ADVANCED BUSINESS CONTRACTS
CONTINUING LEGAL EDUCATION SEMINAR
PRESENTED BY
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1. INTRODUCTION

The drafting of business contracts has always been both an art and a science. The interests of all parties to a business agreement are best served by a written memorialization that is clear, concise, and unambiguous. The draftsman's work product can serve to reveal unresolved issues that warrant further negotiation before the final version of a legal instrument is prepared for execution. That makes the iterative drafting process a crucial component of negotiations. Well drafted business contracts can be key foundational elements of a business enterprise. Business contracts are intended to memorialize a meeting of minds that yielded a common understanding between all parties to an agreement. A well drafted business contract can help keep those minds in alignment as time passes. The drafters skill, when applied well, can facilitate mutually beneficial business relationships that endure.

2. THE ART OF CONTRACT DRAFTING

The art of contract drafting has many aspects. First and foremost is the wordsmith's art. Long ago the skills of lawyers drafting business contracts were judged by the use of arcane and often lengthy and legalistic phraseology. Before typewriters became common, lawyers were also judged by their skills as penmen. Drafting a business contract "by hand" meant exactly that. Lawyers practiced and were judged by their penmanship. The development and proper use of those skills were part of lawyer professionalism. Our tools have changed tremendously since those times, yet all the professional skills of years long past have contemporary correlatives.

The need for lawyers to cultivate the wordsmith's art has remained the same since lawyers began drafting written contracts, but the phraseology of professionally drafted legal instruments has changed greatly. In contemporary practice, the use of "plain language" may be mandated by statute,[1] and is always encouraged and respected. Todays contract drafters should value economy and clarity of language tuned to the expectations and likely comprehension of the contracting parties. These factors must be considered in the context of legal principles regarding contract construction, while always trying to predict how a judge might interpret contract language in the event of litigation.

The penman's art is now rarely practiced, and has been replaced by the typesetter's and typographer's art. Today, the skills of lawyers drafting business contracts are judged in part by the skillful use of now readily available computer systems that rival the capabilities of professional phototypesetters and digital printing presses of relatively recent years. The duty to master use of these computer systems as tools of the practice of law is now explicit. The American Bar Association

Model Rules of Professional Conduct now includes with [Rule 1.1, Competence,](#) a comment under the heading "[Maintaining Competence](#)" which states:

> [8] To maintain the requisite knowledge and skill, a lawyer should keep abreast of changes in the law and its practice, including the benefits and risks associated with relevant technology, engage in continuing study and education and comply with all continuing legal education requirements to which the lawyer is subject.

This comment to the Rule uses broad language that describes a sweeping and continuing professional duty. The inclusion of the duty to "keep abreast of…benefits and risks associated with relevant technology" is directly implicated in business contracting in multiple ways and at multiple levels. This duty is stated as being personal to each lawyer, and therefore, is not delegable.

It is easily observed that readers of business contracts, especially lay readers, tacitly acquire a strong initial impression of the terms of a contract from its general appearance. That initial impression can make the reader comfortable or wary, which can greatly influence the interpretation of the language of the contract. Care should be given to the drafter's choices of layout and typefaces, including the sizes, styles, and spacings because of this effect upon interpretation. Making these typographic design choices is surely an art with multiple legitimate styles, yet there is also some science in the design of a contract document.

Different cultural and stylistic norms should be considered when selecting the design of a contract document. For example, in certain circumstances, such as when drafting a counterproposal, it may be appropriate to disregard preferred typographic and stylistic concerns to produce a document that appears familiar to the other contracting parties. A familiar design can make the modified terms of a counterproposal seem more acceptable. In other circumstances, there can be advantages to producing a counterproposal with a radically improved design. An aesthetically pleasing design can have tactical significance during negotiations. The natural tendency to avoid disrupting pleasing aesthetics often causes lawyers representing other contracting parties to hesitate editing proposed contract language. That can encourage more efficient negotiations and lead to final contract language that is more consistently phrased and less ambiguous.

More generally, Americans usually expect to read long text set in serif typefaces, while Europeans can be more comfortable reading long text set in sans-serif typefaces. Serifs are intended to help guide readers' eyes along a line of text, therefore, longer lines are usually best set in serif typefaces. A business contract that is difficult to read may cause reader fatigue, which can have a negative impact upon the interpretation of contract terms, which then can make negotiations more difficult. These effects upon readers are typically subliminal, yet can be quite influential.

It can be tempting to think that the influence of typographic design is too unpredictable to warrant substantial attention by business contract drafters. Although it may be true that "beauty is in the eye of the beholder," universal principles of human aesthetics are generally thought to exist.[2]

Typography lies at the intersection of the art and science of contract drafting. Lawyers should know the technical and grammatical rules that govern the setting of type. The "[desktop publishing revolution](#)" occurred many years ago, so business contract drafters should assume that many readers will recognize common typographic errors such as the improper use of punctuation. The recognition of such errors can degrade readers' confidence in the contract drafter and, indirectly, in the drafter's client. A good source of information about this topic is [Typography for Lawyers](#), a website and book published to help lawyers improve their typographic skills.[3]

3. The Science of Contract Drafting

Contract drafting is appropriately categorized as a form of technical writing because contracts must comply with the laws applicable to the contract subject matter. This writing does not address such substantive legal issues, and instead addresses the technical *process* of contract drafting. Some of that process is more like a science than an art.

The majority of business contracts today exist principally or exclusively in electronic form. The proportion of electronic contracts will inevitably increase while printed contracts seem progressively more anachronistic. This is an apparent consequence of the rapid advancement of computer technology including the digital communications infrastructure that links computerized devices together. Parties have traditionally used pen and ink to execute most printed business contracts which were filed with other paper business records. Electronic analogs that enable the digital equivalent of this paper based method of contracting have existed for years. However, lawyers have seldom encouraged electronic methods of contracting by their clients.

4. Electronic Contracting

Business contracts can be fully electronic only when there is a way to uniformly format, securely exchange, effectively execute, and reliably store, the digital files that memorialize those contracts. Technologies and laws have long existed that can make electronic contracting feasible and legally binding.

A. Electronic Files

Business contracts can remain in force and effect for many years, and may remain legally relevant many years after contract termination. That makes the choice of the digital file format and storage medium very important. The convenience and reliability of future access to electronic files is the most salient factor. Digital storage media have improved greatly in recent years, while costs have dropped precipitously. This has made long term storage and backup of digital files readily available and affordable.

(1) Electronic File Storage and Transmittal

The storage and transmittal of electronic business contracts implicates the lawyers' duty of confidentiality. The security of data at rest and in transit should be considered when selecting the storage and transmittal methods used. It is foreseeable that loss of important information by a lawyer could adversely affect a client's legal interests. The broad range of the topic of electronic file storage and transmittal is beyond the scope of this writing, yet it is appropriate to note the main points of concern, which are the *physical* security of computer workstations and servers within computer systems, and the *electronic* security of those systems including the interconnecting data networks. It has been reported that only 35 percent of lawyers use email encryption, and that this percentage has remained largely consistent over years.[4] This troubling statistic seems to confirm that a significant problem exists. A discussion of the causes would be mostly speculative.

(2) Electronic File Formats

The choice of electronic business contract file formats can greatly facilitate or impede the future availability of business contract documents. The basic principle that should be adhered to can be stated simply. Truly open file formats should be used that have been designed for reliable and consistent data interchange between systems. There are currently two trustworthy file formats for

formatted text that may include other embedded content such as raster or vector based images. The first and most broadly supported is [Rich Text Format](). The second is the [OASIS]() [OpenDocument]() text format, which is the native format of [LibreOffice]() [Writer](). All final versions of contract documents should also be stored in [Portable Document Format](). Document files in this format can contain all the resources necessary to properly display and print the files, including all the font resources used. Care should be taken to ensure that all needed resources are embedded in a PDF file when it is created. The most reliable way to accomplish this is to use the [PDF/A]() format. This variant of the Portable Document Format is specifically intended for reliable long term storage and retrieval.

(3) ELECTRONIC FILE RESOURCES

Word processing documents are always dependent upon external system resources. The main example of this system resource dependence is the use of "font" files in a document. Those files would be more accurately referred to as typeface files when installed in contemporary computer systems, yet the old and once apt terminology is still often used. Font system resources define the characteristics of a digital typeface, including the particular characters available, their shape, size, and spacing. A fuller discussion of digital typefaces is beyond the scope of this writing. For lawyers drafting business contracts, it is generally sufficient to know that font files with the same typeface name and style can include different character sets with different character encoding and different dimensions, even when published by the same digital typeface foundry. As a result, it is possible for a word processing document opened on different computer systems to display and print differently, even when opened by the same version of the same word processing application. The differences can include missing or altered characters, and altered line wrapping and pagination. It is left to the reader to imagine what the effect upon application of the Best Evidence Rule might be if "original" electronic contract documents can no longer be displayed or printed as they appeared when a contract at issue in litigation was negotiated and executed.

These potential problems can be avoided, or at least greatly minimized, by using only contemporary font resources that are compliant with open specifications well supported across multiple computing platforms of the past, present, and likely relatively distant future. Fortunately, the "[font wars]()" are now little more than computing history, and international specifications regarding digital font resources are mature and stable. An appropriate way to deal with the problem of typeface variability is to use only professionally designed digital typefaces that are compliant with the [Unicode]() specification and are published by reputable foundries. The [OpenType]() typeface file format is the best supported and most reliable. If given a choice, it is best to choose the PostScript version or "flavor" of an OpenType typeface file, although a TrueType version will provide nearly equivalent support and reliability. If newer versions of typeface files are installed either intentionally or automatically when upgrading operating systems or software applications, it is wise to archive prior versions that were used in previously drafted business contracts. If it is later questioned whether a contract document has become altered by use of a newer version of a typeface system resource, then the new resource file can be disabled and the former resource file can be enabled making a comparison possible.

(4) ELECTRONIC CONTRACT EXECUTION

The terms "electronic signature" and "digital signature" are often used interchangeably in common parlance. In legal contexts those terms have very distinct technical meanings. Proper use of these terms is especially important because a digital signature can sometimes also be an electronic signature.

The [Electronic Signatures in Global and National Commerce Act](#) provides that "[t]he term 'electronic signature' means an electronic sound, symbol, or process, attached to or logically associated with a contract or other record and executed or adopted by a person with the intent to sign the record." 15 USC §7006 (5). This extremely broad and inclusive definition makes it very easy to create something that constitutes a legally binding electronic signature. The most professional appearing form of an electronic signature is a digital replica of a person's hand-written signature. It is relatively easy to create such a digital replica as a raster image by optically scanning a hand-written signature. Electronically tracing such a scanned image to create a special typeface file containing the signature as a vector based drawing is far superior. An electronic signature in this form can be scaled without any loss of quality. A vector based electronic signature will always display and print at the full resolution of the output device.

A "digital signature" is a part of a data file that contains a cryptographic key from a [public key certificate](#) (also known as a digital certificate) which is a part of the [Public Key Infrastructure](#). A full discussion of this topic is beyond the scope of this writing. In the context of electronic contracting lawyers should understand that a contract can be executed by applying a digital certificate to an electronic contract document with the signer's intent that doing so signs the contract. It should also be understood that digital certificates are most commonly used within a "chain of trust" leading back to a [root certificate](#) issued by a [certificate authority](#). Root certificates containing the public keys of the larger commercial certificate authorities are very commonly [pre-installed in computer operating systems](#). There are always corresponding private keys maintained by the certificate authorities. The critical point is that all private keys in a chain of trust leading back to and including the key in the root certificate can unlock anything encrypted using a subordinate key. Therefore, use of a commercial certificate authority may be appropriate where some form of verification by a third-party intermediary seems warranted. However, when real security is the paramount concern, it is best for a law firm to create its own certificate authority and issue its own digital certificates. This may be particularly appropriate when using digital certificates to encrypt email messages to and from clients. When a law firm controls the certificate authority used to encrypt client communications, no one else can decrypt those communications.

5. Computer Aided Document Drafting

Computer technology can directly aid lawyers during the process of drafting business contracts in several important ways. Fuller utilization of that technology benefits both lawyers and clients by helping improve drafting efficiency and contract quality. Word processing software is used universally, but is commonly used as little more than "electronic paper." Much more is possible.

The topic of this writing is advanced business contracts, so the automated substitution in documents of simple variables like names and addresses is not addressed. Also not addressed are attempts to teach computers how to draft legal documents based upon conditionally branched logic. It was once thought that such logic was the foundation of professional expertise.[5] Interestingly, failed attempts to create computerized "expert systems" showed that the foundation of expertise is quite different than conditionally branched logic. Contemporary theory is that professional expertise is actually developed by the accumulation of a great many examples and development of the skill necessary to identify relevant examples and compare them to a particular case. Similarities and differences then reveal patterns that lead to answers.[6] There may come a time when such computerized intelligence materially assists lawyers in drafting bespoke business contracts, but computerized

"learning" systems must become much more capable before that would be practical. For at least the near future, practicing lawyers should keep abreast of currently practical technology.

A. Global Regular Expression Parsing

A full discussion of the many ways that contemporary word processing software can aid lawyers drafting business contracts is far beyond the scope of this writing. However, addressing a few topics is warranted. Virtually all lawyers know how to use basic find and replace functions. Those can be very useful, but are inadequate to serve many needs. A much more powerful system of finding and replacing text is known by the acronym "GREP." There are several definitions of this acronym, but "Global Regular Expression Parser" seems to be the best understood. GREP is widely supported by operating systems and by applications that manipulate text.

Lawyers are often unfamiliar with GREP because most implementations require the regular expressions to be entered as code. Better word processing applications enable regular expressions to be built using a menu-driven graphical user interface. If it is possible to logically describe text that needs to be found and the text that will replace it, then it is very likely that GREP can automate the process. This can save much time and greatly increase accuracy when drafting business contracts. For example, GREP features can make it relatively easy to conform language drawn from multiple sources with different phraseology and formatting into one coherent and consistent document. The potential uses are virtually endless.

B. Automated Document Comparison

It is common for complex business contract negotiations to produce many different versions of proposed contract documents. Tracking the differences between different versions can become nearly impossible without the aid of computer technology. Fortunately, automated document comparison is now readily available. Drafting new proposed contract documents together with extra versions that highlight all proposed changes from one or more prior proposals is a courtesy that can demonstrate candor and honesty. That can greatly increase the chance that negotiations will be successful. Use of automated document comparison is an important component of representing clients engaged in complex business contracting.

C. Computer Assisted Proofreading

One of the most difficult problems to combat when drafting business contracts is drafter's bias. The lawyer who drafted a business contract has a very strong tendency when proofreading to read what was *intended* to be written rather than what was *actually* written. That bias is caused by the lawyer's ability to recall the drafting process. Drafter's bias can be so strong that very obvious errors can be missed after multiple readings. Putting the contract aside until the drafter's memory has faded sufficiently is virtually never practical due to the time required. Asking another lawyer to proofread the contract is very rarely practical. The other lawyer would have to be fully familiar with the transaction, the parties, and the negotiations, to be a truly effective proofreader. This makes the contract drafter both the most qualified proofreader and the proofreader most likely to miss some obvious errors.

A good solution to this conundrum is to enable the drafter to proofread the business contract without reading it. Computers are able to read the text of a contract aloud while the drafter listens.[7] The cognitive process of listening is sufficiently distinct from the process of reading that drafter's bias is almost entirely avoided. Computers read aloud with the absolute objectivity of a

machine. Every period, comma, and em-dash causes a clearly audible pause in the speech, and every word is read exactly as it appears in the contract. No human reader can match such accuracy or objectivity. Having a personal computer read a contract aloud before transmitting it to the client or the other parties is a very helpful final step that often reveals overlooked errors or contract language that could be improved further.

D. Contract Drafting as Data Processing

Conceptualizing digital contract documents as more than electronic paper requires understanding that word processing is a type of data processing. As processed by a computer system the text of a contract document is separate from the formatting of the document. The degree of that separation can vary depending upon the system. As the degree of separation increases, the power and flexibility of the system increases correspondingly.

(1) Cascading Styles

A relatively common method of increasing the separation between text and formatting is by applying cascading styles to the text of a document. The goal is to format a contract document as little as possible by formatting particular text, and instead to apply a series of styles in the document to the text. The applied document styles then exclusively control the format.

A major advantage of using document styles is that complex formatting appearing at many places in a contract document can be altered by editing the style settings. Styles are considered "cascading" when defined styles inherit characteristics from other defined styles in the document. When styles are cascading, a change made to one style setting can cause an entire document to reformat as desired. This can be a very powerful and efficient way to control the appearance of a contract document.

Another major advantage of using document styles to control the formatting of contract documents is that contract text can be quickly and easily copied from one document and pasted into another document without any need to reformat the pasted text. All formatting controlled by the same document style will always appear the same. Lawyers sometimes unintentionally reveal language added to the first proposed form of a contract because subtle formatting differences are not noticed during drafting. This can produce a tactical disadvantage by highlighting for other parties the contract language that was focused upon during drafting. Consistent use of cascading document styles can avoid such problems.

(2) Relational Contract Drafting

Still greater benefits can be achieved by additionally separating business contract structure from text and formatting. All lawyers who draft business contracts intrinsically build a body of professional work product that can be drawn upon for examples or templates when beginning new business contract drafting projects. That work product is an invaluable resource that becomes progressively less accessible as it grows by accretion. That is because each contract is a separate document that must be identified as relevant, retrieved from storage, winnowed to excise extraneous language, and then processed to produce something useful that can be built upon. This process can become so time consuming that the benefits are outweighed. Also, many previously drafted contracts may contain similar provisions that served similar purposes, but which vary significantly in quality. Potentially helpful and important provisions that were drafted after a spark of inspiration may be lost in documents never found.

There is a better way. Rather than simply storing completed contract documents for possible later retrieval as examples or templates, document elements can be stored separately. Those document elements then can be linked to produce prototype documents, which then can be exported, formatted, and edited until ready for submission. A major benefit of this relational model of contract drafting is that individual document elements can be used in multiple prototype documents, while prototype documents can contain multiple document elements. As a result, editing a document element will change all prototype documents that incorporate that element. Such a system maximizes the chance that the product of prior inspiration will be found and used for the benefit of a client. When this system is used jointly by an entire law firm, the benefits can be magnified. This is best appreciated by working with such a computer assisted document drafting system.

ABOUT THE PRESENTER

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1. See: New Jersey Truth-in-Consumer Contract, Warranty and Notice Act, N.J.S.A. 56:12.

2. For example, the "golden ratio" has been demonstrated to be pervasive in nature, and might ease visual perception.

3. This author does not endorse all typographic rules stated in the publication. For example, as shown in this writing, adding leading between paragraphs *and* indenting the first line of paragraphs at different levels is an appropriate and helpful way to identify and differentiate logical breaks of different degrees.

4. American Bar Association's annual Legal Technology Survey Report, 2015 Edition, compiled by the American Bar Association's Legal Technology Resource Center.

5. See: History of artificial intelligence.

6. See: Watson, developed by IBM.

7. The ability to convert text to speech has always been a standard feature of every Macintosh® computer. This capability can be added to other types of personal computers by installing third-party software. Some of that software is intended to aid readers who are visually impaired.