## Reflections on language, cognition, normativity and evolution

This paper argues that the view of language as affordances (Gregoromichelaki and Kempson 2019) promises to solve two problems: (a) the paradox for bottom-up processing that the disjoint stimuli of speech production and perception seem to preclude common explanation; and (b) the problematic status of mediating mental representations facing the alternative anticipatory top-down Predictive Processing perspective (Clark 2016). On the DS view, processing is not exclusively bottom-up so the problem of disjoint realisations is no longer a stumbling block - stimuli are taken instead as enabling and constraining the anticipatory potential (affordances) that grounds any speech perception/production event (cf. Noë 2012). And the view of grammar as enabling perception/production of affordances for interaction resolves the representation problem: structure-inducing macros yield (distributed) cognitive representations which are not world-mirroring but occasion-specific nested structures of anticipations of action opportunities for a group of agents or an agent and its environment. Perception/production of such affordances is based on earlier participation in (joint-)practices with each individual's differential history of interactions yielding their unique contribution in every new occasion. As a result, agents and their social/material environment coevolve and adapt to each other with affordances and abilities arising and decaying under two factors balancing complementary or competing individual/group interests and contributions (Wilson and Wilson 2007) yielding the appearance of "flexible" word forms/meanings: (i) diachronic reevaluation and revision of own prior response to stimuli (e.g. "words") due to subsequent interaction events; (ii) pressure for normative stabilisation within a particular group in order to achieve efficient interaction with others.

The grammar mechanisms then directly presuppose language change as a consequence of the hit-n-miss effectivity imposed by any one implementation of the joint pursuance of affordances. This induces a flexibility of what a word can be used to achieve, which paradoxically ensures its relative stability. Accompanying every language action, as a bonus, the individual can enjoy a sense of group consolidation without being burdened by the presumed mediating individual acts of Gricean inference. The promised result is an account of language evolution as a mechanism underpinned by interaction without external directive or prior inferential grounding.

Clark, A. 2016. Surfing Uncertainty OUP

Gregoromichelaki, E. and Kempson R. Procedural Syntax. Scott et al Relevance. CUP.

Noë, A. 2012 Varieties of Presence. Routledge.

Wilson, D.S. and Wilson E.O. 2007 Rethinking the Theoretical Foundation of Sociobiology. *Quarterly Review of Biology* 42.