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#1 The Role of Disciplines in Interdisciplinary Exchange

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A Forum on Interdisciplinarity

Harvey J. Graff, Ohio State University
Jerry A. Jacobs, University of Pennsylvania
Mary Jo Maynes, University of Minnesota, and
William H. Sewell, Jr., University of Chicago

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Two author-meets-critics sessions were held at the 2014 and 2015 Social Science History Association meetings on the topic of disciplines and interdisciplinarity with the same set of commentators. Both were organized by Harvey J. Graff. The 2014 session at the Toronto meetings focused on Jerry A. Jacobs' book, *In Defense of Disciplines: Interdisciplinarity and Specialization in the Research University* (Chicago: University of Chicago Press, 2014). The same set of commentators reconvened in Baltimore in 2015 to discuss Harvey Graff's book, *Undisciplining Knowledge: Interdisciplinarity in the Twentieth Century* (Baltimore: Johns Hopkins University Press, 2015). The panelists at both of these sessions were John Guillory, New York University; Mary Jo Maynes, University of Minnesota; Janice Reiff, University of California at Los Angeles; and William Sewell, Jr., University of Chicago.

The Forum on Interdisciplinarity presented here includes the edited and revised comments of Mary Jo Mayes and William Sewell, Jr. on both books, and responses and an exchange from Harvey J. Graff and Jerry A. Jacobs. **This paper is one of the 4 papers in this series.**

Keywords: disciplines, interdisciplines, interdisciplinarity, social-science history

The Role of Disciplines in Interdisciplinary Exchange

Jerry A. Jacobs

A movement to promote interdisciplinary research is becoming a powerful force in American higher education. Calls for more connectivity and greater integration are evident in fields as diverse as nanotechnology and American studies. Advocates claim that reforms would promote more rapid advances in research, more useful solutions to complex public problems, and more effective teaching and learning. In my book, *In Defense of Disciplines: Interdisciplinarity and Specialization in the Research University*, I carefully scrutinize these claims. I maintain that the critiques of established disciplines such as history, economics and biology are often overstated and misplaced. I show that disciplines are remarkably porous and continually incorporate new methods and ideas from other fields. Rather than limiting intellectual opportunities, the organizational structure of liberal arts disciplines is in fact the source of their dynamism and breadth.

Drawing on diverse sources of data, I illustrate this thesis with a wide range of case studies: the diffusion of ideas between fields, with a special focus on education research; the creation of interdisciplinary scholarly journals; fields which emerged as applied spinoffs from the discipline of sociology; interdisciplinary American studies programs; cross-listed courses, team teaching and specialized degree programs for undergraduates.

Successful interdisciplinary breakthroughs typically result in the establishment of new fields of study which recreate many of the same organizational arrangements that are evident in established ones. I also question whether efforts to integrate knowledge across domains are likely to succeed, since interdisciplinary research itself is often quite specialized in focus. Finally, an interdisciplinary university would likely result in greater centralization of academic decision making in the offices of deans and presidents.

Over the course of the book, I turn many of the criticisms of disciplines on their heads while making a powerful case for the enduring value of liberal arts disciplines. I show that disciplines are broad and dynamic while interdisciplinarity is often narrow and specialized. While some maintain that interdisciplinarity is needed in order to solve the daunting challenges of our time, in fact problem-oriented research centers quickly multiply and create a plethora of specialized units. A university based on interdisciplinary principles is likely to be balkanized with far greater opportunities for centralized control. Calls for interdisciplinarity do little to address the real challenges of the rapid proliferation of knowledge and the attendant imperative of specialization. And antidisciplinarity — the rejection of disciplines and any related system for certifying, codifying and refining bodies of knowledge — would undermine our university system. In short, liberal arts disciplines, while inevitably imperfect, are not the problem but rather are the essential vibrant engines at the center of the great modern research university.

Harvey Graff and I had a number of fruitful conversations while I was finishing my book, although his manuscript was not available until after mine went to press. Consequently, I see our publications as part of a continuing dialog about how intellectual work in the university should be organized.

Graff's book, *Undisciplining Knowledge: Interdisciplinarity in the Twentieth Century*, complements mine in several important ways. First, he shows that the intellectual history of fields often draws from multiple sources. For example, the field of biology emerged as an effort to bring

together formerly disparate fields of botany, zoology and human physiology and the emerging fields of genetics and biochemistry. This conclusion is consistent with my premise that disciplines are not intellectually isolated domains. Indeed, they largely emerged in hybrid form. Graff suggests that modern disciplines did not emerge through a simple process of differentiation but were actively constructed, cobbled together from diverse sources.

Graff could have further elaborated on the multiplex nature of fields by showing how ideas and techniques are continually incorporated as fields advance, mature and become increasingly differentiated internally. For example, I show that ideas, methods and particularly research findings flow from the liberal arts disciplines into graduate schools of education quickly and easily. Research by prominent scholars in psychology and sociology are rapidly cited in educational research; the case of economics is a bit less clear, perhaps because of the scarcity of economists until recent years in educational schools.

Graff tends to downplay this tendency because he draws principally from the programmatic declarations of leading figures rather than focusing on the day-to-day practice of research. In other words, more of a focus on what researchers and scholars actually do in their research and teaching would make fields look even messier.

One of my central points is that disciplinarity and interdisciplinarity have coexisted in American research universities. Research centers are often organized on interdisciplinary principles, while academic departments have been structured on disciplinary lines. This hybrid structure is ubiquitous; in leading research universities, research centers are more numerous than are academic departments. Academic departments tend toward isomorphism — nearly all research universities feature departments of biology and psychology — while the configuration of research centers tend to be more idiosyncratic, rooted as they are in particular configurations of scholars and access to funding streams.

Graff may not see the matter in quite the same way because he views his case studies as instances of interdisciplines rather than disciplines. While he seeks to examine the interplay between disciplinary and interdisciplinary tendencies, his case studies consistently emphasize the varied intellectual roots of each field of inquiry. Unfortunately Graff is not sufficiently clear on what makes a field an interdiscipline. If inclusion in this set derives from the fact that the field draws on diverse sources of ideas and methods, then all fields are interdisciplines. Once we appreciate the varied and eclectic nature of department-based academic fields, as well as the ongoing incorporation of methods and metaphors from various domains of inquiry, then the criticism of disciplines as isolated silos loses its force.

Second, Graff's case studies may be viewed as instances of "scientific and intellectual movements," a term developed by Scott Frickel and Neil Gross (2005). This approach emphasizes the active role of scholars in creating scholarly domains by likening academic politics to social movements that emerge outside of academia. Leaders of new fields make bold claims in order to stake out new intellectual territory. Successful claims must not only overcome internal competition but attain legitimacy in the eyes of external audiences — deans, funding agencies, the general public, and prospective students — as well. Referencing Frickel and Gross's framework more explicitly could have helped Graff differentiate social movements that largely involve battles within the confines of a single field from others which span disciplinary boundaries.

Finally, Graff's work resonates with mine because of its ambivalence about interdisciplinarity. Given Graff's lifelong involvement in interdisciplinary research, including his leadership role in the Social Science History Association and as a leader in literacy studies, one might

expect his book would extol the virtues of interdisciplinarity. Yet his accounts often reveal the limitations of efforts to build interdisciplinary fields. And he is strongly critical of what he considers to be excessive claims on behalf of applied interdisciplinary projects.

Graff believes that many of his cases can be considered “failed interdisciplines.” While this sometimes reflects the demise of the field, such as was the case for Social Relations, more often he judges the fields to fall short of intellectual coherence. I am reluctant to offer such judgments in the absence of clear criteria. In other words, one person’s failed interdiscipline could be another’s vital embrace of diverse ways of thinking.

What makes Graff’s book so interesting to me is the tension between novelty and innovations on the one hand and the need to develop structured programs of research and teaching on the other. Graff, like many advocates of interdisciplinarity, emphasizes the role of novelty in scholarly advance. Thus, he lauds the repeated “turns” in the “new social histories.” Graff takes these currents as evidence of the dynamism of the field.

Graff’s personal experience with and intellectual support for interdisciplinarity draw him to support the cross-field embrace of the new. But, as I see it, his orientation as a historian pulls him in the opposite direction. By looking at fields over the long term, the question of institutionalization comes to the fore. Scholarly fields succeed by becoming an established part of the system of fields that compose the modern university. In this phase, they must develop their initial promise and show the continuing fruitfulness of continuing research and training. In American universities, this process results in the establishment of departments, majors, and doctoral programs. This is the organizational form that makes a field into a “discipline.”

Thus Graff seems caught between the desire to embrace the openness of interdisciplinarity and the recognition that the failure to become established as a discipline leaves the field without a secure home in the academy. I don’t see this tension as a conundrum since I emphasize the ability of disciplines to continually incorporate new ideas. And the fact is that much innovation requires the development of particular ideas and methods rather than the infusion of exotic ideas from foreign sources. Disciplines advance through both the internal development of research programs as well as the incorporation of ideas from external sources. It is only when disciplines become too inward-looking that this tension becomes a problem.

As long as the theme of interdisciplinarity remains ascendant, there will be a need for more research like Graff’s with a long-term view of interdisciplinary initiatives and experiments. Graff’s case studies remind us that building enduring bridges across fields requires more than bold pronouncements. Readers of Graff’s book will come away with an appreciation of the many complexities involved in the pursuit of the goal of interdisciplinarity.

References

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Jerry A. Jacobs is Professor of Sociology at the University of Pennsylvania. He has served as Editor of the *American Sociological Review*, and as the Founding President of the [Work and Family Researchers Network](#), an international and interdisciplinary scholarly association.