From "Naturalizing Phenomenology" to Formalizing Cognitive Linguistics (I): Cognitive Transform Grammar

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Abstract

In this paper I try to identify certain paleostructures in language which transcend (or are somehow more fundamental than) the metatheoretical paradigm-opposition between faith in language being a computable, logico-mathematical system, or, conversely, a faculty bound up with overall human cognition, emotion, and embodiment such that nonsentient computers can never truly understand language. I will, in fact, analyze some examples suggesting a context-sensitivity and a level of epistemic engagement which I feel argues for a register of linguistic nuance that is probably computationally intractable. However, I also claim that some facets of language are more logically straightforward, and some sentences (or other linguistic artifacts) evince that logical register primarily or exclusively. Juxtaposing these cases, I claim that language is not intrinsically either tractable or non-tractable to computers or to any other system whose nature is essentially to carry out logicomathematical operations. Instead, tractability in this sense is a parameter which is more or less evident in different artifacts. A comprehensive theory must therefore address samples of language which are indeed strongly tractable — so that the machinery of computational linguistics becomes explanatorily relevant — and also examples which (via some interpretive or contextual complexity) are effectively intractable. Theories which make sense of the latter cases may be important to linguistic analysis even if they are not conducive to computational treatment or formulation. In sum, different theories, with different levels of formalizability and of adherence to reductionist logico-mathematical paradigms, are appropriate for different acts of language. An overall philosophy of language, then, rather than judging the merits or demerits of logical, mathematical, or computational formalization as a criteria of theoretical rigor, should instead seek to integrate diverse analyses, which paradigmatically differ on this issue, into a aggregated, multi-paradigm theoretical framework.

On connaît la célèbre affirmation de Claude Lévi-Strauss: les sciences humaines seront des sciences naturelles ou ne seront pas. Evidemment, sauf à en revenir à un réductionnisme dogmatique, une telle affirmation n'est soutenable que si l'on peut suffisamment généraliser le concept classique de naturalité, le généraliser jusqu'à pouvoir y faire droit, comme à des phénoménes naturels, aux phénoménes d'organisation structurale.

Jean Petitot [?, p. 1]

The nature of any entity, I propose, divides into three aspects or facets, which we may call its form, appearance, and substrate. In an act of consciousness, accordingly, we must distinguish three fundamentally different aspects: its form or intentional structure, its appearance or subjective feel, and its substrate or origin. In terms of this three-facet distinction, we can define the place of consciousness in the world.

David Woodruff Smith, [?, p. 11]

This is a test sentence. And another.

1 Test Section

This is a test. And another sentence.