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Kanta Dihal, "On Science Fiction As a Separate Field": 32-36

On Science Fiction As a Separate Field

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It is surprising to see what kinds of disciplinary boundaries a field so inherently interdisciplinary as literature and science relies on. Ever since beginning my forays into the field four years ago, I have noticed an often deliberate lack of engagement with science fiction and its critics. Indeed, it came as a complete surprise to me that science fiction studies is a different field from ours. Interdisciplinarity is what drew me to the study of literature and science in the first place, as this research field offered me the opportunity to cross what I thought was perhaps the largest possible disciplinary gap, between quantum physics and literature. Literature for me includes science fiction. And yet, in this field we study science and we study fiction, but very few of us study science fiction.

My argument in this short article is based on my personal experiences as a PhD researcher working in both literature and science and science fiction studies, as I investigate the many different ways in which stories are constructed around quantum physics —in popular science, in canonical literature, and in science fiction. The 2015 British Society for Literature and Science (BSLS) conference in Liverpool was one of the first conferences I ever attended, and it came as a great surprise to me to discover that there were hardly any papers, and not a single panel, that focused on science fiction. In hindsight, this was particularly astonishing because the University of Liverpool is a major science fiction research centre, its library holding the largest science fiction collection in Europe. Although I have since then encountered several researchers who do cross these boundaries individually, the fields cannot be said to engage much with each other at all. The disciplines have separate research associations: the BSLS and the Society for Literature, Science and the Arts (SLSA) on the one hand, the Science Fiction Research Association (SFRA) and Science Fiction Foundation (SFF) on the other. These associations publish their own discipline-specific journals: the *Journal of Literature and Science* and *Configurations* focus on literature and science, *Extrapolation*, *Foundation* and *Science Fiction Studies* on science fiction. I am not arguing that the two fields should merge, the two fields are not similar enough to warrant a full merger. However, they do overlap in some areas, and this overlap seems to be actively avoided by researchers especially on the literature and science side.

Most literature and science researchers will be familiar with Charlotte Sleigh's 2010 claim that "science fiction is, rightly or wrongly, not taken seriously as a genre of literature with a capital 'L,' and I hope this book might be taken seriously" (Sleigh x–xi). Sleigh's apology for the fact that she lacks scholarly expertise in science fiction studies is controversially phrased, yet nevertheless seems to reflect the current general opinion among literature and science scholars. In 2015, Martin Willis provided an updated overview of the field in his own *Literature and Science*, this time claiming that "there are also considerable critical traditions in, for example, science fiction . . . but which are not discussed in the present *Reader's Guide* as they do not form a part of the essential criticism of the field" (Willis 4). Both of these monographs show an urge on the part of literature and science researchers to distance themselves as quickly as possible, in the introduction to the works, from the irrelevant or even tainted field of science fiction studies.

Sleigh's book happened to be the first work on literature and science I read, and reading her introduction as a student had a significant impact on my own work. When I wrote the proposal for a PhD in literature and science, it originally did not cover any science fiction at all—it was my supervisor, Sally Shuttleworth, who very soon after the start of my PhD convinced me to include science fiction. I am grateful for that, but I also wonder how many other early-career literature and science researchers were similarly discouraged and made a more permanent decision to avoid science fiction. One can see how this adverse reaction may also occur the other way around, as science fiction researchers might find literature and science critics too dismissive of their work to consider collaborating.

Conversely, the field of science fiction studies "has never found a foothold within literature and science (and has never sought it)" (Willis 167). Both fields have coexisted without mutual interaction for at least seven decades: early science fiction research such as the work of J.O. Bailey (*Pilgrims through Space and Time*, 1947) dates back to the late 1940s, the decade in which Marjorie Hope Nicolson published her seminal work in the as-yet-unnamed field of literature and science (*Newton Demands the Muse*, 1946). Yet in spite of the discipline's long history, many science fiction scholars seem to confirm the legitimacy prejudice expressed by Sleigh. Brian Aldiss and David Wingrove coined the term "Generalization-22" for "the generalization which says that all science fiction is rubbish. . . . [The term is] not solely the creation of the hostile outside world. It has been fostered in part by the SF world, who have insisted that its kind of reading is Different" (Aldiss and Wingrove 15). Even in the twenty-first century, both science fiction critics and authors continue to reinforce this generalization. A famous example is Margaret Atwood's claim that her novels *The Handmaid's Tale* (1985) and *Oryx and Crake* (2003) are not science fiction, but speculative fiction, as the former genre promises its readers "the talking squid of Saturn" (Atwood 513). The science fiction counterpart to Willis's work, Brian Baker's *Science Fiction* (2014), published in the same Macmillan series, opens in a manner that seems to reinforce this generalization by vehemently denying it. The main themes of his introduction are "Science fiction's crises of legitimation, and how science fiction (and its criticism) remains a contested field" (Baker vii).

However, in that same year, a more confident approach emerged in *The Oxford Handbook of Science Fiction*. No defensive hedging is to be found in Rob Latham's introduction, although the author of the cover blurb still felt the need to emphasise that "No longer marginalized and fighting for respectability, science-fictional works are now studied alongside more traditional art forms." Whereas many SF scholars emphasise an underdog narrative, the blurb of Latham's collection emphasises a growing out of the underdog status. Both approaches, however, cling to the vestiges of an idea that their field needs legitimizing and defending, thus perhaps obstructing the true legitimization that comes with confidence. I find this painful to see: a field that shows little confidence about itself is unlikely to inspire young researchers to commit to it.

The discipline of literature and science, on the other hand, "reinforce[s] its legitimacy as a scholarly approach" through "a focus on canonical figures" (Tattersdill 33). The field of literature and science studies arguably originates in the 1980s, very confidently building on the original work of Beer, Haraway, Hayles, and others, who engaged little with science fiction. The fledgling discipline ignored the small but nonetheless impressive body of work that had been created in science fiction studies during the preceding decades by such critics as Kingsley Amis, Brian Aldiss, and Darko

Suvin. Science fiction criticism, meanwhile, largely omitted the work of the aforementioned literature and science critics from their own research.

The latter omission could partly be caused simply by the fact that literature and science is still a small field: as Martin Willis points out, it is not even known as such in North America, where the field is more often called "science and literature" (Willis 1). But even within an exclusively British context, a significant body of criticism appeared in both disciplines in this period. Literature and science used it to claim a foundation in legitimate academic practice, whereas science fiction used it to explore tentatively the possibility of legitimacy. Yet to those who still feel that science fiction has a less well-developed critical tradition than literature and science, I would like to propose one counter-example: that the field of science fiction studies might be better at confronting its past and present Western bias and racial prejudices than literature and science. Postcolonial critiques of science fiction have been published since the beginning of this century (Pordzik; Rieder). Conversely, "literature and science studies have, to date, largely focused on science in the Western world" (Gill 50). The BSLS Winter Symposium on The Politics of Literature and Science, held in December 2016 at the University of Exeter, seemed to be one of the first concentrated efforts within literature and science, after an urgent call for the necessity of addressing this topic at the 2016 BSLS conference.

Another reason for the lack of engagement from the perspective of science fiction studies could be the discipline's active pursuit of research into other media. Whereas Darko Suvin (1979) and Carl Freedman (2000) were eager to establish science fiction as a literary genre first and foremost, current researchers emphasise that this approach meant a conscious rejection of many science fiction media: Suvin and his adherents even rejected the pulp magazines as objects worthy of study (Latham 2). For science fiction studies, increasing their engagement with a discipline that exclusively studies literature might feel regressive. Although I do not have the room to discuss this further here, I would suggest that that this move toward including more media should be considered by literature and science as well, perhaps even to the point where our field might become known as 'fiction and science'. As the Fiction Meets Science project in Germany shows, this rebranding opens up the discipline to science fiction, without limiting itself to this genre.

From the perspective of someone who studies the various narratives that are constructed around science, the exclusion of science fiction is striking because it disregards an immensely popular and influential genre. Science fiction is used in science teaching, through works such as Barry Luokkala's *Exploring Science through Science Fiction* and Lawrence Krauss's *The Physics of Star Trek*. The genre is also a fruitful resource for research in a direction which has as yet been less explored: the influence of fiction on scientific practice. In many media, science fiction is one of the most important genres in which collaborations between the scientific and the artistic community take place: one particularly hilarious example is the joke physics paper titled "Traversable Achronal Retrograde Dimensions in Spacetime" or "T.A.R.D.I.S." (Tippett and Tsang) which posited a new theoretical model for time travel and gained a lot of media attention upon its submission to the arXiv, a database of science preprints. More serious is the collaboration with NASA for the making of the film *The Martian*, and the dozen-or-so published academic papers that came out of the research for *Interstellar* that was carried out in order to make the black hole look realistic on screen.

As an early-career scholar, I am not in the position to demand change in either the literature and science or the science fiction research field. However, I find that

working in both fields enriches my research, which would be lacking an essential element if I had never considered including science fiction in my corpus. If the field of literature and science wishes truly to engage with all intersections of literature and science, it cannot omit science-fiction literature.

Works Cited

Aldiss, Brian W., and David Wingrove. *Trillion Year Spree: The History of Science Fiction*. Gollancz, 1986.

Amis, Kingsley. *New Maps of Hell: A Survey of Science Fiction*. 1960. Penguin Classics, 2012.

Atwood, Margaret. "The Handmaid's Tale and Oryx and Crake 'In Context.'" *PMLA*, vol. 119, no. 3, 2004, pp. 513–517.

Bailey, J. O. *Pilgrims through Space and Time: Trends and Patterns in Scientific and Utopian Fiction*. Argus Books, 1947.

Baker, Brian. *Science Fiction: Reader's Guides to Essential Criticism*. Palgrave Macmillan, 2014.

"Fiction Meets Science: The World of Science under the Literary Microscope." www.fictionmeetsscience.org/ccm/navigation/. Accessed 28 Apr. 2017.

Freedman, Carl Howard. *Critical Theory and Science Fiction*. Wesleyan UP, 2000.

Gill, Josie. "Review of Uppinder Mehan's 'Postcolonial Science, Cyberpunk and The Calcutta Chromosome.'" *Journal of Literature and Science*, vol. 6, no. 2, 2013, pp. 50–51.

Krauss, Lawrence Maxwell. *The Physics of Star Trek*. 1995. Rev. ed., Basic Books, 2007.

Latham, Rob, ed. *The Oxford Handbook of Science Fiction*. Oxford UP, 2014.

Luokkala, Barry B. *Exploring Science through Science Fiction*. Springer, 2014.

Nicolson, Marjorie Hope. *Newton Demands the Muse: Newton's Opticks and the Eighteenth Century Poets*. Princeton UP, 1946.

Pordzik, Ralph. *The Quest for Postcolonial Utopia: A Comparative Introduction to the Utopian Novel in the New English Literatures*. Peter Lang, 2001.

Rieder, John. *Colonialism and the Emergence of Science Fiction*. Wesleyan UP, 2008.

Sleigh, Charlotte. *Literature and Science*. Palgrave Macmillan, 2010.

Suvin, Darko. *Metamorphoses of Science Fiction: On the Poetics and History of a Literary Genre*. 1979. Edited by Gerry Canavan, Peter Lang, 2016. Ralahine Utopian Studies 18.

Tattersdill, Will. "Questioning Categories of Science and Fiction in Fin de Siècle Magazines." *Science and Literature: The Great Divide?*, special issue of *MHRA Working Papers in the Humanities*, vol. 7, 2013, pp. 33–40.

Tippett, Benjamin K., and David Tsang. "Traversable Achronal Retrograde Domains In Spacetime." *arXiv preprint*, 4 Nov. 2013, arxiv.org/abs/1310.7985.

Willis, Martin. *Literature and Science: Readers' Guides to Essential Criticism*. Palgrave Macmillan, 2015.