

## *Mefisto's Gift: The problem of symmetry*

WALTER ARKADY

It has been twenty years since the publication of *Mefisto's Gift*, and it has consistently presented an unparalleled challenge to both readers and critics alike. Its subtitle ("A diabolical gift from an infernal intellect"), while much derided in the papers at the time, has since been largely proven true. At least one critic has terminated their career over the course of reviewing this text, and if the more hysterical elements of the press are to be believed it also precipitated the conversion of a self-proclaimed "nihilist revolutionary" that attempted unsuccessfully to mail a bomb to the author. The name Simon Quain, once unknown, has now occupied that enviable position once enjoyed by luminaries like Eco, Stratham, and Pynchon in the popular discourse, a vicious mind prone to creating works that entrap as much as they entertain. Naturally, when I was approached to write an introduction for its second printing, I accepted. It had been three years since I defended it in the press, and while I am not prone to saying "I told you so", I believe I have at least reserved the right to chuckle and stare meaningfully into the middle distance.

To understand *Mefisto's Gift* we must first understand its name. Mephisto, of course, is a name any scholar of Marlowe will know well, and his gift bastardised in the popular perception to be that of merely absolute knowledge. Why am I concerning myself with a succeeding, although incorrect, interpretation of a text? I do so because Quain was himself obsessed with the procession of linear time, and the supplanting of what has been with what is to be by means of that ephemeral moment which we call the present. Before he became a writer, Quain was a theoretical physicist, and his work was focused on the extension of a theorem by Emily Noether which states, in the simplest terms, that the conservation laws that govern nature arise through symmetries. If, then, energy is constantly conserved throughout time by the laws of physics, we are to conclude that the laws of physics are themselves translationally symmetrical with regards to time. Which is all a very complicated way to say that the laws of physics do not change throughout history, an apple will always fall at a certain speed towards the head of Newton no matter if it falls in 1000 or 10,000 CE. An explanation of as much, though in much more technical vernacular and accompanied by several mystifying diagrams, was

Quain's self-authored foreword to *Gift*, and no doubt was responsible for sending many readers packing by itself alone.

I do not pretend to be a close confidante or friend of Quain's, we shared a long conversation at a conference on the decaying power of literature a few years ago and have since shared less than perhaps fifty words, some ten of which were delivered by his widower. However, I have witnessed him make with ineffable grace that strange transition few scientists make, and even fewer artists make in the reverse direction. Perhaps that, too, is a breaking of symmetry. Nevertheless, after his death Levi delivered to me the final draft of *Gift*, and asked me to, in Quain's words, "be censorious upon that which demands pre-emptive censoring for posterity". I am proud to say that I made no such futile attempts at dilution, and promptly directed it to a trusted agent of mine, leading directly to its publication several months later as an unadulterated manuscript. So much I have told the world, but this I shall share in public confidence now: I did not, in fact, understand *Gift* when it was presented to me, nor when it was published. In fact, it has taken until this most recent reading, conducted over the last months, to even partially unlock its secrets.

As the table of contents will inform you, *Gift* contains nine sections ("compartments"), each with nine chapters, beginning with the oft-parodied couplet,

O ancients fair upon this matter write  
What matters that Rome's sons were ne'er white? (I.1.01)

"Rome's sons", of course, refers to the many Graeco-Roman statues that today we associate with a sort of austere marble cleanliness, but in their day would have been brightly adorned with as many colours as the average carnival attraction. The double use of "matter" presages the true question of the text, the changing of meaning over time. Just as we might call a car that was once red "a rusty brown car" if we saw it first in its rusted state, so might we now call Rome's statues white when their creators never intended them to be colourless and pale. Iambic pentameter, a callback to Shakespeare, is used for this couplet, although it never appears again in the text, the vast remainder of which is prose.

The following text is a literary *tour de force*, lacking any of the rigidity or exactitude one might associate with scientific prose, but instead examining every facet of the central question possible - the question of the progress of time. Heroes

triumph, then grow old, and in turn become tyrants; a common man discovers that he has the “gift” to automatically rewind time if he is ever placed in mortal peril, eventually culminating in him being trapped forever in a nursing home on the day he suffers a fatal brain hemorrhage, bedridden and paralysed; a mathematician wakes up to find that basic mathematical truths have been overwritten overnight, and only he seems to remember that pi was never 4. All of these I view as attempts to communicate, in a narrative form, the impossible fact that consistency over time is a central, fundamental conceit that underlines both our storytelling and our perception of reality: we are nothing without object permanence. Take away constancy over time, and our universal conceptions deteriorate, if the house we leave is not the house we return to our hold over our reality is lessened. Change, if it must happen, must happen in front of our eyes or following predictable laws, the subtle change that snatches our ground away from us is the most hated of all enemies. For this reason anagnorisis is the height of tragedy, rather than death or downfall.

While Quain abandoned science for letters, he remained cognisant of recent scientific developments. After the election in 2016 I found him despondent at a bar in lower Manhattan, and asked for the cause of his troubles. He told me, simply, that a new form of crystal would soon be discovered that violated time translation symmetry. Then he left. If reports from Levi are true, he began work on *Mefisto's Gift* shortly after.

But, of course, I knew none of that back then, and when the projected crystals were published I read the article that described them with mild interest. These “time crystals” moved, even when they were in the lowest possible energy state. They oscillated, in short, without energy, at rest in perpetual motion. They were an impossibility, and I believe what Quain was trying to convey with *Gift* is precisely this sense of impossibility, this feeling that what was once absolute fact is no longer true, that all is lost to the fundamental chaos of the universe.

In the final chapter of section 9, Quain describes the tale of Sisyphus. Except each time Sisyphus moves the rock up the mountain, he feels a chorus of novel sensations - some days, it's back-breaking labour, other days it's as simple as walking. Without the assurance that physical laws remain the same across time, all human pursuits would be reduced to such a sisyphean endeavour, their discoveries possibly invalidated mere seconds after they are uncovered. It is that realisation, I believe, that is the heart of *Mephisto's Gift*.