
Sensory-motor result representations of (French) artefact terms

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The ongoing research on artefact concepts in the cognitive sciences continues investigating either artefact processing by means of psychological experiments (e.g. Malt & Sloman 2007) or artefact term semantics (e.g. Kornblith 1980; Marconi 2013) by partly taking into account neuro-cognitive evidences. This talk gives a cognitive semantics of a class of artefact terms that is not only compatible with the grounded cognition thesis on action concepts (e.g. Gallese & Lakhoff 2005) but also with diachronic data from French and evolutionary artefact theories referring to hand-based productive actions such as basic reshaping, basic conjunction and basic separation (e.g. Oswalt 1973, Beck 1980). To the best of my knowledge, neither linguists nor philosophers treat the nominalisation of creation verbs (henceforth **productive action verbs**) such as composing, constructing and combining in an explicit way.

In this talk, I investigate the productive kind of action, as denoted by French action verbs such as *combiner* (to combine), *composer* (to compose) and *construire* (to construct) and claim that some **deverbal** artefact nouns preserved over time **sensory-motor properties** of actions that led to the first creations. In other words, synchronic nouns are denotations of **action result states** that have been mapped onto different domains.

By drawing on Latin **past participles (passives)** of basic action verbs and their role in noun derivations, as well as the evolutionary idea that artefacts can be characterized in terms of the basic action by which they have been produced, the talk gives a cognitive picture of how some artefact concepts could develop over time and what their semantics is like. The core thesis is that artefact terms such as *composition*, *sculpture* and *construction* do not denote different sorts of item products associated with the according actions but are just denotations of the according action result states. For example, the synchronic term *composition* should be considered as simply denoting the composing result state, entailing the composing way of creating something and the term *sculpture* should simply be considered as denoting the carving result state, entailing the carving way of creating something.

A welcome consequence of considering the nouns as denotations of domain crossing mapped properties is that both polysemy and under-specification of specific artefact nouns can be avoided. Indeed, neither a piece of music nor a false works can be sufficiently accounted for by the feature of being composed or rather of being constructed. The fact that *composition* means a piece of music instead of simply a composed item and the fact that *construction* means building or false works instead of simply a built object can be explained via past conventionalization, namely how creations that rise within specific domains are named. In short, result object (and object result) readings can be understood as consequences of **lexicalisation**.

To develop this line of thought, the talk proceeds by introducing the notions of artefact (1) and productive action (2). Subsequently, it will be argued that reference to a piece of music by 'composition' or to a building by 'construction' is not to be understood as a **contiguity** based metonymic mapping between certain kinds of actions such

as composing and constructing and the corresponding products in the specific domains, but rather as a cross domain mapping of action result states onto different domains (3).

The second part of the talk will provide arguments for the view that deverbal artefact nouns reflect **mental representations** of action result states. By drawing analogies to the grounded cognition research, affordances theory (e.g. Gibson 1979) and object binding mechanisms (e.g. Werning 2012), it will be assumed that our first action concepts must have been shaped by representations of action result states (4). That is, it will be argued that when our ancestors first productively shaped natural objects such as stones and tree limbs, they did not only observe and memorize the results of manipulating, but also **traded** gained knowledge from one generation to the other. Assessing evolutionary artefact theories in the light of meme theory (e.g. Dawkins 1976), evidence for variation-based result representations of lexicalized nouns such as *conférence* will be then given by drawing on verbal phrases such as 'to participate in a conference' (5). Action result state readings of different sorts of deverbal nouns, not explicitly artefact nouns, are already discussed by formal approaches to language (e.g. Osswald 2005d).

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