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## **Music, language, and the deceptive charms of recursive grammars**

Interest in the relations between language and music has grown in the past years. An important factor in this development is the rise of cognitive science.

In 2002 Hauser, Chomsky and Fitch<sup>1</sup> made the conjecture that the specifically human, and specifically linguistic element in the capacity for language might be a cognitive-computational capacity for *recursion*. This is patently wrong (recursive features are apparent in music, if nowhere else). Even so, this article has brought about an intense and continuing debate.

Recursion may have an important place in cognitive processes. Recursive theoretical models may also seduce the theorist to false abstractions and pseudo-explanations. This is observed in some versions of musical and linguistic formalism, which share a common rationalist-idealist background; paradigmatically, in Chomsky's controversial Minimalism.

It is also observed in the reductive practices of Riemann's *Musikalische Logik* (1873) and Schenker's *Der freie Satz* (1935). More extensively I will discuss Lerdahl en Jackendoff's attempt to transform music theory into a theory of musical perception (*A Generative Theory of Tonal Music*, 1983). They do so with the help of the formal method and psychological premises of Generative Grammar.

The theory rests on a shaky ontological thesis, the existence of the musical artwork as a mental object (a substitute for Chomsky's 'I-language'). Like Schenker theory, it is further undermined by what Leonard Meyer has called the 'fallacy of hierarchic uniformity', and more generally, by its radical decontextualisation of music. There is a paradox in the authors' careful avoidance of a music-language comparison, and the strong linguistic analogy implied in their conception of a theory of music *as grammar*.

An alternative can be sketched which (1) denies any ontological status to the musical artwork; (2) recognises that music and language are incommensurable, yet (3) may have substantial commonalities, within a certain historical-aesthetic framework. This view finds support in functionalist linguistic theories. It calls for a conception of grammar which includes, or is supplemented by, a theory of musical *discourse*.

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<sup>1</sup> Hauser, Marc D., Noam Chomsky, and W. Tecumseh Fitch. 2002. "The Faculty of Language: What Is It, Who Has It, and How Did It Evolve?" *Science* 298 (5598): 1569–79.