

# Science/Literature: The Interface

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'By training I was a scientist: by vocation I was a writer. That was all.'  
C. P. Snow, *The Two Cultures* (1)

**T**HIS SPECIAL SECTION OF THE *AUSTRALIAN HUMANITIES REVIEW* EMERGED FROM THE Literary Studies Convention at the Australian National University from 3-7 July 2018. As a conference which brought together Australia's four major literary studies associations, it showcased a range of approaches to literary scholarship to discuss 'the literary as an interface between different forms of knowledge and processes of knowledge formation, looking at questions of how and through what means the literary is communicated, represented, negotiated, and remade'. One of the approaches prompted by this theme was the ways in which literature can translate, communicate, or re-imagine scientific knowledge. This seemed particularly apt given that one of the definitions of 'interface' is 'an apparatus designed to connect two scientific instruments so that they can be operated jointly' (*Oxford English Dictionary*), for example, two different computer operating systems. In other words, the interface is the meeting place which allows translation to occur.

Science as a narrative for public consumption is by no means new. Darwin's writings were inherently literary in style (Rothwell). Science writing can adopt the provisional, the fictive and the metaphoric to fill the interstice between complex

hypothesis explaining the real and the real as simply and readily perceived (Beer). And, most importantly, the translation of complex scientific knowledge is critical in a world in which we are crashing through the world's sixth mass extinction, and in which the latest report from the Intergovernmental Panel on Climate Change (IPCC) describes how the alterations to 70 percent of land on the Earth's surface are adding significantly to climate-warming emissions. As Steven Allison and Tyrus Miller note in *The Conversation* (a popular outlet for the communication of science), while humans are responsible for climate change, it is viewed as a scientific problem. This is reflected in the IPCC's report, in which little more than ten pages are devoted to 'climate ethics, social justice and human values'. The division between science and the humanities, between facts and their communication, still remains, even sixty years after it was famously referenced by C. P. Snow in his influential 1959 Rede Lecture on the 'two cultures'.

Snow perceives these two cultures as being situated at two poles, with 'literary intellectuals at one pole—at the other scientists' (4). Between them lies, as Josh Mostafa canvasses in the first essay in this special section, 'a gulf of mutual incomprehension' (Snow 4). Mostafa's essay, 'In Search of Lost Time: Fiction, Archaeology and the Elusive Subject of Prehistory', interprets these two poles not so much as literature (or literary criticism, as he explains) and science, but as scientific research and creative writing. He applies his exploration to the translation of archaeological facts (and empathic understanding of lives lived) into fiction about prehistory, and the different modes by which this might be accomplished authentically given the scantiness of archaeological data from this period. Mostafa's insistence of collaboration and the meeting of archaeological/historical and creative methods compels us to reimagine and revisit Snow's critique of the two cultures nearly three quarters of a century ago.

Jessica White continues this exploration of the tension between fact and fiction in her essay 'Libraries of Plants: Reading for Survival'. Investigating the representation of plant science in three texts—John Wyndham's science fiction novel *The Day of the Triffids* (1951), Peter Wohlleben's work of popular science, *The Hidden Lives of Trees* (2015) and Mununjali author Ellen van Neerven's story 'Water' from her collection *Heat and Light* (2014)—White posits that reading about plants can be a way of counteracting plant blindness, or the inability to see plants as having agency and individuality. This lack of perception proves a threat to humanity in Wyndham's novel; provides a warning in Wohlleben's text; and offers the possibility of restoration for Aboriginal peoples after invasion in Van Neerven's story. The protagonists in these works, whether fictional or non-fictional, first receive information about plants through the scientific method, which is 'commonly represented as ideally comprising some or all of (a) systematic observation, measurement, and experimentation, (b) induction and the formulation of hypotheses, (c) the making of deductions from the hypotheses, (d)

the experimental testing of the deductions, and (if necessary) (e) the modification of the hypotheses' (*Oxford English Dictionary*). However, not everyone who associates with science follows the scientific method, nor is science, as White suggests, a culturally singular episteme.

Anna-Sophie Jürgens, in her essay 'The Matter of Fact: Science and Identity in Contemporary Australian Literature', highlights how, through a reading of *Rifling Paradise* by Jem Poster (2006) and *Fall Girl* by Toni Jordan (2010), science and scientific practice may become questionable and questioned outside the controls of academic institutions and peers. Innovatively probing the interface between science as a literary trope and identity narratives, Jürgens presents the socio-cultural relevance of science in fiction. Exploring two problematic fictional characters, this paper applies and develops Roslynn Haynes' taxonomy of scientist stereotypes in *From Madman to Crime Fighter: The Scientist in Western Culture* (2017) to argue for the inclusion of non-stereotypical *non-scientists* in our cultural imagination.

Each of these papers address the ways in which imagination can—and indeed must—be used to convey scientific fact to non-scientifically minded audiences. They also share a representation of science as a narrative trope that can exist for vital affective and social functions beyond the presumed scope of empirical science. Without imagination, we cannot problem solve. Creativity is thus a core component of science, and it is matched in the world of writing.

The discipline of science covers an array of fields, including biology, chemistry, physics, genetics, mathematics (to name a few), and when it meets one of the many genres that constitute literature—literary fiction, genre fiction, creative nonfiction, popular science, poetry and play—the range of options for stories that contain and communicate science is vast. While, for this special section, we have selected only three papers to illuminate ways in which science and scientists meet a literary interface, we encourage readers, whether scientifically-minded or not, to explore the dizzying options for reading and thinking about the ways in which literature and science can animate, express and energise each other.

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