

Postdoctoral project abstract: An analysis of vagueness¹

The phenomenon of vagueness is no mere curiosity. First, because it is ubiquitous: it extends far beyond the paradigmatic cases of bald heads and heaps of sand, since most of the divisions that we draw admit of borderline cases. Second, because it gives rise to profound questions, ranging from fundamental matters of metaphysics and logic, to pressing normative ones. Here are some examples:

- Can it be vague when a person has come in or out of existence, and what impact ought this to have on the project of giving criteria for personhood?
- If it's vague whether p , ought we still accept that it's either the case that p or that it's not the case that p ? (In other words, does vagueness undermine the law of excluded middle, and consequently classical logical reasoning?)
- Is it ever permissible to believe that p , or to act as if p , if it's vague whether p ? More generally, if it's vague whether p , is the proper attitude to suspend judgement, or is it something else, like perhaps rejecting or disbelieving that p , perhaps while also disbelieving that it's not the case that p ?

A natural way of approaching these questions is to first determine what vagueness consists in, so as to better ascertain what effects we should take it to have. Given the sorts of questions we are considering, then, what we would like to have is an analysis that takes the following form:

Analysis For it to be vague whether something is the case is for it to be the case that ϕ

where the possible substituends of 'something' are 'that'-complement clauses (e.g., 'that Harry is bald', 'that Nova Scotia is a small province' and so forth) and ' ϕ ' is schematic sentence letter to be replaced by a declarative sentence that provides the relevant analysis. (For more on this approach to analysis, as well as a formal framework for expressing them, see [Rayo \(2013\)](#) and [Dorr \(2014\)](#).)

The primary objective of the proposed project is to provide such an analysis.

That such an analysis is to be had is already controversial. According to some authors [Barnes \(2010\)](#); [Barnes and Williams \(2011\)](#), vagueness is a metaphysically primitive phenomenon which cannot be explained in more basic terms. Even so, it may seem at first glance that it should be easy to find candidate analyses of this sort, given the plethora of 'theories of vagueness' present in the literature. What are arguably the most popular such

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theories, however, do not provide an analysis of the right sort, because they have a different subject matter: they are theories of what it is for a *linguistic expression* to be vague. For example, [Fine \(1975\)](#), [McGee \(1990, 2005\)](#); [McGee and McLaughlin \(1995\)](#); [McGee and McLaughlin \(2004\)](#), [Soames \(1999, 2009\)](#), [Raffman \(1996, 2005, 2014\)](#) [Keefe \(2000\)](#), [Rayo \(2008\)](#) all hold to some variant of the idea that a sentence is vague because it has multiple admissible interpretations which our linguistic rules and conventions do not settle between. [Williamson \(1994\)](#), meanwhile, holds that while there is a unique interpretation selected by our conventional rules and practices, it is one that we in some sense cannot distinguish from nearby alternative ones.

I will argue that a prerequisite on the possibility of giving an analysis of the aforementioned sort is that we recognise that vagueness can attach to propositional content. None of the above theories offer an analysis of what propositional vagueness might consist in. Moreover, the semantic theories endorsed by the leading advocates of this approach entail that there is no propositional vagueness at all. For instance, both [Fine \(1975\)](#) and [Williamson \(1999, 2003\)](#) provide a semantics and a logic for a language containing an operator that can be used to express vagueness in the material mode: these languages contain sentences that can naturally be read as ‘It’s vague whether Harry is bald’, for instance. However, when we look at the details of the semantic framework it becomes obvious that the operator ‘it is vague whether’ is not a genuine propositional operator at all: its semantic clauses are given rather in terms of quantification over admissible interpretations of the language. Adding propositional quantifiers to such a language, which is required for the purposes of expressing analyses of the right form, yields anomalous results: the formal semantics validates a sentence that says that it is never vague whether something is the case. While these theorists generally present this result in a positive light, a negative upshot is that it is consequently impossible for them to offer any adequate analyses of the sort we are aiming for, or indeed to offer any non-trivial generalisations that might answer some of the questions we opened with.

My goal will be to see whether we might not do better. More precisely, the objectives of the project are fourfold:

1. to make a compelling case for the recognition of propositional vagueness;
2. to articulate an analysis of propositional vagueness, preferably one that is compatible with the idea that vague language involves semantic indecision;
3. to work out what the proper logic of the propositional operators used to express vagueness is;
4. to flesh out some of the consequences of the proposed analysis for adjacent philosophical questions, such as some of the questions considered at the beginning.

This project lies at the intersection of several areas of contemporary theoretical philosophy in the analytic tradition: the philosophy of language & mind, metaphysics, epistemology and philosophical logic. As such, it will call upon the full-range of resources available in these and adjacent fields. Highlighting the limitations of the semantic theories offered in calls upon a careful investigation of the proposed formal semantics. Such formal tools will also play a role in investigating questions regarding the logic of the expressions we use to express propositional vagueness.

In the end, we shall not only better understand the nature of the phenomenon of vagueness, but also be in a better position to begin to determine how we ought to relate to it, and how it ought to affect our reasoning and deliberations.

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