Arthur C. Clarke’s much-quoted third law of prediction, ‘any sufficiently advanced technology is indistinguishable from magic’, of 1973,1 was anticipated in 1928 by Virginia Woolf. Here is the reaction of her eponymous character Orlando on entering the lift in Marshall & Snelgrove’s, Oxford Street, ‘for the good reason that the door was open’ and finding herself ‘shot smoothly upwards’:

‘The very fabric of life now, she thought as she rose, is magic. In the 18th century we knew how everything was done; but here I rise through the air; I listen to voices in America; I see men flying — but how it’s done I can’t even begin to wonder. So my belief in magic returns’.2

In this spoof biography Orlando is unusual, not to say magical, in having been born during the reign of Queen Elizabeth I and in having spent two of the intervening centuries as a man. Odd as this may seem, the sentiment described is extremely contemporary. Today people are surrounded by inexplicable technology and the belief in magic is indeed returning. This is a challenge to scientific doctors who must, if they are to be called doctors, never cease to practice understanding-based medicine.

I have spent too much of the last 2 days learning how to use the mobile phone which has replaced the one which drowned last week in the Venetian lagoon. Having grimly eschewed a full-blown super-phone, I brought home what the salesman called a ‘classic handset’. If you think that sounds basic and simple, think again. Just one of the many talents hidden inside its tiny shell is a route-finding map of the entire British Isles.

Now, I used to understand how a vinyl record could store the sound waves of its music — I could see the wobbles in its grooves with a magnifying glass. But here we have something entirely different. Every line and curve and character in this map, which I estimate would be about 300 yards across if I could spread it out, is coded into patterns of binary memory flags in a chip somewhere inside the phone. And while I know this to be true, the scale of the miniaturisation involved is many orders of magnitude beyond anything I can meaningfully picture. In spite of this, the size and number of the elements that achieve this apparent magic can be known with absolute precision. In fundamental contrast, when our own brains do things which may seem equally magical, their full extent tends to remain hidden from science because it is impossible to measure or prove.

For example, last week: it was as I was cleating the mooring rope on our hired motor cruiser that I heard the crash at my feet. During the next suspended moment a chronologically impossible sequence of thoughts and feelings seized my troubled mind: I knew instantly the object was my ‘phone, which I had tucked into my shirt pocket that morning. As I watched it bounce away I knew it to be irretrievably lost; but also that it would be safe from abuse (drowned, corroded, and embedded in mud as it undoubtedly soon would be); there were feelings of foolishness; feelings of loss for a neat little possession whose ways I had grown to know, a weary consciousness of the effort that would be required to learn the ways of another; the forty pounds of call-credit possibly lost; but then again, probably not; and last but not least, the seductive vision of a modern super-phone, flashing like the Kingfishers that had been delighting us all week. And all this before the fatal splash, and long before the female voice (not my wife’s) declaring that she hadn’t known I swore.

These are different kinds of magic; the important thing is not to undervalue one of them because it can’t be measured. Our minds will cope with the mysteries of the 21st century just as they did those of the 20th — as long as we acknowledge their ‘magical’ ability to do so.

REFERENCES


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