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## **Counting in Language and Reality**

Reality is not presented to us as an undifferentiated mass of colours, shapes, and sounds. Rather, we think and speak of individual objects we can track through time and differentiate from each other. Understanding how language divides reality requires understanding the words and phrases that enable this division. Perhaps the most familiar are number words like "one" and "two", which we use to sort, track, and count. My project aims to give a theory of the meaning and use of natural language number words, and elicit key implications in philosophy of language and metaphysics. This project is timely: recent advances in linguistics and psychology remain largely unexamined by philosophers. It also builds on several recent papers of my own.

Investigating natural language counting will yield philosophical insight into the links between language, reality, and thought. However, the implications extend beyond philosophy. Proper understanding of numerical cognition and speech can shed light on our most basic cognitive mechanisms and social structures. Consider the ability to track individual objects through space and time. Without it I couldn't make a cup of coffee or tie my shoes. To understand this ability, we must understand what it is to treat an object as one. Consider the many and varied systems of monetary currency. Utilizing these requires summation and valuation within conventionalized scales, as well as between them. To fully understand these systems we must understand how we use words to communicate these valuations. These are just two examples among many: counting permeates our thought and language.

In the first phase of the project, I focus on the meaning of number words. I've recently defended the view that number words semantically encode a specific measure function---a function from objects to a value on a conventional scale. This work focused only on certain occurrences of number words: those at the beginning of sentences. I will expand my theory to cover the many different sorts of linguistic occurrences of number words. My theory requires utilizing a hitherto underexplored notion: that of being a partial thing (as opposed to a part of a thing). In developing my theory, I will give a metaphysics of this notion. In the second phase of the project, I turn from meaning to use. We use number words for all sorts of practical purposes---sometimes grouping multiple objects together and counting them as one, if it suits us. I will give a pragmatic theory of how this works. With that theory on the table, I can bring new insight into a familiar philosophical puzzle: the problem of the many. In the third phase of the project, I bring together my theories of the meaning and use of number words to give a novel treatment of the distinction between mass nouns (e.g. "water") and count nouns (e.g. "dog").