

# On the Co-evolution of Internalization and Externalization in Human Language

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In the generative approach to language evolution as typified by Berwick & Chomsky (2016), externalization (communication) is largely dismissed as a secondary phenomenon in favor of internalization (thought) being the primary function of language. I argue against this position and claim that externalization plays an equally important role in the evolution of human language, especially of a rich and complex lexicon, in support of the cognitive linguistic view that communication is the essential function of language.

As cognitive semantics has shown so far, the concepts underlying human lexicon can be classified into concrete and abstract concepts. Concrete concepts are based on bodily experience with physical entities, while abstract concepts lack a physical basis and do not have stable, tangible, observable referents. They are often understood metaphorically through more concrete concepts or structures (Lakoff & Johnson 1980, Johnson 1987). This priority of concrete concepts over abstract ones deserves special attention when we consider the co-evolution of their internalization and externalization. As regards evolutionary continuity, it is also interesting to note that nonhuman animals, especially primates, share some conceptual structures with humans, even though they lack sophisticated ways of externalizing them (Fitch 2017, Seyfarth & Cheney 2017).

This talk emphasizes that the co-evolutionary role of internalization and externalization is an essential factor in the emergence of human lexicon, which contains concepts ranging over various levels of abstraction. The co-evolution in question proceeds as follows. As a first step, basic concrete concepts are readily realized as syntactically operable lexical items. Concrete concepts have a common physical basis because they represent physical entities which have specific shapes or texture and can be handled as such (Taylor 2003; see also Pulman 1983). As a result, they can be internally combined into complex linguistic forms without externalization. In contrast, abstract concepts do not have such physically universal standards, and understanding them depends on a specific idealized cognitive model (Lakoff 1987). Therefore, they first need to be shared through externalization to become distinct linguistic objects.

As a second step, not only abstract concepts but also internally complex concrete concepts will be externalized and used for communication. This externalization makes it easier to manipulate them as syntactic objects because they are now equipped with obvious forms linked to auditory or visual stimuli. This, in turn, leads to more complex internal combination of lexical concepts, both concrete and abstract ones, and these new concepts will be externalized again.

Thus there is a kind of positive feedback loop of internalization and externalization, and this co-evolutionary relation has provided human language with such a rich and complex lexicon as we see today.

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