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Michael Whitworth, "Roundtable: Versions of History, Versions of Chronology": 72-76

Versions of History, Versions of Chronology

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For this roundtable, I would like to raise two large questions. First, when we deal with the relations of literature and science in an historical way, whose version of history are we working with? Second, how do we deal with various forms of anachronism?

When practiced in an historicist mode, literature and science studies are undeniably indebted to the practices and publications of historians of science, but at times the historical questions that interest literary scholars occupy the margins of published works of science history, and the practices of literary scholars value things – mostly obviously language and form – that are less significant for historians, or that touch them in different ways. For example, take Lorraine Daston's remarks about E. A. Burtt's 1925 publication *The Metaphysical Foundations of Modern Physical Science*. In a brief appreciation of the book, Daston remarked that it had been neglected by the scientific journals of the time (Daston). Whatever the truth of that claim, Burtt could not be said to have been neglected by the literary and generalist journals of his time. Reviews appeared in the literary sections of political weeklies (*The Nation and Athenaeum*, *The Spectator*, and *The Weekly Westminster*), in a large-circulation literary review (*The Times Literary Supplement*), and in three little magazines (*The Calendar of Modern Letters*, *The Dial*, and belatedly in 1931, *The Criterion*).[1] It was quickly picked up by the authors of popular scientific works, and alluded to by Aldous Huxley in his novel *Point Counter Point* (269).[2] Burtt's treatment of the concept of the 'Spirit of Nature' was alluded to soon after publication by one of the founders of the field, Marjorie Hope Nicolson (422). This evidence does not refute Daston's contention, but indicates one of the ways that the history of books within the scientific community does not necessarily correlate with the history within other communities and intellectual sub-cultures. Similar examples could be drawn from history-of-science accounts of the reception of relativity theory: accounts focusing on the scientific community take their terminal date as 1919, whereas in considering materials that circulated among literary writers and readers we must extend 10 years or more after that date, and will find relatively little before it.[3] Whose history? The historian of science's account is not always sufficient for the needs of literary scholars. When my doctoral studies began to focus on the 'new physics,' I became aware that no published history provided the sort of account that I was looking for, and that I would have to assemble the information myself (Whitworth, "Physics and the Literary Community").

Historians of science don't always interest themselves in the same topics as scientists, or produce accounts of science that scientists find credible. In particular, scientists tend to favour whiggish histories in which the value of past science is determined by the extent that it anticipated the present state of the field, while historians of science have been far more open to exploring lines of development that later science has disavowed. Literature and science has tended to favour the scientific mainstream in this regard: Darwin and Einstein rather than lesser known contemporaries. Though I'm as guilty as anyone else in this regard, I wonder whether ether theory, the theory of gravitation overthrown by the Michelson-Morley experiment and then by Einstein, might have made an impact upon the literary consciousness. Certainly Oliver Lodge continued to disseminate the theory through

the mass media well into the 1920s.[4] It takes a certain kind of bravery, however, to commit to a defunct scientific theory that seems without any kind of credibility. While the rediscovery of spiritualism, mesmerism, and parapsychology under the rubric of 'weird science' has opened the doors somewhat, and while the recent conference on scientific canons implicitly raised the question of which sciences we choose and why, 'weird' science and (retrospectively) 'wrong' science are marginal in very different ways.[5] I suspect it is also easier to be taken seriously by a book publisher if one is dealing with a science that has been confirmed as valuable by later developments. In the world of popular history publishing, the current trend towards subtitles that spell out the point of the book favours events and theories that did something, that led somewhere, or that prove someone's point: we're unlikely to see a book titled *Ether: How One Theory of Gravitational Force Proved to be Over-Complicated and Wrong*, or *Phlogiston: Why Things Burned in the Eighteenth Century* (though if anyone wants to borrow these titles I'd be delighted to be proved wrong).

Anachronism is anathema to historicist methodology, and yet, practically speaking, it cannot be completely avoided. One difficulty in studying literature and science historically is the incommensurability of the archives that each provides. Science sets great store by being cumulative and sequential, and a scientific work that seems to overlook significant work in its field risks being accused of being unscientific: if there are giants available, you must stand on their shoulders. The importance attached to being fully informed of the latest work is inseparable from the importance attached to priority of discovery; the latter may also owe something to the applied sciences and the importance of acquiring intellectual property rights to discoveries with commercial applications. One consequence of science's concern with sequentiality is that dating becomes significant. Histories of science can very often provide precise dates for crucial experiments and for submissions of papers to journals.

Science is not absolutely different from literature in this regard. Indeed, one effect of T. S. Eliot's insistence on 'tradition' as a process was greater recognition of the ways in which a literary author builds on what has been done before, and a concomitant relegation of the independent genius model of literary creativity (Whitworth, *Pièces d'identit*).[6] However, although literary criticism has recognised the importance of accumulation, and although it may be part of many literary writers' creative process, there are no professional incentives for literary writers to date their manuscripts with precision. The published text of a scientific paper at the present time might record the date of submission, the date of the revised paper, and the date of publication. There is a distinctive bibliographic code surrounding it which has no equivalent in literary production. When first published, lyric poems are not accompanied by 'date of inspiration,' 'date of composition,' 'date of revision,' or 'date of submission,' though later scholarly editors might manage to recover some of this information. Though both scientific and literary production operate within a chronology – for most modern authors, we can establish the publication dates of books at least to a year, and very often to a precise day – the degree of precision available is not compatible.

For example, to cite a case I have considered elsewhere, might the ray of light in Wilfrid Wilson Gibson's sonnets "Chambers" (published in *The Athenaeum* 1 July 1919) owe anything to the discussions of relativity theory and rays of light that had appeared in the same journal in April and May of the same year? (Whitworth, "Within the Ray of Light"). The sonnets do not present themselves as 'topical,' but they may nevertheless incorporate recently aired ideas. It is equally possible that they may have

been on the author's or the editor's desk for a matter of months. If we did not know of J. W. N. Sullivan's articles on relativity in the *Athenaeum*, which were unusual in anticipating A. S. Eddington's announcement of the experimental proof of relativity in November 1919, we might be inclined to see Gibson as uncannily anticipating the imagery of scientific exposition which became available so widely after November 1919; as it is, the case looks more like one of prosaic borrowing. But as so often in matters of literary inspiration, the language of the poem is only loosely connected to the language of expositions of the scientific theory, and those expositions are, in the case of a mathematical science, one stage removed from the mathematical formulation of the theory. The language in itself does not offer solid proof of borrowing; that would occur only where novel terminology was employed. The language of the 'ray of light' might owe as much to the language of divine illumination as it does to contemporary science. Of course some such cases are resolvable, because the author kept diaries that record composition or reading. But in the literary sphere such attention to the chronology of production is far more rare than it is in the scientific. For astronomical reasons, we know exactly when Eddington made his eclipse observations in 1919, and, for socio-historical ones, we know exactly when he announced his findings. In the case of Gibson and thousands like him, we know next to nothing.

One solution to such problems is to cut the Gordian knot and to assert the supremacy of the literary imagination, a facility so penetrative that it can anticipate scientific discoveries by decades and detect nascent theories as they vibrate through the ether. There's a significant sub-genre of criticism that works in this way. A formative moment for me was reading an article by Hugh Kenner that related Ezra Pound's *Cantos* to the then-voguish (and admittedly fascinating) topic of fractal geometry. *The Cantos*, it turned out, exhibited the same self-similarity that was to be found on many a lurid book cover and poster. While Kenner's main theme was not that Pound had anticipated the work of Mandelbrot et al., he nevertheless falls into the rhetoric of critics who make such claims: Pound was "fishing for fractals" and "is even predicting a geometrician who'll discover them" (729). While there's a case to be made for the article – that by using fractal geometry it makes a case for there being a form to Pound's apparently formless epic – there's also something self-contradictory about its relation to the authority of science. On the one hand it wishes to give creative primacy to the poet as one who invents a new formal language, yet on the other its case implicitly rests on the authority of mathematics. Kenner's article was formative for me because it became the paradigm case of something to avoid. The 'anticipations' that we discover in literature are too often anachronisms and self-projections. However, I'm left with an opposite if not quite equal feeling that historicism cannot completely bracket off history from the present; that what we find interesting in the past will be interesting because of something happening in the present, and that the questions we put to it will derive from the present. As Sally Shuttleworth discusses in her article here, the problem is how to present the parallels; how to preserve the independence of past and present, allowing neither to determine the other, while at the same time allowing the reader of one's criticism to create dialogues between them.

Notes

1. The reviews in question were by: J. W. N. Sullivan, *TLS*, 4 June 1925, p.376; Bertrand Russell, *Nation and Athenaeum*, 37 (13 June 1925), p.326; J.W.N. Sullivan, *The Calendar of Modern Letters*, (July 1925), pp.400-03; J. W. N. Sullivan, *Weekly Westminster*, 15 August 1925, p.406; Bertrand Russell, *The Dial*, 79, no.3 (September 1925), pp.255-8; Alan Porter, *The Spectator*, no.5079 (31 October 1925), 778-9; William Empson, *The Criterion*, 10, no.38 (October 1930), pp.167-71.

2. See also Rice and Ward.

3. For the scientific reception of relativity from 1907 to 1919, see Sanchez-Ron, "The Reception of Special Relativity in Great Britain."

4. Oliver Lodge's *Ether and Reality* (London: Hodder and Stoughton, 1925) was based on BBC radio broadcasts earlier in that year.

5. See the special issue of *Victorian Review* 26.1 (2000) on 'Weird Science,' edited by Martin Willis. A conference with a similar focus (on "Scientific Canons") was held at University of East Anglia, 6 May 2011, organised by Adelene Buckland.

6. On Eliot, tradition, and science, see Whitworth, "*Pièces d'identité.*"

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