Construction Law: The Historical Perspective

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1.01 INTRODUCTION

A. Construction in the Ancient World

For more than 4,500 years, from primitive Mesopotamian fire-brick and early Egyptian cut-stone construction to the extraordinary structures of the modern-built environment, construction has been a hallmark of the advancement of human civilization.1 Ever since mankind first promulgated rudimentary principles of law to regulate human rights and obligations arising out of societal

Portions of this chapter are adapted from articles by the author published in The Journal of the American College of Construction Lawyers and William Mitchell Law Review.

1. See Plutarch, Pericles (75 AD):

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.

See also 1 Philip L. Bruner & Patrick J. O’Connor, Bruner & O’Connor on Construction Law § 1:1 (West Group 2002) [hereinafter Bruner & O’Connor].
interaction, there have existed principles of law governing the built environment and the construction process. The earliest known principles of construction law were primitive and punitive. 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 someone, and does not construct it properly, and the house which he built fall in and kill its owner, then the 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 is ruined, and in as much as he did not construct properly this house which he build and it fell, he shall re-erect the house from his own means.

233 If a builder build a house for someone, 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.²

As classical antiquity gradually civilized the built environment, so too did it refine the governing law. By the reign of Rome’s Caesar Augustus (27 BC to 14 AD),³ construction risks inherent in building upon unsuitable soils⁴ and building without managerial competence and cost control⁵ were widely recognized.

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³. When he became Rome’s first emperor in 27 BC, Gaius Julius Caesar Octavius (63 BC to 14 AD), great nephew of Julius Caesar, was given the name Augustus by the Roman Senate.
⁴. 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! (Emphasis added.) Matthew 7:24–27 (New Revised Standard Edition).
⁵. See Marcus Vitruvius Pollio, De Architectura, Book X, Introduction (ca. 20 BC) (Morris Hickey Morgan trans., 1914). Known to history as “Vitruvius,” he was chief engineer to Caesars Julius and Augustus and thus in his time could be called the “chief engineer of the civilized world.” Vitruvius wrote a 10-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
Good construction practice under Roman law favored careful contractual articulation of the scope of work and allocation of construction risks.6

B. Construction’s 19th-Century Transformational Events

For 1,900 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

City of Ephesus (the same place to which Saint Paul almost a hundred years later wrote his Letter to the Ephesians):

In the famous and important Greek City of Ephesus, there is said to be 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 honor. If no more than a fourth has been added to his estimate, it is furnished by the treasury, and no penalty is inflicted. But when more than one-fourth has been spent in addition on the work, the money required to furnish it is taken from his property.

Roughly two generations after Vitruvius wrote his treatise, Jesus of Nazareth used the same common problem as a metaphor:

For which of you, intending to build a tower, does not first sit down and estimate the cost, to see whether he has enough to complete it? Otherwise, when he had laid a foundation and is not able to finish, all who see it will begin to ridicule him, saying, “this fellow began to build and was not able to finish.” Luke 14:28–30 (New Revised Standard Edition).

6. See Vitruvius, supra note 5, Book 1, chapter 1. Regarding “construction law,” Vitruvius advised the architect—the “master builder” of those days—as follows:

[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 items for the householders to settle after the works are finished, and so that in drawing up contracts, the interests of both the employer and the contractor may be wisely safeguarded. For if a contract is skillfully drawn, each may obtain a release from the other without a disadvantage.

Roman builders had good reason to exercise care in contracting because the Roman legal doctrine of pacta sunt servanda (“contracts must be honored”) imposed strict contractual liability unless nonperformance was excused under the doctrine of rebus sic stantibus (“provided the circumstances remain unchanged”). See also Restatement (Second) Contracts, Introductory Note to Chapter 11 (“Contract liability is strict liability. It is an accepted maxim that pacta sunt servanda, contracts are to be kept.”). These ancient principles undergird the modern law of contract and its legal doctrines of sanctity of contract, force majeure, and impracticability. See 5 Bruner & O’Connor, supra note 1, §15:22.
of construction as local and parochial and as invoking primarily the “law of the shop,” rather than the “law of the courts.” Then, beginning in the mid-1800s, American law governing construction was transformed by a series of revolutionary events:

- In 1879, the founding of the American Institute of Architects, 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. Engineering associations thereafter were formed to promote engineering as a profession, separate from both architectural design and construction contracting, and in turn spawned a number of professional engineering subspecialties—electrical, mechanical, structural, civil, and geotechnical—to address emerging technical disciplines. Professional specialization accelerated after legislative enactment of state design professional registration laws in the United States, beginning with the State of Illinois in 1897. By the mid-20th century, the architectural profession was perceived as having abandoned its age-old role as “master builder.”


[T]he increasing complexity of construction projects . . . challenged the architect’s historic role as the most knowledgeable player at the job site. As Professor Salvador 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.” Even if we stop short of Salvador’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 builds-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.
By 1888, in response to the rigid express contractual risk allocation imposed by the legal Doctrine of Sanctity of Contract, which allocated almost all construction and completion risks to the contractor, unless the contract expressly stipulated otherwise, the American Institute of Architects and the National Association of Builders (predecessor to the modern Associated General Contractors of America) negotiated and cosponsored the so-called Uniform Contract—the first national attempt to create a standard construction contract form. Building upon that cooperative mutual relationship, the American Institute of Architects, from 1911 to the present, has published 13 editions of its standard construction documents with the endorsement of the Associated General Contractors of America.10

By the mid-1800s, states had begun 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. Such statutes, however, were construed to grant no lien rights in public property.11

In 1894, troubled by contractor defaults on federal contracts during the financial panic of 1893 and by the absence of mechanic’s lien protection on public projects, Congress enacted the Heard Act to require federal

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 in the AIA Construction Industry documents 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. . . .

9. See Dermott v. Jones, 69 U.S. 1, 2, 7; 17 L. Ed. 762 (1864):

It is a well settled rule of law that if a party by his contract charges himself with an obligation possible to be performed, he must make it good, unless its performance is rendered impossible by 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.


11. See, e.g., Jordan v. Bd. of Educ. of Taylor’s Falls, 39 Minn. 298, 39 N.W. 801 (1888) (mechanic’s lien could not be foreclosed against public property).
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 default. 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 acts fostered the formation of the modern surety industry.\(^\text{12}\)

The early 1900s witnessed the emergence of a primary judicial vehicle for development of construction law principles—the modern theory of “contextual contract,”\(^\text{13}\) which elastically allowed the judiciary to add contractual terms, conditions, and warranties implied by the transaction’s surrounding circumstances\(^\text{14}\) and complexity,\(^\text{15}\) and to interpret express contractual language in conformance with industry usage, custom, and practice.\(^\text{16}\)

Contextual contract principles led courts to recog-

\(^{12}\) See 4 BRUNER & O’CONNOR, supra note 1, §§ 2:8–2:9; Willis D. Morgan, The History and Economics of Suretyship, 12 Cornell L. Q. 153 (1926) and 13 Cornell L. Q. 487 (1927).


\(^{14}\) See 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.”).

\(^{15}\) See Karen Eggleston, Eric A. Posner, & Richard Zeckhauser, 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.”).

\(^{16}\) See Oliver Wendell Holmes, Jr., The Theory of Legal Interpretation, 12 Harv. L. Rev. 417 (1899); 1 BRUNER & O’CONNOR, supra note 1, § 3:1, et seq. Rapid evolution and specialization of language continue to cause misunderstandings. Two hundred fifty years ago, Samuel Johnson, in the preface of his Dictionary of the English Language (1755), the first of the great English dictionaries, wrote:

It must be remembered, that while our language is yet living, invariably by the caprice of everyone 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.
nize 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 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 unconscionableness, disproportionality, and misrepresentation; and restitutionary principles of promissory estoppel. Moreover, Congress and state legislatures added their own contextual concepts by using the legislative-administrative process to preempt areas of law traditionally reserved for private bargainers and the courts.

By the late 19th century, competitive bidding laws had been enacted in most jurisdictions 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 19th 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 utilization by supervising “general” contractors of improved construction scheduling techniques, and led to the introduction and widespread use of bar charts in the early 1900s and of sophisticated critical path method networks beginning in the 1950s.

Following the Great San Francisco Earthquake in 1906, municipalities began to take more seriously and to enact comprehensive building and fire codes formulated by regional code organizations. Hundreds of local and regional building codes developed in the 20th century have been replaced by adoption of the new International Building Code introduced in 2003.

In the 1920s, the science of “soil mechanics” was founded by a young engineer, Carl Terzaghi. This science, in the 1940s, led to the development

21. Interestingly, it was the law that drove Terzaghi to his new calling. After receiving a mechanical engineering degree in Austria in 1904, Terzaghi worked for a design-build firm.
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 20th 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 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 American Institute of Architects and the National Association of Builders called for resolution of disputes by arbitration. Thereafter, the American Institute of Architects’ Standard General Conditions of Contract continued to provide for the resolution of disputes by arbitration. By 1925, Congress had enacted the Federal Arbitration Act, followed after 1955 by most states’ adoption of the Uniform Arbitration Act. Thereafter, the

He designed a factory building with footings sized in accordance with the empirical formulae of the day, and had the site load tested with a typical two-foot-by-two-foot platform loaded to 150 percent of design load. No settlement occurred within 24 hours, and Terzaghi allowed the construction to proceed. As soon as the building was completed, it began to settle and crack. Terzaghi was sued and lost quite a bit of money, and 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 soils that support those structures. He decided to devote himself to this most backward, unscientific aspect of civil engineering practice—the study of soils.


23. See the Uniform Contract art. XII (1905 ed.):

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 shall be final and binding on both parties hereto. Each party shall pay one-half of the expense of such reference.
judiciary openly embraced arbitration as a favored method of alternate dispute resolution.24

In the 21st century, the construction industry remains the largest single segment of the production sector of the American economy25 and probably of the world economy. The industry also remains one of the most technologically complex. The development of modern engineering principles, of sophisticated construction practices, and of new building and materials technologies produced a host of specialized design disciplines and construction trades to oversee the design and installation of highly specialized modern systems, equipment, and materials unknown prior to the 20th century—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. 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 and interstate highways, wastewater treatment plants, airports, and harbors.


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.

We must now use the inventiveness, the ingenuity and the resourcefulness of American businessmen and lawyers—the “Yankee Trader” innovativeness—to shape new tools to meet new needs. In the area of arbitration, the tools and the techniques are ready and waiting for imaginative lawyers to make use of them.

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.

Construction today has acquired a legendary reputation for extraordinary factual and legal complexity,\textsuperscript{26} which is not unjustly earned:

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.\textsuperscript{27}

Construction’s complexity has created recognized public safety risks, which in turn have led to increased governmental regulation of the construction process through legislative imposition of licensing laws, safety regulations, and building codes.\textsuperscript{28} The recognized financial credit risks inherent in the multi-party construction process have led to legislative enactment of an assortment


of laws to protect owners and unpaid construction trades against the risks of contract default.

1.02 CONSTRUCTION DISPUTE RESOLUTION

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 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.29

Under the weight of a century of contextual experience, construction law indeed is evolving into a “separate breed of animal.”30 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. Construction law has been viewed by some academicians

29. See Oliver Wendell Holmes, Jr., The Common Law 1 (1881).
30. Paul Hardeman, Inc. v. Arkansas Power & Light Co., 380 F. Supp. 298, 317 (E.D. Ark. 1974) (“[C]onstruction contracts are a separate breed of animal; and, even if not completely sui generis, still [the] law must be stated in principles reflecting underlying and industry realities. Therefore, it is not safe to broadly generalize. True, general principles of contract law are applied to construction contracts, but they are applied under different operative conditions. Care must be taken, then, not to rely too uncritically on such cases as those arising from the sale of real or personal property. And even within the larger rubric of ‘construction contracts,’ it is manifest that the law, if sensitive to the underlying realities, will carefully discriminate between, say, a contract to construct a home and a contract to construct a 50-story office building; between a contract to build a private driveway and a contract to construct an 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.”).
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. Construction law is a “capstone” subject that includes the nuances of the “contextual” contract and the towering legal edifice constructed to govern legal relationships among the multitude of parties—design professionals, contractors, subcontractors, material suppliers, sureties, insurers, or tradesmen—typically engaged in varying degrees in construction projects.31 These legal relationships include: (1) multiple express and implied contractual relationships; (2) tort relationships, rights, and obligations where contractual privity does not exist; (3) suretyship relationships invoking equitable principles governing construction bonds; (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) statutory rights and obligations created by statutes governing mechanic’s liens, public contractor bonds, and public contract bidding; (9) statutory rights and obligations arising under the Uniform Commercial Code governing relationships for the purchase of construction materials and equipment; (10) public duties created by building codes, licensing laws, and health and safety laws; (11) problems of proof of causation of loss; (12) damage measurement and computation principles that recognize construction’s imperfect world under doctrines such as “substantial performance” and “economic waste;” and (13) issues unique to construction dispute resolution, 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—

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31. The American and foreign jurisdictions that certify construction law as a specialized area of legal practice recognize the field to have significant breadth. See Amendments to the Rules Regulating the Florida Bar, 875 So.2d 448 (2004), which establish standards by which a Florida lawyer may become a “board certified construction lawyer” and which define “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 and governmental hearings, oversight and document review, construction lending and insurance, construction licensing, and analysis and litigation of problems arising out of the Florida Construction Lien Law, § 255.05, Florida Statutes, and the federal Miller Act, 40 U.S.C. § 2470.
a fact of life that can be frustrating to courts and mesmerizing to juries—and all too frequently 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, and contend that construction cases invoke the “law of the shop” rather than a “law of the court” and should be settled by arbitrators or by other alternate dispute resolution devices. Such views over the years


   "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 . . . ."

33. 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.


   "Except 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 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], became so extreme, so debilitating and so unreasonable as to constitute a breach of contract between the contractor and a subcontractor. This was the formidable undertaking faced by the trial judge in the instant case . . . ."

35. For example, former U.S. Supreme Court Chief Justice Warren E. Burger expressed this view (believed to be shared by many in the judiciary) as follows:

   "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.

   . . ."
have led to wide industry use of alternative dispute resolution procedures such as arbitration,\textsuperscript{36} and innovative dispute review board, mediation, and stepped claims settlement practices.\textsuperscript{37}

\section*{1.03 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 have paid little attention to the industry.\textsuperscript{38} The articulated reasons for such academic oversight, although anecdotal, suggest that legal academicians have been unwilling to

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\item 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.
\item 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.
\item 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.
\item 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.
\item The acceptance of this concept has been far too slow in the United States.
\end{itemize}

Burger, supra note 24.

\textsuperscript{36} Arbitration was mandated by The Uniform Contract as early as 1905 and by subsequent editions of the Conditions of Contract promulgated by the American Institute of Architects. For background, see 6 Bruner & O’Connor, supra note 1, §§ 20:1–20:3.


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. Those few academicians who have mastered construction law suggest that their academic colleagues have more interest in “public law,” a subject less 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.

The American Bar Association Forum on the Construction Industry and the American College of Construction Lawyers are seeking, through the writing and publication of this textbook, to introduce a generation of fledgling lawyers to the practice of construction law. While it necessarily will be taught primarily by adjunct faculty, it is this author’s hope that the book will inspire an interest in the study of construction law, and that some of the students will in turn be inspired to teach others.

39. See Stipanowich, supra note 25, at 496.

40. Professor Emeritus Justin Sweet of the Boalt Hall School of Law at the University of California, Berkeley, was one of the few 20th-century legal academicians to devote a career to construction law. In his article, Construction Law: The Need for Empirical Research, 23 Constr. LITr. Rptr. 3 (Jan. 2002), 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.

41. Professor Edward Patterson of Columbia, in his article, Builder’s Measure of Recovery of Breach of Contract, 31 Col. L. Rev. 1286 (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 warrants academia’s attention.

42. In contrast, European law schools have perceived the importance of construction law as a scholarly endeavor. For example, the University of Strathclyde offers an LLM Degree in Construction Law.