Analysis of verbal descriptors for timbre: Based on conceptual metaphor theory

Yo-jung Han (yuh141@psu.edu) 251 Music Building I, University Park, PA The Pennsylvania State University

Abstract

Our verbal descriptions about musical attributes frequently rely on metaphor. Metaphor entrenched in everyday life is used without conscious effort, but it governs our thoughts (Kövecses, 2010). In this sense, understanding metaphor is a way of understanding our thoughts and experiences. According to conceptual metaphor theory, when A is understood as B, the target A is conceptualized by the source B. It has been found that the source domain of musical attributes such as pitch, duration, and loudness is spatial dimension (Moravec & Stepanek, 2005). However, less attention has been given to the examination of timbre. Therefore, this study aims to understand how we conceptualize timbre by investigating the source domain of timbre descriptors based on the conceptual metaphor theory.

Sixty-nine descriptors were collected from three timbre research articles: Moravec and Stepanek (2005), Štěpánek (2006), and Traube and Bernays (2011). As a result of the semantic analysis, the descriptors were largely categorized as vision, touch, sound, taste, and person. The dominant source domains were vision and touch. The sub-domains of vision were brightness, clarity, density, shape and spatial dimension. The sub-domains of touch were surface and solidity of materials, temperature, and humidity. Brightness, clarity, and dimension in vision and surface in touch had relatively more descriptors than other sub-domains did.

Both target and source domains were sense modalities except for the "person" domain. It indicates that timbre is conceptualized through a concrete bodily experience. In case of the source domain of "sound", it can be regarded as metonymy instead of metaphor in that metaphor is mapping across two domains, while metonymy is mapping with one domain (Kövecses, 2010). As Moravec and Stepanek (2005) reported, some descriptors might be regarded as words for quality of playing and artistic expression. This study yields new questions: In real life, what source domains are frequently used to describe timbre? Is there inter-subjectivity in using timbre descriptors?

References

- Kövecses, Z. (2010). *Metaphor: A Practical introduction (2nd edition)*. Oxford and New York: The Oxford University Press.
- Moravec, O. & Stepanek, J. (2005). Verbal descriptions of musical sound timbre and musician's opinion of their usage. *Fortschritte der Akustik*, 31(1), 231-232.
- Štěpánek, J. (2006). Musical sound timbre: Verbal description and dimensions. In *Proceedings 1 the 9th International Conference on Digital Audio Effects*. Montreal, Canada, 18-20.
- Traube, C. & Bernays, M. (2011). Verbal expression of piano timbre: Multidimensional semantic space of adjective descriptors. In *Proceedings of the International Symposium on Performance Science*, 299-304.

Applications

- ♣ Verbal descriptions can be a useful source to understand students' musical concepts, ideas and experiences. Specifically, understanding the characteristics of metaphor when we describe musical attributes such as pitch and timbre can be a way of understanding our musical thoughts and experiences.
- ♣ Even though certain metaphorical descriptions have been commonly used to communicate our musical images, as a teacher we need to check out whether students have the same understanding about the descriptions as we.
- ♣ Metaphorical expressions about timbre can be helpful to perceive and discuss the characteristics of a tone and to evoke a student's imagination leading to a vivid musical experience.