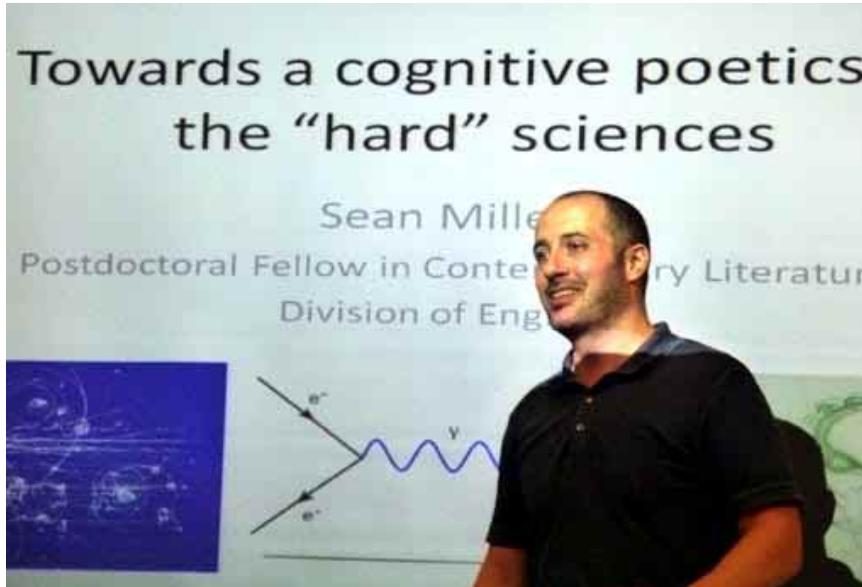


What is Interdisciplinarity?

By Dr Sean Miller, Postdoctoral Fellow, Division of English

Early this year, HSS formed five interdisciplinary research clusters to promote cross-disciplinary research. In this issue of *Horizon*, Dr Sean Miller, whose research interest cuts across literature and science, attempts to define interdisciplinarity. We also take a look at the Literary and Cultural Studies cluster, and the New Frontiers in Neuroscience cluster.



Dr Sean Miller is a specialist in Literature and Science Studies.

Interdisciplinary research is in vogue. But do we all agree on what it means?

In order to understand what interdisciplinarity means, we need to have a clear sense of what an academic discipline is. While as specialists, we're able to define our own disciplines, we may not be so adroit at defining unfamiliar disciplines. To complicate matters, any attempt at sorting out the disciplines inevitably provokes tricky questions of categorisation.

In my recent work on theoretical physics as a scientific discourse, I have come to appreciate two relatively distinct forms of interdisciplinarity. The first I'll call "interdisciplinarity with a lower-case 'i'". It generally involves the use of established methods within a discipline to investigate relatively unexplored territory – or the blending of methods from related subfields. An example in English would be using semiotics to interrogate the iconography of professional wrestling. The second form I'll

call "Interdisciplinarity with a capital 'I'". It usually involves the use of methodologies that cross major disciplinary boundaries. It is, by far, the more difficult to achieve – yet potentially more impactful.

Those unfamiliar with English as a discipline might think that it concerns itself exclusively with the study of literature. But over the past few decades, English has opened into culture studies, an approach that employs literary critical methods to interrogate non-literary discourses. Such an approach operates under the assumption that all cultural practices embody a system of

meanings and values represented in a range of cultural artifacts, that may be read as texts. Culture studies, as a subfield of English, overlaps productively with disciplines such as anthropology, philosophy, history, and media studies, among others.

As we all know, disciplinary methods imply methodological assumptions, some of which go relatively unexamined. A basic contention of culture studies is that what one might call a *discourse world* undergirds the fundamental assumptions of a given discipline. To some, it may be vaguely threatening in that it suggests that we in one discipline can recognise the blind spots in another.

A knee-jerk reaction to perceived incursions across disciplinary boundaries is to do boundary work, to borrow a term from the sociologist Thomas Gieryn, where guardians of the discipline under uninvited scrutiny dismiss such scrutiny as illegitimate. At times, the urge within a discipline is to claim for itself the full authority to define itself. A more measured response is to welcome this kind of scrutiny inasmuch as it offers a reinvigoration of methods through its defamiliarisation, along with a revisioning of unexamined assumptions. I believe this kind of Interdisciplinarity holds great promise for academic work in the twenty-first century.

Imagining String Theory

Dr Sean Miller's book, *Strung Together: The Cultural Currency of String Theory as a Scientific Imaginary*, will be published by the University of Michigan Press in January, 2013. *Strung Together* is the first sustained study of string theory as a cultural phenomenon, synthesising recent developments in continental philosophy of science, cognitive linguistics, and literary criticism to examine the role the imagination plays in the production and dissemination of string theory as scientific knowledge.