# Complexity for Kripke's theory of truth

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**Abstract:** In his famous paper on truth in formal languages, Kripke used partial valuation schemes and their jump operators to define various transfinite hierarchies converging to admissible interpretations of a truth predicate $T$ (over the standard model of arithmetic). We shall discuss how to measure the complexity of such interpretations of $T$. Apart from giving a brief survey of the topic, I shall present a method for proving complexity results in this direction, and show how to apply it for obtaining some interesting generalisations of earlier results by Kripke, Burgess, Welch and others. This method will be both relatively simple and rather general.

# References

[1] S. A. Kripke, Outline of a theory of truth, *Journal of Philosophy* 72(19), 690–716, 1975.

[2] S. O. Speranski, Notes on the computational aspects of Kripke's theory of truth, *Studia Logica* 105(2), 407–429, 2017.