Anabel Maler<sup>\*1</sup>

\*University of Chicago, United States of America 1amaler@uchicago.edu

# **Hearing Function in Post-Tonal Contexts**

# ABSTRACT

### Background

When analyzing post-tonal compositions, it is often difficult to make sense of how ideas and phrases relate to one another. In reference to Classical music, William Caplin argues that, within an arrangement of perceptually significant time spans, each chunk of music has a *formal function* — a role that the chunk plays within the formal organization of the music (1998). In this paper, I propose that attentive listening to formal functions, processes (such as prolongation, repetition, fragmentation, extension, expansion), and hierarchies of the sort that is basic to Caplin's theory is not tied exclusively to tonal music or specific formal types. In fact, attending to these features in post-tonal works can shape one's understanding of their formal organization.

Formal function as it is presently understood in the field of music theory has developed principally for the study of European music of the late eighteenth and early nineteenth centuries, a repertoire that has informed much recent work in the field as a whole. The concept of formal functionality — the idea that formal units play specific roles in articulating the structure of a piece of music — is strongly tied to ideas about musical form that emerged through the teaching of composition in the early nineteenth century, and that was codified in the writings of Arnold Schoenberg and Erwin Ratz, and more recently in those of William Caplin.

Post-tonal music presents several unique challenges to the prospective formal and form-functional analyst. First, the proliferation of different compositional styles, techniques, philosophies, and media in the twentieth century has encouraged analysts to take a narrower view, focusing on single composers or groups of composers rather than attempting to generalize across the whole of post-tonal music. Second, the move away from the concept of a tonal center (even in works that make reference to tonality) naturally results in the lack of cadential articulation of tonal areas.

This paper turns to listener perception of formal function as a way to make sense of form in post-tonal repertoires. One might think of the formal functions of these phrase structures more broadly as musical instantiations of what cognitive scientist Don Norman has called affordances in his work on material design (1988). For Norman, affordances reflect the potential uses or actions latent in materials, and affordances are perceived not only based on physical attributes but based on the perceiver's past experiences. In a recent monograph, Caroline Levine applies this terminology to literary forms in order to demonstrate that 'each shape or pattern, social or literary, lays claim to a limited range of potentialities' (2015). So too does a formal pattern in music lay claim to a specific range of potentialities when it meets with a listener and all her beliefs and past experiences, and from that interaction we may come to determine its formal function. In my work, I contend that formal function is an emergent property of music through which a listener actively shapes musical organization in time.

#### **Aims and Repertoire Studied**

My broad aim is to develop a way to account for how listeners apprehend formal units - from the level of the up through longer sections - in post-tonal phrase compositions. In this paper, I explain how the theory of formal function, developed with reference to tonal compositions, can be adapted for post-tonal works, demonstrating my approach with close analyses of Webern's Op. 11 No. 1 and Varèse's Density 21.5. My paper asks how one makes sense of units in post-tonal music as one hears them, relating each unit to surrounding ones. With respect to the opening of Webern's Op. 11 No. 1, a focus on formal function means adopting the view that each musical fragment gradually acquires meaning for the listener through its relationships to surrounding fragments, such that the weight of those meanings accumulates over time and leads the listener to develop and refine her formal expectations.

### Methods

My analytical work draws on existing theories of form and formal function, post-tonal form and segmentation, and listener perception in order to create a new methodology for addressing function in post-tonal music. I use close analyses of musical compositions, focusing on listener understanding and expectation rather than pre-compositional structures, in order to demonstrate the utility of thinking about post-tonal repertoires in terms of function. I also recompose passages in order to demonstrate the efficacy of my listener-centric theory of post-tonal formal function.

## Implications

I use a series of examples, including recompositions, drawn from Webern's Op. 11 No. 1 and Varèse's *Density 21.5* in order to demonstrate the value of a form-functional approach in a variety of post-tonal contexts. My ultimate aim is to present form as an emergent property of music, a process by which a listener apprehends and actively shapes the formal organization of a passage as she hears music in time.

In analyzing excerpts from Varèse's *Density 21.5* and Webern's Op. 11, I dispense with many aspects of traditional form-functional theory that rely on tonality in order to characterize the function of musical units. I retain, however, what I believe are the essential elements of hearing formally: the segmentation of units from each other based on salient parameters; and the perception of those units interacting with each other, shaping our expectations for future units and relationships. In summary, a theory of post-tonal formal

function offers first an opportunity to closely engage with multiple musical parameters to understand their particular affordances, and second, a model of form as a dynamic process that emerges at the intersection of a composer's structure and a listener's interpretation.

#### Keywords

Musical Form, Formal Function, Cognition, Twentieth-Century Music.

# REFERENCES

- Caplin, William E., 1998. Classical Form: A Theory of Formal Functions for the Instrumental Music of Haydn, Mozart, and Beethoven. Oxford/New York: Oxford University Press.
- Caplin, William E., James A., Hepokoski, James, Webster, and Pieter, Bergé, 2009. Musical Form, Forms & Formenlehre: Three Methodological Reflections. Leuven: Leuven University Press.
- Clifford, Robert, 2002. 'Multi-Level Symmetries in Webern's Op. 11, No. 1', Perspectives of New Music 40/1: 198–215.
- Hanninen, Dora A., 2004. 'Associative Sets, Categories, and Music Analysis', Journal of Music Theory 48/2: 147–218.
- Hasty, Christopher, 1981. 'Segmentation and Process in Post-Tonal Music', *Music Theory Spectrum* 3: 54–73.
- —, 1984. 'Phrase Formation in Post-Tonal Music', Journal of Music Theory 28/2: 167–90.
- Howland, Patricia, 2015. 'Formal Structures in Post-Tonal Music' Music Theory Spectrum 37/1: 71–97.
- Levine, Caroline, 2015. *Forms: Whole, Rhythm, Hierarchy, Network.* Princeton (NJ): Princeton University Press.
- Nattiez, Jean-Jacques, and Anna, Barry, 1982. 'Varese's Density 21.5: A Study in Semiological Analysis', *Music Analysis* 1/3: 243–340.
- Norman, Donald A., 1988. *The Psychology of Everyday Things*. New York (NY): Basic Books.