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"The Purer Fountains": Bacon and Legal Education

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I. Introduction: An Orthodoxy Under Fire

Today, the classical underpinnings of American legal education are under intense critical review. The dominant pedagogy, the “case book” and the “Socratic method,” were established by Christopher Columbus Langdell (1806-1906) at Harvard Law School more than a century ago. Together with Langdell's first year curriculum, which was exclusively focused on Anglo-American common law doctrine, and his emphasis on a competitive, anonymous graded “meritocracy,” this system still exercises an incredible grip on elite American law schools. But Langdell's 19th Century model has now been challenged by many rivals, including critical legal studies, “law and economics” empiricism, “global” curriculums, and clinical instruction.

As is so often the case, Bacon anticipated these major forces of change. In his great De...Augmentis Scientiarum (hereafter, “De Augmentis”), Bacon attacks the narrow parochialism of the common law pedagogy of his day. "For at present there are nothing but schools and institutions for multiplying altercations and controversies on points of law, as if for the display of [Footnote: A preliminary version of this article was presented as the Francis Bacon Annual Lecture at the Huntington Library, San Marino, California on May 8, 2003. I am most grateful to the Bacon Foundation and its devoted trustees and to Dr. David Sieburg and his colleagues at the Huntington Library. I am also particularly grateful to my Administrative Assistant, Brendan Farmer, and Deborah H. Goldstein, Boston College Law School, 2003. Their intelligence and hard work was invaluable.]


[2] The best accounts of Langdell’s extraordinary career and influence on all American professional education, in particular, are by my friend and co-investigator in a generous Spencer Foundation Grant to study professional education, Bruce A. Kimball of the University of Rochester. See Bruce A. Kimball, “‘Warn Students that I Entertain Heretical Opinions, Which They Are Not to Take as Law’: The Inception of Case Method Teaching in the Classrooms of the Early C.C. Langdell, 1870-1883,” Law and History Review (Spring, 1999), 57; “When Holmes Borrowed from Langdell: The ‘Ultra Legal’ Formalism and Public Policy of Northern Securities (1904), 45 Am. J. of Legal History (2001) 1; and “Young Christopher Langdell, 1826-1854: the Formation of an Educational Reformer,” 52 J. of Legal Education (2002), 189. Other important Kimball articles are awaiting publication. We are both grateful to the Spencer Foundation for their support.

Attacking reliance on decided judicial cases and on the parochial, prevailing common law treatises and pedagogy, Bacon evolved a new system of legal instruction based on empirical observation, distilled into maxims or aphorisms, one that sought true global significance and universal scientific legitimacy. “[T]here are certain fountains of natural equity from which spring and flow out the infinite variety of laws which individual legal systems have chosen for themselves. And as veins of water acquire diverse flavors…according to the nature of the soil through which they flow…. just so in these legal systems natural equity is tinged and stained…according to the site of territories, the disposition of peoples, and the nature of commonwealth. It is worthwhile to open and draw out the purer fountains of equity, for from them all amendment of laws in any commonwealth must be sought” The Aphorismi (Neustadt, ed., 273). This paper will set out Bacon's philosophy of legal education, analyze its fundamental pedagogical and doctrinal elements, and examine its lessons for American legal education today.

In so doing, it will be necessary to traverse a minefield of controversy. As E.O. Wilson has so powerfully described in his book Consilience: The Unity of Knowledge (1998), Bacon was “the grand architect” of an enlightenment dream that “called for the illumination of the moral and political sciences by the ‘torch of analysis.’” Bacon was also devoted to a belief in a “unity of knowledge,” relying on “the common means of inductive inquiry that might optimally serve all branches of learning.” In E.O. Wilson’s words, “Bacon envisioned a disciplined and unified learning as the key to improvement of the human condition.”

But the “unity” of the modern legal academy has been fragmented into academic specialties and increasingly divorced from the experience of law practice. Post-modern and post-structuralist ideologies have attacked any pretense “neutral” and “objective” rule of law that could be taught in a formal, external setting, like mathematics or physics. Increasingly, law, and legal education, are seen as devoid of external truths. In E.O. Wilson’s words:

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7 Id., p.27.

8 Id., p.27.

“In the most extravagant version of this constructionism, there is no ‘real’ reality, no objective truths external to mental activity, only prevailing versions disseminated by ruling social groups. Nor can ethics be firmly grounded, given that each society creates its own codes for the benefit of the same oppressive forces.”

Hence comes “the post-modernist prohibition against universal truth…” which can have particular force in modern legal pedagogy.

Equally important, law practice itself has changed. The “three qualities of modern law,” described prophetically by Max Weber (1864-1920) and articulated in his great *Law and Economy and Society*, seem to be coming true. First, the “legal ignorance of the layman” has increased, as legal rules become more specialized, complex and technical. Most lawyers in modern firms are divided into such specialties, and usually have little or no idea of what their partners and associates actually do. Second, the “anti-formalistic tendencies of modern legal development” have led courts and tribunals to increasingly depart from “objective” or “universal” rules, and to rely instead on “economical utilitarian meaning.” Finally, there is the “lay justice and corporate tendencies in the modern legal profession.” Weber adds, “The use of jurors and similar lay judges will not suffice to stop the continuous growth of the technical element in the law and hence its character as a specialist’s domain.”

Add to those changes the rapid shrinking of world cultures by improved communications and the welcome, and dramatic, increase in cultural diversity throughout American law schools and American society generally, and it becomes clear that conventional legal pedagogies and curricula will come under great stress. The century old orthodoxy of American legal education could soon be shattered into a hundred unrelated pieces. Can Bacon help us?

II. “This Evil is an Old One”: Bacon’s Education

a) Bacon’s University Education

Bacon had a low opinion of his formal education, both at Trinity College, Cambridge, and at Gray’s Inn of the Inns of Court, where he studied law. But in examining his ideas for education reform, it is logical to start with what happened to him.

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10 *Consilience*, p.40.
13 Id., p.301.
14 See id., p.302-304.
15 See id., p.315-321.
16 See id., p.315-321.
As was customary for his day, Bacon was matriculated at university at what was, by modern standards, a very early age—thirteen. In June of 1573, he “went up” to Trinity College, Cambridge with his older brother, fifteen year-old Anthony, whose progress had been delayed by severe health problems. (Anthony, like his father, had severe asthma, which ran in the family.) The two boys roomed together at Trinity College, subject to the constant concern of their mother, whose anxious letters are still a primary source on Bacon’s life.\(^{17}\)

Bacon stayed at Cambridge until March of 1576. He left before obtaining a degree. From his later criticisms in *The Advancement of Learning* and *De Augmentis*, it was clear he experienced the typical curriculum and pedagogy of an undergraduate at Trinity College, under its first statutes of 1552. Trinity was no ordinary college. As Arthur Gray observed, under these statutes, “[e]laborate provision is made for a teaching staff within the College, and a schedule of the subjects of education is drawn up which conforms to the new curriculum of study which in the reign of Edward VI [1547-1553] was substituted for the old routine prescribed for *trivium* and *quadrivium*.\(^{18}\) This course was rigorous.

“All ‘disciples’—the term is much more convenient than its modern equivalent, ‘persons in *status pupillari*’—must have a tutor, who is to supervise their education and morals, and to be responsible to the College for their dues. This is the first recognition in college statutes of the now familiar relationship of tutor and pupil, though it had unquestionably existed earlier. The total number of pensioners is restricted by the regulation that no fellow is to have more than one pensioner-pupil, except the President, who may have four. Lectures take place in the morning. Those for bachelors are given in the parlour, for undergraduates in the hall. A ‘master of the hall’ is to note the attendance, diligence and proficiency of the disciples, and to report thereon to the ‘seniority’. If a disciple does not attend regularly he ‘loses his term’. There are certain *quaesitores aulae*, called in the 1560 statutes *lectores*, who are to see that their classes make progress in the special subjects of Plato, Demosthenes and Cicero.”\(^{19}\)

The overall curriculum was dominated by Aristotle and his deductive system:

“The order of study is minutely prescribed. In his first year the disciple reads dialectic and the elements of Euclid: this is considered to be the best introduction to Greek philosophy… In his second year he is engaged on logic; in his third on


\(^{19}\) Gray, supra note 18, p.93.
ethics, politics and rhetoric; in his fourth on physical science. In all these subjects Aristotle is the textbook.”

Besides the required lectures, students were required to participate in so-called “repetitions,” which were translations of Latin classics into Greek, and reverse. Finally, there were “declamations” in hall three times a week, in Latin, English and Greek, “the subjects to be discussed…posted in the hall at dinner time.”

“In the student’s first year he translates Demosthenes into Latin and the orations of Cicero into Greek; in the next year he similarly renders Plato and the philosophical works of Cicero. The third and fourth years are devoted to revision. The disciple must provide himself, within two years, with copies of Aristotle, Plato, Demosthenes, Cicero, a Greek Testament and a Bible in Latin. If he fails to do so he is removed from College.”

Unless he chose to observe graduate lectures, Bacon would have had no opportunity to study law, which was taught as a graduate subject. If he had, the course of study would have focused solely on Roman law, primarily the Institutes of Justinian, the Digest and the Codex, all in the original Latin. Even canon law studies, which had been taught at Oxford and Cambridge, had been prohibited by Henry VIII following the Act of Supremacy in 1535. The subject of Roman law was an old one, certainly dating back into the twelfth century at Oxford, as the Liber Pauperum of Vacarius testifies. And it was not entirely unrelated to practice. The activities of the Doctors of Civil Law in Doctors’ Commons, who had developed monopolies in the Admiralty Court, the Court of Bequests and the Court of the Constable and the Marshal, were encouraged by the Tudors, as counterweights to the political influence of the common lawyers. For this practice, a university doctorate in the civil law of Rome was required. But the university legal training was divided by language, subject matter and culture from the common law courts.

20 Id., p.93-94. In 1591, “sons of certain noblemen” at Oxford were “allowed to request the BA degree after three years.” Fletcher, supra, note 18, p.165.

21 Gray, supra, note 18, p.94. “Frequently in the early years of the century, students record in their graces the performance of an exercise known as a ‘variation’ (variatio). This seems to be an exercise performed by one person only in which he presents various arguments for and against a set thesis. Such variations were almost certainly made in parviso, since the Laudian statutes refer to disputations in parviso as those ‘once known as variations’. No fixed number of such exercises seems to have been required: different students offer two, three, four, five or six. Applications show that performances of some exercises in parviso were required throughout the Tudor period. The few students who apply for the lower degree without having apparently performed at least one exercise are usually instructed by the university to become general sophisters before admission. Only rarely is this requirement relaxed, as when, for example, lack of time or the absence of a disputing colleague prevent the exercise taking place. Then the university usually insists on alternative disputations being performed.” Fletcher, supra note 18, p.170.


23 “For the lawyers of the University, the most important consequence of the reformation was that courses ceased to be given in the canon law.” Id., p.257.

of law.\textsuperscript{25} Eventually, Bacon learned a lot of Roman law, but he probably did not learn it at age fourteen or fifteen at Cambridge. Even if he had, it would have been taught in the same way as his Aristotle, by lecture and replication.\textsuperscript{26}

Much of Bacon’s mature philosophy was a pent-up rebellion against his university experience. Aristotle, Bacon later observed, was “a philosophy only strong for disputations and contentions, but barren of the production of works for the benefit of man.”\textsuperscript{27} Even after the “reforms” of the Restoration, everything began with the sacred classical texts, and worked down from there. The student, unlike Janus, faced only backward, not forward. “\textit{Plus ultra}” (“even further”) was Bacon’s battle cry. One had to get past both the contents of the curriculum and the deductive pedagogy to do anything new. Bacon’s first major philosophical work, \textit{The two Bookes of Francis Bacon, of the proficience and advancement of learning, divine and humane} (London, 1605) [Gibson 81] (hereafter, “\textit{The Advancement of Learning}”) was a sustained attack on this experience.\textsuperscript{28} When, later in his life, Bacon would turn to classical antecedents in both law and philosophy, it was to create a new model, not Aristotle’s \textit{Organum}—drummed into his teen-aged head—but a \textit{Novum Organum,} a new “tool,” a new way.

Bacon and his brother both left Cambridge in March of 1575, without taking degrees. Perhaps little should be made of this. They were sons of privilege, and their father was one of the most powerful figures in the country. That privilege soon led to Bacon’s appointment to the household of Sir Amios Paulet, ambassador to France. for almost three years Bacon was able to study continental systems closely, and may well have picked up his taste for comparative analysis. But the death of his father on February 20, 1579 brought him home. Probably by accident, Bacon was ill-provided for by the estate—“I think I had greatest part in his love of all

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\footnotesub{25} See Daniel R. Coquillette, \textit{The Civilian Writers of Doctors’ Commons, London} (Berlin, 1988), pp. 22-32. The competition with the common lawyers became fierce in the early 17th Century, but the university civil law faculties survived. In Brian Levack’s words: “During the first decade of the century it was widely rumoured that ‘the civil law should be put down and quite exterminated the kingdom’. Whether there was any substance to these rumours, which arose because of the alleged ‘designs of evil men about the king’, cannot be determined. There is no question, however, that the profession of the civil law had fallen on hard times, and civilians were apprehensive that both their profession and the university faculty with which it was closely tied would be destroyed. The main problem that civilians faced was intense competition from the common lawyers, who were encroaching upon their jurisdiction and also gaining some of the judicial appointments which had traditionally been reserved for civil lawyers. Since many of the students studying law at Oxford did so in order to prepare for careers as proctors, advocates, and judges in the ecclesiastical and admiralty courts, an attack of this sort upon the sources of the civilians’ livelihood threatened the faculty itself. As one contemporary predicted, if the civilians were to be deprived of their customary judicial fees, ‘they and that whole faculty must needs fall to the ground.’” (notes omitted.)

\footnotesub{26} See the vivid account at Bowen, \textit{supra} note 17, p.35. “This scholastic aridity, this stultified repetition of classical authority, was offered to young minds at a time when the entire western world, let alone England, was opening to discovery and fresh knowledge of heaven and earth.” \textit{Id.}, p.35.

\footnotesub{27} See Daniel R. Coquillette, \textit{Francis Bacon} (Edinburgh and Stanford, 1992), pp. 77-90. (Hereafter, “\textit{Coquillette.”})
\end{footnotesize}
his children, yet in his wisdom served me as last comer.” In his own mind, Bacon had little choice but to make his own way. He took advantage of his father’s vacant chambers in Gray’s Inn, and thus began his legal education.

b.) Bacon’s Legal Education

The evolution of the Inns of Court and of Chancery in London had created a system of legal education that was completely independent of the universities. In John Baker’s words: “The fifteenth-century inns of court and chancery together formed a law school not much smaller in size than the University of Cambridge. It would be called in Tudor times the Third University of England and with good reason, for it played at least as full a part as the other two older universities in the education of laymen destined for high or local office.”

Thanks to John Baker, W.R. Prest, and Samuel Thorne, and their careful study of the readings and moots in the Inns, we now can recreate the world Bacon knew as a law student. (Bacon’s own accounts of his time from 1579 to his early admission as a barrister in 1584 consist primarily of letters to his uncle, Lord Burghley, seeking a position that would support his studies.)

In some ways, the process would have reminded Bacon of his university experience—and, indeed, he would later find similar faults with both. Value was placed on two things only, encyclopedic knowledge of the legal past—particularly statutes, pleadings, and some cases—plus oral dexterity in “translating” and using these antiquities for good advantage. The “lectures” on Aristotle were replaced by “readings” on important statutes and processes; the “replications,” by pleading exercises and other drills, and the “thrice-weekly declamations in hall,” by the “moots,” or case arguments. Participation in those exercises was not open to all, but was a function of advancement in rank. As Baker described it:

“We have already seen how the early lectures and disputations in the common law mirrored those in the university law schools. Now, graduation in those medieval law schools was not a matter of passing an examination and then attending a degree ceremony, but a step (gradus) in the educational process. It occurred not by the incantation of a formula of conferment, but by performance of the appropriate exercise by the candidate himself: a bachelor of arts took his degree by ‘determination’ of a question, masters and doctors by ‘inception’ (a beginning rather an ending). There was a professional analogy in the graduation of serjeants at law: though attended with much ceremony, the effective part of a serjeant’s graduation was his first count at the bar. Both schoolmen and serjeants needed

29 Bowen, supra note 17, 41. See Coquillette, supra note 28, pp.23-24, 311-312. Bacon’s inheritance amounted to £300 a year, “a perfectly good ‘living’ for minor Elizabethan gentry, but…hardly enough for Francis’ ambitions.” Id., p.24. By contrast, his eldest stepbrother had an income of £6,000 a year. Id., p.24.


someone’s permission to graduate; it was not free for all. Nevertheless, the essence of the matter was that the bachelor, the doctor and the serjeant all created themselves, by performing the exercise or pleading which carried them up the step. This must surely be how the degrees of barrister and bencher came about. As soon as a member of an inn was allowed to argue a moot at the bar, and did so, he thereby made himself a barrister; and as soon as he was allowed to sit on the bench at moots, and did so, he thereby made himself a bencher.”

This advancement up the common law ranks by “degree of learning,” may well have inspired Bacon’s notions of the “scalla intellectus,” but, as we shall see, Bacon’s system was quite different.

Preparation for the “moots” was also divided by experience. “Inner barristers,” the lowest rank, helped prepare useful cases for the more senior lawyers, who had passed the bar and thus were “utter barristers.” These utter barristers would actually argue the cases in hall, before the “elders of the house,” the benchers. The “inner barristers” also had to “recite” the pleadings. A report of 1540, quoted by J.H. Baker, gives the following picture:

The whole company and fellowship of learners is divided and sorted into three parts and degrees: that is to say, into benchers, or (as they call them in some of the houses) readers, utter barristers, and inner barristers.

Benchers or readers are called such as before-time have openly read… Utter barristers are such that for their learning and continuance are called by the said readers to plead and argue in the said house doubtful cases and questions, which amongst them are called moots, at certain times propounded and brought in before the said benchers as readers; and are called utter barristers for that they, when they argue the said moots, they sit uttermost on the forms which they call the bar. And this degree is the chiefest degree for learners in the house next the benchers…All the residue of learners are called inner barristers, which are the youngest men that for lack of learning and continuance are not able to argue and reason in these moots; nevertheless, whosoever any of the said moots be brought in before any of the said benchers, then two of the said inner barristers, sitting on the said form with the utter barristers, do for their exercises recite by heart the pleading of the same moot-case, in law-French, which pleading is the declaration at large of the said moot-case, the one of them taking the part of the plaintiff and the other the part of the defendant…

The ordering and fashion of mooting

In these vacations every night after supper, and every fasting day immediately after six o’clock, boyer ended (festival days and their evens only excepted), the reader with two benchers, or one at the least, cometh into the hall to the cupboard; and there most commonly one of the utter barristers propoundeth unto them some

33 Id., p. lvi (notes omitted).
doubtful case, the which every of the benchers in their ancienties argue, and last of all he that moved. This done, the readers and benchers sit down on the bench in the end of the hall, whereof they take their name, and on a form toward the midst of the hall sitteth down two inner barristers, and of the other side of them on the same form two utter barristers. And the inner barristers do in French openly declare unto the benchers—even as the serjeants do at the bar in the king’s courts to the judges—some kind of action, the one being as it were retained with the plaintiff in the action and the other with the defendant; after which things done, the utter barristers argue some questions as be disputable within the case—as there must be always one at least—and, this ended, the benchers do likewise declare their opinions how they think the law to be in the same questions. And this manner of exercise of mooting is daily used during the said vacations.

This is always observed amongst them, that in all their open disputations the youngest of the continuance argueth first, whether he be inner barrister or utter barrister or bencher, according to the form used amongst the judges and serjeants. And also that at their moots the inner barristers and utter barristers do plead and reason in French, and the benchers in English…34

Not all “moots” were formal moots in hall. Less formal “library moots” had “students arguing before utter barristers” and informal discussions “at the cupboard.”35 Then there were “board’s end cases” and “clerk’s common cases” that “evidently involved the putting of specific questions by senior barristers or new benchers, without pleadings, and were therefore not moots in the strict sense of the term.”36 These were found at Gray’s Inn as early as the 1530s.37 Finally, there were “bolts” or “boltings,” which were specific doctrinal questions put to the students as a kind of drill, without the case pleadings.38 According to David Walker and Earl Jowitt, these “bolts” were also private, unlike the public “moots.”39

Pedagogically, this common law system also worked much like its intellectual rivals in the universities. The students’ primary task was to master a vast body of preexisting knowledge in specialist languages (in this case Law French and Latin), with a good deal of highly technical jargon—particularly related to the “art” of pleading. The literature was also highly specialized and, with very few exceptions, there were no conceptual guides through the morass—those were

34 Id., pp. lx-lxi (notes omitted).
35 Id., p. lxxiv.
36 Id., p. lxxiv.
37 Id., p. lxxiv.
38 Id., p. lxxv.
Littleton’s Tenures, Perkins’ Profitable Book, and Fitzherbert’s Natura Brevium were essentially outlines or, in the latter case, a form book.\(^{41}\)

In such a situation, the best “learning aids” were “readings” that efficiently conveyed information and rituals, drills and play-acting to fix facts and forms in your mind. The law was anchored in vast, immutable custom, at least in theory, which must be sorted through, classified, and memorized. No reader of Coke’s Institutes, particularly Coke on Littleton, can fail to admire the vast common law memory that drove those works. Critical analysis was, by definition, worse than useless, it would invariably clog the machine’s inherent assumption of legitimacy. Everything was deduced from the preexisting common law, which was studied in a complete vacuum from either social observation or scientific reasoning. Indeed, studies of the student notebooks at Litchfield Law School and Harvard Law School before its dramatic rescue by Joseph Story, show the same patterns. The “lecturer” sets out the law; the “crammer” reinforces it in the memory by questioning and drill; and the “moot court” dramatizes the abstract principles by role acting.\(^{42}\)

Despite the paucity of records chronicling Bacon’s five years as an “inner barrister,” we do have some idea of what he thought of all this. First, he saw the system as immensely wasteful, commenting, “I am purposed not to follow the practice of law, it drinketh too much time, which I have dedicated to better purpose.”\(^{43}\) This was, in part, because the system lacked conceptual “short cuts” to guide the efficient mind—which Bacon would later term “Maximes” or “Aphorismi”—and partly because, as he commented on the parallel deductive studies of Aristotle, “being a philosophy strong for disputations and contentions [such as “moots” and “bolts”], but barren of the production of works for the benefit of the life of man.”\(^{44}\) In other words, this was a system of learning that was not, in any direct sense, an instrument of social good. Finally, in the absence of any direct link between the law, as a body of knowledge, and observation of the law’s impact on human affairs, there could be no critical analysis of the

\(^{40}\) See Baker, Introduction, supra n.30, at pp. 214-217; Daniel R. Coquillette, Anglo-American Legal Heritage (Durham, 1999), pp. 272-274 (Hereafter “Coquillette, Heritage”).


\(^{43}\) Bowen, supra note 17, p.48.

\(^{44}\) Id., 35.
system’s efficacy or inherent legitimacy. Again, as Bacon observed, “for at present there are nothing but schools and institutions for multiplying altercations and controversies on points of law, as if for the display of wit. And this evil is also an old one. For it was likewise the pride of antiquity, as by sects and factions, to keep alive a number of questions of law, rather than settle them.” Bacon was explicitly referring to the Sabinians and the Proculeans of the Roman Republic, but could also surely be thinking of the moots and bolts of Gray’s Inn! The ancient learning rituals of Bacon’s law student days were, like the Aristotelian replications of his university, shackles to the intellect. “The philosophers lay down many precepts fair in argument, but not applicable to use: the lawyers, being subject and addicted to the positive rules…have no freedom of opinion, but as it were talk in bonds.”

The “old exercises of [legal] learning” did not long survive the Civil War and the Interregnum. As J.H. Baker has demonstrated, the “moots” in today’s law schools owe more to eighteenth century debating societies than to any timeless rituals of the inns of courts. But the challenges of formalism and ritual thinking in legal education are very much with us. Out of his own experience, Bacon proposed a better way for his day and, quite curiously, for ours: a new pathway for professional learning.

III. Bacon’s Plans for the Classification and Storage of Legal Learning: The Advancement of Learning and A Proposition to His Majesty

Bacon’s most important early works focused on the dual topics of education and law reform. In 1605, terrorist conspirators planned to blow up both Houses of Parliament, and James I, on Opening Day. Bacon would have been there. Had he died in that blast, which was narrowly averted, The Advancement of Learning (1605), the Essays (1597) and the Maximes of the Law (written in 1596-1597, and published posthumously in 1531), would have ensured his reputation.

Although Bacon was fluent in Latin and the professional law French, he wrote The Advancement of Learning in English. This choice was doubtless political, the book was both dedicated to James I and directed at him and the politicians in his court. Perhaps it was a symbolic rebellion as well against the tongue of the inns of court, whose rote education systems he challenged. “Here, therefore [is] the first distember of learning, when men study words and not matter…” In this challenge he admitted his debt to the Counter-Reformation “college of the Jesuits” who, like himself, have made “a just complaint that states were too busy with their laws and too negligent in the point of education.” The ultimate goal would be a legal learning

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45 Works, supra note 4, vol. 5, p.108.
46 Id., vol. 5, p.88.
47 Readings and Moots, vol. 11, supra note 31, at pp. lxxv-lxxvi.
48 Id., at p. lxxvi.
49 Coquillette, supra note 28, at p.77.
50 Id., at pp. 325, 332-333.
51 Id., at p.78.
52 Id., at p.80.
free of both the abstract deductions of the “school” philosopher, bringing forth “cobwebs of
learning, admirable for the fineness of thread and work, but of no substance or profit,”54 and the
narrow bonds of traditional legal education in the Inns of Court.

“[F]or the more public part of government, which is Laws, I think good to note
only one deficience; which is, that all those who have written of laws, have
written either as philosophers or as lawyers, and none as statesmen. As for the
philosophers, they make imaginary laws for imaginary commonwealths; and their
discourses are as the stars, which give little light because they are so high. For
the lawyers, they write according to the states where they live, what is received
law, and not what ought to be law: for a wisdom of a lawmaker is one, and of a
lawyer another.”55

The ideal balance would be both learning and research, freed from rote forms dictated by
the past, that focused on “the actual application of laws in practice and their constant
improvement.”56 In Bacon’s view, as I have noted elsewhere, this would “increase the social
value of the legal theorist” while also improving “the quality of the theorist’s jurisprudence by
constant testing against the truths.”57

“[T]he wisdom of a lawmaker consisteth not only in a platform of justice, but in
the application thereof; taking into consideration by what means laws may be
made certain, and what are the causes and remedies of the doubtfulness and
incertainty of law; by what means laws may be made apt and easy to be executed,
and what are the impediments and remedies in the execution of laws; what
influence laws touching private right of meum and tuum have into the public state,
and how they may be made apt and agreeable; how laws are to be penned and
delivered, whether in Texts or in Acts; brief or large; with preambles or without;
how they are to be pruned and reformed from time to time; and what is the best
means to keep them from being too vast in volumes or too full of multiplicity and
crossness; how they are to be expounded, when upon causes emergent and
judicially discussed, and when upon responses and conferences touching general
points or questions; how they are to be pressed, rigorously or tenderly; how they
are to be mitigated by equity and good conscience; and whether discretion and
strict law are to be mingled in the same courts or kept apart in several courts;
again, how the practise, profession, and erudition of law is to be censured and

“[W]hich excellent part of ancient discipline hath been in some sort revived of late times by the
colleges of the Jesuits; of whom, although in regard of their superstition I may say, quo meliores,
eo deteriores [the better the worse:] yet in regard of this, and some other points concerning human
learning and moral matters, I may say, as Agesilaus said to his enemy Pharnabazus, talis quum sis,
uitiam noster esses [they are so good that I wish they were on our side].”  Id., vol. 3, p.277.
55 Coquillette, supra note 28, p.84.
56 Id., p.84.
57 Id., p.84.
governed; and many other points touching the administration, and (as I may term it) animation of laws.”

But Bacon was not just concerned with the goals of legal learning, but with pedagogy, the best ways to “deliver” knowledge. Here he turned to his favorite tool, the aphoristic method.

“Another diversity of Method, whereof the consequence is great, is the delivery of knowledge in Aphorisms, or in Methods; wherein we may observe that it hath been too much taken into custom, out of a few Axioms or observations upon any subject to make a solemn and formal art; filling it with some discourses, and illustrating it with examples, and digesting it into a sensible Method; but the writing in Aphorisms hath many excellent virtues, whereto the writing in Method doth not approach.”

The aphorism aided the mind by condensing knowledge into memorable “bites,” without the seduction of mindless repetition, as in the traditional “replications” of the university or the “exercises” of the Inns of Court. The aphorism stretched the mind, and imposed its own rigor.

“For first, it trieth the writer, whether he be superficial or solid: for Aphorisms, except they should be ridiculous, cannot be made but of the pith and heart of sciences; for discourse of illustration is cut off; recitals of examples are cut off; discourse of connexion and order is cut off; descriptions of practice are cut off; so there remaineth nothing to fill the Aphorisms but some good quantity of observation: and therefore no man can suffice, nor in reason will attempt, to write Aphorisms, but he that is sound and grounded. But in Methods, Tantum series juncturaque pollet, Tantum de medio sumptis accedit honoris [the arrangement and connexion and joining of the parts has so much effect,] as a man shall make a great shew of an art, which if it were disjointed would come to little. Secondly, Methods are more fit to win consent or belief, but less fit to point to action; for they carry a kind of demonstration in orb or circle, one part illuminating another, and therefore satisfy; but particulars, being dispersed, do best agree with dispersed directions. And lastly, Aphorisms, representing a knowledge broken, do invite men to enquire farther; whereas Methods, carrying the shew of a total, do secure men, as if they were at furthest.”

As we will see, the aphoristic method became a center piece of Bacon’s expansion of The Advancement of Learning (1605) in his mature work, De Augmentis (1623), this time in Latin for the ages. But Bacon began using aphorisms much earlier in his first legal work, the Maximes, written between 1596 and 1597.

Bacon certainly did not invent the method. Common lawyers as early as 1546 circulated little treatises, such as the Principia sive Maxima Legum Anglie, organized around isolated

But Bacon gave it a new style with his twenty-five maxims, notes written in English, but the maxims in Latin. Ironically, he claimed to have originally written the book in Law French, although no copies survive.

“Fourthly, whereas I know very well it would have been more plausible and more current, if the rules with the expositions of them had been set down either in Latin or in English, that the harshness of the language might not have disgraced the matter, and that civilians, statesmen, scholars, and other sensible men might not have been barred from them; yet I have forsaken that grace and ornament of them, and only taken this course: the rules themselves I have put in Latin (not purified further than the propriety of terms of law would permit; but Latin); which language I chose, as the briefest to contrive the rules compendiously, the aptest for memory, and of the greatest authority and majesty to be vouched and alleged in argument: and for the expositions and distinctions, I have retained the peculiar language of our law, because it should not be singular among the books of the same science, and because it is most familiar to the students and professors thereof, and besides that it is most significant to express conceits of law; and to conclude, it is a language wherein a man shall not be enticed to hunt after words but matter. And for excluding any others than professed lawyers, it was better manners to exclude them by the strangeness of the language, than by the obscurity of the conceit; which is such as, though it had been written in no private and retired language, yet by those that are not lawyers would for the most part have been either not understood, or, which is worse, mistaken.”

But Bacon was certainly aware that his maximes were student and analytical aids, and no more adequate to store the bulk of the law than Justinian’s Institutes could replace the Digest and the Codex. James’ accession to the throne in 1603, uniting the Crowns of England and Scotland, not only gave Bacon hope of advancement, but presented the potential problem of uniting the laws of the two kingdoms. Eager to gain favor with James, and also to improve the “storage” of English law in what today we would call a “manageable data base,” Bacon wrote no less than four tracts on the classification and storage of legal knowledge. The first, and least useful, was his A Brief Discourse touching the Happy Union of the kingdoms of England and Scotland, published in 1603, followed by A Memorial touching the Review of Penal Laws and the Amendment of Common Law (written in 1614), A Proposition to His Majesty Touching the Compiling and Amendment of the Laws of England (written 1616-1617), and An offer to the king of a Digest to be Made of the Laws of England (written in 1621).

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63 See the discussion in Coquillette, supra note 28, pp. 99-117. “This came to an end [in 1621] Bacon’s grand schemes for law reform. We are left to wonder about the results if James had directed Bacon to this end, rather than leaving him to his philosophy.” Id., p.117.
Bacon’s first point was that the law was: 1) “stored” in statutes, arranged chronologically with no effort at identifying anachronistic or inconsistent clauses, and with no method to search the statutes by topic; or 2) “stored” in yearbooks and law reports, also arranged chronologically, with no effort to locate overruled cases, anachronistic cases, cases that simply repeated the same proposition many times over, or cases that simply did not make sense as reported. The library at Gray’s Inn, doubtless familiar to Bacon, was organized that way, with a modest additional section for the black letter guides to students, like Littleton’s Tenures, Abridgements of the year books, and “Registers of Writs” and guide books for pleaders. Indeed, if we were to ignore Sheppard’s Citator, the various Westlaw and Lexis computer searchable data bases, and the multi-volume treatises, this structure would be familiar to any modern law librarian and student, although on a different, and even more problematic scale.

As a first step to potential unification with Scotland, but also as a first step to a new vision of legal education, Bacon proposed to change all this.

“Wherefore, for the Common Law of England, it appeareth it is no Text law, but the substance of it consisteth in the series and succession of Judicial Acts from time to time which have been set down in books which we term Year Books or Reports so that as these Reports are more or less perfect, so the Law itself is more or less certain, and indeed better or worse. Whereupon a conclusion may be made, that it is hardly possible to confer upon this kingdom a greater benefit than if his Majesty should be pleased that these books also may be purged and reviewed, whereby they may be reduced to fewer volumes and clearer resolutions…”

This was a massive task, equal to that of the great Codex and Digest (529-535 A.D.) of Justinian, on which continental jurisprudence rested. It could only be achieved:

“By taking away many cases obsolete and of no use, keeping a remembrance of some few of them for antiquity sake.

By taking away many cases that are merely but iterations, wherein a few set down will serve for many.

By taking away idle Queries, which serve but for seeds of incertainty.

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64 Id., pp. 111-113.
66 This is certainly the picture from the older holdings contained in the 1888 catalogue, assuming that there were no major deaccessions or accessions of old books. See D.R. Douthwaite, Catalogue of the Books of the Honourable Society of Gray’s Inn (London, 1888). But, as Douthwaite, the Librarian, observed: “There are no means of knowing what, or how many, books the library then contained; [late 16th century] although it is pretty certain that the collection must have been small, even for those days.” Id., “Preface,” p. v.
67 Works, supra note 4, vol. 12, p.85.
68 For a discussion of the classical Roman texts, with reference to Bacon, see Daniel R. Coquillette, The Anglo-American Legal Heritage (Durham, NC, 1999), pp. 4-10 (Hereafter, “Legal Heritage”).
By abridging and dilucidating cases tediously or darkly reported.

By purging away cases erroneously reported and differing from the original verity of the Record.

Whereby the Common Law of England will be reduced to a corse or digest of Books of competent volumes to be shielded, and of a nature and content rectified in all points.”\(^{69}\)

Bacon’s most complete vision of this massive reform of fundamental “data base” of English law was expressed in his *Proposition to his Majesty ... Touching the Compilation and Amendment of the Laws of England* (1616) (hereafter *A Proposition*). By now Bacon was Attorney General and was elevated to Privy Counsellor, but his criticism of his own legal system was scathing:

“But certain it is, that our laws, as they now stand, are subject to great incertainties, and variety of opinion, delays, and evasions: whereof ensueth,

1. That the multiplicity and length of suits is great.

2. That the contentious person is armed, and the honest subject wearied and oppressed.

3. That the judge is more absolute; who, in doubtful cases, hath a greater stroke and liberty.

4. That the chancery courts are more filled, the remedy of law being often obscure and doubtful.

5. That the ignorant lawyer shroudeth his ignorance of law in that doubts are so frequent and many.

6. That men’s assurances of their lands and estates by patents, deeds, wills, are often subject to question, and hollow; and many the like inconveniencies.”\(^{70}\)

Bacon’s solution was a massive program: first, to sort through the “ancient records” and to select and register those of “most worth and weight” to be used as “reverend precedents, but not for binding authorities”; second, to create a set of scrutinized and approved law reports “the perfect course of law,” rejecting those which were anachronistic, over-ruled, repetitious, “idle queries, which are but seminaries of doubts,” and “reported with too great prolivity”,\(^{71}\) third, to create a similarly purged “codex” of all the statutes; and, finally, to produce three authoritative “auxiliary

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\(^{69}\) *Works*, supra note 4, vol. 12, pp. 85-86.

\(^{70}\) *Id.*, vol. 13, pp. 64-65.

\(^{71}\) *Id.*, vol. 13, pp. 68-69.
books,” and “Institutions,” based on Justinian’s great text book of 533 A.D., an official law
dictionary, “De verborum significationibus,” based on the famous Chapter XVI of Book Fifty of
Justinian’s Digest, and—last but not least—a De regulis juris, probably in aphoristic form. Of
the latter Bacon observed:

“For the treatise De regulis juris, I hold it of all other things the most important to
the health, as I may term it, and good institutions of any laws: it is indeed like the
ballast of a ship, to keep all upright and stable; but I have seen little in this kind,
either in our law or other laws, that satisfieth me. The naked rule or maxim doth
not the effect. It must be made useful by good differences, ampliations, and
limitations, warranted by good authorities; and this not by raising up of quotations
and references, but by discourse and deducement in a just tractate. In this I have
travelled myself, at the first more cursorily, since with more diligence, and will go
on with it, if God and your Majesty will give me leave.”72

Bacon saw these great projects as the cornerstone of his new system of legal education.
Even after his impeachment and disgrace in 1621, he dreamed of completing at least part of his
plan. In his sad An offer to the King of a Digest to be Made of the Laws of England, sent with
his letter of March 20, 1621 thanking James for preventing his continued imprisonment in the
Tower, Bacon wrote:

“And because in the beginning of my trouble, when in the midst of the tempest I
had a kenning of the harbour which I hope now by your Majesty’s favour I am
entering into, I made a tender to your Majesty of two works, An history of
England and A digest of your laws; as I have (by a figure of pars pro toto)
performed the one, so I have herewith sent your Majesty, by way of an epistle, a
new offer of the other. But my desire is further, if it stand with your Majesty’s
good pleasure, since now my study is my exchange and my pen my factor for the
use of my talent, that your Majesty (who is a great master in these things) would
be pleased to appoint me some task to write, and that I shall take for an oracle.”73

Bacon never gave up his dream of what today we would call a concise, authoritative, systematic,
quality-reviewed, fully searchable data base of law. The American law student of today
crouches in a vast library of hundreds of thousands of chronological law reports and statutes, and
impenetrable state and federal “codes,” using computer search engines that generate endless
unreviewed and unreliable answers. To this student, adrift in a sea of information, Bacon’s
vision is still a dream.

IV. Bacon’s Theory of Education: The Scalla Intellectus

Having described Bacon’s heroic efforts to reform the vast and desperately untidy attic
that was the legal knowledge of his day, we now come to Bacon’s theories of education. In
general, these are the products of some of Bacon’s more mature works, the Novum Organum

72 Id., vol. 13, p.70. For a full discussion, see Coquillette, supra note 28, pp. 112-113.
In the fifth book of *De Augmentis*, Bacon observed that “men’s labour in rational knowledge is either to invent that which is sought, or to judge that which is invented, or to retain that which is judged, or to deliver over that which is retained.” From this observation, he derived the four “logical” or “rational arts”: 1) the “Art of Inquiry or Invention”; 2) the “Art of Examination or Judgment”; 3) the “Art of Custody or Memory”; and 4) the “Art of Elocution or Tradition.” (The latter is better translated as “transmission,” as Wheeler observed.)

Put in modern terms, the “four rational arts” correspond to the basic functions of a modern research university, of the kind described in the *New Atlantis*. The art of “inquiry or invention” is the research function. The “art of examination or judgment” is the function of critical analysis, a function essential to the mature and wise use of research. The “art of custody or memory” is represented by the modern research library and, as Wheeler would put

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74 See note 5, supra, and the discussion at Coquillette, supra note 28, p.338.
75 *Works*, supra note 4, p.407.
76 *Id.*, p.407.
78 The utopia of Bensalem had a great research facility called “Salomon’s House” or the “College of the Six Days Work” to study the natural world.

“Bacon’s description of the physical research facilities was a true glimpse into the future, a genuinely uncanny foresight. Of course, his idea of a ‘Palace of Invention’ appeared as early as the *Gesta Grayorum* (1594) and there were also traces in the *Comentarius Solutus* of 1608 and other works. But here was simply extraordinary foresight. This massive research centre had deep shafts to investigate geology and seismology, high towers for astronomy and meteorology, aquaria (salt and fresh), metallurgy and pharmaceutical laboratories, and botanical gardens. There were scientific zoos to study selective breeding, and to do genetic experiments on animals. ‘By art… we make them greater or taller… and contrariwise dwarf them. Neither do we this by chance, but we know beforehand of what matter and commixture what kind of those creatures will arise’. There were also ‘furnaces of great diversities’ for physical experiments, and ‘perspective-houses’ to test optics and to study light by breaking into its parts. There were ‘sound-houses’ to test acoustics, olfactory laboratories, microscopes to examine blood and urine, and a ‘mathematical house’ for computation and geometry. To my mind, the most amazing were the ‘engine-houses’. These ‘engine-houses’ designed, among other things, submarines and aircraft.” *Coquillette*, supra note 28, p.259, notes omitted, citing to *Works*, supra note 4, vol. 3, pp. 159, 163. Wheeler has described this as a “vast mission-oriented ‘leading edge’ scientific establishment that directed society’s development.” Harvey Wheeler, “Francis Bacon’s *New Atlantis*: The ‘Mould’ of a Law Finding Commonwealth” in *Francis Bacon’s Legacy of Texts* (W.A. Session, ed, New York, 1990), p.297.
it, “database archival resources.” Finally, there is the art of “transmission,” the art of transmitting learning from teacher to student, or pedagogy.

As we have seen, Bacon’s earlier works focused on the obvious faults of the common law “memory”—a vast, unsearchable and illogically organized “database archival resource.” But, as the Advancement of Learning (1605) demonstrates, Bacon was also concerned with sophisticated and efficient “transmission” of that knowledge, hence his work on the aphoristic method in the Maximes of the Law (written 1596-1597) and elsewhere.

Today, we would all agree that a first rate university or professional school would require a great knowledge “memory,” a “data base archive” as intelligently accessible as possible. And we would also agree that first class “transmission,” or teaching, skills were highly desirable, to pass essential knowledge from one generation to the next—or at least the techniques of extracting that knowledge from the great “data base archive” or, even better, by direct empirical research. But it is Bacon’s latter two “rational” arts that form the most compelling rationale for first class education: the art of “invention,” the creation of new data and insights by research, and the art of “examination or judgment.”

Most of us can imagine a fine educational institution handicapped by a poor research library and misguided and inefficient methods for transmitting knowledge. (Indeed it clearly resembles the early Harvard Law School, with its grossly defective library—looked after by the janitor—and a “crammer” method of class recitation.) But what we cannot imagine is a truly first class institution that is indifferent to serious research and fails to develop critical judgment in both the students and faculty. These latter two “rational” arts, the nature of true research and developing critical judgment, were the focus of Bacon’s mature insights in the Novum Organum (1620) and De Augmentis (1623).

Of course Bacon understood that “invention” and “judgment” require a framework of knowledge. The first rungs of his “ladder of understanding,” the Scala Intellectus, required amassing that critical mass of knowledge. This is where the “transmission” techniques for conveying knowledge effectively came in, and the abilities necessary to access the knowledge store of the archival “memory.” Bacon would not regard the learning rituals of his early days in the university and Gray’s Inn as useless or unnecessary—but rather as wasteful, unimaginative, and inefficient in achieving their goals. Nor would he regard the law libraries of the Inns of Court as unnecessary, but rather as pathetically lacking in what today we would term “searchable” data bases and, more importantly, contaminated with poor quality data, data that

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79 Wheeler, supra note 77, p.21.
80 See Id., pp. 20-21; Coquillette, supra note 28, pp. 99-117.
81 Id., p.325.
82 See Works, supra note 4, vol. 2, pp. 687-692 (“Scala Intellectus sive Filum Labyrinthis”). See also Coquillette, supra note 28, pp. 260-261, 335. Bacon used the term “Scala Intellectus” to refer to “building tentative axioms from empirical research, seeking practical application, and then attempting to develop even higher truths that, in turn, would suggest new empirical experiments, just as proposed in the Novum Organum.” Id., p.260. This, of course, requires a gradual progression of expertise, step by step.
was fragmented, unreviewed, anachronistic, misleading, and—as a matter of social utility—profoundly disconnected to any social good. 83

But let us assume that we adopt Bacon’s many suggestions on aphoristic pedagogy and on the storage and classification of legal knowledge. Bacon still would be profoundly dissatisfied unless there was similar progress with research and critical judgment. Indeed, once past the first few rungs of the Scalla Intellectus, all four of the “rational arts” must be integrated.

Perhaps this is most obvious with the development of the “invention” or “research” function. 84 Bacon, as we know, believed that theory must be constantly informed and corrected by inductive, empirical research.

“For all those who before me have applied themselves to the invention of arts have but cast a glance or two upon facts and examples and experience, and straightway proceeded, as if invention were nothing more than an exercise of thought, to invoke their own spirits to give them oracles. I, on the contrary, dwelling purely and constantly among the facts of nature, withdraw my intellect from them no further than may suffice to let the images and rays of natural objects meet in a point, as they do in the sense of vision; whence it follows that the strength and excellency of the wit has but little to do in the matter.” 85

Part of Bacon’s genius was that he did not restrict such inductive “invention” to the natural sciences, but foresaw that the empirical study of mankind and human conduct was equally possible and valuable, thus anticipating the social sciences, including linguistics and sociological jurisprudence. 86 Whether it be a study of Aristotle’s Ethics or Henry VIII’s Statute of Uses, the proof was “in the pudding” of actual human affairs. 87 The gap between the university and professional training of his day and the world of inductive observation and actual practice was, to Bacon, like a bad divorce, “the unkind and ill-starved divorce and separation of which has thrown into confusion all the affairs of the human family.” 88 The cure was “a true and lawful marriage between the empirical and the rational faculty.” 89

“There are and can be only two ways of searching into and discovering truth. The one flies from the senses and particulars to the most general axioms, and from

83 See Works, supra note 4, vol. 4, pp. 13-21 ("Preface” to “The Great Instauration”). “For in like manner the sciences to which we are accustomed have certain general positions which are specious and flattering, but as soon as they come to particulars, which are as the parts of a generation, when they should produce fruit and works, then drive contentions and barking disputation, which are the end of the matter and all the issue they can yield.” Id., vol. 4, p. 14.
84 Id., vol. 4, p.407 (De Augmentis, 1623, chap. 1).
85 Id., vol. 4, p.19.
86 See Coquillette, supra note 28, pp. 233-234.
87 See Bacon’s extraordinary “Learned Reading…Upon the Statute of Uses,” one of the required Double Readings to advance at Gray’s Inn. It was delivered in the Lent vacation, 1600. See Works, supra note 4, vol. 7, at 391. In this reading, Bacon decried the erosion of the public policy goals of the great Statute of Uses (1536) by the use of blatant legal fictions. See the full discussion at Coquillette, supra note 28, pp. 48-59.
88 Works, supra note 4, vol. 4, p.19.
89 Id., vol. 4, p.19.
these principles, the truth of which it takes for settled and immoveable, proceeds to judgment and to the discovery of middle axioms. And this way is now in fashion. The other derives axioms from the senses and particulars, rising by a gradual and unbroken ascent, so that it arrives at the most general axioms last of all. This is the true way, but as yet untried.”

But imaginative, empirical research alone was not sufficient. That “rational art” must join with the “Art of Examination or Judgment.” As all true teachers know, instilling critical judgment in students is the greatest task. Bacon saw it as, first, overcoming the characteristic impediments to human understanding by self-knowledge and teamwork, and, second, developing the intellectual courage necessary for true intellectual independence. Only with adequate self-knowledge and intellectual independence could the “judgment” faculty be adequate, in student or teacher, and only with good critical judgment can research, or invention, proceed on a sound footing. The two “faculties” are mutually dependent.

But, of course, there were powerful obstacles to self-knowledge, which Bacon described by his famous “idols.”

“The idols and false notions which are now in possession of the human understanding, and have taken deep root therein, not only so beset men’s minds that truth can hardly find entrance, but even after entrance obtained, they will again in the very instauration of the sciences meet and trouble us, unless men being forewarned of the danger fortify themselves as far as may be against their assaults.”

I will not here review in depth Bacon’s “four idols”: the “Idols of the Cove”—the defects of the individual psyche; the “Idols of the Tribe,” that “have their foundation in human nature itself, and in the tribe or race of men”; the “Idols of the Market-place,” that are “formed by the intercourse and association of men with each other” (here Bacon anticipates modern linguistics—“words plainly force and overrule the understanding, and throw all into confusion, and lead men away into numberless empty controversies and idle fancies.”); and, finally, the “Idols of the Theatre,” the idols which have immigrated into men’s minds from the various dogmas of philosophies, and also from wrong laws of demonstration.” It is the latter, the “Idols of the Theatre,” that Bacon believed to be the most dangerous to education. A quick review of these “Idols of the Theatre” will show why they are so dangerous, and particularly why they are dangerous to good legal education.

The “Idols of the Theatre” were so named because, in Bacon’s view, doctrines and dogmas are inherently artificial. They are over-simplifications and imitations of reality, inherently artificial, although they would have you believe they are real...just like a stage play. In Bacon’s words:

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90 Id., vol. 4, p.50.
91 Id., vol. 4, p.407.
92 Id., vol. 4, p.53 (The Novum Organum, Aphorism 38).
93 Id., vol. 4, p.55 (The Novum Organum, Aphorism 44).
These I call Idols of the Theatre; because in my judgment all the received systems are but so many stage-plays, representing worlds of their own creation after an unreal and scenic fashion. Nor is it only of the systems now in vogue, or only of the ancient sects and philosophies, that I speak; for many more plays of the same kind may yet be composed and in like artificial manner set forth; seeing that errors the most widely different have nevertheless causes for the most part alike. Neither again do I mean this only of entire systems, but also of many principles and axioms in science, which by tradition, credulity, and negligence have come to be received.  

Bacon certainly regarded the classical pedagogy of his university training, including the “repetitions” and “declamations,” as this type of dangerous “theater,” and the “moots” and “bolts” of the inns of court as well. Today, he would be joined by the many post-modern critics of contemporary legal education. Such education remains dominated by the “Socratic” drills and the “case method” of Langdellian formalism. It is also still focused, in the first year at least, on appellate cases which—in their remoteness and intellectual “focus,” can be as detached from reality and as artificial as any stage play. Just ask a trial judge.

So what are Bacon’s answers? First, self-conscious awareness of all the “idols” will, in Wheeler’s words, be “data cleansing.” True, the human mind will always be an “enchanted glass,” incapable of purely accurate comprehension.

“For it is a false assertion that the sense of man is the measure of things. On the contrary, all perceptions as well of the sense as of the mind are according to the measure of the universe. And the human understanding is like a false mirror, which, receiving rays irregularly, distorts and discolours the nature of things by mingling its own nature with it.”

But the inaccuracies of the “false mirror” can be mitigated by making conscious allowance for the defects, in the same way the mirror of a telescope can be repaired.

There is a particular trap in the study of law. Bacon observed that “[t]he human understanding is of its own nature prone to suppose the existence of more order and regularity in the world than it finds.” Bacon was prophesying the inherent weaknesses of elegant Newtonian physics, a masterpiece of the Enlightenment. But the seduction is even greater in legal study, where it becomes easy to lose sight of the forest of human needs through the intervening doctrinal trees. Bacon was certainly aware of the peculiar dangers of legal education, as his “Preface” to the Maximes of the Law (circa 1596) makes clear, and it led to his controversial decision to omit all decided authority—all precedental cases—from that aphoristic

94 Id., vol. 4, p.55.
95 See Section II, (a) and (b), supra.
96 Wheeler, supra note 77, p.27. “Bacon’s ‘idols’ for decontaminating sense data is like Kant’s idea of critique.” Id., p.27.
97 Works, supra note 4, vol. 4, p.54 (The Novum Organum, Aphorism 41).
98 Id., supra note 4, vol. 4, p.55 (The Novum Organum, Aphorism 45).
If his legal proposals did not stand alone, vindicated by direct empirical evidence of utility and common benefit, the trappings of authority were the very idols that the student must self-consciously resist.

“For these reasons I resolved not to derogate from the authority of the rules by vouching of the authority of the cases, though in mine own copy I had them quoted: for although the meanness of mine own person may now at first extenuate the authority of this collection, and that every man is adventurous to control; yet, surely, according to Gamaliel’s reason, if it be of weight, time will settle and authorise it; if it be light and weak, time will reprove it. So that, to conclude, you have here a work without any glory of affected novelty, or of method, or of language, or of quotations and authorities, dedicated only to use, and submitted only to the censure of the learned, and chiefly of time.”

It was also important how doctrine was taught. Here we come full circle. The rational faculty of “invention,” or research, required the rational faculty of “examination” or “judgment” to “cleanse” the data of the ever-present idols. Only in this way could knowledge accurately be taught and stored. Thus good research and teaching were inextricably linked. In Bacon’s words, from the “Preface” of the Novum Organum (1620):

“And the same humility which I use in inventing I employ likewise in teaching. For I do not endeavour either by triumphs of confutation, or pleadings of antiquity, or assumption of authority, or even by the veil of obscurity, to invest these inventions of mine with any majesty; which might easily be done by one who sought to give lustre to his own name rather than light to other men’s minds. I have not sought (I say) nor do I seek either to force or ensnare men’s judgments, but I lead them to things themselves and the concordances of things, that they may see for themselves what they have, what they can dispute, what they can add and contribute to the common stock.”

Bacon was clearly aware of the two great legal pedagogies of his day, the civilian study of the Roman law and the common law study of precedents, authorities, and statutes. As we have seen, he had little sympathy for the latter.

In Aphorism 93 of the “De Augmentis,” Bacon directs that “[T]he lectures and exercises of those who study and labour at the law be so ordered and instituted, as rather to set legal questions and controversies at rest, than to raise and excite them.” It could be argued, particularly because of the use of the word “instituted,” that this was a reference to the pedagogy symbolized by the classic civilian text, Justinian’s Institutes. First conceived by the Emperor

100 Id., supra note 4, vol. 7, pp. 322-323. When he wrote those words in 1596, Bacon was indeed “mean” in his “own person.” Ten years later he was Lord Keeper! (Coquillette, supra note 28, pp. 313-319.)
101 Id., supra note 4, vol. 4, p.19.
102 See text at notes 43-46, supra.
103 Id., supra note 4, vol. 5, p.108.
Justinian himself, as part of his wholesale review of the classical Roman texts, between 528 AD and 535 AD, the Institutes were to be a first rung on the “ladder of learning” of Roman law students. Keyed directly to the great Digest and Codex of the same period, the Institutes, published on Nov. 21, 533 AD, were a splendid “nutshell” guide to beginning students, all the more remarkable for being “spoken” directly by the Emperor, and thus law in its own right.104 “Justinian’s design had been to embrace in his three authoritative works every jot and tittle of positive law.”105 All other law books were ordered to be destroyed.

Justinian’s teaching philosophy was plain. Not for him the torturous “moots” and “bolts,” or the “Socratic” agonies of the modern law student. Directly addressing his law students in the Prooemiism, the Emperor observed:

“Having removed every inconsistency from the sacred constitutions, hitherto inharmonious and confused, we extended our care to the immense volumes of the older jurisprudence; and, like sailors crossing mid-ocean, by the favour of Heaven have now completed a work of which we once despaired. When this, with God’s blessing, had been done, we called together that distinguished man Tribonian, master and ex-quaestor of our sacred palace, and the illustrious Theophilus and Dorotheus, professors of law, of whose ability, legal knowledge, and trusty observance of our orders we have received many and genuine proofs, and specially commissioned them to compose by our authority and advice a book of Institutes, whereby you may be enabled to learn your first lessons in law no longer from ancient fables, but to grasp them by the brilliant light of imperial learning, and that your ears and minds may receive nothing useless or incorrect, but only what holds good in actual fact. And thus whereas in past time even the foremost of you were unable to read the imperial constitutions until after four years, you, who have been so honoured and fortunate as to receive both the beginning and the end of your legal teaching from the mouth of the Emperor, can now enter on the study of them without delay.”106

In “Title I,” the Emperor continued his theme:

“Having laid down these general definitions, and our object being the exposition of the law of the Roman people, we think that the most advantageous plan will be to commence with an easy and simple path, and then to proceed to details with a most careful and scrupulous exactness of interpretation. Otherwise, if we begin by burdening the student’s memory, as yet weak and untrained, with a multitude and variety of matters, one of two things will happen: either we shall cause him wholly to desert the study of law, or else we shall bring him at last, after great labour, and often, too, distrustful of his own powers (the commonest cause, among the young, of ill-success), to a point which he might have reached earlier,

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105 Id., p.81.
without such labour and confident in himself, had he been led along a smoother path.”

How many American law students, frustrated and demoralized by the “hide the ball” teaching techniques of the orthodox first year “Socratic” method would weep at those words! The civilian approach was not to require a student to reinvent biology by dissecting a frog, but to lay out a simple initial path, rational and clear, that would become increasingly complex once the initial steps were mastered. Was this Bacon’s idea of the “Scalla Intellectus,” one rational step at a time?

It is certainly true that Bacon was enamored of the civilian learning, and that his great legal classification schemes, such as *A Proposition to His Majesty*, owed much to the structure of the *Institutes*, the *Digest*, and the *Codex*. As Bacon observed, in his letter to George Villiers, Duke of Buckingham and the King’s favorite:

“[A]lthough I am a professor of the common law, yet am I so much a lover of truth and of learning, and of my native country, that I do heartily persuade that the professors of law, called civilians, because the civil law is their guide, should not be discountenanced or discouraged: else whensoever we shall have aught to do with any foreign king or state, we shall be at a miserable loss, for want of learned men in that profession.”

But Roman law instruction, based on Justinian’s “sacred texts,” was still a “top down,” deductive pedagogy, that assumed the “starting” point of the classical texts. Of course, Bartolist jurists had long discovered how to apply Roman law to improve the emerging legal systems of Renaissance Europe. But the course of instruction—then, as during my Oxford Roman law studies in the 1960s—was based on close analysis of a closed, indeed dead, world.

Not surprisingly, therefore, when Bacon actually attempted to establish an aphoristic guide to the first rungs of the *scalla intellectus*, he refused to blindly adopt civilian models. On the other hand, he equally refused to reject such models outright, particularly when they were useful. This common lawyers, like Edward Coke, would abhor. In his “Preface” to the

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107 *Id.*, p.3.
110 *Civilian Writers*, supra note 108, pp. 32-44.
111 *Id.*, pp. 22-29.
112 In his Preface to 7 *Coke’s Reports* (1608), Coke wrote: “And sure I am that no man can either bring over those bookes of late written (which I have seene) from Rome or Romanists, or read them, and justifie them…but they rune into desperate dangers and downefals; for the first offense is a praemunire…and they, that offend the second time therein, incurre the heavie danger of high Treason. These bookes have glorious and goodly titles…but there is mors in olla: They are like to Apothecaries boxes…whose titles promise remedies, but the boxes themselves containe poyson.” 7 *Coke’s Reports* (London, 1608), “Preface,” 8th unpaginated page.
Maximes of the Law (circa 1596), Bacon noted that some of his maximes, or “rules,” were concurrent with Roman models.

“…[W]hereas some of these rules have a concurrence with the civil Roman law, and some others a diversity, and many times an opposition; such grounds as are common to our law and theirs I have not affected to disguise into other words than the civilians use, to the end they might seem invented by me, and not borrowed or translated from them: no, but I took hold of it as matter of great authority and majesty, to see and consider the concordance between the laws penned and as it were dictated verbatim by the same reason. On the other side, the diversities between the civil Roman rules of law and ours,—happening either when there is such an indifferency of reason so equally balanced, as the one law embraceth one course, and the other the contrary, and both just after either is once positive and certain, or where the laws very in regard of accommodating the law to the different considerations of estate,—I have not omitted to set down with the reasons.”

As will be seen, Bacon rejected the legal nationalism of the common law, and admired the global pretensions of the Roman law and its civilian jurists. But the “global” law he sought to teach was based on experience and reason, not ancient text, or Bartolist adaptations.

Nor was Bacon wedded to a rigorous, civilian curriculum, in which every law was in its exact place in a deductive hierarchy, and carefully related to each other class of laws. Indeed, as Bacon noted below, even Justinian’s Digest was more “free-form” than that. Thus, Bacon preferred a more open structure for his aphorismic introductory text—to encourage the students to think and, most importantly, to apply the principles to practice. As Bacon observed:

“[W]hereas I could have digested these rules into a certain method or order, which, I know, would have been more admired, as that which would have made every particular rule, through his coherence and relation unto other rules, seem more cunning and deep; yet I have avoided so to do, because this delivering of knowledge in distinct and disjoined aphorisms doth leave the wit of man more free to turn and toss, and to make use of that which is so delivered to more several purposes and applications. For we will see all the ancient wisdom and science was wont to be delivered in that form; as may be seen by the parables of Solomon, and by the aphorisms of Hippocrates, and the moral verses of Theognis and Phocylides: but chiefly the precedent of the civil law, which hath taken the same course with their rules, did confirm me in my opinion.”

114 According to Bacon in De Augmentis (1623):
“Wherefore let it be my present object to go to the fountains of justice and public expediency, and endeavour with reference to the several provinces of law to exhibit a character and idea of justice, in general comparison with which the laws of particular states and kingdoms may be tested and amended.”
Works, supra note 4, vol. 5, 88.
Not only did Bacon reject the extremes of both the civilian and common law pedagogies, he was one of the first jurists to recognize the importance of comparative analysis of rival legal systems. Indeed, Bacon believed that there was a body of principles common to all legal systems and, like the Roman *ius gentium*, these principles could be discovered by careful observation and comparison of the actual operation of the law in different nations and systems. This was Bacon’s theory of the “purer fountains.”

Bacon explored this idea most thoroughly in his “*Aphorisms on the greater law of nations or the fountains of Justice and Law,*” known as the “*Aphorismi.*” Written about 1614, these “*Aphorismi*” have only recently been discovered in Hardwick MS. 51, a manuscript in a library tended by Thomas Hobbes, Bacon’s former secretary[^116], and set out and annotated by Mark Neustadt in 1987.[^117]

Bacon’s belief, as set out in the *Aphorismi*, was that there were universal principles of law, just like that of natural science. While the narrowly educated lawyer learns and appreciates only the positive rules and laws “limited by the boundaries of regions and commonwealths,” true legal education must be global in scope, empirical in character, and comparative in technique. Of course, individual states adopt these principles of “natural equity” to their own needs, but this does not detract from their inherent universality.

“There is little doubt, meanwhile, but that there are certain fountains of natural equity from which spring and flow out the infinite variety of laws which individual legal systems have chosen for themselves. And as veins of water acquire diverse flavors and qualities according to the nature of the soil through which they flow and percolate, just so in these legal systems natural equity is tinged and stained by the accidental forms of circumstances, according to the site of territories, the disposition of peoples, and the nature of commonwealths. It is worthwhile to open and draw out the purer fountains of equity, for from them all amendment of laws in any kingdom or commonwealth must be sought.”[^118]

And who should teach in the “global law school”? Certainly not “pure academics,” detached from empirical study and human reality, nor narrow, nationalistic legal practitioners.

“Nearly all those who have written about laws have inclined either to fancies of philosophers or to the subtleties of lawyers. In both there is some dignity but too little profit. Doubtless the latter are chiefly concerned with human practice, but they are constrained and wasted upon trifling matters. The knowledge of a legislator is different from that of an advocate, because the ordinances of a civil law, to which lawyers are bound to adhere, are limited by the boundaries of regions and commonwealths.

[^116]: See *Coquillette*, *supra* note 28, pp. 237-244.
[^117]: *Aphorismi*, *supra* note 5, pp. 135-143, 239-246.
[^118]: Id., p.273.
Certainly it partakes of a higher science to comprehend the force of equity that has suffused and penetrated the very nature of human society. And it should not be concealed that both philosophers and lawyers seem little suited or proper for this work. Philosophers, who wander the pleasant by-ways of contemplation, ornament civil activities more than they improve them; and lawyers, bound by their rules and formulae, do not employ a free and higher judgment.119

What was needed, instead, was a law school by and for “lawyer statesmen,” who understood the value of direct observation of human affairs.120

“This truly this work and endeavor belongs chiefly to statesmen and those skilled in public affairs who have learned about human dispositions, compulsions and habits by much practice and attentive reading, listening, and observation.”121

Of course, this could be a description of Bacon himself. Even his choice of the term “equity,” rather than “law,” for the “purer fountains” anticipated Bacon’s elevation to Lord Keeper in 1617, the head of the equitable Court of Chancery. (“Law” was traditionally drawn from authority; “equity” was realm of reason and fairness.)122 But lawyer statesmen had a drawback, they were too busy to found law schools.

“But these political men are often made for action and not suited for teaching. Moreover they are not rich in leisure, and are satisfied if they take care for their own times. (Indeed, among them care for posterity commonly does not go beyond the boundaries of their own families.)”123

Indeed, Bacon himself was too busy, as chief legal officer of the kingdom, and, eventually, Viceroy. He left no detailed plans of any school or curriculum, only the extraordinary vision of a research university—the vast laboratories and “engine-houses” of “Salomon’s House” of Bensalem—set out in his haunting utopia, the New Atlantis (circa 1624).124 Like his other mature works, the New Atlantis was the product of the forced leisure of Bacon’s impeachment. And it was incomplete. It cut off, either by accident or deliberately, just before the promised “frame of Laws,” or “the best state or mould of a Commonwealth.”125 Thus there was no description of the law school of utopia. So let us do something outrageous. Let us imagine how Bacon would resolve the post-modern crisis facing professional education in general, and American legal education in particular.

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119 Id., p.272.
120 For a current expression of this view, see Anthony T. Kronman, The Last Lawyers (1993).
121 Aphorismi, supra note 5, pp. 272-273.
123 Aphorismi, supra note 5, p.273.
124 See note 78, supra. See also Coquillette, supra note 28, pp. 261-262. Salomon’s House had a mission statement worthy of any modern university: “The End of our Foundation is the knowledge of Causes, and secret motions of things; and the enlarging of the bounds of Human Empire, to the effecting of all things possible.” Works, supra note 4, vol. 3, p.156.
V. The “New Pathways”: A Neo-Baconian Pedagogy

a.) In Medicine

In 1985, Harvard Medical School introduced a radical new approach to medical education, the “New Pathway” Program. First conducted as an experiment in its first two years (1985-86 and 1986-87), it aimed at integrating traditional “abstract” learning (anatomy, pathology, pharmacology, etc.) with a more “integrated” medicine, focusing on actual patients and healing. The goal was to graduate doctors with “more positive attitudes toward all behaviors related to humanistic medicine, lifelong learning, and issues related to learning in a social environment.” In short, the effort was how to train doctors that could exercise all of Bacon’s four “rational arts” on a life long basis: to access acquired knowledge (“art of custody or memory”); to test and improve that knowledge by direct experiment and research (“art of inquiry or invention”); to apply critical judgment to such raw experience (“art of examination or judgment”); and to be able to transmit that knowledge effectively—to teach (“art of elocution or tradition and transmission”). All this through a new curriculum, that moved students through the easiest rungs of the scalla intellectus by normal classroom pedagogy, but exposed them as quickly as possible to direct experience, in which their doctrinal learning could be quickly tested and improved.

A particularly important part of the “New Pathway” focused on unifying technical medical knowledge with “humanistic medicine,” i.e., “humanism” and “social learning.” This was intended to go well beyond traditional psychiatry—a specialty increasingly driven by drug treatments—to efforts to teach young doctors to see and appreciate their patients in a broader social context, thus facilitating better communication and wiser judgments. In short, the “New Pathway” sought not only to unify the separate introductory subjects of the medical curriculum, by focusing on actual patients and empirical experience at an early stage, but also to unify medical training more generally with the social sciences and the humanities.

127 Same note.
129 See Id., p. 4-5. See also note 129, supra.
To see how this would work in practice, let us examine the basic four year American medical school curriculum. It has been traditionally divided in two parts. The first two years is largely classroom learning, taught mostly in lecture form by faculty with Ph.D.s in the sciences. These are mandatory courses (no electives), and are focused on the “building” blocks of the sciences. The goal is to pass Part One of the United States Medical Licensing Examination, administered by the National Board of Medical Examiners (“NBME”) (hereafter “the Boards”). The examination is multiple choice, and tests “whether the student can understand and apply important concepts of the sciences basic to the study of medicine.” It is very hard, with a 20% failure rate. Most medical students regard it as an exercise in memorizing and applying a “given” body of doctrine. Multiple choice tests punish originality, and Part One of “the Boards” is no exception.

The next two years are largely clinical in nature, and consist of rotations in cooperation with one or more affiliated hospitals. These usually include a required third year curriculum including “three months of internal medicine, three months of general surgery, and six weeks of OB/GYN, psychiatry, pediatrics and neurology.” Only in the fourth year do students have any serious choices.

“The fourth year of medical school is really the first time when students are allowed to choose their desired path. They choose elective rotations in other specialties, or, if they want to delve deeper into a specialty they experienced in third year, they may perform what is known as a sub-internship. However, the rotations continue to be between six weeks and three months, so students are encouraged (forcibly) to experience many different specialties, thereby producing well-rounded and capable physicians. During the fourth year, students decide what they want to specialize in and apply for “internships” and/or “residencies” in their desired specialization.”

At the end of the fourth year, students must pass Part 2 of “the Boards.”

“This exam focuses on the principles of clinical science that are deemed important for the practice of medicine under supervision in postgraduate training. It assesses whether medical school students can apply the medical knowledge and understanding of clinical science considered essential for the provision of patient care under supervision. Many medical schools in the United States require students to pass Parts 1 and 2 prior to graduation.”

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132 The English curriculum is very different, usually starting at the undergraduate level. Again, I am most indebted to my excellent research assistant, Deborah H. Goldstein, Boston College Law School ’03, and her excellent research memorandum, “British Medical Training Compared with American Medical Training” (2003), manuscript available through the author.


134 I am again indebted to Deborah Goldstein, supra note 132. See her research memorandum “The Medical School Experience” (2003), pp. 1-3, available through the author. (Hereafter, “Goldstein.”)

135 Id., p.1.

136 Id., p.2.
Students then apply for “internships” or “residencies.” (Some “internships” are merely the first year of a residency.) At the end of the first year, graduates take Part 3 of “the Boards,” which “assess whether …[they] can apply the medical knowledge and understanding of biomedical and clinical science considered essential for the unsupervised practice of medicine…” At this point a graduate can obtain a license to practice medicine in the United States. Most graduates, however, continue residencies for at least three to six years, during which time they are notoriously exploited, with long hours and low pay. Even after that, some graduates continue with fellowships to develop sub-specialties, which narrows their expertise even more, and can take another one to five years. Finally, there are intense written and oral examinations for “board certification” in a specialty, with failure rates of over 30%. The result is a hierarchical medical profession, ranging between “low technology” primary care physicians to narrowly defined specialists. While the gaps in income and prestige are not as great as that between “GPs” and “Harley Street consultants” in the English profession, they are still real to the young doctor.

The “New Pathway” was designed to combat the inherent fragmentation and narrowness of this process by focusing on the reforming the first two years. As initiated at Harvard in 1988, it introduced students to clinical settings almost at once, replacing the traditional lectures and doctrinal “pigeon holes” with “a problem-based approach emphasizing small-group tutorials” and “self-directed learning complemented by laboratories, conferences and lectures.”

“Students are expected to analyze problems, locate relevant material in library and computer-based resources, and develop habits of collaboration and lifelong learning. Clinical skills and the patient-doctor relationship are addressed in a three-year longitudinal sequence; instruction in patient history-taking begins in the first weeks of school. This differs markedly from most medical schools, where students spend the majority of their first two years in a lecture hall.”

The students then took Part 1 of “the Boards” and continued into the third and fourth years of specialty rotation. These “New Pathways” systems made few changes. In 1998, a “randomized controlled trial” was conducted “to evaluate the long-term effects of an innovative curriculum, the New Pathway (NP) Program, on behaviors and attitudes related to humanistic medicine, lifelong learning and social learning.” This study compared 100 randomly selected 1989 and 1990 Harvard Medical School graduates, 50% who had studied under the “New Pathway” program, and 50% who had “the traditional curriculum.” The study did show significant differences—the most striking being the fact that “40% of the NP graduates…”

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137 Id., p.2.
138 See sources cited at note 129, supra.
139 Goldstein, supra note 134, p.2.
140 See note 132, supra. See the excellent historical account in Thomas Neville Bonner, Becoming a Physician: Medical Education in Britain, France, Germany and the United States: 1750-1994 (Oxford, 1995).
141 See Long-term Outcomes, supra note 126, p.2. See also sources cited at note 129, supra.
142 Goldstein, supra note 134, p.2.
143 Long-term Outcomes, supra note 126, p.1.
remained in low-technology, psychosocially oriented careers (primary care and psychiatry)—more than twice the number of traditional graduates (18%).” The study continued “[h]us, unlike typical residents, the NP graduates were less influenced to leave primary care by the high-technology, hospital based nature of residence education,” i.e., the highly fragmented system of specialties described above. Given the fact that the “New Pathway” only made major changes in the first two years of a professional education that, counting internship, residencies, and fellowships, could easily exceed ten years, these results are quite striking.

Bacon would certainly regard the New Pathway as a step in the right direction, but would certainly deride its limitations. To begin, it only applies to the earliest stages in this particular Scalla Intellectus. In terms of two of his “rational arts,” “the Art of Custody or Memory” and “the Art of Elocution or [transmission],” it should be a vast improvement over the lecture hall, by linking the transmission of basic data to actual experience as soon as possible. But pure research and critical judgment, the “Art of Inquiry or Invention” and the “Art of Examination or Judgment,” are developed over time, later down the long path of medical training. Increasingly, medical experts concerned with fundamental cancer research have returned to Neo-Baconian principles. In particular, research developed within the traditional hierarchies of the medical profession, and driven by the goals of funding agencies, has been disappointing. Bacon would have predicted the failure of any program that was not based on “pure,” i.e., purely empirical research, free from such agendas and preconceptions. But the inherent narrowness of the medical certification system and the culture of hierarchies it promotes would make a “New Pathway” at this level—still dedicated to “lifelong learning, integrated knowledge, and a humanistic approach”—a challenge indeed.

b) In Law

Can legal education learn from the medical “New Pathway,” in particular, and Neo-Baconian reform initiatives, in general? The first year of law school approximates the first two years of the traditional medical program in that it is largely mandatory and focuses on time-honored doctrinal “pigeon-holes,” “contracts,” “torts,” “civil procedure,” etc. Although the conventional pedagogy is now less rigid than Langdell’s so-called “Socratic Method,” the data analyzed is still artificially structured appellate cases—quite far from the empirical trenches of the law. Equally important, the “critical judgment” inspired by this pedagogy is often transparently phony. Extremely large classes, and professors with a carefully programmed “theater” of exposition, are closer to the “replications” and “bolts” of Bacon’s day, than a system that truly rewards originality and inquiry. Finally, the importance of first year grades, and the rigor of that competition, is at least comparable to Part 1 of the medical “Boards.”

144 Id., p.4.
145 See text at notes 75-77, supra. See also Works, supra note 4, p.407.
146 See text at notes 91-97. See also Works, supra note 4, p.53-55.
147 See, for example, Duncan Kennedy’s famous attacks on conventional legal pedagogy: Duncan Kennedy, Legal Education and the Reproduction of Hierarchy: A Polemic Against the System (Cambridge, Mass, 1983); and Duncan Kennedy, “Legal Education as Training for Hierarchy,” The Politics of Law: A Progressive Critique (New York, 1982). The “Socratic method,” the dynamics of the traditional classroom, and individual competition for grades engendered by the formal nature of law school examinations has been accused of discouraging cooperative skills, encouraging confrontation rather than mediation, and creating disadvantages for women, among other
The second two years in the conventional medical school curriculum really have no equivalency in the legal academy except in the clinical programs. But these programs are certainly not universally required, and there are no compulsory rotations. In addition, at many law schools clinicians do not hold tenure-track positions, and the programs they teach do not have the prestige of the regular classroom. At Harvard Law School, only half the students take clinical programs of any kind.\textsuperscript{148}

The second year is still quite necessary for learning required “building blocks,” such as taxation, professional ethics, corporations, constitutional law (in many schools) and legal accounting. These courses—with the exception of professional ethics—are rarely required, but they so much form part of the language and culture of American practice that they are rarely skipped over.

It is, of course, the third year which is the problem. Many law students complain bitterly that it would be better spent in a legal form of “internship,” i.e., “apprenticeship.” As it stands, only an emphasis in some law schools on supervised research and writing gives the third year any structure or focus.\textsuperscript{149} Ironically, it has been the required first year curriculum that is seen to be the most successful by graduates. Equally ironic, most serious efforts at reform, such as Todd Rakoff’s “Experimental First Year” at Harvard or Judith Ahreen’s “Optional First Year” or “Curriculum B” at Georgetown, have focused on the first year.\textsuperscript{150}

At the close of the third year, many law graduates take one or more state bar examinations. These form the “minimal” qualifications to practice law and are a function equivalent of the far more difficult Part 3 of the medical “Boards.” Most of these examinations are, at least in part, multiple choice, and they stick closely to an unimaginative memorization of doctrine. “Lifelong learning” skills and critical judgment are not tested at all.

Only at this point does true apprenticeship begin, as graduates take junior positions in large firms or organizations. But recent developments in law firm economics have led to early specialization, and widespread abandonment of required rotations—even though these rotations

\textsuperscript{148} The Office of Clinical Programs, Harvard Law School, gave the figure of “just over 50%” for the year 2002-2003.
\textsuperscript{150} See Todd D. Rakoff, “The Harvard First-Year Experiment,” 39 \textit{Journal of Legal Education} 491, 491-499 (1989). Despite the valiant efforts of Professor Rakoff, the Harvard experiment proved so costly in faculty time that it was discontinued. Georgetown’s “optional” first year “curriculum B” continues as “an innovative and integrated approach to the study of law.” <www.law.georgetown.edu/curriculum/jdprog.CFM#first>>. For the view that the rigor of the first year represents the best of professional education, see Mary Ann Glendon, \textit{A Nation Under Lawyers: How the Crisis in the Legal Profession is Transforming American Society} (New York, 1994), pp. 239-253 (Hereafter, “Glendon”). For a rather uncomplimentary and anecdotal description of an “experimental” first year section, see Richard D, Kahlenberg, \textit{Broken Contract} (Boston, 1992), pp. 11-20.
filled the same needs as in medical training, i.e., providing enough generality to at least know
where to go to solve problems of a patient/client that are outside your specialty. And, of course,
some law students just “hang out a shingle” and practice law.\footnote{According to the ABA “McCrate Report” (Legal Education and Professional Development—An Educational Continuum, Chicago, 1992) (Hereafter, “McCrate Report”), the gap between university legal education and practice was, at least in 1992, growing dangerously. \textit{Id.}, pp. 284-299. If so, the result could be Bacon’s worst nightmare. In Mary Ann Glendon’s words:
“It would be as though medical faculties decided to devote themselves entirely to basic research in chemistry, biology, and genetics, but continued to send their graduates out to treat patients and to design systems for the delivery of health services. The more law professors give themselves over to high theory, the closer we come in a full circle to a stripped-down version of the old apprenticeship system. Law school provides advanced general education on top of a liberal arts degree, and new graduates, it is assumed, will pick up what they need to know on the job as they go along. The flaw in that assumption, however, is that students are being sent from law schools without law into law firms where senior lawyers are too busy to provide much supervision.” \textit{Glendon, supra} note 150, p.245.}

Bacon would find this existing system reminiscent of the flawed professional training of
his day. Only the specific nature of the “idols” have changed—with Langdell’s pedagogy and
curriculum creating the “theater” of today’s first year classroom, rather than the received
doctrine of the common law moots, bolts and readings of his day. But these rituals, isolated
from experience, make for poor learning.

Here is a modest proposal. Let us assume that the first year—if modestly enriched by the
kinds of interdisciplinary research and writing and clinical experiences proposed by Rakoff,
Ahreen and others—does an acceptable job of transmitting “building blocks” of information or,
at least, of teaching students where such information is stored, i.e., Bacon’s “Transmission” and
“Memory” functions. Let us further assume that the next two years do a poor job of inculcating
Bacon’s most crucial “rational arts”: 1) the “Art of Inquiry or Invention,” i.e., the creative skills
required to “think outside the box” and learn from life experience; and 2) the “Art of
Examination or Judgment,” i.e., the art of critical analysis and wisdom. In Bacon’s view, these
two years could hardly be expected to be successful, fragmented into scores of electives,
unrelated to each other by any overlapping concept, and divorced from actual experience—
except for optional clinical programs, ignored by many students and, shamefully, often the
tenure track faculty.

So why not design a “New Pathway” for the second and third years, drawing from the
Harvard Medical School experience? Assuming that first year doctrinal, lawyering, and research
and writing programs are adequate to transmit the basic legal vocabulary and date access skills
(i.e., Bacon’s “Transmission” and “Memory”), the second year could offer a choice of
“concentrations,” but—as with the third and fourth years of medical school—some rotation
being mandatory. These “concentrations” could integrate classroom instruction, supervised
research, and clinical experience through faculty “institutes,” that had both academic and clinical
components.

For example, assume a second year student decides—as many do—that litigation is not
for him or her. “Transactional” or “corporate” law is what attracts. A “corporate” institute could
combine academic instruction in business planning, law and economics, secured transactions, corporate taxation, securities law and legal accounting, with a program of actually representing small businesses and neighborhood development schemes, as is done now at Harvard’s Hale & Dorr Center. Such an “Institute” would not just be a vehicle to transmit research and judgment skills to students, but would be a vehicle for faculty research as well, and would encourage collaboration among faculty and students alike—the “teamwork” Bacon found essential for genuine creativity. Another student, interested in litigation, would be taught a different package of academic, research, and clinical skills, while a third, interested in a career in government legal service, could be supervised by an Institute that actually provided counsel to government agencies. A mandatory “rotation” among at least two or three of these “concentrations” would provide a conclusion of the universal legal or jurisprudential principles represented by a rule of law.

It might be objected that these “Institutes,” to the extent they actually practice law, would compete unfairly with the practicing bar, or provide uneven services. Exactly the same charges could be leveled at the medical internships and residencies, but they provide invaluable services for the poor and middle class that regular doctors cannot or will not provide. Existing legal clinics, applying strict means tests, have far too much work. Or the “Institutes” could work in support of government projects, reducing the cost to the taxpayer.

The real objections are likely to be by legal educators themselves. Such “Institutes” would raise the cost of legal education by requiring smaller student/faculty ratios and replacing classroom instruction by more costly clinics. Simply integrating existing clinical programs would not be enough—these programs would have to have the added prestige of full equality with classroom and tenure-track instruction, and that, in turn, would require a change in faculty culture.

152 The Community Enterprise Project (CEP) of the Hale and Dorr Legal Service Center “works toward facilitating access to capital and equity participation for neighborhood residents, as well as stimulating home ownership, business development and overall economic stability.” See <<www.law.harvard.edu/academics/clinical/lsc/cep.htm>>

153 These are hardly new ideas, but the case for reform grows more compelling. See, for example, Dean Kristine Strachan’s implemented programs for integrated “capstone” and “cornerstone” programs in the third year, implemented at the University of San Diego School of Law. Kristine Strachan, “Curriculum Reform in the Second and Third Years: Structure, Progression, and Integration,” 39 J. Legal Education 523 (1989), 523-533. She candidly acknowledged that “[T]he direction of our reform runs against the present mainstream of legal education…” Id., p.530.

154 For one thing, most tenure-track law faculties are not qualified to teach such integrated courses. Dean Patrick J. Schlitz took the Harvard Law School faculty as an example:

“If it is indeed true that as Harvard goes so goes the academy, then a close examination of the Harvard Law School faculty should provide particular insight into the future of legal education. That future will apparently include faculties made up almost entirely of people without substantial experience practicing law—or at least practicing in the private sector. Although most Harvard graduates go on to practice in private law firms, most Harvard professors have little or no such experience. Only three of the seventy-five members of the Harvard Law faculty have more than five years experience in private practice. The youngest of those three is sixty-six years old, last practiced law in 1964, and was appointed to the Harvard faculty in 1966. In other words, not a single member of the (huge) Harvard Law School faculty has practiced in a law firm at even a senior associate level in the last thirty years. If current trends hold, the Harvard faculties of the future will have even less collective experience in private practice. The thirteen oldest members
All to the good, Bacon would say. If better education of students breaks down traditional law faculty formalism, develops new bonds between faculty formerly working in isolation, and encourages learning by direct experience as a primary goal, rather than an optional after thought, the results will not just be better legal education, but better legal research and critical judgment from students and faculty alike. The “New Pathway” would lead to “New Tools” of analysis and invention! And what about the cost? As Bacon emphasized, the concern of society should not be the modest cost of better education, but the extraordinary social cost and danger of a blinkered formalism, indifferent to human welfare.  

Bacon, for all his intense frustration with contemporary legal education, was devoted to his Inn of Court, Gray’s Inn. He participated in every activity, including: delivering the required statutory “double reading”—in great style, arranging “Masques” and entertainment, planting the Inn gardens and “making of their walks”, and serving as Treasurer for the exceptionally long term of eight years, 1608-1616. “[F]ew men,” he observed, “are so bound to their societies, by obligations ancestral and personal….” Indeed, for all the attacks of his contemporary rivals, and of Whig historians long after his death, Bacon was loyal to his profession. “I hold every man a debtor to his profession,” reads his Preface to the Maximes of Law, “from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves, by way of amends, to be a help and ornament thereunto.”

of the current Harvard faculty have an average of 4.3 years’ experience in private practice; three of them have more than five years’ experience, and only four have none. By contrast, the thirteen youngest members of the Harvard faculty have an average of about ten months’ experience in private practice; none of them has more than five years’ experience, and ten have none. Looked at another way, the fifteen faculty members appointed before 1966 have an average of 2.75 years’ experience in private practice, and only five of them have none. By contrast, the fourteen Harvard faculty members appointed after 1991 have an average of .786 years’ experience in private practice, and ten of the fourteen have none. The future seems clear. If current hiring trends continue, soon there will not be a single member of the Harvard Law School faculty who will have substantial experience doing what the vast majority of Harvard graduates will be doing: practicing law in the private sector.


155 See text, supra, at note 27. See also Bacon’s “Preface” to the Great Instauration, “Works, supra note 4, vol. 4, pp. 13-21. (Novum Organum (1620)).
157 In this, Bacon undoubtedly had business transactions with Shakespeare. See the lively and reasonably accurate account in W.G. Thorpe, The Hidden Lives of Shakespeare and Bacon and their Business Connection; with Some Revelation of Shakespeare’s Early Struggles 1587-1592 (London, 1897), pp. 11-39. This activity began at least as early as the Gray’s Inn Masque of 1588. Id., p.13. See also D. Plunket Barton, Charles Benham, Francis Watt, The Story of the Inns of Court (Boston, 1926), p.196 (Hereafter, “Inns of Court”).
158 See R.J. Fletcher, “Introduction” to Francis Bacon: The Commemoration of his Tercentenary at Gray’s Inn (London, 1912), with example gardening accounts at pp. 12-15. See also Inns of Court, supra note 157, pp. 194-195.
160 Inns of Court, supra note 157, pp. 198-199.
161 Works, supra note 4, vol. 7, p.319. The feeling was mutual. Gray’s Inn religiously observes Bacon’s anniversaries, and unveiled a statue to his honor in the front quadrangle on June 27, 1912 to mark his tercentenary at
How it would please him if the great educational insights of *The Maximes; The Advancement of Learning*; the *Novum Organum*; and the *De Augmentis* could serve professional education, particularly legal education, today! And so it should, for the Harvard Medical School’s “New Pathway” and its hope for a better education for tens of thousands of American medical students, is a Baconian idea, and its application to the serious plight of our law students offers even more promise. Bacon’s faith in the power of true research, in the ability of the human mind to overcome the idols of doctrinal theaters, in the value of integrating knowledge by true experience, in the focus of learning on human need, and in the need to pursue “global” perspectives that unite all study—these speak powerfully to the condition of all American professional schools today, and particularly to law schools.

As William Twining observed in his great Maccabean Lecture of 1989, despite the “structuralists, post-structuralists, deconstructionists, semioticians and even narratologists” it is not bad history to “converse” with great historical figures. (He used the example of Bentham.) Indeed, “a failure to equip students with a basic method for conducting reasonably disciplined conversations” is a fault. Bacon was a man of his time, but, in his own words, his works were “dedicated only to use, and submitted only to the censure of the learned, and chiefly of time.” One of his goals was to converse with future generations about the nature of good education so that “there may spring helps to man, and a line and race of inventions that may in some degree subdue and overcome the necessities and miseries of humanity.” We should listen carefully, for Bacon has much to say to us.

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Gray’s Inn. See *Francis Bacon: The Commemoration of his Tercentenary at Gray’s Inn* (London, 1912); *The Unveiling of the Statue of Francis Bacon* (London, 1912). Of course, Bacon’s alleged “totalitarianism,” as promulgated by Whig historians like Macaulay, has not endeared him to common lawyers ideologically. See *Coquillette, supra* note 28, pp. 14-17, 293.

162 *Coquillette, supra* note 28, pp. 292-293.


165 *Id.,* vol. 4, p.27 (“Plan to Work,” *The Novum Organum*).