

The medium is the message: Questioning the necessity of a syntax for timbre

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Introduction

The notion of a timbral syntax has been of persistent appeal to composers, music theorists, and music psychologists alike. Following a discussion by Arnold Schoenberg (1911) as part of his theory of harmony, several conceptions of timbral syntax have been outlined (Lerdahl, 1987; McAdams, 1989; Bigand et al., 1998; Murail, 2005; Nattiez, 2007). The discourse surrounding these proposals is speculative: authors suggest ways in which timbre could function syntactically in a yet-to-be materialized musical system but give little consideration to how timbre actually functions in music. Of course, music neither possess nor displays a true syntax in the normative linguistic sense, nevertheless, beginning with the writings of Hugo Riemann in the late 19th century, music theorists have proposed a syntax-like organization for music. According to Swain (1995) syntaxes, both musical and linguistic, have two basic functions: first, to control information load, and secondly to mediate expressed relationships. More specifically, Meyer (1989) proposes that to qualify as syntax “successive stimuli must be related to one another in such a way that specific criteria for mobility and closure are established” (p. 14). By mediating tension with closure, music is thus segmented into loosely recursive units, which in turn make possible more complex hierarchical structures and organization, such as musical form. Importantly, Meyer denied timbre the ability to contribute meaningfully to musical syntax (and therefore to formal organization) due to its secondary nature with respect to more syntactically salient parameters such as pitch, harmony, and rhythm. In our presentation, we revisit this theme and argue that syntax is a sufficient, but not a necessary condition for timbre to contribute meaningfully to an unfolding musical form. Moreover, we propose that contrary to any syntactical underpinning, the various levels of timbral organization that span a musical work can be apprehended by a process of mnemonic agglutination. In doing so, we bridge recent empirical research on memory for timbre, together with score analysis and a consideration for the listening act itself—for what it means to attend to and remember music (and thus timbral characteristics) over time.

Method

Two questions frame the presentation: (1) How does memory for timbre play out in ecologically valid contexts? (2) If an underlying syntax for timbre is indeed not necessary to the organization and apprehension of a piece of music, how might composers structure the deployment of timbre such that it serves a form-bearing function (McAdams, 1989)? First, we review contemporary theories of auditory memory (Siedenburg & Müllensiefen, 2019) that demonstrate how fine-grained timbral properties in music may be extracted, memorized, and stored over long time-spans, hence providing the basis for timbre to act as a bearer of musical form. We propose that timbre does not need syntax in order to carry forward musical information over time, but that its aesthetic qualities—themselves traditionally only considered as a medium to other musical information—can constitute the musical message. Next, drawing on theories of the experience of musical form (Cook, 1990; Levinson, 1997; London, Cox, Morrison, Maus & Repp, 1999; Zbikowski, 1999; Huovinen, 2013), we argue that one prominent way by which timbre bears form is via the recognition and agglutination of discrete timbral-mnemonic units into contours across large spans of time. We call this process *apperception* (Touizrar, 2019). Finally, drawing on analyses of orchestral music of the 19th and 20th centuries, we demonstrate how composers construct and modify large-scale apperceptive contours, thus forging orchestrational form using timbre as a primary mnemonic construct.

Results

The result of our theoretical proposition, when applied to score analysis, demonstrates that composers exhibit in their works an explicit concern for the mnemonic structuring of timbre across large spans of musical time. Composers such as Nikolai Rimsky-Korsakov and Arnold Schoenberg construct what we term *iconic motives* whose primary constituents include a prominent timbral profile in addition to other parameters such as pitch and rhythm. Developments to the various parameters of these recurring motives—and especially to timbre—across the work allow listeners to apperceive large-scale contour spanning the entire work whose principal grouping involves the agglutination of several instrumentally-varied iterations over time. We demonstrate how these large-scale grouping structures depend on the sonic impression of a memorable psychological present, followed by dependency on episodic and working memory that all together contribute to both implicit and explicit retention and recognition of form-generating timbral information.

Discussion

Our presentation addresses central questions faced by research on musical timbre: how, and to what degree might timbre participate in the construction of musical form? Moreover, if timbre does indeed function in a form-bearing capacity, how can we identify and demonstrate its explicit and implicit contributions to a musical form both in terms of its construction by composers as well as its reception by listeners? In tonal music, syntax serves as a building block of large-scale formal organization via the recursive harmonic progressions and their inevitable cadential closures that make up complete statements such as theme, periods, and sentences. These medium-scale units are grouped together into larger functional sections that progress through harmonic key areas, which are themselves structured according to the same tension-release principles that govern small-scale harmonic progressions. If timbre does indeed play a syntactic role in the unfolding of musical form, we should expect to find a palpable and recursively structured scheme for tension and release that is independent yet co-occurrent with harmonic, melodic, and rhythmic elaborations. Without denying the possibility of such structuring for timbre in other musical traditions, the battle to force timbre into a syntax seems to have been lost. Since no compelling evidence yet exists that demonstrates a coherent timbral syntax, let alone one that is easily apprehended, we propose that a change in approach to timbre as a form-bearing element is required. Instead, the relationship between syntax and form should be newly examined from an experiential vantage point; one that takes into account the imaginative experience of form-building undertaken by listeners (a group that includes composers, performers, and theorists). Memory is a key component in the experience of musical form, and understood experientially, timbre's contribution to the temporal elaboration of musical form is at the very least palpable. We propose that memory for timbre, and more specifically diachronic mnemonic grouping of timbre can play an active role in the unfolding of musical form. By merging existing evidence and theories together with score and phenomenal analysis, we wish to make a case for timbre's form-bearing capacity that is to be examined in an interdisciplinary and ecologically valid context.

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