

Telling Science

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In Genoa, around 1800, a small girl who was probably suffering from a dermatological condition like vitiligo was exhibited in the window of an apothecary's shop. It was claimed that, to protect her against the smallpox, she had been inoculated with cowpox and that the dark patches on her skin were in fact cow hide. She was said to have developed them as a result of being subjected to a technique which, implicitly, had among its dangers that of blurring the boundaries between human beings and animals. Whilst certain contemporaries like Batt, an English doctor, were repelled by what they considered to be a mystification, others believed that being vaccinated meant incurring the risk of developing bovine characteristics. The anecdote shows that science is not enough without the story, but also that stories can be used to ill-effect. The Genoese child was a tool in a 'fake news' item which no doubt spread locally on a much smaller scale than other urban legends nowadays, like the supposed link between different types of vaccination and unrelated conditions including multiple sclerosis or autism. Narrative and science function together in debates around inoculation in 18th-century Europe—and have a lot to teach us about modern questions like the way in which the 'antivax' movement has gained currency.

It is through telling stories about how individuals were saved—or not—that inoculation as a technique was made known and then, on the basis of such stories, either adopted or rejected. The practitioners were lauded in tales of daring which fit standard patterns including stock references to their devotion to science or dismissed in anecdotes which suggested their engagement with medicine was insufficiently academic. The public, hungry for information, often had to make sense of conflicting reports.

The clash between competing narratives was such that there were doubtless more texts published about inoculation in a country like France, in the 18th-century, than there were people actually inoculated against the smallpox. These narratives tapped into questions like the accuracy of scientific data, the value and conditions of medical trials, the potential danger of experiments, the question of how far preventive medicine could be a public policy matter, for instance with a government compelling certain categories of citizens to undergo forms of treatment to which they might object, the role of fashion or peer pressure in some aspects of health and prevention...all of which have clear resonance nowadays.

Science is a never-ending source of wonder and inspiration for narrative, helping us to think differently and create new paradigms. But as is indicated by the tension between accurate reporting and scare stories regarding scientific matters beyond the immediate understanding of most of us, the ambivalent power of narrative in its relation to science lies amongst other things in its capacity to explain what is not immediately comprehensible. A follow-on is that, in its freest expression, it allows us to imagine that which science has yet to invent or to make possible—as the literary genre of science-fiction clearly shows. People were for instance travelling to the moon in stories hundreds of years before the 1969 lunar landings.

By giving something textual reality, we can bring it into a form of existence which has none of the constraints of scientific laws—constraints which time and various developments may help us overcome in unforeseeable manners—or simply make it intelligible to those who do not master the complicated set of conditions necessary for it to occur. Even in science, the art is often in the telling.