

## **Computability as the main shared property of language and music lexicons**

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The Identity Thesis of Language and Music by Katz & Pesetsky (2011) – henceforth K&P– postulates that the syntax module for music and language is fundamentally the same, and all observable differences between them can be traced back to the different natures of their respective lexical modules.

The aim of the present proposal is to refine K&P’s hypothesis by proposing that the primitive locus of the different natures of the music and language systems is not the lexicon, but the interpretive component (the “meaning” module). The radically different nature of this component in each system is what determines the different nature of the lexical features participating in each of them. Keeping these differences aside, a bundle of common fundamental properties are shared by language and music lexical systems. These properties constitute a relevant argument to defend the same abstract inverted-Y model for language and for music:

- Both lexical systems are made up of discrete units.
- These units can be decomposed into features, which all together constitute an internally logical universe.
- These features are responsible for:
  - guiding the syntactic derivation
  - the asymmetry of the merging operations
  - the successful interpretation of the derivation at the interfaces

Thus, the difference between the lexical systems of language and music lies in the nature of their respective features because they are oriented to different interpretive (i.e. meaning/semantic) components. Both lexical systems are nonetheless oriented to some interpretive module, and this is made possible precisely by their shared fundamental properties, since they provide the lexical units of each of the systems with the ability to participate in a syntactic computational system connecting a materializer module (the interface to the sensory-motor system) to a mind-internal interpretive module (the intentional-conceptual system in the case of language, and the tonal-harmonic component in the case of music, following K&P).

### **References**

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