Drawing Pictures

in legal practice and transactional teaching

Jay A. Mitchell Stanford Law School January 7, 2017

Drawing pictures

- We see it all the time.
- We probably do it ourselves.
- But we likely don't often think about why people do it, about why people say "sketch it out for me" or "help me get a picture in my head."

The world we inhabit

Corporate work involves:

- entities
- structures
- relationships
- flows
- processes
- complex facts
- abstract concepts
- attention to time
- multiple factors
- collaboration
- communication

There's a lot going on here.

Drawing

Think about all we can use when we draw:

- shapes
- color
- lines
- line weights
- line effects (dashes, dots, arrows, etc.)
- even the trace of an erased line
- proximity
- white space
- text

This is a tool with tremendous capacity for conveying both information and intensity.

What the research says

Sketches and drawings:

- make visible abstract concepts
- show passage of time
- help you see the big picture ("30,000 foot view")
- help you see relationships otherwise unseen
- draw on your power of visual processing ("mind's eye")
- provide platform for calling out ideas ("distributed cognition")
- provide platform for internal conversation
- provide common ground for engagement with others
- enable collaboration across disciplines
- facilitate communication through gesture
- engage you physically

Toss out ideas, sketch things out conceptually....or capture facts and concepts in a focused, detailed, and disciplined way.

A chapter from the book reflecting the research is attached as Appendix A.

Why it's great for corporate work

Drawing seems like a natural tool for us.

Not just for merger diagrams, either.

It's useful for all sorts of things:

- working through facts
- figuring out a difficult document
- understanding how related documents fit together
- developing advice
- creating a deal structure
- planning a transaction
- planning a deliverable
- developing a document or presentation
- communicating with a client

Some examples with commentary are included in Appendix B.

Why it's great for teaching

It's also great for teaching.

It lets you slow things down and be explicit about what's going on.

You can visibly break down the problem.

And then visibly build it back up.

You can almost literally see (and feel) the interplay of methodical analysis and creativity that's at the core of lawyer work.

Suggestions

Draw pictures.

Think about doing a little more with them -- make greater use of their capacity.

Consider not just talking about the problem but explaining what you're doing with the picture (metacognition with a marker....).

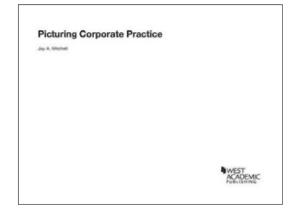
Focus on drawing as an activity, and not as a finished product. Verb, not noun.

Think about it this way:

- The sketch is not the end goal. The end goal of the drawing is what you learn while sketching.
- Sketches are not about being a good artist, they're about being a good thinker.

(two great quotes from the literature)

For more information



The book includes 50+ visuals and numerous examples and encouragements of the use of visual methods in corporate practice.

Contact information:

Jay A. Mitchell Professor of Law Director, Organizations and Transactions Clinic Stanford Law School 559 Nathan Abbott Way Stanford, CA 94305 jmitchell@law.stanford.edu tel: 650.724.0014

Appendix A

Appendix A is a chapter from the book. It reflects the research on drawing from psychology, cognitive science, engineering, art, design, and other disciplines.

2 / Visual Thinking and Communication

Making sketches and other visuals is a great thing for us corporate lawyers to do. This chapter, which draws on writing by both practitioners and scholars, explains why.

Sketching? Visuals? Isn't that what architects, engineers, and designers do?

Sketching indeed is what those folks do. But, in many ways, we're like them.

Architects think about buildings and movements of air, light, and people. We think about legal entities and movements of money, goods, data, and intellectual property. Engineers think about mechanical and chemical processes. We create decision-making protocols and transaction plans. Like architects and engineers, we listen to clients, study the landscape, deal with abstract concepts, draw upon technical knowledge, impose frameworks, develop plans, and build products.

We live in a world of structures, flows, and processes, too.*

* It's interesting that scholars describing the work of transactional lawyers refer to them as "transactions cost engineers" (Gilson) and "enterprise architects" (Dent). Indeed, a 2013 book is called *Law as Engineering: Thinking About What Lawyers Do* (Howarth).

Sketching and Lawyers

"Visual thinking means taking advantage of our innate ability to see — both with our eye and our mind's eye — in order to discover ideas that are otherwise invisible, develop those ideas quickly and intuitively, and then share those ideas with people in a way that they 'get.'"

Dan Roam | The Back of the Napkin: Selling Ideas and Solving Problems Through Pictures

Given that, it should not be surprising that corporate lawyers work at the whiteboard. A veteran corporate practitioner (Conboy) observed that "using diagrams is the most common way for an experienced lawyer to train a new lawyer, or to introduce a new lawyer to a deal, a concept, a structure, or a case." He described how diagrams can show a deal structure, or a before-and-after view of a deal, or each step in a series of steps comprising a transaction, or static situations, or relationships among persons and legal entities.

A second deeply experienced corporate lawyer (Weise), in a piece in an American Bar

Association publication, identified multiple ways that "lawyers can use drawings to great benefit in their daily work."

Drawing is actually a pretty common practice in the business world. Technology, finance, and other business people, as well as management consultants and investment bankers, routinely draw pictures to illustrate systems designs, networks, data flows, business processes, corporate structures, financing arrangements, and so on. You will go to meetings where the entire conversation centers around a picture on a whiteboard. So, in view of these parallels with the design professions and the fact that drawings are commonly used in practice (and in business), and given that we don't exactly spend a lot of time in law school talking about visual communication, it makes sense to discuss it in a general way, and then in later chapters offer some specific examples of its value in everyday lawyer activities.

As we'll see, simple sketches and other visuals can be great practical tools for studying a commercial arrangement, working through a set of documents, planning a deal, briefing a partner, or creating a work-product for a client.

Thinking

"[Designers] draw sketches to try out ideas, usually vague and uncertain ones. By examining the externalizations, designers can spot problems they may not have anticipated. More than that, they can see new features and relations among elements they have drawn, ones not intended in the original sketch."

Masaki Suwa and Barbara Tversky | External Representations Contribute to the Dynamic Construction of Ideas

There is a lot of writing about sketching and thinking.

There are scholarly books, articles, and symposia in multiple disciplines: cognitive science, psychology, user experience, engineering, architecture, education, design. Topics include "thinking through drawing," "visual thinking," and "graphic thinking." These titles alone suggest why lawyers might want to pay attention here; we're hired to think about things.

There is popular writing, too; the subtitle of a well-known business book is "solving problems and selling ideas with pictures."

Sketching is described as a tool for expressing and trying out ideas, dealing with abstractions, making connections, and preserving ideas and impressions. For lawyers, who deal with abstract concepts all the time, and who routinely impose structure on complex facts, the notion of conveying concepts and structures on paper or screen (through shapes, lines, colors, and spatial relationships) seems quite relevant and interesting.

So is, as one group of scholars (Heiser, Tversky, and Silverman) describes it, the fact that sketches "convert internal memory and mental manipulation to external memory and physical manipulation, relieving limited cognitive resources."

"Relieving limited cognitive resources?" That sounds pretty good for folks who often find themselves working long hours on multiple projects under time pressure.

Discussion Partner

"The process of graphic thinking can be seen as a conversation with ourselves in which we communicate with sketches.... The sketches generated are important because they show how we are thinking about a problem, not just what we think about it."

Paul Laseau | Graphic Thinking for Architects and Designers

Sketches, as thinking tools, can help you engage more deeply with a situation.

One writer (Dubovsky) says "drawing is a way of both reflecting on the world and entering in." When you do enter the world (of a business relationship or corporate structure or decisionmaking process), a visual facilitates productive conversations — with yourself. Drawing a schematic or a timeline can help bring out what you're thinking and then give you a platform for (internal) discussion about the situation. You look, spot patterns, talk to yourself, make connections, and try out ideas until the assessment or advice comes into better view and that little voice in your head says "I think that works."

Even erasing is helpful in these selfconversations. As one writer (Dee) nicely puts it, the "ghosts and traces of partial erasure can generate new thoughts and fresh forms." That's really true; that still-visible line you erased ten minutes ago, or that prior version of a mindmap you saved on your phone, may on later encounter prompt a new idea and prove central to your analysis. You have your thinking process right in front of you.

Visuals, in short, provide a ready-made, and always-available, discussion partner.

Collaboration

"The shared sketch ... served as a shared focus of attention, ensuring that both partners were considering the same thing. It simplified communication by allowing efficient gestures on the sketch to convey... information instead of cumbersome language. Thus, it allowed for rapid establishment and maintenance of common ground."

Julie Heiser, Barbara Tversky, and Mia Silverman | Sketches for and from Collaboration

Sketches facilitate conversations with others, too.

Two scholars (Craft and Cairns), who observed engineers develop information visualization software, noted how sketching "helped to communicate new ideas quickly, to support verbal communication, to confirm understanding, to form a written record for later references, to build complex ideas, and to explain difficult concepts." Visual representations are "public;" other people can look at, comment on, and easily change them.

Think about standing at a whiteboard with a colleague and how that interaction plays out. You draw, they point, you color, they wave their arms, you cross out, they take the marker and circle something ten times. Then the two of you come back later, look at the board, see something new, revise again, and agree on a plan.

Imagine trying to do that through an e-mail exchange; it's simply not as effective as the two (or five) of you engaging with a picture.

Seeing the Big Picture

"[T]he most salient aspect [of drawings] is their overallness the fact that in some sense we see them all at once."

Anthony Dubovsky | The Euphoria of the Everyday

Visuals help you see the whole picture.

A sketch can show entities, relationships, movement, and passage of time; it can provide both a broad and a deep view, all at once. Pictures, says one legal scholar (Porter), are very "efficient in conveying information ... [with a picture], we approach it from the gestalt perspective, taking it all in at once...." Think about how valuable that quality could be when you're trying to understand a transaction structure, or explain it to a client or colleague who asks you for the "30,000-foot view," or develop a multi-month plan for an acquisition.

Litigators like the efficiency of graphics and images, too; as a veteran general counsel (Rosman) notes, "Words may be a lawyer's primary tool, but they're not the only tool.... A chart can persuasively show factual and legal points, a diagram can explain a case's procedural history, and a photograph can save five pages of your brief."

A little drawing can be great for showing the big picture.

Pictures in the Head

"Drawings can communicate information in ways that words cannot achieve.... Words, sentences and paragraphs are linear — the person reading the words accumulates bits of information one after the other. The reader has to retain each word he has read and then assemble a mental picture bit by bit, one after the other.... The reader constructs his mental picture one word at a time rather than having the opportunity to grasp the 'big picture' all at once...."

Steve Weise | Get Your Crayons Out

Visuals can speed up understanding.

People can read pages of text and try to grasp what all is going on, but that can be pretty tough. Imagine a 90-page product commercialization agreement, or hundreds of pages of project finance documents. It's no easy task to follow the action when you're plowing through a pile of paper. A drawing, which benefits from the power of human visual processing, and which is susceptible to physical manipulation, seems to facilitate faster comprehension. As a legal scholar (Porter) says, "rapid visual cognition of images allows us to understand complex factual scenarios without wading through a ponderous textual explanation." The everyday expressions we use — "sketch it out for me," "let me get a picture of this in my head" — are telling. Who wants ponderous? Why not, as Weise observed, "skip the words and go straight to the picture?"

Learning Styles and Physicality

"Much of drawing's value derives from its immediacy and its link between what one thinks and one feels.... As drawing is 'pressure sensitive' it dramatizes ideas by making lines more or less intense and emphatic in a manner that reflects the workings of the thought process."

Errol Barron | Drawing in the Digital Age

Folks often respond quickly and firmly to questions about their learning styles. Do you describe yourself as a visual learner, one who responds to graphics and images? Did you draw flow charts when you prepared for finals or wrote a paper? Use of sketches, schematics, and other visuals should have obvious appeal to you.

Or, are you a tactile or kinesthetic learner, one who learns best when you're moving or otherwise doing something? And, whatever your learning style, do you retain information better when you take notes by hand? Or when you hold and read a physical book?

Scholars study the physicality of drawing and reading, the connection between hand and mind, and the linkages between touch, movement, and thinking. The act of holding a marker in your hand or moving your finger on a screen, drawing arrows, and erasing and crossing-out, may actually help you get a better grip on a problem.

As one writer (Dubovsky) put it, "the handdrawn line offers a mode of exploration that goes beyond the mental. The kinesthetic sense enters in — we learn from the physical feel of gesture and movement.... What guides us here — the kinesthetic — is another kind of decision-making, one that develops in the course of action."

In legal work, where we regularly deal with complex situations, we need everything we have to mobilize our knowledge and spark our imaginations. Paying attention to a physical activity that may facilitate cognitive work seems like a pretty sensible move.

You Don't Have to be an Artist

"The sketch is not the end goal. The end goal of the drawing process is what you learn while sketching. So don't worry if you can't sketch. In fact, if you're too good you might just fool yourself into thinking your sketch is a deliverable. It's not. The real value of sketching is that it allows you to explore and refine ideas in a quick, iterative and visual manner with little overhead or learning curve."

Joshua Brewer | Sketch Sketch Sketch

Some might question their ability to take advantage of visual techniques because they think they're "not very good at art" or they've "never been able to draw" or they're "not visual types."

Those concerns are irrelevant. For lawyers, sketching is not about artistic skill or personal expression; it's about use of an effective practical technique for getting work done.

Sketches don't have to be fancy. Don't think beautiful drawing or display slide or graphic design software; think scratch paper, whiteboard, tablet, or phone. "Sketches," says one designer (Santa Maria), "are not about being a good artist, they're about being a good thinker."

There is no right way to do it. You can make (or not make) your own rules; boxes for corporations, green lines for money flows, red for risk exposures, purple for relevant statutes, ovals or triangles or arrows or whatever. Diagrams, flow charts, process maps, timelines, doodles, tiny screens or wall-to-wall whiteboards... all are okay.

It just needs to work for you.

Wrapping Up

Making thoughts external? Conveying abstract ideas effectively? Prompting new ideas? Facilitating comment by others? Seeing the big picture? Taking advantage of visual and tactile processing? Portable and available? No rules?

Anything that has such practical utility for creative and collaborative problem-solving ought to be of interest to folks who are paid to think about complicated things, deal with subtle concepts, engage with individuals from other disciplines, come up with workable solutions, and build products.

That would be you.

Sketching can be quite helpful in this line of work, whether you're advising technology

entrepreneurs (for whom drawing on a white board is a primary mode of working), presenting a deal structure to a board of directors, or just wading in at the earliest stage of situation assessment. Sketches provide a way to trigger and capture thoughts, engage others, pause, and reinterpret. They help you move from vision to artifact which (like architects and engineers) is what we have to do in this job.

And they work, even in a profession that privileges text over graphic.

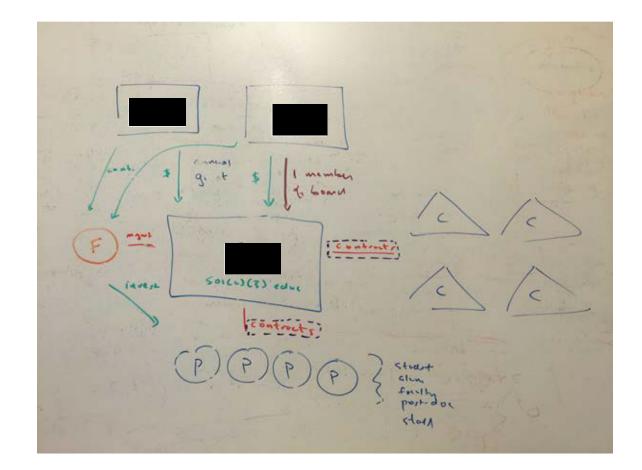
You might think of sketch pads (whether paper or touchscreen) as another type of legal pad.

Appendix B

Appendix B consists of examples of use of drawings in everyday work, with some commentary on the side. Most come from the clinic; a few come from the book.

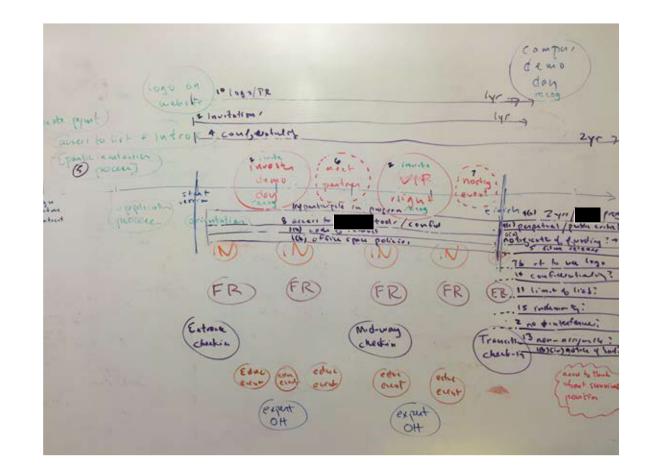
project briefing

We use simple drawings to brief students about their projects. This diagram relates to a tech incubator program. It calls out key constituents, funding sources, and contracts. Note the use of shapes, lines, line effects, text, and (not visible here) color.



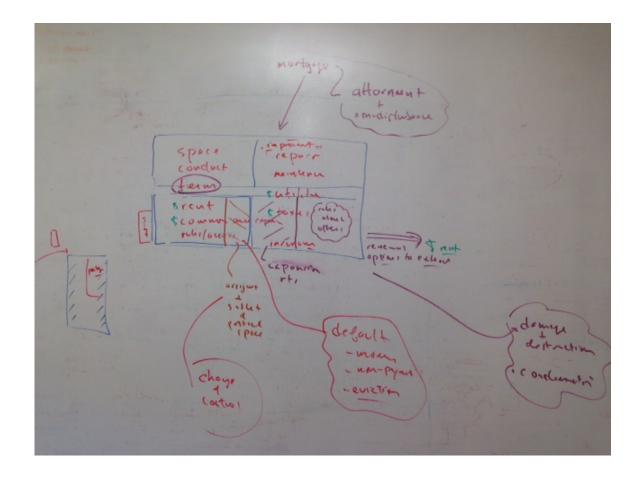
factual understanding

This reflects an effort to understand the program operated by that tech incubator. It calls out key program elements, events, and timing. It also notes contract provisions, including those that appeared to remain effective after the program. We worked from an outdated contract, a set of orientation talking points, and some text from an internal website.



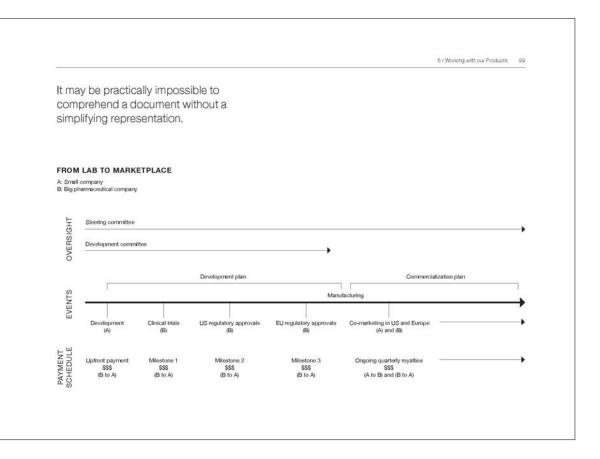
document demystification

This is an example of use of a simple drawing to demystify a common commercial document. Here, we talked about office leases with a student interested in real estate. We drew a shape for the office building, and noted basic terms (space, rent, use, term, repairs, etc.) in the center of the shape, in line with the core nature of those terms. Expansion and subletting are shown through the sections with diagonal lines. Renewal options are reflected in the arrows pointing out to the right. Parking and signage are shown at the left. Less likely contingencies (default, change of control, condemnation, new owner, new lender, and so on) are presented on the edges of the drawing, reflecting their remoteness. There's nothing profound here; even a crude sketch like this, though, created during an informal conversation, can facilitate student understanding and build confidence.



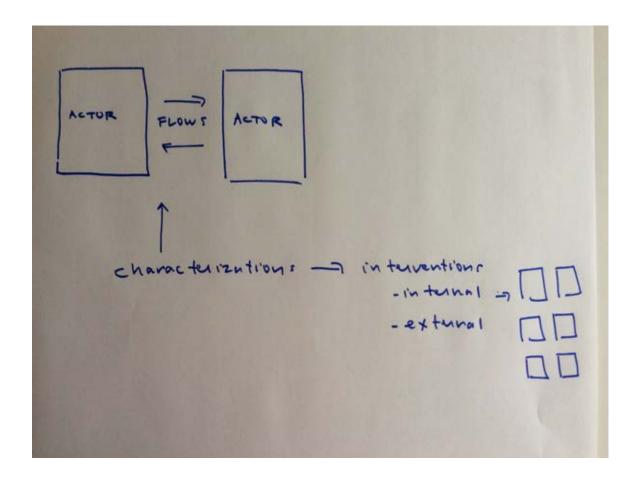
document understanding

This is an example from the book. It depicts the commercial arrangement set out in (lengthy and dense) drug research and commercialization agreements between, typically, a large pharmaceutical company and a small company with a product idea. A timeline format can capture multiple elements and timing associations of a relationship (here, two types of oversight and planning, milestone events, and related compensation terms) in a simple and graspable way.



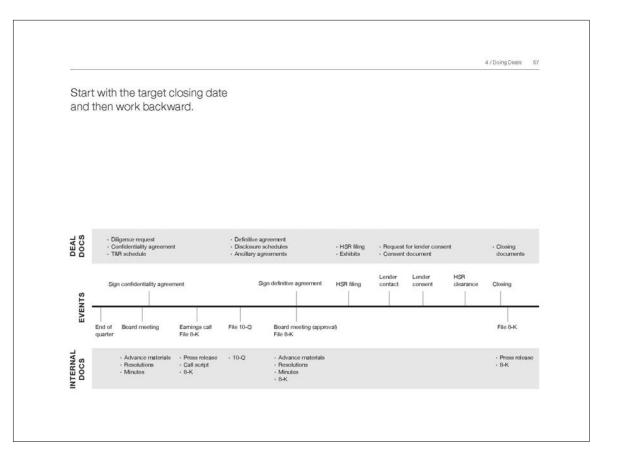
advice development

This is the model for an activity we carry out all the time in developing advice about collaborative relationships (for example, licensing or affiliation arrangements) or programmatic activities. We start by calling out characteristics of the relevant actors. We then focus on the activities of and relationship between the actors, including the flows of rights, services, money, information, and so on. We think about the legal implications of those activities and flows for our client. (For example, in affiliation situations, we worry about, among other things, vicarious liability and trademark protection.) Then, we call out possible interventions, both internal to the client and in the relationship itself -- internal processes, disclosure, contract terms. We finish by identifying documents we need to create to reflect and implement those interventions. The whiteboard gets colorful, messy, and full of ideas and plans. This kind of thing works really well as a thinking tool and as an interaction platform with a student. It's described in more detail in chapter 3 of the book.



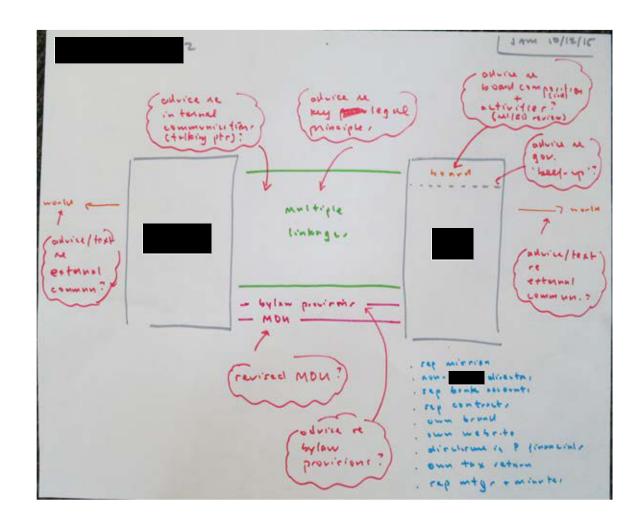
deal planning

This is an example from the book. It's a stylized high-level timeline for an acquisition by a public company. The drawing shows key events and related internal and deal documents. This sort of thing can help one figure out event sequencing and see what docs need to be created when, both of which are central concerns of deal planning and management. As noted in the book, deal planning may be the area "where the power of a visual to reveal connections, see "overallness," and facilitate collaboration, really stands out." The timeline also reflects the notion of drawing as an interim activity: working through a deal plan in this way could be a step in preparing a traditional, highly-detailed time and responsibility schedule. And, cleaned up, it's a nice platform for briefing the client about major events in the deal.



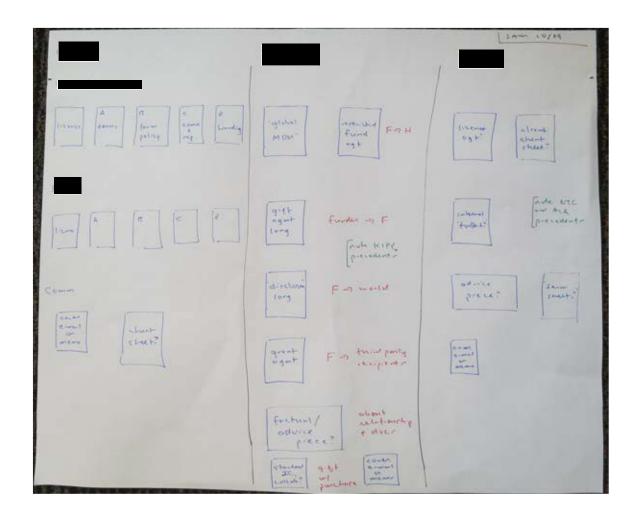
deliverable design

This is an example of using a drawing to plan a deliverable. This situation involved advice about a related party matter. We do a high-level diagram of the situation and then tie possible documents to "places" on the diagram. The drawing noted possible topics to be addressed in an advice memo and various other workproducts to be included in the deliverable.



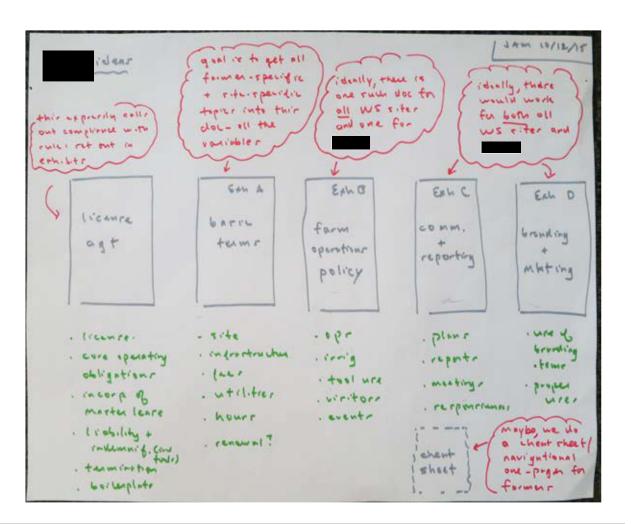
document architecture

This is an example of a planning tool we use in the clinic. It's useful to identify every single document we need to create in an engagement, from big contract to exhibit to cheat sheet to transmittal e-mail. This drawing shows deliverable packages for three clients. We use size, shape, and color to convey information about nature of the document, difficulty, purpose, and so on. Use of document icons in this manner somehow seems more effective than a simple list in understanding the work ahead -- and in concentrating the mind. There's a discussion of this technique at pages 100-101 of the book.



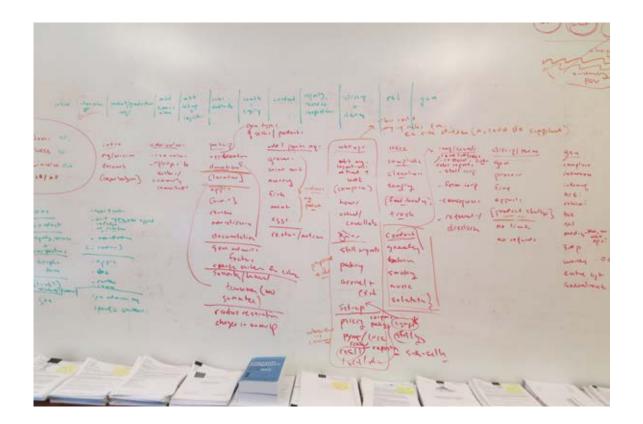
document architecture

This is another example of use of a simple drawing to help define the document plan. Here, we were trying to figure out a sensible way to convey lots of information; there are "what goes where, and why" ideas and explanations here.



document outlining

This is an example of "horizontal outlining." It's discussed at pages 104-105 of the book. It's just an outline -- calling out topic categories (e.g., "conditions precedent") and individual provisions to be included in each category -- except that it's set up in a left-to-right, not top-to-bottom format. As noted in the book, "this format may make make it easier to experiment and come up with a logical organization structure and sequencing....it may help you see the flow, and the story being told in the document." This is an especially useful approach when working with students on a document; imagine the use of gesture and movement (and arrows and erasers) in such a session.



Thank you