

# In the name of love?

By defining ideas precisely, as science does, fiction would deny its readers freedom of interpretation.

Alan Lightman

During my career I have had the privilege of working both as a physicist and as a novelist. As a member of both of these communities, I've been fascinated by the different ways in which they work, the different ways in which they think, and their different approaches to truth.

One important distinction that can be made between physicists and novelists, and between the scientific and artistic communities in general, is in what I shall call 'naming'. Roughly speaking, the scientist tries to name things and the artist tries to avoid naming things.

To name a thing, one needs to have gathered it, distilled and purified it, and attempted to identify it with clarity and precision. Consider, for example, the word 'electron'. As far as we know, all of the zillions of electrons in the Universe are identical. There is only a single kind of electron. And to a modern physicist, the word 'electron' represents a particular equation — the Dirac equation with field operators.

That equation summarizes, in precise mathematical and quantitative terms, everything we know about electrons — every interaction, the precise deflections and twists of electrons by particular magnetic and electric fields, the tiny effects of electrons and their antiparticles materializing out of nothing and then disappearing again. In a real sense, the name 'electron' refers to the Dirac equation. For scientists, it is a great comfort, a feeling of power, a sense of control, to be able to name things in this way.

The objects and concepts with which the novelist is concerned cannot be named. The novelist might use the words 'love' and 'fear', but these names do not summarize or

convey much to the reader. For one thing, there are a thousand different kinds of love. There's the love you feel for a mother who writes to you every day during your first month away from home, and the love you feel for a mother who, when you stumble into the house drunk after driving home from the prom, slaps you and then embraces you. There's the love you feel for a man or a woman you've just made love to, and there's the love you feel for a friend who calls to give you support after you've just split up with your spouse. But it's not just the fact that there are so many different kinds of love that prevent the novelist from truly naming the thing. It's also the fact that the idea of love — the particular sensation out of the thousands of different kinds of love — must be shown to the reader not by naming it, but through the actions of the characters.

If love is shown, rather than named, each reader will experience it and, what's more, will understand it in his or her own way. Each reader will draw on their own adventures and misadventures with love. Every electron is identical, but every love is different.

The novelist doesn't want to eliminate these differences, doesn't want to clarify and distil the meaning of love so that there is only a single meaning, like the Dirac equation, because no such distillation could represent love. Any attempt at such a distillation would undermine the authenticity of readers' reactions, destroying the delicate, participatory creative experience of a good reader reading a good book. In a sense, a novel is not complete until it has been read. And each reader completes the novel in a different way.

I'll give another illustration of the difference between naming and not naming. Let me represent science by expository writing. Like science, a piece of expository writing

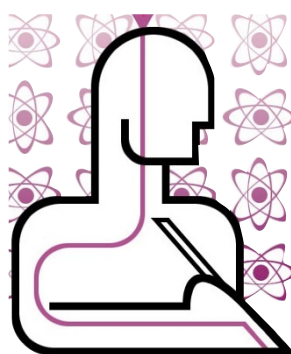


takes a reductionist and reasoned approach to the world. You have a position or argument, you structure this argument in logical steps, amassing facts and evidence to convince your reader of each assertion. We all learn that in expository writing it is useful to begin each paragraph with a topic sentence. A topic sentence, in effect, states the idea of the paragraph at the outset. You thus begin by telling your reader what he or she is going to learn in the paragraph and how to organize his or her thoughts so as to gain as ordered and structured an understanding as possible.

But in fiction, a topic sentence is usually fatal, because the power of fiction is emotional and sensual. You want your reader to feel what you're saying, to smell it and hear it, to be part of the scene you are creating. You want your reader to be blind-sided, to let go and be carried off to a magical place. Every reader will travel differently, depending on his or her own experiences of life. With a topic sentence, you don't leave room for your reader's own imagination and creativity to be engaged as the paragraph unfolds. The difference can be stated in terms of the body. In expository writing, you want to get to your reader's brain. In creative writing, you want to bypass the brain and go straight for the stomach or the heart. ■

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