Causality and converging evidence: overcoming methodological monism with corpus analysis and experimental approaches

Poster contribution – Causality in Language Sciences

Max Planck Institute for Mathematics in the Sciences

The unprecedented amount of oral data made available in the recent years encouraged the development of a corpus-based cognitive linguistics where, put simply, one draws “cognitive” causal inferences based on frequency observation in a speech production. However, each type of data bringing its share of restrictions and specific evidence, the inherent offline nature of corpus-data limits the type of cognitive processes that can actually be studied. As a result, when pursuing a better understanding of the factors underlying both the production and perception of prosodic markers of (dis)fluency and their variations across situations, one soon realizes that “the benefits of multi-methodological research outweighed the problems – in linguistics as much as elsewhere” (Arppe 2010:3).

This poster offers a methodological and theoretical review of converging evidence from a multi-methodological approach to speech processing (dis)fluency defined as a subjective experience of ease associated with a cognitive operation (Alter 2014:440). A corpus-study on 8 types of situations revealed that conditions of production influence discourse structuration and more particularly the distribution and type of prosodico-syntactic units of segmentation (Degand & Simon 2009). On the other hand, two on-going perceptive experiments first verified the psychological reality of this segmentation (as listeners showed preference of a prosodico-syntactic segmentation type depending on the situations presented to them), and, secondly, that the segmentation had an effect on memorization an comprehension for native French listeners. However, in line with Little (2011), we can wonder whether in order to establish causal relation between prosodico-syntactic units and situations, all we have to do is to track regular sequences of effects following causes in time – while being aware of the following complexity: in social contexts, ‘causal mechanisms are constituted by the purposive actions of agents within constraints’ (Illari, Russo & Williamson 2011).

The presented study cases serve as pretext for two broader theoretical and methodological questions. First, from a methodological point of view, how can best be combined corpus-based and experimental approach in language sciences to reinforce ones converging evidence? Secondly, theoretically can these two kinds of evidence lead to a unified conclusion? As linguistic is attached to methodological monism, there are very few testimonies of corpus linguists using experimental methods (Gilquin & Gries 2009:14). These considerations on multi-methodological approaches on fluency aim at overcoming the cavalier approach to the assessment of causal relation often associated with the utilization of corpus-based studies.


