



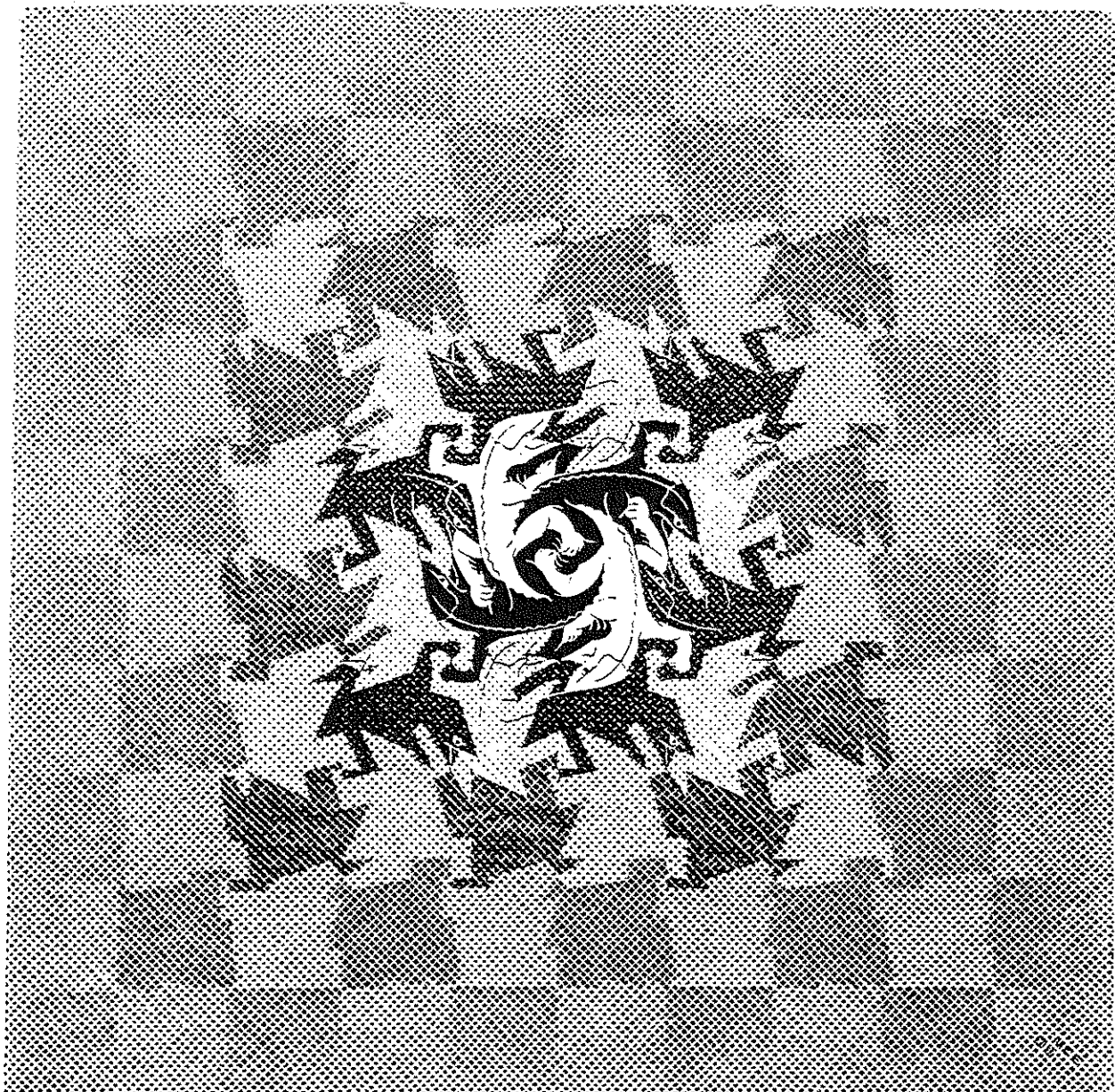
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BEING COHERENTLY VAGUE
The Logic and Metaphysics of Vagueness


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of The Australian National University, November 1993.

Declaration

This dissertation is my own work,
except where otherwise acknowledged.

A handwritten signature in black ink that reads "Dominic Hyde". The signature is written in a cursive style with a long, sweeping underline.

Dominic Hyde

- *If you hit a rock hard enough and often enough with an iron hammer, some mollycules of the rock will go into the hammer and contrariwise likewise.*

- *That is well known, he agreed.*

- *The gross and net result of it is that people who spend most of their natural lives riding iron bicycles over the rocky roadsteads of the parish get their personalities mixed up with the personalities of their bicycles as a result of the interchanging of the mollycules of each of them, and you would be surprised at the number of people in country parts who are nearly half people and half bicycles.*

Mick made a little gasp of astonishment ...

- *Good Lord, I suppose you're right.*

- *And you would be unutterably flibbergasted if you knew the number of stout bicycles that partake serenely of humanity.*

Here the sergeant produced his pipe ...

- *Are you sure about the humanity of bicycles? Mick enquired of him. Does it not go against the doctrine of original sin? Or is the Molecule Theory as dangerous as you say?*

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Introduction

The concept of 'vagueness' has many differing senses. The sense of 'vagueness' with which this thesis deals is not that colloquial sense whereby something counts as vague if it is unclear, inexact or hazy; we are concerned with a more technical sense to be found in the philosophical literature, according to which the hallmark of vagueness is the presence of "borderline cases". Vagueness, in this sense, is primarily an attribute of terms of natural language and manifests itself in apparent semantic indeterminacy; that indeterminacy, for example, that arises when asked where to draw the line between the red and the non-red, or the tall and the non-tall.

The aim of this thesis is to show how this concept of vagueness can also be applied to the world — that which vague natural language seeks to describe.

In Chapter One we focus in on this technical sense, clarifying and disambiguating in the process, in an attempt to arrive at a systematic description of the phenomenon of vagueness. The exercise is not merely descriptive however; the phenomenon gives rise to a logical puzzle, commonly attributed to the ancient Greek philosopher Eubulides of Miletus. This puzzle, more usually considered in the form of a paradox — the sorites paradox, presents vagueness as more than just a challenge for orthodox semantic theory; it is a challenge for orthodox logical theory as well.

The task then is to provide an analysis of the phenomenon of vagueness constrained by the need to satisfactorily dispel puzzlement surrounding the sorites paradox. We shall look in detail at the three theories of vagueness which dominate the analytic approach to this phenomenon; the Epistemic Theory; the Representational Theory; and the Ontological Theory.

The Epistemic Theory discussed in Chapter Two seeks to find a place for vagueness within the orthodoxy. Vagueness, says the epistemic theorist, merely *appears* to have its source in semantic indeterminacy; in fact, natural language is semantically determinate. Claims to the contrary are rejected in favour of an account according to which the purported semantic indeterminacies are in fact epistemological. Vagueness in natural language is a manifestation of the unknowability of certain semantic facts.

Vagueness on this account presents no challenge to orthodox semantics or logic; the sorites paradox has a solution which leaves classical logic intact.

The widespread view that vagueness is properly a semantic phenomenon has left most philosophers dissatisfied with this account (so much so that the epistemic theory is

often ruled out by definition). The remainder of this thesis — Chapters Three to Six — will be taken up with an analysis of vagueness as a semantic phenomenon.

Those theorists advocating a semantic approach to vagueness can be further distinguished by attending to matters metaphysical. Some agree with the epistemic theorist that vagueness is in no way attributable to "the world"; though language contains terms whose meaning *is* indeterminate, this does not reflect any indeterminacy in that which language describes. Such theorists, in claiming vagueness to be a merely semantic phenomenon, endorse what I have termed a Representational Theory of vagueness. It is by far the most popular approach and, consequently, the many variations on the representationalist's theme will occupy us throughout Chapters Three, Four and Five.

Their response to the challenge posed by vagueness varies — some declaring vague language beyond the scope of any semantic and logical theory, and some admitting that orthodox logic and semantics requires extension. At worst, orthodox metaphysics is retained whilst classical logic and semantics are conservatively extended.

However, a small minority, myself included, see vagueness as at least sometimes ontologically grounded; some semantic vagueness is due to indeterminacies in that which is described. Such a view — the Ontological Theory of vagueness — seeks to show how it is that the world could be vague and to subsequently show how classical reasoning in the context of vagueness leads to puzzles which can be avoided if logic is revised appropriately. The task of Chapter Six is to establish this account as a viable and desirable alternative.

This thesis, therefore, will attempt to show how vagueness can constitute grounds for a deviant metaphysics, semantics and logic.