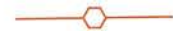


INTERDISCIPLINARITY

A HISTORICAL VIEW

by
DAN CALLWOOD



Behind the buzzword “interdisciplinarity” lies a hidden history. Historian Dan Callwood probes the political aspects of this burgeoning academic trend.

Interdisciplinary study, “interdisciplinarity”, and “transdisciplinarity” are all academic buzzwords that have captured both the imagination and funding. Even a cursory search on JSTOR, the online academic journal service, brings up a wide range of papers that take an interdisciplinary approach to research, mixing fields as diverse as sociology, linguistics, education and environmental sciences. However as an idea, a set of methods and a way of organising research, it deserves to be interrogated and placed in its historical context. What do we mean when we use the term “interdisciplinarity”? What are its historical foundations in the university? Is it an esoteric, scholarly concept? Is it implicated in the power relations that govern all knowledge-generation and dissemination? If interdisciplinary study challenges the institutional and intellectual boundaries of different fields of study, shouldn't we challenge its own foundations?

Interdisciplinarity is the merging of two or more academic fields to create knowledge previously unattainable within the bounds of each established discipline. This creation of knowledge could manifest itself through innovative individual work, through collaboration, or in new fields such as Middle Eastern studies in the humanities, or nanotechnology where physics, chemistry and engineering intersect.

In order to investigate and understand the term, and the organisations and study it has spawned, we need to look at the rise of the ordering of knowledge and academic disciplines themselves. The novelist William Gaddis wrote,

Knowledge has to be organised so it can be taught, and it has to be reduced to information so it can be organised... In other words this leads you to assume that organisation is an inherent property of knowledge itself, and that disorder and chaos are simply irrelevant forces that threaten it from outside.¹

Arguably, this is not the case; ordering knowledge into different disciplines and methodologies only masks the chaos of analysing that information. In order to make sense of this chaos of information, we organise study into

“disciplines”. As well as meaning the organisation of knowledge, discipline can also be defined as the training of people (through threat of punishment) to follow codes of behaviour. These definitions intertwine in educational establishments. In the 15th century, “discipline” was a kind of moral instruction that taught self-control. Although contemporary academic faculties do not take this aspect of “discipline” quite so seriously, the term does still reveal the enmeshed relationship of knowledge and power.

Attempts to order knowledge in this fashion date back to the ancient Greeks, who categorised knowledge and suggested a hierarchy for forms of knowledge. Later, the burst of information produced by the Scientific Revolution led scientists to limit themselves to increasingly narrow fields. Knowledge was then tamed by the codifying impulses of the Enlightenment, best encapsulated by the production of Diderot's *Encyclopédie* in 1751.

However, it wasn't until the 19th-century development of the modern university that the state began to sponsor and shape the production and disciplining of knowledge. Even the humanities were under pressure to conform to scientific method in order to tighten their subject areas, leading to the birth of sociology in the 1830s and the development of disciplines such as English, modern languages, politics and economics.

This was not a smooth process; as long as there was an impulse toward specialisation and classification, there was also resistance. Nietzsche, for one, hated the rise of the specialised and professionalised “scholar” at the expense of the wide-ranging “philosopher”. He claimed,

The Declaration of Independence of the man of science, his emancipation from philosophy, is one of the more subtle after-effects of the democratic form and formlessness of life.²

Faced with this ossifying process of specialisation, it's easy to see why “interdisciplinarity” is a worthy idea. Adding the prefix “inter” to the loaded term “discipline” seems at first to change its meaning radically. “Inter” evokes notions of inclusivity, exchange and reciprocity, softening Nietzsche's elitist notion of

philosophy as a higher form of knowledge and privileging collaboration as the means to attain a comprehensive knowledge of the world. This may be bound up with a mistrust and lack of confidence in our faculties to know much outside a narrow sphere of specialisation.

But does the term "interdisciplinarity" really imply a cuddly inclusivity and openness to new ideas, free of internal faculty boundaries and even international borders? The institutional basis that allowed much interdisciplinary study to develop in the 20th century suggests otherwise. During World War II the Allies saw the value of employing the best minds to analyse potential risks and provide knowledge about the enemy. In an atmosphere of total war, academics worked, mostly in secret, for the Office of Strategic Services in the United States or the British Foreign Office's Information Research Department. This collaboration between academia and the state served as a model for knowledge generation in the Cold War. As the state's interest moved to different areas of the world, the state was not concerned with the borders between disciplines that academics had created. Instead, the state brought academics together under "area studies", for example at Columbia University's Russian Institute, created in 1946, and Harvard's Russian Research centre, set up in 1947. During the Cold War, academics from different disciplines were placed together in institutes, which forced exchange, with geopolitical pressures dictating the areas necessary to study, such as the Soviet Union itself, or the Pacific Rim. By encouraging exchange across disciplines, these centres would aim for a kind of totalising knowledge of their field by going beyond rigid disciplinary boundaries. Outside the direct production of knowledge for the state, interdisciplinary study areas such as American Studies diffused influence and "soft power" by promoting a patriotic amalgam of history and literature that spoke of the superiority of American culture.

The history of interdisciplinary study is not all academic collusion with the aims of the state, however. Cultural studies for instance stood at the critical margins of institutions. Rooted in new social movements such as feminism, gay rights and anti-racist movements, it aimed to critique the production of culture and identity by striving for an inclusive notion of "culture" that melted art,

film and literature into it. Since the fall of Soviet Communism, fields such as American studies or the "area" studies set up in the shadow of nuclear war have moved on to critically appraise their past.

Alongside the notions of exchange and the breaking of barriers, interdisciplinary institutes, and the kind of "total knowledge" to which they aspired, evolved in part as instruments of the state. This is not to say that "interdisciplinarity" and its many uses are forever tainted, just that if we recognise that traditional academic disciplines deserve to have their boundaries, assumptions and foundations challenged, then so too does the notion of "interdisciplinarity".

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1. William Gaddis quoted in Joe Moran, *Interdisciplinarity* (London, Routledge, 2002), p1.
2. Friedrich Nietzsche in *Ibid*, p3.

POLARITIES OF PRACTICE

by
ROB KESSELER



Filtering artistic intuition into scientific lab work, Rob Kessler invites us to see the natural world through different lenses. To accompany his text, **Unknown Quantities** presents a selection of ink drawings from his new series *Zona pellucida*.