Why I Am Not a Nominalist

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Introduction The sum of the divisors of 220 is 284, and the sum of the divisors of 284 is 220. The Pythagoreans spoke of numbers so related as being *amicable*. I don't know how this ancient teaching should be taken, but surely nobody nowadays, except perhaps a stray numerologist or two, would imagine that numbers are literally capable of forming friendships. A number is just not the sort of thing that can enjoy a social life. And this is but the least of a number's lacks.

A number lacks a position in space, such as tables, chairs, and other material bodies possess. It lacks dates in time, such as dreams, headaches, and other contents of minds possess. It lacks all visible, tangible, audible properties. In a word, it is *abstract*.

Disbelievers in numbers and other abstract entities or "universals" have come to be called *nominalists*. Nominalism has always attracted philosophers of the hard-headed, no-nonsense type. But does it not conflict with modern science, which speaks the language of abstract mathematics?

I Instrumentalist nominalism Some nominalists concede that their philosophy of mathematics conflicts with science by implying that science, when it speaks the language of mathematics, is not speaking truly. These nominalists adopt an *instrumentalist* philosophy of science, according to which science is just a useful mythology, and no sort of approximation to or idealization of the truth. Truth is to be sought, rather, in a philosophy prior and superior to science.

The position of the well-known nominalist Nelson Goodman is best understood as a subtle and sophisticated variation on instrumentalism. For Goodman, science is less a useful fiction than useful *nonsense*. But whereas a

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