The Historical Emergence of Construction Law

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THE HISTORICAL EMERGENCE OF CONSTRUCTION LAW

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For more than 4500 years construction has been a hallmark of the advancement of human civilization, from primitive Mesopotamian fire-brick and Egyptian cut-stone construction to the extraordinary structures of the modern built environment.\(^1\) Since mankind first promulgated rudimentary principles of law to regulate human rights and obligations arising out of societal interaction, there have existed principles of law governing the built environment and the construction process.\(^2\) As classical antiquity


That which gave most pleasure and ornament to the city of Athens, and the greatest admiration and even astonishment to all strangers, and that which now is Greece’s only evidence that the power she boasts of and of her ancient wealth are no romance or idle story, was [Pericles’] construction of the public and sacred buildings.


2. The earliest known principles of construction law were primitive and
gradually civilized the built environment, so too did it refine the law governing its built environment. By the reign of Rome’s Caesar Augustus, construction risks inherent in building upon unsuitable soils or with incompetent management and cost control were punitive. The Code of Hammurabi is said to be based on even older collections of Sumerian and Akkadian laws. Under its “eye for an eye” system of justice, Hammurabi’s Code dictated that builders be punished for injuries to others caused by collapse of their buildings. The code provisions pertinent to construction state:

229 If a builder build a house for some one, and does not construct it properly, and the house which he built fall in and kill its owner, then that builder shall be put to death.
230 If it kill the son of the owner the son of that builder shall be put to death.
231 If it kill a slave of the owner, then he shall pay slave for slave to the owner of the house.
232 If it ruin goods, he shall make compensation for all that has been ruined, and inasmuch as he did not construct properly this house which he built and it fell, he shall re-erect the house from his own means.
233 If a builder build a house for some one, even though he has not yet completed it; if then the walls seem toppling, the builder must make the walls solid from his own means.


Augustus reigned from 27 B.C. to 14 A.D. When he became Rome’s first emperor in 27 B.C., Gaius Julius Caesar Octavianus (63 B.C.–14 A.D.), great nephew of Julius Caesar, was given the name Augustus by the Roman Senate. Colin Wells, The Roman Empire 14 (2d ed. 1992).

Jesus of Nazareth, who is said to have practiced carpentry as a boy, employed widely understood metaphors in his sermons and concluded His Sermon on the Mount with this admonition:

Everyone then who hears these words of mine and acts on them will be like a wise man who built his house on a rock. The rain fell, the floods came, and the winds blew and beat on that house, but it did not fall, because it had been founded on rock. And everyone who hears these words of mine and does not act on them will be like a foolish man who built his house on sand. The rain fell, and the floods came, and the winds blew and beat against that house, and it fell—and great was its fall!

Matthew 7:24–27 (emphasis added).

See 10 Marcus Vitruvius Pollio, Vitruvius: The Ten Books on Architecture 282 (Morris Hicky Morgan trans., Dover Publications 1960) (ca. 20 B.C.) [hereinafter Vitruvius]. Known to history as “Vitruvius,” he was chief engineer to Julius Caesar and Emperor Augustus. Thus, in his time, he was the “chief engineer of the civilized world.” Vitruvius wrote a ten-volume treatise for Augustus on Roman construction practices, which survived the ravages of time to influence the architecture of the European Renaissance. Among other things, Vitruvius proposed to Augustus that Rome resurrect an ancient ancestral law of the Greek City of Ephesus:

1. In the famous and important Greek City of Ephesus there is said to be
widely recognized. Good construction practice under Roman law favored careful contractual articulation of the scope of work and allocation of construction risks.\(^6\)

\[\text{an ancient ancestral law, the terms of which are severe, but its justice is not inequitable. When an architect accepts the charge of a public work, he has to promise what the cost of it will be. His estimate is handed to the magistrate, and his property is pledged as security until the work is done. When it is finished, if the outlay agrees with his statement, he is complimented by decrees and marks of honour. If no more than a fourth has to be added to his estimate, it is furnished by the treasury and no penalty is inflicted. But when more than one fourth has to be spent in addition on the work, the money required to finish it is taken from his property.}\]

2. Would to God that this were also a law of the Roman people, not merely for public, but also for private buildings. For the ignorant would no longer run riot with impunity, but men who are well qualified by an exact scientific training would unquestionably adopt the profession of architecture. Gentlemen would not be misled into limitless and prodigal expenditure, even to ejectments from their estates, and the architects themselves could be forced, by fear of the penalty, to be more careful in calculating and stating the limit of expense, so that gentlemen would procure their buildings for that which they had expected, or by adding only a little more.

\textit{Id.} Roughly two generations after Vitruvius wrote his treatise, Jesus of Nazareth used as a metaphor the same common problem:

\textit{For which of you desiring to build a tower, does not first sit down and count the cost, whether he has enough to complete it? Otherwise, when he has laid a foundation and is not able to finish, all who see it will begin to mock him, saying, “This man began to build and was not able to finish.”}


6. \textit{See} \textit{1 Vitruvius, supra} note 5, at 11. Regarding “construction law,” Vitruvius advised the Architect—the “master builder” of those days—as follows:

\textit{[A]s for principles of law, [an Architect] should know those which are necessary in the case of buildings having party walls, with regard to water dripping from the eaves, and also the laws about drains, windows, and water supply. And other things of this sort should be known to architects, so that, before they begin upon buildings, they may be careful not to leave disputed points for the householders to settle after the works are finished, and so that in drawing up contracts the interests of both employer and contractor may be wisely safeguarded. For if a contract is skillfully drawn, each may obtain a release from the other without disadvantage.}\n
\textit{Id.} Roman builders had good reason to exercise care in contracting because the Roman legal doctrine of \textit{pacta sunt servanda} (“contracts must be honored”) imposed strict contractual liability unless non-performance was excused under the doctrine of \textit{rebus sic stantibus} (“provided the circumstances remain unchanged”). These ancient principles undergird the modern law of contract and its legal doctrines of sanctity of contract, force majeure, and impracticability. 5 \textit{Bruner & O’Connor, supra} note 1, § 15:22, at 65. \textit{See also Restatement (Second) of Contracts} ch. 11 intro. (1981) (“Contract liability is strict liability. It is an
I. CONSTRUCTION LAW’S TWENTIETH CENTURY EMERGENCE.

For 1900 years following the advent of Augustus’s Imperial Rome—through Europe’s Dark Ages, Renaissance, and Industrial Revolution—construction law was subsumed by broader and more generalized fields of law and by perceptions of construction as local and parochial, invoking primarily the “law of the shop” rather than the “law of the courts.” Then, in the mid-1800s, a series of revolutionary events transformed American law governing construction. Beginning in 1857, the founding of the American Institute of Architects (AIA), which championed the practice of architecture as a specialized profession distinct from construction contracting, heralded the eclipse of the architect’s historic role as “master builder”—the single person in charge of design and construction. Following the founding of the AIA, engineering associations were formed to promote engineering as a profession, separate from both architectural design and construction contracting. In turn, these associations championed recognition of a number of professional engineering sub-specialties—electrical, mechanical, structural, civil, and geotechnical—to address emerging technical disciplines. Professional specialization accelerated after legislative enactment of state design-professional registration laws, beginning with the state of Illinois in 1897. By the mid-twentieth century, the architectural profession was


perceived as having abandoned its age-old role as “master builder.”

After the Civil War, increased professional specialization and complexity of the construction process compelled the construction industry to address the implications of the doctrine of Sanctity of Contract. This doctrine allocated almost all construction and


[T]he increasing complexity of construction projects . . . challenged the architect’s historic role as the most knowledgeable player at the job site. As Professor Salvadore of Columbia University observed, architects came in the 1970s to know less and less about more and more until the architect is “sometimes said to know nothing about everything” (citation omitted). Even if we stop short of Salvadore’s caricature, it is clear that the architect was no longer venerated for his or her comprehensive grasp of all aspects of building.

During this same period, whenever the economy tightened, opposing forces claimed greater pieces of the architect’s historic domain. Civil engineers claimed the right to design hospitals, office buildings, and court houses. Interior designers claimed the right to design 60,000 square foot office build-outs. Mechanical engineers made arguments that, in the end, suggested that the shapely Hancock Tower in Boston was merely a chase for the mechanical system.

Professionals became increasingly targets of the plaintiff’s bar; in the 60s and 70s architects were conventionally sued if anything went wrong at the project. The fall of the house of privity made the architect a direct target of unhappy subcontractors and contractors. The rising tide of civil litigation elevated the role of the insurance industry. The insurance industry not only affected practice by describing conduct that would result in the loss of coverage, it insisted on a place at the table when the AIA construction industry documents were being drafted. The effect of listening too closely to the cautions of a prudential insurance industry was that the architect further retreated from the dominant role he had once played.

Id. at 5–6.


It is a well-settled rule of law, that if a party by his contract charge himself with an obligation possible to be performed, he must make it good, unless its performance is rendered impossible by the act of God, the law, or the other party. Unforeseen difficulties, however great, will not excuse him.

[The rule] rests upon a solid foundation of reason and justice. It regards the sanctity of contracts. It requires parties to do what they have agreed to do. If unexpected impediments lie in the way and a loss must ensue, it leaves the loss where the contract places it. If the parties have made no provision for a dispensation, the rule of law gives none. It does not allow a contract fairly made to be annulled, and it does not permit to be interpolated what the parties themselves have not stipulated.
completion risks to the contractor, unless the contract expressly stipulated otherwise.\textsuperscript{12} In response to this rigid contractual risk allocation, in 1888 the AIA and the National Association of Builders (predecessor to the modern Associated General Contractors of America) negotiated and co-sponsored the so-called “Uniform Contract”: the first national attempt to create a standard construction contract form.\textsuperscript{13} Building upon that cooperative mutual relationship, the AIA published thirteen editions of its standard construction documents from 1911 to the present with the endorsement of the Associated General Contractors of America.\textsuperscript{14}

By the 1880s, states began to enact mechanic’s lien statutes to protect unpaid subcontractors, laborers, and materialmen who had performed work on private property by granting such persons defeasible equitable interests in the improved real estate up to the value of their respective contributions.\textsuperscript{15} Such statutes, however, were construed to grant no lien rights in public property.\textsuperscript{16} In 1894 however, troubled by the absence of mechanic’s lien protection on public projects and by contractor defaults on federal contracts during the financial panic of 1893, Congress enacted the Heard Act.\textsuperscript{17} The Heard Act required federal contractors, as a condition of contract award, to post surety bonds to protect subcontractors, laborers, and materialmen against the credit risk of nonpayment and to protect the Government against the performance risk of

\textit{Id.} at 7, 8.

\textsuperscript{12} Id.

\textsuperscript{13} William Stanley Parker & Fanevil Adams,\textit{ The AIA Standard Form and the Law} 135-36 (1954):

The [American] Institute [Of Architects] was co-sponsor with the National Association of Builders of the so-called Uniform contract, which was first published in 1888 and for twenty-five years was the accepted standard contract for building construction. Soon after 1900, however, it was felt to be desirable to develop a more extended form of contract, and in 1911 The Institute published the First Edition of the Standard Documents.

\textit{See also} Justin Sweet, The American Institute of Architects: Dominant Actor in the Construction Documents Market, 1991 Wis. L. Rev. 317, 323.

\textsuperscript{14} 2 Bruner & O’Connor, supra note 1, § 5:2.

\textsuperscript{15} \textit{See} 3 Bruner & O’Connor, supra note 1, §§ 8; 124-8; 151 Fifty State Construction Lien & Bond Law (2d ed. 2000).

\textsuperscript{16} \textit{See}, e.g., North Bay Constr. Inc. v. City of Petuluma, 49 Cal. Rptr. 3d 455 (Cal. Ct. App. 2006) (denying foreclosure of mechanic’s lien against public property); Jordan v. Bd. of Educ., 39 Minn. 298, 39 N.W. 801 (1888) (same).

\textsuperscript{17} 28 Stat. 278 (1894).
In 1935, Congress replaced the Heard Act with the more comprehensive Miller Act. All states followed suit by adopting their own “Little Heard” or “Little Miller” Acts. These laws fostered the formation of the modern surety industry.

The early 1900s witnessed the emergence of a primary judicial vehicle for development of construction law principles: the modern theory of “contextual contract,” which elastically allowed the judiciary to add contractual terms, conditions, and warranties implied by the transaction’s surrounding circumstances and complexity, and to interpret express contractual language in conformance with industry usage, custom, and practice.

18. 4 BRUNER & O’CONNOR, supra note 1, §12:5.
22. Oliver Wendell Holmes, Jr., The Path of the Law, 10 HARV. L. REV. 457, 466 (1897):
   You always can imply a condition in a contract. But why do you imply it? It is because of some belief as to the practice of the community or of a class, or because of some opinion as to policy, or, in short, because of some attitude of yours upon a matter not capable of exact quantitative measurement, and therefore not capable of founding exact logical conclusions. Such matters really are battle grounds . . . where the decision can do no more than embody the preference of a given body in a given time and place. We do not realize how large a part of our law is open to reconsideration upon a slight change in the habit of the public mind.

See also Todd D. Rakoff, Social Structure, Legal Structure, and Default Rules: A Comment, 3 S. CAL. INTERDISC. L.J. 19, 20 (1999) (“When we look at the world of contracts as a whole, most of the contextualizing comes from having different norms—whether formulated as rules or as standards—for different types of transactions.”).

23. Karen Eggleston et al., The Design and Interpretation of Contracts: Why Complexity Matters, 95 NW. U. L. REV. 91, 92 (2000) (“We argue that . . . the current tendency of scholars to focus on completeness and neglect complexity has resulted in an inadequate understanding of contracts and contract law.”).
24. See Oliver Wendell Holmes, Jr., The Theory of Legal Interpretation, 12 HARV. L. REV. 417 (1899); see also 1 BRUNER & O’CONNOR, supra note 1, §§ 3:1–:2. Rapid evolution and specialization of language continue to cause misunderstandings today, just as they did 250 years ago, when Samuel Johnson wrote:
   [I]t must be remembered, that while our language is yet living, and variable by the caprice of every one that speaks it, . . . words are hourly shifting their relations, and can no more be ascertained in a dictionary, than a grove, in the agitation of a storm, can be accurately delineated from its picture in the water.

SAMUEL JOHNSON, Preface to A Dictionary of the English Language (1755),
“Contextual contract” principles led courts to recognize numerous implied conditions in construction contracts as a matter of law: the owner’s implied duty of full disclosure, the owner’s implied warranty of the adequacy of detailed design, the contractor’s implied duty of good workmanship, the contractor’s implied duty of inquiry and clarification, the mutual implied duty of cooperation, and the mutual implied duty of good faith. In addition, the judiciary fashioned “contextual contractual” principles of unconscionability, disproportionality, misrepresentation, and promissory estoppel. Moreover, Congress and state legislatures added their own contextual concepts by using the legislative-administrative process to preempt or limit areas of law traditionally addressed by local ordinances or reserved under the common law for private bargainers and the courts.

By the late nineteenth century, most jurisdictions had enacted competitive bidding laws to prevent chicanery and fraud in the award of public construction and other contracts by requiring public contracts to be awarded to those responsible bidders who submitted the lowest responsive bids. Known today as the “design/bid/build” or “sealed bid” project delivery method, competitive bidding remains the most widely used procurement approach.

The nineteenth century’s host of new specialized construction trades—electricians, plumbers, iron workers, steam fitters, and others organized to fabricate or install newly invented technologies—necessitated the use of improved construction scheduling techniques by supervising “general” contractors. This also led to the introduction and widespread use of bar charts in the early 1900s and sophisticated critical path method networks beginning in the 1950s.


25. 3 BRUNER & O’CONNOR, supra note 1, §§ 9:64–105.
27. 6 BRUNER & O’CONNOR, supra note 1, §§ 14:29–41.
33. See 5 BRUNER & O’CONNOR, supra note 1, §§ 15:3–6.
Following the Great San Francisco Earthquake in 1906, municipalities began to take building and fire codes more seriously. If they had no codes previously in place, they enacted new comprehensive codes that were formulated by regional code organizations. In 2003, adoption of the new International Building Code replaced hundreds of these early twentieth century local and regional building codes.

In the 1920s, a young engineer named Carl Terzaghi founded the science of "soil mechanics." In the 1940s, this science led to the development of the Unified Soil Classification System, which created a scientific framework and terminology for precise classification of soils for engineering purposes by geotechnical professionals worldwide.

By the early twentieth century, the increasing complexity of the construction process led the industry to promote specialized industry dispute resolution procedures invoking professional decision-making and arbitration. By 1905, before any state had

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34. See 5 BRUNER & O’CONNOR, supra note 1, § 16:2 n.4 (citing STEPHEN TOBRINER, THE HISTORY OF BUILDING CODES TO THE 1920S (1984)).
36. Hyman Cunin, Soils Part I: Engineering Aspects and Physical Properties, THE CONSTRUCTION SPECIFIER, May 1968, at 80. Interestingly, it was the law that drove Terzaghi to his new calling. Id. After receiving a mechanical engineering degree in Austria in 1904, Terzaghi worked for a design-build firm. Id. He designed a factory with footings sized according to the empirical formulae of the day, and he had the site load tested with a typical two foot by two foot platform loaded to 150 percent of design load. Id. No settlement occurred within twenty-four hours, and Terzaghi allowed the construction to proceed. Id. As soon as the building was completed, it began to settle and crack. Id. at 81. Terzaghi was sued and lost quite a bit of money. As a result:
He began to question the reasons for this failure. He was soon impressed with the high standards of engineering design related to concrete construction, compared with the guesswork and ignorance associated with the bearing values of the soils that support those structures. He decided to devote himself to this most backward, unscientific aspect of civil engineering practice—the study of soils.
Id. Prior to Terzaghi, courts could attribute building collapses to nothing more specific than a “latent defect in the soil” or “soft, slippery, porous and unsafe” soil. See, e.g., Dermott v. Jones, 69 U.S. 1, 17 L. Ed. 762 (1864); Stees v. Leonard, 20 Minn. 494, 20 Gil. 448 (1874). See also 4 BRUNER & O’CONNOR, supra note 1, § 14:2.
37. STANDARD CLASSIFICATION OF SOILS FOR ENGINEERING PURPOSES (UNIFIED SOIL CLASSIFICATION SYSTEM), ASTM STANDARD D2487-98, § 1.5 (2000).
38. Id.
39. See 6 BRUNER & O’CONNOR, supra note 1, § 20:1.
authorized enforcement of arbitration agreements or awards—and at a time when the judiciary was hostile to arbitration under a perception that the forum was intended to divest courts of judicial business—the “Uniform Contract” of the AIA and the National Association of Builders called for resolution of disputes by arbitration. Thereafter, the AIA’s Standard General Conditions of Contract continued to provide for the resolution of disputes by arbitration. By 1925, Congress enacted the Federal Arbitration Act, followed by most states’ adoption of the Uniform Arbitration Act, which was promulgated in 1955. Thereafter, the judiciary openly embraced arbitration as a favored method of alternate dispute resolution.

40. See id.
41. See 6 BRUNER & O’CONNOR, supra note 1, § 20:2 n.8 (citing Kulukundis Shipping Co., S/A v. Amtorg Trading Corp., 126 F.2d 978, 983 (2d Cir. 1942)).
42. See THE AM. INST. OF ARCHITECTS, FORM 19642-PL, THE UNIFORM CONTRACT art. XIII (1905):
   In case the Owner and Contractor fail to agree in relation to matters of payment, allowance or loss referred to in Arts. III or VIII of this contract, or should either of them dissent from the decision of the Architects referred to in Art. VII of this contract, which dissent shall have been filed in writing with the Architects within ten days of the announcement of such decision, then the matter shall be referred to a Board of Arbitration to consist of one person selected by the Owner, and one person selected by the Contractor, these two to select a third. The decision of any two of this Board shall be final and binding on both parties hereto. Each party shall pay one-half of the expense of such reference.
43. Id. § 20:2.
44. Id.
45. Id. § 20:2 n.15.
   I cannot emphasize too strongly to those in business and industry—and especially to lawyers—that every private contract of real consequence to the parties ought to be treated as a “candidate” for binding private arbitration. In the drafting of such contracts, lawyers will serve their clients and the public by resorting to tested clauses the American Arbitration Association has developed to fit particular needs.

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In the twenty-first century, the construction industry remains the largest single segment of the production sector of the American economy and probably of the world economy. The industry also remains one of the most technologically complex. The development of modern engineering principles, sophisticated construction practices, and new building and materials technologies produced a host of specialized design disciplines and construction trades to oversee the design and installation of highly specialized systems, equipment, and materials unknown prior to the twentieth century. Those disciplines, systems, equipment, and materials fostered an exponential increase in the complexity, size, and scope of the built environment: “skyscraper” office towers with deep foundations, large bore tunnels, massive dams and power plants, subways, interstate highways, wastewater treatment plants, airports, and harbors.

II. CONSTRUCTION LAW’S MODERN COMPLEXITY.

Construction today has acquired a legendary reputation for extraordinary factual and legal complexity—a reputation not unjustly earned:

If the courts are to retain public confidence, they cannot let disputes wait two, three and five years or more to be disposed of. The use of private arbitration is one solution, and lawyers should be at the forefront in moving in this direction.


48. For example, electricity, plumbing, heating and ventilating, lighting, telephones, fiber optic cables, elevators and escalators, fire suppression, curtain wall, roofing and insulation, sealants, reinforced concrete, paints and coatings, and high-strength steel and glass. 1 BRUNER & O’CONNOR, supra note 1, § 1:1.

49. Id.

50. The judiciary itself has embellished this legendary reputation. See, e.g., Erlich v. Menezes, 981 P.2d 978, 987 (Cal. 1999) in which the Supreme Court of California observed:

[T]he [owners] may have hoped to build their dream home and live happily ever after, but there is a reason that tagline belongs only in fairy tales. Building a house may turn out to be a stress-free project; it is much more likely to be the stuff of urban legends—the cause of bankruptcy, marital dissolution, hypertension and fleeting fantasies ranging from
Construction is an inherently complex business. Even casual observers of the construction process are struck by the enormous amount of information required to construct a project. Hundreds, even thousands, of detailed drawings are required. Hundreds of thousands of technical specifications, requests for information, and other documents are needed. Complex calculations are used to produce the design. For years, this complexity dictated a labor-intensive, highly redundant methodology for doing the work. Projects were fragmented and broken into many parts. Different entities undertook different parts of a project, both for design and construction. Therefore, the construction industry became exceptionally fragmented. On a project of even average complexity, there may have been from 5 to 15 firms involved in design. From 40 to 100 companies may have been engaged in construction. Many more companies supplied materials, professional services, and other elements necessary for completion of the project. It was effectively impossible to convey the sum of knowledge necessary to construct a facility in a set of plans and specifications. Stated another way, the information technology traditionally used for construction is inadequate.

Construction’s complexity has created recognized public safety risks, which in turn has led to increased governmental regulation of the construction process through legislative imposition of licensing laws, safety regulations, and building codes. Recognized financial credit risks inherent in the multi-party construction process have led to legislative enactment of an assortment of laws to protect

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homicide to suicide. As Justice Yegan noted below, “No reasonable homeowner can embark on a building project with certainty that the project will be completed to perfection. Indeed, errors are so likely to occur that few if any homeowners would be justified in resting their peace of mind on [its] timely or correct completion. . . .” The connection between the service sought and the aggravation and distress resulting from incompetence may be somewhat less tenuous than in a malpractice case, but the emotional suffering still derives from an inherently economic concern.

.Id.

51. See 1 BRUNER & O’CONNOR, supra note 1, § 1:2 (citing John W. Hinchey, Visions for the Next Millennium, in 1 CONSTRUCTION LAW HANDBOOK § 2.01[A] (1999)).

52. See 5 BRUNER & O’CONNOR, supra note 1, §§ 16:1–29.
owners and unpaid construction trades against the risks of contract default. Like other highly complex fields of human endeavor, the construction process has spawned its own unique customs, practices, and technical vocabulary, which in turn led courts and legislatures to develop legal principles consistent with industry realities. Construction law has derived much of its uniqueness from industry experience, customs, and perceived foreseeable risks, which in turn have shaped evolving principles of common law and statutory law applicable to the built environment. Oliver Wendell Holmes, Jr. reminds us that:

The life of the law has not been logic: it has been experience. The felt necessities of the time, the prevalent moral and political theories, intuitions of public policy, avowed or unconscious, even the prejudices which judges share with their fellow-men, have had a good deal more to do than the syllogism in determining the rules by which men should be governed. The law embodies the story of a nation’s development through many centuries, and it cannot be dealt with as if it contained only the axioms and corollaries of a book of mathematics. In order to know what it is, we must know what it has been, and what it tends to become.

Under the weight of a century of contextual experience, construction law indeed is evolving into a “separate breed of animal.” Construction law today is a primordial soup in the


“melting pot” of the law—a thick broth consisting of centuries-old legal theories fortified by statutory law and seasoned by contextual legal innovations reflecting the broad factual “realities” of the modern construction process. Some academicians view “construction law” incorrectly as mere “advanced contract law”—a misunderstanding that arises from viewing “construction law” through the prism of a historically narrow academic discipline rather than through the kaleidoscope of complex legal and factual issues inherent in the construction process itself.56

“Construction law” is a “capstone” subject, a towering legal edifice built out of modern statutes, “contextual” common law principles of and foundational legal concepts sustaining and binding the multitude of parties—architects, engineers, contractors, subcontractors, material suppliers, material manufacturers, sureties, insurers, code officials, and tradesmen—typically engaged in varying degrees on construction projects.57

interchange on an interstate highway. This is what one would expect a priori; this is, generally, what one finds when he reviews the actual development of the law.

Id. at 317–18.

56. 1 Bruner & O’Connor, supra note 1, § 1:4.

57. Those American and foreign jurisdictions that certify “construction law” as a specialized area of legal practice recognize the field to have significant breadth. See Amendment to the Rules Regulating the Florida Bar, 875 So. 2d 448, 540–41 (2004), which establishes standards by which a Florida lawyer may become a “board certified construction lawyer” and which defines “construction law” as follows:

“Construction law” is the practice of law dealing with matters relating to the design and construction of improvements on private and public projects including, but not limited to, construction dispute resolution, contract negotiation, preparation, award and administration, lobbying in governmental hearings, oversight and document review, construction lending and insurance, construction licensing, and the analysis and litigation of problems arising out of the Florida Construction Lien Law, section 255.05, Florida Statutes, and the federal Miller Act, 40 U.S.C. § 2470.

See also The Law Society of Upper Canada, Standards for Certification-Construction Law, which defines the “construction law specialty” as follows:

The practice of construction law encompasses the representation of participants in the construction industry and includes the negotiation and formation of contracts, provision of legal advice on construction matters, representation with regards to tenders or proposals, preparation of documents, representation in proceedings and the resolution of disputes including, alternative dispute resolution and litigation.

The types of legal relationships include (1) multiple express and implied contractual relationships, (2) tort relationships, rights, and obligations where contractual privity does not exist or professional or public duties supersede, (3) suretyship relationships invoking equitable principles governing rights and duties under construction bonds and bonded contracts, (4) insurance relationships invoking principles applicable to products insuring construction and design risks, (5) agency principles applicable to construction industry participants and their representatives, (6) design professional rights and liabilities created by common law and statutory duties, (7) construction lender relationships and liabilities pertaining to project financing, (8) special rights and obligations created by statutes governing mechanic’s liens, public contractor bonds, and award of public contracts by bidding or negotiation, (9) special rights and obligations arising under the Uniform Commercial Code governing relationships for the purchase of construction materials and equipment, (10) special public duties created by building codes, licensing laws, and health and safety laws, (11) technical issues of scope of work, changes, and proof of causation delay and of loss, (12) issues of damage measurement, apportionment, and computation under contextual principles such as the doctrines of “substantial performance,” “betterment,” “economic waste,” and unsegregated approaches to damage measurement that recognize construction’s imperfect world, and (13) issues unique to construction project delivery, dispute resolution, teaming, partnering, and alliancing.

Like other highly complex fields of law, the litigation of construction disputes relies heavily for proof of causation upon opinion testimony of experts—a fact of life that can be frustrating to courts and mesmerizing to juries—and all too frequently.


Being trained in this field, you are in a far better position to adjust your differences than those untrained in these related fields. As an illustration, I, who have no training whatsoever in engineering, have to determine whether or not the emergency generator system proposed to be furnished . . . met the specifications, when experts couldn’t agree. This is a strange bit of logic.

. . . .

The object of litigation is to do substantial justice between the parties litigant, but the parties litigant should realize that, in most situations,
they are by their particular training better able to accomplish this among themselves.

59. The common “lore” in construction litigation is that the more complex cases should not be tried to a jury and should be reserved for trial to the court or to experienced construction arbitrators. Some experienced trial judges believe that juries are more capable than credited by the common “lore.” See The Honorable Frank M. Hull, Judge of the U.S. Court of Appeals for the 11th Circuit, an Honorary Fellow of The American College of Construction Lawyers (and self-described “recovering construction lawyer”), Comments Before the 2004 Joint Meeting of the American College of Construction Lawyers and the Canadian College of Construction Lawyers (Feb 28, 2004), in 39 Construction L. Rep. 3d (Carswell) 4, 13–15 (Feb. 2005):

The general conventional wisdom is that there is no way that an unskilled, untutored, civil jury with no experience in the construction field, could possibly come up with a correct result in a complex construction case. That idea has been around a long time. But my years as a trial judge have changed my view somewhat. I had 10 years on the state court trial bench. I lived in the courtroom, day in and day out, trying cases. Then, I had four years as a trial judge on the federal district court where a lot of my time was in court.

With that experience, I have somewhat changed my view and believe that a jury trial is not as bad a way to resolve a complex construction case as I once thought. Your first preference may be to have an ADR or a bench trial, but a civil jury trial is simply not as bad as you might think. And there are several reasons why I have come to that conclusion.

The first and most obvious one is citizen participation in our judicial process. I saw jurors day in and day out when I was a trial judge, and I believe they benefit immensely by participating in the process, and in turn, the system benefits from their participation. Jurors take their jobs seriously; they take their oaths seriously; and in my view, they actually do a decent job of resolving most disputes with a verdict that speaks the truth of the particular dispute before them.

There are many studies that show that the jury’s result is basically the same result the trial judge would have reached. They’ve done blind studies where the judges are asked to fill out what their decision would be in the same case the jury is hearing, and in 80% of the cases the judge’s decision is the same as the jury’s. In addition, in 10–15% of cases where the judge reached a different decision, the judge agreed that the jury’s verdict was reasonable under the facts and circumstances of the case. For example, the judge may have awarded a little bit less damages or a little more damages, but the jury’s verdict was within the realm of reason.

In my experience, jurors actually do a good job as fact finders. Social studies often show that 12 heads are better than one. And you may say, “How can that be? There is no way. The highly technical evidence in a complex construction case essentially prohibits a jury from understanding the relevant analysis.” But, if you think about it, even when you’ve got boxes full of documents, the case really boils down to 30 or 40 different documents that are the crucial documents. It often boils down—even a six-week trial or three-month trial—to a couple of key witnesses and a few key facts. Once those facts are determined, a great deal of the result of the case will flow from those facts.
results in detailed factual records of proceedings that appear “formidable” to finders of fact and reviewing appellate judges. Some judges, overburdened by their judicial workloads, have little time for complex construction cases; as discussed, they contend that construction cases invoke the “law of the shop” rather than a

And I would suggest to you, because I’ve seen it done, a jury is pretty good at determining many types of facts. For example, a jury is good at determining the fact of whether water was put in the concrete or whether the roof was installed in the correct manner. I mean, they can figure that out. A jury is good at determining who is telling the truth and who is not. It is rare in construction cases that there’s not some crucial fact issue about who is telling the truth and, in my experience, I’ve seen jurors do an excellent job of determining credibility.

Juries are often accused of being biased against the deep pockets of a large business defendant in a case. For example, if you have a small sub-contractor who is suing a large general-contractor, some believe juries are biased against the larger business. But, in my experience, that simply is not true.

Studies show that 80% of today’s jurors believe there are too many claims, that there are too many frivolous lawsuits, and so jurors don’t come in, by and large (particularly in construction and other commercial cases), with a viewpoint of prejudice for or against a particular party because they’re a large business. I find that jurors generally come in with open minds and with really one over-arching goal, and that is, to decide the case with the proper result. Jurors believe there is truth and a correct result in the case, and they seek to find it.

I would further add that many times juries talk among themselves during recesses about how poorly the case is being tried. And I have a favorite quote about a juror who talked about what the jury tried to do in a case: “Judge, we couldn’t really make heads or tails of the case. We really couldn’t follow all the objections of the lawyers. None of us believed a lot of the witnesses so we made up our minds to disregard the evidence and decide the case on its merits.”

60. See Blake Constr. Co. v. C. J. Coakley Co., 431 A.2d 569, 575 (D.C. 1981): [E]xcept in the middle of a battlefield, nowhere must men coordinate the movement of other men and all materials in the midst of such chaos and with such limited certainty of present facts and future occurrences as in a huge construction project such as the building of this 100 million dollar hospital. Even the most painstaking planning frequently turns out to be mere conjecture and accommodation to changes must necessarily be of the rough, quick and ad hoc sort, analogous to ever-changing commands on the battlefield. Further, it is a difficult task for a court to be able to examine testimony and evidence in the quiet of a courtroom several years later concerning such confusion and then extract from them a determination of precisely when the disorder and constant readjustment, which is to be expected by any subcontractor on the job site [or by any other party for that matter], become so extreme, so debilitating and so unreasonable as to constitute a breach of contract between a contractor and a subcontractor. This was the formidable undertaking faced by the trial judge in the instant case . . . .
“law of the court” and are better suited to be settled by experienced arbitrators or by other specialized alternate dispute resolution methods.\footnote{61} Such views over the years have led to wide industry use of alternative dispute resolution procedures such as arbitration.\footnote{62}

\footnote{61. A growing number of trial lawyers who litigate construction disputes, particularly in rural courts, report judicial treatment anecdotally along the following lines:

\begin{quote}
Judge: Smith, is this a multi-party construction case?
Smith: That’s correct, your honor.
Judge: I’m taking you off the trial list. We don’t have the time or resources for cases like this on my jury docket.
Smith: But, your honor . . .
Judge: Go find yourself an arbitrator or a referee if you can’t settle this case yourselves. Next, please . . .
\end{quote}

In more refined and eloquent terms, U.S. Supreme Court Chief Justice Warren E. Burger, in a 1985 speech to the Minnesota State Bar Association, said:

The obligation of the legal profession is, or has long been thought to be, to serve as healers of human conflicts. To fulfill that traditional obligation means that there should be mechanisms that can produce an acceptable result in the shortest possible time, with the least possible expense and with a minimum of stress on the participants. That is what justice is all about.

My overview of the work of the courts from a dozen years on the Court of Appeals and now 16 in my present position, added to 20 years of private practice, has given me some new perspectives on the problems of arbitration.

One thing an appellate judge learns very quickly is that a large part of all the litigation in the courts is an exercise in futility and frustration. A large proportion of civil disputes in the courts could be disposed of more satisfactorily in some other way.

\begin{quote}
My own experience persuades me that in terms of cost, time, and human wear and tear, arbitration is vastly better than conventional litigation for many kinds of cases.
\end{quote}

In mentioning these factors, I intend no disparagement of the skills and broad experience of judges. I emphasize this because to find precisely the judge whose talents and experience fit a particular case of great complexity is a fortuitous circumstance. This can be made more likely if two intelligent litigants agree to pick their own private triers of the issues. This is not at all to bypass the lawyers; they are key factors in this process.

The acceptance of this concept has been far too slow in the United States.

Remarks of Warren E. Burger, \textit{supra} note 46, at 3, 4, 6.}

\footnote{62. As early as 1905, the construction industry’s Uniform Contract required arbitration of disputes. \textit{See} \textit{THE UNIFORM CONTRACT}, \textit{supra} note 42. By 1915, the second edition of the General Conditions of Contract promulgated by the American Institute of Architects included a broad mandatory arbitration clause. \textit{6 BRUNER & O’CONNOR, \textit{supra} note 1, § 20:1.}}
dispute review boards, mediation, and stepped claims settlement practices.

III. CONSTRUCTION LAW SCHOLARSHIP.

Although construction is the largest segment of the production sector of the United States’ gross domestic product, and quite likely of the world’s gross domestic product, American legal and economic scholars pay little attention to the industry.


64. Stipanowich, supra note 47, at 465.


Legal and economic scholars have devoted little attention to an industry—construction—that seems to offer valuable lessons about the organization of economic activity. Major construction projects are generally initiated, and proceed, without governmental central planning, without organized, formal markets for the exchange of services, and without hierarchical top-down control within a single firm. Many of the characteristics that have long been associated with the construction industry are now increasingly observed in outsourcing by traditional firms and, by the extension of that process, in the virtual firm. Construction projects reflect a system of economic organization involving a high degree of contracting, both formal and informal, rather than formal integration. This contracting may take place under conditions of high uncertainty; conditions may be constantly changing and ex ante specification of rights and obligations is often difficult at best. Construction projects also provide insights into the role of teams of individuals from different firms; into the networks of relationships that produce such teams; into a “culture of collaboration” that seems vital to successful teamwork; into trust, reputation, and other informal, nonlegal mechanisms that affect collaboration; and, in a minor way in this study, into the role of written contracts.


[I]n the literature on the shift from industrial to post-industrial society, one of America’s largest industries—construction—is scarcely mentioned. Given that the “new economy,” based on intangibles, will rule the old economy, based on the manufacture of the tangible, how will the construction industry, by nature focused on the tangible, adapt to this change? Although the construction industry is considered part of the manufacturing sector of the economy, the industry differs in most respects from high-volume mass production of goods. In stark contrast to a controlled manufacturing facility, each “unit” produced by a construction contractor is “assembled” at a different geographic location,
The articulated reasons for such academic oversight, although anecdotal, suggest that legal academicians have been unwilling to acquire practical understanding of the complexities of the construction process and hence have been unable to develop significant capability to contribute to the development of law undergirding the construction industry.\textsuperscript{66} Those few academicians who have mastered construction law suggest that their academic colleagues have more interest in “public law,”\textsuperscript{67} a subject less to a different design conceived by a different designer, by skilled workers from dozens of specialized trades and sub-contractors, and is made to order for its purchaser. Construction contractors can rarely achieve any economies of scale by building more units, even by building the same design repeatedly, because the changing location of each project involves changing site conditions (geology, foundation soils, groundwater, and weather conditions), changing municipal ordinances and regulations, a changing work force and mix of sub-contractors, and other difficulties. There is limited opportunity to apply automation to most construction processes, and limits are placed on productivity improvements due to the complex interplay of sub-contractors and conflicts in the scheduling of their component parts of the work. For these and other reasons, construction has never been directly comparable to other forms of manufacturing.

\textsuperscript{66} See Stipanowich, supra note 47, at 496–97: This scholarly and pedagogical obliviousness [of academia], while not confined to construction contracts, cannot be explained on the basis that such transactions are unimportant—the construction industry has for some time been the largest single production activity in the United States—or less academically rich than other commercial fields. Unless the explanation is a perverse form of intellectual snobbery, it must be a pervading ignorance of the practical significance of an academic challenge presented by the field of construction law—or a reflection of the inherent complexity (real and perceived) of principle and practice in this arena. Although today’s attorneys and industry actors have much greater access to treatments of pertinent legal subjects than their predecessors, much more can be done to enhance the level of scholarly treatment and interdisciplinary discussion of legal rules.

\textsuperscript{67} Professor Emeritus Justin Sweet of the Boalt Hall School of Law at the University of California, Berkeley, was one of the few twentieth century legal academicians to devote a career to construction law. He offers the following reason for academia’s lack of empirical scholarship in the construction law field: One is the lack of full-time law teachers with interest in Construction Law. The best and often only empirical work comes out of the law schools. Law teachers can involve statisticians and sociologists in their studies. Money can be found, though I admit not easily. Yet you can count on one hand the number of full-time teachers of Construction Law, maybe not even that many. Law teachers come out of certain schools, clerk for important judges and are interested mainly in Public Law. This pool does not produce many teachers who want to spend their time in Construction Law.

dependent on custom and practice and less factually intensive. Although there have been occasional cries within academia over the years for more scholarly study of construction law issues, American academicians continue to contribute little to the teaching and development of construction law. This state of affairs soon may be blown away by the winds of change.

IV. CONSTRUCTION LAWYERS AND THE “TORCH OF LEARNING.”

In the absence of significant construction law scholarship by the academic community, practicing lawyers hold high the “torch of learning” in this field. The major treatises and most scholarly work on construction law are written by practicing lawyers. The handful of law schools that offer construction law courses do so almost entirely through practitioners serving as adjunct faculty.

Prior to construction law becoming recognized as a distinct area of legal practice in the 1970s, lawyers who practiced “construction law” were self-taught under the necessity of providing


68. Professor Edwin W. Patterson of Columbia Law School, in his article, Builder’s Measure of Recovery of Breach of Contract, 31 Colum. L. Rev. 1286, 1287 (1931) observed, “The economic importance of the building industry, the frequency of litigation involving this type of contract, and the inadequacy of judicial analyses of the complex problems of [construction] damages, seem sufficient justifications for the study here presented.”

69. In contrast, foreign law schools have perceived the importance of construction law as a scholarly endeavor, and some offer masters degrees in construction law. For example, the University of Strathclyde in Glasgow offers an L.L.M. Degree in Construction Law. See University of Strathclyde, Overview of L.L.M. Degree in Construction Law, http://www.ggs1.strath.ac.uk/courses/construction.html (last visited Aug. 29, 2007).

70. In her “state of the school” address on September 17, 2003, Harvard Law School Dean Elena Kagan admonished, “[T]he world is changing, and in response to those changes, the law is changing and becoming ever more specialized and complex. We need to expand the faculty because the world of law is expanding and we need to cover everything important that is happening in it.” Harv. L. Today, Jan. 2004, at 4.

71. See generally Bruner & O’Connor, supra note 1; Steven G. M. Stein, Construction Law (Matthew Bender ed., 1986).


73. Construction law courses offered by Columbia Law School, University of Minnesota Law School, University of Nebraska Law School, University of Texas Law School, and William Mitchell College of Law, among others, all are taught by practitioners serving as adjunct faculty. See, e.g., William Mitchell College of Law, http://www.wmitchell.edu (last visited Nov. 29, 2007).
adequate legal representation to construction industry clients.\textsuperscript{74} The American Bar Association, organized in 1878, did not recognize construction law as a significant area of legal practice until 1976, when it formed the Forum on the Construction Industry.\textsuperscript{75} The Forum’s membership now exceeds 6500 lawyers.\textsuperscript{76} Many state bar associations also have formed construction law sections or committees.\textsuperscript{77} The total membership of the American construction law bar as of 2007 appears to exceed 30,000 lawyers.\textsuperscript{78}

Against this background, in 1989, fifty-six senior American construction lawyers from across the United States formed the American College of Construction Lawyers (ACCL) to recognize those lawyers, judges, and scholars who “demonstrated skill, experience, and high standards of professional and ethical conduct in the practice or in the teaching of construction law, and who are dedicated to excellence in the specialized practice of construction law.”\textsuperscript{79} In the sixteen years since its founding, the ACCL has grown

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\textsuperscript{74} Back then, practitioners joked that the practice of construction law was so broad that it included “everything except the practice of medicine.”

\textsuperscript{75} See Ralph Kaskell Jr., The Genesis of the ABA Forum Committee on the Construction Industry, CONSTRUCTION LAW., Jan. 1988, at 15. Through its publication, The Construction Lawyer, and through its quarterly meetings, the ABA Forum contributes significantly to professional understanding of construction law as a distinct area of practice. With that professional education focus, the Forum has been a worthy educator of construction lawyers, particularly young lawyers seeking to enter the construction law field.


\textsuperscript{77} Construction law sections or committees have been formally organized by state bar associations in more than half of the states (Arizona, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Minnesota, Missouri, Montana, Nebraska, New Jersey, New York, North Carolina, Ohio, Oregon, South Carolina, Texas, Utah, Virginia, Washington and Wisconsin), by various county and local bar associations (e.g., Atlanta, Austin, Boston, Dallas, Houston, Kansas City, San Diego, San Francisco, Maricopa County, Allegheny County), and by international and foreign bar associations (e.g., Canadian Bar Association, Society of Construction Law of the United Kingdom, Society of Construction Law United Arab Emirates, Society of Construction Law Singapore, Society of Construction Law New Zealand, Society of Construction Law Hong Kong, International Bar Association, Inter-Pacific Bar Association, and European Society of Construction Law). See, e.g., Society of Construction Law Hong Kong, http://www.scl.hk (last visited Sept. 15, 2007).

\textsuperscript{78} Thousands upon thousands of American lawyers hold themselves out as practicing “construction law,” as evidenced by a search for “construction lawyers” on FindLaw or Martindale, or for “construction law” or “construction lawyers” on search engines such as Google, Yahoo, or MSN.

\textsuperscript{79} The ACCL’s web site, http://www.ACCL.org, states the “history and
to 150 Fellows and includes Fellows who are construction law practitioners in America, Canada, the United Kingdom, and France. The ACCL also includes Honorary Fellows who are respected American, Canadian, and British jurists with backgrounds in construction law. In addition, American and international lists of top lawyers now recognize highly regarded construction lawyers.

To disperse intellectual light from construction law’s “torch of learning,” senior construction lawyers endeavor through teaching, lecturing, and writing to “give back” to the global construction industry and to the legal profession gifts of learning for the privilege of practicing in this great field of law. May this “gift” continue to be a foundational building block upon which others may build. For as Vitruvius reminds us:

It was a wise and useful provision of the ancients to transmit their thoughts to posterity by recording them... so that they should not be lost, but, being developed in succeeding generations through publication in books, should gradually attain in later times, to the highest purpose” of the ACCL as follows:

The American College of Construction Lawyers is one of the premier legal associations in America. Founded in 1990, the College is comprised of the top 1 percent of the construction bar in the United States and also includes lawyers and judges from Canada, Britain, and France. Fellowship is extended by invitation to those lawyers and judges who, after careful investigation, are found to have mastered the practice or the teaching of construction law and dispute resolution in the highly complex technical and legal fields pertaining to the built environment, and whose professional careers have been marked by the highest standards of ethical conduct, professionalism, civility, and collegiality. The College provides a professional forum for its Fellows to explore and analyze complex legal and industry issues arising nationally and internationally.

refinement of learning. And so the ancients deserve no ordinary, but unending thanks, because they did not pass on in envious silence, but took care that their ideas of every kind should be transmitted to the future in their writings.\textsuperscript{82}

\textsuperscript{82} 10 Vitruvius, supra note 5, at 195.