USE OF SOCIAL SCIENCE MATERIALS IN TEACHING WITHIN THE STANDARD, GENERALIST LAW CURRICULUM: A CRITERION FOR THEIR REFINED INTEGRATION

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I. INTRODUCTION

That lawyers and jurists should consider empirical social science findings more fully and with greater sophistication in making legal decisions is not a novel proposition. Nor is the corollary that legal education has a logical responsibility to promote this end. The more difficult question has been how to incorporate social science in a law course: how to teach law and not duplicate efforts of social science education; whether social science should dictate the conceptual framework of the course, be integrated with legal materials as part of legal methodology, or be confined to descriptive background to enhance understanding of legal materials. Pragmatic concerns complicate the issue: the rapid rate at which legal materials that should be covered expand, the limited abilities of a law professor not formally trained in social science, and teaching within a standard curriculum geared largely to preparation for private practice.

The thesis of this Article is that the primary and unique task of legal education is furthering insight into the distinct pattern of relationship among theory, norms, and empirical fact. This is the activity and life of the law and the pattern serves as a conceptual framework for integrating social science materials in legal education. Social science is integral to "fact management," a process that underlies the competent lawyering capacities that a generalist education seeks to develop.[1] These capacities include: sense of social perspective, adequate information, ability in dialectical reasoning, and skill in operations. Assimi-

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1. *See* text accompanying note 48 *infra*. This term and the following list of capacities are set forth in Holmes, *Education for Competent Lawyering—Case Method in a Functional Context*, 76 COLUM. L. REV. 535, 562-65, 578 app. (1976).

lation, selection, and presentation of complex social fact, or fact management, underlies all of these capacities. As such, it unifies theoretical skills and practical or applied ones. Social science may be used in this lawyering process as a source of fact and a means of fact management.

To the extent that social science has been so used, it has been integrated into primary legal authorities. This integration is a part of legal process; it changes social science. Social science is then not any more separate from the law than the material facts of a particular case are from its holding, or legislative facts or intent are from the statute.

After exploring the history and use of nonlegal materials, the few reported patterns of use, and theories of learning, this Article concludes first, that in generalist education for the practice of law social science is most effectively taught as it appears in primary legal sources: cases, statutes, and administrative materials. Social science materials supplement these, but should be used not with the goal of instilling insight in a distinct system of knowledge, but rather insight into the legal process itself. Second, the case method, defined as intensive critical analysis of primary legal sources, is an effective and manageable means of integrating social science in law teaching.

II. Brief History of Attempts to Integrate Social Science in Legal Education

The reason little progress is evident in integrating social science in legal education is the failure to move beyond the recognition of the importance of social science for law and legal education to a refined criterion of relevance. Proponents of social science instruction generally advocate wholesale incorporation of social science in its own frame of reference or system of meaning. The early legal realist experiments, however, illustrate the folly of lack of attention to the differences between the goals of education for the profession of law and social science. Contemporary advocates of practical skill training also reject wholesale incorporation as too academic or theoretical.

Broadening legal studies to include nonlegal materials, drawn primarily from the social sciences, was part of the movement known as legal realism and was a lively reform issue in the 1920s and 1930s. It was part of both an attempt to entirely reorganize the curriculum at Columbia University Law School in 1926-28 in light of social and economic functions of law, and an institute founded in 1928-29 to foster

empirical interdisciplinary research at Yale.[2] It was a departure from the view that law was a conceptually autonomous science whose mastery did not require insight from without so that other culturally desirable learning was irrelevant to law study and a lawyer's work.[3] Yet even as the philosophical development of realism and its reformist political side flowered, the particular emphasis on incorporation of social science into both legal curriculum and scholarship slowly died down. The Yale research attempt slowly descended to virtual inactivity by approximately 1935 to 1939.[4] The pace of reform moderated at Columbia by 1930.[5]

In 1955, Brainerd Currie diagnosed the cause of Columbia's inability to carry out reform as lack of a sharp perception of the purpose served by social science materials in a law curriculum.[6] Currie concluded that the movement failed and that legal education in 1955 remained largely as it had been twenty years earlier. Although casebooks were entitled, "Cases and Materials," the study of law nevertheless remained the study of appellate court opinions without integration of social science

2. The Columbia activity is summarized and analyzed in Currie, *The Materials of Law Study*, *reprinted in* AALS CURRICULUM STUDY PROJECT COMMITTEE, TRAINING FOR THE PUBLIC PROFESSIONS OF THE LAW: 1971 [hereinafter cited as CARRINGTON REPORT], 1971 AALS PROCEEDINGS Pt. 1, Sec. II, 184 app. (A. Cullison ed. 1971), *reprinted in* H. PACKER & T. EHRLICH, NEW DIRECTIONS IN LEGAL EDUCATION 267-318 (1972). Subsequent citations to the *Carrington Report* and its appendices are to H. PACKER & T. EHRLICH *supra*. For a historical study of the Yale institute, see Schlegel, *American Legal Realism and Empirical Social Science: From the Yale Experience*, 28 BUFFALO L. REV. 459 (1980).

3. Well-chronicled historical embodiments of this latter view in legal education include Story's establishment at Harvard of a university law school with a narrow curriculum embodying vocational preparation by synthesis of authoritative legal materials without philosophical or institutional considerations. Langdell's case method provided further reason to confine the scope of a law course to authoritative legal materials. Rooted in Pound's sociological jurisprudence, the legal realists' reaction against the Story and Langdell precedents logically entailed use of nonlegal materials in legal education and scholarship.

4. Schlegel, *supra* note 2, at 567-69.

5. Currie, *supra* note 2, at 269, 312-15.

6. *Id.* at 317.

Goals at Columbia varied among providing: (1) a descriptive background in which legal doctrine operates; (2) a detailed account of human behavior; (3) accumulation of knowledge relevant to such social institutions as the family; and (4) facts upon which to base solution of social problems, such as the cause of crime or the efficacy of laws. The ambitious goals led to disappointment with both the knowledge social science had to offer and its failure to provide standards for criticism. The demise of the empirical research effort at Yale has been ascribed, in part, to its originators' goals of utilizing research for the agenda of progressive reform politics in the pre-war period. Schlegel, *supra* note 2, at 581-82. Again, social science proved disappointing because it did not quickly yield facts upon which to base reform, and because as it grew in respectability as a university discipline, it became more scientific and less tied to reform politics. *Id.* at 586.

materials.[7]

Since Currie's statement, the status of the movement that he called an "epochal event" in legal education is largely undocumented. The Columbia experience illustrated a vast curricular reform project; the Yale story is of a major interdisciplinary research project. The story of the more refined use of social science materials, called for by Currie in the conclusion of his historical study of the Columbia experiment, is scarcely mentioned in literature on legal education. In teaching a fairly traditional substantive law course, that is, one organized not by social science categories but by legal subject matter, Currie urged that teachers call attention to the relevance of social science to law as an instrument for or impediment to social goals.[8] Legal educators still need to clarify precisely when and where social science is relevant in a law course in a generalist curriculum and how to implement that concept. Both tasks must overcome the theory versus practice, education for policy formulation versus practitioner training dispute in legal education.[9]

III. Apparent Contradiction Between Interest and Implementation in Present Integration of Social Science in Legal Education

A. *Description of Present Integration*

A 1978 survey of trends in American legal education by E. Gordon Gee and Donald Jackson does not include use of social science materials within standard legal curricula.[10] Instead, use of nonlegal materials appears under the heading "Interdisciplinary Training," a subject that includes joint degree programs; law course offerings that emphasize behavioral or social science skills, such as law and literature, life sciences and law, law and economics, law and education; and special research

7. Currie, *supra* note 2, at 269. This statement was made eight years after Professors Lasswell's and McDougal's ambitious effort to conceptualize systematic training for lawyers as public policy makers, which stressed empirical explanation of values, but used broad value concepts that did not employ legal language or the specific categories of social science. *See* Lasswell & McDougal, *Legal Education and Public Policy: Professional Training in the Public Interest*, 52 YALE L.J. 203 (1943).

8. Currie, *supra* note 2, at 308, 317.

9. *See generally* Gee & Jackson, *Bridging the Gap: Legal Education and Lawyer Competency*, 1977 B.Y.U. L. REV. 695, 928, 961-62 (1977).

10. Gee & Jackson, *supra* note 9, at 874-77. The Gee and Jackson article both summarizes and epitomizes the scanty available literature that describes use of social science materials in legal education.

projects that require use of university resources outside the law school. Although the authors conclude that this type of program innovation has been relatively unsuccessful, they emphatically assert the movement will and should grow.[11] The reason given for slow growth in interdisciplinary programming is its mixed reception among legal educators, resulting from "the existing policy split between academicians and practitioners."[12] Interest in and recognition of social science's relevance exists, but there are few signs of significant program reform.[13]

A 1973 survey of the number of law school classroom hours in behavioral science and the teaching approach employed reported findings consistent with those of Gee and Jackson.[14] This sequel to earlier surveys conducted in 1931 and 1948 found that interest in teaching behavioral subjects remained high, and the number of law schools teach-

11. *Id.* at 877. Without citation to empirical data, they state "reality dictates" such growth "as a closer nexus between law and other allied disciplines naturally develops," and because of recognition that law is not made in, nor can the lawyer be trained in, "a social vacuum."

12. *Id.* at 876. Gee and Jackson were struck by repeated emergence of this debate, between "practical" versus "theoretical" orientations, in all decision making about legal education.

13. Reports focus on broader or formal interdisciplinary training: joint degree programs, joint faculty appointments, elective courses on law and "blank,"—a fill-in-the-blank for social science generally, or economics, sociology, or psychology. *See, e.g.,* Lovett, *Economic Analysis and its Role in Legal Education*, 26 J. LEGAL EDUC. 385 (1974); Mazor, *The Materials of Law Study: 1971*, CARRINGTON REPORT, *supra* note 2, at 319; Zusman, *Law and the Behavioral Sciences—Revisited: A Third Survey of Teaching Practices in Law Schools*, 26 J. LEGAL EDUC. 544 (1973). As Gee and Jackson assert, interdisciplinary programming appears to be a visible innovation, but not a major one, nor one significantly affecting the structure of legal education. *Accord*, D. JACKSON & E. GEE, BREAD AND BUTTER?; ELECTIVES IN AMERICAN LEGAL EDUCATION (1975); Myers, *Education of Present and Future Lawyers, printed in* M. SCHWARTZ, LAW AND AMERICAN FUTURE 179, 184-85 (1976). An example is a trend in increased elective economic theory courses, *e.g.*, "Economics and Law." Lovett, *supra*. The trend, however, was an increase from four to 18 law schools teaching such courses, and included five leading institutions and 10 "national" law schools. *Id.* at 389, 415. The study was limited to a sampling of leading national law schools.

Identifying major innovations in legal education for a recent symposium, Murry Schwartz gives more impressionistic support for the conclusion that interdisciplinary materials have not had a significant effect on legal education. He states that "law" and "blank" courses appear to be responses to changes in the outside world, but could disappear tomorrow and leave only a small residue. They have had little influence upon the fundamental structure of legal education. Schwartz, *How can Legal Education Respond to Changes in the Legal Profession?*, 53 N.Y.U. L. REV. 440, 441-43 (1978). Another impressionistic description in agreement with Schwartz on this point is Sparer, *The Responsibility of Law Teachers*, 53 N.Y.U. L. REV. 602 (1978).

14. Zusman, *supra* note 13. Behavioral science in the survey included sociology, psychology, psychiatry, and economics, and was defined as "scientific disciplines which use recorded observations to study individual and collective human behavior for the purposes of prediction and control." *Id.* at 546.

ing them increased. However, the number of hours in required classes remained very small and the number of optional or elective courses were not much greater. The main teaching approach focused on technical legal knowledge or applications such as cross-examination technique, rather than a general, or philosophical approach. The study concludes that there is disparity between acceptance in principle of behavioral science as suitable for legal study and the practice of making little room for it in the curriculum.

The few studies that attempt to look at integration of nonlegal materials with legal ones within a standard law course, rather than a interdisciplinary program, give an incomplete and mixed picture. Studies stressing economics or quantitative skills report their relatively high degree of integration in the legal curriculum.[15] The use of economics in courses beyond traditional ones such as antitrust and trade regulation has spread; theory rather than study or use of quantitative methodology is the emphasis.[16]

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15. Economics appears to be the special case. A report of a 1973-74 survey by the American Association of Law Schools to identify teachers who used economics or empirical studies in their teaching indicated a substantial increase in the use of economics directly in law courses. Lovett, *supra* note 13. Most frequent was nearly universal use in the predictable areas of antitrust and trade regulation, but it was spread, in less significant numbers, to the whole gamut of legal education. There are examples in contracts, torts, and property, although it is more noteworthy in areas with a legislative and administrative base, *e.g.*, tax, securities, and corporations. Lovett's study was confined to 22 "national" schools and 50 "stronger" regional schools. Forty percent of American law schools offered at least one course involving use of quantitative methods, primarily in traditional areas of antitrust, regulated industries, and accounting, but also in computer science and statistics, according to a 1978 survey. White & Stone, *Quantitative Methods and the Legal Profession*, 53 N.Y.U. L. REV. 672 (1978).

16. *See* Lovett, *supra* note 13, at 399. White & Stone, *supra* note 15, conclude there is no evidence of a present shift to increased emphasis on quantitative methods.

Disparity between interest and implementation was noted by Mazor in a 1971 update of Currie's survey. Mazor, *supra* note 13. Mazor observed the contradiction between legal educators' statements of need for social science in legal study at the 1969 Annual Association of American Law Schools Meeting, and an observed shortage of interdisciplinary law school activity. The proceedings are published in 23 J. LEGAL EDUC. 1 (1970). The conference topic was "Social Research and the Law." Mazor's questionnaire to law faculty showed high interest in representation of other disciplines in faculty appointments. The interdisciplinary activity in which they engaged most frequently was assignment to students of materials from other disciplines. Formal interdisciplinary programs were rated as the lowest factor that fostered interdisciplinary activity, the nature of subject matter highest. Very few teachers said they engaged or planned to engage in interdisciplinary research.

The latter finding is consistent with other indications of lack of interest. If research by law teachers is an indicator of teaching interest, the forecast for use of social science materials looks as though it may be improving, though at a very modest rate. A 1971 survey that showed the modest fraction of approximately one-sixth of all full time law teachers at least occasionally conduct

B. *Dichotomy Between Theoretical and Practical Orientations Generally*

The finding of the studies that action has lagged far behind interest may be relevant to the present status of more refined interdisciplinary effort in teaching materials. A reason given for lack of implementation is the policy split between theoretical, policy education and practitioner training that Gee and Jackson reported among legal educators. This dispute is between proponents of technical training of practitioners in legal doctrine and skills, and advocates of academic education of lawyers to a more theoretical understanding of law, legal institutions, and lawyers' roles in the larger society.[17]

The 1971 *Carrington Report on Legal Education* described tension and conflict in the dual obligation of promoting academic and professional excellence; it urged recognition of their interdependence and equal importance.[18] Yet, the tension remains, even in the common curricular mix of most national law schools.[19] Gee and Jackson found increasing support for the emphasis on practical training by students, judges, and practitioners in 1978. They conclude that the more theoretical elements of legal education must be proven useful to students in achievement of their professional goals.[20]

Tension between academic and professional aspects of legal education may be inevitable; it may also be creative. Nevertheless, it can lead to hardening of positions on educational policy in a manner that obstructs flexibility and clarification of the purpose of legal education. Lack of a clear educational purpose may underlie the malaise among law students and teachers reported by Packer and Erlich in their 1972 *Carnegie Commission Report on Legal Education*. They reported confusion and discontent about goals and methods in the second and third

"nontraditional" research, most of which involves some use of the scientific method, showed great change from virtually no sociological research by law teachers previously. Cavers, *Non-Traditional Research by Law Teachers: Returns from the Questionnaire of the Council on Law-Related Studies*, 24 J. LEGAL EDUC. 534, 543 (1972). In 1978 not more than 20% of law teachers believed a background in quantitative skills aided substantially in publishing, and 70% would not do joint research with someone who had such a background. White & Stone, *supra* note 15, at 673. From these studies, it appears that empirical research employing scientific method by legal scholars may slowly increase, but is likely to employ observation or descriptive techniques that do not stress quantitative skills.

17. *See* CARRINGTON REPORT, *supra* note 2, 93, 127; Gee & Jackson, *supra* note 9, at 928.

18. CARRINGTON REPORT, *supra* note 2, at 127.

19. Gee & Jackson, *supra* note 9, at 927.

20. *Id.* at 961-62.

years of law school, law professors' roles as teachers in a graduate academy or a professional training school, and the character of legal scholarship as purely doctrinal or empirically based.[21] Dissension may result not in a creative tension, but a "fractionalized conception of legal education as a system of diverse and conflicting educative elements."[22] Such a conception does not lead educators to integrate skills, theories, and perspectives creatively, but to stress certain ones to the exclusion of others.

C. *Social Science Integration and the Theoretical versus Practical Tension*

1. *The Early Realist Experiments*

The tension is by no means new. Similar tensions in professional and educational identity characterized the progressive or social realism movement of the 1930s, of which attempts to assimilate social science materials into the legal curriculum were a part.

The Langdellian concept of law as a closed system of universal principles, fully extractable from appellate cases alone, had been altered by the 1930s.[23] Nevertheless, perhaps due to Story's narrow legal curriculum at Harvard and the role of precedent in common law, the doctrine contained in cases remained the content of legal education. The legal realists challenged that remnant of the Story-Langdellian model of legal education as too divorced from social fact, too tied to a "transcendent" notion of law at odds with the new sociological jurisprudence. Use of social science in legal education was the logical pedagogical corollary to their notion of law as means to social ends.

The realists stressed the empirical research techniques of social sci-

21. H. PACKER & T. EHRLICH, *supra* note 2, at 33. *See also* Woodward, *The Limits of Legal Realism: An Historical Perspective*, in H. PACKER & T. EHRLICH, *supra* note 2, at 331. Woodward discusses current frustration and tension in terms of the "secularization" of law. He describes tension among those who feel it has gone too far, and those who feel it has not gone far enough. *Id.* at 332-48.

22. Holmes, *supra* note 1, at 562.

23. Reed, *Training for the Public Profession of Law*, *reprinted in* CARRINGTON REPORT, *supra* note 2, at 164. Langdell himself had to admit that the case system, as opposed to the case method, had failed. He maintained nevertheless that law study must remain in the university as an academic pursuit, but its materials could expand beyond appellate cases. The aim of legal education and the rationale for use of the case method thus had changed by the time Professor Ames gave the case method rationale in 1913 as training a legal mind, rather than mastery of a systematic body of principles. Holmes, *supra* note 1, at 556-57.

ence, and in their rather cynical view of substantive content, seemed to equate law with method.[24] Emphasis on social science's method, rather than legal method, separates them from practitioner training advocates of today. Those faculty who opposed reorganization of Columbia's curriculum in terms of social function had practical concerns. They felt the absence of technical analysis of doctrine and historical orientation. Some faculty and alumni feared creation of a social science research institute rather than education for a practical profession.[25] They also felt constraints on the amount of material a course or curriculum could absorb. Contrary to expectations, restructure of the curriculum by social function did not simplify, reduce duplication of, or yield greater room for nonlegal materials.[26] These educators displayed concern similar to that shared by practitioner critics today. Their concern was to conserve education for a particular profession, marked in part by a particular concept, a history, a body of knowledge, and a method.

The realists urged that legal studies be tied to action; in this sense they were practically oriented. In addition to a sociological jurisprudence in which legal thought could not be divorced from the economic or social order, they emphasized education in practical lawyering skills.[27] For many, the motivation for their research efforts was political reform agenda.[28] Their stress of nonlegal materials to teach practical lawyering contrasted with the dominant view that other disciplines had little to do with technical aspects of a lawyer's work. Their practical skill emphasis was on public law tasks and reform, consistent with the idea that legal education should be for a public profession of law, public service, and decision making, rather than service of individual clients.[29]

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24. Woodward characterizes the realists' concept of law, which underlay their revolt against the case method, as applied science based on practical considerations, law as technique or the administration of power rather than a science of principles. *See* Woodward, *supra* note 21, at 360-62.

25. Currie, *supra* note 2, at 312-13.

26. *Id.* at 315-16.

27. Holmes, *supra* note 1, at 559-60 (quoting Llewellyn, *On What's Wrong with So-Called Legal Education*, 35 COLUM. L. REV. 651, 658 (1935), and J. FRANK, COURTS ON TRIAL 227 (1949)).

28. Schlegel, *supra* note 2, *passim*. Examples are Clark's focus on usefulness for reform in research on federal court procedures, *id.* at 517, and Douglas' business failures project. Both pursued active advocacy of their respective reform goals after falling away from empirical research. *Id.* at 585.

29. *See generally* Reed, *supra* note 23.

Thus, use of social science materials involved three related issues of professional and educational identity: could classroom legal education of intellectual skills incorporate social science and still serve aspirants to the legal profession who desired learning in the law, rather than learning about law; should and could practical skills be taught; and were private practitioners or public servants the desired product?

The issues are similar to the contemporary theory versus practice debate that has plagued recent interdisciplinary program efforts. Indeed, some assert that the debate has not been modified substantially for over fifty years.[30] This appears to be true, at least in that aspect of the tension that pits individual client and public service orientations against one another. Whether time and space constraints limit social science instruction, and whether social science is peripheral to teaching law also remain unresolved issues.

2. *More Recent Integration*

The atomist versus public service debate has continued to characterize discussion of social science in the legal curriculum.[31] One view, reminiscent of those opposed to Columbia's early curricular reform, is that social science is too theoretical and abstract and that its acquisition is too expensive in time and money for its limited relevance to the practical concerns of private practice.[32] Knowledge of social science has little immediate effect in practice: it does not effect the amount of work one can take on, and lack of it is not apparent if one can handle the legal issues. Neither judges nor legislators reward such knowledge and few opponents capitalize on its absence.

The practitioner training view Gee and Jackson found among judges, students, and practitioners was often that of the private practitioner: the professional that serves primarily personal interests of individual clients, not the public.[33] Lawyers therefore need not predict for

30. Auerbach, *What Has the Teaching of Law to do with Justice?*, 53 N.Y.U. L. REV. 457 (1978).

31. At the 1969 American Law Schools Annual Meeting on Social Science and Law, Auerbach felt that meeting's lack of focus was due to diverse conceptions of the type of lawyer being educated. Auerbach, *Perspective: Division of Labor in the Law Schools and Education of Law Teachers*, 23 J. LEGAL EDUC. 251 (1970). Although he concluded no single lawyer type could be the model, the diversity still appears to inhibit conception of the role of social science materials and method in the legal curriculum.

32. Gee & Jackson, *supra* note 9, at 874-77.

33. In describing this phenomenon, Gee and Jackson may be overlooking significant con-

collective decision making, but for private planning; legal impediment or incentive to private goals, not social ends, is their concern. Knowledge of the law, of doctrine and the relationship of laws, is what law school should impart. Social science that treats laws as social facts designed to influence behavior does not yield knowledge of law's interrelationships on their own terms so much as the "how" and "why." Even its generation of empirically based predictions for alternative courses of action generally is not keyed to individuals' behavior or to highly specific choices.

Responsibility to the profession and adherence to democratic values among legal educators gives some support to this view in the 1970s version of the debate. According to this position, the profession has necessarily become more involved in public aspects of law and more diverse, so that legal education finds a student without clear professional goals.[34] Nevertheless, if the professional is to remain open to various groups in society and responsive to a perceived unmet need for legal services, the cost of legal education must be minimized, both in terms of tuition and time investment.[35] To the extent that the integration of social science into a generalist curriculum demands extra money for additional faculty, faculty research, or student class hours, it fails the cost-benefit test.

Among legal educators who share these views are firm proponents of social science integration in legal education, and they have made valiant proposals to tie the integration to practitioner competence. An example is the 1971 *Carrington Report on Legal Education*, which has been characterized as representative of a consensus among legal educators.[36] It strongly affirms the importance of setting legal principles in social context, assessing the limits and possibilities of social science methodology, and appreciating law related disciplines. Social science in the *Carrington Report* model is included in a standard J.D. curriculum for a generalist degree. The *Carrington Report* is sensitive to the need to justify the function of curricular requirements to the profession,

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trary "practioner" opinion. Not only legislators, but appellate courts, perceive the relevance of social science to practical decisions. Judge Irving Kaufman of the United States Court of Appeals for the Second Circuit wrote recently that most observers today would include in a judge's curriculum vita study of economics, sociology, and psychology, and selected sciences as well. Kaufman, *Charting a Judicial Pedigree*, N.Y. Times, Jan. 24, 1981, § 1, at 23, col. 4 (city ed.).

34. *See generally* H. PACKER & T. EHRLICH, *supra* note 2, at 5-21.

35. *See, e.g.,* CARRINGTON REPORT, *supra* note 2, at 127-28.

36. H. PACKER & T. EHRLICH, *supra* note 2, at 48-49.

and to decrease cost. As did the early Columbia experiment, it abandons doctrinal curricular classifications; it attempts to avoid the pitfall of those reformers by using classifications related to the functions of a competent lawyering process rather than social functions of law, especially in the basic core of instruction.[37] Lack of response to the *Report* in terms of observable curricular change illustrates again the gap between interest and action in incorporating social science in legal education, and also the contemporary theoretical/practical skill policy split's effect on the earlier controversy.[38] Not only is social science too theo-

37. First, the *Report* is a call for total curricular revamping, a broad proposal for social science integration rather than a detailed solution to the particular problem of social science's relevance to a legal subject area or to a legal problem. As such, it is vulnerable to the criticism Gee and Jackson found among practicing lawyers, judges, and private practice bound students. The main social policy course in the generalist curriculum, Law and Social Control, appears superfluous to the everyday concerns of representing individual clients. Its content is public law related: crime and racial discrimination. While knowledge of law's broader social setting is relevant to private practice, its appearance in a course separate from courses in legal doctrine and method, decision making and planning, and the intensive instruction in specific law subjects, implicitly lends credence to the charge that it is largely peripheral. Social and economic milieu and underpinnings of law are mentioned in the other course descriptions. However, no detailed description is offered of how such perspectives are to be transmitted or with what material. More scientific, data based scholarship is left to graduate instruction. While this answers charges that actual performance of social science research is too time consuming and costly for generalist education, it leaves unclear just what social science content the generalist curriculum should include.

Although the *Report* and its curricular recommendations use significance for practitioner functioning as its criterion, it is nevertheless vulnerable to criticism by the practitioner training advocates. It does not give a clear or specific link between social science materials and the materials of private practice: cases, statutes, and regulations. Because of its lack of specific correlation to practice, its inclusion of social science appears unjustified, however desirable in general education, especially if it adds expense to generalist education. Ironically, social science, the realists' tool to enliven overly conceptual, abstract legal education, is opposed today in the name of practicality as too theoretical. The *Report* thus provides evidence for the charge that legal educators tend to think too universally in attempts to respond to changes in the outside world and the profession. It leaves unanswered Currie's appeal for refined integration of social science materials within particular law courses.

38. In the proceedings of the 1969 American Association of Law Schools Meeting on Social Science and Law, Carlin took the position that social science and its methods should have a very modest role in legal education, and could not aid it in its major task, determination of which issues lawyers should explore. Carlin, *Graduate Programs for Which Law Faculties Have No Responsibility*, 23 J. LEGAL EDUC. 249 (1970).

Auerbach echoes this sentiment in 1978—the issue of which social consequences lawyering should promote is neglected by social science's emphasis on empirical method over values and beliefs. Auerbach, *supra* note 30, at 474. Those legal scholars who scoffed at social science's unsuitability to assist lawyers in answering pressing social problems in the 1960s and 1970s found company among professional sociologists who believed professional social scientists should be involved in social policy decisions and abandon attempts to be value-free in research. *See, e.g.*, D. HOROWITZ, RADICAL SOCIOLOGY: AN INTRODUCTION (1971). In parallel fashion, realist dis-

retical for those concerned with "bread and butter" education, but also for those who have followed the realists' commitment to legal education's role in formulating practical social reforms.[39]

D. *Some Conclusions*

Currie described the movement to introduce social science materials as possibly one of the few epochal events in the history of American legal education.[40] By 1971, Mazor's update of Currie's work suggests "other movements may yet come to overshadow it," noting "a felt contradiction" between legal educators' interest and action.[41] In 1978, Schwartz does not mention social science content or any interdisciplinary activity when he lists the only two major changes he perceives in legal education: clinical programs and greater demographic spread in the student body. Law school courses purporting to apply social science to law have not affected the legal profession or the structure of legal education, he asserts.[42]

Schwartz's statement gives two clues to what happened to the vigor of the social science integration movement. First, social science study may have been overshadowed largely by the advent of clinical legal education. The realists' practical orientation and their commitment to public policy law reform tasks is largely missing in today's discussion of social science materials. It appears to be accepted that the reform agenda of activist legal educators is not served as well by social science instruction as by actual participation in reform through litigation and legislative drafting. Practitioners who are not committed to the goals of reform oriented clinics also find value in the skills training and the "real world" dimension that clinical education provides.

Apart from practical application, the need to allow social and eco-

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enchantment with social science in the 1930s coincided with a shift in sociology between 1920 and 1940 from earlier public policy allegiance to a more nearly pure science, that is, one as objective and value free as possible. P. HORTON & C. HUNT, SOCIOLOGY 34 (5th ed. 1980); Schlegel, *supra* note 2, at 581.

39. Professionals in sociological reasearch often only aggravate the reservations of fellow legal educators. For instance, Hans Zeisel, a legal educator esteemed as a pioneer in sociological research, urged that sociological research should be pursued as a science for its own sake, and had in reality very little to do with legal decision making—even public policy oriented decisions of the United States Supreme Court. Zeisel, comments at the Assessment Conference, *Developments in Law and Social Science Research*, 52 N.C.L. REV. 969, 993 (1974).

40. Currie, *supra* note 2, at 267.

41. Mazor, *supra* note 13, at 319.

42. M. SCHWARTZ, *supra* note 13.

nomic knowledge to permeate intellectual study of law is as pressing today as in the 1930s. However, clinical programs remove the pressure on classroom teachers to teach social science, at least that pressure which sprang from reform advocacy or a perceived need to enliven doctrinal educational approaches with incorporation of social or economic data from the outside world. The perceived sterility of abstract, doctrinally oriented classroom materials can be alleviated to some extent through encounter with flesh and blood in a clinical experience. Clinical programs removed the impetus to integrate social science in the functions of a generalist curriculum. In the sense of being ill-suited to immediate practical application, social science may appear as theoretical as the conceptually closed, doctrinal content of legal education in the 1930s. Social science, in fact, may appear worse: theory or doctrine is admittedly law or a part thereof, while social science materials often are about law. To the practitioner, activist law reformer, or the teacher seeking to reduce materials, social science laws appear best reserved to academicians and graduate curricula.

The latter point pertains to Schwartz's second clue. Law and social science offerings, he states, have had no impact upon the structure of legal education or the legal profession. He concludes that the persistent form of legal education may indicate something worthy of preservation. The practitioner training view, whose criterion is relevance in practice, substantiates this conclusion in part. The profession's demand for practical competency does not embrace social science materials, but at least implicitly rejects them in favor of learning in the law: cases, statutes, and administrative materials, the largely traditional teaching resources. Broad curricular reform, such as the *Carrington Report*, leaves this point unaddressed—the specific relation between the materials of practice and social science teaching materials.

Closer examination shows that the viewpoints of the clinical enthusiast and traditionalist may not be opposed to legal education's attention to social science, but rather allied with Currie's call for refined integration of social science materials by individual teachers within the standard law curriculum. In addition to clinical education's preemption of practical application, use of social science may have been hampered by lack of a precise criterion for its integration with legal materials and a perception that its teaching materials would not be legal materials or the materials of practice. To preserve the valuable and unique aspects of legal education, as Schwartz urges, and provide learning in the law

rather than theory about it, as the practitioner viewpoint urges, the materials of law study should be the raw materials of the law: cases, statutes, administrative regulations, pleadings, legislative histories, and administrative decisions and interpretations. Social facts, and social science as their source, are also basic components of the legal process. Although legal materials are the unique raw materials of legal discipline and scholarship, they are also the materials of legal practice.

Currie's call for refined integration of social science materials into the content of law courses has not received much attention. This may be due to the tendency of legal educators to think in terms of broad curricular change, and a corresponding perception among practitioners and educators that social science integration would be a costly addition and would involve materials foreign to those of legal practice. It may be due in part to clinical education's preemption of the practical skill and practical law reform impetus of the early social science advocates.[43] Notably, none of these factors involves opposition to social science on the philosophical notion of law that underlay the early Langdell-Story approach to legal education. No one urges that law is or should be an entirely abstract, conceptually self-contained study divorced from economic and social realities. Social science is not perceived as a threat to a concept of law so much as logistically difficult to incorporate into education that is a prerequisite to a particular professional career. It is peripheral to an already full curriculum, costly in proportion to its relevance to everyday private practice, and unsuitable for immediate law reform action.

The issue of lawyer competency, which promises to replace availability of legal services as a primary concern in the 1980s,[44] is not apt to provide greater motivation for social science incorporation in legal study, as long as the conventional wisdom is that social science is a valuable source of perspective, but too unwieldly to be relevant in any integral sense to the practical profession of law.

43. An alternate explanation is that although larger curricular reforms are being debated and clinical programs are absorbing both social idealists and more prosaic practical skill enthusiasts, individual teachers have quietly compiled classroom materials that integrate social science into traditional legal subject matter. To the extent that this has happened, it needs to be held up as encouragement to other educators and to show sound or manageable approaches.

44. Smith, *Conference in Houston Explores Lawyer Competence, President's Page*, 66 A.B.A. J. 1486 (1980).

IV. A CRITERION FOR REFINED INTEGRATION OF SOCIAL SCIENCE MATERIALS

A. *Need for Criterion Tied to Competent Practice*

The historical experiments and the present lag between interest in social science and its actual use suggest that the primary criterion for integrating social science materials is relevance to the practice of law, to the unique content of education for a particular profession. Such a criterion addresses the practitioner side of the theory/practice debate in legal education. It also recognizes social science's largely neglected, sideline status in current legal education, a status resulting not from opposition in principle, but inability to effectively act upon a felt need for infusion of social science. Treatment of social science in broad interdisciplinary programming as a subject relevant to but outside the subject matter of law, taught largely with nonlegal materials, apparently has had little effect on legal education. The better approach, as Currie proposed, appears to be the difficult task of refined integration in law courses, as part of the legal process.

The starting point for developing a criterion for that integration is a description of the legal process as it is known to those operating from within, rather than the observations of scientists unfamiliar with the mechanism. An example is the *Carrington Report*, discussed previously. The *Report* notes a need for data based, social science research to provide an intellectual underpinning for law, which may be a clue as to why no detailed solution to social science integration in legal curricula is offered. Its authors perceive the problem of social science's slow integration and acceptance as an inability to induce practitioners to follow scholars.[45] Their solution is graduate instruction in social science research for prospective teachers of a new generation of lawyers.

This solution, although expensive and slow, may partially alleviate the perceived problem of practitioner apathy. It alone will not be an adequate solution to the need for refined integration of social science in generalist law curriculum.[46] It seems doomed to be ineffectual in light of the historical concern for preserving education for a particular and

45. CARRINGTON REPORT, *supra* note 2, at 147.

46. References to "practice of law" herein include broadly diversified legal activities: legislative lobbying and drafting, counseling, and negotiation, as well as litigation. Nevertheless, the following analysis centers largely on private practice of law, due to the sources of criticism in the practitioner training side of the theory/practice debate, and on litigation or counseling which relies on use of court and administrative cases.

practical profession distinct from social science, the persistence and strength of practitioner training critics, and the impatience of activists in clinical programs.

The criterion for social science integration adopted by the *Report* for generalist legal education was one of significant effect on practitioner competence. To meet this criterion, the task of securing an intellectual underpinning for law may not be to induce practitioners to adopt social science scholarship. Rather it is to pay close attention to practitioners' present use of social science, however crude, and consider how that could be improved from the perspective of competent lawyering. To respond best to the gap between interest in principle and actual integration of social science in legal education, the starting point is how competent lawyers function,[47] and only then how law courses in a standard curriculum realistically can both transmit to students a critical appreciation of present use of social science and affect that usage.

B. *A Conceptual Basis for Practice Oriented Criterion of Integration: Unified Competent Lawyering Capacities*

An intellectual structure for the generalist curriculum drawn from a description of interrelated capacities the able practitioner should possess is a helpful framework to specify how, where, and when social science is or can be integrated into law from a practice point of view.

Legal education is, in this view, an interdependent spectrum of educative categories based on professional skills or capacities.[48] The categories range from the theoretical to the practical: legal perspective, legal and nonlegal theory and information, legal dialectics, and finally, legal operations.[49] The list is both sequential and dynamic. It is sequential in that it moves from the teaching of concepts to use of particular facts. Thus legal perspective concerns the functions and purpose of law, an evaluation of its means and ends, and an understanding of it

47. *Accord*, Mazor, *supra* note 13; Stolz, *Training for the Public Profession of Law (1921); A Contemporary Review*, *reprinted in* CARRINGTON REPORT, *supra* note 2, at 227.

48. Holmes, *supra* note 1, develops this "unified concept" of legal education as a response to Karl Llewellyn's challenge to educators to teach skills inadequately addressed by the traditional case method, Llewellyn, *The Place of Skills in Legal Education*, 45 COLUM. L. REV. 345 (1945). It incorporates in an index format previous attempts to conceptualize education for lawyer operations. *See* Redmount, *A Conceptual View of the Legal Education Process*, 24 J. LEGAL EDUC. 129 (1972); Rutter, *A Jurisprudence of Lawyers' Operations*, 13 J. LEGAL EDUC. 301 (1961); Strong, *Pedagogical Implications on Inventorying Legal Capacities*, 3 J. LEGAL EDUC. 555 (1951).

49. Holmes, *supra* note 1, at 562-65 and accompanying appendix at 578-80.

as a particular type of method. At this stage there is little concern with facts other than collective facts such as social or historical context. Pertinent operative facts are treated generally in the second category, legal information, although as incidental to its primary focus on conceptual analysis of legal doctrine and legal and nonlegal theory. Legal dialectics is analyzing, distinguishing, reconciling and synthesizing legal materials: case, statutory and administrative. It includes logic and fact sensitivity, and appreciation of the factual component, "type facts," in legal rules. Finally, practical skills, in the category of legal operations, employ particular facts.

Especially significant from the viewpoint of social science integration in this spectrum is the source of unity among the categories in the process of fact management.[50] Each category draws upon this underlying set of skills. The basic components of fact management are fact assimilation and implementation. Fact assimilation is ordering of undifferentiated factual mass by discovery of factual relationships and by forging facts into a cohesive whole. Fact ascertainment is discovery: it includes both fact finding and fact development through reliability and relevance testing. Fact differentiation and selection is forging a complex yet cohesive whole. It is done by diagnosis of the problem, discernment of the law or doctrine that fits the facts, consideration of advocacy and of suitability to a specific legal task. Implementation logically follows assimilation in fact management, but also augments processs of selection and differentiation. It includes the operations of drafting, legal advocacy, and persuasive argumentation.

Fact management's role as a unifying, underlying stream for the educative categories is significant for social science's role in legal education. Evident in it is the early realists' insistence that: (1) law is not a closed body of static knowledge, a unity of principles, but an activity, a method, a process that includes finding, selecting, and presenting facts; and (2) the activity takes place in the world of social and economic realities rather than a theoretical heaven of concepts. Legal doctrine and theory shape fact management and limit incorporation of social fact, yet the range of factual inquiry goes far beyond examination of narrow facts set as those that define a legal principle. Social fact permeates the legal process because fact management underlies each capacity. In legal perspective, there is factual description of the social

50. *Id.* at 562.

context of legal functions and identification of shared societal values underlying nonlegal and legal theories. In dialectical reasoning, facts are quantified, verified, or perceived in a new causal relationship that may shatter legal logic or sharpen the opposition of one principle to another.

The sequential nature of the lawyering capacities lies not only in increasing attention to particular facts, increasingly concentrated factual consideration, but also in the incorporation of each category into subsequent ones. The student and practitioner employ legal perspective, legal information, and legal dialectics in performing a legal operation. For instance, to determine which facts are to be elicited at a client interview (operation), one must know the doctrinal area of law or the rule under which relief might be sought (information), appreciate how the rule varies by factual context (dialectics), and use perspective, *e.g.*, is the client's problem one suitable for legal resolution?

This version of the subject matter of legal education bridges the opposing theory and practice orientations in legal education. Doctrine is not "theory" in the sense of abstract, purely conceptual principle. Its mastery draws upon fact management skills: relevance in fact development, definition, and discernment in fact differentiation and selection. It is integral to legal operations as well as to legal dialectics. The unifying empirical principle of fact management, a process inherent in the practice of law, changes the debate. The question for such educational choices as materials and methods becomes what theoretical training is useful to private practice and what is not.[51]

This notion of legal education provides a conceptual basis upon which to respond to Currie's call for refined integration of social science materials in legal education.[52] The competent lawyering concept may help legal education avoid overly universal prescriptions and yet

51. *Id.* at 572.

52. Holmes' description of the subject matter of legal education is part of his inquiry into "functional" teaching method and materials. Because he is interested in practical skill acquisition, an educational goal seemingly at odds with traditional teaching from appellate court cases, he defines the case method broadly. In the unified concept of legal education that incorporates theory and practical skill the case method is a valuable, though not exclusive, tool. Holmes' argument thus supports the proposition that the legal realists (and their contemporary counterparts), in opposing the unduly abstract concept of law inherent in Langdellian education, went further than necessary in abandoning cases as teaching materials, the case method's analytical approach, and "fundamental" law subjects. Holmes' conceptualization of the subject matter of legal education thus has implications for teaching methods and materials. *Id.*

respond to demands to further practitioner competency. The scheme does so because it locates an intellectual framework for law in the legal process itself, taking account of social and economic realities and non-legal descriptions, but without looking to other disciplines for intellectual underpinning. It avoids the early realists' overly inclusive embrace of social science; it offers structure for the specificity the *Carrington Report* lacks.

C. *Educational Goals and Theory Implicit in the Conception*

1. *Insight as an Educational Goal*

The dynamic character of the concept of interrelated educative categories based on lawyering capacities is particularly important for teaching social science in law curricula. The unity of the concept is dynamic both because the underlying unity of fact management is a process, and because of the interdependence of the categories. Each is incorporated into the next; each is prerequisite to competent performance of the next. It is not, however, a one-way relationship. Legal operations draw on the capacity for legal perspective, but also yield relevancy criteria for that more theoretical search for law's social function. The categories are rooted in the process of fact management and held together in a dynamic pattern of relationship. The pattern makes up that larger entity, the competent practice of law.

The educational goal implicit in this version of lawyering is to impart appreciation of that unity of dynamic interrelationship, to impart insight. Acquisition of prescribed information or skills, that is, molding or training a practitioner, is undeniably a goal of legal education. In education for competent practice, however, it is only part of the larger goal of obtaining insight. In contrast to molding or training, insight concerns deeper, more complex structures of fact. It is understanding gained by seeing a pattern of relationship or meaning.[53]

Insight results from well-performed legal reasoning and practice. Legal reasoning, particularly in case analysis, is largely a synthesis of

53. These terms are drawn largely from J. Spencer, Learning (1968) (unpublished paper by Professor Spencer at Kalamazoo College, Kalamazoo, Michigan), which in turn draws upon Alfred North Whitehead's philosophy of education. *See also* Saxe, *Legal Concepts and Applied Social Research Concepts: Translation Problems*, in M. SAKS & C. BARON, THE USE/NONUSE/MISUSE OF APPLIED SOCIAL RESEARCH IN THE COURTS 169-72 (1980), in which the term *paradigm* is used to describe social science and legal ways of viewing problems and of thinking.

holdings or rules into a unified whole that is applicable to new situations. Similarly, fact assimilation, which underlies legal reasoning and all legal processes, is ordering an undifferentiated mass of facts into a cohesive, complex whole. Only when facts are selected and differentiated by a pattern of meaning, through use of problem definition, law discernment and considerations of advocacy, do they have legal significance. When a law professor or a judge asks for the facts, the insightful answer is those facts that are material or relevant in their legal context.

Insight results when something is learned in context, when it takes on significance in a system of meaning or fully developed theory. A particular holding has a causal pattern: it is made up of facts and rules. It also has impact in a larger pattern of synthesized doctrine, of legal theory, and of legal perspective. Similarly, a particular fact has causal relationships to other facts and rules, or a case holding. Such patterns of relationship hold particular facts, holdings, or concepts in comprehensible unity.

This is the source of intellectual excitement in common law analysis. As case after case is dissected, the student sees the role of policy, precedent, and fact in one holding, and the impact of that holding as a constituent part of the next case or of a body of law. Particular cases, in synthesis, are part of a larger formulation. In a pattern of relationship, they have significance that they do not have apart.

The interplay of fact and doctrine is similar. Neither has full significance apart from the other. Their real significance is as part of a system of meaning. On one level, doctrine that results from the synthesis of case holdings depends on facts: factual context and particular facts of cases. In turn, the materiality of facts in a case turns on doctrine. Theory and fact are held together in a pattern of relationship; the key to learning is grasping the pattern, rather than a fact, a theory, or a holding.

In the unified, dynamic theory of competent lawyering capacities, descriptive factual knowledge underlies and frames theories of law's social function (perspective), and legal doctrine or theory (information). Perspective and doctrine, employed in dialectical reasoning, provide context or theory to make new fact situations legally intelligible. In turn, application of doctrine to new facts may point up gaps in an original premise, and require revisions of legal perspective or theory. "Learning the law" then, is learning how these categories interact in a pattern called legal process.

Insight, therefore, is not gained solely through the category of legal perspective. It is not separate from practical education, from molding and training by imparting information and skills. Rather, practical education is facilitated by relevant insights. In turn, facility in skills and familiarity with information confer the freedom to explore new patterns, and to gain deeper insight.

Insight is learning that changes the learner. It enables one to be aware of a more complex, yet comprehensible context. The learner who has gained insight has a changed conceptual framework with which to approach new learning. Even after individual facts or ideas have faded, the system of meaning in which their significance was grasped remains, available for new learning.

The case method, when broadly defined as method applicable to more than the study of appellate court cases, exemplifies this learning process. The essence of the case method is systematic, intensive investigation of the sources of law. Opinions and legislation are simultaneously the end-product of legal processes and building blocks in continuing legal process. They are, therefore, examples of law's structure or pattern. The case method is guiding the student through original sources, through the processes by which the law was developed. As Dean Harlan Stone stated: "[B]y this method . . . the student make[s] these concepts intellectually his own in such a way to be capable of using and applying them."[54]

Given the impossibility of teaching the entirety of substantive legal knowledge, the primary goal of imparting insight is a practical one—even for those who urge primary emphasis on teaching the basic information and skills a lawyer needs in everyday practice. It is practical because the unifying meaning construct is the legal process. Insight into this pattern yields ability to receive and use new information and skills. Knowledge with no relevance to practice is taught futilely; being outside the unifying pattern of education for lawyering, it stands slight chance of being retained or applied.

2. *Psychological Theories of Learning*

Insight as an educational goal is consistent with certain psychological theories of learning. Psychologists are far from agreement on a broad,

54. Remarks in *Symposium—Papers and Discussion Concerning the Redlich Report*, 4 AM. L. SCH. REV. 91, 93 (1961).

formal theory of learning with predictive value. At the same time, however, more precise, empirical bases of prediction are often too narrow to have significance for the variety of students and subject matter that characterizes legal education.[55] Theorists are divided broadly among those who interpret learning cognitively, as a way in which perceptions or attitudes are modified by experience, and those who interpret learning as a matter of connections between stimulus and response. Varying both in the subject matter of their study and in method, they nevertheless approach agreement on the proposition that in learning a complex substantive matter, one may learn to learn. This is accomplished either by cognitive restructuring, insight into a new pattern, or by learning to discern what is constant and important in a problem, what cues yield a problem solving approach transferable to a new learning situation.[56] These are exactly the goal of imparting in-

55. *See generally* W. HILL, LEARNING 253-59 (3d ed. 1977).

56. Gestalt psychology's contribution to learning theory is an emphasis on understanding or perception of relationships within an organized whole. A gestalt, translated roughly from the German as "form," "pattern," or "configuration," is a dynamic system in which parts are dynamically interrelated so that the whole cannot be perceived or inferred from the separate parts. *Id.* at 115. When a learner sees certain aspects in a new way, a way that involves understanding of relationships or connections, he or she sees a situation as a single gestalt. Insight is the word for this cognitive restructuring, which is commonly experienced as a feeling that one now "truly understands." Max Wertheimer's learning experiments, in which school children solved geometrical problems, demonstrates insightful learning as cognitive restructuring. *Id.* at 121-25 (discussing M. WERTHEIMER, PRODUCTIVE THINKING (1945)). When mechanical application of a rule would not suffice, conversion of the problem into a familiar one, or insightful restructuring into a better gestalt, would. Logic does not necessarily produce insight; an inductively or deductively "correct" answer may not be one that entails understanding a problem as an integrated whole, understanding why the means led to the end. While prior learning or experience such as logical skills may be essential to problem resolution, insightful restructure also uses an element of novelty to organize material in a new manner or see it in a new system of meaning.

Insightful learning is especially resistant to forgetting and also is easy to transfer to new situations. *Id.* at 117. Both phenomena may be due to the learner's changed situation. The new perception that yields insight gives a sense of completion that aids retention. Good gestalts give a unifying framework in which details that might otherwise be forgotten have a place and with which one may approach new learning.

This gestalt explanation of original and flexible adult thinking is highly cognitive. Transfer of learning approach is also found in connectionist theories of learning to learn, generally categorized under the term, "mediating responses." *Id.* at 171-79. According to this view, response to original stimulus may mediate, or produce, stimulus for the final observable response. Mediating responses serve as a cue or guiding stimulus for further behavior. In other words, a learner may discover which cues (mediating responses) in a situation are significant and thus learn a general method of problem solution that can be transferred to a new situation. A famous example is Harlow's concept of "learning sets." *Id.* (summarizing Harlow, *Learning Set and Error Factor Theory, printed in* 2 S. KOCH, PSYCHOLOGY (1959)). Another variation is Tolman's concept of "field cognition mode," a way of learning. An example is use of language as a mode for learning

sight by teaching legal process or competent lawyering.

Teaching transferable learning ability is of obvious value in education for competence in an increasingly diverse legal profession in which new problems are constantly encountered and substantive knowledge becomes outdated. The goal of legal education might well be to impart distinctive cue acquisition, in connectionist language, or perception of an integrating learning approach, a unifying pattern among particularities of knowledge, in cognitive language. Such teaching must be more than merely giving the cues, more than stating, "This is the pattern." To gain insight, a student needs opportunities to experience a process, an activity: restructuring information into a new pattern or formulating a learning approach.

The unified concept of competent lawyering outlined in Section B above is a problem solving approach or unifying pattern that legal education can convey. Cognitive restructuring that yields insight into the system of meaning or context in which legal problems are resolved becomes the educational goal. The interdependence of the educative categories and the underlying unity of fact management skills yields a pattern students can discern in legal materials and use to tackle new problems, new learning situations. Because the educative categories are rooted in lawyering capacities, the concept can serve as a bridge in the theory versus practice dichotomy that characterizes formulation of legal educational goals. Such a unified concept of the educational goal could alleviate the emphasis of certain skills or perspectives to the exclusion of others.

For present purposes, a unified concept of the content of legal education can serve as a criterion for refined integration of particular subject matter, such as social science, in the legal curriculum. Thus, competent lawyering capacities and fact management skills provide a criterion for determining where and when social science is most effectively integrated with legal materials.

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other things. *Id.* at 174 n.135. When faced with a long series of different discrimination problems, all of which can be solved in the same manner although no direct substantive learning can be transferred from one to the next, learners gradually learn the generally applicable principle. Certain cues must be discerned as those yielding an approach to learning, a "learning set."

Responses to stimuli give learners cues, and cues can be complex and verbal. Mediating responses therefore resemble gestalts as learning modes; a gestalt might be interpreted in connectionist theory as stimuli produced by a learner's own responses. *Id.* at 175. Psychological learning theorists thus do agree on the possibility and value of teaching transferable learning ability.

V. Unified Lawyering Capacities as an Integrative Learning Pattern

A. *A Pattern Distinct from that of Social Science*

Fact management skill is a unifying substratum of competent lawyering's educative categories. The educational categories of perspective, information, dialectics, and operations are unified by common inclusion of fact assimilation and implementation. Accordingly, this realm of empirical reality, which includes economic and social facts, is an essential and fundamental part of the subject matter of legal education. This much the early realists articulated.

Categories are also unified by interdependence in a process of lawyering. Lawyering calls into play a general perspective, theory, doctrine and precedent, reasoning and practical skills. Competent lawyering thus provides a basic defining criterion, a pattern of relationship for legal education. It emphasizes process, the activities of lawyers. In this respect, the competent lawyering concept is in contrast to the criteria the realists at Columbia hoped to use to integrate new material and redesign the legal curriculum. Their criteria were drawn from social science, not legal process.

The difference is crucial for integration of social science in legal education. While competent lawyering serves to unify and integrate diverse substantive matters, including social sciences, it also excludes.[57] Learning cannot be all-inclusive; learning distinctive cues for a particular problem solving approach involves learning to ignore other cues and other information. In fact assimilation, the lawyer's task is ordering undifferentiated factual material. Ordering for and by the legal process excludes other patterns of relationship; it leaves in the background discrete facts and factual relationships that could be prominent in another perspective. What is integral to a social science perspective on social reality may have far less weight in a legal one. The proper function of law in society, a general perspective capacity and an educative category, may well limit or exclude discrete ideas and conceptual relationships that are, in other contexts, quite valid. The social science concept is not irrelevant, but its prominence in legal problem solving

57. To draw again on gestalt psychology in learning theory, a unified whole is also a segregated whole; gestalts stand out as distinct from the background against which they appear. W. Hill, *supra* note 55, at 115.

depends on its function in the pattern of relationship that is the legal process.

Competent lawyering as an integrative learning pattern assumes unique subject matter for legal education, insight not transmitted by education in social science. The stubborn perseverance of legal education's traditional structure, despite nearly unanimous appreciation among legal educators of social fact and theory as components of law, is some evidence for that assumption. While recognizing the significance of shared subject matter—group behavior and interest in socially effective results—differences between lawyering and social science are the key to identifying social science's effective contribution to education for competent lawyering.

Legal process and social science share concern with empirical knowledge. They employ concepts with factual analysis to further knowledge in a similar manner. They differ significantly in their sources and their purposes. These differences shape their perception and treatment of fact, their pattern of relationship for integrating factual information.

To limit analysis and highlight major contrasts, social science is defined here in a conventional sense as a body of knowledge about life, gained by the scientific method. Scientific method is testing a hypothesis by scientific research: by systematic, controlled observation and classification. Social science includes both findings or knowledge, and method or the means of knowing. Legal process is the unified dynamic of lawyering capacities described above, utilized within institutions that have the power of official sanction, specifically, the courts.

Social science and law both depend upon knowledge about collective or social behavior. Social science claims a body of organized, verified knowledge secured through scientific investigation.[58] In this aspect, it is a science, distinct from social philosophy, a system of ideas and values. Yet concepts and theory cannot be completely divorced from scientific knowledge. Formulation of concepts leads to increased knowledge in a process that is in many ways similar to the interplay of doctrine and fact in legal process. In social science fairly accurate descriptive knowledge is necessary to frame an hypothesis, which is a concept that is an explanatory pattern, that "holds" facts in a pattern of relationship or system of meaning. Analysis, criticism and application of the concept, or scientific research to verify the hypothesis, points up

58. P. HORTON & C. HUNT, *supra* note 38, at 10.

gaps and errors in present knowledge.[59] In a similar manner, legal theory rests on factual assumptions, legal doctrine incorporates facts, and both are analyzed and critiqued in dialectical reasoning. Theoretical inconsistency and errors in the factual premise may be corrected by application to a new factual problem of new values, information, or theories, either legal or nonlegal. Despite significant differences, social science and law share empirical subject matter and a rational, systematic method of advancing knowledge by constant criticism of theory, institutions, or assumptions.

Nevertheless, the disciplines differ in their source of truth and their purpose. These differences result in different patterns that integrate empirical and conceptual subject matter.

Social science's source of knowledge is ultimately scientific method. Factual knowledge is descriptive statements that scientists agree are accurate after controlled, scientific investigation,[60] subject to revision in light of new empirical investigation. In contrast to scientific authority, law looks to humanistic authority as a source of truth. Humanistic authority rests less on an empirical method of investigation than insights of certain people and social groups. This is not to deny that method is essential to assess the validity of legal knowledge, to determine what is authoritative. Use of accepted modes of reasoning affects the strength and validity of legal authority. Nevertheless, legal method varies from scientific method in its use of humanistic authority. Who exercises legal method, and by what societal authority, may determine the truth of a legal statement.

The truth of a descriptive legal statement of present reality rests on past societal agreement.[61] The agreement may be a particular law, or an agreement that a legal institution's decision will be enforced. Accuracy of sociological description of present reality depends on a method. Moreover, the method requires the social scientist to attempt to stand outside society, to observe as objectively as possible. The desired result is a more accurate description, a fuller theory, which may be used to predict or explain events. In legal process, the desired result is a socially acceptable and workable ordering of present and future events—problem resolution. The lawyer acts in society, in a special role en-

59. *Id.* at 39.

60. *Id.* at 7.

61. The phrase is from Moynihan, *Social Science and the Courts*, 54 PUB. INTEREST 12 (1979).

trusted by societal agreement: legislator in the legislature, advocate or decision maker in the courts or agencies, and counselor within the framework of all these institutions. The advocate or decision maker speaks by virtue of and within past societal agreement to persuade other members of society that this is the agreement, or to pronounce that it is with official sanction. As an actor within a social institution, the lawyer's perspective is quite different from that of the social scientist, for whom the lawyer's activity is an object of empirical inquiry. Thus, each discipline's source of truth is integrally related to its function or purpose.

Precedent assumes an important role for one acting within the parameters of past agreement. As the theory of fact management in lawyering process makes clear, legal precedent contains results of past empirical inquiry and use of precedent in the continuing legal process, and entails further fact management. Revision of knowledge is not, however, as it is in social science, dependent solely on new empirical evidence. This is because legal precedent embodies not only empirical information, but past agreement and authoritative interpretation. Fact management, the assimilation and implementation of empirical information, underlies lawyering capacities, but the facts are held in a pattern of relationship that rests on humanistic authority.

Past agreement as a source of authority for legal truth adds a normative dimension to legal perception and management of empirical reality. New conclusions do not arise from new evidence necessarily, however unwelcome they be, as in the scientific model. To the scientist, precedent seems to require manipulation of factual findings that is dishonest or contrived; law appears to start with a conclusion and manipulate evidence to fit it.[62] This appears obvious from the lawyer's interest

62. An example is a sociological study of the Detroit school desegregation case, Bradley v. Milliken, 338 F. Supp. 582 (E.D. Mich. 1971), *aff'd in part,* 484 F.2d 215 (6th Cir. 1973), *rev'd,* 418 U.S. 717 (1974). Wolf, *Social Science and the Courts: The Detroit Schools Case*, 42 PUB. INTEREST 102 (1976). The author points to agreement among the parties on the "goodness" of integration as the reason sociological evidence that racial isolation is not educationally harmful was not introduced, and evidence relied upon in the decision against the school board was of de jure discrimination in school board actions, not residential patterns. She calls the evidence of the theory of de jure discrimination "contrived." This adjective makes sense against a scientific search for explanation of a social phenomenon, but does not when one takes into account the norms established within societal agreement that frame the sphere of factual inquiry. Problem definition, law discernment and considerations of advocacy shape factual differentiation and selection. Facts indicating de jure discrimination are prominent in the legal pattern, although they may not be significant as causal factors in a scientific explanation of school segregation.

in outcome. As partisan advocate, one is interested in a particular result; even as disinterested decision maker, one is concerned with problem solving over theory building. What is less obvious is that adherence to a norm or pattern, while seemingly at odds with a scientific search for truth, does not imply a lack of integrity. It is integral to the search for legal truth.

Conformance of fact to norms or patterns of meaning is essential to a system that rests on societal agreement. In the dynamic concept of lawyering, it is fact assimilation. It is acquisition, differentiation, and selection of fact by the system of meaning within which lawyers act, the integrative pattern that shapes legal perception. Facts prominent in that perception may overshadow those that scientists might agree yield a more accurate explanation of social phenomena. For instance, an individual's invidious intent is prominent in legal perception of the facts of a racial discrimination case, while scientists may find that social or residential patterns explain the phenomenon of segregated housing more completely. Facts derive significance in a larger pattern of relationship agreed upon as meaningful and authoritative in a social institution. Their significance is tied to their utility in the continued life of that pattern. The legal term is material facts: material to resolution of an issue which arises in interpreting and applying past societal agreement.

Legal fact management is also shaped by its operational context of problem solving or dispute settlement, deciding the issue arising under past agreement in a new factual setting. For example, the adversary process in litigation is a major limit on scientific factual inquiry—evidence relevant to accurate explanation of the social phenomenon involved, but not relevant to issues raised by advocates pitted against one another, may often be excluded. Evidence that time constraints prevent from being gathered or presented may also be excluded. A decision may not await more complete factual knowledge.

A lawyer thus has a different operation to perform than a social scientist. The lawyer must work for a practical and effective result within

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The contrast is also seen in the distinction between "empiric-analytic" knowledge, suitable to law as an instrument of social policy ends and which employs social science, and "hermeneutic" knowledge that focuses on interpersonal meaning, suitable to law as moral legitimist, and which is less apt to employ social science as a basis of decision. *See* Post, *Legal Concepts and Applied Social Research Concepts: Translation Problems*, in M. SAKS & C. BARON, *supra* note 53, at 172-75.

a pattern of meaning embodied in past agreements. Crucial is one's personal ability in the legal process: knowledge of past authority and present information, use of legal dialectical reasoning, and skill in implementation. Ability to utilize these with appreciation of law's social function, with discrimination among and commitment to values embodied in social agreements, and with imagination and courage, may be called for as well. The lawyer's warranty is tied to law's purpose and source of truth: "This is my resolution of the new problem; it should persuade you because it is based upon our common agreements."[63] The social scientist, in contrast, seeks to objectify the process by which he or she assembled and analyzed relevant materials. The warranty is tied to social science's source of truth: "You can perform the same method and get the same result, regardless of personal or societal receptivity or practical consequences."[64]

The lawyer speaks personally and persuasively, within a received pattern that unifies relevant materials. It is a distinct pattern, one that may exclude other patterns of relationship among empirical data. It is a unity based on societal agreement more than method, on humanistic authority more than scientific. A lawyer's success, and that of the legal process, depends more on ability to act with discrimination in the pattern of significance than to criticize from without. The legal process' interpretation and application of past agreement rests on the lawyer's personal ability, and the legal community's corporate ability, to receive faithfully, integrate perceptively, and communicate persuasively.

B. *Integration of Social Science Within the Pattern*

The distinction between the patterns of relationship for empirical data in lawyering and in social science is the key to integration of social science in legal education. First, it adds credence to the practitioner-training school's criticism, that social science is too "theoretical" for legal education.

Refining that objection pursuant to the dynamic interrelation of theory and fact management skills is competent lawyering. Social science method and its knowledge of empirical reality, quite valid with its own system of meaning and integrity, is not useful learning for lawyering. It is not helpful in light of the immediate task of solving a specific, dis-

63. Rosenberg, *Comments*, 23 J. LEGAL EDUC. 199, 203 (1970).
64. *Id.*

crete problem within the context of past authoritative agreements. New empirical data that social science offers may play a role, but social science's interpretation of data, the weight it gives it in causal explanation of social phenomenon, may not be determinative in legal issue resolution. The data's value depends on its position in the legal pattern of meaning or relationship.

Social science cannot provide a complete answer when a court asks: "What did we as a society agree to in the past? How have the courts interpreted that and how should we today?" To respond effectively, a lawyer needs insight into the legal system. Knowledge of specific facts or empirical evidence, with which social science can assist, is not as important to the lawyer's functioning as knowledge of how and why such variables have significance. In this sense, the impatient practice-oriented student is correct in asking for learning in the law, not knowledge about the law. The student needs the perspective of those who act within law's pattern of meaning. Primary legal authorities, judicial opinions, legislation, and legislative history, transmit the pattern of relationship. They transmit insight. Integration of social science in legal education cannot replace major emphasis on legal materials.

Second, legal process' distinctive pattern of significance excludes the wholesale incorporation of social science in its own system of meaning, but does not exclude its integration entirely. The key to effective teaching of social science in law school is integration of social science in the distinctive pattern of interrelationship among facts, theory, norms, and operational context that is the legal process.

A starting point for this integration is examination of how social science is presently used in the legal process, and how it functions in competent lawyering capacities. Social science presently is almost never used as a basis of legal decision making.[65] One reason is the problem solving approach that results from legal education based upon appellate cases. One commentator identifies ignorance and inertia as primary reasons lawyers fail to use social science.[66] As judges are nearly entirely dependent on lawyers to produce relevant social science findings, lawyers' failings virtually preclude use of social science. Reliance on an approach that has been successful in the past—traditional legal

65. Lochner, *Some Limitations on the Application of Social Science Research in the Legal Process*, 1973 LAW & SOC. ORD. (ARIZ. ST. L.J.) 815. *See also* case histories analyzed in M. SAKS & C. BARON, *supra* note 53, at 82-117.

66. Lochner, *supra* note 65, at 824-25.

analysis of legal materials, especially cases—reduces incentive to try new approaches that might yield different solutions.

In the analogy to cognitive learning theory, structuring data in one integrative whole reduces other data to background status. Yet a new problem that resists solution by the transferred learning approach forces search for another. New data that cannot be integrated into an interpretative pattern forces restructuring of perception. Similarly, social science is used most often when a courtroom lawyer must make a new argument, use novel proof, or act in the absence of or against precedent.[67] The most striking use of social science, particularly economics, in the legal process, has been when a new and fluid statute, lacking a history of interpretation, needed theory for enforcement: antitrust and trade regulation are the preeminent examples.[68] Instances of first impression, when existing institutions, doctrine, theory, or method appear inadequate, give practitioners the incentive to utilize social science as a basis of decision.

Novelty on a level that disturbs the pattern may call for social science, not just as additional evidence in the set legal pattern, but as part of the pattern itself. A new legislatively-created right without the history of common law development that identifies significant facts in a developed theory may fall outside the integrating patterns of past agreement and interpretation worked out in legal process. For new categories, one may call on social science. It thus becomes a significant variable in the pattern.

Occasionally when new legal ground is broken, social science is introduced, but nevertheless is a relatively minor variable in the interplay of fact, norms, and theory. For example, the holding that racial segregation in education was unconstitutional could be justified by a line of past judicial interpretation of societal agreement, although social science strengthened the credibility of the recent precedent.[69] Social science in this instance was not integral to the problem solving approach or the integrating system of meaning, although it was useful.

Social science may have a significant role in fashioning remedies for public law violations because legal doctrine and theory may be absent

67. *Id.* at 822.

68. *Id.* at 823; comments of John P. Morris, Assessment Conference, *supra* note 39, at 1054.

69. McLauren v. Oklahoma State Regents, 339 U.S. 637 (1950); Sweatt v. Painter, 339 U.S. 629 (1950); Sipnel v. Board of Regents, 332 U.S. 631 (1948); *and* Missouri *ex rel.* Gaines v. Canada, 305 U.S. 337 (1938), paved the way for Brown v. Board of Education, 347 U.S. 483 (1954).

or unhelpful. Past agreement that de jure racial discrimination in public schooling violates equal protection under the constitution, does not necessarily dictate a specific remedy viable among complex social factors. Empirical and behavioral variables have room to significantly affect norms and precedent in design of a remedy.[70]

For the majority of routine tasks, such as incorporating businesses, writing and probating wills, drafting contracts, and even planning compliance with or litigating under public law provisions, the private practitioner does not need social science. For the majority of trivial cases, governed by precedent or its noncontroversial extension by accepted legal reasoning, judges do not need social science. This is not because social fact is irrelevant to these legal operations, but because its role with norms and theory in the pattern of relationship relevant to the task is established. Norms, theory, doctrine, and tasks operate in the processes of fact assimilation and selection to limit infusion of new factual perspective and relationship.

For example, the social function of contract in society, theory of contract, relevant legal dialectics in construction of contract law, and contract drafting skills are not set in cement. Factual knowledge or hypotheses undergird contract law, and new information and variety in factual problems penetrate its practice. Nevertheless, when only the particular stated facts change, but not the role, the weight, or significance of those facts, the competent practitioner has the necessary learning approach for satisfactory problem resolution without aid from social science. Competent lawyering by fact management may draw upon social science, but the factual inquiry is limited sharply by settled legal perspective, theory, and doctrine. The problem is already legally defined, the relevant law discernible, the avenue of successful advocacy clear. The innovative and well-funded attorney may use social science, within the limited scope given it by the legal process, to find new facts, develop or verify them. Ignorance, inertia, and limits of time and money may and probably will prevail. The process of decision may suffer in quality, but neither judge, opponent, nor client is likely to provide incentive to use social science. The pattern that gives particular facts significance remains and it is inclusive enough to integrate or accommodate change in factual particulars. Inaccuracies—failure to find

70. *See, e.g.*, Wolf, *supra* note 62, who attributes an interdistrict busing order to a judge's change in attitude wrought by social science evidence.

a key fact or to accurately identify causal relations—may be revealed and corrected by fact management skill in the incremental process of case law growth.

In development of legal rights created at common law, fact and theory correlate in legal process so that a large gap is seldom present for social science to fill. Past interpretation of societal agreement not only narrows the relevant scope of factual inquiry, but personal ability in legal process—use and understanding of accepted norms, theory, and legal reasoning—may overshadow the role of new empirical perception. Novelty strains the process of case law growth, however, and thus provides an incentive to use social science in practice.

Brown v. Board of Education[71] marked a point of change, restructuring of an integrative pattern of meaning embodied in past agreement and its interpretation. It was not wholesale abandonment of the learned approach, as the line of precedent leading to it illustrates.[72] It was change in a major cue, a salient part of the pattern of meaning. Equality in separateness was no longer a criterion to use in finding and selecting facts, no longer the premise for legal problem definition or resolution in the social reality of race relations. It was replaced by discrimination alone, official separation. The fact that separate accommodations were equal did not carry the significance it had in the earlier formulation.

Social science findings of educational harm from racial segregation in schooling were cited by the Court. Few find in them the basis of the decision, either as motivation for judicial behavior or as significant variables in the logic of the decision. The weight of the social science data in the justices' personal decision making is not evident from their opinion. The opinion is the product of their personal ability in legal method—analysis, synthesis, imaginative extension—and is warranted by its resolution of a problem in a persuasive manner. It is possible to discount the use of social science findings as makeweight. Nevertheless, its use is an entry point for social science in the legal process. In a time of novelty, when legal norms and theory are in flux, the relevant range of empirical inquiry widens. It may be the basis of new integrative principles; it may be proof of factual assumptions underlying com-

71. 347 U.S. 483 (1954).

72. *See* note 69 *supra*.

peting theories; or it may be makeweight when a change is made on other grounds.

Novelty, the point for social science integration, is also a point in which the distinctions noted above between legal and social science are most apparent. The lawyer's personal skill and warranty of persuasive legal analysis is most distinctive in new areas. The perspective of choice means the pattern of relationship between empirical data, norms, and theory is to some extent a personal one, reflecting how a system of meaning is received and transferred to new problems by an actor in the legal process. The learner who hopes to act within that system of meaning needs to learn not only what that decision maker received, what legal sources were called upon, but how they were weighed, analyzed, synthesized; which were decisive in the new situation and why. The learner needs to appreciate a living pattern, one forged by an actor sensitive to variables of norms, theory, and social fact.

C. *An Example of Distinct Integrative Patterns*

Social science's limited utility in the legal process of interpreting and applying past agreement is evident in the findings of a sociologist's study of the 1971 Detroit school desegregation litigation.[73] Eleanor P. Wolf evaluated the quality and comprehensiveness of social science materials introduced to determine whether judicial decisions at various levels accurately reflected the weight of social science evidence offered. She found significant omission of relevant social science data due to the adversary method and the parties' consensus on empirical value questions she considered open, such as the social benefits of integration and the educational harm of racial isolation. She found an unclear line between facts and their interpretation, and contrivance in factual inquiry into de jure segregative acts when other social-economic variables, such as residential segregation, appeared more causally related to present de facto segregation. She also found insufficient appreciation, not so much of the peculiarities of social science research methods, but of the basics of scientific causation. For instance, evidence on educational resource allocation to black and white schools was offered with student

73. Wolf, *supra* note 62 (citing Bradley v. Millikin, 338 F. Supp. 582 (E.D. Mich. 1971), *aff'd in part,* 484 F.2d 215 (6th Cir. 1973), *rev'd,* 418 U.S. 717 (1974)). *See also* Wolf, *Northern School Desegregation and Residential Choice*, in P. KURLAND & G. CASPER, SUPREME COURT REVIEW 63-85 (1977).

achievement level statistics, but no explanation of how to discover whether any causal relationship existed between the two. She also concluded that regardless of whether it appears in the legal ground for a decision, social science has a large role in influencing a judge's general perspective, "educating" to social fact within the limits of the adversarial procedure.

The study is valuable in its demonstration both of limits to the sociological explanation of the legal process for learning to practice within that process, and the role of social science in the legal process. The most striking aspect of the study, however, is its failure to see that legal perspective, theory, and doctrine interact with facts to limit the relevant universe for pertinent social science inquiry. Her basic premise, that judicial decisions should accurately reflect the weight of social science evidence, assumes that social science's own interpretation of its data should govern use and interpretation of the data in the process of legal decision making.

Because of the parties' expressed consensus on the "moral and ideological imperatives" of the goal of integration in public schooling, evidence tending to undermine factual assumptions that racial and class heterogeneity improves education performance was not introduced. Wolf believes this consensus influenced the trial judge greatly, perhaps even causing him to change from pretrial rejection of busing as a remedy to ordering unprecedented interdistrict busing. She notes, however, that the legal basis for that remedial order was not social science evidence of educational harm from racial isolation, but findings of de jure discrimination in school site selection, pupil transportation policies, and boundary changes. Because Wolf is convinced this de jure discrimination is not the cause of school segregation, she examined the evidence of de jure discrimination for evidence of specific causation and found it contrived. She thought it was "blurred" with interpretation and value choices or lack thereof. For instance, whether a small neighborhood homogeneous school should be valued over a larger, distant heterogeneous one was a question she thought should have been addressed.

The goal of school racial integration was, for the district court particularly, a settled normative interpretation of past agreement. Incentive to introduce social science evidence that racial segregation may not harm educational achievement therefore was slight, unless the possibility of change was sensed. More significantly, those who act within the

legal system have a sense of the relative weight of the role of empirical data. In this area the role of norms articulated by the courts as part of the societal agreement has been great, so the practitioner would not have expected new empirical evidence alone to change the legal standard. Again, the practitioner may have been aware that post-1954 acts of de jure discrimination probably are not causes of present segregated schooling patterns or not a cause that may be isolated from other socioeconomic factors, such as those affecting residential patterns. However, interaction of a multitude of variables beyond an actor's or entity's control has not been held to violate past societal agreement so as to allow court ordering of events.

Wolf's critique of factual causal proof in the context of social or educational policy choices may be valid, and the court's use of factual assumptions about researchable subjects and present day behavior needs social science critique.[74] Her study does not reflect, however, an understanding of the role of new empirical data among other variables and cues for legal problem solving. From a legal perspective, interpreting factual evidence in the light of de jure discrimination is not contrived, but consistent with authoritative interpretation of past agreements. De jure discrimination is a cue or integrative pattern in legal operations concerning the broad social phenomenon of racial discrimination. The legal problem that guides fact discernment is not sound educational policy by itself; it is what conduct violates a particular societal agreement so as to warrant court ordering of future events. Social science evidence was used for proof in a narrow, legal universe, not to prove causation in the scientists' larger context of social realties.[75]

The effect of social science evidence of educational harm that Wolf noted in the judge's attitude toward remedy illustrates that the effect of social science is not accurately gauged by the legal reasoning used in an

74. Moynihan, *supra* note 61, distinguishes between court interpretation of past agreements, in which what the court says is true, and legal statements of future prediction in researchable, discoverable subjects. In the latter, social science critique is valid, in a mode of argument in which reasoning is more empirically based and more exposed and less subjective and value laden. This is indeed where Wolf's criticism serves a valid purpose. Its utility in this latter type of legal reasoning is limited if the social science does not recognize the role of that reasoning in the overall legal process—its interplay with norms, theory and limited range of choice—and that the former type reasoning, value laden interpretation of past agreement, is valid and limits the scope of the latter reasonings.

75. The concept of the limited scope of a legal universe, in which social science may operate in a manner that is manageable for those within the legal process, is from M. FINKELSTEIN, QUANTITATIVE METHODS IN LAW 15 (1978).

opinion to justify a decision. More significantly, it shows that the limited extent to which social science did permeate the legal process was determined by the personal perspective of the decision maker. It was in the personal integration of norms, theory, and empirical evidence for a particular choice that novelty entered the legal process.

VI. Implications for Teaching Method and Materials From Unified Lawyering Capacities as an Integrative Learning Pattern

Insight, appreciation of law's unifying pattern of relationship so as to make the pattern one's own and enter into it, is the goal of education for practice of law. Insight is transmitted when students experience cognitive restructuring of material in the new pattern, that of lawyering or unified lawyering capacities. Teaching materials and methods therefore should facilitate teaching unified lawyering capacities as a new pattern for integrating law school learning; a learning approach to transfer to new problems; and an experience of receiving and entering a structure of meaning that changes one's perception.

How does one transmit insight as a pattern for integrating social science? Social science materials may play a valuable role in isolating what variables have been most significant in lawyering. However, when presented in its own system of meaning, social science cannot transmit the personal integration of decision; it does not speak from within the legal process.[76] It will thus seldom be of decisive consequence for the practitioner in the dilemma of choice, although in the face of the demands of novelty, he or she may call upon it.

Teaching substantive social science knowledge or findings in law school is likely to be ineffective or inefficient. First, there is little substantive knowledge on specific legal issues, that is, in the limited context in which social science operates within the legal process, there may

76. Particularly exemplary is the most frequent type of sociological research: behavioral analysis of judicial decisions. *See* H. BAADE, JURIMETRICS 1-4 (1963). The behavioral approach, in emphasizing factors and outcome over the language of decision, ignores the fact that in an opinion one actor in the process sought to communicate to another—to speak, speak persuasively, and within the common pattern of meaning. Llewellyn pointed out the rhetoric of an appellate decision is intended to guide lower courts in analogous cases not yet decided. K. LLEWELLYN, THE COMMON LAW TRADITION—DECIDING APPEALS 14 n.9 (1960), *quoted in* H. BAADE, *supra*, at 3. This purpose of legal statement, assistance in decision making or choice, is neglected by behavioral analysis.

well be little readily available specific knowledge.[77] Second, lawyers usually have incentive to use social science only when they face new questions, which are precisely those on which specific social science research generally will be incomplete. Time and cost constraints may make the research unfeasible. Social science method rather than substantive findings may be a more useful subject of instruction. An appreciation of the method enables the practitioner to critically examine social science evidence and to work with scientists because of acquaintance with advantages and disadvantages, explanatory weaknesses and strengths of various research methods.[78] Method is best taught in conjunction with substantive content, however, just as in law the examination of particular primary materials, cases, and statutes, imparts a sense of legal method better than a treatise on method alone. The problem solving approach is gleaned from repeated specific instances. For education whose aim is preparation for the generalist practice of law, repeated exposure to social science materials in their entirety and in their own context will not be a time- or cost-effective manner of imparting acquaintance with social science methodology. Such courses have remained on the periphery of curricula.

The key is in the use of legal materials—materials that are the unique content of legal practice and of legal scholarship. The interplay of empirical, normative, and theoretical variables in a living integrative pattern, in the context of choice and novelty, is best learned in or via the actual materials of the law: in the cases, statutes, and administrative regulations and decisions themselves.

Such an approach confirms Schwartz's assertion that the failure of social science to permeate the structure of legal education indicates

77. Hans Zeisel, eminent in the field of sociological research, states this from the point of view of "micro" findings, *i.e.*, rather than general insights on large social question from empirically based social theory, the effect of a variable, for instance jury size, on a specific outcome, such as murder verdicts. Zeisel, *supra* note 39, at 979. In this area of inquiry there is little research by either social scientists or lawyers. Zeisel, *Of Social Research Methods and Competency for Lawyers Therein*, 23 J. LEGAL EDUC. 240, 241 (1970). Moreover, social science seldom can predict specific development: the larger role of individual behavior over group behavior, the less social science has to offer in the way of prediction. P. HORTON & C. HUNT, *supra* note 38, at 32; Zeisel, *supra* note 39, at 979. Moynihan, *supra* note 61, points out the instability of substantive social science knowledge: the revisionism inherent in scientific method as a source of truth.

78. Zeisel, supra note 77, at 240-42, urged this should be the aim of a separate course of instruction on social science in a law school, using presently available case materials in which social science is prominent.

something worthy of preservation.[79] It also reflects the imprint of the practical profession on law and legal education. It stems from appreciation of lawyering capacities as the criterion for integrating subject matter, the pattern of relationship or meaning for law and legal education.

Opposition to early realist attempts to revamp legal education by social science's theory and method illustrates legal education's firm historical grounding as preparation for a particular profession. The present structure of legal education does the same. The categories of study have remained largely the legal definitional areas in which lawyers must assimilate, select, analyze, and advocate admittedly social fact to gain relief, to solve an immediate problem within societal institutions. The materials of study have remained the materials of practice—primary sources of the law. These were formerly and for too long exclusively appellate court cases, but increasingly are trial court and administrative cases, legislation at all levels of government, regulatory, arbitration, and negotiation materials, all of which correspond to the growth of these materials in the profession's world of practice.

These materials are units of practice—materials undeniably relevant to professional preparation because they are both the product of and the subject matter for, the ongoing legal process.[80] As product, unified lawyering capacities are revealed in their dissection: a sense of norms and social context, assimilation of legal and nonlegal information and theory, exercise of legal reasoning, skill in the operational context of case decision, legislative drafting, regulatory interpretation. They are empirical data for learning legal process; they are actual units of practice, in contrast to writing about law either by social scientists or traditional legal scholars in hornbooks or treatises.

If the unifying matter of dynamic interrelationship in the lawyering capacities is grasped, the materials have yielded far more than an item of information or a legal rule. They yield insight the student can transfer to new situations.

A case that utilizes, misuses, or fails to use social science can teach where social science has a role in the legal process. The primary learning is not substantive social science knowledge or even its method, but its place in a complex interplay of norms, empirical information, and

79. *See generally* M. SCHWARTZ, *supra* note 13.

80. The term, "units of practice," is from Casper, *Law Schools Do Not Know Whether to Teach Chords or Songs*, LEARNING & L., Fall 1974, at 28, 32.

theory in authoritative interpretation of past agreement. The relation of social science to humanistic authority, that is, to the context of past agreement and the lawyer's personal competence in lawyering, is the primary learning goal.

The use of cases or legislative histories as teaching materials is advantageous because they illustrate interplay of norms, facts, and theory in the context of decision making. They are concrete materials, not secondary presentations about the law. This characteristic serves laudable educational goals: the students wrestle with primary sources of law. The resultant insight is truly one's own. It comes through participation in a pattern of meaning and through the activity of relating new knowledge to that pattern. It becomes part of one's intellectual equipment in a manner quite different from taking another's classification from a treatise. These materials are also manageable materials for inclusion in textbook and classroom discussion. If insight into a pattern is the goal, numerous highly edited materials will not serve as well as dissection and critical analysis of a few complete primary law materials. These materials are more apt to be within the law professor's sphere of competence than social science ones. To be sure, a professor must master social science empirical data and theory, at least to the extent it is utilized in legal materials, to master a legal subject area. As Wolf's study demonstrates, legal materials can be dissected and analyzed in terms of their treatment of empirical data and use of scientific method. A law professor, however, would use his or her competence in legal method to dissect in a manner different from that employed by Wolf, emphasizing the legal process, the complex interplay with empirical data of norms and theory in the context of past agreement and institutional constraints on choice.

Use of the case method as it is defined here, intensive analysis of a primary source, does not necessarily limit materials to cases or limit dissection of legal materials to their own text. Intensive study of a source of law, material that embodies the legal process, in a manner that encourages the student to go through that process critically and empathetically, serves the purpose of the case method. Statutes and administrative rulings or regulations can be subjected to the same method. Social science data, selected by its inclusion, modification, or exclusion in legal materials, can also be used. With primary sources as the key, criticism of misuse or nonuse of social science furthers insight. Materials that are actual illustrations of social science's integration in

the legal system of meaning by an actor or actors in that process will be most effective for learning that is useful for lawyering, for insight.

Reliance on primary sources of the law in teaching need not result in conceptually closed or professionally parochial education. It merely reflects a principle of social science integration predicated upon the legal process as it is known to those operating within it. Other materials, secondary sources or social science studies about law, also reveal patterns, but they are classifications of what primary decision makers or writers have done, and are a step removed from the process itself. They supplement by providing learning about the law.[81] They offer learning cues but their study does not give the student the experience of utilizing or even restructuring a received pattern. They cannot provide entry into the process firsthand.

The most important characteristic of the criterion for refined integration of social science materials in a law course is reliance on primary sources of law for the conceptual framework. These convey to the student the sense of a live pattern continually integrating social fact in the crucible of decision and action, the pattern itself occasionally being restructured in the face of novelty. While social science should not define legal instruction, neither should it be relegated to providing descriptive background for legal problems. As the fact management process underlying lawyering capacities illustrates, assimilating and presenting social or economic fact is integral to lawyering. It is exemplified in primary legal sources; it is a constituent part of the pattern of meaning for legal decision making. Social science refines and changes legal fact management; it provides new means of fact finding, new theories to test fact relevance, new standards of criticism for factually verifiable conclusions. It needs to be taught, therefore, but mastery of its findings, theories, and standards is far less important than understanding their role in fact management and fact management's role in competent lawyering capacities.

Use of legal materials admittedly excludes teaching the learning approach of social science. Nevertheless, by stressing the living nature of

81. A good example is inclusion of regression equation analysis of relevant considerations in zoning amendment appeal cases in case notes following an appellate zoning opinion in C. HAAR, LAND-USE PLANNING 377 & Supp. 57 (3d ed. 1977 & Supp. 1980). The note is among others requiring the student to draft a statute, give a client advice in a problem situation, and consider ramifications for professional ethics from factual variations. The conceptual framework was a setting in which the various factors in the regression analysis were integrated in decision in the legal process: an actual case.

the system of meaning that is taught, the entry points for social science and for novelty in the legal process, instructors can avoid teaching a learning approach that rigidly excludes integration of knowledge about social reality. Novelty best shows the living character of the legal system's patterns, and this is also when social science is most apt to influence the pattern and be the basis of the decision. Novelty illustrates social science entry, it use, and limits upon its use as a basis for legal decision. It also dramatizes the perspective of choice and the emphasis law places on personal competence in lawyering capacities. Materials that are responses to novelty may not be typical of those encountered daily by practitioners, but they yield insight transferable to new situations. They yield insights not into the methods and knowledge of social science, but into the dynamic pattern of relationship among the capacities of perspective, information, reasoning, and applied skill that is the essence of even the trivial or the routine in lawyering.