

EUROPEAN READINGS

Key Issues in Recent German Interdisciplinary Scholarship

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IT IS EVIDENT from even just a cursory look at bibliographies pertaining to German interdisciplinary scholarship that German scholars of note have been interested in, if not preoccupied with, interdisciplinary studies for almost all of the twentieth century, certainly since the early 1920s. However, it is also clear that the most extensive, comprehensive, and intensive works have been published since the late 1960s, coinciding, for example, with Helmut Schelsky's initiatives to plan and found the University of Bielefeld and its well-known Zentrum für interdisziplinäre Forschung (Center for Interdisciplinary Research), which constitutes a progressive contribution not only to interdisciplinary studies and research worldwide but also to the (former West) German post-secondary school system. Since the late 1960s, moreover, over 370 diverse interdisciplinary work groups and conferences have taken place. The Center has encouraged and supported great productivity since its founding in 1967 and inspired a major symposium in January 1986, "Ideologie und Praxis der Interdisziplinarität. Schelskys Konzept und was daraus wurde" ("Ideology and Praxis of Interdisciplinarity: Schelsky's Concept and Its Development"). This symposium included presentations/papers and commentaries collected by Jürgen Kocka into the book that is one of the main subjects of this review essay: *Interdisziplinarität: Praxis—Herausforderung—Ideologie* (Frankfurt am Main: Suhrkamp, 1987) (*Interdisciplinarity: Praxis—Challenge—Ideology*).

Kocka's volume of only 168 pages includes an impressive array of essays by significant voices such as Jürgen Mittelstrass and Wilhelm Vosskamp. The latter's essay in this volume as well as his "Grenzüberschreitungen ..." ("Crossing Boundaries ...") appears in translation elsewhere in this issue) offer revealing insights into the state and status of interdisciplinarity in research and education as we move toward the next century. Eleven scholars are represented in all, and they contribute to the definition and its variations, the possibilities and boundaries, and the sense and "nonsense" of interdisciplinarity. from the perspective of scholars from different disciplines, practitioners as well as critics of interdisciplinarity. A common theme is the strain or difficulty of interdisciplinary studies, case studies, and research due to the lack of a common language or communication system across the disciplines. This "deficit" tends to hamper cooperation among scholars from different disciplines. Franz-Xaver Kaufmann (63ff.) maintains, for example, that interdisciplinarity is only possible "gegen den Strom" ("against the current"). Thus, extraordinary stimulation, challenges, and resources are required to create and realize interdisciplinary research.

All agree that interdisciplinary research is eminently worthwhile. Hartmut von Hentig (34 ff.) considers interdisciplinarity a necessary part of education, even or especially at the levels below the university. Heinz Heckhausen (129 ff.) believes rather the opposite, given the complexity of interdisciplinary concepts and variations thereof. A few authors assign to interdisciplinary study those issues or problems or matters not yet addressed by individual disciplines: Lorenz Krüger and Hans Joos, among others. To what extent interdisciplinarity can reestablish the "lost unity" of the disciplines becomes a matter of controversy and skepticism (Kaufmann and Mittelstrass). However, all agree that interdisciplinarity can and does contribute to the solution of any practical, societal problems and that it stimulates and enhances progress within the individual disciplines. Interdisciplinarity is a medium of self-reflection and self-control within/of the scholarly and technical world (Klaus Immelmann and Peter Weingart, among others). Interdisciplinarity can best be achieved, according to these eleven scholars, by identifying significant problems that require the intense cooperation among several disciplines to reach a solution or solutions. Thereby linguistic, methodological, historical, and overall disciplinary boundaries can be transcended or overcome. Experience, disappointments, failures, and successes are shared to achieve a commonly desired, concrete result (Kaufmann, Immelmann, Vosskamp, and Krüger, among others). All consider this process a worthwhile undertaking and promote working research groups of long duration, so that the process and methodology to overcome earlier differences can be repeated to tackle new projects and achieve new, ever better results,

Kocka's anthology is representative of others, earlier and more recent ones, that address key issues of interdisciplinarity. Another volume, published in 1983, provides an interesting comparison, inasmuch as it contains the writings of scholars from

former East Germany. Co-edited by Heinrich Parthey and Klaus Schreiber, the book is entitled, *Interdisziplinarität in der Forschung: Analysen und Fallstudien* (Berlin/DDR: Akademie-Verlag, 1983) (*Interdisciplinarity in Research: Analyses and Case Studies*). It is the twenty-second volume of a series called *Wissenschaft und Gesellschaft (Scholarship and Society)*. This 319-page book includes essays by nineteen scholars who devote themselves to themes and variations similar to those in Kocka's collection. It is noteworthy that the first theme stressed is the capability of interdisciplinary research to solve global human problems. Researchers must be sufficiently engaged in the process, the methodology, and the goals to achieve positive results and overcome otherwise insurmountable differences in language/communication, disciplinary boundaries, and the like (Parthey and Schreiber), another major theme encountered earlier.

This anthology does not strive to present a comprehensive overview of interdisciplinary research but rather offers major characteristics of such research. The first two essays (Parthey, 13 ff., and Gert Wangermann, 47 ff.) provide the theoretical foundation of interdisciplinary research, including the relationship between object and method as correlatives. Following are three case studies that demonstrate the effectiveness of interdisciplinary cooperation among researchers to address and solve complex problems related to nutrition (Peter Hanke and Hans-Albrecht Ketz, 61 ff.), cancer (Wolf-Heiger Mehnert and Janos Wolf, 81 ff.), and energy (Vadim Nikolajew and Hein Klare, 109 ff.). Eight more case studies follow, which incorporate interdisciplinary aspects of research related to fields as diverse as modern linguistics, psychology, the function of information technology in the biological sciences, plasma physics, and so forth. As is true of the Kocka anthology, this one is itself a testimony to interdisciplinary cooperation and collaboration.

Although the emphasis on a solid grounding in the disciplines as the basis for effective interdisciplinary work is found in both anthologies, the East German collection focuses on the "dialectic" between disciplinary and interdisciplinarity in keeping with the philosophical and political underpinning and heritage known by students of East Germany as a required part of their studies. Nonetheless, the critical importance of highly qualified disciplinarians is given primary attention as a prerequisite to successful interdisciplinary collaboration. In addition, readiness for and sincere engagement in the process are paramount in importance, as is flexibility, a characteristic stressed also by Kocka and his colleagues. The conclusions drawn here are that the East German system of education is well equipped to encourage interdisciplinary research and cooperation and that future interdisciplinary work has a firm and sound basis in what has emerged to date. Indeed, Kocka and his West German colleagues can draw the same conclusions.

Both of these anthologies on interdisciplinarity represent a cross-section of the significant thinkers and scholars in contemporary Germany. The trend is toward an ever-increasing number of forums and structures for interdisciplinary dialogue and work, including research institutes (besides Bielefeld, there are Munich, Heidelberg, Berlin, Darmstadt, and, planned for 1994, Karlsruhe), seminars and symposia (Cologne, Kassel, Heidelberg, and others), conferences and lecture series (Freiburg, Berlin, etc.). The latter information was collected by Ursula Hübenthal in an appendix (169-171) to her 1991 book, *Interdisziplinäres Denken* (Stuttgart: Franz Steiner Verlag, 1991), (*Interdisciplinary Thinking*) which precedes an exhaustive bibliography (172-190), one excellent example of those referred to in the very first sentence of this review essay. Hübenthal's book, while not the immediate subject of this essay, confirms the well-documented impression that interdisciplinary research continues on a very high note in recently unified Germany. Just as historical, philosophical, political, and human connections have occurred or been made between the "two Germanies" to begin a new era of constructive communication, collaboration, and cooperation, so we may hope for a similar, continued development in interdisciplinary research across former political and geographical boundaries as well as disciplinary, linguistic, and methodological boundaries. The evidence certainly leads us to believe that this will occur.

Biographical Note: Roslyn Abt Schindler serves on the Editorial Board of *Issues in Integrative Studies* and on the AIS Executive Board as Vice President for Development. An active member of the Association since 1985, she has presented at several annual meetings and published a translation of another German essay, "The Contradiction between Knowledge and Wisdom," in the *AIS Newsletter* of May 1986, pp. 3-4.

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