INTRODUCTION

Most people who are conversant with constraint theory have, by now, heard of the thinking process—a logical method used to identify and break policy constraints. As with any new technology, over the few years since its inception various people have discovered new and different ways to apply it.

Most of these new applications normally fall into one of two areas: organizational or personal improvement. In either of these spheres, those familiar with the thinking process are accustomed to using it to answer the three crucial management questions:

# WHAT to change?
# What to change TO?
# HOW to cause the change?

The ability to construct a logical argument and communicate it in a clear, concise manner makes cause-and-effect logic a powerful persuasion tool. But there are other domains besides organizational or personal management that can benefit from the persuasive power of cause-and-effect. One such application is the strategy and preparation for courtroom litigation of legal cases.

BACKGROUND

In 1998, I consulted an attorney specializing in civil law on a personal matter. During the consultation, the attorney mentioned that he was appalled at how few attorneys are really well prepared to try cases before a judge or jury. One of the reasons for this, the attorney suggested, is that most law schools emphasize case law in their curricula and don’t teach courtroom strategy in any meaningful way. This is one of the skills left to on-the-job training.

My attorney said that he intended to write a book someday on effective legal strategy. There is a need, he contended, for lawyers to have a structured way to know how strong a case they have before going to trial so that they can prudently decide whether to negotiate a settlement or take the case before a judge or jury. And if they decide to do the latter, they need to be able to construct a case that is logically sound enough to produce a win.

I suggested that the thinking process could provide the tools to structure legal cases logically, and that attorneys who understood these tools and could use them effectively would have a competitive edge over those who did not, especially in the actual presentation of the case in a courtroom. My attorney became interested in learning more about the thinking process. Over the next several months, he educated me on the REAL legal process (not the one people routinely see on television or in the movies), and I introduced him to the thinking process.

I should point out that this initial foray into the legal world has been confined to the domain of civil law. The thinking process would be no less applicable to prosecution and defense in criminal law, but my first opportunity to explore the possibilities for the thinking process happened to involve an attorney specializing in civil—specifically contract—law.

LEGAL STRATEGY: WHERE DOES THE THINKING PROCESS FIT IN?

The more I learned about how cases are actually litigated, the wider I perceived the application of the thinking process to be. But it all begins with what should have happened—the provisions of the law—and what actually happened—current reality.

Every legal dispute starts with a story—at least two of them, actually: the plaintiff’s story and the defendant’s story. Embedded within one or both of these stories is reality. The usual reason that a dispute comes to legal proceedings is that one of the parties in the dispute sees the actions (or inactions) of the other party as an infringement of the rights guaranteed him or her under the law. The two key questions in any legal case are:

1. What rights does the law provide?
2. What actually happened with respect to those rights?

The thinking process is useful in answering these questions directly and concisely.

The Prerequisite Tree

In the thinking process, the prerequisite tree identifies the obstacles standing in the way of an objective, the intermediate objectives needed to overcome the obstacles, and the sequence in which they must be overcome. For the purposes of a legal application, however, the obstacles are less important than the intermediate objectives. If we strip the obstacles away from the prerequisite tree, what we really have is an intermediate objective (IO) map.

If one examines the original text of a law in a law book—admittedly, a risky undertaking for nonlawyers, as reading the law in its original form is a sure cure for insomnia—it becomes quickly apparent that the provisions of most laws can be structured and read in the form of an IO map.

The objective of the legal prerequisite tree, or IO map, is a decision favorable to the attorney’s client. The provisions of the law form a tree of dependency below that objective. The branches of that tree may be simple or complex, but their structure will reflect the provisions unique to the particular law in question.

The same prerequisite tree applies to both sides in a legal case. The plaintiff tries to prove that all the elements needed to
secure a judgment in his or her favor are, in fact, present. The
defense tries to prove that one or more of these dependent
elements are absent, thus invalidating the plaintiff’s claim. The
example case provided later shows how the provisions of the
law might be structured in a prerequisite tree.

The Legal Cause-and-Effect Tree

One of the biggest challenges a lawyer has is wading
through a mountain of emotional rhetoric, separating out the
facts of the case, and determining “how the horse really ate
the cabbage.” The relevant must be separated from the irrelevant.
Once this is done, the facts of the case can be compared with
the provisions of the law to determine whether a persuasive
argument for one side or the other can be made. In theory this
sounds easy, but the execution isn’t always so. And success or
failure lies in the execution. As Will Rogers once observed,
“Plans get you into things, but you’ve got to work your own
way out.”

In a civil suit, the facts of the case normally surface in
depositions by both sides, a legal proceeding that takes place
outside a courtroom. Normally, the attorneys for each side
interview the principals of the other side and any other witnesses
with knowledge pertinent to the dispute. As we all know from
the coverage of Mr. Starr’s impeachment investigations last
year, depositions are sworn testimony, and deponents are held
accountable for the truth of their statements. A lot of extraneous
information comes out during the deposition process, but if the
interrogation is properly prepared, there are some nuggets of
gold buried in the testimony. The trick is to separate the gold
from the sand.

By constructing a prerequisite tree to link the requirements
of the law before the depositions take place, an attorney can
zero right in on the key questions he or she needs to have the
witnesses or the opposing side answer during the deposition.
And it is the answers to these questions that provide the building
blocks of the cause-and-effect tree.

Marston Oil v. Wilson: A PRACTICAL
EXAMPLE

Let’s look at a practical example. This is the first legal
case that I know to which the thinking process has ever been
applied in any significant way. The cause of action was an
alleged violation of trade secret law. Although the names and
the location involved have been changed, the details of the case
provided here are accurate and did occur.

Background

Jeremy Wilson was a contract employee for Marston Oil
Company. Unlike the well-known giants, Exxon, Mobil, Shell,
etc., Marston was not a vertically integrated producer-and-seller
of oil. It was a small privately owned wholesaler of a wide
variety of petroleum products, selling mostly to manufacturing
companies, retail dealers, and large organizational users.
Marston Oil had no more than a couple of dozen employees.

Most of these were operational people: those who received,
handled, stored, transported, and delivered Marston’s products.
A few were front office sales, administrative and accounting
employees. Marston Oil was owned by two brothers, Alan and
Geoffrey Hickman. Alan was the majority owner.

In 1984, Alan Hickman persuaded Wilson to leave his
current employer to work instead with Marston Oil. Wilson’s
specialty was trading in a profitable but highly specialized,
stratified product set known as transmix, feedstock, and heavy
oil (TF&H). Very few brokers in petroleum products have the
specialized knowledge to trade in TF&H successfully. Wilson
was one of these people, and he was well known for his skill in
the oil trading community. When Wilson arrived at Marston
Oil, nobody there knew anything about how to trade in TF&H,
so Wilson brought to the company a capacity that Marston did
not already have—and a potentially profitable one, at that.

Besides his deep knowledge in TF&H, Wilson brought with
him contacts (suppliers and customers) previously developed
in the course of his business. He could do this because his
relationship with his previous company had been as an
independent subcontractor on commission, not as a salaried
employee. This was the same type of relationship he entered
into with Marston for the first two years of his tenure there. In
1986, he became a salaried employee of Marston Oil, though
his salary derived exclusively from commissions on the trading
he did in TF&H oil.

In 1994, Wilson left Marston Oil to work in the same
capacity (TF&H trader) for another company based in Texas.
Alan Hickman subsequently brought suit against Wilson for
violation of the Uniform Trade Secrets Act. Hickman charged
that Wilson had illegally taken with him contact lists, copies of
contracts, and special pricing algorithms that were proprietary
to Marston Oil.

The Case for the Defense

The attorney with whom I worked on this case represented
Wilson in the action brought by Marston. His job was to refute
the charges brought by Marston Oil. At the time I entered the
picture, the case had already been underway for some time, so
I did not have the opportunity to help build the case or strategy
from scratch.

We began with the attorney reviewing trade secret case
law with me. He clarified the meanings of legal terms. Because
of the structure of the numbered paragraphs in the law book
(Figures 1a and 1b), the law fairly broke itself down into the
structure that became the legal prerequisite tree (Figure 2).
Notice that the legal code citations are included in each block
for easy reference, and the wording of these blocks is taken
verbatim from the referenced paragraphs. This prerequisite tree
gave us our charter: present evidence to prove that one or more
of the required dependencies in the tree were not substantiated.

Then I reviewed deposition summaries—the “Cliff Notes”
versions of the more detailed formal record of questions posed
by the defense team and the answers provided by the parties to

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§3426.1 Definitions

As used in this title, unless the context requires otherwise:

(a) "Improper means" includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means. Reverse engineering or independent derivation alone shall not be considered improper means.

(b) "Misappropriation" means:

(1) Acquisition of a trade secret of another person by a person who knows or has reason to know that the trade secret was acquired by improper means; or

(2) Disclosure or use of a trade secret of another without express or implied consent by a person who:

(A) Used improper means to acquire knowledge of the trade secret; or

(B) At the time of disclosure or use, knew or had reason to know that his or her knowledge of the trade secret was:

(i) Derived from or through a person who had utilized improper means to acquire it;

(ii) Acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or

(iii) Derived from or through a person who owed as duty to the person seeking relief to maintain its secrecy or limit its use; or

(C) Before a material change of his or her position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

(c) "Person" means a natural person, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, government, government subdivision or agency, or any other legal or commercial entity.

(d) "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

(1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and

(2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy. Leg. H. 1984 ch. 1724, 1994 ch. 1010.

Figure 1a. Uniform Trade Secrets Act Definitions

§3426.3 Misappropriation-Recovery of Damages for Loss.

(a) A complainant may recover damages for the actual loss caused by misappropriation. A complainant may also recover for the unjust enrichment caused by misappropriation that is not taken into account in computing damages for actual loss.

(b) If neither damages nor unjust enrichment caused by misappropriation are provable, the court may order payment of a reasonable royalty for no longer than the period of time the use could have been prohibited.

(c) If willful and malicious misappropriation exists, the court may award exemplary damages in an amount not exceeding twice any award made under subdivision (a) or (b). Leg.H. 1984 ch. 1724.

Figure 1b. Uniform Trade Secrets Act Interpretation
the suit and by pertinent witnesses. Even though these were only summaries of the key statements, the volume of facts was substantial.

I began by transferring the deposition statements onto Post-It® notes and affixing them to a piece of flip-chart paper. After all pertinent facts were posted this way, I sorted them into topical groups, according to the content the Post-It® notes contained. These topics included:

- Cash flow/finances
- Wilson’s departure
- Administrative security
- Administrative control of confidential information
- Physical security
- Source of Wilson’s knowledge
- Duty to withhold information

Once this initial sorting was complete, I had “clusters” of statements—entities in the parlance of the thinking process—that could be arranged as cause-and-effect building blocks on each topic. By adding commonsense intuition to provide cause sufficiency, a logical picture of the situation began to emerge. Each cluster naturally connected without difficulty to at least one other cluster, sometimes more than one. This tree had aspects of both continuing reality and past history (and more history than current reality), so it’s not completely accurate to refer to it as a “current reality tree.”

Once I believed this factual cause-and-effect tree to be reasonably complete, I reviewed it with the defense attorney to verify my representation of events. He pointed out some aspects of the factual history he might not have noticed himself without the visibility that the tree provided. The entire tree is too extensive to include in this paper, but Figures 3, 4, and 5 show three of the pages for illustration purposes. Notice that where the content of a particular block originated from sworn deposition, the defensor’s name and the deposition line numbers are indicated in the block.

TURNING LOGIC TREES INTO LEGAL STRATEGY

Now we have a prerequisite tree showing the provisions of the law and a cause-and-effect tree showing the facts of the case. What do we do next? The first decision was “How can we use these tools in the courtroom?” To answer this question, we did a little analysis and role playing.
Figure 3. Marston Oil v. Wilson
Cash Flow/Finances

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Figure 4. Marston Oil v. Wilson
Administrative Security

Marston-WilsonCRTE.dgm
715 Marston Oil did not take reasonable physical measures to safeguard any information considered company confidential.

714 There were few physical barriers preventing access of anyone at Marston Oil to the company's files and business information.

711 Most of the office employees, except dispatchers, had access to the computer network and customer information. [Hickman-2: 58-9]

712 Financial records at Marston Oil were not secured during business hours.

713 Everyone at Marston Oil had access to the files except the drivers. [Hickman-1: (153-154)]

708 Lowell kept copies of TF&H oil contracts in an unlocked file cabinet in her office. [Lowell: (50-1)]

709 Accounts receivable, accounts payable, and bank records were stored in file cabinets in the hallway at the Freeman Avenue office. [Lowell: (44-6)]

710 Lowell never found the financial file cabinets locked when she needed access. [Lowell: (53)]

705 Marston Oil's contract records and information were not secured during business hours.

706 Geoffrey Hickman had access to Wilson's office and would go in when Wilson was not there. [Hickman-2: (94-5)]

707 Other employees had access to Wilson's office during business hours as well.

701 No steps were taken at Marston Oil to prevent one employee from getting something from the desk of another. [Voorhees: (28)]

702 Wilson kept some records in his desk (unlocked), including contracts he was currently working on. [Hickman-1: (203)] [Lowell: (209), (52)]

703 The doors to Lowell's office, Wilson's office, and both of the Hickmans' offices were never locked (or had no door). Lowell: (53)]

704 Offices were never locked. [Voorhees: (60-1), (533-34)]

**Figure 5. Marston Oil v. Wilson Physical Security**
The attorney told me that, unlike television portrayals, there are some things you can say in opening and closing arguments and some things you can’t. The opening arguments are limited to recounting the stories of both sides, usually in a way that lets the jury know what they will hear from the witnesses that will be called— “you tell ‘em what you’re gonna tell ‘em.” The requirements of the law (provable elements) may not be discussed at this time.

The closing argument, however, is generally focused on what the law requires each side to prove for the jury to find in favor of one side or the other. In other words, it becomes a simple tutorial on the law, supported by the pertinent factual evidence that supports or refutes each side’s legal requirements.

The Legal Cause-and-Effect Tree

As we looked at the reality tree in its entirety, it became clear that many of the entities I incorporated in it to provide logical sufficiency did not appear anywhere in the depositions. Most of these would qualify as common sense or intuition, but some of them were specific statements about the competitive environment of the oil trading business and the knowledge required to play in that arena. As the “tree-builder,” I had gleaned this information from my discussions with the attorney, who was already well-versed on the oil trading business.

Recognizing, however, that these entities (crucial to the logical sufficiency of the case) could not be just stated by the attorney without support, we could see immediately that an outside expert witness would be needed to establish the validity (“entity existence”) of these facts. The tree had made its first contribution to the case—it identified what kinds of expert witnesses would be needed and what questions would have to be asked to establish these facts.

The logic tree’s second contribution was in helping to identify the questions that the attorney would have to ask on direct and cross-examination. Because the sequence of witness testimony would not follow the sequence in which the story unfolded in the tree, it would be important to be sure that all the right questions were asked of every witness at the time they were on the stand. By carefully examining each block in the tree, it was possible to determine exactly what questions to ask and how to phrase those questions to elicit the answers he needed from each witness. The defense attorney said it would also be possible to anticipate what objections, if any, the plaintiff’s attorney might interpose and how to deal with them.

Even though my colleague would not be showing the jury the cause-and-effect tree in his opening argument, he was able to use its well-organized structure to sequence the story he would tell the jury: “Mr. Wilson came to work for Marston Oil as an independent contractor in 1984 ... you will hear Geoffrey Hickman testify that ... Martha Lowell will say that ....” By the time his opening argument was completed, the jury would know exactly “how the horse ate the cabbage” in this particular case and which witnesses could be expected to verify which parts of the story.

The Legal Prerequisite Tree

The defense attorney observed that the prerequisite tree would be most visible in the closing argument, though its value would prove to come much earlier in the case. Recall that the prerequisite tree, previously reduced to an intermediate objective (IO) “map,” shows the dependency relationships in the law (refer to Figure 2). In order for the IOs in each successive level of the tree to be proven or refuted, the ones leading to it from below must also be substantiated.

For example, in order to prove that misappropriation of trade secret information had occurred (Figure 2, block 105), the plaintiff would have to show that the information was acquired by someone who knew that it was obtained by improper means (110) and that it was disclosed by a person without consent (111) who used improper means to acquire it (112) and had knowledge that it was a secret (113). Conversely, the defense need only prove that the discloser had no reason to know that the information was acquired by improper means or had a duty to maintain secrecy.

The legal prerequisite tree allows a plaintiff’s attorney to determine very easily the elements of proof required to support a cause of action: “In order to get a judgment in our favor, we have to prove this and that. In order to prove this, we have to prove “a,” “b,” and “c”....” And once constructed, it provides a quick benchmark against which to determine the relevance of other facts about the case—it can help the attorney separate the wheat from the chaff, especially in convoluted situations. For plaintiffs, it can succinctly express the burden of proof. For defendants, it can quickly highlight the aspects of the law most susceptible to a successful defense argument.

When the case comes down to the closing argument, an attorney can use a well-constructed legal prerequisite tree—or key parts of it—as a visual aid for the jury. The graphical depiction of the elements of proof required by the law is likely to be much easier for a jury to absorb than a verbally recited list. A plaintiff’s attorney could make the tree look like a solidly constructed pyramid by reviewing the evidence presented to prove the existence of each block in the tree. A defense attorney could present the tree as a house of cards, then “pull out” key cards to make the case collapse.

In the case of Marston Oil v. Wilson, my attorney colleague chose to attack the entity existence of block 106 (Figure 2). He developed evidence to show that a trade secret did not actually exist, and so no judgment could be found against his client.

OTHER USES OF THE THINKING PROCESS

The thinking process has potential utility for lawyers in ways other than those described here. Even before starting to build a courtroom strategy, an attorney can use the legal prerequisite tree and the factual cause-and-effect tree to assess whether he or she has a good chance of winning the case in front of a jury. The logic trees can give the attorney an effective way to evaluate the strength of the client’s case and an easy
way to communicate the strengths and weaknesses to the client at the very beginning of the case. Knowing how strong the case is gives an attorney leverage in negotiating an out-of-court settlement—or possibly accepting or resisting such an overture from the opposing side.

And when it comes to negotiation for an out-of-court settlement, we enter the domain of the conflict resolution diagram ("evaporating cloud"), the potential of which has yet to be fully explored in the legal arena.

WHERE TO GO FROM HERE?

The legal logic trees presented here are unrefined. The use of the thinking process in the legal arena requires considerably more polishing before it’s ready for public consumption. A lot more developmental work remains to be done on various ways to apply it. My attorney colleague and I will continue applying the thinking process tools to legal case preparation as described here, and develop new ways to use it as well. Eventually we plan to find out how the thinking process translates to the criminal law arena. Once the effectiveness of the methodology is proven and its value is demonstrated to the broader legal community, it will be time to take it to schools of law and to bar association continuing education.

ABOUT THE AUTHOR

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ENDNOTES

1 Refer to Dettmer, H. William, Breaking the Constraint to World-Class Performance. Milwaukee, Quality Press (1998), Ch. 8, for an example of a negative branch pertaining to the O.J. Simpson criminal trial.

2 [STATE] Civil Code, Title 5, Uniform Trade Secrets Act.

3 Ibid., § 3426.1, Definitions