Frege on Unsaturatedness
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Introduction

Purpose
To elucidate the notion of “unsaturatedness” in Gottlob Frege’s works and to focus on the difference between unsaturatedness and the notion of function.

Background
The relationship between unsaturatedness and the notion of function is a contentious issue in the construal of Frege’s philosophy.

Methods
1. To analyze concepts, predicates, and the sense of predicates through Frege’s works.
2. To compare the argument of functions with objects, proper names, and the sense of predicates.

Materials
• ... a function by itself must be called incomplete, in need of supplementation, or unsaturated. (FB, 6)
• ... a concept is a function whose value is always a truth-value. (FB, 15)
• The second part [=predicate] is unsaturated - it contains an empty place; only when this place is filled up with a proper name, does a complete sense appear. (FB, 17)
• ... not all the parts of a thought can be complete; at least one must be unsaturated or predicative ... (BG, 205)
• The unsaturated part of the thought we take to be a sense too: it is the sense of the part of the sentence over and above the proper name [=the sense of the predicate]. (NS, 209)
• Every individual number is a self-subsistent object. (GLA, § 55)
• ... a proper name, which thus has as its Bedeutung a definite object ... (SB, 27)

Discussion

Conclusion
1. Unsaturatedness is not intrinsically related to the notion of function.
2. Predicates and the sense of predicates do not have the faculty of mapping. Therefore these are not a type of function.

Future Discussions
Does unsaturatedness have a semantic role? If so, what is the role?

Results & Discussions
1. Concepts are functions that map objects for truth values.
   Concepts require an object that serves as the reference of proper names. When we allocate an object for this concept, we obtain a truth value.
2. In the case of predicates and the sense of predicates, the arguments are not objects.
   Predicates require a proper name, and the sense of predicates requires the sense of proper names. Functions require a number as an argument. Number is an object, but proper names and the sense of proper names are not.

References
Frege, G.
(FB) Funktion und Begriff, Jena: Hermann Pohle, 1891.