

BJØRN JESPERSEN: *Unities of the proposition*

This paper explores what procedural semantics can do for the twin notions of structure and unity. Procedural semantics construes linguistic meaning as a procedure that delineates which objects of which type operate on which other objects of which type so as to yield which yet other objects of which type. I conceive of a multi-part structure as an interlocking system of objects. The two main sources of inspiration are Frege's notion of *Sinn* and procedural semantics as known from computer science, where it contrasts with denotational semantics. The contrast, in broad terms, is the contrast between an intensional and an extensional conception of meaning.

My working hypothesis is that predication holds the key to the unity of the fundamental category of atomic propositions in which a monadic property is predicated of an individual, as expressed by "Venus is a planet" or "1 is odd". Furthermore, I model predication as an instance of the procedure of functional application; predication is emphatically not a relation. The respective meaning of those two sentences is a procedure that prescribes how to obtain a property and an individual and apply the former to the latter so as to obtain a truth-value. (The truth-value obtained in the empirical example will be indexed to worlds and times.) A noteworthy departure from Frege is that I do not embrace unsaturated entities. His saturation metaphor means simply, in my theory, that certain entities are typed in such a way that they hook up as function and argument and yield a third entity beyond both of them as value. In cases like "Venus is heavier than Mars" or "1 is larger than 2", the unifier is still the procedure of functional application. But this procedure does not extend to all cases. The procedure of functional abstraction is called for as a different kind of unifier to unify different sorts of entities. For instance, while the innermost structure of the proposition that Venus is a planet is the procedure of application, the outermost structure is the procedure of abstraction in order to obtain an empirical truth-condition from a truth-value.

Hence the title of the paper: a rich structure such as a proposition is a case of procedures within procedures, structures within structures, unities within unities. The paper will show how this procedural approach avoids the two classical pitfalls of underdetermining structure as a mere list or sequence and adding on unifiers endlessly. The solutions will be framed within Tichý's neo-Fregean Transparent Intensional Logic.