asserts that "meter is no less important [than pitch] for the intelligibility and coherence of Webern's twelve-tone music."³

While the subject of metre in Webern's music is clearly of interest, relatively little research has been undertaken on the subject. In particular, metrical analyses of individual works that consider their entire length are relatively few, and no attempt has been made to explore Webern's metrical practice across his œuvre. In this investigation, I seek to make progress on both of these fronts.

¹ Wallace Berry, *Structural Functions in Music* (Englewood Cliffs, NJ: Prentice-Hall, 1976), 397.

² Pierre Boulez, "Proposals," in *Stocktakings from an Apprenticeship*, trans. Stephen Walsh (Oxford: Clarendon Press, 1991): 49.

³ Christopher F. Hasty, *Meter as Rhythm* (New York: Oxford University Press, 1997), 265.

This investigation begins with a review of some of the more significant discussions of metre in Webern's music in the analytical and theoretical literature. This is followed by a discussion of this investigation's major methodological concerns, by way of clarifying its scope and approach. These two portions prepare the heart of the investigation, its two analytical chapters, of which the first treats earlier works and the second later ones. A brief concluding chapter suggests avenues for further research.

My aims in this investigation are as follows: first, to demonstrate that the metrical aspect of his works was a preoccupation for Webern, and to provide substantial evidence for this preoccupation; second, to trace patterns in the composer's metrical practice and to examine how it evolved throughout his *œuvre*; and third, to probe beneath this metrical practice to identify some of the conceptions of metre that guided Webern.

This investigation is not intended to constitute a final, comprehensive account of metre in Webern's works; the topic is far too rich to exhaust so summarily. Above all, my goal is to identify and explore some of the basic metrical issues in Webern's *œuvre* and to provide a basis for further investigation on the topic. For this reason, the works I have chosen to discuss represent a variety of the genres and styles in Webern's *œuvre* and raise a variety of metrical issues. I hasten to add that my aims in this investigation are primarily analytical; I do not expound a theory of metre in Webern's music, even though the theoretical matters that his music raises could easily inspire one. Further clarifications of scope and approach will be discussed below.

This investigation will have several significant benefits. First, it will of course result in a deeper understanding of Webern's metrical practice as it plays out across his œuvre. Second, given the relevance to metre of all aspects of a musical surface, it will result in a deeper understanding of Webern's works on this immediate, and surprisingly under-examined, level. Such an approach is particularly important in the broader context of Webern analysis, given the dominance of the interest in pitch organization.⁴ Third, the conceptions of metre underlying Webern's handling of metrical aspects will shed valuable light on his aesthetic, again from an angle little-explored in Webern scholarship. Fourth, this investigation should result in an improved understanding of Webern's notation of his compositions with respect to metre, one that will benefit performers and theorists alike.⁵ Finally, this investigation should serve as a springboard for further examination of this rich topic.

⁴ This dominance has been identified by various authors, particularly with reference to Webern's twelve-tone music: see, for example, Christopher F. Hasty, "Composition and Context in Twelve-Note Music of Anton Webern," *Music Analysis* 7, no. 3 (1988): 281–312; and Kathryn Bailey, *The Twelve-Note Music of Anton Webern: Old Forms in a New Language* (Cambridge: Cambridge University Press, 1991), 3.

⁵ Wallace Berry asserts that "critical interpretive decisions rest upon understanding yielded by [investigations of metre]" (*Structural Functions*, 400).

Literature Review

The subject of metre in Webern's works has garnered a certain amount of attention in analytical scholarship. In this section, I review a number of treatments of this topic as they pertain to this investigation.

Some of the earliest treatments of metre in Webern's music appear in discussions of rhythmic analysis generally. Such treatments reflect an increasing interest in the second half of the twentieth century both in rhythmic and metrical theory and in the analysis of Webern's music.⁶ An early example of such a treatment is Arnold Elston's "Some Rhythmic Practices in Contemporary Music,"⁷ published in 1956, in which the author discusses, among other works, the second movement of Webern's *Quartett*, op. 22. Many of the matters that arise in Elston's discussion, which include the accentuation of weak metrical positions, the elision of downbeats, and shifts in metrical disposition, recur throughout the analytical literature on metre in Webern.

The *Variationen*, Op. 27

Another such treatment of rhythmic analysis invoking Webern's music is Edward T. Cone's article "Analysis Today," published in 1960. In this article, Cone invokes the third movement of the *Variationen*, op. 27, by way of raising questions about rhythmic analysis of twentieth-century music; in his words, "the

⁶ Kathryn Bailey chronicles changing attitudes toward Webern's music in the fifty years following his death in "Coming of Age," *The Musical Times* 136, no. 1834 (1995): 644–49.

⁷ Arnold Elston, "Some Rhythmic Practices in Contemporary Music," *The Musical Quarterly* 42, no. 3 (1956): 318–29.

regularity of the meter in such composers as Webern must be carefully examined. Is it to be felt as a constantly present control? Is it a pure convention? Is it, as some would have us believe, an evidence of the composer's numerological superstitions?"⁸ The *Variationen*, he writes, "present the problem in an acute form." Despite asserting the presence of "at least seven different time-divisions simultaneously functioning" in the passage discussed, Cone held to the meaningfulness of the notated metre.⁹

Cone's brief invocation of op. 27 spurred several other articles treating the *Variationen*'s second and third movements. In his article "A Metrical Problem in Webern's Op. 27," published in 1962, David Lewin sought to resolve the "problem" in the second movement of the discrepancy between the 3/8 metre projected by the musical surface and the notated 2/4 metre.¹⁰ Granting the significance of the notated metre, Lewin related it to significant intervallic patterns in the movement's pitch structure to explain this significance.¹¹ Peter Westergaard's article "Some Problems in Rhythmic Theory and Analysis," published the same year as Lewin's, followed Elston and Cone in posing general questions concerning rhythmic analysis.¹² By way of demonstrating existing, conventional rhythmic notions at the analyst's disposal, Westergaard, like Lewin,

⁸ Edward T. Cone, "Analysis Today," *The Musical Quarterly* 46, no. 2 (1960): 182.

⁹ Incidentally, this is also where Cone proposes the term "structural downbeat" that has gained currency—if not without controversy—in metrical theory (182–83).

¹⁰ David Lewin, "A Metrical Problem in Webern's Op. 27," *Journal of Music Theory* 6, no. 1 (1962): 124–32.

¹¹ Lewin also applies the analytical tools developed in the course of this discussion to op. 24/ii (131–32).

¹² Another such example is Howard E. Smither's "The Rhythmic Analysis of 20th-Century Music" (*Journal of Music Theory* 8, no. 1 [1964]: 54–88) in which he briefly discusses op. 28/ii (73, 77).

presented an analysis of the second movement of the *Variationen*, identifying what he considered “a high degree of regularity” in the relation of the musical surface to the notated metre.¹³ Westergaard discussed the second movement again in an article published the following year to refute claims of the movement’s totally serial organization,¹⁴ also developing his assertions concerning rhythm and metre in the piece made in his earlier article and noting the suitability of the notated 2/4 metre in light of irregularities in the projected 3/8 metre and “larger regular patterns.”¹⁵ Several years later, in his article, “Some Aspects of Rhythm and Meter in Webern’s Opus 27,” James Rives Jones discussed the opening fourteen bars of the third movement, re-barring this passage to reveal what he called its “real metric structure,” whose downbeats, he showed, “perfectly fill in a quasi-Schenkerian structure.”¹⁶ Jones also considered the relation of the notated metre to this “structural meter,” concluding that the notated metre is not projected and perhaps was employed simply by convention.¹⁷ Finally, three decades after the publication of his article on the second movement of op. 27, David Lewin published another article in which he treated the same movement while foregoing the “heavy theoretical machinery” of the earlier article.¹⁸ He argued that the notated 2/4 metre relates to a larger metrical structure and thus constitutes “a formal mensural unit marking time in a regular way between . . . large-scale

¹³ Peter Westergaard, “Some Problems in Rhythmic Theory and Analysis,” *Perspectives of New Music* 1, no. 1 (1962), 190.

¹⁴ Peter Westergaard, “Webern and ‘Total Organization’: An Analysis of the Second Movement of the Piano Variations, Op. 27,” *Perspectives of New Music* 1, no. 2 (1963): 107–20.

¹⁵ *Ibid.*, 113.

¹⁶ James Rives Jones, “Some Aspects of Rhythm and Meter in Webern’s Opus 27,” *Perspectives of New Music* 7, no. 1 (1968): 106.

¹⁷ *Ibid.*, 109.

¹⁸ David Lewin, “A Metrical Problem in Webern’s Op. 27,” *Music Analysis* 12, no. 3 (1993): 343.

metric beats” (343), while to the perceived “3/8 pseudometre” he ascribed a thematic significance (349). He also identified a “quasi-isorhythmic structure” running through the movement, the deviations from which he related to other aspects of the movement’s metrical structure (345–48); and finally he identified links between the movement’s metrical and pitch structure (350–53).

This small flurry of analytical treatments of the op. 27 *Variationen* represents not only some of the earliest treatments of metre in Webern’s music, but also some of the most ambitious. The variety of attempts to reconcile the musical surface with the notated metre in the movements discussed, which included recourse to higher metrical structure, patterns in pitch organization and motivic groupings, and principles of Schenkerian analysis, suggests not only the difficulty of this matter, but also its allure.

Other Investigations

A treatment of metre in Webern’s music of particular significance for this investigation is Carl Dahlhaus’s “Rhythmic structures in Webern’s Orchestral Pieces, Op. 6,” published in 1972.¹⁹ In this article, Dahlhaus explores a variety of rhythmic aspects in the op. 6 *Stücke*, many of which touch upon metre. Indeed, among the various approaches scholars have taken in metrical analysis of Webern’s music, Dahlhaus’s approach here most closely resembles that of this investigation: he seeks to understand the *meaning* of rhythmic-metrical aspects of

¹⁹ Carl Dahlhaus, “Rhythmic structures in Webern’s Orchestral Pieces, Op. 6,” in *Schoenberg and the New Music: Essays by Carl Dahlhaus*, trans. Derrick Puffett and Alfred Clayton (Cambridge: Cambridge University Press, 1987), 174–80.

Webern's works, situating these within Webern's broader aesthetic. Thus Dahlhaus asserts the presence of a "'floating' or 'suspended' metre" in these pieces corresponding to the "floating" (*schwebende*) or "suspended" (*aufgehobene*) tonality described by Schoenberg (174), refers to the abstracting of metrical positions (175) and the "stereotyping of the beat" (176), and contends for the significance of metrical position in the expression of certain gestures (177) as well as the presence of "rhythmic *topoi*" (178)—all of these pertaining to matters raised in the present investigation. Regarding the recurring question of the significance of metrical notation, Dahlhaus asserts, "[t]he significance of the individual elements of rhythm, quantity and barring is [in the op. 6 pieces] variable. True, the bar, which is the foundation of traditional rhythmic usage, still represents a musical reality, but to varying degrees and with differing functions."²⁰ The present investigation seeks to extend a similar approach to a greater variety of works than Dahlhaus discussed, to draw connections between these works, and to provide stronger support for some of his assertions.

Mention might also be made here of Dahlhaus's "Problems of Rhythm in the New Music," in which he discusses the op. 30 *Variationen*.²¹ While his discussion of op. 30 dwells above all on matters of rhythm and serial technique, he makes several observations regarding metrical matters, including reference to Webern's adherence "in essence rather than for merely notational purposes" to

²⁰ Ibid., 177.

²¹ Carl Dahlhaus, "Problems of Rhythm in the New Music," in *Schoenberg and the New Music*, trans. Derrick Puffett and Alfred Clayton (Cambridge: Cambridge University Press, 1987), 45–61.

“the stresses of metrical rhythm,” as well as to metrical correlates to the operation of inversion in the realm of pitch.²²

The examination of metre in Webern’s works also plays a role in more recent scholarship treating broader issues of rhythm. In his article, “Temporal and Pitch Structures in Webern’s Orchestral Piece Op. 10, No. 2,” Michael Russ contests Forte’s view (discussed below) that notions of metre are not only inappropriate in discussions of post-tonal music but “hinder” them.²³ He asserts the presence of a “contextually-established” 2/4 metre running against Webern’s notated 3/4 metre in op. 10/i that, although projected by other variables, bears significant correspondence with aspects of the piece’s pitch and rhythmic structure.²⁴ He also identifies a 5/4 metre that, while agreeing with the piece’s rhythmic and pitch structures, nevertheless lacks sufficient regularity to form a thorough-going metrical layer.

James Marra also explored metre as part of his investigation of rhythm in Webern’s op. 11/i, a piece discussed below.²⁵ Owing to the suspension of projected pulse in this piece, Marra concluded that the conventional notion of metre is inappropriate in this context, and that the piece’s metre signature merely “reflects units of rhythmic structure” rather than actual metrical phenomena.²⁶

²² Ibid., 60–61.

²³ Michael Russ, “Temporal and Pitch Structures in Webern’s Orchestral Piece Op. 10, No. 2,” *Music Analysis* 7, no. 3 (1988): 247.

²⁴ Ibid., 258.

²⁵ James Marra, “Interrelations Between Pitch and Rhythmic Structure in Webern’s Opus 11, No. 1,” *In Theory Only* 7, no. 2 (1983): 3–33.

²⁶ Ibid., 32.

In the second half of the twentieth century, full-length theoretical treatments of rhythm and metre increasingly emerged.²⁷ While twentieth-century music figures in several of these treatises, only two of them, Wallace Berry's *Structural Functions in Music*²⁸ and Christopher F. Hasty's *Meter as Rhythm*, include discussion of Webern's music. The inclusion of this music in a theoretical treatment that covers such a wide variety of music testifies to the innovative nature and flexibility of these theories. I will briefly discuss their treatments of Webern's music.

Wallace Berry, *Structural Functions in Music*

The discussion of rhythm and metre forms the third and final part of Berry's *Structural Functions in Music*. In this chapter, Berry treats a large variety of works, including an unusually high number from the twentieth century, and no fewer than four by Webern, including op. 5/iv, op. 11/iii, op. 22/i, and op. 27/iii.²⁹ Indeed, he takes much interest in the metrical aspects of Webern's music; as he states, "Webern's meters, and fluid rhythmic surfaces, are too little understood in real depth."³⁰

²⁷ Besides those discussed below, see, for example, Grosvenor Cooper and Leonard B. Meyer, *The Rhythmic Structure of Music* (Chicago: University of Chicago Press, 1960); Maury Yeston, *The Stratification of Musical Rhythm* (New Haven: Yale University Press, 1976); William E. Benjamin, "A Theory of Musical Meter," in "Rhythm and Meter," special issue, *Music Perception: An Interdisciplinary Journal* 1, no. 4 (1984): 355–413; Fred Lerdahl and Ray Jackendoff, *A Generative Theory of Tonal Music* (Cambridge, MA: MIT Press, 1983) (hereafter *GTMT*); Joel Lester, *The Rhythms of Tonal Music* (Carbondale: Southern Illinois University Press, 1986); Justin London, *Hearing in Time* (Oxford: Oxford University Press, 2004).

²⁸ Berry, "Rhythm and Meter," chap. 3 in *Structural Functions*, 301–424.

²⁹ Berry also discusses several of Webern's works in earlier sections of the book, including op. 7/i and iii, op. 9/i, op. 10/i, and op. 25/i.

³⁰ Berry, *Structural Functions*, 400.

Berry's most substantial discussions of metre in Webern's works concern two pieces in particular, op. 11/iii and op. 5/iv.³¹ He begins his discussion of these pieces by citing the suitability of Webern's music for demonstrating "metric functions" that he outlined earlier in the chapter (326–27). He cites op. 11/iii "as an example of what is sometimes termed 'nonmeter,' 'antimeter,' 'suspended meter,' or 'ameter,'"³² pointing out that the experience of metre as unstable and ambiguous in this piece in fact presupposes its presence (397). With its "very tenuous articulation at a predominantly subdued dynamic level," this piece exemplifies what he calls "minimal eventfulness" (398). Berry proceeds through the few events of this ten-bar piece, demonstrating the relations of events to one another by means of his metric functions. In noting the position of the movement's "chief accentual events occurring as *balancing referential points just off center* [italics in the original]," he concludes that the metrical structure reflects "a circumstance of splendid equilibrium . . . with constant asymmetries and fluctuation at the same time" (400).

The second of Webern's works that Berry discusses in detail is the fourth movement of the *Fünf Sätze*, op. 5. Berry notes the presence of "many devices . . . by which events underscore the notated bar-line and the [quarter] pulse" (401). In discussing a thrice-appearing rising motive and the "persuasive anticipative feeling" it generates, he remarks upon "[t]he general importance of anacrusis in

³¹ The other two works of Webern discussed in his chapter on rhythm and metre are invoked by way of a brief demonstration: op. 22/i as "[a]n example of the shaping power of controlled changes in rhythmic motion" (306–7), and op. 27/iii as an example of the "practice of rhythm applied motivically," in this case isorhythm (312). He also briefly refers to op. 16 as exceptional among Webern's works in its "unusual decisiveness of accent" (400).

³² The conflation of these terms seems objectionable, given the different implications of each.

expression of metric structure” this demonstrates.³³ He also discusses higher metrical structure, identifying the “primary downbeats defining intermensural units” and noting their reinforcement of the notated bar-line, the relatively even proportion (4—4—3) of the temporal intervals between them, and the predominance of the first over the others (406–7).

Berry’s inclusion of Webern’s music—and that of several other “modern” composers—in his theoretical work must be acknowledged as the bold step that it represented for rhythmic theory. This inclusion was no gimmick, either; his theoretical notions clearly suited such challenging music, as they elucidated metrical qualities of this music in a convincing and sophisticated way. Despite his emphasis on perceptual aspects of metre, Berry also considered the relation of musical surface to notated metre; but while he affirmed the significance of the latter with respect to the former, one also wonders to what extent his interpretation of the former was tempered by the latter.

Christopher Hasty, *Meter As Rhythm*

The second theoretical treatment of metre that incorporates Webern’s music is Christopher Hasty’s *Meter as Rhythm*. Hasty’s attention to rhythmic issues in post-tonal music may be seen in his work prior to this book, including his articles “Composition and Context in Twelve-Note Music of Anton Webern” and “Rhythm and Post-Tonal Music: Preliminary Questions of Duration and

³³ Ibid., 404–5. See also his inclusion of anacrusis as one of the factors productive of accent (342).

Motion.”³⁴ Hasty’s treatment of metre in Webern’s music in *Meter as Rhythm* consists of discussions of the opening bars of the *Quartett*, op. 22, and of sketches for a third movement of the same work that was never completed. Both discussions are found in a chapter that marks a turn toward “practices that have received considerably less attention in studies of rhythm and meter.”³⁵ This chapter also includes discussions of pieces by Monteverdi, Schütz, and Babbitt, works in “styles that feature a high degree of metrical ambiguity and severely limited mensural determinacy,” but that, he argues, are still metrical.³⁶ In his analysis of op. 22/i, which for its great detail extends only to the work’s fifteenth bar, Hasty demonstrates how the musical surface, while in its fragmentation lacks what he calls “projective constancy,” nevertheless features distinct metrical cues. He also discusses the piece’s notation, which, he contends, “provides very little information about metre”: the metre signatures in the section he discusses “do not indicate metrical types but, rather, serve to identify four phrase constituents by means of bar lines and to divide the phrase into ‘readable’ units without doing too much violence to its rhythm” (260).

In the second part of Hasty’s discussion of Webern’s music, concerning sketches for the theme of an unfinished third movement of op. 22, he seeks to demonstrate “the importance of rhythmic distinctions for Webern’s compositional labor” (266). In so doing, Hasty counters an emphasis on pitch relations in

³⁴ Christopher F. Hasty, “Rhythm and Post-Tonal Music: Preliminary Questions of Duration and Motion,” *Journal of Music Theory* 25, no. 2 (1981): 183–216.

³⁵ Hasty, *Meter as Rhythm*, 237.

³⁶ *Ibid.* Such assertions distinctly resemble assertions made by Berry in *Structural Functions* (see 318–19), as do several aspects of Hasty’s theory; Berry’s work is nonetheless never mentioned in *Meter as Rhythm*, nor even does it appear in Hasty’s bibliography.

Webern scholarship that he, like other scholars, finds exaggerated.³⁷ Through his discussion of these sketches, he retraces Webern's process of crafting this theme and its rhythmic character through changes of texture, rhythm, metre signature, and other parameters, concluding that rhythmic and metrical considerations played just as great a role in this process as considerations of pitch (275). In general, Hasty's attitude toward rhythm and metre in Webern's music resembles the intuition that motivates the present investigation: as he writes, "I would argue that meter is no less important [than pitch] for the intelligibility and coherence of Webern's twelve-tone music."³⁸ Moreover, the flexibility of Hasty's analytical apparatus and its emphasis on dynamic, "in-time" metrical experience, makes it a valuable tool for the analysis of Webern's music.

The inclusion of Webern's music in these two expositions of metrical theories seems related to, if not even rendered possible by, the particular conceptions of metre of the theorists that conceived them, conceptions that do not require event regularity but instead emphasize the metrical *function* or *flavour* of events.

Kathryn Bailey, Sketch Studies

A final work of considerable importance to the topic of metre in Webern's music is Kathryn Bailey's article, "Rhythm and Metre in Webern's Late Works," in which the author describes metrical issues that arise in Webern's sketches for

³⁷ Hasty makes a convincing argument for the importance of rhythmic aspects and the inadequacy of exclusively pitch analysis of Webern's music in "Composition and Context."

³⁸ Hasty, *Meter as Rhythm*, 265. It should perhaps be emphasized, however, the divergence between Hasty's notion of metre and conventional notions thereof.

his works opp. 21 to 31.³⁹ A theme running through this article is Webern's uncertainty concerning the metrical disposition and representation in notation of his musical surfaces (253ff). Bailey groups the evidence of this uncertainty into three categories: 1) variations in the note values a piece employs ("the denominator"; 256), 2) variation in the metrical disposition of a musical surface relative to an established metre (259), and 3) "real metrical alteration, a change from duple to triple metre or vice versa" (260). Bailey also devotes a considerable portion of the article to a discussion of the second movement of the *Streichquartett*, op. 28, both of whose sections exhibit variation along the lines of the third category, among other types (262–78). In light of the frequent occurrence of late metrical changes in Webern's compositional process, as well as his habit of not re-sketching the music once such a change has been made, Bailey concludes that, by and large, "he considered metre to be simply a matter of convention: in many cases important for establishing generic intentions, in all cases a necessity for performance, but not a determining factor in the sound of his music."⁴⁰

The value of this article for illuminating Webern's metrical practice is obvious, given the light it sheds upon Webern's compositional process and the synthesis of metrical issues Bailey provides. Nevertheless, the article's focus on

³⁹ Kathryn Bailey, "Rhythm and Metre in Webern's Late Works," *Journal of the Royal Musical Association* 120, no. 2 (1995): 251–80. Although Bailey makes no claim to treating all of Webern's twelve-tone works in this study, she includes opp. 17–20, the composer's earliest twelve-tone works, in statistics presented early in the study. The omission of opp. 17–20 in further discussion is perhaps owing in part to the lack of extant sketches for op. 17/i and for the entirety of op. 20 (see 252 n.7).

⁴⁰ *Ibid.*, 279. Earlier in the article, Bailey makes a similar statement but exempts op. 24/i and iii and op. 27/i and ii as works in which the notated metre *does* play a meaningful role (278).

sketches precludes more detailed discussion of the finished, published works themselves.

Major Analytical Treatments of Webern's Music

Two other substantial analytical works concerned with Webern's music warrant mention in this review in light of their aim to discuss his œuvre on a large scale: Kathryn Bailey's *The Twelve-Note Music of Anton Webern* and Allen Forte's *The Atonal Music of Anton Webern*. In the former, while metrical matters arise on occasion, they are pursued but little,⁴¹ which is not surprising given the author's stated primary interest in row structure, canonic structure, and formal structure.⁴² Nevertheless, metrical issues arise on several occasions, and her invocations are curious in light of conclusions she draws in her article on rhythm and metre in these works just discussed: in *The Twelve-Note Music*, she seems to take the meaningfulness of the notated metre for granted, as wholly relevant to the performance and perception of the works in question.⁴³

Metre also plays a relatively minimal role in Forte's *The Atonal Music of Anton Webern*, although it arises frequently enough to raise questions as to Forte's position on metre in this repertoire: in his other work on rhythm in Webern's music, he eschews the employment of metrical conceptions, suggesting that the

⁴¹ See, for example, 49 and 68. A significant exception is her discussion of op. 29/iii, wherein she explores "several inconsistencies" in the metrical notation of the movement (299–301).

⁴² Bailey, *Twelve-Note Music*, 6.

⁴³ This is evidenced in her discussions of op. 20/ii (161), op. 21/i (165), op. 27/iii (210), and op. 28/iii (218). The negligible role of metre in this investigation may be seen in Bailey's relegation of any comment on the metrical issues of op. 28/ii, which form the largest part of her discussion in "Rhythm and Metre," to a single line in a footnote (421, n.28), despite the inclusion of two sketches that illustrate these issues clearly (66–67).

notion of metre “has hindered study of the rhythmic structure of this music for decades.”⁴⁴ In *The Atonal Music*, however, he seems to take the notated metre for granted, as may be seen in his discussions of a “chronic limp” in op. 9/ii (176), an “unrelentingly trochaic” metre in op. 13/i (282), and a “characteristic fracturing of metre” in op. 15/ii (332), among others. This consideration of metrical issues may, then, indicate a shift in his position on the matter from his earlier work.

By and large, the existing literature exploring metre in Webern’s music suggests the richness of this topic. This richness is suggested in particular by the questions raised in the literature, the quantity of scholarship generated by certain of Webern’s works (in particular the op. 27 *Variationen*), the variety of approaches taken in this scholarship, and the presence of his works in progressive theories of metre. Nevertheless, the scholarship on this topic also exhibits some limitations. For example, existing metrical analyses typically examine single works and do not attempt to situate the practices found in a given work within a larger metrical practice; moreover, the analytical scholarship on earlier works is somewhat scanty. In the present investigation, then, I hope to make in-roads on this topic, examining pieces from across Webern’s œuvre and exploring themes that run throughout.

⁴⁴ Allen Forte, “Foreground Rhythm in Early Twentieth-Century Music,” *Music Analysis* 2, no. 3 (1983): 247. See also “Aspects of Rhythm in Webern’s Atonal Music,” *Music Theory Spectrum* 2 (1980): 91.

Methodology

A number of matters concerning my approach in this investigation warrant discussion. To begin with, this investigation centres upon analyses of several works from across Webern's opus-numbered oeuvre. These works were selected for the diversity of styles and genres represented among them as well as for the metrical issues they raise; and indeed they represent a reasonably good cross-section of Webern's oeuvre with respect to chronology. In particular, the genres discussed in this investigation include works for solo voice and piano, string quartet, solo instrument with piano, small orchestral ensemble, and chorus with orchestra; and the stylistic periods represented include early song, expressionistic,⁴⁵ aphoristic, early twelve-tone, and late twelve-tone styles.

As is inevitable with such a selection, important passages and pieces in Webern's oeuvre are omitted; moreover, the significant metrical issues in the pieces I discuss will by no means be exhausted. The complexity of the study of metre and the richness of Webern's music of course preclude this possibility. I have, however, made every attempt to bring to light the most significant issues and to, wherever possible, refer to other pieces that may relate to the issues discussed.

There are two omissions from Webern's opus-numbered oeuvre among the selection of pieces discussed that warrant particular mention: first, discussion of

⁴⁵ With this category I refer to op. 5/i. Although op. 5 as a whole is typically classified as an aphoristic work, the first movement of this set clearly differs from the following four, quite obviously in length but also in affect.

his two “tonal” works, opp. 1 and 2,⁴⁶ and second, discussion of his middle-period songs, opp. 12–19. Regarding the first, much of metrical interest is found in particularly op. 1, and simply constraints of space limit the inclusion of opp. 1 and 2 in this investigation. Regarding the second, this omission owes in part as well to limitations of space, but also to the considerable metrical difficulties in these pieces.⁴⁷ Anne Shreffler, perhaps the greatest champion of the middle-period songs, admits that “Webern’s early twelve-tone [i.e., op. 17–19] and transitional songs are his least accessible works,” and that opp. 17 and 18, perhaps the most extreme of these, “have resisted analysis and performance.”⁴⁸ Since one of the goals of this investigation is to build a foundation for understanding Webern’s metrical practice, it would be somewhat unpractical to venture into such deep waters; it is nevertheless hoped—indeed, based on preliminary research, it is the case—that this investigation may facilitate examination of works with such a high degree of metrical complexity. Moreover, reference to these works will be made along the course of this investigation.

A word also bears mention regarding my inclusion of vocal works in this investigation. These works are a double-edged sword: on one hand, the text’s metre places constraints on the metre of a song’s musical surface that may not

⁴⁶ I use the term “tonal” here in the loose sense necessary in discussing the harmonic organization of these works.

⁴⁷ These pieces are far from uniformly difficult from a metrical perspective, however; in particular, op. 12/i and iv are relatively conservative metrically (see Shreffler’s comments on metre in the former in *Webern and the Lyric Impulse: Songs and Fragments on Poems of Georg Trakl* [Oxford: Oxford University Press, 1994], 97), and op. 16 features a relatively close correspondence between notated metre and musical surface throughout (see Berry’s comments on op.16/i in *Structural Functions* [400–1]).

⁴⁸ Anne C. Shreffler, “‘Mein Weg geht jetzt vorüber’: The Vocal Origins of Webern’s Twelve-Tone Composition,” *Journal of the American Musicological Society* 47, no. 2 (1994): 278.

represent the composer's metrical practice more generally; on the other hand, the texture of a vocal work presents a valuable opportunity, since it comes "pre-interpreted" with respect to the importance of individual parts—the voice overwhelmingly having priority in such textures.⁴⁹ Moreover, the correspondence of the text's metre to the notated metre presents an opportunity to examine Webern's manipulation of one against the other. It should be noted, finally, that patterns found in both texted and instrumental works suggest continuity between Webern's metrical practice expressed in different genres.⁵⁰

One of the difficulties in the study of metre in Webern's music relates to the listener's perception. In numerous passages there are strong grounds to doubt, for example, that the notated metre will correspond to—is an accurate description of—the most likely listening experience of a work. Accounting for the metrical aspect of this listening experience in Webern's music would require an extremely sophisticated theoretical apparatus capable of predicting the metrical perception of features of an atonal musical surface—one which, in light of the abundance of information and variability of factors that contribute to metrical formation, seems if not impossible, extremely unlikely.⁵¹ Although I will deal occasionally with

⁴⁹ Shreffler writes of "the vocal line, which for Webern was [in general] the leading voice" (*Lyric Impulse*, 41).

⁵⁰ The view that a continuity obtains between Webern's vocal and instrumental music is not universally held, however. Kathryn Bailey refers to an "apparent distinction in Webern's mind between the style and techniques appropriate to instrumental chamber music and those suitable for the solo song. . . . [H]is innovations and experiments take place in the instrumental, and choral and instrumental, music; the sets of songs for solo voice are much simpler in conception" (32).

⁵¹ Lerdahl and Jackendoff discuss the difficulty of predicting analyses through the weighting of rules: *GTTM*, 53–55.

issues of perception, the difficulties this matter raises will largely remain unresolved in this investigation.

Several additional limitations of this investigation also warrant mention. To begin with, a considerable limitation relates to what Felix Meyer and Anne Shreffler call “unusual historical circumstances” in the publication of Webern’s opp. 1 to 13. As they point out, Webern only secured a publication contract with Universal Edition in 1920, at which time he revised a large number of his already-composed works in preparation for their printing.⁵² Thus, these works in their printed form are influenced by Webern’s later aesthetic and metrical practice. Access to the original versions of these works is limited,⁵³ and thus the versions of these works consulted for and cited in this investigation are the printed, revised ones. On one hand, this fact obscures an important part of this investigation, namely the examination of changes or continuity in Webern’s metrical practice across different periods of his œuvre. On the other hand, these revisions would need to be considerable to change the findings of this investigation, since many of these findings, in light of the nature of metrical analysis, concern evidence drawn from relatively large spans of music.⁵⁴ Nevertheless, without knowing the extent

⁵² Felix Meyer and Anne C. Shreffler, “Webern’s Revisions: Some Analytical Implications,” *Music Analysis* 12, no. 3 (1993): 355. In this article, the *opera* cited are opp. 1–15; elsewhere, Meyer and Shreffler cite opp. 1–17 (“Rewriting History: Webern’s Revisions of his Earlier Works,” in “Del XV Congreso de la Sociedad Internacional de Musicología: Culturas Musicales Del Mediterráneo y sus Ramificaciones,” special issue, *Revista de Musicología* 16, no. 6 [1993]: 32). I take the range I cite, opp. 1–13, from the most recent source on the matter: Anne C. Shreffler, “Anton Webern,” in *Schoenberg, Berg, and Webern: A Companion to the Second Viennese School*, ed. Bryan R. Simms (Westport, CT: Greenwood Press, 1999), 282.

⁵³ The majority of Webern’s manuscripts and sketch material is held in the Paul Sacher Stiftung in Basel, Switzerland.

⁵⁴ Shreffler reports that “in general, the larger the gap [between composition and publication], the more extensive the revisions,” and that “[t]he most significant revisions have to do with reorchestration (though this applies much more to orchestral songs than it does to chamber

of these revisions and their precise nature, no reliable comment may be made on the matter.

Another limitation on the scope of this project is the relative lack of attention to sketch material. Study of such material would of course significantly enrich an understanding of Webern's metrical practice.⁵⁵ However, owing first to the difficulty of accessing this material and second to the limited scope of this investigation, I have not examined sketches besides those available in published materials, of which a not-insignificant quantity fortunately exists.⁵⁶

Finally, those familiar with Webern scholarship may be surprised by the lack of attention to aspects of harmonic organization in this investigation. For example, unlike the vast majority of scholarship treating these works, my analyses of Webern's twelve-tone music contain no references to rows and row structure. While doubtlessly harmonic aspects exert a significant effect on metre in tonal music, the influence of harmonic aspects on metre in post-tonal music is a matter of some debate.⁵⁷ Certainly pitch in general plays an important role in certain respects, such as register and contour, but its influence with respect to harmonic organization seems to be considerably diminished compared with tonal music.

settings such as Op. 14), reduction of notational detail, reduction of dynamics, and changes in articulation" (*Lyric Impulse*, 57).

⁵⁵ Numerous scholars emphasize source studies in Webern analysis: such studies factor significantly in the work of Kathryn Bailey (*Twelve-Note Music*), Allen Forte (*Atonal Music*), Christopher Hasty (*Meter as Rhythm*), and Anne Shreffler (*Lyric Impulse*), among others.

⁵⁶ A substantial amount of sketch material is reproduced in Anton Webern, *Sketches, 1926–1945. Facsimile Reproductions from the Composer's Autograph Sketchbooks in the Moldenhauer Archive* (New York: Carl Fischer, Inc., 1968), and an additional limited quantity may be viewed on the website of the Moldenhauer Archives (The Moldenhauer Archives—The Rosaleen Moldenhauer Memorial, The Library of Congress, accessed 21 November 2013, <http://memory.loc.gov/ammem/collections/moldenhauer/>).

⁵⁷ As mentioned above, that the notion of metre is even viable in the context of post-tonal music in the first place has been challenged.

Instead, other factors, such as rhythmic patterns, grouping, register, dynamic, articulation, timbre, and so on, seem to play a more significant role in metrical formation in post-tonal music. With respect to twelve-tone music in particular, I share Christopher Hasty's position when he writes, "I do not believe that an analysis of row structure per se is likely to shed much light on the question of rhythm."⁵⁸ Nevertheless, the relation of harmony to notated metre and to the metrical features described in this investigation is an obvious avenue of further research on the topic, even if only from the standpoint of the construction of these works and Webern's conception of the relation between these two.⁵⁹

Finally, my employment of existing systems of metrical analysis in this investigation warrants brief discussion. No single analytical system is wholly adequate to describe the variety of metrical phenomena found in Webern's music and what I wish to describe in this investigation. In my analysis and in the relatively sparse annotation of the musical examples that accompany it, I employ tools from several systems, including those elaborated by Wallace Berry, Christopher Hasty, Fred Lerdahl and Ray Jackendoff, and Harald Krebs,⁶⁰ employing each as it aids comprehension of the phenomenon in question. In general, I employ Wallace Berry's means of indicating higher-level "downbeats" that function independently of a regular metrical structure, as well as broader notions of musical motion that he expounds elsewhere in *Structural Functions*. I

⁵⁸ Hasty, *Meter as Rhythm*, 265. See also "Composition and Context," 292–93.

⁵⁹ This is Hasty's position on the matter as well: see *Meter as Rhythm*, 265.

⁶⁰ Berry, "Rhythm and Meter," chap. 3 in *Structural Functions*, 301–424; Hasty, *Meter as Rhythm* (see especially 103–47); Lerdahl and Jackendoff, "Metrical Structure," chap. 4 in *GTTM*; Harald Krebs, *Fantasy Pieces: Metrical Dissonance in the Music of Robert Schumann* (New York: Oxford University Press, 1999).

employ Christopher Hasty's notion of metre as "projection" in contexts where no long-term structure is necessarily projected but metrical cues are nevertheless in play. I employ Lerdahl and Jackendoff's "dot notation" to describe long-term, consistent, predictable metrical structure. Finally, I employ Harald Krebs's analytical tools to discuss what he terms "metrical dissonances," namely "grouping dissonance" and "displacement dissonance."⁶¹

By way of summary, then, the focus of my examination is largely on the musical surface of Webern's works and its relation to the notated metre: To what degree does Webern attempt to project the notated metre, and to what degree obscure it? What are the means by which he projects it or obscures it? What patterns may be observed in this relation between musical surface and notated metre, what might be the desired effects of such treatment of this parameter, and how do these relate to Webern's broader aesthetic goals? How does Webern treat certain metrical positions? And what are the conceptions of metre that lie behind such relations between musical surface and notated metre? These, then, are the questions guiding my analysis of Webern's works.

⁶¹ For an overview of the two types of "metrical dissonance" he describes, see *Fantasy Pieces*, 31–39.

Introduction to the Analytical Chapters

The following two analytical chapters constitute the heart of this investigation. I have divided the works discussed into two groups, one reflecting an earlier metrical practice and the other a later one. While it might be tempting to make a division in Webern's metrical practice along the lines of the harmonic organization of his œuvre—that is, into “atonal” and “twelve-tone” works—such a division would be somewhat arbitrary, perhaps even misleading, with regard to these works' metrical aspects, since there seem to be few or no entailments between harmonic and metrical organization in atonal styles. Instead, if a division is to be made, it should be made between op. 20 and op. 21: the musical surfaces and metrical character of the works from op. 21 and later differ markedly from earlier works, as will be discussed in the second of these two chapters.

My approach in these two chapters differs somewhat from one to the other, partly by way of a clear exposition of the metrical issues discussed in this investigation and partly owing to the metrical styles represented and the pieces discussed. With respect to an exposition of metrical issues, in the first chapter I attempt to establish some basic features of Webern's metrical practice, including the degree to and means by which a musical surface may correspond to the notated metre. I also attempt to raise general themes of this practice that will return in, and perhaps even shed light upon, later works. This suits well the pieces discussed in this chapter, as many of these themes arise again in later works in a more advanced form.

With respect to the metrical styles exhibited in the works discussed, along Webern's œuvre may be observed a general distancing of musical surface from notated metre, in some cases a certain abstraction; thus it is more difficult to discuss the relationship between these two in specific terms in later works. For this reason, in the first of these two chapters, my discussion is more detailed and follows more closely the dynamic process of metrical formation, whereas in the second, my discussion focuses more on broader characteristics of the relation between musical surface and notated metre and their effect. The generally greater length of the pieces discussed in the second chapter also inhibits the sort of detailed analysis found in the first.

As mentioned above, a guiding concern of these analyses is the relation between musical surface and notated metre. In each piece I discuss, I will begin by examining this relationship, then explore what the features identified might suggest about Webern's metrical practice and his conceptions of metre.

Metre in Earlier Works

Fünf Lieder für mittlere Stimme und Klavier, Op. 3—I. “Dies ist ein Lied”

In the first song (“Dies ist ein Lied”) of Webern’s *Fünf Lieder*, op. 3, a variety of matters pertaining to Webern’s metrical practice in his lieder emerge (see Example 1). In general, this piece exemplifies the close correspondence between voice and notated metre, and with it the discrepancy between accompaniment and notated metre, typical of these works, as well as some of the characteristic ways each of these is effected. This piece also permits the broaching of important questions concerning the meaning of metre for Webern.

I will begin by discussing the relationship of the voice to the notated metre, taking the piece’s first phrase as an illustration. The first word, “Dies,” falls on a relatively strong metrical position, a tactus pulse, reflecting its syntactical strength as a demonstrative pronoun (b. 1). The relative importance of the following two syllables, “ist” and “ein,” is reflected in their placement in a strong and a weak 8th position⁶², respectively; and “Lied” (b. 2), the most important word so far, falls on a downbeat, subjugating the three prior words as anacrusic to it. In the remainder of the line, “für dich allein,” the most important word of these, “dich,” falls on a tactus position, as does the phrase’s ultimate syllable, the “-lein” of “allein” (b. 2). Thus, Webern’s metrical setting of this

⁶² Here and throughout this investigation, I refrain from using the word “note” when referring to metrical *positions*, *spans*, or *groupings*. Although the use of this term in this context is common in music-theoretical discourse, it is in such cases of course misleading; in an obvious example, sometimes a metrical position referred to does not in fact feature an attacked note but a rest, or a note begun earlier is sustained through it.

phrase corresponds closely to the text's own, natural metre which, through both tonic accent and structural importance, projects three different metrical levels (see Figure 1).

Not only does the metrical disposition of this phrase's text correspond to its natural metre, but certain musical parameters also reinforce these metres. The first word, "Dies," is lent a thetic quality through agogic accent and by its being the soprano's first utterance.⁶³ The word "Lied" is likewise emphasized through agogic accent, a short crescendo leading to it, and a local melodic peak on it—all conventional cues for strong metrical positions. The word "dich," which falls on a second tactus position, is the melodic high point of the line, even if it is not accented agogically, and "allein" constitutes its low point. The remaining words—"ist," "ein," "für,"—of less structural weight, are quicker rhythmically and occupy intermediary positions in the melodic contour. Thus, the metrical structure implied by the notated metre is projected by rather conventional means, including agogic accent, melodic peak, and dynamic peak. It should be noted as well that not only does the structure of the text *correspond* to the notated metrical structure, but it is itself one of the parameters that *projects* this metre.

Before advancing further into the piece, let us examine the accompaniment in these bars. While the vocal line corresponds to and indeed projects the notated metre, the accompaniment tends to obscure it. Its opening gesture, a *staccato* chord on a weak 8th and a low *tenuto* E on a weak triplet 8th (b. 1), provides no metrical orientation for the voice's entry. Moreover, the chord at the end of b. 1,

⁶³ Such a dramatic, thetic vocal entry is found elsewhere in Webern's early songs: see, for example, op. 3/v and op. 8/i and ii; see also op. 14/ii.

which falls on a weak triplet 8th position, obscures the duplet subdivision in the voice's line. In a similar rhythmic conflict, in b. 2 the accompaniment enters on a weak duplet 8th while the voice articulates a more relaxed triplet rhythm; and although the accompaniment's top line largely articulates the 8th pulse level,⁶⁴ its lower voices activate only weak 8ths, producing a displacement dissonance of D2+1 (1=8th) that only "resolves" on the downbeat of b. 3.⁶⁵ While Webern does not often employ such metrical dissonances as accompanimental figures,⁶⁶ he does employ isolated, off-beat⁶⁷ punctuations quite commonly, as we will see, and in his lieder, particularly those involving a rhythmic dissonance of 3:2 between voice and accompaniment.⁶⁸ In these two bars, then, the accompaniment plays an obscuring role against the metrical structure projected by the voice.

In the following two bars (bb. 3–4), the voice's line clearly projects the notated bar-length, since the period of the "sequenced" figure in these bars, being three quarters long, corresponds to it precisely. At the same time, the line also

⁶⁴ This line is, of course, an echo of the voice's line in bb. 1–2. While its metrical position with respect to the quarter level is preserved, it is shifted with respect to the bar.

⁶⁵ In other words, this layer is "out of phase with" the primary layer by one 8th. I discuss the use of Krebs's analytical system for metrical dissonance below. In the annotated score, "R" stands for "resolution [of a metrical dissonance]." Such "resolutions" will be discussed in the next chapter.

⁶⁶ Such figures do, however, appear in other roles, as will be discussed below.

⁶⁷ By "off-beat" here and elsewhere, I refer to weak positions on a given metrical level. This is a slippery term, since what is a weak position on one metrical level is a strong position on another (see Lerdahl and Jackendoff's Metric Well-Formedness Rule [MWFR] 2, which states that "[e]very beat at a given level must also be a beat at all smaller levels at that point in the piece" [*GTTM* 69–70]); this is, however, above all a conceptual difficulty, one which, in my experience, almost always disappears given a specific context. I will add that while colloquially "beat" is sometimes used to refer to what many theorists call "tactus," the term is also used more generically in theoretical literature (see, for example, *ibid.*, 18–21), as I use it here.

⁶⁸ As an extreme example of this tendency, see op. 4/v, in whose outer sections (bb. 1–5 and 12–15) this is the rule rather than the exception.

exhibits a feature common in Webern's works: conspicuous downbeat elision.⁶⁹

The elision is conspicuous in this case in that the only 8th positions in these bars not activated are the downbeats.⁷⁰ Here, the accompaniment compensates for these elisions in a subtle but deliberate way: the downbeats of both bars correspond to the "resolution" of a displacement dissonance begun in the previous bar. In this way, these positions so important for projecting metrical structure are still activated. The displacement dissonance noted earlier begins again in b. 4, but instead breaks on beat 3, where the accompaniment *aligns* with the voice in a dramatic peak. That this is the first occurrence of such an alignment points up the degree to which these two parts differ metrically. In the accompaniment's "cadential" figure of b. 5, the downbeat position is again elided conspicuously, a mere triplet 8th rest preventing its activation.

Webern interrupts the prevailing notated metrical structure in bb. 5 and 7. Frequently with a shortened bar, as is b. 5, the locus of interest is the downbeat of the *following* bar, since it was deemed necessary that this moment correspond with a downbeat. In this case, the reason behind this change is quite clear: the melodic and dynamic peak in the voice, its doubling in the piano RH, and the low C in the piano's LH all contribute to a strong thetic sense at this moment, perhaps

⁶⁹ I use the term "elision" in this investigation in the sense of a "dropping out" or "suppression" (*OED Online*, s.v. "elision," accessed March 14, 2014, www.oed.com); that is, an elided metrical position is one that is not activated—usually deliberately, by implication.

⁷⁰ It could be argued that this metrical disposition is merely a function of the text's metre in these two bars; but while the latter suggests such a metrical disposition on the quarter level, there is no reason *a priori* that these figures should be so disposed on the level of the bar—that is, instead of peaking on, for example, beats 3 and 1.

the strongest of the piece;⁷¹ the notated metre thus reflects this thetic character. The change made to b. 7 is more curious. Whereas the voice's figures in bb. 6 and 7 are similar, their disposition in the two bars differs—unlike the figures of bb. 3 and 4. What might account for this difference? In this case, metrical definition is gradually lost beginning in b. 6 and leading to the end of b. 7, owing to increasing pace (concurrent with a *rit!*) and rhythmic complexity and sporadic activations of certain metrical positions, and this process finishes with the conspicuously off-beat *ppp* chord in the accompaniment at the end of the bar. The extension of b. 7 thus reflects this loss of metrical clarity; a notated downbeat would imply (or prescribe) a clarity at odds with the musical surface. Metrical clarity is only recovered in b. 8—and gradually, given the elision of the downbeat—with the voice's resumption that brings back material from bb. 3 and 4.

Before concluding this analysis, two final metrical issues warrant mention: first, the re-positioning of the voice's line from bb. 1–2 by one beat in b. 9. The effect of this change—a perceptible one, given the association of the figure in b. 8 with its earlier version in bb. 3 and 4—is an emphasis on “möcht” and a confirmation of the thetic quality of this syllable noted above. After eliding the downbeat of b. 10—as does the accompaniment—this figure resumes its earlier metrical position on “das rühre sein.” The second matter is the consistent elision of downbeats in the accompaniment at the close of the song through the sustaining of notes through this position (bb. 10–12). Such elision in final bars is rather

⁷¹ The similarly-articulated beat 3 of b. 4, preceding this “adjusted” downbeat by the three quarters of the prevailing metrical structure, may serve to prepare this shift of downbeat.

characteristic of Webern's lieder, particularly in opp. 3 and 4,⁷² and suggests an avoidance of the articulation of strong metrical positions, by way of closing the piece with maximum smoothness.

This relatively short piece raises several important issues relating to Webern's metrical practice. To begin with, the significance of the notated metre relative to the musical surface is clear, whether through the latter's projecting the former or mitigating it, both of which it seems to do quite deliberately at different moments. Moreover, this interaction serves to reinforce through metre the conventional roles of voice and accompaniment, the voice of course occupying the leading one. This interaction is particular, however. In general, the musical surface of this piece, especially in the voice's part, projects the metrical structure implied by the notated metre, but in the voice's failure to do so the accompaniment fulfills this role. This structure is also obscured at some moments, whether by the elision of downbeats (as in bb. 5, 8, and 10–12) or through rhythmic complexity, as in b. 7. Moreover, a certain flexible treatment of this metrical structure may be observed: whereas largely the grouping into three quarters indicated by the metre signature holds throughout the piece, Webern sees fit to adapt this grouping at moments, if only slightly.

The metre-obscuring devices employed in this piece also warrant discussion. One of Webern's most effective means of obscuring metrical projection is the isolated activation of weak metrical positions, particularly in the context of simple rhythmic dissonances such as 3:2. This is the case at several

⁷² See, for example, op. 3/v and op. 4/i, ii, and iv.

moments in this piece, such as in the accompaniment of bb. 1, 5, and 7; but in later works this device is employed more frequently.⁷³ Webern also relies on more regular obscuring features, such as the displacement dissonances in the accompaniment, bb. 2–4;⁷⁴ but frequently this obscuring consists simply in the elision of strong metrical positions identified several times above. These devices all contribute to the light articulation of this piece's projected metrical structure, which suits its tender affect: the most intense dynamic level, for example, is *p* (and only *pp* in the accompaniment). In such an affect, one found throughout Webern's œuvre, the clear articulation of a metrical structure would disrupt this atmosphere. Moreover, these metre-obscuring devices may also be considered a sort of rhythmic colouring of this atmosphere. Finally, the elision of strong metrical positions at key moments, such as the opening, the close, and the passage following the caesura at b. 8, permits the most unobtrusive entrances and exits.

If indeed Webern's elision of downbeat positions is aimed at creating smooth entrances and exits, it bears noting two conceptions of metre lurking behind this practice: namely the association of the activation of strong metrical positions with accent, and the association of the regular activation of such positions with rigidity. In Webern's case, evidence for these conceptions is found above all in his fighting them: by eliding strong positions and activating weak ones, and, when a strong position is activated, by mitigating the intensity with which it is activated. These themes will be pursued further below.

⁷³ For works that employ this device particularly frequently, see op. 12/i, op. 13/ii and iv, and op. 17/ii and iii.

⁷⁴ Hints of a grouping dissonance are also found in the piano's LH in bb. 6–7.

Fünf Sätze für Streichquartett, Op. 5—I. Heftig bewegt

The op. 5 *Fünf Sätze* are perhaps Webern's most extrovertedly rhythmic works. Throughout these pieces Webern employs devices whose rhythmic aspect is essential: grouping dissonance, displacement dissonance, off-beat punctuation, ostinato, and imitation. The first movement (*Heftig bewegt*) of the op. 5 set is easily the longest (the next-longest movement, after the first movement's fifty-five bars, is the fifth, with twenty-six), and it features a variety of devices noteworthy not only for their metrical significance but because they are used throughout the set (see Example 2).

The strong rhythmic character of this movement is clear from the outset. It opens with a slurred *ff* leap in the second violin and cello imitated *pizzicato* in first violin and viola, and followed followed by three homophonic *fff* off-beat punctuations in all four instruments (bb. 1–2). The metrical disposition of these gestures readily lends a hearing of triplet groupings of 16th notes in this short introduction, a G4/3 (1=16th) dissonance against the notated metre.⁷⁵ Moreover, a result of this metrical dissonance is the activation, particularly strongly in this case, of weak notated metrical positions. Such off-beat punctuation, already remarked in op. 3/i, pervades not only this movement and the whole op. 5 set, but Webern's entire œuvre in a number of manifestations.

The musical surface continues to evade the notated metrical structure in the music that follows. The violin line that initiates the piece's formal beginning

⁷⁵ In other words, groups of four 16ths against groups of three. In the accompanying annotated score, I employ Krebs's notation for metrical dissonance (as described in *Fantasy Pieces*), but in homophonic passages I only annotate the upper part.

(bb. 2–4), while clarifying the duple grouping of 16ths implied by the notated metre and these groups into higher groups of two, has a period of two quarters, producing a much higher-level grouping dissonance of $G3/2$ (1=quarter) than that of bb. 1–2 against the notated metre.⁷⁶ This structure is nevertheless disrupted by the entry of the same line, transposed and displaced a 16th later, in the second violin in b. 3.⁷⁷ Moreover, the off-beat punctuations in the lower strings continued from the introduction contribute further disruption. The anti-metrical effect of these punctuations is augmented by the relatively wide and variable temporal distance between them, which denies the regularity that occasions metre.

Before proceeding, I will discuss the concept of “metrical dissonance,” which I borrow from Harald Krebs, since it arises frequently in this analysis. Usually when Webern uses such dissonances, there is little to no prevailing, perceptible metrical structure to in turn render these dissonances perceptible as such; thus whether a dissonant effect is produced may be questioned. Krebs acknowledges the existence of cases where the metrical dissonance in question consists of patterns on the musical surface that conflict only with the notated metre, not with any other line—what he calls “subliminal dissonance.”⁷⁸ Indeed, given the lack of correspondence between notated metre and musical surface in his music in general, the majority of cases of metrical dissonance in Webern’s music are “subliminal.” Two things may be noted here: first, such a device

⁷⁶ It may be noted as well how this line enters on a weak 16th, omitting its first note (compare b. 3, second violin) and thus elides a relatively strong metrical position.

⁷⁷ I indicate the resultant displacement dissonance with “4”s, referring to the 16th level, but indicate grouping structure following the first violin line begun two beats earlier that the second violin imitates here.

⁷⁸ Krebs, *Fantasy Pieces*, 46–52.

unquestionably has a dissonant effect for the performer, whose reference point is the notated metre, by which the dissonant line is understood as such; and thus this dissonance presumably influences the work's performance, colouring its projection and by extension the listener's hearing. Even if these lines are not heard as notated, however, the constantly shifting metrical fields will still produce a metrical disorientation, albeit of a somewhat different sort. These themes—metrical dissonance, the colouring of a passage by metrical conflict, quickly shifting metrical structure—all return later in this investigation.

An additional peculiarity of applying Krebs's approach to Webern's music is that occasionally the "beats" of dissonant metrical layers are not articulated, whereas in the examples Krebs discusses these most often correspond to accents⁷⁹ in the texture. This is consistent with the elision of strong metrical positions found throughout Webern's œuvre; indeed, it represents an additional dimension of metrical complexity. However, it renders complicated the delineation of the anti-metrical layer.

The first alignment of musical surface and notated metre comes on the downbeat of b. 4 with the arrival of the violins' imitated figure on this beat.⁸⁰ A short *ppp* stretto following this moment produces a temporary metrical haze (b. 4), but the notated metre is lightly clarified again on beat 3 in the first violin by the repetition of Bs in the tail of this stretto. The following series of off-beat punctuations in b. 5 exhibits an interesting correlation between metrical position

⁷⁹ Here I invoke the definition of accent proffered by Cooper and Meyer: "a stimulus (in a series of stimuli) which is *marked for consciousness* in some way" (*Rhythmic Structure*, 8). This definition would include the several factors Krebs discusses (*Fantasy Pieces*, 25–29).

⁸⁰ Following Berry (*Structural Functions*, 350–51), I indicate this thetic moment with an arrow.

and dynamic intensity: the increase in “off-beatedness” of these punctuations (weak quarter—weak 8th—weak 16th) is matched by a dynamic intensification (*pp*—*p*—*ff*). This correlation is suggestive of an expressive use of metre.

The following section (*Etwas ruhiger*, bb. 7ff) begins with a passage of some metrical complexity. On one hand, the repetition of a short 8th-note figure in the cello, accompanied by the viola (b. 7), may be interpreted as the unusual grouping dissonance of $G9/8$ (1=16th). This passage may be perhaps more intuitively understood, however, as simply a figure followed by its repetition displaced by a 16th. This produces one of two interpretations, depending on whether the displacement is conceived as “forward” (late) or “backward” (early):⁸¹ if the former, the figure has a period of two quarters, producing a grouping dissonance of $G3/2$ (1=quarter); if the latter, the figure has a period of two and a half quarters, producing a grouping dissonance of $G2.5/2$ (1=quarter).⁸² The first possibility seems to me the more likely, both by intuition and for motivic reasons: regarding the latter, the grouping dissonance of $G3/2$ (1=quarter) recurs throughout this piece, unlike the $G2.5/2$ (1=quarter) dissonance.⁸³ In either case, the displacement of the figure by a 16th represents a considerable metrical disruption.⁸⁴ The energy of the “answering” figure that follows this repeated figure moves to the downbeat of b. 9, realigning the musical surface with the

⁸¹ See Krebs, *Fantasy Pieces*, 35.

⁸² I use “ $G2.5/2$ (1=quarter)” instead of “ $G5/4$ (1=8th)” not only to preserve a common denominator between the two proposed interpretations, but also because the quarter is clearly the tactus at this moment, and the additional “0.5” here represents the disruption of this pulse level that this interpretation implies.

⁸³ I have indicated both the $G9/8$ (1=16) grouping dissonance and the first of the two alternative interpretations in the appended annotated score.

⁸⁴ Forte interprets this shift as a reference to the 16th-note leap that begins the movement (*Atonal Music*, 68).

notated metre via agogic accent in the wake of the preceding metrical dissonances.

The next phrase begins with a lyrical line in the violins in thirds and sixths accompanied by the viola (bb. 9–10). The violin line, which for its expressive indication (*sehr zart*) and higher dynamic level seems to be the *Hauptstimme*, conspicuously avoids its downbeat positions, sustaining through that of b. 10 and resting on those of bb. 11 and 12.⁸⁵ Even when this line breaks into a G3/2 (1=quarter) grouping dissonance reminiscent of bb. 7–8, preparing the return of the figure from those bars, the “downbeat” of these groups of two quarters is elided by a rest. Conversely, the *Nebenstimme* in the viola, although featuring some syncopation and cross-bar groupings, largely activates strong metrical positions, anchoring the violins’ lines metrically.⁸⁶ Simultaneously, however, a G3/2 (1=quarter) metrical dissonance occurs in this line, but with grouping opposite to that of the upper two parts. At the end of this passage, Webern extends b. 13 with a fourth tactus beat, avoiding the correspondence of the cello’s final note with a downbeat position and including the entire figure within the bar, so that the next bar begins with new material.⁸⁷

The stretto that follows produces another temporary metrical haze: its imitated figure, with a period of five 16ths, adds to the confusion generated by the

⁸⁵ Although I am treating this line as the *Hauptstimme*, an argument could be made for the viola’s line having this status, particularly toward the end of the phrase; but this argument would have to be based on the *character* of the lines in question over against the other features mentioned.

⁸⁶ That this line articulates these positions is clear particularly in its dynamic indications, which in all cases call for peaks at notated downbeats.

⁸⁷ The correspondence of metrical “divisions” with formal divisions will be discussed below. This piece is somewhat unusual for Webern’s “crossing” such divisions with anacrusis on several occasions (e.g., bb. 13–14, 17–18, 26–27, 36–37)

staggered entries by producing a grouping dissonance (G5/4, 1=16th) in each part. As the upper parts gradually dissolve into light off-beat punctuations, the cello takes over, its contour articulating a minimal metrical structure as it proceeds into b. 16.⁸⁸ The violins' line in bb. 16–17 leading back to *tempo I* borrows the beginning of the cello line of bb. 7–8, but is, like the second occurrence of that line, displaced by a 16th. After this follow two *fff* off-beat punctuations, both on weak 16ths, that mark the end of the phrase. This moment also provides a temporary reprieve to the stream of activations of the 16th level begun at b. 14, before this stream resumes in a reversal of the motion of bb. 14–16—if looser—beginning in the cello and moving upward through the viola and the second violin, usually in groups of six 16th notes.

The *espressivo* melody in the viola beginning on the anacrusis to b. 20, again borrowing the cello's line from bb. 7–8, elides the notated downbeats of bb. 20 and 21, sustaining through the former and resting on the latter, and also rests on the “downbeats” of its G3/2 (1=quarter) grouping dissonance in bb. 21–22. Meanwhile, the cello brings back the G5/4 (1=16th) grouping dissonance of bb. 14–15, but surreptitiously conforms to the viola's G3/2 grouping dissonance in b. 21—and similarly rests on the “downbeat” of this figure—before descending through off-beat 8th notes into b. 24. The imitative passage beginning in the violin in b. 22 similarly elides strong metrical positions, and the entrance of the imitated figure in the lower two parts occurs in both cases on the 16th following a quarter

⁸⁸ As the accompanying annotated score indicates, I favour the ultimate D (b. 16) as the most thetic moment for reasons of agogic accent, even though defensible alternative interpretations could be proposed.

position. These three parts in turn each feature groupings of three 16ths, and moreover are staggered such that none of them aligns with another, the overall effect being another metrical haze. Metrical clarity is regained in b. 24, the end of this formal unit, with a homophonic articulation of beat 2. In the following section, the first violin departs from its displacement dissonance (D4+1 [1=16th]) to articulate the first two quarter positions of b. 25 while the other instruments elide them; and a cascade of 16th notes in the lower parts through a *ritardando* closes the section.

In the remainder of this piece, many of the features already discussed return; I will merely highlight several noteworthy elements. To begin with, Webern changes the metre signature at b. 27 to 2/4, a concession to the G3/2 (1=quarter) grouping dissonance encountered multiple times already. Here the *Hauptstimme*, the first violin's line, elides all of its downbeats until b. 37. Meanwhile, decreasingly off-beat positions—8ths in b. 27, quarters in bb. 28–29—are lightly punctuated in the accompaniment, and it activates its first downbeat at b. 30. The cello, however, regularly articulates its downbeats in bb. 31–33 while the inner two voices return to off-beat positions, after which a composed *ritardando* (in addition to an indicated *poco rit.*) effects a transition back to the original 3/4 metre.

In bb. 39–40, the first violin experiments with metrical dispositions in a less systematic way than strict grouping dissonance, while the lower strings exhibit Webern's penchant for figures that straddle the bar-line—a matter simply

of a substantial anacrusis and a substantial continuation.⁸⁹ The familiar G3/2 (1=quarter) grouping dissonance returns in the two middle parts at bb. 42–43 while the cello continues playing unsystematic anti-metrical groupings, and a frenetic *ff* passage leads to the movement’s most strongly-articulated downbeat (b. 48), which also constitutes its melodic climax. This reservation of the strong articulation of a downbeat for a climactic moment again indicates Webern’s careful handling of metrical position, and indeed such a handling will be observed again below. Homophonic syncopated chords in a G3/2 (1=quarter) grouping dissonance reminiscent of bb. 12–13 occur at b. 49 in all four parts, still eliding the dissonance’s “downbeats,” and this group is fragmented to half its length in b. 51, quarter positions articulated in the violins until the piece’s very first gesture returns *sfff* in the first violin in a metrical disposition not yet encountered (b. 52). While this gesture is repeated through a *decrescendo*, the second violin and viola play 16th notes that stress the second 8th of each quarter span in bb. 53–54, and the cello plays descending 16ths while increasingly eliding strong metrical positions. The final gesture of the piece is a *ppp* punctuation in all parts on the final 8th position of b. 55.

Of the abundant rhythmic activity in this movement, several matters in particular warrant further discussion. In a broader perspective, the notated metre remains 3/4 through most of the piece, the most significant exception being the 2/4 section in bb. 27–36, and the recurrence of patterns in Webern’s treatment of the notated metrical positions remarked above implies the significance of this

⁸⁹ Examples of pieces that exhibit this practice particularly clearly are op. 12/2 and op. 14/v.

metre for the musical surface. Thus, as in op. 3/i, while Webern feels free to modify the prevailing metrical structure he has set, these modifications are usually minimal, consisting of the occasional addition or removal of a beat. It is also interesting to note the absence of metrical activity on levels higher than the bar. If such higher metrical organization obtains, normally it is more expressive of form than metre, producing spans or formal units rather than metrical units.⁹⁰ This is perhaps understandable given the lack of metrical clarity on levels lower than the bar, upon whose support such higher metrical structures depends. Thus, metrical activity strictly speaking is generally limited to a slim range of metrical levels surrounding the tactus level.

In light of all the metrical “interference” on the musical surface—such as grouping dissonance, close imitation, and off-beat punctuations—the notated metrical structure must for the most part be only barely perceptible. By contrast, Webern seems to take care at several moments to articulate this structure, even during this interfering activity. Moreover, in spite of this interference, the underlying metrical structure is not without effect; rather, it plays a fundamental organizing role: for example, the pervasive off-beat punctuations would not be off-beat without reference to this structure.

On this note, it is worth considering Webern’s emphasis of weaker parts of the underlying metrical structure. This emphasis was also noted in conjunction with op. 3/i, an admittedly different context. Webern is clearly not concerned about obscuring this metrical structure from perception; on the contrary, he seems

⁹⁰ An exception to this tendency is the 2/4 section of bb. 27–36, where the relative regularity of the surface activity and the shortened bar length aids the projection of larger metrical units.

to do so deliberately. George Rochberg refers to a “suspension of beat” in Webern’s music that is “achieved either by a careful avoidance of regular metric groupings or, if regular metric groupings are employed, by avoiding the natural accentual weight inherent in them.”⁹¹ What could such effects contribute to this movement? In light of its extroverted, rhythmic nature, these effects may be considered an extreme form of rhythmic excitement—not unlike the off-beat punctuations that pervade the first movement of Beethoven’s Symphony No. 3 (“Eroica”), to take a familiar example. The main difference in this piece is that these punctuations occur without the context of an audible metrical structure; the notated metrical structure remains merely the organizing force that gives these metrical positions their meaning as off-beat. That this metrical structure still plays an audible role—if not as a metrical frame, then as a way of colouring rhythmic activity—is likely, given that for the performers, any tension between musical surface and notated metre is a tangible part of the piece’s performance. Thus the underlying metrical structure here functions somewhat differently from that in the tradition preceding Webern, occasioning a colouring of the musical surface rather than being itself expressed.

The relevance of the experience of performing these features should not be underestimated. Webern’s awareness of the difficulty of performing his works, and indeed his intentional construction of them to this end in certain cases, is attested by Peter Stadlen’s account of rehearsal with Webern for the première of the *Variationen*, op. 27. Regarding a difficult hand-crossing in the work’s second

⁹¹ George Rochberg, “Indeterminacy in the New Music,” in *The Aesthetics of Survival* (Ann Arbor: The University of Michigan Press, 2004), 9.

movement, Stadlen reports that Webern claimed this difficulty “would bring out the emotional content” of the moment.⁹² This approach may readily be transferred to difficulties owing to the metrical position of events. A clear example of this effect is the beginning of “Abendland I” (op. 14/ii), which begins with a *sfp* chord in three parts occurring on the 16th immediately following the downbeat; presumably the difficulty of playing this metrical position—particularly in its *Sehr lebhaft* tempo—is part of the effect of this moment, a jarring introduction to the morbid images painted in this song’s text.⁹³ Such treatment of metrical position must be considered another example of Webern’s expressive use of metre.

A suggestive and related feature for Webern’s metrical practice is the off-beat punctuation that ends the piece (b. 55). Several other of his works finish with such a punctuation;⁹⁴ indeed, he ends formal units on an off-beat relatively frequently, as is the case in op. 5/i with the units of bb. 1–6 and 14–17.⁹⁵ While to end a formal unit with a punctuation in general is of course nothing remarkable, to do so on a weak metrical position is indeed unusual. The effect Webern seeks here may again be a tension that the difficulty of playing this metrical position will involve; alternatively, it may simply constitute rhythmic colouring, as also discussed above, so that even important structural articulations are so coloured.

⁹² Peter Stadlen, “Serialism Reconsidered,” *The Score* 22 (February 1958): 13.

⁹³ In the context of op. 6/iii, Dahlhaus similarly refers to a chord occurring on an unstressed part of bar, which he concludes was so placed because it “should be played in a hesitant, not an accented, manner: the reticent attack corresponds to the *ritardando*” (Dahlhaus, “Rhythmic Structures,” 177).

⁹⁴ See, for example, op. 5/iii, op. 14/vi, op. 17/iii, op. 18/ii, op. 19/i, and op. 24/i and iii.

⁹⁵ In another example, of a total of four formal units of op. 5/iv, two end on such a punctuation.

A further possible explanation for this device relates to a correspondence between formal divisions and notated metrical “divisions” observable in Webern’s music: frequently divisions between formal units coincide with “divisions” in the notated metre, particularly the bar-line. Moreover, musical activity will often continue to the end of these units.⁹⁶ Whereas in the musical tradition preceding Webern, a phrase’s energy is normally concentrated on the downbeat of some bar, in Webern’s music this energy frequently accumulates in different positions, even at times at the end of a bar. Moreover, the downbeat at the beginning of formal divisions is often elided with a rest; for example, each of the four formal units of op. 5/iv begins on a rest,⁹⁷ in each case immediately preceded (excepting the piece’s initial downbeat) and followed by musical activity.⁹⁸

This divorce of metrical position with phrase energy, coupled with the alignment of metrical “divisions” with formal divisions, suggests a particular notion of the bar: what on the written page normally indicates patterns in an audible metrical structure seems for Webern to also serve as divisions of musical material. Such a handling of metrical spans is perhaps also understandable in light of the density of Webern’s music, because of which—in addition to the slow speed of musical motion, frequently—notated metrical positions cannot retain their conventional meaning as an audible means of interpreting rhythms;

⁹⁶ For other examples of this phenomenon, here limited to the end of pieces, see op. 4/iii; op. 14/i and iii; op. 16/i, ii, and iv; and op. 31/v.

⁹⁷ Wallace Berry also notes this in his discussion of this movement in *Structural Functions* (405).

⁹⁸ Op. 5/i is exceptional in this regard, as few of its formal units exhibit this characteristic (but see bb. 10, 29, and 36). This probably owes in part to its constant rhythmic activity. This pattern will be further discussed below.

nevertheless, this particular veering from traditional metrical practice is significant and will be further pursued below.

Vier Stücke für Violine und Klavier, Op. 7—III. Sehr langsam

The third piece (*Sehr langsam*) from the *Vier Stücke*, op. 7, clearly exemplifies a particular approach to notated metre: the metre seems determined based upon the rhythms of the musical surface (see Example 3).⁹⁹ This is suggested by the frequent correspondence of surface events to downbeat positions, at least in the first seven bars of this fourteen-bar piece: the downbeat of b. 1 corresponds to the onset of the piece's first note, one that is also agogically accented; that of b. 2 to the culmination of a simple rhythmic gesture continuative of the first, sustained note of b. 1;¹⁰⁰ that of b. 3 to the onset of a sustained note in the piano; that of b. 4 to the onset of a descending, recessive gesture in the violin; that of b. 5 to the culmination of a short descending gesture in the piano;¹⁰¹ and so on. This approach to notated metre reflects a somewhat primitive notion of metrical structure whereby, given the correlation of these events to downbeats, the

⁹⁹ For a discussion of this and other post-nineteenth-century approaches to notated metre, see Mark Delaere, "Tempo, Metre, Rhythm. Time in Twentieth-Century Music," in *Unfolding Time: Studies in Temporality in Twentieth-Century Music*, ed. Darla Crispin (Leuven: Leuven University Press, 2009): 23–24.

¹⁰⁰ Of course, in this case the interpretation of this rhythmic figure is also *suggested* by the notated metre, in whose absence its metrical character would be more ambiguous and thus not as convincingly *generative* of the notated metre.

¹⁰¹ This interpretation, too, is tempered by the metrical disposition of the musical surface; but it is also supported by the fact that this is the only part of the gesture that aligns with the established 8th-note pulse. This gesture does not appear in one of the many earlier versions of this piece (see Felix Meyer and Anne C. Shreffler, "Performance and Revision: The Early History of Webern's Four Pieces for Violin and Piano, Op. 7," in *Webern Studies*, ed. Kathryn Bailey, 135–69 [Cambridge: Cambridge University Press, 1996], 145); in fact, in this version the content of bb. 4–5 is spread out over three bars, the second of which alone does not feature an event like those listed above on its downbeat.

most salient element of the notated metrical structure is the bar-line; and thus surface activity internal to these bars may, for all intents and purposes, be indifferent to the notated metre.

At the same time, it would be a mistake to assert a complete independence of the span between downbeats from a richer sense of metre. For example, the metre signatures in this movement all share a common denominator—the 8th note—implying that either the movement’s rhythms somehow happened to share a single reference pulse, or that they were conceived in or otherwise brought into conformity to this pulse. Even the complex rhythm of five 32nd notes against four in b. 4 fits within the span of an 8th note. Moreover, the numerator of these metre signatures, although variable, varies only between 2, 3, and 4—all conventional metrical groupings of tactus pulses. Since downbeats here correspond to actual musical events, either these events somehow happen to unfold at a rate that suggests larger metrical structure, or they too have been conformed to a prevailing metre to some degree. In general, then, the relationship between surface rhythm and notated metre in this piece suggests the priority of the surface rhythms in comparison to the notated metre, but these rhythms also reflect, in a limited sense, a conformity to the metre in which they are notated.

This piece also exemplifies Webern’s interest in playing with the metrical dispositions of figures, as evidenced by the violin’s rising triplet-16th-note line in bb. 6–9. Given its period of five triplet 16ths, this figure is found in all possible metrical positions with respect to the 8th and four different positions with respect

to the bar-line.¹⁰² This device, which generates the longest-breathed event in this work, is one that recurs throughout Webern's œuvre¹⁰³ and not only reflects a close attention to metrical disposition, but also confirms the significance of the notated metre in such passages. Carl Dahlhaus expresses this in his discussion of op. 6/iv when he writes, "Webern's metrically modified rhythmic imitations do not contradict the regular barring but, on the contrary, presuppose it."¹⁰⁴ The figure of bb. 10–11, consisting of 32nd notes alternating between G# and A, also relies on this device, if in a considerably scaled-down manifestation, as it begins first on beat 2 (b. 10) and then beat 1 (b. 11). It may be noted as well Webern's conscientious avoidance of downbeat activations in the piano part following this moment, as was remarked above in conjunction with op. 3/i, suggesting by analogy that it—that is, the downbeat of b. 11—constitutes the piece's close.

***Drei kleine Stücke für Violoncello und Klavier, Op. 11—I. Mäßige* ♪**

The first piece (*Mäßige* ♪) of the *Drei kleine Stücke* for cello and piano, op. 11, demonstrates the special difficulties that Webern's aphoristic works present to metrical analysis (see Example 4). Perhaps the quintessence of the aphoristic style, this piece is so subdued and its events so concentrated and varied

¹⁰² Interestingly, the fifth iteration is identical to the fourth in this respect, owing to its occurring a 16th "late" and to the adjustment of the length of b. 8. This repetition may represent an attempt at effecting the phrase's closure.

¹⁰³ This is of course the case in the grouping dissonances observed in op. 5/i, to cite one example. Kathryn Bailey reports on Webern's experiments with metrical disposition of various works in "Rhythm and Metre," and particularly in op. 24/iii in *Twelve-Note Music*, 203–5.

¹⁰⁴ Dahlhaus, "Rhythmic Structures," 175–76.

that a long-term metre can hardly be said to be established.¹⁰⁵ Nevertheless, this work exhibits a careful handling of metre and metrical positions, as will be demonstrated.

There are several curious features of this movement pertaining to metrical position. One such feature is the frequent articulation of the second dotted quarter position of the bar. This position is articulated by the onset of a vertical sonority, often agogically accented, in five of the movement's eight eligible bars¹⁰⁶—a suggestively high proportion. Moreover, two of these positions not articulated (bb. 3 and 5) correspond to the beginnings of formal units, which, in light of Webern's occasional tendency observed above of eliding the initial strong position of such units, may in part account for these exceptions.¹⁰⁷

Even more intriguing is Webern's handling of downbeat positions in this movement. Most of these are elided, whether with rests or with the sustaining of a note through this position, and occasionally conspicuously so: for example, the piano's sonority from b. 3 sustained into b. 4 releases only one 16th after the downbeat;¹⁰⁸ likewise, the downbeats of bb. 6 and 7 consist of 16th rests preceded and followed by sounding material. However, the two downbeats that *are* articulated are also conspicuous. The first, in b. 5, is preceded by an *accelerando*

¹⁰⁵ Berry makes similar observations in his illuminating analysis of op. 11/iii (*Structural Functions*, 398).

¹⁰⁶ I omit the ninth bar as ineligible, as the sounded activity of the piece ceases in this bar at the metrical position in question.

¹⁰⁷ In his analysis of this piece, James Marra remarks on its "section-initiating rests" ("Pitch and Rhythmic Structure," 25; see also 21), although he includes that of b. 1 and treats that of b. 5 differently (22, n.16).

¹⁰⁸ Carl Dahlhaus affirms the meaningfulness of the downbeat in a similar case in op. 6 ("Rhythmic Structures," 179).

and followed by a *ritardando*—progressive and recessive functions,¹⁰⁹ respectively, that suggest a climax at this moment. This interpretation is reinforced by the loudest dynamic indications in the piece occurring within this gesture. Moreover, that this climactic moment occurs in precisely the middle bar of the piece seems no accident. The second articulated downbeat comes in the final bar of the piece (b. 9) and coincides with the climax of a cello gesture, as suggested by a dynamic peak and the anacrusic syncopated figure leading to this moment.¹¹⁰

These patterns point to Webern's careful arrangement of the musical surface with respect to metrical position. There seem to be several matters at play: first, the general elision of downbeats; second, the regular activation of the bar's second strong beat; third, the articulation of downbeats being reserved for climactic and formally significant moments. Regarding the first, we have previously witnessed Webern's tendency of eliding strong metrical positions, and given the *ruhig* affect of this piece, his eliding downbeats here is not surprising; indeed, the rate of elision is higher here than in the pieces already discussed. Concerning the second, this may simply represent an attempt to ensure "rhythmic comprehensibility" by articulating significant metrical positions, while at the same time avoiding the activation of the strongest ones; but if this were indeed Webern's intention, these positions are articulated unusually frequently in comparison to his practice in other works.

¹⁰⁹ For the terms "progressive" and "recessive functions," see Berry, *Structural Functions*, 7–13.

¹¹⁰ That this even distribution of downbeat articulations is no accident is reinforced by the presence of a similar pattern in the third piece (*Äußerst ruhig*) of the op. 11 *Stücke*, with only the downbeats of bb. 2, 5, and 10 articulated.

An alternative interpretation of this pattern is that Webern is drawing musical energy away from the downbeat as much as possible, again presumably in an attempt to mitigate metrical structure, since the middle position to which this energy gravitates is of course the furthest metrical position from the downbeat. From a purely perceptual point of view, this approach is doomed to failure, since the regular activation of middle positions in turn would suggest their status as downbeats. But this may not pose a problem since, as we have seen, Webern seems to be completely unconcerned or unaware that the notated metrical structure might go unperceived. Moreover, that a given metrical position should be so regularly activated may have been acceptable to him if, as seen in op. 7/iii, the downbeat was his primary concern, perhaps with complete disregard for other metrical positions. This line of reasoning is, admittedly, highly conjectural.

Regarding the third matter, Webern's reserving the articulation of downbeats for important structural moments is remarkable. On one hand, this practice may suggest a conception of strong notated metrical positions as productive of some sort of accent, so that the mere activation of downbeats at climactic moments in this piece lends an extra weight to these moments, much as would, for example, a melodic climax. Indeed, it was earlier observed how the melodic climax of op. 5/i concurs with the most strongly-articulated downbeat, which suggests the viability of this notion. However, such a notion would be peculiar: while the idea that metre may produce accents is certainly intuitive and defensible,¹¹¹ it takes for granted a prevailing, perceptible metre; and even if such

¹¹¹ Lerdahl and Jackendoff discuss this notion in *GTTM*, 17–18.

a metre was projected in this case, again it would likely suggest the mid-bar strong position so regularly activated as downbeat and not the notated downbeat. On the other hand, this handling of downbeats may indicate again an atemporal understanding of metre, such that a notated metre indicates simply the relative *importance* of temporal positions that may or may not be activated; and so, prevailing, perceptible metre or not, climactic moments of this piece are somehow emphasized by occurring on strong metrical positions.

The conception of metre and metrical positions the musical surface of op. 11/i suggests presents a very peculiar compositional problem. On one hand, metrical positions seem for Webern to possess by their very nature a certain significance somehow independent of the temporal structure they conventionally represent, such that here he reserves strong metrical positions for certain purposes and employs weak positions for others. On the other hand, his works testify to a strong concern for the rhythmic shape of gestures difficult to reconcile with such a treatment of notated metrical positions, given the occurrence of these positions in strict sequence—particularly in a piece where, as in op. 11/i, the metre signature is constant throughout. In short, Webern is here walking a tight line between two desiderata: the liberty of rhythmic expression and the careful employment of the frame upon which these rhythms are imposed. His solution to this problem in op. 11/i, which bears no obvious signs of this conflict, must be considered highly subtle.

Conclusion

The pieces discussed in this chapter have raised a variety of matters instructive for Webern's metrical practice. The significance of notated metre in these works is clear, but the nature of this significance is by no means straightforward. In op. 3/i and op. 5/i, metrical position seems to play a conventional role, with the range of positions from strong to weak often carrying their conventional associations with respect to the musical surface, even if the notated metre sometimes becomes imperceptible. In op. 7/iii, metrical position is of limited meaning for most of the piece, the downbeat functioning as the main metrical marker for musical spans of somewhat variable length. In op. 11/i, metrical position seems to be treated as a parameter like dynamic or melodic contour, with strong positions reserved for climactic moments. Thus even in these few works a development in Webern's conception of metre may be observed. Through this development, moreover, emerges what Christopher Hasty identifies as a "spatialization of meter."¹¹² By this, he refers to the treatment of notated metre and the structure it describes as removed from its meaning as representative of a temporal or rhythmic structure. This may be observed in particular in Webern's treatment of metrical indicators as "divisions" in op. 5 and in his peculiar handling of metrical position in op. 11/i; but it will be found to evolve yet further below.

Also noteworthy in the works discussed is the degree to which notated metrical structure is articulated. In op. 3/i, this structure is articulated with some

¹¹² Hasty, *Meter as Rhythm*, 296.

regularity, although its articulation is relatively light, and strong metrical positions are elided somewhat frequently. The articulation of strong metrical positions is avoided to a greater degree in op. 5/i, and the considerable activity on the musical surface, even if it presupposes the notated metre for its meaning, renders its perception unlikely. The metrical structure of op. 7/iii is quite clearly articulated, at least on downbeats; but in the temporal span between these downbeats, which is variable, this structure is often quite unclear. Finally, given his unusual handling of metre in op. 11/i, it is difficult even to speak of the articulation of metrical structure, unconventional as Webern's notion of this structure seems to be here. Moreover, the sparseness of events in this piece, and the absence of pulse, by extension, makes the perception of the notated structure unlikely.

The high level of mitigation of metrical structure observed in these pieces—achieved by factors discussed above, such as downbeat elision, off-beat punctuation, sparseness of texture, and so on—suggests that this is an aesthetic *desideratum* for Webern. Extra-musical support for this view may be added from a letter from Webern to Schoenberg following a performance of the latter's *Drei Volksliedsätze* he conducted: Webern reports, “[w]e sang the song *Herzlieblich Lieb* without bar lines. I did not give a definite beat at all.”¹¹³ Webern's triumphant tone in this comment suggests that for him (and presumably also for Schoenberg) the obscuring or smoothening out of an audible metrical structure is to be desired. It is likely that Webern's attitude on this was appropriated from Schoenberg, who reflects a similar sentiment in an essay entitled “Today's

¹¹³ Hans and Rosaleen Moldenhauer, *Anton von Webern: A Chronicle of His Life and Work* (London: Victor Gollancz Ltd., 1978), 335.

Manner of Performing Music”: “[o]ver-accentuation of strong beats shows poor musicianship, but to bring out the ‘centre of gravity’ of a phrase is indispensable to an intelligent and intelligible presentation of its contents.”¹¹⁴ Thus Webern’s careful avoidance of clear metrical articulation is understandable. This practice, as many of those already discussed, will be further explored in the next chapter.

Finally, a word bears mention about metre on levels higher than the bar—what is frequently referred to as “hypermetre.” While hypermetre is a common feature in the musical tradition preceding Webern, it is rarely a salient feature of his own music. Several reasons for this may be proposed: in works such as op. 7/iii and op. 11/i, both the sparseness of his musical textures and their contrast from one moment to the next heavily undermine the possibility of hypermetre; in works such as op. 5/i, the great amount of rhythmic dissonance similarly undermines this possibility (although an exception was mentioned in conjunction with this piece: see note 90). In general, some combination of these factors constrains the formation of hypermetre in the majority of Webern’s published works, forcing analysis to remain for the large part on the level of the bar.

¹¹⁴ In *Style and Idea: Selected Writings of Arnold Schoenberg*, ed. Leonard Stein, trans. Leo Black (Berkeley: University of California Press, 1984), 321. The notion of “centre of gravity” resonates with the interpretation of Webern’s emphasis of the middle beat in op. 11/i proposed above.

Metre in Later Works

In this chapter I examine Webern's metrical practice as manifested in several of his twelve-tone works. As mentioned above, Webern's metrical practice may be divided into two parts, with the division between opp. 20 and 21. In particular, whereas the works from opp. 13 to 20, with some exceptions, exhibit a high level of rhythmic complexity, in the works that follow, opp. 21 to 31, Webern's rhythmic vocabulary is significantly curtailed, and notated metre becomes much more regular. Moreover, the relation of musical surface to notated metre in these works is also different: any correspondence is less obvious than in earlier works; indeed, the musical surface at times seems wholly indifferent to the metrical structure implied by the notated metre. This is presumably one of the characteristics that has provoked claims for the arbitrariness of Webern's notated metre mentioned above. At the same time, a continuity between earlier and later works may be identified, as I will show, in the recurrence of certain characteristic features or practices observed above in the works discussed in this chapter. Through all the examples discussed, moreover, may be witnessed Webern's careful attention to metrical aspects of his works.

Symphonie für Kammerensemble, Op. 21—I. Ruhig schreitend

The *Symphonie*, op. 21, marks a significant change in Webern's oeuvre in the construction of the musical surface. The simplification of the musical surface just mentioned is decidedly manifest here; for example, in this work's first

movement (*Ruhig schreitend*), Webern employs no durations shorter than an 8th note (except for grace notes), and indeed none shorter than a quarter note in the first half (bb. 1–25; see Example 5). Moreover, no metrical divisions other than duplets are employed, not even triplets. Furthermore, surface rhythmic activity is sparse, with instruments often tacit for long spans, and the gestures they play often quite short. Finally, this rhythmic material is presented within an unchanging 2/2 metre.

Several metrical issues arise in this movement. Immediately striking is the projection of a robust¹¹⁵ metrical structure in its opening bars: the horns' slurred whole notes beginning in b. 3 project groups of two bars (bb. 3–4 and 5–6), and these two groups, united by timbre and contour, form a four-bar group to which the clarinets respond with another four-bar group, this structure prevailing over the usually off-beat onsets of the surrounding material. The projection of this structure is naturally aided by the presence of two canons, the temporal interval of whose voices, at two bars, supporting the projection of higher metrical levels. This structure nevertheless dissolves quickly with the general fragmentation of the musical surface beginning in b. 11 and the crossing of bar-lines of what longer durations remain.

Another metrical feature of this movement warrants mention: for much of this piece, the second half position of each bar is elided. This elision is

¹¹⁵ By “robust,” I refer to the significant degree to which a given metrical structure approximates “ideal” metrical structure, which is essentially a product of binary units that combine or break down to different recursive levels. I distinguish a *robust* metrical structure from a *rich* one, the latter of which may—and most likely will—contradict principles of the former, to a greater musical effect.

conspicuous in light of the frequent activations of other metrical positions (see Examples 7a and 7b). While the stoicism of the notated metre toward the musical surface in many of Webern's later works may give the impression that the former is simply arbitrary, this is clearly not the case here: rather, the regularity of this elision *confirms* the significance of the notated metre. Moreover, this elision produces a distinct metrical character in that a gap is created in the movement's metrical profile at the half-note level.¹¹⁶ Interestingly, this feature may also be related to the rich metrical structure just discussed, as the bar where this structure begins to dissolve (b. 11) is also where the second half position is activated for the first time in the piece, and it continues to be activated in the rest of the A section after this moment (see Figure 2a). Nevertheless, in the B section (bb. 25b–66) the second half position is elided very consistently: in bb. 27ff, this position is activated in only four bars (bb. 50, 52, 54, and 56), despite the regular activation of other metrical positions (see Figure 2b).¹¹⁷

What could account for these two peculiar metrical characteristics, namely the unusual projection and immediate dissolution of a robust metrical structure and the frequent elision of the middle position of the bar? Or are these simply the result of arbitrary compositional decisions? In his discussion of this movement, Julian Johnson suggests the possibility of a reference to the first movement of Mahler's Symphony No. 9. He cites several parallels between the two works,

¹¹⁶ Arguably, this gap itself projects a metrical level, but one produced by the *absence* of activation. One wonders whether it is significant that this position constitutes the temporal *middle* of the bar, in light of the important role of symmetry in op. 21.

¹¹⁷ I have not yet discovered the reason why these activations occur in precisely these bars, which seems not accidental.

including orchestration (particularly the horns so evident in the opening), tempo indications, phrasing, and harmonic motion.¹¹⁸ Johnson overlooks, however, the elision of the second half position in the Webern *Symphonie* that also characterizes the opening material of the Mahler work. Webern's introduction of this feature within so clear a metrical structure, rather exceptional in his œuvre,¹¹⁹ may thus serve to highlight the reference to the Mahler Symphony; moreover, the presence of one of the most striking features of this alleged reference, the soaring horns, also diminishes following the moment where the robust metrical structure disappears and the second half position is first activated, suggesting that these factors are working in conjunction.

For the remainder of the discussion of this movement, I turn to its second half, bb. 25b–44. To begin with, in bb. 27–34, as in the movement's first half, a limited rhythmic vocabulary is employed, here consisting simply of 8th notes, either singly or in pairs; long sustained notes of a variety of lengths, but never shorter than a dotted half; and grace notes. The limitations on this passage's rhythmic material largely precludes the rich projection of a metrical structure. The continued presence of two canons, here with a temporal interval of one bar between voices, does not contribute significantly to the production of metre, given that the onsets of sustained notes, conventionally important metrical cues, are inconsistent with respect to metrical position, but never fall on strong positions—that is, downbeat or middle strong beats (see Figure 2b). The 8th notes, by

¹¹⁸ Julian Johnson, *Webern and the Transformation of Nature* (Cambridge: Cambridge University Press, 1999), 205.

¹¹⁹ The projection of such a robust metrical structure is also found at the opening of op. 24/iii, but there this structure dissolves before even attaining eight bars.

contrast, do occasionally correspond to downbeat positions, but in every case it is the *second* of a pair of 8th notes that falls on this position. Thus a peculiar metrical profile is formed: the regular activation of the 8th level provides a “basic metrical unit,” but the lack of regularity on higher levels leaves this metrical potential untapped. Indeed, a state of suspension is produced.

The isolation of the content of bars 34 and 35 with fermatas calls attention to the “axis” of what turns out to be a retrograde of bb. 27–34.¹²⁰ Here, the elements retrograded are durations, and the position of the axis entails every bar’s contents flipping over its middle, such that events on strong 8ths in the original version fall on weak 8ths in the retrograde; and events within the first quarter to the fourth quarter, and the second to the third; and events within the first half to the second half; and finally, that onsets become releases and vice versa. Owing to the disposition of 8th notes and the release of sustained notes in bb. 27–34, a similar metrical profile obtains between original and retrograde, at least with respect to the activation of strong metrical positions: sustained notes never activate these positions, and 8th notes do somewhat more frequently—particularly given their high occurrence in the final 8th position in the original; naturally, however, the pattern whereby the *second* of a pair of 8ths activates a downbeat obtains in the retrograde as well, since these positions transform onto each another. Thus both original and retrograde mitigate metrical structure, a characteristic observed in earlier works and that here also corresponds to the *ruhig* affect of the section.

¹²⁰ The position of the fermata *on* the bar-line between bb. 34 and 35 is another sign of Webern’s conceiving of metrical markers as divisions.

The operation of retrograde is found relatively frequently in Webern's later works, and while its employment may vary considerably, this particular instance is suggestive for his conception of both rhythm and metre. As has been noted, the rhythmic element retrograded here is duration. While other species of retrograde exist—the retrograding of the temporal interval between onsets, for example, as found in op. 31/i—all share a *spatial* handling of temporal relations; for metre is a one-way phenomenon, whereby any re-arrangement of its visual representation in the bar and metrical positions entails a complete loss of musical sense: for example, beat 4 may not be inserted between beats 1 and 2 without beats 2 and 4 completely losing their meaning as such; and likewise, under the reversal that retrograde constitutes, metrical positions do not retain their meaning. That when retrograded the passage from bb. 27–34 changes character so little suggests its deliberate construction to this end. Such a construction would entail an abstraction of the musical surface from metrical structure, however, since failing this an entirely new character would be produced. This handling of metre exemplifies comments made by George Rochberg regarding the opening of op. 27/i, which similarly employs retrograde: “[t]he beat and meter is now a frame, not a process—a frame on which to construct symmetries of pitch and rhythm . . . the beats which comprise each measure are merely successive and, as such, constitute a frame or scaffolding which supports the structure . . . the beat and the meter become static entities, succeeding each other but not progressing *to* each

other.”¹²¹ Webern’s use of retrograde, then, constitutes another manifestation of the “spatialization of meter” discussed above.

Quartett für Geige, Klarinette, Tenorsaxophon und Klavier, Op. 22—II. Sehr schwungvoll

The second movement (*Sehr schwungvoll*) of the *Quartett*, op. 22, exhibits clear evidence of Webern’s attention to the metrical domain (see Example 6). My discussion of this piece will remain on the level of certain global characteristics, as several of these are also found separately in other works explored elsewhere in this investigation.

The most immediately striking evidence for Webern’s attention to metrical aspects in this work is its “home” 1/2 metre. His employment of this unconventional metre may be compared to that in earlier works; for example, op. 4/i and op. 9/ii both employ what are sometimes referred to as “complex” meters, that is, metres regular on all metrical levels except one, normally the tactus.¹²² In the case of these two pieces, the metre signatures are 7/4 and 5/4, respectively. Interestingly, while the use of complex metres in op. 4/i and op. 9/ii represents experimentation with metrical organization on higher levels, the use of 1/2 metre suggests experimentation with a *lack* of metrical organization.¹²³

¹²¹ George Rochberg, “Musical Time and Space,” in *The Aesthetics of Survival* (Ann Arbor: The University of Michigan Press, 2004), 101–2.

¹²² For a discussion of complex metres, see Justin London, “Some Examples of Complex Meters and Their Implications for Models of Metric Perception,” *Music Perception: An Interdisciplinary Journal* 13, no. 1 (1995): 59–77.

¹²³ Webern also employs 1/2 metre with some consistency in op. 23/ii, where sections of 1/2 metre alternate with those of 5/4, and the metrical character of these sections differs considerably: in particular, the internal structure of 1/2 bars is quite variable—a true non-committal 1/2—owing

Indeed, this piece exemplifies a tendency in Webern's later metrical style toward what I call "non-committal" notated metre. By "non-committal," I refer to the lack of metrical richness a given signature promises. Conventionally, a metre signature promises some degree of metrical richness; a quadruple metre, for example, implies a relatively sophisticated metrical structure of three levels (see Figure 3a), and likewise, a triple metre implies another distinct structure (see Figure 3b). The most non-committal of conventional metres is of course duple metre, since it only admits of two levels of metrical structure and two metrical positions at the tactus level (Figure 3c); and indeed, duple metre is normally Webern's metre of choice in works that exhibit this practice.¹²⁴ The only information a signature with a numerator of 1 provides, by contrast, is, in conjunction with its denominator, a tactus—a single metrical level (see Figure 3d). Op. 22/ii differs from other pieces characterized by non-committal metre, however, in the richness of its rhythmic activity on lower levels: this activity descends three metrical levels below the half note, a total of four metrical levels.¹²⁵

Another matter of metrical interest in this piece pertains to the exceptions to the movement's "home" metre. Digressions from this metre occur in only six places: bb. 4, 7, 11, 15, 130, and 192. As with any change of metre signature, it

to rhythmic variety, while that of 5/4 bars feature no irregular groupings (not even triplets) and clearly articulates the 8th level.

¹²⁴ Other examples of non-committal metre include op. 21/ii, op. 24/ii, and op. 28/ii (the "scherzo"). Further manifestations of this metrical practice will be discussed below.

¹²⁵ Admittedly, passages employing 16th notes are few: they include only bb. 31 and 152, both of which constitute the initiation of a return to the piece's original tempo. In light of this complexity on lower levels, a 2/4 metre might have been chosen instead of 1/2; but this would entail a tactus of 216 beats per minute, a tempo at the upper threshold for metrical entrainment (see London, *Hearing in Time*, 27–30)

might be wondered why such a change was made. In this case, each of these exceptional bars features a duration that, if the 1/2 metre had been preserved, would cross the bar line, requiring the division of the duration and the use of a tie.¹²⁶ Further inspection reveals, moreover, that nowhere in the movement does Webern employ a tie; he “respects” bar-lines completely. This constraint has two implications. First, it implies the meaningfulness of the notated metre, but in a very specific way: the notated metre functions as a “rule” for metrical organization—at least at the level of the bar—rather than the “suggestion” that it represents conventionally. Second, the effect of this rule is the prohibition, notwithstanding the above-mentioned exceptions, of long durations on the musical surface. This prohibition is especially remarkable in light of the movement’s brisk tempo (*Sehr schwungvoll*, half note = ca 108): it guarantees a fragmented musical surface whose higher-level metrical organization, if any, must be produced by other means.¹²⁷ While Webern’s employment of compositional constraints in other parameters is well-documented—the prohibition in twelve-tone music on rearticulating a given tone until all twelve are sounded is an obvious example—this piece exemplifies a specifically metrical constraint.¹²⁸

¹²⁶ Bar 130 is an exception in that it is a rhythm (of triplet halves), not a single note, that would cross the bar-line if the bar were divided into two bars of 1/2. In his analysis of bb. 1–19, Arnold Elston suggests that the expansion of the first of these bars, b. 4, represents a cadential gesture (“Rhythmic Practices,” 328). This certainly seems to be the case, as suggested also by the indication *calando* in this bar and *tempo* in the following; but this interpretation does not seem applicable to the other extended bars.

¹²⁷ Admittedly, the tempo relaxes in several later passages. The restrictions discussed are still in force in these passages, however.

¹²⁸ Kathryn Bailey writes of op. 22/ii, “[t]he blurring of outlines is an important characteristic In all cases . . . there is a discrepancy between the row structure and the musical structure . . . it is quite impossible to find any clean divisions in the piece. . . . In every way Webern seems to be trying to throw off the traces in this piece” (*Twelve-Note Music*, 249). Webern’s self-

A final feature of this movement that warrants mention is the bar-line-crossing beams found throughout the printed score. Although such beams are found in much of Webern's music,¹²⁹ this practice is taken to an extreme in this piece, with beams occasionally crossing two bar-lines.¹³⁰ While Webern nowhere, to my knowledge, comments on the significance of this practice, it would seem to imply at least the continuity of a given gesture across both rests and metrical structure, if not a sort of repudiation of the bar-line that renders visible Webern's comment to Schoenberg cited above. This exceeding of the boundaries of metrical notation is perhaps not surprising, however, in light of the constraints on the musical surface just discussed. Moreover, that Webern goes out of his way to indicate the connectedness of a gesture across bar-lines reinforces the notion of these bar-lines as a boundary of sorts—a boundary that, if not crossed, would constrain the music. Such a view is of course consistent with the view of notated metre discussed in the previous chapter whereby metrical spans are treated as musical divisions.

Streichquartett, Op. 28—II. Gemächlich

The second movement (*Gemächlich*) of the *Streichquartett*, op. 28, exhibits in the extreme the tendency observable in many of Webern's later works toward a constrained rhythmic vocabulary, but also illustrates matters pertaining

imposed restrictions on metrical organization seem to relate to this “blurring” Bailey identifies in other parameters.

¹²⁹ It is unclear at what moment Webern began this practice, and the printed scores themselves are unreliable as an indication of this, owing to his revisions of opp. 1 to 13 several years after most of these works were composed, as discussed above. Likely Webern was influenced on this matter by Schoenberg, in whose printed scores may be found the same practice.

¹³⁰ See, for example, bb. 20–22 (violin) and 23–25 (clarinet).

to his handling of notated metre (see Example 7). This movement is well-known for the absence of rhythmic activity either above *or* below the quarter level in its scherzo¹³¹ (bb. 1–18);¹³² that is, the quarter note is the only note duration employed.¹³³ This section constitutes a good example of what I have called non-committal metre, as the metrical organization implied by the notated 2/4 metre, in light of these rhythmic constraints, suggests only the most primitive such organization.

Aspects of other parameters of the musical surface also contribute to the attenuation of metrical formation in this section. Difference of timbre between the already-similar instruments is mitigated by their playing *pp* and *pizzicato*; the instruments' lines are highly disjunct and frequently cross one another; and the slurs beginning at b. 8, a potential metrical cue, cross one another and are thus of no help metrically. Nevertheless, the *sfp* in all instruments at b. 5 does provide a potential metrical cue, as does the *f* in b. 11 and the subsequent *p* in b. 14. Indeed, these cues taken together help project a loose pulse layer of three bars, or six tactus beats, to which may be added—retroactively, or perhaps on the repeat of this section—the downbeat of b. 2, the piece's first “full” bar, as well as the change to *pp* at b. 8 (an admittedly slight change to constitute a metrical cue). While this second pulse layer should, by some accounts, be sufficient to project a

¹³¹ I employ Webern's terms for the sections of this movement—a “scherzo with trio”—as described in a letter to Rudolf Kolisch (Moldenhauer and Moldenhauer, *Anton von Webern*, 489).

¹³² This lack of rhythmic activity is presumably the impetus for Karlheinz Stockhausen's analysis of the movement exploring temporal aspects of musical experience (“Structure and Experiential Time,” *Die Reihe* 2 [1958]: 64–74).

¹³³ Op. 24/ii resembles this movement in the severity of its rhythmic constraints, as there Webern employs only quarter notes and half notes.

metrical structure,¹³⁴ the difference between these two layers, a ratio of 6:1, is considerable. Indeed, the absence of a pulse layer between these two, except that implied by the notated metre, is significant, since a span of six lends itself well to the most basic subdivisions, duple and triple, without favouring one or the other; and thus an ambiguity is built into the musical surface.¹³⁵

While the movement's trio (bb. 19–36) has a stronger potential to project metre than the scherzo, it has other barriers to metrical formation. To begin with, Webern here uses a larger variety of durations, ranging from 8th notes to half notes (and excluding non-duple subdivisions), which creates a significantly less homogeneous musical surface than in the scherzo. The trio preserves the scherzo's quarter level at its 8th level, however, as Webern's tempo markings indicate, even if this level is not saturated to the same extent as in the scherzo. Moreover, it not only preserves the metrical level of six tactus beats from the scherzo, owing to the density of onsets in these positions, but it projects an intermediate level, which the scherzo lacked, with activations at every second 8th. This additional metrical level is largely a product of one of the trio's canons, the combination of whose individual lines, consisting of onsets spaced a half duration apart, and the temporal interval between canonic voices, a quarter duration, produces regular activations at the quarter. At the same time, a second canon with a variable metrical character plays against the first. Its articulation, simple

¹³⁴ For a summary of several versions of the view that only two different pulse layers are necessary for metrical formation, see Danuta Mirka, *Metric Manipulations in Haydn and Mozart: Chamber Music for Strings, 1787–1791* (Oxford: Oxford University Press, 2009), 4 and 13–14.

¹³⁵ Howard Smither identifies this passage as his rhythmic style IC, characterized as “[e]qual beats predominating with vague or no accentuation at the secondary level” (“Rhythmic Analysis,” 73, 77). The ratio of 6:1 between metrical layers is an example Lerdahl and Jackendoff provide of a deficient metrical structure in their discussion of MWFR 3 (*GTTM* 69–70).

combinations of slurs and detached notes, offer ample metrical cues,¹³⁶ and given its time interval of a quarter duration between voices, it usually projects a duple character; but the variety of manifestations of its motive and the irregularity of its metrical disposition, added to the metrical cues from the first canon, produce significant overall metrical ambiguity. In Example 7, dotted vertical lines have been added to indicate possible barrings of this passage according to the various metrical cues on the surface.

Both the scherzo and trio of this movement, then, exhibit a high level of metrical ambiguity, the scherzo with an absence of metrical cues and the trio with a profusion. Curiously, in a letter to the violinist Rudolph Kolisch, Webern describes this movement's sections as "[a] 3/8 in contrast to a 2/4—like a slow *waltz* to a *quite unhurried polka* [emphasis original]."¹³⁷ While the reference to these dances may have been partly in jest, that Webern should attach a significance to these metre signatures at all is somewhat remarkable: as we have seen, the scherzo's notated 2/4 is by no means clearly projected by its surface, and the trio's 3/8 is decidedly opposed by its musical surface. That Webern makes these associations is also curious in light of the evidence of his sketches for this work: as Kathryn Bailey reports, in these sketches the scherzo is always in some

¹³⁶ The metrical character of the two basic versions of this figure is indicated, using Hasty's notation described in *Meter as Rhythm*, above the cello's line of bb. 19–20 and viola's of bb. 21–22.

¹³⁷ Moldenhauer and Moldenhauer, *Anton von Webern*, 490.

triple time and the trio in duple until the end—even if the disposition of the surface with respect to the notated metre changes.¹³⁸

There are several possible explanations for these discrepancies, each with attendant difficulties. First, the metrical notation may simply be arbitrary, as some authors have suggested with reference to other of Webern's works. This interpretation, which amounts to an analytical surrender to the musical surface's ambiguity, must reckon with Webern's use of two different metre signatures between scherzo and trio—not to mention the bar of 5/8 separating these sections—as well as with Webern's deliberations to which his sketches attest: why use these different metre signatures, and upon what was he deliberating, if the notated metre is arbitrary? Second, the metrical notation may be meaningful in that it prescribes details of performance—for example, strong metrical positions receiving a certain emphasis. This interpretation, however, would seem to impose a regularity that flatly contradicts what by all other indications is a largely ambiguous musical surface.

A third possibility may be proposed by analogy to Webern's conceptions of harmonic organization. Anne Shreffler documents these conceptions in her article, "'Mein Weg geht jetzt vorüber': The Vocal Origins of Webern's Twelve-Tone Composition." Shreffler contends that, according to Webern's appropriation of the twelve-tone method, "the mere presence of a series—however

¹³⁸ Bailey, "Rhythm and Meter," 262–78. Bailey concludes, "[t]he sketches for this movement thus bear witness to a convoluted sequence of events exhibiting considerable metrical indecision" (276).

imperceptible—can serve as an organizing force.”¹³⁹ Indeed, she asserts that not only did Webern not seek to emphasize the row, he even “attempted to obscure it” (313); and “[i]n freeing the twelve-tone row from the musical surface, Webern granted it a metaphysical significance that far surpassed any structural role” (319). It is not difficult to see how this notion of harmonic organization might relate to metre. Notated metre easily gives the impression of a presence lurking behind the rhythmic activity of a work, such that even if this metre is not obviously projected through the musical surface, its controlling influence remains. Aspects of this controlling influence, which is of course undeniable for performers, were remarked upon already with reference to op. 5 above. Now, it would be reasonable to suppose that in Webern’s artistic evolution the distance between musical surface and notated metre increase, and all the more if a similar distancing from this surface took place in the realm of pitch organization. Moreover, that Webern’s conceptions of harmonic organization in twelve-tone works is related to his use of metre in works where the metre remains unchanging and apparently indifferent to the musical surface is suggested by the fact that this style occurs only in twelve-tone works.¹⁴⁰ Nevertheless, in the absence of more concrete evidence, particularly comments by Webern on the subject, this possibility remains conjectural.

¹³⁹ Shreffler, “Vocal Origins,” 318.

¹⁴⁰ For other examples of this style, see op. 21/ii; op. 24/i and iii; op. 27/i–iii; and op. 28/i.

I. Kantate, Op. 29—I. “Zündender Lichtblitz des Lebens”

The first movement (“Zündender Lichtblitz des Lebens”) of Webern’s *I. Kantate*, op. 29, exhibits a number of suggestive aspects of his later metrical style (see Example 8). The first passage of this piece I will discuss, its orchestral introduction (bb. 1–13), exhibits a particular practice found in Webern’s latest works, the employment of what I call “metrical cells.” With this practice, the musical surface is organized into short units, usually of one or two bars, united by a given metre; moreover, the order of change between these units is relatively high, and complex metre signatures are often employed. In this passage, then, is found a large variety of metre signatures that change every one or two bars, the changes between these signatures occurring in both numerator and denominator.

In general, the degree to which the musical surface is metrical in this practice is debatable, and indeed variable. The broad metrical pace of the first bar, for example, is reflected in the denominator of its metre signature, 7/2.¹⁴¹ The content of b. 2, largely quarter notes, similarly expresses the denominator of its key signature, 5/4; moreover, it also projects one of the two most likely divisions of this metre, 3+2 (the other, of course, being 2+3), through its articulation and the half note at the end of the bar. Such clear internal structure is likewise reflected in the next three bars, particularly in the conventional internal division of 4/4 metre found in b. 4. Bar 6, however, notated in 6/2 metre, projects simply a

¹⁴¹ See the following note. Incidentally, this bar constitutes a rather blatant example of Webern’s aversion to articulating the initial downbeat of a formal unit, as discussed above, since the “seventh (i.e., added) beat” is the first beat of the bar, and thus could just as easily be omitted; otherwise, the contents of the bar are essentially the same as those of b. 6 (without half-note subdivisions), which is notated in 6/2 metre.

binary division of three whole notes, not the compound subdivision this metre signature suggests;¹⁴² here, then, the notated metre seems to be merely pragmatic, indicating no more than the number of beats in a given span (numerator) and the duration in which those beats are measured (denominator).¹⁴³

That each of these bars projects a different metrical character should be clear. In so far as a musical surface corresponds to its metre signature, a change of denominator, one of tactus, represents a significant change in rhythmic organization: a bar whose tactus is a half duration, for example, is qualitatively different from one whose tactus is a quarter duration, even if the speed of a given duration is identical between these two:¹⁴⁴ the music moves at a different rate. A change of numerator is likewise a significant metrical change: for example, a musical surface in duple time differs qualitatively from one in triple time.¹⁴⁵ Thus, the notion of metrical cells is not merely one of notation; given these differences and the changing metrical character they imply, passage through these cells will indeed be experienced as passage through one metrical field to another. The different qualities these cells project is also suggested by the indications above individual bars, *getragen* above those with a half-note tactus and *lebhaft* above those with a quarter-note tactus. To this it may be added that these units are “cells” in another sense, in that the divisions between these units correspond to

¹⁴² This may, of course, simply represent Webern’s unwillingness to use a metre with a denominator 1, i.e., 3/1, as would be necessary to correctly reflect this bar’s contents.

¹⁴³ This somewhat impoverished meaning of notated metre resembles what Dahlhaus calls “counting rhythm” (“Problems of Rhythm,” 49).

¹⁴⁴ For example, if the same musical material were notated in 2/2 instead of 4/4.

¹⁴⁵ In his discussion of what he calls “deferral,” Christopher Hasty writes of “the special feeling of triple metre or the difference in character between duple and triple” (*Meter as Rhythm*, 135–36).

“divisions” in the notated metre, namely to bar-lines—and thus Webern’s conception noted above of bars as formal spans and bar-lines as divisions returns in another manifestation.¹⁴⁶

It may be wondered what Webern’s aesthetic intentions were with such rhythmic organization. While no record of his thoughts on this survives, he comments on the other two movements of op. 29, both of which exhibit—if to a lesser degree—shifts in metrical character like those discussed in conjunction with the first movement, in correspondence with Hildegard Jone, the author of the work’s text. Concerning the work’s second movement, he writes, “possibly music has never before known anything so *loose* [italics in the original].”¹⁴⁷ Regarding its third movement, he states, “Musically there is not a single centre of gravity in this piece. The harmonic construction (resultant of the individual voices) is such that everything is floating.”¹⁴⁸ In light of Webern’s attempts throughout his œuvre to unite all of the parameters of a work in its expression, it would not be unreasonable to suppose that these comments, while concerning harmonic organization, may apply equally to the work’s rhythmic organization.

The vocal passages of this work also exemplify suggestive aspects of Webern’s later metrical practice. Taking bb. 14–22 as an example, compared with

¹⁴⁶ It should also be noted that Webern’s practice of “respecting” bar-lines by not employing ties is at play in this work too, suggesting as usual the significance of the notated metre for the musical surface.

¹⁴⁷ Anton Webern, *Letters to Hildegard Jone and Josef Humplik*, ed. Josef Polnauer, trans. Cornelius Cardew (Bryn Mawr, Pa: T. Presser Co., 1967), 37.

¹⁴⁸ *Ibid.*, 40.

earlier vocal works¹⁴⁹ the bar lengths Webern employs here are contracted, such that frequently bar divisions correspond simply to divisions between words.¹⁵⁰ This style of notation may be related to two themes noted earlier. First, it relates to Webern's practice whereby metrical "divisions" correspond to other divisions, here those between words. Moreover, the notion of bar-lines as boundaries is reinforced by the curious *tutti* rest at the end of bars whose events are otherwise displaced by one quarter between the top two and bottom two voices (for example, bb. 17 and 19). Second, the shortness of these bars relates to the employment of non-committal metres—but here, the constant change of metre in conformity to the lengths of these words demonstrates an even lesser commitment to metrical organization. Furthermore, while here, as in bb. 1–13, Webern juxtaposes units of contrasting metrical character, the "cells" in question are generally shorter than in the earlier passage.

II. Kantate, Op. 31—V. "Freundselig ist das Wort"

The fifth movement ("Freundselig ist das Wort") of the *II. Kantate*, op. 31, exhibits two features representative of Webern's metrical practice in his later works that may nevertheless be related to earlier works (see Example 9). The first of these is found in the very first bars of this movement: the syllables of the choir's phrase "Freundselig ist das Wort" fall on every weak 16th position

¹⁴⁹ Comparison to solo vocal works here is perhaps problematic, in that bar lengths are typically shorter in Webern's choral works as compared with his lieder; but bar lengths of the two earlier choral works, opp. 2 and 19, are still decidedly longer and more regular than in this passage.

¹⁵⁰ This style is found even more extensively in op. 31; see, in particular, sections of i, ii, and v. Bailey notes this practice in ii, writing of the "constant shifting" of "the rhythmic and metric situations" of the middle section, bb. 32–44 (*Twelve-Note Music*, 322).

through two bars until the last syllable, which corresponds to a downbeat (bb. 1–3).¹⁵¹ This device, constituting the systematic and regular activation of weak metrical positions followed by a “resolution” to a strong metrical position, I call “metrical closure,” since there is a sense that the resolution constitutes a completion of the figure; indeed, most often this “resolution” corresponds to a significant point in the work’s formal structure. It is found several more times in this movement: a few bars later, following a bar-long rest (b. 8), and again at the end of the first section (bb. 14–16, beginning with solo violin); and opening the movement’s third section (bb. 25–26) and the beginning of the following phrase (bb. 28–29).¹⁵² The device seems particularly, but not exclusively, related to beginnings of formal units: apart from the above, it opens both stanzas of the first song (“Wie bin ich froh!”) from the *Drei Lieder*, op. 25 (bb. 2 and 6–7); but it also closes the vocal part of the same song (b. 11). Indeed, the device is found across Webern’s œuvre: a similar feature was pointed out in the accompaniment of op. 3/i discussed above (bb. 2–4); and it is also found in instrumental works: in op. 5/iii, it begins the thrust to the piece’s *fff* close (bb. 15–17).¹⁵³

Several observations may be made concerning this device. To begin with, the regularity of activation of the metrical level in question is of course

¹⁵¹ Incidentally, Webern’s occasional aversion to durations crossing bar-lines discussed above is manifest here, with the rest on the downbeat of b. 2 breaking the established pattern of 8th notes. Alternatively, this rest may simply serve to articulate the natural rhythm of the text, since it occurs between words; see a similar case in b. 8.

¹⁵² An interesting occurrence is at the end of the third section where, rather than “resolve,” the figure simply sustains the last activation (b. 31).

¹⁵³ Harald Krebs discusses this passage in “Some Extensions of the Concepts of Metrical Consonance and Dissonance,” but he identifies this line as a “type A dissonance” (what in *Fantasy Pieces* he calls a “grouping dissonance”) and makes no mention of the “resolution” (110–11). In general, examples of this device abound in Webern’s music, particularly in vocal works (but not necessarily in the vocal part): see, for example, op. 3/v (bb. 9–10), op. 12/iv (bb. 2–3); op. 16/iii (bb. 3–4 and 9–11); and op. 29/iii, bb. 49–50.

remarkable for such a work as op. 31/v whose rhythms are largely fluid and unpredictable. This regularity, moreover, corresponding as it does to the notated metre, strongly suggests the significance of the notated metre even at this late stage in Webern's œuvre, and in particular the significance of metrical position, given the consistency of this device's "dissonant" phase occurring on weak positions and its "resolution" on a relatively strong metrical position. Moreover, the occurrence of this device most frequently at the beginning of a formal unit, and its seeming delay of the "real" moment of beginning, constitutes a link between metre and form in Webern's metrical practice to add to those remarked above.¹⁵⁴ Webern's employment of this device also suggests a connection of his metrical practice to what he considered his inherited musical tradition: this device is found with a similar effect, for example, in the opening of the second movement of Brahms' Violin Sonata in G (bb. 3–7), or even, in a variation on it, in the opening of Bach's Brandenburg Concerto No. 6 in F.¹⁵⁵

That Webern employs this device across his œuvre and across multiple genres is evidence of a certain continuity in his metrical practice; it suggests that aspects of his metrical language persevere from earlier to late works, though these differ considerably. This is of course a boon for the metrical analyst, as it suggests the possibility that metre in these later works may be interpreted with the help of

¹⁵⁴ It may be argued that its frequent use at the beginnings of formal units, particularly the opening of a piece, indicates Webern's attempt at a sort of "auditory illusion." While this is possible, in general Webern shows little interest in such musical sleight of hand. Moreover, any listener familiar with his style will know that he rarely, if ever, composes such a regular rhythm on strong metrical positions, thus rendering such illusions obvious.

¹⁵⁵ David Lewin notes a similar device at the beginning of the second movement of the *Variationen*, op. 27, in his 1993 analysis of the piece, albeit in a much subtler and more sophisticated form, and he links it to metrical play in Brahms ("A Metrical Problem," [1993 article], 349).

that in earlier ones. For example, this heavy activation of weak metrical positions may shed light on works like the third movement of Webern's *Variationen*, op. 27, which features such activation extensively, if less systematically.¹⁵⁶

Concerning the perceptibility of this device, it is of course by no means a given that this dissonance–resolution relationship will be perceived as such, particularly if it follows a metrically-ambiguous passage or begins a piece, as in op. 31/v; but as with the metrical dissonances discussed above in the context of op. 5, even if a prevailing, perceptible metrical structure is not in play, the “dissonance” this device involves still has meaning, if only for the performers, and thus it will be necessarily conveyed at least in some aspect.

A second device of metrical significance in this piece is the off-beat punctuation that occurs throughout this movement—indeed, throughout the entire *II. Kantate*. Various guises are found here: punctuations that fill gaps in a metrical level, whether during sustained notes (b. 25–26) or rests (b. 31); those that obscure the vocal line (b. 30); and those that remain suspended following their onset (bb. 28, 31). This recurring feature of the texture has several implications for the metrical character of this passage. On one hand, these punctuations generally reinforce a certain metrical level, in this case the quarter level, since none falls on a position requiring a shorter duration and many fall on weak quarters, bringing this level to the perceptual foreground. On the other hand, these punctuations obscure higher metrical organization in this passage, particularly that projected by the voice, which otherwise would project such organization.

¹⁵⁶ In “Serialism Reconsidered,” Peter Stadlen cites but several bars of this piece where all onsets occur on weak quarters (14–15).

Moreover, the lack of regularity of these punctuations with respect to frequency, duration, instrumentation, and so on, also prevents higher metrical formation. Thus is produced an emphasis on a local metrical level, at the expense of other metrical levels, a metrical feature of Webern's works noted above.

Conclusion

Evidence of Webern's careful attention to the metrical aspects of his works may be found throughout his *œuvre* in numerous manifestations. Moreover, contrary to certain claims, evidence for the significance of notated metre in his music may be found across his *œuvre*, even if the nature of this significance varies from work to work. One of the reasons this significance may be doubted is the mitigation of metrical structure remarked upon numerous times above; nevertheless, as I have shown, this mitigation itself exhibits patterns and indeed may indicate aspects of Webern's aesthetic as well as conceptions of metre underlying his music. Two of these conceptions occurring in numerous manifestations are the "spatialization of meter" and links between metre and form.

Significant differences in metrical practice are also found in Webern's metrical practice between earlier and later works. The most striking difference is a simplification of the musical surface found in his works beginning with op. 21. Moreover, while in the earlier works the projection of robust metrical structure was mitigated through the use of various devices and features—metrical dissonance, downbeat elision, rhythmic dissonance, textural sparseness, and so on—this mitigation is much less systematic than in the later works; Webern's

approach to mitigation in later works is at times much more systematic: a variety of devices and features were observed in the foregoing discussion, including regular elision of a given metrical position, severe constraints on rhythmic vocabulary, and the treatment of metrical notation as a rule. Moreover, a certain abstraction of musical surface from notated metre was remarked, particularly in the employment of a single metre throughout an entire movement or in that of retrograde. Nevertheless, a certain fluidity and liberty in the musical surface was also remarked, whether in the employment of “non-committal” metrical notation or of frequently-changing “metrical cells.”

Conclusion

Clearly this investigation represents merely a preliminary foray into the promising topic of metre in Webern's music. I hope to have in the foregoing discussion identified a number of important features and themes pertaining to Webern's metrical practice, as well as the conceptions that may lie behind these. Certainly many other such features, themes, and conceptions may be identified, particularly in light of the great variety found in Webern's œuvre. Moreover, the works discussed in this investigation represent only a small part of Webern's œuvre; many works rich in metrical issues remain to be explored—and indeed much remains to be explored in the works discussed above. I hope above all in this investigation to have demonstrated the pertinence of the metrical aspects of Webern's music, and to provoke further exploration of this rich topic.

Several other extensions of this investigation suggest themselves. One topic of particular interest to theorists is the temporal experience of Webern's music. Christopher Hasty discusses several aspects of this experience at the end of *Meter as Rhythm* in a chapter entitled "The Spatialization of Time and the Eternal 'Now Moment'," within which figures discussion of Webern's music.¹⁵⁷ The role of metre within this experience certainly warrants further exploration. The temporal dilation and contraction found in works such as op. 24/i and op. 4/iv suggests a calculated manipulation of temporal experience; but the state of

¹⁵⁷ Hasty, *Meter as Rhythm*, 296–303.

suspended temporality in many of Webern's works goes beyond such direct manipulation.

Another promising avenue of exploration is the metrical practice of the Second Viennese School composers at large. There are several indications that Webern's metrical practice springs largely out of that of Schoenberg, his teacher, even if Webern's practice seems ultimately to have taken its own course. This topic is particularly promising in light of the substantially greater amount of theoretical writings left by Schoenberg. In addition, the precise effects on metrical organization of the revolution in harmonic organization through the *œuvres* of these three composers also demands investigation.

A third topic warranting deeper consideration is the metrical practice of composers who followed in Webern's wake, and the question of how the treatment and conceptions of metre of those firmly rooted in modernism compare to those of Webern, who both participated in an earlier musical tradition and embarked upon new musical paths.¹⁵⁸ Metrical matters seem to have been a consideration for many of these composers, among others Pierre Boulez, George Rochberg, and Elliott Carter. It is thus hoped that this investigation will also spur exploration of these related matters.

¹⁵⁸ Dahlhaus evokes this particular historical position in "Problems of Rhythm in the New Music," 61.

Bibliography

- Bailey, Kathryn. "Coming of Age." *The Musical Times* 136, no. 1834 (December 1995): 644–49.
- . "Rhythm and Metre in Webern's Late Works." *Journal of the Royal Musical Association* 120, no. 2 (1995): 251–80.
- . "Symmetry as Nemesis: Webern and the First Movement of the Concerto, Opus 24." *Journal of Music Theory* 40, no. 2 (Autumn 1996): 245–310.
- . *The Twelve-Note Music of Anton Webern: Old Forms in a New Language*. Cambridge: Cambridge University Press, 1991.
- Benjamin, William E. "A Theory of Musical Meter." In "Rhythm and Meter." Special issue, *Music Perception: An Interdisciplinary Journal* 1, no. 4 (Summer 1984): 355–413.
- Berry, Wallace. *Structural Functions in Music*. Englewood Cliffs, NJ: Prentice-Hall, 1976.
- Boulez, Pierre. "Proposals." *Stocktakings from an Apprenticeship*. Edited by Paule Thévenin. Translated by Stephen Walsh. Oxford: Clarendon Press, 1991. 47–54. Originally published as "Propositions," *Polyphonie* 2 (1948): 64–72.
- Cone, Edward T. "Analysis Today." In "Problems of Modern Music. The Princeton Seminar in Advanced Musical Studies." Special issue, *The Musical Quarterly* 46, no. 2 (April 1960): 172–88.
- . "Beyond Analysis." *Perspectives of New Music* 6, no. 1 (Autumn–Winter 1967): 33–51.
- . *Musical Form and Musical Performance*. New York: W. W. Norton, 1968.
- Cooper, Grosvenor, and Leonard B. Meyer. *The Rhythmic Structure of Music*. Chicago: University of Chicago Press, 1960.
- Dahlhaus, Carl. "Rhythmic Structures in Webern's Orchestral Pieces, Op. 6." In *Schoenberg and the New Music: Essays by Carl Dahlhaus*. Translated by Derrick Puffett and Alfred Clayton. 174–80. Cambridge: Cambridge University Press, 1987. Originally published as "Rhythmische Strukturen

- in Weberns Orchesterstücken Opus 6.” *Webern-Kongress Beiträge* 1972–73 (Kassel: Bärenreiter, 1972): 73–80.
- . “Problems of Rhythm in the New Music.” In *Schoenberg and the New Music*. Translated by Derrick Puffett and Alfred Clayton. 45–61. Cambridge: Cambridge University Press, 1987.
- Delaere, Mark. “Tempo, Metre, Rhythm. Time in Twentieth-Century Music.” In *Unfolding Time: Studies in Temporality in Twentieth-Century Music*. Edited by Darla Crispin. Leuven: Leuven University Press, 2009.
- Elston, Arnold. “Some Rhythmic Practices in Contemporary Music.” *The Musical Quarterly* 42, no. 3 (July 1956): 318–29.
- Forte, Allen. “Aspects of Rhythm in Webern’s Atonal Music.” *Music Theory Spectrum* 2 (Spring 1980): 90–109.
- . *The Atonal Music of Anton Webern*. New Haven: Yale University Press, 1998.
- . “Foreground Rhythm in Early Twentieth-Century Music.” *Music Analysis* 2, no. 3 (October 1983): 239–68.
- Gjerdingen, Robert O. “Meter as a Mode of Attending: A Network Simulation of Attentional Rhythmicity in Music.” *Integral* 3 (1989): 67–91.
- Hasty, Christopher Francis. “Composition and Context in Twelve-Note Music of Anton Webern.” *Music Analysis* 7, no. 3 (October 1988): 281–312.
- . *Meter as Rhythm*. New York: Oxford University Press, 1997.
- . “On the Problem of Succession and Continuity in Twentieth-Century Music.” *Music Theory Spectrum* 8 (Spring 1986): 58–74.
- . “Rhythm and Post-Tonal Music: Preliminary Questions of Duration and Motion.” *Journal of Music Theory* 25, no. 2 (Autumn 1981): 183–216.
- Huron, David. *Sweet Anticipation: Music and the Psychology of Expectation*. Cambridge, MA: MIT Press, 2006.
- Hyde, Martha M. “A Theory of Twelve-Tone Meter.” *Music Theory Spectrum* 6 (Spring 1984): 14–51.
- Jarman, Douglas. Review of *The Twelve-Note Music of Anton Webern: Old Forms in a New Language*, by Kathryn Bailey. *Music Analysis* 13, nos. 2–3 (July–October 1994): 300–5.

- Johnson, Julian. *Webern and the Transformation of Nature*. Cambridge: Cambridge University Press, 1999.
- Jones, James Rives. "Some Aspects of Rhythm and Meter in Webern's Op. 27." *Perspectives of New Music* 7, no. 1 (Autumn–Winter 1968): 103–9.
- Keller, Hans. "Rhythm: Gershwin and Stravinsky." *The Score* 20 (1957): 19–31.
- Kramer, Jonathan D. *The Time of Music: New Meanings, New Temporalities, New Listening Strategies*. New York: Schirmer Books, 1988.
- Krebs, Harald. *Fantasy pieces: Metrical Dissonance in the Music of Robert Schumann*. New York: Oxford University Press, 1999.
- . "Some Extensions of the Concepts of Metrical Consonance and Dissonance." *Journal of Music Theory* 31, no. 1 (Spring 1987): 99–120.
- Lerdahl, Fred, and Ray Jackendoff. *A Generative Theory of Tonal Music*. Cambridge, MA: MIT Press, 1983.
- Lester, Joel. *The Rhythms of Tonal Music*. Carbondale: Southern Illinois University Press, 1986.
- Lewin, David. "A Metrical Problem in Webern's Op. 27." *Journal of Music Theory* 6, no. 1 (Spring 1962): 124–32.
- . "A Metrical Problem in Webern's Op. 27." *Music Analysis* 12, no. 3 (October 1993): 343–54.
- . "Some Investigations into Foreground Rhythmic and Metric Patterning." In *Music Theory: Special Topics*, edited by Richmond Browne, 101–37. New York: Academic Press, 1981.
- . "Vocal Metre in Schoenberg's Atonal Music, with a Note on a Serial Hauptstimme." *In Theory Only* 6, no. 4 (May 1982): 12–36.
- The Library of Congress. "The Moldenhauer Archives—The Rosaleen Moldenhauer Memorial." Accessed 21 November 2013. <http://memory.loc.gov/ammem/collections/moldenhauer/>.
- London, Justin. *Hearing in Time: Psychological Aspects of Musical Meter*. Oxford: Oxford University Press, 2004.

- . “Some Examples of Complex Meters and Their Implications for Models of Metric Perception.” *Music Perception: An Interdisciplinary Journal* 13, no. 1 (Fall 1995): 59–77.
- Marra, James. “Interrelations Between Pitch and Rhythmic Structure in Webern’s Opus 11, No. 1.” *In Theory Only* 7, no. 2 (June 1983): 3–33.
- Mead, Andrew. “Webern, Tradition, and ‘Composing with Twelve Tones . . .’” *Music Theory Spectrum* 15, no. 2 (Autumn 1993): 173–204.
- Metzger, Heinz-Klaus. “Webern and Schönberg.” Translated by Leo Black. In “Anton Webern.” Special issue, *Die Reihe* 2 (1958): 42–45.
- Meyer, Felix and Anne C. Shreffler. “Performance and Revision: The Early History of Webern’s Four Pieces for Violin and Piano, Op. 7.” In *Webern Studies*, edited by Kathryn Bailey, 135–69. Cambridge: Cambridge University Press, 1996.
- . “Rewriting History: Webern’s Revisions of his Earlier Works. In “Del XV Congreso de la Sociedad Internacional de Musicología: Culturas Musicales Del Mediterráneo y sus Ramificaciones.” Special issue, *Revista de Musicología* 16, no. 6 (1993): 32–43.
- . “Webern’s Revisions: Some Analytical Implications.” *Music Analysis* 12, no. 3 (October 1993): 355–79.
- Mirka, Danuta. *Metric Manipulations in Haydn and Mozart: Chamber Music for Strings, 1787–1791*. Oxford: Oxford University Press, 2009.
- Moldenhauer, Hans and Rosaleen. *Anton von Webern: A Chronicle of His Life and Work*. London: Victor Gollancz Ltd., 1978.
- Rochberg, George. *The Aesthetics of Survival*. Ann Arbor: University of Michigan Press, 2004.
- Roeder, John. “Interacting Pulse Streams in Schoenberg’s Atonal Polyphony.” *Music Theory Spectrum* 16, no. 2 (Autumn 1994): 231–49.
- Russ, Michael. “Temporal and Pitch Structures in Webern’s Orchestral Piece Op. 10, No. 2.” *Music Analysis* 7, no. 3 (October 1988): 247–79.
- Saxer, Marion. “Die Emanzipation von der metrischen Zeitordnung—eine Utopie? Zeitkonzeptionen in der Musik nach 1945.” *Geteilte Zeit: Zur Kritik des Rhythmus in den Künsten* (2005): 52–70.

- Schoenberg, Arnold. *Style and Idea: Selected Writings of Arnold Schoenberg*. Edited by Leonard Stein with translations by Leo Black. Berkeley: University of California Press, 1984.
- Schnebel, Dieter. "Die Variationen für Klavier op. 27." *Anton Webern II*. Edited by Heinz-Klaus Metzger and Rainer Riehn. Musik-Konzepte Sonderband (Munich, 1984): 164–217.
- Shreffler, Anne C. "'Mein Weg geht jetzt vorüber': The Vocal Origins of Webern's Twelve-Tone Composition." *Journal of the American Musicological Society* 47, no. 2 (Summer 1994): 275–339.
- . "Anton Webern." In *Schoenberg, Berg, and Webern: A Companion to the Second Viennese School*, edited by Bryan R. Simms, 251–314. Westport, CT: Greenwood Press, 1999.
- . *Webern and the Lyric Impulse: Songs and Fragments on Poems of Georg Trakl*. Oxford: Oxford University Press, 1994.
- Smither, Howard E. "The Rhythmic Analysis of 20th-Century Music." *Journal of Music Theory* 8, no. 1 (Spring 1964): 54–88.
- Stadlen, Peter. "Serialism Reconsidered." *The Score* 22 (February, 1958): 12–27.
- Stockhausen, Karlheinz. "Structure and Experiential Time." Translated by Leo Black. In "Anton Webern." Special issue, *Die Reihe* 2 (1958): 64–74.
- Stone, Kurt. "Problems and Methods of Notation." *Perspectives of New Music* 1, no. 2 (Spring 1963): 9–31.
- Travis, Roy. "Directed Motion in Schoenberg and Webern." *Perspectives of New Music* 4, no. 2 (Spring–Summer 1966): 85–89.
- van den Toorn, Pieter C. "Stravinsky Re-Barred." *Music Analysis* 7, no. 2 (July 1988): 165–95.
- Volk, Anja. "Persistence and Change: Local and Global Components of Metre Induction using Inner Metric Analysis." Special Issue on Computation. *Journal of Mathematics and Music* 2, no. 2 (2008): 99–115.
- Webern, Anton. *Letters to Hildegard Jone and Josef Humplik*. Edited by Josef Polnauer. Translated by Cornelius Cardew. Bryn Mawr, Pa: T. Presser Co., 1967.
- . *The Path to the New Music*. Edited by Willi Reich. Translated by Leo Black. Bryn Mawr, PA: T. Presser Co., 1963.

———. “Anton von Webern: Analysis of the String Quartet, Op. 28.” Translated by Zoltan Roman. Appendix 2 in Hans and Rosaleen Moldenhauer, *The Life and Work of Anton Webern*, 752–56. London: Victor Gollancz Ltd., 1978.

———. *Variationen für Klavier*. Edited by Peter Stadlen. Vienna: Universal Edition No. 16845, 1979.

———. *Sketches, 1926-1945. Facsimile Reproductions from the Composer's Autograph Sketchbooks in the Moldenhauer Archive*. New York: Carl Fischer, Inc., 1968.

Westergaard, Peter. “Some Problems in Rhythmic Theory and Analysis.” *Perspectives of New Music* 1, no. 1 (Autumn 1962): 180–91.

———. “Webern and ‘Total Organization’: An Analysis of the Second Movement of the Piano Variations, Op. 27.” *Perspectives of New Music* 1, no. 2 (Spring 1963): 107–20.

Yeston, Maury. *The Stratification of Musical Rhythm*. New Haven: Yale University Press, 1976.

Appendix: Musical Examples and Figures

Example 1: Webern: *Fünf Lieder*, op. 3—I. “Dies ist ein Lied”

Fließend. (♩ = 60) *Zart bewegt.*

Gesang.

Dies ist ein Lied für dich al-lein: von kin-di-schem Wäh-nen,

Klavier.

von from-men Trä-nen... Durch Mor-gen-gär-ten klingt es

ein leicht-be-schwing-tes. Nur dir al-lein—

etwas langsamer als zu Beginn

etwas langsamer als zu Beginn

5 Lieder|für mittlere Stimme und Klavier|op. 3/1

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Example 1 (cont.): Webern: *Fünf Lieder*, op. 3—I. “Dies ist ein Lied”

Measures 9-12 of the song "Dies ist ein Lied" from Webern's *Fünf Lieder*, op. 3. The score is for voice and piano. The voice part (treble clef) has lyrics: "möcht es ein Lied— das rüh-re sein." The piano part (grand staff) features complex textures with triplets, trills, and a *rit.* (ritardando) marking. Dynamics include *ppp* (pianissimo) and *pp* (piano). Measure numbers 9, 10, 11, and 12 are indicated above the staves.

5 Lieder|für mittlere Stimme und Klavier|op. 3/1
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Figure 1: Webern—*Fünf Lieder*, op. 3—I. “Dies ist ein Lied”—opening line

Pitch contour diagram for the opening line of "Dies ist ein Lied". The diagram consists of three rows of dots representing pitch levels. The first row has 5 dots, the second row has 10 dots, and the third row has 10 dots. The lyrics "Dies ist ein Lied für dich al - lein:" are aligned below the dots. The pitch contour shows a general upward trend followed by a slight dip and then a final rise.

Dies ist ein Lied für dich al - lein:

I

ANTON WEBERN, Op.5

Heftig bewegt Tempo I (♩ = ca 100)

I. Geige

II. Geige

Bratsche

Violoncello

pizz. 3 col legno 3 2 arco 2

ff ff ff f pp

3 col legno 3 pizz. 4 arco 4 4 pp

ff ff ff f pp

pizz. col legno pizz. arco

ff ff ff p pp ppp arco

col legno pizz. arco

ff ff f p pp ppp

am Steg 3 am Steg 3 am Steg 3 am Steg 3

ppp ppp ppp ppp

pizz. 5

rit. arco col legno

pp p pp

arco col legno

pp p ff ppp

arco col legno

pp p ff ppp

arco col legno

pp p ff ppp

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[illegible]

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Example 2 (cont.): Webern: *Fünf Sätze für Streichquartett*, Op. 5—I. *Heftig bewegt*

The musical score is divided into three systems, each containing four staves. The first system begins with a tempo marking of $\text{tempo II} (\text{♩} = 88)$ and a rehearsal mark [20]. It features various articulations such as *pizz.*, *arco*, *rit.*, and *f cresc.*. The second system includes *am Steg*, *arco*, *espress.*, and *accel.* markings. The third system starts with *tempo I (♩ = 100)* and a rehearsal mark [25], followed by *Dämpfer auf* and *mit Dämpfer* instructions. The score is heavily marked with dynamics like *pp*, *f*, *ff*, and *ppp*, along with fingerings and other performance indications.

5 Sätze für Streichquartett | op. 5/1

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tempo II (♩=88) rit. *sehr zart* a tempo II [30] rit. - a tempo II *flüchtig* poco rit. -

Violin I: *pp*, *p*, *f*, *p*, *pp*, *ppp*, *pp*

Violin II: *pizz.* *pp*, *arco* *ppp*, *p*, *ppp*

Viola: *pizz.* *pp*, *arco* *ppp*, *p*, *ppp*

Cello/Double Bass: *arco* *p*, *pizz.* *pp*, *arco* *ppp*

[illegible][illegible]

Example 2 (cont.): Webern: *Fünf Sätze für Streichquartett*, Op. 5—I. *Hefig bewegt*

5 Sätze|für Streichquartett|op. 5/1

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Example 3: Webern: *Vier Stücke*, Op. 7—III. *Sehr langsam*

Sehr langsam (♩ = ca. 60)
mit Dämpfer

ppp ohne cresc. *ppp* *am Steg.....* **5**

ppp *äußerst kurz* *ppp*

col legno (weich gezogen) *ppp* *ppp subito* *ppp*

10 *kaum hörbar* *am Steg.....* *kaum hörbar* *ppp*

kaum hörbar *

4 Stücke|für Violine und Klavier|op. 7

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Mäßige (ca 58)
mit Dämpfer

Violoncell

Klavier

rit. - - - tempo

accel. - - - am Steg - - -

pizz. - - - arco - - -

rit. - - - tempo

am Griffbrett

rit. - - -

tempo v

am Steg - - -

flüchtig

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Example 5: Webern: *Symphonie*, Op. 21—I. *Ruhig schreitend* (bb. 1–44)

Ruhig schreitend (♩ = ca 50)

The musical score is arranged in two systems. The first system (measures 1-7) includes parts for Klarinette (marked with a note that it sounds as written), Bass-Klarinette, Hörner (1. and 2.), Harfe, 1. Geige, 2. Geige, Bratsche, and Violoncell. The second system (measures 8-14) includes parts for Kl. (Klarinette), Bkl. (Bass-Klarinette), 1. and 2. Horn, Hrf. (Harp), 1. and 2. Gg. (Violins), Br. (Viola), and Vle. (Cello). The score features various dynamics such as *pp*, *p*, *mp*, and *mp*. Performance instructions include *pizz.* (pizzicato), *arco* (arco), *gedämpft* (damped), and *offen* (open). A note at the bottom of the first system states "Klingt wie notiert" (sounds as written).

Symphonie|für Kammerensemble|op. 21

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Example 5 (cont.): Webern: *Symphonie*, Op. 21—I. *Ruhig schreitend* (bb. 1–44)

The musical score is divided into two systems. The first system covers measures 13 to 20, and the second system covers measures 21 to 26. The instrumentation includes Clarinet (Kl.), Bass Clarinet (Bkl.), two Horns (Hr. 1. and 2.), Harp (Hrf.), two Gongs (1. Gg. and 2. Gg.), Bassoon (Br.), and Violoncello (Vcl.). The tempo markings 'calando tempo' are present at measures 17 and 19. The score includes various dynamics such as *p*, *pp*, *f*, and *mf*, as well as articulations like *pizz.*, *arco*, and *Dämpfer auf/ab*. The key signature is B-flat major.

Symphonie|für Kammerensemble|op. 21

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Musical score for measures 24-34 of "The Swan" by Maurice Strakosky. The score is for a full orchestra and includes parts for K1, Bkl, Hrns, Hrf, Gs, Br, and Vlc. The tempo is marked "tempo". The key signature is one flat (B-flat major/D minor). The score shows various dynamics including *pp*, *p*, and *dim*, and includes performance instructions like "Solo m. Dpf.", "Alle m. Dpf.", and "am Steg".

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Example 5 (cont.): Webern: *Symphonie*, Op. 21—I. *Ruhig schreitend* (bb. 1–44)

Measures 35-39 of the score. The instruments are Kl. (Clarinet), Bkl. (Bass Clarinet), 1. Hrn. (Horn), 2. Hrn. (Horn), Hrf. (Harp), 1. Gg. (Glockenspiel), 2. Gg. (Glockenspiel), Br. (Bassoon), and Vlc. (Violoncello). The score shows various dynamics including *pp* (pianissimo) and *ppp* (pianissimissimo). The Vlc. part has a "Solo" marking in measure 36.

Measures 40-44 of the score. The instruments are Kl. (Clarinet), Bkl. (Bass Clarinet), 1. Hrn. (Horn), 2. Hrn. (Horn), Hrf. (Harp), 1. Gg. (Glockenspiel), 2. Gg. (Glockenspiel), Br. (Bassoon), and Vlc. (Violoncello). The score includes dynamic markings such as *pp*, *p*, *sp* (sforzando), and *ppp*. Performance instructions include "m. Dpf." (medium damping), "Dämpfer ab" (damping off), and "Solo". The Vlc. part has an "Alle" marking in measure 42.

Symphonie|für Kammerensemble|op. 21

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Figure 2b : Webern: *Symphonie*, Op. 21—I. *Ruhig schreitend* (bb. 25b–42)



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Example 6: Webern: *Quartett*, Op. 22—II. *Sehr schwungvoll* (bb. 1–19)

II.

4 *Sehr schwungvoll* $\text{♩} = ca\ 108$
calando a tempo

1 2 3 4 5 6 7 8 *pizz.*
sf *p*

9 10 11 *arco* 12 *pizz.* 13 *arco* 14 *pizz.*
sf *p* *pp* *f* *sf* *sf* *p*

15 *arco* 16 17 *pizz.* 18 *arco* 19
f *sf* *sf* *f* *sf*

Anton Webern "Quartett|für Geige, Klarinette, Tenorsaxophon und Klavier|op. 22/2"

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Figure 3: Structure of several metrical types

Figure 3a: Structure of quadruple metre

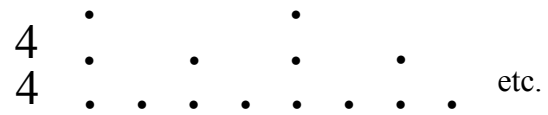


Figure 3b: Structure of triple metre

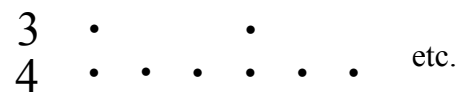


Figure 3c: Structure of duple metre



Figure 3d: Structure of 1/4



Example 7: Webern: *Streichquartett*, Op. 28—II. *Gemächlich* (bb. 1–42)

II

Gemächlich $\text{♩} = \text{ca } 56$ (•)

1 pizz. *pp* 2 pizz. *pp* 3 pizz. *pp* 4

5 *sf* 6 *p* 7 *pp* 8 arco *pp* 9 poco rit. pizz. *pp*

10 arco *pp* 11 tempo, etwas fließender *f* 12 arco *f* 13 poco rit. pizz. arco *p* 14 etc. pizz. arco *p*

Streichquartett|für Streichquartett|op. 28

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Example 7 (cont.): Webern: *Streichquartett*, Op. 28—II. *Gemächlich* (bb. 1–42)

wieder *gemächlich* Bewegt ♩ = ca 112

Measures 15-19: *pizz.*, *pp*, *morendo*, *arco*, *fp*.

Measures 20-24: *f*, *arco*, *fp*, *poco rit.*, *tempo*, *p*, *f*.

Measures 25-29: *poco rit.*, *tempo*, *pizz.*, *f*, *fp*, *p*.

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Example 7 (cont.): Webern: *Streichquartett*, Op. 28—II. *Gemächlich* (bb. 1–42)

The musical score is presented in three systems, each with four staves (Violin I, Violin II, Viola, and Cello/Double Bass). The key signature is B-flat major (two flats). The tempo is marked *Gemächlich* (moderately slow).

System 1 (Measures 30-33): Measure 30 is marked *tempo*. Measure 31 has an *arco* marking. Measure 32 has a *più f* marking. Measure 33 has a *pizz.* marking. Dynamics include *f*, *fp*, and *p*.

System 2 (Measures 34-37): Measure 34 is marked *poco rit.*. Measure 35 has a *pizz.* marking. Measure 36 is marked *tempo*. Measure 37 is marked *wieder gemächlich* and includes a tempo change to 2/4 time with a note value of ca 56. Dynamics include *pp*, *pizz.*, *arco*, *p*, and *sf*.

System 3 (Measures 38-42): Measures 38-42 continue the piece. Dynamics include *sf*, *p*, *pp*, and *pizz.*.

Streichquartett|für Streichquartett|op. 28

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I.

1 *Getragen* ♩ = ca 69 2 *lebhaft* ♩ = ♩ (ca 138) 3

Flöte

Oboe

Klarinette

Bass-Klarinette

Horn

Trompete
immer mit Dämpfer

Posaune
*Immer m.Dpf.
pp*

Harfe

Celesta

Pauke

Schlagwerk

Sopran

Alt
CHOR

Tenor

Bass

1. Geige
Getragen ♩ = ca 69

2. Geige

Bratsche
*mit Dämpfer
pp*

Violoncello
*mit Dämpfer
pp*

lebhaft ♩ = ♩ (ca 138)
mit Dämpfer *f* *Solo* *fp*

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Example 8 (cont.): Webern: *I. Kantate*, Op. 29—I. “Zündender Lichtblitz” (bb. 1–22)

The musical score is for Webern's *I. Kantate*, Op. 29, I. “Zündender Lichtblitz” (bb. 1–22). The score is for a mixed choir and orchestra. The top section includes woodwinds (Fl., Ob., Kl., Bass-Kl., Hr., Trp., Pos., Hrf., Cel., Pk., gr. Tr.) and strings (1. Gg., 2. Gg., Br., Vlc.). The bottom section includes Sopr., Alt, Ten., and Bass voices. The score features complex rhythmic patterns, including a 4/4 time signature with a 3/4 measure, and a 6/2 time signature. Dynamics include rit., p, pp, and getragen. The score is marked with 'rit.' and 'getragen' above the first and second measures of the woodwind section.

1. Kantate|für Sopran, gemischten Chor und Orchester|op. 29
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Example 8 (cont.): Webern: *I. Kantate*, Op. 29—I. “Zündender Lichtblitz” (bb. 1–22)

The musical score is for Webern's *I. Kantate*, Op. 29, I. “Zündender Lichtblitz” (bb. 1–22). The score is for a mixed choir and orchestra. The top system includes Flute (Fl.), Oboe (Ob.), Clarinet (Kl.), Bass Clarinet (Bas.-Kl.), Horn (Hr.), Trumpet (Trp.), Trombone (Pos.), Horn in F (Hr.), Cello (Cel.), Double Bass (Pk.), and Grand Timpani (gr.Tr.). The bottom system includes Soprano (Sopr.), Alto (Alt.), Tenor (Ten.), Bass (Bass), 1st Guitar (1.Gg.), 2nd Guitar (2.Gg.), Baritone (Br.), and Violoncello (Vic.). The score is divided into measures 8, 9, 10, 11, 12, and 13. The tempo markings are “lebhaft” (lively) and “getragen” (sustained). The time signatures are 4/4, 3/2, and 3/4. The key signature is B-flat major. The score includes various musical notations such as notes, rests, and dynamic markings (p, f, pp, sf, fp).

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Example 8 (cont.): Webern: *I. Kantate*, Op. 29—I. “Zündender Lichtblitz” (bb. 1–22)

lebhaft 13 14 15 16 getragen 17

F1.

Obo.

Kl.

Bass Kl.

Hr.

Trp.

Pos.

Hr.

Cel.

Pk.

Bk. mit 2 Teller

Sopr.

Alt.

Ten.

Bass.

1. Gg.

2. Gg.

Br.

Vlc.

Zun - den - der Licht - blitz kind - ler des of Le - - bens ing, Be - - ing,

Zun - den - der Licht - blitz kind - ler des of Le - - bens ing, Be - - ing,

Dpf. ab

Dpf. ab

getragen

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Example 8 (cont.): Webern: *I. Kantate*, Op. 29—I. “Zündender Lichtblitz” (bb. 1–22)

The musical score is divided into three systems. The first system (measures 18-22) includes staves for Flute (Fl.), Oboe (Ob.), Clarinet (Kl.), Bass Clarinet (Bass-Kl.), Horn (Hr.), Trumpet (Trp.), Trombone (Pos.), Horn (Hrf.), Cello (Cel.), Double Bass (Pk.), and Percussion (Schlgwk.). The second system (measures 23-27) includes staves for Soprano (Sopr.), Alto (Alt.), Tenor (Ten.), and Bass (Bass). The third system (measures 28-32) includes staves for 1st Guitar (1.Gg.), 2nd Guitar (2.Gg.), Brass (Br.), and Violoncello (Vlc.).

Measure 18: Tempo *lebhaft* (♩ = ♩). Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 19: Tempo *getragen*. Dynamics: *p*. Rhythmic notation: 3/2, 4/4, 3/2, 4/4, 3/2, 4/4.

Measure 20: Tempo *lebhaft*. Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 21: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 22: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 23: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 24: Dynamics: *p*. Rhythmic notation: 3/2, 4/4, 3/2, 4/4, 3/2, 4/4.

Measure 25: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 26: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 27: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 28: Tempo *lebhaft*. Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 29: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 30: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 31: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Measure 32: Dynamics: *sf*. Rhythmic notation: 3/4, 4/4, 3/4, 4/4, 3/4, 4/4.

Vocal Text:

Sopr.: schlug struck, ein flashed, aus from, der the, Wol - ke des word in the, Wor - tes. storm cloud.

Alt.: schlug struck, ein flashed, aus from, der the, Wol - ke des word in the, Wor - tes. storm cloud.

Ten.: schlug struck, ein flashed, aus from, der the, Wol - ke des word in the, Wor - tes. storm cloud.

Bass: schlug struck, ein flashed, aus from, der the, Wol - ke des word in the, Wor - tes. storm cloud.

Instrumental Text:

1.Gg.: *o. Dpf. Alle* *lebhaft* *pizz. getragen* *lebhaft*

2.Gg.: *o. Dpf. pizz.* *sf* *sf* *sf*

Br.: *sf* *sf* *sf* *sf*

Vlc.: *o. Dpf. Alle* *pizz.* *sf* *sf* *sf*

1. Kantate|für Sopran, gemischten Chor und Orchester|op. 29
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Example 9: Webern: II. Kantate, Op. 31—V. *Sehr mäßig* (bb. 1–31)

1 *Sehr mäßig* ♩ = ca 56

Sopran-Solo *f* *das uns um uns-re*
that draws us to it

Sopran *f* 2 2 2 2 (1) *R* *p*
Freund-se-lig ist das Wort,
Cha-ri-ty is the Words,

Alt *f* *Freund-se-lig ist das Wort,*
Cha-ri-ty is the Words,

Tenor *f* *Freund-se-lig ist das Wort,*
Cha-ri-ty is the Words,

Bass *f* *Freund-se-lig ist das Wort,*
Cha-ri-ty is the Words,

1 *Solo-Geige* *molto f* *sf* *f*

5

Kl. *m. Dpf. sf*

Hrn *m. Dpf. sf*

Trp *m. Dpf. sf*

Pas *m. Dpf. sf*

S-S. *p*
Lie be zu sich frag!
ask ing for our love,

5 *S-Gg* *p*

Br. *m. Dpf. get. p*

Wc. *Solo p* *Dpf. auf* *m. Dpf. p*

2. Kantate|für Sopran, Bass, gemischten Chor und Orchester|op. 31
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Example 9 (cont.): Webern: *II. Kantate*, Op. 31—V. *Sehr mäßig* (bb. 1–31)

8

cel.

trf.

S. S.

S.

A.

T.

B.

11

morendo tempo rit. tempo rit.---

das mit-ten un-ter uns ist,
through er er pre-sent dark ness,

Dun-ke-l-heit,
-sol-ing us,

Dun-ke-l-heit,
-sol-ing us,

Dun-ke-l-heit,
-sol-ing us,

11

morendo tempo rit. tempo rit.---

f

8 2 2 2

Alle pp

(m. DpK.) pp

2. Kantate|für Sopran, Bass, gemischten Chor und Orchester|op. 31

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Example 9 (cont.): Webern: II. Kantate, Op. 31—V. Sehr mäßig (bb. 1–31)

15 *tempo* *ruhig fließend* $\text{♩} = \text{♩}$

Hrn. *pp* *m. Dpf.*

Trp. *pp* *m. Dpf.*

Pas. *pp* *m. Dpf.*

Cel. *pp*

Hrf. *pp*

S.-S. *pp* *Was kann denn an - des mit - ten*
What o - ther pow - er could there

S. *pp* (1) *R* *wenn wir fried - lich sind.*
when we're peace - a - ble.

A. *pp* *wenn wir fried - lich sind.*
when we're peace - a - ble.

T. *pp* *wenn wir fried - lich sind.*
when we're peace - a - ble.

B. *pp* *wenn wir fried - lich sind.*
when we're peace - a - ble.

15 *tempo* *ruhig fließend* $\text{♩} = \text{♩}$ *esp.*

S.-Gg. *pp* *m. Dpf.* *pizz.* *p*

2. Gg. *pp* *m. Dpf.* *pizz.* *p*

Br. *pp*

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Example 9 (cont.): Webern: *II. Kantate*, Op. 31—V. *Sehr mäßig* (bb. 1–31)

sehr getragen ♩ = ♩

21

Picc. *f*

Hrn. *p* *sf*

Trp. *p* *sf* **3/4** **3/2**

Pos. *p* *sf*

Cel. *p* *pp*

Hrf. *pp*

S.S. *pp* *molto f* **2** **2** **(1)** **R**

un - ter uns sein, als das Wort? — Weil es am Kreuz ver-stümme
be - a - mong us, but the Word? — Be - cause it died up - on the

21

2.Gg. *sehr getragen* ♩ = ♩ *(pizz.)* *sf*

Br. *arco* *sf* **3/4** **3/2** *pizz.* *sf* *arco* *molto f*

Wc. *sf* *molto f*

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Example 9 (cont.): Webern: *II. Kantate*, Op. 31—V. *Sehr mäßig* (bb. 1–31)

27 *rit.* - - - - *tempo* *rit.* - - - -

Kl. *f* *p*

Bsskl. *pp*

Hrn.

Tip. *sf* *sf* *sf*

Pbs. *sf*

Cel. *p* *pp*

Hrf. *pp* *pp*

Glocke *ppp*

S-S. *(2) (2) 2 2 (1) R* *f* *p* *pp* *2 2 1?*
müs - sen wir ihm nach, in al - len Ernst der Bit - ten uns ihm fol - gen, wir - der Hand, fol - lows it.
cross, we'll fol - low on; in all the bit - ter - ness of tears our sigh - ing fol - lows it.

S-Bg. *pp* *pp* *pp*

2. Cl. *arco* *esp. p* *gus. p* *esp. p* *zds. p* *esp. p* *get. pizz* *arco* *pp* *ppp* *ppp*

Br. *gel.* *fp* *pp* *esp. p* *gus. p* *esp. p* *zds. p* *esp. p* *get. pizz* *arco* *pp* *ppp* *ppp*

Vic. *gel.* *fp* *pp* *esp. p* *gus. p* *esp. p* *zds. p* *esp. p* *get. pizz* *arco* *pp* *ppp* *ppp*

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