Christopher Hasty's *Meter as Rhythm* begins with the following observation about musical activity: "...a piece of music, while it is going on, is incomplete and not fully determinate—while it is going on, it is open, indeterminate, and in the process of becoming a piece of music or a part of that piece" (p. 3). From this observation flows Hasty's unique conception of meter and its intricate relationship and dependence on rhythm. In opposition to most contemporary metrical theory, Hasty's book (which won the Society for Music Theory's Wallace Berry award in 1998) argues against a meter whose origins are found in accentual periodicity, instead focusing on how constantly evolving contexts shape our experiences; as he puts it, meter is "always more than reproduction of type" (p. 149). His intricately designed arguments are both compelling and original, permitting new and subtle metrical observations in traditional tonal repertories as well as providing the means to describe metrical processes in pre-tonal and twentieth-century musics.

At the heart of Hasty's ideas is the tenet that events take place in time. Instead of basing meter's origins on interacting strata of accent, Hasty begins with the basic property of an event as having a beginning; such a distinction gives rise to a process he names projection, the basis of meter. A beginning is the "definite potential for the becoming of duration" (p. 73); when that duration has ended, the becoming of the event ceases, and if the duration is "mensurally determinate"¹ (that is, if one can mentally reproduce it accurately), it may create a potential for replication. If the second event begins immediately after the first is over, the second beginning garners from the first a definite potential—a promised duration that may or may not be realized. The beginning of the third event determines if the realization of

¹Although mensural determinacy is clearly subjective, Hasty suggests that its limit may be reached after several seconds.
the projection takes place or is denied, and so forth. Thus, projection is the “process in which a mensurally determinate duration provides a definite durational potential for the beginning of an immediately successive event” (p. 84). In Example 1a (taken from Hasty’s Example 7.2), events A and B (with beginnings a and b, respectively) give rise to the projection Q and the projected potential Q'; note that Q' is not realized because there is no beginning of a third event (shown by the “x” through R). By contrast, Example 1b (Hasty’s Example 7.4c) shows such a potential denied, because a third event arrives too late. Denied potential—“early” and “late” beginnings—points to Hasty’s belief in the flexibility of metrical perception, for no matter when an event begins, it shapes the ongoing meter. Thus, in Example 1b, when projected potential Q' is denied by the late beginning of event C, the “new” event B may project duration R as having validity for event C.

**Example 1a. Projected potential.**

A \[\overrightarrow{Q}^a\]

B \[\overrightarrow{Q'}^b\]

R \[\overrightarrow{X}^a\]

**Example 1b. Projected potential denied.**

A \[\overrightarrow{Q}^a\]

B \[\overrightarrow{Q'}^b\]

C \[\overrightarrow{X}^c\]

R \[\overrightarrow{R'}^a\]

Thus far, projection’s relation to duration is eminently clear; but its identity with meter is less so, for projection does not characterize events as “strong” or “weak.” Instead Hasty prefers
to characterize events as beginnings, continuations and anacrases. While all events "start" (that is, they have demarcated beginnings), we perceive continuations and anacrases differently than "beginning" events. An event is a continuation when its beginning "does not end the prior beginning's potential for the creation of a mensurally determinate duration—if the earlier beginning is still 'present' and active..." (p. 104). In other words, there must be some way in which a successive event continues the identity of the prior, beginning event, and thereby continues its potential for projection. Anacrusis is defined as "continuation released." Whereas a continuation "points backwards as a denial of ending for a prior beginning" (p. 120), anacrusis looks forward. An anacrustic event, therefore, is not perceived as beginning, but rather as introduction to beginning. (Such perceptions are not always immediate, nor immutable, as we shall see below!) Hasty distinguishes beginnings, continuations, and anacrases with familiar vertical and diagonal slashes above them on the score, but cautions the reader not to view these as simple strong and weak symbols; more important is the process by which one comes to perceive the quality of each event. In projection, these qualities are inherent to the events, rather than resulting from separate grouping and meter distinctions, and give rise to our more familiar perceptions of strong and weak.

Such a perspective puts metrical perception firmly within the passage of time. Consider Hasty's analysis of bars 24-30 of the first movement of Symphony no. 101 by Haydn, reproduced as Example 2 (originally Hasty's Example 9.16.) Because of its motivic profile, the start of bar 25 is easily heard as a beginning, while the sequential start of bar 26 is a continuation; these events give rise to the two-bar projection R/R'. But my description fails to take in the complex projective opening; its relatively undifferentiated pitch and durational shape strongly affects how and when we come to know that bars 25 and 26 are beginning and continuation. The example shows that it is only over time that we come to perceive the previous seven eighth notes as anacrustic. In fact, we may initially feel that bar 24 is the beginning of a two-bar unit, as shown by Q; it is only after bar 26
is complete (or perhaps slightly before that, due to the highly contrasting material introduced in bar 25) that bar 24 emerges as anacrustic.

From these primary characteristics (beginning, continuation, and anacrusis) arise three categories of meter: equal, mediated unequal, and nonmediated (or pure) unequal. A projective theory of meter privileges organizations that replicate the immediate past; thus, equal (most often duple) meters result when a realized projection (a second event) is also perceived as continuation. Projection accounts for unequal meters through a process called "deferral," where continuation endures beyond the realized projection of a beginning event. Example 3, taken from Hasty's Example 9.18, compares equal meter with deferral; in Example 3c, a third beat perceived as continuation not only denies the larger "duple" projection (see the "x" marked in Q), but also creates a new projection (see R in Example 3c). Within the category of inequality are two further distinctions, mediated and nonmediated or "pure;" these differ in how deferrals relate to
begins. In mediated unequal meter (most often triple meter), a third event, although separated from a first one, still draws upon its projective potential; in other words, the third beat "inherits the particular relevance the first has for the second" (p. 145). By contrast, in nonmediated unequal meter, the deferral does not draw on the previous potential; for example, a bar of 8/8 with 3 + 3 + 2 divisions would be described as nonmediated triple.

**Example 3. Deferral.**

Because projection depends on the characterization of events, and because that characterization can change over time, it is able to accommodate a very complex metrical surface: "irregularity" may take place at a very low "level." Instead of originating from placement in a completed and periodic grid, metrical identity is always evolving, with frequent opportunities for reinterpretation. While Lerdahl and Jackendoff permit beats to be reinterpreted only at hypermetrical levels, even the basic concept of deferral, where projected potential may be temporarily denied, draws on the notion of reinterpretation. Furthermore, for Hasty, reinterpretation comes in a variety of strengths: we may be more or less sure that an event originally conceived as beginning has become continuation or anacrusis. In fact, metrical identity is always in a state of flux, deriving primarily on the possibilities of the immediate past, for projections become attenuated with the passage of time. Such flexibility is demonstrated in Hasty's treatment of hiatus; is meter possible when there is unmeasured silence.
between events? Again, there is no simple answer here, but rather a spectrum of situations that might make such a perception possible. Depending on preceding events, one can perceive realized projective potential without a clear new beginning, if previous events can be “taken as a measure” — that is, if their durations have “acquired sufficient determinacy to be reproduced” (p. 192). Similar arguments permit interruptions and overlaps to occur at any level of metrical counting; in other words, in no case does meter gain a life of its own, but instead is ever susceptible to new relevancies.

Such a stance makes great demands on listeners, and rewards them in kind. The analyses of both tonal music and music before and after it, while challenging, demonstrate how metrical perception is fundamental to our engagement with the music. For example, the openings of the two Courantes from Bach’s cello suites in C major and Eb major (shown as Examples 4a, b, and c; originally Hasty’s Examples 10.6b, 10.9, and 10.10), are obviously quite similar, and would receive identical metrical analyses in most any system. Hasty focuses instead on what he calls the “metrical particularity” of each, identifying their contrasting projections. He begins by remarking that the first is much simpler in its undivided sweep through a tonic arpeggiation; moreover, in such a fluid structure, the potential inequality (the emerging triple meter, as opposed to a duple segmentation of the first bar) is not known until at least well into the second bar, where a low-level beginning on the pitch D retrospectively suggests analogous beginnings on E and G in the first bar. Hasty is not arguing that the opening is ambiguous, but rather that there is a “progressive development in which successive events confirm or deny metrical implications of prior events” (p. 159); his emphasis is not on uncertainty, but rather on the experience of learning about the piece. Thus, the strong arrival on the low C in bar 2, taken with the change of register and pitch material following it, make the rest of bar 2 strongly anacrustic, reaching forward to the next bar (see the right-leaning slash on Example 4a).
Example 4a. J. S. Bach, Suite for Unaccompanied Cello in C Major, Courante, bars 1–2.

Example 4b. J. S. Bach, Suite for Unaccompanied Cello in Eb Major, Courante, bars 1–2: Interpretation 1.

Example 4c. J. S. Bach, Suite for Unaccompanied Cello in Eb Major, Courante, bars 1–2: Interpretation 2.
The particulars of the second opening are quite different; Hasty develops two interpretations for this passage. Example 4b proposes a reduction by harmonic implication (tonic to dominant in bar 1) and a cadence into the downbeat of bar 2, where subsequent sixteenths are heard as passage work. This contrasts with the second interpretation (Example 4c), in which a reduction based on an ascending scale marks successions of “eighth—dotted quarter” and “sixteenth—dotted eighth.” While the first reading emphasizes closure in the first bars, thereby separating them from what will follow, the second finds acceleration from bars 1 and 2 into the subsequent music. For Hasty, all of these observations are metrical in nature.

When released from the necessity of accentual regularity, such observations become possible in pre- and post-tonal music as well. In his analysis of Monteverdi’s madrigal “Ohimè, se tanto amate,” Hasty connects meter with form by arguing that in this piece projection is limited to the creation of small measures except at cadences, where closure is enhanced by larger measures as well as by the delayed fulfillment of projections. It is also noteworthy that in this analysis (and in others) Hasty does not feel it is always necessary to choose between competing interpretations. Instead of claiming a lack of meter, he instructs that “[r]ather than choosing, we might simply say that there is here an intensification of the overlapping, reinterpretation, and ambiguity first introduced in bars 5 and 6” (p. 243). A refreshing feature of his analysis of Schütz’s motet “Adjuro vos, filiae Jerusalem” (from 1629) is its acceptance of measures consisting of 3 + 2 (better named “unequal contractive” than reified into a fixed pattern) that result from frequent interruptions and overlaps. Even a “regular” segment of the motet is highly subject to context: calling it merely a four-bar unit “would be to ignore its particular quality of suspense and the new feeling of elasticity now given to the piece” (p. 249).

Near the end of his book Hasty tackles the multitudinous problems of meter in contemporary music, taking on the difficult works of Webern, Babbitt, Boulez, and Lutoslawski, among

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2This madrigal is from Book IV, 1603.
others. While acknowledging that there may be some question as to whether meter exists in this repertory, Hasty goes on to show how despite difficult conditions—the absence of a clear pulse, the frequent occurrence of hiatus, and the use of very small durations—projections (albeit shorter ones) may still occur. This is viable because a projective potential is no more than that, a possibility that may or may not happen; that regularities are not frequent does not mean that we do not continue to search for them. In fact, Hasty’s analysis of portions of Boulez’s *Le marteau sans maître*, which may in fact be without meter, still demonstrates how mensurally indeterminate events may be part of an ongoing, connective process; such music offers “an experience of a present becoming with no clear beginning and end—a becoming in which there is a continual renewal of vividly present ‘moments’” (p. 291). To refuse to participate in this becoming is to disengage from the musical experience.

Before concluding, I will mention briefly that Hasty’s literature review is interesting for its focus on how authors connect rhythm and meter (rather than how they manage to disentangle them) and for its inclusion of some names not often encountered in the meter literature, including the work of Johann Mattheson and Friedrich Neumann. Notably missing is a discussion of Wallace Berry’s work, especially since Berry speaks often of process and specifically uses the term projection.³ It would also have been helpful to have a fuller index (key terms such as projective/projected/projection, beginning, and continuation are not referenced), especially in light of the (perhaps necessarily) dense prose.

In view of Hasty’s work, we might ask why it has been so important for contemporary theorists (especially Lerdahl and Jackendoff) to separate meter and grouping. The argument for

³See, for example, Berry’s “Metric and Rhythmic Articulation in Music,” *Music Theory Spectrum* 7 (1985): 7–33. While Berry does understand meter as accent (in opposition to Hasty), he also writes in a vein very similar to that of Hasty: “...merged arrival and departure, in fulfillment of anacrusis and the thrust of downbeat impetus, is an apt conceit by which to characterize many notated measure beginnings” (p. 7).
separation is powerful: in understanding each component as independent, we may understand how they interact—how a weak beat may be understood as anacrusis or how a phrase may be more or less in (or out of) phase with (hyper)meter. For Hasty, that interaction is already inherent or intrinsic to one's perception of an event, not a by-product of two different organizations. Part of the appeal of a "grid"-based approach to meter lies, no doubt, in its straightforward representation, almost a "proof" of the metrical landscape, whereas in Hasty's approach there is a much larger burden placed on the musician to make constant adjustments. A "syncopation" results not because of its placement within the grid, but rather from an immediate perception that it occurs too early or too late, and furthermore, that event itself projects a context for subsequent events. Perhaps this view is a more accurate representation of events. Besides encompassing an incredibly wide range of music, Hasty's theories enhance the very scope of meter, for it is not simply a question of identifying a point in time as accented or unaccented, but rather of how an event emerges and how its meaning may change. Hasty's work recognizes that, by its very nature, music and our perceptions of it take place in time.