

Some Affinities Between Music and Language

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This talk will examine some recent research in musical cognition and explore how what we understand about our perception and storage of music is paralleled by some aspects of how language is processed. Using the concept of *image schema transformation* (Lakoff 1987) as a central pivot I will explore how the same mechanism underlies both the use of lexical items, innovative constructions (recently dubbed *snowclones*, as exemplified by ‘Small is the new black’), the storage and perception of iconic musical works (Levitin 2006) and the development of Western classical and popular music (lectures by Brandt, 2011).

Work by Levitin (2006), shows that we store exact representations of iconic musical performances with remarkable accuracy. Yet we are also able to reproduce them quickly and naturally in a different key, or beginning at a different octave. This ability corresponds to what Lakoff (1987) calls *image schema transformations*. Image schemas were proposed as a way of understanding and ‘representing’ knowledge of the world, but were understood to be deeply *embodied*, in the sense that they were experienced through our physical interaction with the meaning of the body (Johnson 1987; Johnson 2007). Image schema transformations involve motivated deviations from the prototypical image schema, such as Lakoff’s famous discussion of ‘over’. In his early work Lakoff (1987: 440–61) examined how numerous different senses of the word could be derived from the central one (the picture is over the fireplace), explaining how senses such as ‘think it over’, ‘the game is over’ and so on, through his notion of *image schema transformation*, the idea that the prototypical image schema could be adjusted in principled ways (both physically--‘put the wallpaper over the hole in the wall’, and metaphorically--‘My opponent is a pushover’). Image schema transformations are a central mechanism for words to acquire extended meanings that were related to the central meaning, yet derived from it in principled, but not totally predictable ways.

Recent work by Anthony Brandt at Rice University, in what is seemingly an unrelated area, the fundamental structure of western music, suggests that image schema transformations are an essential part of how western classical music is constructed and perceived.

Brandt suggests that (at least) western classical music develops thematically by construct a theme, which is then ‘developed’ through three methods--bending, breaking and blending. ‘Bending’ consists of modifying the theme (inverting, changing key, etc.). Breaking means playing only a part of a theme, perhaps with repetitions. Finally, blending includes playing more than one theme at once, or two or more ‘broken’ parts of the theme, or even simultaneously playing two or more ‘bent’ versions (which is, in fact, what ‘harmony’ consists of).

This paper will explore the similarities between the development of motivated, but novel senses of words and sentences, and the systematic development of theme and variation as instantiations of the same cognitive mechanism. The primary difference between linguistic and non-linguistic transformations is that linguistic uses are normally used one at a time, whereas musical instances are frequently developed either simultaneously or with successive (non-)repetitions. I will illustrate this with linguistic examples of novel expressions known as ‘snowclones’. Snowclones (O’Connor; Pullum) are productive fragments of language that build upon set phrases, and are often used playfully (‘small is the new black’). I will also discuss two simple musical examples, one from classical music and the other from Broadway.

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