"INTERDISCIPLINARY":
The First Half Century

by

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What a splendid book one could put together by narrating the life and adventures of a word. The events for which a word was used have undoubtedly left various imprints on it; depending on place it has awakened different notions; but does it not become grander still when considered in its trinity of soul, body and movement?

_Honoré de Balzac_, Louis Lambert

"Interdisciplinary" was probably born in New York City in the mid-1920s, most likely at the corner of 42nd and Madison. The word seems to have begun life in the corridors and meeting rooms of the Social Science Research Council as a kind of bureaucratic shorthand for what the Council saw as its chief function, the promotion of research that involved two or more of its seven constituent societies.² "Interdisciplinary" started out with a reasonably bounded set of senses. Then, subjected to indecent abuse in the 50s and 60s, it acquired a precocious middle-aged spread.

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Now not only is the word everywhere but no one can pin down what people have in mind when they utter it.

Whoever coined "interdisciplinary" never claimed paternity, the way Jeremy Bentham apologized for creating a new compound: "The word international, it must be acknowledged, is a new one; though, it is hoped, sufficiently analogous and intelligible." Professor Robert Sessions Woodworth (1869-1962), the distinguished Columbia University psychologist and the first person I have caught using "interdisciplinary" in public, neither apologizes nor treats the word as a neologism. On Monday evening, August 30, 1926, in Hanover, New Hampshire, where members of SSRC had gathered to escape the heat of New York City and to devise "A Constructive Program for the SSRC," he spoke about the range of research appropriate for the Council: "There is a certain limitation in the fact that we are an assembly of several disciplines, and in our official statements again it is expressed that we shall attempt to foster research which brings in more than one discipline." He continued a few sentences later: "There would be no other body, unless we assume the function ourselves, charged with the duty of considering where the best chances were for coordinated or interdisciplinary work." Professor Woodworth, at the time a member of the founding SSRC Committee on Problems and Policy and soon to be President of the Council (1931-32), had just served as Chairman of the division of anthropology and psychology of the National Research Council in Washington (1924-25). He clearly had an interest in and sensitivity to the language used by planners in both Councils: at a 1931 Brookings Institution conference on cooperative research, when his colleagues got tangled up in the differences between cooperation, collaboration and coordination, Woodworth was able to report that the word "co-ordination" had been favored at the NRC a decade earlier "as a refuge from some worse word which I don't seem to remember."

That "worse word" was not "interdisciplinary," which, if it existed, has left no trace, as far as I can determine, in the Reports, Minutes, and archives of the NRC or the National Academy of Sciences. The scientists came close of course. George Ellery Hale, in 1916 the first President of the NRC, had proposed as early as 1912 that the Academy should foster interest in "subjects lying between the old-established divisions of science" and insisted in 1914 on "the inter-relationship of the sciences." In the 20s and 30s, the most popular terms at the NRC were "new fields," "overlapping projects," "interrelated research," and winners by a mile--"borderlands" and "borderline research."
Outside SSRC committee rooms, "interdisciplinary" seems not to have been current among social scientists in the 20s or 30s, even though the years between the founding of the New School for Social Research (1919) and the Yale Institute of Human Relations (1929) produced a mountain of documents calling for the integration of the social sciences and the related arts of industry, government, and public welfare. Rising stars like Margaret Mead called not for interdisciplinary activity but for "co-operation for cross-fertilization in the social sciences," and well-established luminaries like Harold Laski lamented the "endless committees to co-ordinate or correlate or integrate." Interdisciplinary seems not to have made it into the fifteen-volume *Encyclopaedia of the Social Sciences* (1930-35), plans for which were laid in 1923. "Co-operative research" is the usual term in a half-dozen books published between 1925-30 that present the whole field of social science as a unit. They stress the "interrelation," "mutual interdependence," "interpenetration," "intercommunication," "cross-relationships," "interfiliation," and, of course, "interaction" of the various disciplines, along with the need to explore "twilight zones" and "border areas," "to fill any unoccupied spaces," and to encourage the "active cultivation of borderlands between the several disciplines." But "interdisciplinary" never once raises its head.

Meanwhile, back at the Social Science Research Council, the word was beginning to flex its muscles. At the 1930 Hanover conference, the Council adopted a statement of purpose, quoted in the *Annual Report* for 1929-30: "It is probable that the Council's interest will continue to run strongly in the direction of these inter-discipline activities." The same report also warned with disquieting ambiguity that "Concern with 'cooperative research' or 'inter-discipline problems' should not be allowed to hamper the first rate mind ...." By 1933, in an SSRC fellowship notice appearing in the *American Journal of Sociology*, "interdisciplinary" had regained its -ary and broadened its reference to include "education" as well as "problems": "The fellowships were designed to afford opportunity for research training, preferably interdisciplinary in nature." The first citation for "interdisciplinary" in *Webster's Ninth New Collegiate Dictionary* and *A Supplement to the Oxford English Dictionary* is from the December 1937 issue of the *Journal of Educational Sociology*, in a subsequent notice concerning SSRC postdoctoral fellowships: "The primary purpose of these fellowships is to broaden the research training and equipment of promising young social scientists .... Programs of study submitted should provide either for study of an interdisciplinary nature, for advanced training within the applicants' fields of specialization, or for field work or other experimental training intended to supplement
more formal academic preparation for research." By August 1937, when
the University of Chicago sociologist Louis Wirth submitted his
mimeographed report on Council policies, "interdisciplinary" is branded
as an in-house vogue word: "It may also be said the Council has allowed
itself to some extent to become obsessed at times by catch phrases and
slogans which were not sufficiently critically examined. Thus there is
some justification for saying that much of the talk in connection with
Council policy, especially in the early years, about cooperation and
interdisciplinary research turned out to be a delusion." On Friday,
December 1, 1939, in the University of Chicago's Social Science Research
Building, at a session entitled "The Social Sciences: One or Many," Robert
T. Crane representing the SSRC spoke in a similar fashion about the old
days: "The Social Science Research Council has talked less in recent than
in earlier years about integration of the sciences, about cross-fertilization,
and about a multi-disciplinary or interdisciplinary approach to problems." Mark May, representing the Institute of Human Relations at Yale, recalled
how "the Social Science Research Council, seeing the great need for
integration, attempted to stress interdisciplinary forms of research as well
as interdisciplinary training under its fellowship program ... I distinctly
remember attending meetings of the Council at which time the phrase
'cross-fertilization' was translated into 'cross-sterilization' with the
obvious intent of discrediting interdisciplinary activities."

The American Council of Learned Societies, founded in 1919, was
without the word for two decades. In the spring of 1940, however, the
Council sponsored a conference in Washington, D.C., on "The
Interdisciplinary Aspects of Negro Studies." The relative novelty at ACLS
of such phrases as "interdisciplinary cooperation," "interdisciplinary cross-
fertilization," "inter-disciplinary character," and "inter-disciplinary
nature" may be reflected in the copy editor's oscillation between
hyphenated and nonhyphenated forms. In the 1964 ACLS Report of the
Commission on the Humanities, only three societies and the index boast of
"interdisciplinary relationships." But any residual shyness disappears in
the 1985 ACLS Report to the Congress of the United States on the State
of the Humanities, in which all twenty-eight constituent societies openly
acknowledge their interdisciplinary intentions and their desire to
transcend disciplinary perimeters, melt boundaries, fill gaps, and escape
narrow confines. The Bibliographical Society of America, for example,
expresses its willingness to enter into "interdisciplinary partnerships"
and to receive funding for "interdisciplin ary programs" and
"interdisciplinary conferences." The Medieval Academy of America
mentions its interdisciplinary inclinations six times in about as many
pages; while the American Society for Eighteenth-Century Studies, a bit
ahead with twelve, observes suggestively "that the United States of America is itself one of the great interdisciplinary achievements of the eighteenth century."

By mid-century "interdisciplinary" was common coin in the social sciences. As early as 1951, an editorial in the journal *Human Organization*, commenting on an essay in that issue entitled "Pitfalls in the Organization of Interdisciplinary Research," complained that "present fashion makes the stressing of the interdisciplinary aspects of the project almost mandatory,"18 Numerous how-to-do-it manuals and articles, by and for social scientists, began appearing, culminating in Margaret B. Luszkii's *Interdisciplinary Team Research: Methods and Problems* (Washington: National Training Laboratories, 1958).19 By the late 50s, the idea even seemed old-hat: "Ten years ago interdisciplinary research was very much in vogue."20 The adjective reached political science circles in France by 1959 ("ce que l'on nomme dans le jargon usuel le travail 'interdisciplinaire'");21 the noun arrived a decade later, just in time to appear on Marianne's banner at the barricades of May 1968 ("pluridisciplinarité et interdisciplinarité: deux termes barbares, même s'ils sont d'actualité").22

In the course of the 60s "interdisciplinary" changed from a series of widely scattered occurrences into a kind of weather. An international conference held in Nice in 1969, under the auspices of the Organization for Economic Co-operation and Development, produced the first of many guides that in the 70s taught us to taste the subtle differences between interdisciplinary, metadisciplinary, extradisciplinary, multidisciplinary, pluridisciplinary, cross-disciplinary, transdisciplinary, nondisciplinary, adisciplinary, and polydisciplinary, and to discriminate knowingly between the seven brands of interdisciplinary (teleological, normative, purposive, subject-oriented, problem-oriented, field-theory, and General Systems theory).23 In the 1970s interior designers were among the more fervent interdisciplinarians. The August 1975 issue of the *Designer* teaches subscribers that "There is a wide gap between multi-disciplinary teams and inter-disciplinary teams. Multi-disciplinary applies when various disciplines provide their views with minimal cooperative interaction. Interdisciplinarity requires coordination among disciplines and synthesis of material through a higher-level organizing concept."24 Educators defined "interdisciplinary" with their usual flair: "Interdisciplinary research (or activity) requires day-to-day interaction between persons from different disciplines ... and the interchange in an interactive mode of samples, ideas, and results. Naturally, this is facilitated greatly by physical propinquity."25
Humanists slowly discovered that their careers, too, could be fostered by the use of "interdisciplinary"; "I believe that English must become interdisciplinary, but with caution and no illusions. In the 1970s English must become interdisciplinary, multidisciplinary, cross-disciplinary ... We must become interdisciplinary, first of all, for self-preservation." "Interdisciplinary" made its first appearance in *Speculum*, the journal of the Medieval Academy of America, in 1951, as part of an ACLS fellowship notice, the same year that an SSRC study appeared showing that social scientists were supported four or five times as generously as humanists.27 The word does not reappear in *Speculum* until 1967, when Johns Hopkins University boasts of an interdisciplinary program, followed in 1968 by Ohio State University. In the same year, the new annual *Viator* announces its interest in "interdisciplinary and intercultural research"; in 1970 the University of Connecticut is in possession of an "interdisciplinary program," University College, Dublin, of an "interdisciplinary approach," and the field of British studies of a "triannual interdisciplinary newsletter." In 1971 the Medieval Academy published a brochure entitled *Interdisciplinary Medieval Programs and the Training of Students: A Discussion*. In 1972 it sponsored a panel discussion on marriage in the Middle Ages "employing the interdisciplinary method."28 The next year the word appears in a *Speculum* article ("Abelardian research will become more and more interdisciplinary"). By 1982 "interdisciplinary" has made it into the Memoirs of Fellows of the Academy, a clear sign of respectability: the deceased is praised for his "very early realization of the concept of interdisciplinary medieval studies," his creation of an "interdisciplinary group" and "an interdisciplinary Centre." Contributors to a 1982 book-length survey, *Medieval Studies in North America: Past, Present, and Future*, use "interdisciplinary" frequently and fervently.29 There is so little consciousness of mimicking the antics of those who were first at the federal feast that one essay concludes: "Outside the humanities there is widespread resistance to the notion of interdisciplinarity ..." It is not surprising that the authors would rather belong to an expanding interdisciplinary like Medieval Studies than to an established discipline like Medieval Studies. "Interdisciplinary" sometimes turns into a disembodied smile, a floating demi-lune coming to rest on whatever we already value.

Its silhouette, however, has definitely thickened with the years. No lean, plain word to begin with, "interdisciplinary" was soon larded with thick greasy syllables front and back. Nouns include interdisciplinary, interdisciplinarian, interdisciplinarianship, interdisciplinism, and interdisciplinarity (with a plural -ies, as in "previous potential interdisciplinarities").30 An adverb is attested ("persons who are active
interdisciplinarily").\textsuperscript{31} Since there is a verb "to pluridiscipline" ("applied fields have always tended to be crossdisciplinary and its \textit{[sic]} practitioners pluridisciplined"),\textsuperscript{32} the corresponding "to interdiscipline" may be just around the corner. I could find no citation for "interdisciplinated," as in "chocolated laxatives." As the word got fatter, it was contained by acronyms such as IDE (Interdisciplinary Enquiry, 1965), IDR (Interdisciplinary Research, 1980), IDU (Interdisciplinary Units, 1979) IGPH (Interdisciplinary Graduate Program in the Humanities, 1970), ISC (Interdisciplinary Studies Context, 1971), IRRPOS (Interdisciplinary Research Relevant to the Problems of Our Society, 1970), and the most recent entry, a journal title designed to indicate graphically that interdisciplinarity is central to the editors' purpose: AVISTA (Association Villard de Honnecourt for the Interdisciplinary Study of Medieval Technology, Science, and Art, 1986)\textsuperscript{33} In 1977 "interdisciplinary" made \textit{The Dictionary of Diseased English}.\textsuperscript{34}

The stretching out of syllables (as in "pseudointerdisciplinarity")\textsuperscript{35} went hand-in-hand with an extension of meaning. Different and even conflicting concepts now hang onto the word, vaguely increasing its meaningfulness without limiting it to any specific sense. "Interdisciplinary" always promises good. Fellowship applicants use the word to hint at the innovative, problem-solving, socially committed nature of their research (=worthy of support). When used by the granting agency, "to develop interdisciplinary interests" sounds so natural, so inevitable, like "willingness to grow"; but it can still mean "to retool," the basic Depression sense: "The fellowships broaden the scholar's competence in an interdisciplinary way, or give that scholar the opportunity to retrain for a nonacademic career."\textsuperscript{36} Some fellowships sound like more fun: the Rockefeller Foundation promises that "fellowships are offered as residencies in order to foster interdisciplinary work ....," the Kellogg National Fellowships, that "fellows will carry out a nondegree, interdisciplinary, self-directed activity to expand their personal horizons."\textsuperscript{37} It turns out that "real life is interdisciplinary," that "finally, life is interdisciplinary," that "contemporary issues are interdisciplinary," and that "the interdisciplinarity of the major societal issues of the decade--or century--calls for interdisciplinary solutions."\textsuperscript{38} We are taught that "some disciplines seem to be more interdisciplinary than others," that "if we are to have interdisciplinary achievement, we must have interdisciplinary language," that "the new science isn't 'interdisciplinary' in the old sense of the word," and that students profit from "courses giving an interdisciplinary introduction to the disciplines judged by experienced scholars to be essential for the historical approach to medieval studies."\textsuperscript{39} A new quarterly aimed at generous, politically liberal alumni describes itself as "an interdisciplinary journal ... founded
on the notion that highly sophisticated academic material could be rendered accessible to readers from all disciplines.40 Another side warns that "the thematic of interdisciplinarity opens up a dangerous fissure in the continuity of bourgeois knowledge."41 "Interdisciplinary" can be somewhat indiscriminate in its collocations: "The program … is unstructured and interdisciplinary, yet directed and rigorous."42 Thanks to this openness, reviewers are no longer in the hateful position of having to specify whether a book is cultured, erudite, thorough, original, or conversely, superficial, facile, general, derivative: the one all-purpose adjective keeps readers alert and authors friendly.

Unlike its nearest rivals--borderlands, interdepartmental, cooperative, coordinated--"interdisciplinary" has something to please everyone. Its base, discipline, is hoary and antiseptic; its prefix, inter, is hairy and friendly. Unlike fields, with their mud, cows, and corn, the Latinate discipline comes encased in stainless steel: it suggests something rigorous, aggressive, hazardous to master. Inter hints that knowledge is a warm, mutually developing, consultative thing. The prefix not only has the right feel, but like an unhinged magnet, draws to itself all other inters. And from the twenties on, betweenness was where the action was: from interpersonal, intergroup, interreligious, interethnic, interracial, interregional and international relations to intertextuality, things coming together in the state known as interencapsulated the greatest problems facing society in the twentieth century.43 "Interdisciplinary" combined the notion that nothing is static or fixed, that discovery comes from breaking some conventional limit or barrier, with the desire to see things whole. It is perhaps not totally coincidental that the earliest citation I could find for "interdisciplinary" comes from the same year in which Jan C. Smuts coined "holistic," referring to "the tendency in nature to produce wholes from the ordered grouping of unit structures."44 The 1920s had launched a number of new terms for reciprocal interaction within a total system. By 1928, Harold Laski was complaining that "in our own day it has become fashionable for the observer to apply to the social process the latest discoveries of psychology."45 And the fashion has lasted. "Interdisciplinary," now entering its seventh decade, shows little sign of fading away. Indeed, it is hard to imagine getting through the rest of the century without it.
Notes

1(Evres complètes de M. de Balzac. La Comédie humaine, vol. 16.2 (Paris, 1846), 111.

2Founded in 1923, the Council was, according to Charles E. Merriam, its first Chairman, ordinarily to "deal only with such problems as involve two or more disciplines." ("Report for the year 1925 Made to the American Political Science Association by Charles E. Merriam, Chairman," American Political Science Review 20 [1926], 186.)


4SSRC Hanover Conference, vol II (Dartmouth College, August 23-September 2, 1926), 445.

5Brookings Institution, Co-operative Research (Washington, D.C., 1931), 67.


7"National Academies and the Progress of Research II. The First Half-Century of the National Academy of Sciences," Science 39 (February 6, 1914); cited Cochrane, p. 196.

8Cochrane, p. 322.


10E.g., Harry Elmer Barnes et al., eds., The History and Prospects of the Social Sciences (New York, 1925); Edward Cary Hayes, ed., Recent Developments in the Social Sciences  (Philadelphia, 1927); William F. Ogburn and Alexander Goldenweiser, eds., The Social Sciences and their Interrelations (Boston, 1927); Frederick A. Ogg, Research in the Humanities and Social Sciences (New York, 1928); Wilson P. Gee, ed., The Fundamental Objectives and Methods of Research in the Social

11"Social Science Research Council, Sixth Annual Report, 1929-1930, p. 18. First communicated to me in a letter from David L. Sills, Executive Associate, SSRC, October 7, 1985, and cited by him in "A Note on the Origin of 'Interdisciplinary,'" Items 40 (March 1986), 18. (At the 1931 Brookings conference on cooperative research, Robert S. Lynd, the Permanent Secretary of SSRC, twice spoke of "cross-discipline cooperation" [Cooperative Research, p. 12].) I am grateful to Dr. Sills for his interest in my original enquiry (letter R. Frank to D. Sills, July 10, 1985) and for his kindness in sharing with me material from SSRC archives.

12American Journal of Sociology 39 (July 1933), 106; also 40 (July 1934), 108. SSRC notices before 1933 lack "interdisciplinary" and seem more pointed: "The major objective of these fellowships continues to be the development of more adequately trained research investigators ..." (AJS 38 [July 1932], 118.)

13Journal of Educational Sociology 2 (December 1937), 251. The same announcement appeared in the American Journal of Sociology 41 (September 1935), 239 and 42 (July 1936), 104.


15Louis Wirth, ed., Eleven Twenty-Six: A Decade of Social Science Research (Chicago, 1940), 122.

16Eleven Twenty-Six, p. 133.

17See ACLS Bulletin 32, September, 1941.

1810 (Winter 1951), 3.

19E.g., Dorothy S. Thomas, "Experiences in Interdisciplinary Research," American Sociological Review 17 (1952), 663-69; R. Richard Wohl,

20Elizabeth Bott, Family and Social Network: Roles, Norms, and External Relationships in Ordinary Urban Families (London, 1957), ii, 3. Yet the concept seemed new again to authors in the 60s: "The writing of this book . . . represents fundamentally an exercise in what is now called 'interdisciplinary research.'" (Ben B. Seligman, Most Notorious Victory [New York, 1966], p. xi).


22Le Figaro, 8 September 1970.


28 The discussion took place at the annual meeting of the Medieval Academy in Los Angeles, 15 April 1972, and was published in *Viator* 4 (1973), 413-501.


30 Wolfram W. Swoboda, "Disciplines and Interdisciplinarity: A Historical Perspective," in Kockelmans, *Interdisciplinarity*, p. 82. The files of the Oxford Dictionaries contain citations for *interdiscipline, interdisciplinarity, interdisciplinism*, and *interdisciplinarian; interdisciplinarianship* (along with the other nouns) is included in Merriam-Webster's files. This information was kindly supplied by Freda J. Thornton, Assistant Editor, *Shorter Oxford English Dictionary*, and Frederick C. Mish, Editorial Director, Merriam-Webster Inc.


Announcements in PMLA 100/4 (September 1985), 642 and in Directory of Research Grants, no. 2075.


Harvard Graduate Society Newsletter (Summer 1986), 9.


Medieval Studies in North America, p. 73.

