Linguistic creativity and musical improvisation: some similarities and differences

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Certain cognitive theories of language (e.g. Hudson 2007) suggest that creative tokens of use form temporary nodes in a speaker's linguistic network; entrenchment of such expressions can lead to language change, i.e. the generalisation of a type across a set of tokens in a community of speakers. Innovations may or may not be consciously created, but the development of new linguistic constructions involves innovative 'sense-making' on the part of language users. Recent work on musical improvisation from the perspective of cognitive science (Torrance & Schumann 2018) has also foregrounded the importance of 'sense-making' in enactivism (Dreyfus & Dreyfus 2005). In this approach, the importance of improvisation as a general human trait is highlighted; furthermore, repeated improvisations may lead to an entrenched routine over time. The acquisition of procedural knowledge and its application to the performance of printed music in the western art tradition has been explored (Bangert, Schubert & Fabian 2014), but the connections to improvisation in music, and to the parallels between the acquisition of musical knowledge and the acquisition of linguistic knowledge remain under-researched.

In this talk, I explore parallels between linguistic creativity and patterns in musical (especially jazz) improvisation. The study draws on evidence from a corpus of improvised performances of English versions of the 1928 Brecht/Weill composition *Die Moritat von Mackie Messer* (i.e. *Mack the Knife*) over time. The harmonic structure of the piece accords with typical jazz progressions (e.g. I – ii7 – V7 – I in the A section), but allows for improvisations on the melodic and rhythmic levels, as well as tonal shifts against the harmonic foundation, and the use of different instrumentation. I show how, in a way that is parallel to innovations in language, performance in jazz improvisation involves a feedback loop between conventionalised harmonic progressions and creative 'tokens of use'. These creative patterns may be consistent with the overarching harmonic structure, and involve repeated structural repetitions (melodic, rhythmic and chordal) which themselves can conventionalise over time. This allows a further exploration of parallels between language and music (Steedman 1984, Jackendoff & Lerdahl 2006), but from a usage-based perspective. In the same way as we often see the creation of new constructional patterns as expansions of existing constructions, so the basic harmonic organization of the circle of fifths which underlies the structure of *Mack the Knife* allows for improvisational expansions and the crystallization of new patterns over time. These patterns reflect the establishment of particular routines over instances of use, and provide further evidence for some of the central principles of cognitive linguistics.

References

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