

Disanalogies Between Physical Space and Metaphoric Musical Space: Response to Jonathan Still's Essay

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ABSTRACT: Jonathan Still's exploration of differences in how dancers and musicians experience and conceptualize beats, rhythm, and meter raises issues that scholars interested in these temporal components of music ought to consider, particularly with respect to the relationship between embodiment, physical gravity, and the notion of "musical gravity." This response offers a brief explanation of how the musicians' concept of *downbeat* is motivated by a different reasoning than that which motivates a sense of melodic "gravity." It also extends another issue raised by Still concerning the range in the degree of congruence, across various kinds of dancing, between dancers' steps and musical rhythm and meter.

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JONATHAN Still raises several issues that are useful for musicians to consider. We can broaden one of the central points, concerning differences among musicians and dancers in their understanding of rhythm and meter, by noting the enormous range in the degree of congruence, apparent and actual, between rhythm and meter in music and in the movements of dancers.

In the West, broadly speaking, popular dancing commonly features a high degree of congruence, with steps aligning in a straightforward way with the beats in the music (in a manner that approaches the degree of synchrony in "mickey-mousing" in film soundtracks). More specifically, these steps commonly feature downward movement, in a manner that happens to be consistent with the concept of downbeats and with conductors' downbeats. By contrast, the choreography of classical ballet commonly relates to the music in a more subtle manner, notably in the upward dance movements that commonly occur on what musicians refer to as the "downbeat," but also in the movements between downbeats that often do not align in a blunt way with what musicians refer to as "beats." The congruence can be understood to involve a more general musical "flow," or the "feel" of the two domains of movement: the literal motion of dancers and the metaphorical motion of music. For those interested in music and embodiment, the range of congruence in different kinds of dance responses, choreographed and otherwise, is good to bear in mind when it comes to theories of musical gestures and musical "forces." As Still demonstrates, an examination of actual dancing and of dancers' conceptions of meter, rhythm, and beat can shine a light on musicians' habituated ways of understanding these features of music. Similarly, as Still suggests, Dalcroze exercises can sensitize musicians to available subtleties, and in so doing these can reveal to us the biases that we bring to performing and understanding music.

The biases that we bring to music also produce the challenges that Still raises in applying theories of gesture and musical forces. Musical "gravity" may be a good way to understand how musicians tend to understand melodic norms, but Still's findings point to some of the complexities that arise in applying it to the concepts of "upbeats" and "downbeats" in musical meter. One way to understand the matter is as a conflation of 1) "gravity," 2) a feeling of stability, 3) a sense of "landing," and 4) the conductor's downbeat. While I cannot offer a proper treatment of the matter in this context, I can offer some points to consider. The "downbeat" is the moment when musical events are most likely to initiate (Jones, 1992; Huron, 2006), which fosters the rewards of successful prediction of these moments, which in turn motivates a sense of satisfaction, and which in turn motivates a sense of "landing" and "stability." The conceptual metaphor SETTLED IS DOWN (as opposed to UNSETTLED IS UP, as when a matter yet to be decided is referred to as being "up in the air"), in connection with the sense of stability that arises when matters are "settled," contributes to the sense of the vertical location of

“downbeats.” In another vein, the term “down-beat” is first recorded in English in the late 19th century in connection with conducting patterns. This action-based conducting concept is consistent with SETTLED IS DOWN and with the related metaphoric use of “downright,” current at the time, in reference to certainty and the sense of stability that it implies. All of these elements are available in conceptualizing this category of events as a “downbeat,” and it gives an implicit logic to the concept; however, the concept is not guaranteed to emerge within a culture or a subculture, and for ballet dancers much of this may be peripheral to their experience and, thus, to their conceptualization of the category of event in question (“downbeats”). Furthermore, within the subculture of musicians, the meaning of “downbeat” can be understood to be largely independent of the metaphoric verticality of pitch height and its connection to “musical gravity.” Once we start using the concept of “downbeat,” this use can influence musicians’ understanding of meter and of appropriate performative gestures and thus produce an apparent incongruity between musical “downbeats” and the common upward dance steps of dancers at these moments. When this combines with the mechanical equality of beats provided by metronomes, and a valorization of metric precision generally, we get approaches to performance of the type that motivated Dalcroze to develop a system of eurhythmics as a remedy to mechanical understandings and enactments of musical meter.

Careful examination of the underlying experience and reasoning that motivate concepts such as “downbeat” can not only help explain the apparent incongruity of upward movements “on” “downbeats” in ballet, it can also help us to better understand the nature of our implicit metaphoric reasoning and the cognitive role played by embodiment. If we subtract the vertical conception of beats and the connection to gravity that it implies (in the form of “upbeats” and “downbeats”), we can see that in the broadest sense we have a coincidence of balletic and musical events at these moments, and that the moments known as “downbeats” tend to be relatively salient. If we then look behind the musical sounds to their sources, we can then see that these tend to be salient *exertive* events: in both the balletic and music domains they are movements, or physical gestures, that often share a relative degree of strength and sense of relative effort (they are often relatively “big” in both musical and balletic domains, even if the actual effort is not necessarily great), but the direction and amount of space involved in these movements varies. To put it another way, we have at these moments a shared exertion schema that can be realized in various ways on various instruments (bowing, blowing, or beating) and that can be realized in ballet in the form of upward movements (and in popular dance, commonly in the form of downward movements). The schema features a starting point, a relatively effortful exertion, perhaps a more or less specific duration, and a pattern of recurrence (in music with a regular meter), regardless of how this pattern may be counted by dancers and musicians, and regardless of the direction of movement. In dance, the exertion produces literal movement through physical space, while in music the exertion produces metaphoric musical motion and space (length; duration). In dance, the exertion overcomes literal gravity in a familiar sense, while in music, the concept of musical gravity in connection with downbeats is less straightforward. It may be that the concept of “downbeat” suggests a greater relevance for “musical gravity” in a metric context than is warranted, and that a sense of gravity is relevant only as a component within a conflation of various elements such as I have listed above.

One avenue of further exploration of the issues raised by Still concerns the degree of congruence between musical beats and dance movements in Western popular dancing and ballet in relation to their respective musics. Differences exist not only between popular and classical contexts but also within each context, and each context can tell us something about the relationship between musical gestures and dance gestures in relation to beats and meters. For example, the beat within popular music and folk dance music is usually straightforward, even if there are other differences between, say, club music and contra dance music. Accordingly, while these differences motivate different steps in popular dancing, the different kinds of dancing nevertheless tend to share the feature of regularly recurring steps. More specialized kinds of dancing, such as the various forms of ballroom and swing, commonly involve more variety, not only among dances (e.g. tango versus Lindy hop) but for individual dancers over the course of a given dance. In these contexts, some dancers maintain a high degree of congruence between their steps and the musical beats, while others explore more subtle relationships, but in all cases the musicians maintain a steady beat for the dancers to move to (or to move “against”). When it comes to ballet, we must distinguish classical ballet and contemporary ballet and the nature of beat and meter in different kinds of ballet music, but the greatest difference between kinds of ballet and kinds of popular dances, in the present context, is in the relative metric-rhythmic bluntness or subtlety with which the beat is presented. If different kinds of music afford, motivate, or invite different kinds of congruent dance steps, then we have to understand this difference with respect

to the kinds of music in question before we can consider differences in congruency between the music and the dance steps. When we do come to the matter of congruence, the work of Stephanie Jordan, cited by Still, is helpful. For scholars and musical performers interested in rhythm and meter, discussions with dancers about their experience and understanding of *Swan Lake*, *Romeo and Juliet*, *The Rite of Spring*, and *Agon* might well offer us a way of better understanding the relationship between the music of Tchaikovsky, Prokofiev, and Stravinsky in terms of beat, meter, and gesture, which could well inform our understanding of embodied experiences of musical temporality, not only in the music of these composers but in classical music generally. Beyond this, cross-cultural explorations, such as the example from Kofi Agawu noted by Still, offer even greater understanding along these lines. In some music it may be that musicians and dancers must understand beat and meter differently, according to their different roles, but to whatever extent this may be so, the work of scholars interested in the bodily basis of musical experience and musical meaning will benefit from considering the issues raised by Still.

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