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Hearing Voices in their Hands: Performing and Perceiving Polyphony

ABSTRACT

Background

Theorists agree that classical music is often composed of multiple simultaneous horizontal components. But what should these components be called, and how should they be defined or divided? There are at least three — hitherto isolated — approaches to this question. Traditional music theory speaks of textures composed of 'voices' — a contrapuntal approach. Music cognition speaks of the brain processing different auditory 'streams' (Bregman 1994) — a perceptual approach. And a recent strand of meta-theory examines how analysts describe musical elements as fictional 'agents' (Monahan 2013; Klorman 2016) — a metaphorical approach. Up until now, these three discourses have barely commingled, and practitioners of each have not adopted the others' vocabularies. Furthermore, most scholars treat texture and stream as immutable properties of pieces, disregarding the possibility that they could be affected by differences in performances.

Aims and Repertoire Studied

The first goal of this paper is to integrate the three vocabularies — contrapuntal, perceptual, and metaphorical — into a single model, one that treats voices, streams, and agents as distinct and yet interdependent phenomena. The second goal is to redefine voice, stream, agent, and even polyphony and counterpoint themselves not as material properties of pieces, but as listeners' perceptual responses to sounds. The third goal is to refocus attention on performers, by showing their power to govern how listeners group pitches together. In pursuing this third goal, I examine performances of 19th-century piano music — mostly Chopin — by the 'Golden Age' pianists Josef Hofmann and Shura Cherkassky, who were acclaimed for bringing out potential melodies in 'inner voices' (Schoenberg 1963; Carr 2006).

Methods

I first propose an integrated model of how listeners group pitches into lines, and then analyse recordings to show how certain performance decisions influence this process of grouping.

In my model, a voice is defined as a horizontal linking of tones into a strand one tone thick. A tone may be consigned to more than one voice, but a voice may sound only one tone at any given time-point. The listener groups the voices into streams, which are the smallest perceptual grouping of tones available for attention. Streams are usually composed of one or more voices; but some streams cut through or across segments of voices.

The listener then deems any number of these streams to be a melody, which is a stream that is subject to active attention. When the listener perceives only one stream as melodic, she processes the music homophonically via a 'figure-ground' mode of attending. When the listener perceives multiple streams as melodic, she processes the music polyphonically, either by toggling attention between melodic streams or by integrating them into a superstream (Bigand, McAdams and Forêt 2000).

While any musical component can be described metaphorically, agency can be ascribed only to components containing or participating in at least one melodic stream. Agents can be experiential — in which case they can be perceived in real time — or merely abstract — in which case they can be perceived only out of real time, for example while reading through a score.

In summary, the five levels are:

(1) voice ⟶ (2) stream ⟶ (3) melody ⟶
(4) texture ⟶ (5) agent

By comparing different pianists' recordings of the same musical passages, I demonstrate that the contents of these five levels are not fixed by scores. Rather, the performer can intervene to alter the relationship between any two of these levels. The performer can therefore alter listeners' perceptions of: which voices belong to which stream (levels 1 and 2), which stream is primary/melodic (levels 2 and 3), whether the texture is homophonic or polyphonic (levels 3 and 4), and how different parts of the texture are agentified (levels 4 and 5). Pianistic interventions aimed at manufacturing these regroupings were *de rigueur* in the 'Golden Age' but lost favour as a modern, more objective school of musical interpretation grew dominant in the mid 20th century (Horowitz and Arrau 1999).

Implications

This paper yields two broad results, one stabilizing and one destabilizing: 1) it provides a firm cognitive basis for the mechanics of agential hermeneutics, while disentangling often conflated categories in the individuation of musical elements; 2) by redefining fundamental textural labels — such as 'polyphonic' and 'homophonic' — as perceptual responses to performances, it affirms the need for analysts to attend to the performance practices that their analyses implicitly assume and rely upon.

Keywords

Musical Cognition, Counterpoint, Music Hermeneutics, Musical Perception, Texture.

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