Introduction

Jacob Archambault

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Abstract

1 Logic and semantics

The breadth of Klima's scholarship stretches thematically from debates on identity, categories, and causation in metaphysics, on skepticism in epistemology and theories of mental content in philosophy of mind, to others too numerous to mention; historically, from some of philosophy's best-known figures in Anselm, Aquinas, Ockham and Descartes to lesser-known figures including Thomas of Sutton and Henry of Ghent, to Frege, Geach, Kenny, and others who have produced some of the most impactful scholarship in the analytic tradition.

1.1 Klima's contributions in the history of semantics

Arguably, Klima's most notable contributions come in his research on John Buridan - which has helped elevate Buridan from a lesser-known figure to one whose stature is closer to that of an Ockham, arguably surpassing the Franciscan in his logic - and in the field of semantics.

From his earliest work in semantics, Klima recognized that classical logic, being primarily interested in developing an account of the semantics of propositions as a precondition for the development of a theory of consequence, affords much less attention to its account of the components of propositions themselves, namely names and n-ary predicate relations. Klima fills this lacuna by providing a theory not only of simple, but also of complex terms. Klima provides some of the earliest and most ambitious applications of restricted quantification in the history and philosophy of logic, using it both to formalize the medieval theory of supposition and to provide a general account of quantitively ambiguous natural language sentences (Klima 1988, 1990, 1991a; Klima and Sandu 1990). Cf. (Parsons 2014). Expansions on the same theme - namely, formalizations of supposition theory specifically and medieval semantics more broadly as a means to resolve apparently intractable interpretative problems in historical scholarship and debates in contemporary philosophy - provide us with an account of the semantics of intensional verbs (Klima 1991b), a semantic foundation for Aquinas'

theory of the analogy of being in his theory of the copula (Klima 1996, 2002a), and a clean resolution of the problem of existential import in the Aristotelian square of opposition(Klima 2001).

Elsewhere, Klima's work decouples *via antiqua* and *via moderna* semantics from the realist and anti-realist metaphysics with which they are most commonly paired, contending that neither semantics by itself strictly entails its associated metaphysics (Klima 1999, 2011b). Rather, archtypical realists were required to adopt non-straightforward semantic accounts of the meanings of terms in at least some cases by their antecedent metaphysical commitments (e.g. to divine simplicity) (Klima 2002b). Conversely, some of the best known nominalist logicians incorporated what today would be regarded as 'realist' elements in their logic (Klima 2005). For Klima, the *via antiqua* and *via moderna* traditions of medieval logic aren't semantic frameworks that differ in their quantity of ontological commitments, but distinct frameworks differing in the kind of tools they provide for handling ontological commitments, which in turn differ from the model-theoretic framework dominant today. In particular, the *via antiqua* semantic framework takes an affirmative statement to be true when what is signified by its predicate inheres in what is signified by its subject - sometimes called the *inherence theory of predication*. Within this framework, terms predicating common natures or accidental features of a subject are taken to ultimately refer to exactly the types of entities one might expect, but the framework also provides a rich theory according to which being is predicated in different degrees - which may, for instance, be represented formally by the use of different subscripted uses of the verb 'is' - thus avoiding the full, immediate, fundamental commitment to possibilia, abstract metaphysical nominalists today might find objectionable.[1] Conversely, the dominant semantic framework post-Ockham takes an affirmative statement to be true when its subject and predicate term refer to the same object - sometimes called the *identity theory of predication*. Within this framework, terms predicating common natures or accidental features of a subject need not be taken to ultimately refer to different types of objects such as abstract genera or relations, but may instead be taken to refer to *familiar* objects *differently*. For example, the truth of 'Socrates is a father' does not require commitment to a distinct entity that is Socrates' fatherhood. Instead, the sentence's predicate may be taken to (non-rigidly) refer to Socrates himself, albeit connoting his being a father, and hence to refer to the *same* object as that rigidly referred to by the proper name 'Socrates', albeit in a different way. Granting some license for intensional contexts,[2] the verb 'is' or 'exists' in *via moderna* semantics is equally ontologically committing in its various uses, but *what* one is committed to by its uses need not be immediately apparent (Klima 2008b, pp. 437–430). Both frameworks would reject the object-language metalanguage distinction taken for granted since Tarski in their theory of truth, and both provide ample tools to reject a naive application of the Quinean criterion for ontological commitment in terms of quantification in

[1] See (Klima 2002a).
[2] See (Klima 2005).

their use of ampliation to for tensed, modal, and intensional contexts.

1.1.1 The independence of metaphysics from semantics

None of this means that there is *no* relationship between an author's positions in metaphysics and his semantics: rather, the semantic framework an author adopts conditions what options that author has in metaphysics without fully determining them. For example, extreme realism in metaphysics doesn't follow strictly from the *via antiqua*'s inherence theory of predication, but it is the most natural fit for that theory if one accepts the view that terms signifying accidental being denote their referents rigidly while rejecting that framework's insistence on multiple, analogically related senses of 'being' (Klima 1999). Conversely, the broad outlines of Ockham's account of the relation between language, thought, and reality serves not only as a foundation for Ockham's own metaphysical reductionism, but also for the realism of a Descartes, Malebranche, Putnam or a Leibniz (Klima 1991b). In a particularly drastic example, the choice of a mistaken semantic framework may inhibit the speaker from constitutively referring to, and thus believing in, an actually existing God whose existence is only adequately assertable in an alternate framework (Klima 2008a, p. 74).

What is clear, however, is that there is no is relationship of *entailment* from purely semantic principles to metaphyscal truths. Klima writes:

> To be sure, this is not to say that metaphysical principles are to be derived from, or somehow justified in a weaker sense on the basis of, semantic principles. Metaphysical principles, being first principles using the most general terms, such as the transcendentals and the categories, cannot be derived from prior principles, and their terms cannot be defined on the basis of more general terms. What semantics can do, however, is that it can provide the principles of interpretation of metaphysical principles. On the basis of these principles of interpretation the implications of metaphysical principles are more clearly delineated, which then can be used in their evaluation in dialectical disputations concerning their acceptability in the interpretations thus clarified. Furthermore, if the semantic principles of interpretation are made explicit, they can also be subject to further evaluation, in a disputation on a different level, the sort appropriate to the comparison of different logical theories. (Klima 2011a, p. 49)

Modern mathematics calls this notion of *independence* , though as the name implies the fundamental notion itself is by no means a recent one. Just as Cantor's continuum hypothesis is neither provable nor refutable in Zermelo-Frankel set theory, or - to provide a more medieval example - truths of revealed theology are neither provable nor refutable from the principles of natural philosophy, neither are metaphysical principles provable or refutable from those of semantics alone.

Two complications distinguish the semantic case from those mentioned. first, that as implied above, a metaphysics may be limited by the semantics it inhabits;

second, that while both the set-theoretic and theological case mentioned above are concerned with provability and refutability in a single system, the sheer multiplicity of semantic frameworks itself may provide a barrier to a broadly acceptable account of provability across those frameworks. The first problem generalizes one nearly the opposite of that established by Gödel first incompleteness theorem: where that theorem established the expressibility of unprovable claims of number theory in any sufficiently robust system, the semantic problem we face here is that a claim of metaphysics may be taken to be proven or refuted merely on account of the *lack* of expressibility of the particular semantic framework one is working in. The second provides us with the difficulty of elaborating what provability of a claim even means across a variety of semantic frameworks.

1.1.2 Charity

1.1.3 Why semantics?

Semantics: 1) a theory of meaning broadly construed 2) Tarskian/Montaguean mathy stuff a semantics is almost never actually this, given that most semantics have a canonical interpretation and a domain to which they are expected to apply (e.g. Model theory handles solids better than liquids or gases). 3) e.g. a dictionary 4) e.g. proof-theoretic semantics 5) a philosophy of language 6) a theory of language, thought, and reality

1.2 Buridan

2 Notes

Modern metaphysics confuses the question of what being is with the question of what beings there are. (this isn't a new insight: once one gets past the mysticism of some of his interpreters, this is the fundamental point behind the talk of ontological difference in the philosophy of Martin Heidegger)

2.1 Positions taken

In (Klima 2008b), Klima recognizes that representing *via antiqua* semantics would require substantial modifications to modern quantification theory, while representing *via moderna* semantics requires fewer modifications 1) Via antiqua semantics requires a different account of predication, and multiple copula to be introduced to represent the different senses of being 2) Via moderna semantics requires the introduction of restricted quantifiers. 3) both require the rejection of the object-metalanguage distinction.

Klima agrees with Buridan that the notion of truth is not strictly needed for a semantics concerned with formal validity, but it is needed to explain the semantics of sentences that themselves predicate that notion. Analogy: nobody complains that we don't have a formal definition of the term 'red' in our logic,

even though a basic grasp of the semantics of that term is needed for using the term in sentences about red things.

Two uses for semantics of truth: 1) as part of a theory of validity, 2) for its own sake. In 'Logic without truth', Klima rejects Buridan's solution to the liar paradox.

(1) Natural languages are semantically closed (2) Natural language inference has to be token-based. Both Klima/Buridan and Tarski come to the conclusion that defining consequence in terms of truth and falsity doesn't work from similar considerations: Tarski's consideration is related to superenumable domains and the possibility that a language may simply an appropriate selection of denoting terms; Klima/Buridan's considerations come from the possibility that a claim may be not exist to even be true or false, or it may be self-falsifying while nevertheless describing a possible state of affairs (Klima 2004, p. 96).

The primary impetus behind Klima's work is one of charity. Examples: Positive: 1. His analysis of parasitic reference in his work on Anselm 2. His attempts to translate between via antiqua and via moderna semantics 3. The entirety of his body of work on John Buridan Negative: 1. The infrequency with which Klima actually reveals his own philosophical positions in his work (exceptions: Aquinas' hylomorphism and proof of immortality, Anselm's proof, Per Buridan, the semantic closure and token-based character of natural language inference) 2. His adopting semantics that build on classical logic while rejecting non-classical semantics.

3 quotes

'Buridan's nominalism is obtainable by the adverbialization of Peter of Spain's semantics.' 'Nominalism is obtainable by the adverbialization of realist semantics.' 'Medieval realism and nominalism are just different versions of conceptualism, differing especially in how they handle the problems of describing and identifying mental content.'(Klima 2011b, p. 110)

why the study of Buridan (or the history of philosophy in general) can be philosophically so rewarding: this study can put our own philosophical problems in an entirely different light, providing us with such theoretical perspectives that otherwise might entirely escape us as we are working in our set ways determined by the intellectual habits of our philosophical period, which in modern times tends to stretch to a mere couple of decades. - Klima2005b - Quine, Wyman, Buridan, p. 17.

In this paper I will attempt to dig further to the roots of their disagreements, trying to establish those primary logical-semantic differences that may have motivated their conflicting intuitions concerning these metaphysical principles. - Thomas of Sutton v. Henry of Ghent

are supposed to be fundamentally different from the laws of psychology. For while the former are the laws of the logical relations among objective concepts, the latter are the laws of the causal relations among formal concepts. - The problem of universals and the subject matter of logic, Klima 2014, p. 173.

These different theories can be arranged on a 'theoretical scale', ranging from extreme realism to extreme nominalism, meaning maximal semantic uniformity along with maximal ontological diversity on the realist end [...], and maximal ontological uniformity with maximal semantic diversity on the nominalist end.- The problem of universals and the subject matter of logic, Klima 2014, p. 176.

Well, conceptual diversity is obviously a great hindrance to understanding: if we don't have the same concepts, we can- not have the same thoughts, which means we are doomed to talking past each other all the time - Klima 2021 Words and what is beyond, p. 36.

So, what should be our guiding light, in this rational discourse? In one word: rationality, which is love or goodwill on its active side, on the part of the will, and understanding on its receptive, theoretical side, on the part of the intellect. -Klima 2021, p. 41 (Parsons 2014; Read 2015)

'The primary purpose of a logical semantic theory is to define logical consequence in terms of the truth values of propositions in different interpretations' (Klima 1991a, p. 79).

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