A Bibliographic Essay on Cognitive Linguistics

for Law Librarians and Legal Researchers[*]

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Abstract:

As one of the new fields under the general heading cognitive studies, cognitive linguistics is changing the theoretical paradigms behind language studies. As such, it is beginning to affect law, both as a scholarly discipline and as practiced in the courts. After several years of intensive study, former public and academic law library director Charles Dyer has created a bibliography of the leading books in the field and an essay to aid law librarians and legal researchers, both in setting up core collections and in beginning research, using cognitive linguistics for legal and empirical studies.

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Introduction

Cognitive Studies and the Change in Paradigm

There is a quiet revolution going on in the biological sciences and social sciences that is only now beginning to be reported in the popular press. The revolution's complexity, breadth, and depth is often hidden from even many of the researchers and academics who are participating in it.[1] Its eventual effect will be massive, involving nearly all fields of human inquiry. In small ways, it is already beginning to affect law, both in practice and in theory, but the changes that will come in the next few decades will be very dramatic compared to our current state of affairs. The aim of all these studies is to understand cognition, and ultimately human cognition, language and thought.

Essentially, the increased use of empirical studies and significant gains in methodology have generated scientifically verifiable results in these fields of endeavor that previously had been considered the "soft" sciences. They were never soft. Rather, they were simply underdeveloped, and their complexity in

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1. Jessica Lindblom and Tom Ziemke, for example, have written on the failure of many leading cognitive scientists to grasp their connections to other fields. "Embodiment and social interaction: A cognitive science perspective," BODY, LANGUAGE AND MIND, VOLUME 1: EMBODIMENT 129-163 (Tom Ziemke, Jordan Zlatev, Roslyn M. Frank, eds., 2007).

comparison to the hard sciences of physics and chemistry is only now beginning to be understood.

The revolution is occurring in several fields at once. These fields are experiencing "paradigm shifts" in the sense that Thomas Kuhn meant in his famous 1962 sociological study of the hard sciences, *The Structure of Scientific Revolutions*. Only this time, it is the fields of biological sciences and social sciences that are experiencing the shifts.

The recently begun fields of neuroscience and cognitive science are now beginning to make serious headway. They are beginning to blend in both studies and results.[2] Psychological experiments and modern brain imaging systems, such as functional Magnetic Resonance Imaging (fMRI) and Positron Emission Tomography scans (PET scans), are being combined to improve our understanding of how the brain functions. They are finding, much to the surprise of many in the fields, that several previous scholars may have had it right.

Charles Darwin's theory of natural evolution, very much as he devised it, and not the alterations in theory made by others, seems to be just about right on point. Put very simply, the human brain is not an exceptional special development, with capacities that could not have been created naturally. Rather, the human brain is on a continuum of development, and all the marvelous faculties of the brain, including abstract thought, a sense of self, and language,

2. JEROME FELDMAN, FROM MOLECULE TO METAPHOR: A NEURAL THEORY OF LANGUAGE (2006).

can be explained by natural principles.[3] The ability to conceptualize and to deal with highly social interaction comes from a series of adaptations to the human body, mostly in the brain, but elsewhere as well, that can be explained as naturally occurring evolutionary development.[4]

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3. There are many works that could be cited. Of particular aid to the author are the works of Gerald Edelman, such as BRIGHT AIR, BRILLIANT FIRE: ON THE MATTER OF THE MIND (1992) [hereinafter cited as BRIGHT AIR], perhaps the most readable of his several more popular works. A very useful compendium of current issues in the field is EVOLUTIONARY COGNITIVE NEUROSCIENCE (Steven M. Platek, Julian Paul Keenan, and Todd K. Shackelford, eds. 2007). [hereinafter cited as ECN]. The introductory chapter of ECN, Aaron T. Goetz and Todd K. Shackelford, *Introduction to Evolutionary Theory and Its Modern Application to Human Behavior and Cognition*, at 5-19, specifically discusses Darwin's leading contribution to the effort. ECN also includes an article about ethical uses of neuroscience in the courtroom, Michael B. Kimberly and Paul Root Wolpe, *Philosophical, Ethical, and Social Consideration of Evolutionary Cognitive Neuroscience*, at 559-578.

4. It must be stated that there remains a considerable amount of disagreement within these fields. As is noted later, a substantial percentage of linguistics and other scholars remain tied to the older paradigm of generative grammar, as first set out by Noam Chomsky. These scholars believe that sometime during human evolution a "language module" was somehow quickly

Cognitive psychologists are finding that William James and John Dewey were considerably more perceptive about human cognition than academia had previously accorded them to be. The total body is involved in our abstract reasoning, and much of what we reason is done unconsciously and routinely. The various components of our thinking, not just logic or semantic understanding, but also aesthetics, play a role in all our thought.[5] Our minds are recursive. That is,

evolved within the brain which accounts for the significantly greater ability of humans to make and use language than other animals. Many cognitive scientists, notably led by Stephen Pinker and Paul Bloom (and Terence Deacon from another perspective), and neuroscientists, of whom William H. Calvin also stands out, continue to presume the presence of this "language module", but maintain that its maturity as such a strong module within the brain occurred slowly, on an evolutionary time scale. Second generation cognitive scientists and most all cognitive linguists disavow the existence of this "language module" as non-existent, both from a functional view, given their theories, and from a not insignificant amount of recent research that tends to undermine the theory. Perhaps the most notable response from a cognitive scientist and cognitive linguist view is found in GILLES FAUCONNIER AND MARK TURNER, THE WAY WE THINK: CONCEPTUAL BLENDING AND THE MIND'S HIDDEN COMPLEXITIES 172-174 (2002).

5. MARK JOHNSON, THE MEANING OF THE BODY: AESTHETICS OF HUMAN UNDERSTANDING (2007).

for any thought or process, the brain utilizes neurons in several of its structures

and the signals return through successive paths between the different parts.[6]

Logical reasoning comes into play when the neurons in the frontal cortex are

used, but our centers for values, such as in the temporal lobes, are also used as

well, for every concept and volitional thought.

The various scientists and social scientists in these fields do not all agree.

But they all agree on several key points: First, the theories presented can be

verified by scientific research. If we are presently not capable of verifying a

theory because of inferior equipment, e.g., fMRI's cannot scan for individual

neurons,[7] then that theory will be examined in other ways until the equipment is

technologically available. Second, most all generally maintain that we have an

embodied mind, i.e., that we should be able to account for all the functions of the

human brain, including consciousness, through natural processes. Third, a theory

in any one field should be able to correspond to theories in the other related fields;

i.e., if empirical results in a related field would seem to dispel that theory, then

more work must be done to make that theory compatible or to change to a better

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6. BRIGHT AIR, *supra* note at 132-33.

7. There are some 100 billion neurons in the human cortex, way too small

and too many to distinguish individually with even today's highly refined

equipment. Individual neurons can be dyed, but that is pre-selecting the results, so

there is some limit to those empirical studies. Also, there are ethical implications

on the extent human subjects can be subject to experimentation.

theory. This interdisciplinary approach is quite remarkable, given the separateness that is found among academic disciplines, but it shows the primacy of provable results and the respect that is now being accorded to scientists working in the formerly "soft" sciences, e.g., cognitive psychology, especially when their theories enhance the results of theories in the harder disciplines, e.g., molecular biology. It is the across-the-disciplines approach of these capable researchers that will make their theories much harder to ignore.

Although these other fields are very important, my intent with this article is to introduce law researchers and law librarians to the field of cognitive linguistics. Of the many fields in this revolution, cognitive linguistics will likely be the first to affect the study and practice of law in a big way, or actually several big ways. My original purpose in taking up the study of cognitive linguistics was to try to grasp a way to help self-represented litigants better understand legal discourse.[8] However, my studies have led me to conclude that much of the reasoning process in law, its use of logic and the kind of logic we use, may well be affected by cognitive linguistics.[9] In any event, as cognitive linguistics affects our understanding of meaning and word choice in the context of legal situations,

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8. Charles R. Dyer, *The Queen of Chula Vista: Stories of Self-Represented Litigants and a Call for Using Cognitive Linguistics to Work with Them*, 99 LAW LIBR. J. 717 (2007) [99:4, 2007-45] [hereinafter cited as Dyer, Queen].

9. For the most complete recognition of this possibility, I recommend STEVEN L. WINTER, A CLEARING IN THE FOREST: LAW, LIFE, AND MIND (2001).

such as the interpretation of a contract or a statute, then it will surely affect legal

outcomes and become a part of the arsenal that any lawyer needs to practice law.

The History of Cognitive Linguistics

Cognitive linguistics first began late in the 1970's. One positive influence

was the pioneering work on human categorization done by psychologist Eleanor

Rosch, who published a series of articles on how certain concepts seem to carry

dramatic similarities in different unrelated languages.[10] Her work led to the

notion that the subconscious human mind is instrumental in creating semantic

categories, that they are not invented by conscious rational ways alone.

On top of that, within the linguistics community there were several

professors who were dissatisfied with the existing linguistics paradigm of the

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10. Eleanor Rosch (nee Heider), *Natural Categories*, 4 COGNITIVE

PSYCHOLOGY 328-350 (1973); Eleanor Rosch, *Cognitive Reference Points*, 7

COGNITIVE PSYCHOLOGY 532-547 (1975); Eleanor Rosch, *Cognitive

Representations of Semantic Categories*, 104 JOURNAL OF EXPERIMENTAL

PSYCHOLOGY: GENERAL 192-233 (1975); Eleanor Rosch, *Principles of

Categorization,* COGNITION AND CATEGORIZATION 27-48 (E. Rosch and B.B.

Lloyd, eds., 1978); Eleanor Rosch, *Prototype Classification and Logical

Classification: The Two Systems*, NEW TRENDS IN COGNITIVE REPRESENTATION:

CHALLENGES TO PIAGET'S THEORY (E. Scholnick, ed., 1981).

time, Noam Chomsky's "generative grammar." They believed that generative grammar failed to provide adequate explanations for an increasing number of problem examples and observations about language, especially when it was applied to non-Indo-European languages. They also felt that Chomskian-trained linguists had tried and failed too often to create a "generative semantics", i.e., the attempt to extend Chomsky's theory of generative grammar into the realm of semantics.

In the late 1970's, Ronald Langacker at the University of California San Diego and a former Chomskian, decided to drop the basic principles of Chomskian linguistics and start anew. He eventually determined new basic principles himself, chief among these that language acquisition and use is not any different from any of the other capacities of the human mind, i.e., that it is learned through biology and culture.   A theory of grammar and semantics must be consistent with the way the human mind actually functions, as shown in Rosch's then recent experiments. He began publishing a series of papers on his new ideas, barely leading a wave of other linguists and cognitive scientists. Langacker eventual encapsulated all his ideas in the monumental two-volume work *Foundations of Cognitive Grammar*, published in 1987 and 1991.

The second very strong work that led the pack was that of George Lakoff of the University of California at Berkeley, another former Chomskian linguist, and philosophy professor Mark Johnson of the University of Oregon. Their first collaboration was *Metaphors We Live By* in 1980. They too depended much on

the work of Eleanor Rosch and also the new efforts to develop "frame semantics" by Charles Fillmore.

In 1987, the same year that Langacker published the first volume of his *Foundations of Cognitive Linguistics*, Lakoff published *Women, Fire, and Dangerous Things*. This work established the foundation for the cognitive linguistics theories of prototype and radial categories. Also in 1987, Mark Johnson published *The Body in the Mind*, which is considered by cognitive linguists as the beginning of the modern use of the concept of "image schema."[11] As if 1987 were not notable enough, it also marked the year that neuroscientist Gerald Edelman began the publishing of his three-part work on human consciousness,[12] the first of several neuroscientists whose findings on the embodied mind strengthened the cognitive linguistics position on language. A few other significant cognitive linguistics and cognitive science writers also

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11. "Image schema" had some prior use in both the psychology of William James and Gestalt psychology, but Johnson defined it more specifically in terms of linguistic concepts.

12. GERALD M. EDELMAN, NEURAL DARWINISM: THE THEORY OF NEURONAL GROUP SELECTION (New York: Basic Books 1987). GERALD M. EDELMAN, TOPOBIOLOGY: AN INTRODUCTION TO MOLECULAR EMBRYOLOGY (New York: Basic Books 1988, Reissue edition 1993). GERALD M. EDELMAN, THE REMEMBERED PRESENT: A BIOLOGICAL THEORY OF CONSCIOUSNESS (New York: Basic Books 1990).

appeared in the 1980s, including Leonard Talmy, Gilles Fauconnier, Mark Turner, and Eve Sweetser.

By the late 1980's, cognitive linguistics had respectable academic stature in several universities. While cognitive linguistics began somewhat as a rebellion against Chomsky's theories, in the1990's cognitive linguistics became a separate linguistic paradigm in its own right. Currently, cognitive linguistics is the dominant paradigm in about half the university linguistics departments in the United States and most linguistics departments in other countries. Since Chomsky's theory of generative grammar is grounded in the same philosophical traditions as most current jurisprudential theories (including both traditional legal positivism and such postmodern theories as critical legal studies), this change in linguistic paradigm will have a significant ripple effect throughout the field of law. We law librarians and law researchers had best be prepared for it. I hope this essay and bibliography will help.

I had hoped originally to include a whole section explaining cognitive linguistics and its fundamental features. Unfortunately, to do it justice would require an article at least as large as this whole essay and bibliography. Given the several well written introductory texts on cognitive linguistics that I will be reviewing, and given the fact that I know many new readers will not initially be interested in all of the elements of cognitive linguistics, I commend to you the very works I will now review instead.[13]

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13. I will use the other material in another article some other day.

The Different Starting Points that Researchers Use

I suppose there are several ways one could approach the study of cognitive linguistics. Obviously, if one has the time and there are classes available, taking an introductory course would provide a good general overview and an introduction to many of the common examples used to explain theoretical points.

Most lawyers or legal scholars have neither the time nor the availability of a class. Instead, one might just read an introductory textbook. But that is, at least from my observation, not a very common approach among legal scholars. Instead, they are first introduced to the field through regular legal research, or I should say they come across the mention of cognitive linguistics during their research and decide to follow it up. Usually, this is through a footnote to one of the landmark books in the field, rather than to an introductory text.

In this way, quite a number of legal scholars have become introduced to a small, but crucial, part of the field, and that is conceptual metaphor theory.

Starting from a particular spot based on need

These legal researchers first get into cognitive linguistics through their examination of the use of metaphor in law cases and statutes. One relatively obvious example is the notion of a corporation as a person who should be allowed

First Amendment rights under the Constitution.[14] In my casual examination of legal periodical articles, using *Hein Online*, I found that about half the articles that use the word "metaphor" refer to books and articles from cognitive linguistics. Nearly all of them confine their discussion just to conceptual metaphor theory, which was one of the first areas developed within cognitive linguistics as it emerged as a competitor to generative grammar in theoretical linguistics during the 1980's. Their starting point was the classic text *Metaphors We Live By*,[15] As such, they are introduced to the writings of one of the founders of conceptual metaphor theory, University of California at Berkeley linguist George Lakoff.

Many legal scholars stop at this point, i.e., stop at conceptual metaphor theory. There are practical reasons for doing so. First, the literature on conceptual metaphor theory is quite substantial, and also the number of law review articles employing it is growing steadily. Second, for many, the theory can stand in its own right, and the value of probing farther into cognitive linguistics, compared to the time, is often not worthwhile for their enterprise. Third, the next most logical step is to read Lakoff's 1987 landmark book, *Women, Fire, and Dangerous*

14. Rather than cite law review articles on this very heavily covered topic, I note the recent U.S. Supreme Court decision in *Citizens United v. Federal Election Commission* (U.S. S.Ct., No. 08–205. Argued March 24, 2009, reargued September 9, 2009, decided January 21, 2010).

15. GEORGE LAKOFF AND MARK JOHNSON, METAPHORS WE LIVE BY (1980, reprinted with a new afterword in 2003).

Things: What Categories Reveal about the Mind. This book leads to a different paradigm shift, as it sets firm ground for the *prototype model of category structure*.[16]

In his 2002 book *A Clearing in the Forest: Law, Life and Mind*, law professor Steven L. Winter wrote at length on the prototype model of category structure. As a constitutional law scholar, Winter uses court cases, mostly from federal constitutional law, to illustrate his points. I consider his book a landmark book, both because of its application of cognitive linguistics to law and because of his excellent articulation of the paradigm shift. This shift is, being very succinct, the use of prototypes and extensions from them (called radial categories) to define a class, as opposed to the time-honored use of Aristotelian logic's necessary and sufficient conditions and the formalist logic that springs from it.[17] The shift is also a change from the emphasis on truth to an emphasis on meaning.

Although there have been legal symposia based on *A Clearing in the Forest* and Steven Winter's work in general, by his own admission, only a few

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16. WILLIAM CROFT AND D. ALAN CRUSE, COGNITIVE LINGUISTICS 77-92 (2004); JOHN R. TAYLOR, LINGUISTIC CATEGORIZATION 41-83 (3rd ed. 2003).

17. Winter maintains that, while many other legal scholars declaim the formalist position, they do not really replace it, as their own systems subsume to the same logic patterns. I tend to agree with Winter. Dyer, *Queen*, at 751-52.

law professors have followed him into this paradigm shift.[18] Over time, however, I believe many more will be ready to make the shift, especially those new professors who come from a social science or humanities field in which they had been previously exposed to cognitive linguistics.

Confession time: *A Clearing in the Forest* was my introduction to cognitive linguistics back in 2005. As a retired public law librarian, I was discontented with most of the strains of jurisprudence theory I had been exposed to.[19] I was actually perusing the stacks of the University of Washington Law Library, looking for what I now know to be a paradigm shift. I was primed to go there through my readings of recent jurisprudence scholars who favor a pragmatic approach, often citing the works of philosopher Richard Rorty.[20] I was also primed to go there because of my practical experience with self-represented litigants and our collective failure to enable them to understand legal discourse, which had led me to the jurisprudence of Austin Sarat and similar exponents of

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18. Telephone interview with Steven L. Winter, Walter S. Gibbs Professor of Constitutional Law, Wayne State University Law School (June 21, 2006).

19. A good retelling of these theories can be found in GARY MINDA, POSTMODERN LEGAL MOVEMENTS: LAW AND JURISPRUDENCE AT CENTURY'S END (New York University Press 1995) [hereinafter cited as MINDA, POSTMODERN LEGAL MOVEMENTS].

20. See MINDA, POSTMODERN LEGAL MOVEMENTS, at161-163.

Law and Culture. None of these works were responding to my needs until I met Steven Winter's.

Steven Winter's book is not a complete introduction to cognitive linguistics, although it is very complete for its intended purposes. It does not cover the several theories of cognitive grammar,[21] which I believe to be culturally

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21. I should note that, while there are competing theories, the theories are somewhat supplementary, employing pretty much a common empirical component, based on experiments. The differences can be summed, in my mind, as how much grammar is composed at the time of the speech act as opposed to how much comes from that which is called by neuroscientists "procedural memory". The differences are slight to an outside observer, but crucial when defining hypotheses for empirical studies.

I suspect that eventually the theories will meld together, when there is enough evidence to explain the human dynamic process of creating "procedural memory" as humans mature and gain further experience in the use of grammar. My view is generally reflected in the writings of the various contributors to the issues of the competing theories of cognitive grammar. They note that, in their opinion, Jean Piaget was essentially correct in his view that grammar is learned, as distinct from Noam Chomsky, the creator of the competing linguistic theory of generative grammar, who has held that humans are born with an innate ability, perhaps a brain module, to use grammar.

significant when examining traditional logic as it is employed in different languages. It does not cover issues of discourse, e.g., legal discourse, from a training perspective, as courts, law libraries, and legal services agencies might need when dealing with self represented litigants. However, *A Clearing in the Forest* is the next book I would offer to a legal scholar who wants to pursue cognitive linguistics into more depth than just reading law review articles and *Metaphors We Live By*.

The encyclopedic approach

The encyclopedic approach, that of trying to get a handle on the whole field, would be the pattern taken by those whose interest or need is more diffuse. A scholar from an adjacent field might seek this approach. Adjacent fields to cognitive linguistics would be cognitive psychology, cognitive science, neuroscience, and artificial intelligence studies. A scholar in a competing or complementary field might also take this approach. Theoretical and applied linguists trained in generative grammar and linguists or legal researchers using discourse analysis, discourse studies, corpus studies, sociolinguistics, or sociocultural linguistics would likely fall into this category of researcher.

As one might guess from this discussion, much of the work being done in cognitive linguistics research is in connection with this problem of explaining grammar and human grammatical development.

However, while it is usually logical for researchers to fall into these two groups based on their need (which is another way to say their intention), researchers also chose their path based on their preferred learning style. Some researchers prefer to go deep into a particular narrow topic first and only expand from that as they need clarification, depending on their general understanding prior to entering the field, to fill in the holes. Other researchers feel uncomfortable doing that and prefer a slower, more general approach, either so as to avoid making simple errors that scholars in that field would see readily or because they need to have a larger frame of understanding. This latter type often has a desire to comprehend the total elegance of a theoretical position, even though they do not need that for their specific research endeavor.

The field of cognitive linguistics has two aspects about it that may well lead scholars new to the field to find themselves alternating between the two general approaches. First, the field borrows heavily from findings in other fields. Cognitive psychology and neuroscience both bring out research findings that help or hinder theoretical positions within cognitive linguistics, and cognitive linguists remain not only aware of these findings, but incorporate them as evidence for their positions. Cognitive science contributes to the theoretical underpinnings of cognitive linguistics (and vice versa) to such an extent that many scholars publish in journals in both fields.

Second, the emerging overall philosophical position taken by the several fields of cognitive studies creates a paradigmatic shift, in the Kuhnian sense, of

the mind-body problem, including a relaxation of the wall separating emotion and rationality and a call for the re-positioning of traditional Aristotelian logic as only a sub-set of a broader logical perspective, a perspective that many traditional legal scholars would not find "logical" at all.[22] This issue will trouble some scholars, but others will either accept it readily or find it of no concern for their current needs.

Law librarians aiding researchers new to the field of cognitive linguistics should be aware of these different approaches when conducting reference transactions and should help researchers assess both their current needs and long-term goals. Law librarians should not be surprised if some researchers seem to switch goals and needs as they grapple with or decide to avoid the underlying issues of paradigm shift.

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22. For the new philosophical position, see GEORGE LAKOFF AND MARK JOHNSON, PHILOSOPHY IN THE FLESH: THE EMBODIED MIND AND ITS CHALLENGE TO WESTERN THOUGHT (1999). For the landmark book representing the new neuroscience position, see ANTONIO R. DAMASIO, DESCARTES' ERROR: EMOTION, REASON, AND THE HUMAN BRAIN (1994).

Starting from a general approach

There are several introductory textbooks for cognitive linguistics, written with different intentions. A librarian can assess the researcher's needs and choose the appropriate one.

For most legal researchers who want a simple introduction to the field, I recommend David Lee's *Cognitive Linguistics: An Introduction*. Besides being concise and very clear, the book also delves into how cognitive linguistics might be pertinent to discourse analysis. Discourse analysis is often the entry point for legal scholars seeking to understand the nexus between language and law, and there has been a substantial amount of literature on language and law using discourse analysis as its research methodology.[23]

For scholars who want to jump right into the reigning arguments for several theoretical positions within cognitive linguistics, I recommend William Croft and D. Alan Cruse's *Cognitive Linguistics*. It is a much harder read for someone unfamiliar with the field, but would be a worthwhile start for law researchers who are, say, already versed in conceptual metaphor theory, and now

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23. E.g., JOHN M. CONLEY & WILLIAM M. O'BARR, RULES VERSUS RELATIONSHIPS: THE ETHNOGRAPHY OF LEGAL DISCOURSE (1990); JOHN M. CONLEY & WILLIAM M. O'BARR, JUST WORDS: LAW, LANGUAGE, AND POWER (2d ed. 2005); SALLY ENGLE MERRY, GETTING JUSTICE AND GETTING EVEN: LEGAL CONSCIOUSNESS AMONG WORKING-CLASS AMERICANS (1990).

want to expand their knowledge and are concerned that their future writing

contain proper references to controversial claims, i.e., that they use "*But see*" in

their footnotes. One caveat about this book: Croft is a proponent of one of the

prevailing theories on grammar from a cognitive perspective: radical construction

grammar. This book's discussion of grammar approaches the other grammar

theories through that lens.

A second introductory text that could serve the legal scholar who wants to

be aware of reigning controversies within cognitive linguistics is Vyvyan Evans

and Melanie Green's *Cognitive Linguistics: An Introduction*. It is a longer, and

more repetitive, book. The authors presume that most readers would not read the

book from beginning to end, but use the first chapters as introduction and the

latter two sections, one on semantics and the other on grammar, for further study

according to their needs.

Core Collections for Law Libraries

I added this section after composing the bibliography and writing most of

the essay. I then went through the list to see which books should be in a core

collection for different types of law libraries. It was then that I realized how very

personal my selection standard was. The topics within cognitive linguistics that

interest me most are more represented than other topics. Given that what interests

me most likely will be what will interest other researchers coming from a law

perspective, and that I have a background both in academic scholarly research and in practical research for courts, public law libraries, and other justice organizations, I have left my selections as they are. I recommend the books not listed in this section to an academic collection development librarian working with a professor interested in cognitive linguistics. I also recommend many of the works to be examined by those doing practical research as I describe below. My personal annotations to the individual works can be found in the general bibliography.

Academic Law Libraries

The books in this core collection are most likely sufficient to enable a professor level law researcher to get started and achieve considerable depth before the academic law librarian would have to resort to interlibrary loan or sending the researcher to a general academic research library.

Cognitive Linguistics Bibliography (Main Editors: Sabine De Knop, Beate

Hampe, René Dirven, and Birgit Smieja).

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Bibliography of Books on Language and Law

(http://www.illa.org/BIBLIO.HTM).

International Association of Forensic Linguists (http://www.iafl.org/).

Frame Net (http://framenet.icsi.berkeley.edu/).

David Lee, *Cognitive Linguistics: An Introduction* (Oxford University Press 2001).

Friedrich Ungerer and Hans-Jörg Schmid, *An Introduction to Cognitive Linguistics* (2d ed. Longman 2006).

René Dirven and Marjolijn Verspoor (with many chapter authors), *Cognitive Exploration of Language and Linguistics* (John Benjamins Publishing Company,1998).

Zoltán Kövecses, *Metaphor: A Practical Introduction* (Oxford University Press 2002).

John R. Taylor, *Linguistic Categorization* (Oxford Textbooks in Linguistics, 3rd ed., 2003).

The Oxford Handbook of Cognitive Linguistics (Dirk Geerearts and Hubert Cuyckens, eds., Oxford University Press 2007).

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Methods in Cognitive Linguistics (Monica Gonzalez-Marquez, Irene Mittelger, Seana Coulson, and Michael J. Spivey, eds., John Benjamins Publishing Company, 2007).

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Mark Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason* (University of Chicago Press 1987).

George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (Basic Books 1999).

Mark Turner, *The Literary Mind: The Origins of Thought and Language* (Oxford University Press 1996).

Jerome A. Feldman, *From Molecule to Metaphor: A Neural Theory of Language* (MIT Press, A Bradford Book 2006).

James Paul Gee, *An Introduction to Discourse Analysis: Theory and Method* (Routledge, Taylor and Francis Group, 2nd ed., 2005).

Alice Deignan, *Metaphor and Corpus Linguistics* (Johns Benjamins Publishing 2005).

George Lakoff, *Moral Politics: How Liberals and Conservatives Think* (University of Chicago Press, 2nd ed., 2002).

Steven Pinker, *The Stuff of Thought: Language as a Window into Human Nature* (Viking 2007).

Gerald M. Edelman and Giulio Tononi, *A Universe of Consciousness: How Matter Becomes Imagination* (Basic Books, 2000).

Antonio R. Damasio, *The Feeling of What Happens: Body and Emotion in the Making f Consciousness* (Harcourt and Harvest Books, 1999).

I further recommend to an interested scholar the following list serve:

Cognitive Linguistics List Serve (cogling-l@mailman.ucsd.edu). To

    subscribe or unsubscribe via the World Wide Web, visit

    http://mailman.ucsd.edu/mailman/listinfo/cogling-l or, via email,

    send a message with subject or body 'help' to cogling-l-

    request@mailman.ucsd.edu.

Academic law library collection development specialists should also look

at the rest of the books in the bibliography and at the various book series,

especially at these three book series:

    Cognitive Linguistics Research.

    Applications of Cognitive Linguistics.

    Cognitive Theory of Language and Culture Series.

Public Law Libraries and Private Law Libraries

The following core collection is recommended for a major research level

public law library, such as a state law library or a public law library in a major

metropolitan area. I would not recommend this collection for a middle-sized

county law library, but the list provides a good list for individual items that might be purchased first if the library has a patron interested in the topic.

A major private law library might consider purchasing from this list if a researcher at the firm is involved in forensics or if, as a part of pro bono work, the researcher is involved in language access issues, such as work with an Access to Justice Commission. Please use the annotations in the general bibliography to determine the appropriateness for the purpose at hand.

Bibliography of Books on Language and Law (http://www.illa.org/BIBLIO.HTM).

International Association of Forensic Linguists (http://www.iafl.org/).

David Lee, *Cognitive Linguistics: An Introduction* (Oxford University Press 2001).

Friedrich Ungerer and Hans-Jörg Schmid, *An Introduction to Cognitive Linguistics* (2d ed. Longman 2006).

Zoltán Kövecses, *Metaphor: A Practical Introduction* (Oxford University Press 2002).

The Oxford Handbook of Cognitive Linguistics (Dirk Geerearts and Hubert Cuyckens, eds., Oxford University Press 2007).

George Lakoff and Mark Johnson, *Metaphors We Live By* (University of Chicago Press 1980, 2003 afterword).

George Lakoff, *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind* (University of Chicago Press 1987).

Steven L. Winter, *A Clearing in the Forest: Law, Life and Mind* (University of Chicago Press 2001).

Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (Basic Books 2002).

Gary B. Palmer, *Toward a Theory of Cultural Linguistics* (University of Texas Press, 1996).

Methods in Cognitive Linguistics (Monica Gonzalez-Marquez, Irene Mittelger, Seana Coulson, and Michael J. Spivey, eds., John Benjamins Publishing Company, 2007).

Zoltán Kövecses, *Metaphor in Culture: Universality and Variation* (2005).

Cognitive Linguistics: Current Applications and Future Perspectives (Gitte Kristiansen, et al, eds. Mouton de Gruyter: A Mouton Reader 2006).

Zoltán Kövecses, *Metaphor and Emotion: Language, Culture, and Body in Human Feeling* (Cambridge University Press 2000).

Zoltán Kövecses, *Language, Mind, and Culture: A Practical Introduction* (Oxford University Press 2006).

James Paul Gee, *An Introduction to Discourse Analysis: Theory and Method* (Routledge, Taylor and Francis Group, 2nd ed., 2005).

I recommend the following source to a researcher or developer of plain language materials:

Frame Net (http://framenet.icsi.berkeley.edu/).

Legislative Advocacy and Political Discourse

The following titles are recommended for law librarians, lawyers, judges, and other concerned citizens who do legislative advocacy or participate in political discourse. A law library that serves patrons so involved should consider them for purchase. For further information on the use of these materials, check out my section below on research "As an aid to political and legislative needs", beginning at page 53.

George Lakoff, *The Political Mind: Why You Can't Understand 21ˢᵗ-Century American Politics with an 18ᵗʰ-Century Brain* (Viking, 2008).

Drew Westen, *The Political Brain: The Role of Emotion in Deciding the Fate of the Nation* (Public Affairs, 2007).

Thom Hartmann, *Cracking the Code: How to Win Hearts, Change Minds,*
and Restore America's Original Vision (Berret-Koehler Publishers,
2007).

Research Aims and Methods

While research aims and research methods would seem to be different
topics, I have found that, since the aim often helps define the appropriateness of
the method, the two topics are best discussed together. I may appear to bend more
toward discussing one than the other in parts of this section, but that is mostly
because I see no reason to go over obvious points, such as the aim of the
academic research of cognitive linguistics.

Research methods in cognitive linguistics and cognitive science

There are several types of research conducted by cognitive linguists and
cognitive scientists. Researchers will base their use depending on the hypothesis
to be tested and the overall aim of the project. A good source on the uses and
limitations of the different methodologies is *Methods in Cognitive Linguistics*.[24]

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24. METHODS IN COGNITIVE LINGUISTICS (Monica Gonzalez-Marquez, et
al., eds., 2007), [hereinafter cited as METHODS IN COGNITIVE LINGUISTICS].

The increasing use of empirical studies by legal scholars generally, but especially forensic consultants, may make these research methods useful to them.

Introspection

The first and most common approach to research in linguistics generally has been the method of introspection. *Introspection* as used here means that a linguist simply studies a sentence that the researcher makes up, to show something about the language being studied. The sentence must be one that would sound proper to a native speaker. This form allows the researcher to concentrate on the specific issue at hand, because he will automatically make the sentence as simple as can be, while still displaying the point being made. Examples using introspection abound for those writing about grammar from the generative grammar tradition or writing about polysemy, the multiple meanings attributed to words.

This method is also useful to expand on research from other studies, such as those listed below. For instance, a researcher may inquire why a certain perfectly acceptable sentence is never found in corpus studies. What makes it acceptable, but not natural or easily spoken by the population of the corpus study.

The method obviously has its limits. The study of pragmatics, or words in everyday use, requires a researcher to go out and find some actual sentences spoken by actual users. Likewise, discourse analysis, the study of the underlying

meaning found in a conversation between two users of the discourse, requires actual data from "real people".

Cognitive linguists, who are trying to link their studies with actual hard evidence, have shown a tendency over the years to employ the other methods more and to discount the use of introspection.[25] Nevertheless, the use of introspection for some law researchers may have its place, especially when working in such fields as transactional law or creating pleading forms.

Experimental studies

Borrowing mostly from methods used in cognitive psychology and neuroscience, cognitive linguists have begun acquiring evidence by running subjects through tests. Most such testing is done using undergraduate students as test subjects in labs at universities because of the relatively low cost and availability of subjects.[26] Researchers have slowly begun to expand on the types of subjects used, especially when the areas of concern contain cultural components or dialectical components.

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25. Raymond W. Gibbs, Jr., *Why Cognitive linguists Should Care More About Empirical Methods*, METHODS IN COGNITIVE LINGUISTICS, 2-18, at 3-5.

26. Sometimes, students are required to participate as part of a class assignment.

The most typical studies of this sort have the subjects sitting with the tester or at a computer and making choices, such as word associations. For example, the tester says a word and the student then says the next word that pops into her head. Or the tester shows a subject a picture and asks for the most appropriate word to describe it. The variations for such test can be quite complicated, including, for instance, priming the subject with prior conversation in order to observe discourse features or features of primed metaphorical uses.

Observation can be made in a variety of ways, including mostly obviously the actual conscious choices made. Additional information can be obtained from recording the amount of time taken by the subjects, given different priming. Others observations can be such things as eye movement, reflex movement, and even neural path activity, using fMRIs and PET scans.

Survey

Another method, of obvious familiarity to librarians, is the survey. This is simply a testing pattern used over larger groups. Surveys can be either multiple choice or open-ended. Closely linked to this method is the use of the focus group.

As noted below in my discussion of political discourse, focus groups are also used by political think tank researchers to solicit what words and phrases are more emotively convincing to the groups being studied. Although these

researchers may not realize it, they are conducting cognitive studies in the sense that cognition and reaction are the key components of their study.

Corpus studies

A *corpus* in this sense is a very large data bank of writings (or sayings turned into text), usually of a certain type. The most common ones are now in machine-readable form. There are very large corpuses[27] that are commonly used by cognitive linguists. The most common way to explore them for research is through collocation of words, or, as we librarians would refer to it, a Boolean search of two or more words within a certain distance. Other uses are simply examining the intended use of a specific word. For instance, a researcher might be interested whether a word or particular phrase is used more in its literal sense or in one or more metaphorical senses. The obvious search is simply a key-word-in-context.

Given that American law has several rather substantial corpuses, such as Lexis and Westlaw, I am surprised that corpus studies by linguists have not taken place on a large scale. Other significant corpuses would be a data base of court forms or one of court testimony through use of appellate transcripts.

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27. An alternate commonly found plural is *corpora*.

There are issues regarding the use and limit of corpus studies. I particularly like the discussion in Alice Deignan's *Metaphor and Corpus Linguistics* (Johns Benjamins Publishing 2005).

Discourse analysis and sociolinguistics

Discourse analysis is its own sub-field of linguistics, and some maintain that it has its own theoretical basis. The dominant research mechanism for discourse analysis is to take large pieces of actual conversation set in a particular discourse environment and to analyze it according to particular factors. See the recommended reading James Paul Gee, *An Introduction to Discourse Analysis*.

Closely related to discourse analysis, but with considerably different methodology and output, is sociolinguistics. Essentially, sociolinguistics uses quantitative analysis of linguistic features, somewhat similar to general sociology studies. Recent years have also seen an attempt to return to more informal approaches to discourse, under the headings sociocultural linguistics and ethnolinguistics.

Both of these fields have seen the intrusion of cognitive linguistics as a theoretical aspect in their development of hypotheses for field testing and reporting. However, this has mostly been done by those already in the fields, rather than cognitive linguists looking to broaden their research queries. There have been several essay compilation books, however, that try to bridge the gap

between discourse analysis and cognitive linguistics, including one with the subtitle "Bridging the Gap."[28] Partly, this has resulted from conferences that include both discourse analysis and cognitive linguistics as their joint aims.[29]

Cultural anthropological studies

Cultural anthropology researchers have also taken up cognitive linguistics in order to improve their enterprise. They continue to use traditional anthropological means to gather data, but now have also been using experimental methods as outlined above. Of particular interest is the sub-field of applied cultural linguistics, which examines the teaching of second languages with a specific attention to the problems of both cultural framing and the effect of primary language itself on the concepts that learners have.[30]

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28. DISCOURSE AND COGNITION: BRIDGING THE GAP (Jean-Pierre Koenig, ed., 1998).

29. One annual conference is titled Conceptual Structure, Discourse and Language, which has run since 1994. The Conceptual Structure, Discourse and Language Association was formally created in 2005, and it is now considered the American version of a chapter of the International Cognitive Linguistics Association. (Other countries actually have associations with "Cognitive Linguistics" in their name.)

Research methods in applied linguistics and in similar training settings

Applied linguistics refers to the use of linguistics in training students (or, for our purposes, also litigants) in a second language or in a particular dialect or discourse (such as legal discourse). The methods noted below are used for general study of the adequacy of such programs as English as a Second Language (ESL) programs and literacy programs. Their use for cognitive linguistics comes when a particular component of the course is changed in order to adapt to findings in cognitive linguistics to see if the change is effective.

With regard to a public law library, I suggest that the use of classrooms to train self represented litigants is in some ways similar to the settings used in applied linguistics. Here is an interesting example: Several law libraries have classes wherein the teacher or video or computer program uses the metaphor of a journey when talking about going to court.[31] The litigant must face certain obstacles along the path, overcoming them on a timeline in order to maintain

30. See APPLIED CULTURAL LINGUISTICS: IMPLICATIONS FOR SECOND LANGUAGE LEARNING AND INTERCULTURAL COMMUNICATION (Farzad Sharifian and Gary B. Palmer, eds., 2003).

31. There is also an interactive computer program intended to help self represented litigants write their own divorce pleadings, called the A2J program, which uses this metaphor. See the A2J Author program at http://www.kentlaw.edu/cajt/A2JAuthor.html.

proper progress and reach the goal of a decision by the court and usable judgment. The SOURCE-PATH-GOAL schema is a common one that cognitive linguists refer to often. This use of a cognitively recognizable feature aids learning. Understanding the cognitive features of this technique, a teacher can improve the training and can test the appropriateness of its use in various circumstances.

Standard comprehension testing

Obviously, students get tested to see how well they are doing. Indeed, a passing grade is often needed for students to get through a course, such as an ESL course, in order to qualify for a certificate or to continue in school in a foreign country. These same tests can be used in a statistical way to see if changes in pedagogy based on cognitive linguistics findings help increase scores. Some literacy programs and ESL programs test on factors such as business and legal discourse understanding. Unfortunately, most comprehension testing is usually only available in a curriculum setting, and not, for instance, at a clinic for self represented litigants.[32] However, a short form of such testing, done almost like an evaluation, after, say, a substantive law program, may lead to valid results.

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32. Many public law libraries and some public libraries often hold such classes, which are often taught by members of the local bar association or by librarians themselves.

Visual and audio cues—Video studies and classroom observation

Videos of the students in classrooms and other such settings, or actual classroom observation, can provide research data for those wishing to observe the comprehension levels of the participants. Non-verbal cues can be gained in this way. Also, they provide a record of the kinds of questions that get asked, which can be useful for interpreting the kinds of issues that the students are having. Cognitive and cultural linguistics aids substantially in appreciating just what is going on.

Statistical data based on other factors

The trial courts in several counties in the San Joaquin Valley in California participated in a study to determine whether it was cost-effective to maintain their self help centers and discovered that, yes indeed, it is cost-effective. The reason given by the consultant and agreed to by the California Administrative Office of the Courts is that self represented litigants are better prepared to go to court. They also usually have a better understanding of the law and comprehend the court orders subsequent to their cases. The first factor leads to fewer continuances, which in itself is sufficient to save the courts so much time and money that the self help centers effectively pay for themselves. The second factor has been

observed in this and other settings and, for example, is considered a reason for the decline in returns to court for child custody and support hearings.

Add to that another finding in a different study that, when judges take the time to explain their decisions to self represented litigants from the bench during and at the conclusion of the trial, the comprehension level is actually quite high. Unfortunately, those litigants with Limited English Proficiency, and especially those using an interpreter, fail to comprehend the judges' rulings as well.

Given these results, the Self Represented Litigation Network has been working on the issue of making court orders more comprehensible through creating Plain English forms and instructions. In one project, the plan is also to translate them into Spanish. For that project, the SRLN has also added a cognitive linguist on the evaluation panel.

There is some difficulty regarding using data such as re-hearings and continuances as statistical information regarding comprehension levels in self represented litigants, since obviously a large number of other factors, e.g., loss of job, a move to another state, etc., can affect such numbers. There is also the difficulty that, after the divorce, many former spouses agree informally to changes in child payment and visitation schedules, and sometimes the custodial parent simply gives up and does not pursue making the other parent meet his or her responsibilities.

Nevertheless, the use of statistical data from these types of sources (comparison of continuances before and after, etc.) brings in a completely

different way of looking at such programs. In a sense, the question moves from whether the litigant understood the court order to whether the actions of the litigants show that the greater societal goal—lasting, efficient justice—was obtained. Certainly, the more immediate goal, saving the courts' time and money, is also a valuable one, one worth identifying, studying, and using as a reasons for making systemic changes in the court system.

As an aid to legal scholarship

In recent years, academic legal scholars have significantly increased their use of empirical studies. Faculty hiring at law schools has changed, as new professors now often have significant graduate education and background in other academic disciplines, including linguistics. Except in areas like intellectual property, most of these scholars will have completed their other work in the social sciences or the humanities, rather than the physical or biological sciences. Since law is essentially a human enterprise, this makes sense.

The social sciences have used a different level of rigor in their statistical studies, when compared to the hard sciences. One would hardly expect a physicist to think in terms of standard deviation as an acceptable display of a physical law. Physicists will often spend years trying to determine why an event that occurs once in a million happens at all. Social scientists cannot possibly spend time on such small anomalies. They have much larger ones to contend with.

Nevertheless, the social sciences seem to add some rigor to law in the sense of making legal rules more compatible with our observations of the world and human behavior within it. This is the appeal of jurisprudential work such as law and economics.

However, the social sciences themselves are now due to be shaken up by the arrival of the various fields of cognitive studies. Cognitive studies connect the biological sciences with the social sciences, and the increasing understanding of the biochemical nature of life is giving the biological sciences ever more rigor as well. The social sciences will be obtaining more rigor in the coming decades. Certainly psychology is already greatly affected. Eventually, economics and sociology will be as affected. Academic law librarians will be facing new professors, many of whom will have a background in cognitive studies in conjunction with their social science background. As law is a language-based discipline, cognitive linguistics will become a routine component of the work of many. It is only a matter of time.

All this is in addition to those professors with a background in philosophy, literature, and cultural studies. Since humanities are not traditionally as concerned with statistical rigor, the numbers who have taken on cognitive studies has been mostly those who simply see greater insight through its methods. Among the humanities, linguistics, and especially cognitive linguistics is developing more rigor, so much that at some point it may well have to be re-labeled as a social science.

All this little rant is meant to say is that the infusion of cognitive linguistics into the law school environment will be broad-based, not just with the present contingent, which is mostly constitutional law and jurisprudence scholars. For most academic law librarians, it will be slow. But occasionally, a new professor will arrive and demand materials on cognitive linguistics. The truth is, the cost, for an academic law library, is not very much. If the law school is at a university campus that has a linguistics department with a serious theoretical component, one willing to venture beyond the traditional generative grammar school to include cognitive linguistics, then the law library may need little more than the core collection. Electronic access to journals and the SSRN for linguistics would complete the picture. (Unfortunately, many linguistics titles in SSRN are subscription-based, rather than free, like most law school SSRN titles.)

Linguistic barriers

Law researchers and law librarians may wish to enter into a study of cognitive linguistics for purposes of dealing with issues of linguistic barriers to others in understanding various legal problems. (As the previous sentence sounds almost tautological, it perhaps point out the cognitive strength of the word "barrier", something we readily understand, even in this metaphorical use.) This section will discuss three instances of "others" for whom the researchers may conduct such research.

Self represented litigants

Self represented litigants are a significant part of the American legal scene, often litigating half or more of the cases in certain areas, such as family law and landlord-tenant law. Yet the portion of research done on their behalf is incredibly small. With the turn to Access to Justice Commissions in the bar and judiciary and the advent of the Self Represented Litigation Network, this need is beginning to be addressed. (Some academic institutions have been involved in these efforts, most notably the Harvard Law School, but they are generally behind the ball compared to the courts and the bar.)

The barriers to understanding legal discourse for self represented litigants are significant, as has been noted.[33] However, the application of cognitive

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33. See my article, Dyer, *Queen*, at 718, n.2, and elsewhere throughout the article, for a list of such sources. For application of cognitive linguistics to these issues, see Charles R. Dyer, *Cultural Competency: A Layered Problem*, 34 NEWSLETTER OF THE STATE, COURT, AND COUNTY LAW LIBRARIES SPECIAL INTEREST SECTION OF THE AMERICAN ASSOCIATION OF LAW LIBRARIES, #2, at 4-7 (Spring 2008); Charles R. Dyer, *Cultural Competency Redux*, 36 NEWSLETTER OF THE STATE, COURT, AND COUNTY LAW LIBRARIES SPECIAL INTEREST SECTION OF THE AMERICAN ASSOCIATION OF LAW LIBRARIES, #1 (Winter 2010), *forthcoming*. These articles can be located at

http://www.aallnet.org/sis/sccll/membership/newsletter.htm.

linguistics to this problem is very recent. The Self Represented Litigation Network has added a cognitive linguist as a consultant on its review and evaluation process for some of its work in developing plain language materials for self represented litigants. In part, this has come about because of my own participation in the Network's research panels, but mostly it has occurred as workers in the field who also serve on these panels have noted the continuing aggravation of litigants over matters of legal discourse, even with plain language materials and mediated aid.

Legal services organizations are required to develop Limited English Proficiency Plans (LEP) in order to receive federal funding. Essentially, this amounts to having staff on board who can converse in the language of the people they serve, rather than rely on the litigants bringing in relatives or friends to aid in translation. A constant concern is with the underlying issue of what the legal services organizations label "cultural competency". This is another way to refer to the fact that word-for-word translation does not suffice when the litigant does not have the same cognitive and cultural understanding as other Americans have. I have appended to this essay two small articles that I wrote that help describe this problem.

Librarians at public law libraries and, to a lesser extent, those academic law libraries that are open to the public also have met the issue of cultural competency, not to mention the more general barrier of legal discourse. There is also a movement just underway to include more representation by law librarians,

and general public library librarians, in Access to Justice Commissions. As such, some law librarians may be called upon to contribute to the work of helping remove barriers to access due to language issues.

Law students

As a former teacher of legal research and writing, I remember the difficulty that students have with legal analogy. They wish all law was "black letter" law—immutable, unchanging, with well-defined classifications necessary for application of the law in particular instances. Law professors strive to help their students learn "to think like a lawyer." My hope, as a researcher, was also to find a way to train self-represented litigants quickly, so they too could think like lawyers.

What I learned instead was that lawyers actually think like everyone else does. Subsequent to that thought process, they translate their ideas into the recognized patterns of legal discourse, with a presumption that the well-made legal argument applies a rule (made from an induction of case law and statutory sources) deductively to the particular situation at hand.[34]

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34. *Compare* Solan's observation of judges pretending to add rigor to their opinions after the fact in order to be more influential with their colleagues and to lay down a usable precedent, LAWRENCE M. SOLAN, THE LANGUAGE OF JUDGES 2, 118-38 (1993); Posner's many comments in this regard, *see generally*, RICHARD

What really happens is a different type of reasoning altogether. Instead of an inductively created rule, the rules we really use are concepts based on the (real or presumed) experience of a prototypical situation. This "rule" is a parable or story, and the many presumed elements[35] within the story are also prototypes born from previous parables or stories. Our common biological and cultural experiences are added to our individual experiences in creating these prototypes. The prototypes are then employed by analogy and often, by extension, by metaphor. We use so much metaphor that nearly 80 percent of our concepts and nearly 100 percent of our abstract concepts are metaphors.

The brain interprets the sense in their several modalities and reacts by causing motor movement. The human brain, among other higher animals, also creates concepts, the process of which enables learning and long-term memory. The human brain also manages to create more concepts through "radial extension" and metaphor. These devices enable planning and the development of

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A. POSNER, HOW JUDGES THINK (2008); and the discussion of the metaphors used in Analytic Philosophy by Lakoff and Johnson in their philosophical text, GEORGE LAKOFF AND MARK JOHNSON, PHILOSOPHY IN THE FLESH: THE EMBODIED MIND AND ITS CHALLENGE TO WESTERN THOUGHT 440-468 (1999). Of course, this observation, or corollaries to it, has been made by many jurisprudential scholars, ever since the Legal Realists.

35. By elements, I mean prototypes of the protagonist, action, objects, background, antagonist, barriers, etc., of the story.

a full language, as opposed to the "proto-languages" of animals. Animals have phonemes and separated phrases that represent literal concepts, such as warnings, pain, joy, aggression, and stylized court practices. It is generally thought that no animals besides humans have long-range planning capabilities, at least not represented in their language. Some scientists are not sure of this limit, but the relatively much smaller number of phrases that animals posses, compared to humans, seems to point to this fact.

Oliver Wendell Homes said that "the life of the law is experience." To that, a neuroscientist or a cognitive linguist would say that the "life" of all discourses, legal, professional, cultural, and social, is experience. By use of analogy, metaphor, and radial extension from prototypes, all abstract concepts are created.[36]

This improved understanding of how lawyers actually think makes my own enterprise easier, but it is still far from easy. For years, law professors have written about various metaphors employed in law, albeit not always with the understanding of the very deep and stacked amount of metaphors we all use in our daily expressions and routine concepts. Only a very few law professors have joined the rising tide of humanities and social science professors who have become acquainted with prototypical logic, as formulated by cognitive linguists.

36. Even mathematics is based on metaphor. *See* GEORGE LAKOFF AND RAFAEL E. NÚÑEZ, WHERE MATHEMATICS COMES FROM: HOW THE EMBODIED MIND BRINGS MATHEMATICS INTO BEING (2000).

Until the field is plowed in depth, we as attorneys will still rely all too heavily on the metaphors of our discourse to make complete translation of legal concepts into plain language possible. Nevertheless, we are off to a good start.

What does this mean for law librarians? As the work of Steven Winter and others becomes more popular, academic law librarians will have to meet the research needs of faculty who make the paradigm shift. In part, this bibliographic essay is meant to address that need. But also, the teaching of basic legal research and writing will need to be adjusted as legal process courses take into account the new paradigm. Since academic law librarians are sometimes involved in teaching such courses, they too will need to gear up to meet this challenge.

As an aid to political and legislative needs

Cognitive linguistics has already had a significant effect on American political discourse. I added a section to the bibliography on political writings from a cognitive linguistics viewpoint. Politics is a component of the overall legal community's environment, and, of course, very large numbers of lawyers are involved in political and legislative activities.

George Lakoff has developed a political theory based on cognitive linguistics wherein he proposes that the differences between conservative and liberal viewpoints in American political discourse is based on differing underlying metaphors to family life. He holds that the conservative viewpoint employs the

metaphor of the strict father family model, while the liberal viewpoint employs that of the nurturant parent model. Many liberal commentators and political operatives have studied his works and now use his theory as part of their work.

Lakoff and others believe, however, that it is the conservatives who actually use cognitive elements to greater advantage in their political discourse than liberals. While not subscribing to his theory, conservative think tanks do use focus groups to determine the types of framing that carry stronger emotional weight with potential voters. This appeal to the emotional side of politics makes sense from a cognitive linguistics and cognitive science viewpoint.

As an instructor in legislative advocacy for many years, I, like the conservative think tank researchers, had found that emotional stories carry more influence than statistical charts when trying to convince legislators and political support groups of a certain legislative position on a bill. Having now read the several books on the topic of political discourse in this bibliography, I have incorporated them into my own training for legislative advocacy.

Since many law librarians are involved in legislative advocacy, I highly recommend that they consider reading some of these works. For this purpose, probably the book to start with is Thom Hartmann's *Cracking the Code*. For a translation from its intended purpose of political discourse to that of legislative

advocacy, readers may wish to visit my own website, wherein I have included a

computer presentation on this very point.[37]

The Bibliography

The Scope of the Bibliography

The following selective bibliography is a list of books and other sources

with the primary intent that many of these sources would form the core group of

materials in cognitive linguistics in a research law library. All of the books below

were examined to some extent, and most were read from cover to cover.

Some few books that might have been included were not examined for

lack of resources within the time frame. Most of these were generally very

expensive books that were not locally available, so in a sense they were books

that are already limited in their appeal. Many books were examined, but left off

this list, because they were determined not to be helpful for purposes of this

selective bibliography.

For purposes of containing the bibliography, I have also chosen not to

include many notable works from authors whose perspective differs from

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37. Charles R. Dyer, "Legislative Advocacy: A Cognitive Approach,"

materials from a presentation at the Equal Justice Conference, Minneapolis, MN,

May 6, 2008, at http://www.charlesrdyer.com/EJC2008legadv.asp.

cognitive linguistics theory. I have included some works that were written for more popular audiences, such as several books by noted cognitive psychologist Stephen Pinker. There are components within his titles included that blend well with cognitive linguistics theory, while other parts do not. They are given mostly for the purposes of creating a perspective of where such literature and cognitive linguistics both fit within the larger sphere of writings on linguistic theory generally. Specifically excluded are books that are totally outside of or opposed to cognitive linguistics theory, such as the very substantial collection of contemporary works written completely from the viewpoint of generative grammar theory.

Not noted here is the work being done through periodical literature, which is mostly field studies not directly applicable to the work of law librarians, nor necessary for establishing a core library on cognitive linguistics for most law-related users. However, sources for periodical literature are noted. Cognitive linguistics is found in many disciplines, and more are appearing at a rapid rate, so a comprehensive periodical literature search would be massive and immediately out of date. For the field of cognitive linguistics itself, the best database is the one maintained for the International Cognitive Linguistics Association by the publisher Mouton de Gruyter, noted below. It is not exhaustive, as cognitive linguists also publish in journals in related fields.

There are several books that are compilations of individual essays on a particular topic. Cognitive linguists often publish such books, and many are

simply compilations of field reports that happen to be on a similar topic. In a sense, they are the equivalent of a seminar issue of a journal. There are also many such compilation books that are actually the proceedings of an academic conference or of a particular track within an academic conference. Generally, such books are excluded, but I put a few in. Those chosen were chosen because of their theoretical content—in other words, the overall topic of the particular work is one that I found instructive to law researchers. Typically, I was led to such works because the books were referenced in other works that were similarly on point. A few compilation volumes are noted here because they contain landmark articles that are constantly cited.

A Selective Bibliography on Cognitive Linguistics for Law Libraries

Within each section, these books are placed in an order that roughly approximates their importance to me as a law researcher who works in cognitive linguistics, as that was how I composed the list and chose between those selected and those which were not selected. When the bibliography was near completion, I thought of re-organizing them in alphabetical order, but decided to keep them in this order instead, as the alphabetical listing for such small lists does not serve a real purpose. Please note that the books selected for the core collection lists are not necessarily the first books listed in each section, but I also retained their listing priority in those lists as well.

Library Reference Sources

Cognitive Linguistics Bibliography (Main Editors: Sabine De Knop, Beate

Hampe, René Dirven, and Birgit Smieja) ISSN 1861-048X.

> "The Cognitive Linguistics Bibliography is an electronic database
>
> consisting of 7000 entries covering a wide range of subjects within the
>
> broader field of cognitive linguistics." Maintained by the German
>
> publisher Mouton de Gruyter on behalf of the International Cognitive
>
> Linguistics Association, the database is available in English to libraries at
>
> an annual cost of US $125 or Euro 100. The database is also available, as
>
> of the Summer of 2008, free to members of the ICLA. (Individual
>
> membership costs about US $80.) Entries include bibliographic
>
> information with abstract and "keywords," its term for subject entries. It is
>
> librarian friendly, in that it is searchable by ISBN or ISSN or publisher, as
>
> well as author, title, date, keywords, or "full text", i.e., it searches the
>
> abstracts for words. The search engine and exporting functions are good.
>
> There are entries for books, journal articles, articles in edited volumes, the
>
> edited volumes themselves, theses, and manuscripts. The entries are
>
> submitted by ICLA members.

The Linguist List (http://linguistlist.org/).

> "The Linguist List is dedicated to providing information on language and
>
> language analysis, and to providing the discipline of linguistics with the

infrastructure necessary to function in the digital world. Linguist maintains a web-site with over 2000 pages and runs a mailing list with over 25,000 subscribers worldwide. Linguist also hosts searchable archives of over 100 other linguistic mailing lists and runs research projects which develop tools for the field, e.g., a peer-reviewed database of language and language-family information, and recommendations of best practice for digitizing endangered languages data. Linguist is a free resource, run by linguistics professors and graduate students, and supported entirely by donations." The number of materials on cognitive linguistics is not as extensive as the Cognitive Linguistics Bibliography, but it is a very useful list for getting a start in other areas of linguistics, such as corpus studies and discourse analysis. It also has a useful directory of linguists worldwide, including most cognitive linguists. None of the mailing lists listed here pertain either to cognitive linguistics or law.

Bibliography of Books on Language and Law

(http://www.illa.org/BIBLIO.HTM).

This list is a general list of books on language and law maintained by the International Language and Law Association, or, more specifically, by Professor Peter Tiersma of the Loyola Law School (New Orleans, LA). It is not specific to cognitive linguistics, and, in fact, has few, if any cognitive linguistics books on it.

International Association of Forensic Linguists (http://www.iafl.org/).

> The IAFL maintains a bibliography in its Resources section on its website. It contains many items, both books and journal articles. "This bibliography is intended to cover all notable references about forensic linguistics. The latter is defined broadly, rather than narrowly, so that some references which are related to the field but are not strictly speaking 'forensic' or 'linguistic' are nevertheless included." However, it is not specific to cognitive linguistics, and there is little there on cognitive linguistics.

Cognitive Linguistics List Serve (cogling-l@mailman.ucsd.edu).

> To subscribe or unsubscribe via the World Wide Web, visit http://mailman.ucsd.edu/mailman/listinfo/cogling-l or, via email, send a message with subject or body 'help' to cogling-l-request@mailman.ucsd.edu. The International Cognitive Linguistics Association maintains a list serve that is open to non-ICLA members. One can subscribe at http://lists.ucsd.edu/mailman/listinfo/cogling-l. Most of the posts on the Cognitive Linguistics List are announcements about meetings and conferences. There are occasional announcements about new publications. If a collection development specialist is interested in staying abreast of the latest publications in the field, this is one avenue for current information.

Frame Net (http://framenet.icsi.berkeley.edu/).

"The Berkeley FrameNet project is creating an on-line lexical resource for English, based on frame semantics and supported by corpus evidence. The aim is to document the range of semantic and syntactic combinatory possibilities (valences) of each word in each of its senses, through computer-assisted annotation of example sentences and automatic tabulation and display of the annotation results. The major product of this work, the FrameNet lexical database, currently contains more than 11,600 lexical units (defined below), more than 6,800 of which are fully annotated, in more than 960 semantic frames, exemplified in more than 150,000 annotated sentences. It has gone through five releases, and is now in use by hundreds of researchers, teachers, and students around the world." Frame Net was invented by one of the founders of cognitive linguistics, Charles J. Fillmore. Fillmore's theoretical addition to cognitive linguistics is called Frame Semantics. Since Fillmore has published rarely, and then only in journals, he is not otherwise present in this bibliography, except when referred to by others. Frame Semantics is considered a precursor to Construction Grammar. For a short essay on Fillmore, see http://www.unistuttgart.de/linguistik/sfb732/files/hamm_framesemantics.pdf.

Some basic journals in cognitive linguistics:

Cognitive Linguistics, the journal of the International Cognitive Linguistics Association.

    Subscription comes with ICLA Membership. Also available online from Mouton de Gruyter. (Mouton, 1990-).

Pragmatics and Cognition (Benjamins, 1993-).

Annual Review of Cognitive Linguistics (Benjamins, 2003-).

Constructions (peer-reviewed e-journal, University of Düsseldorf, 2004-).

Cognitextes, Review of AFLiCo, the French Cognitive Linguistics Association, (peer-reviewed e-journal, AFLiCO 2007-).

Cognitive Linguistics: Cognition, Language, Gesture (Cognitive Science Network (CSN), a division of Social Science Electronic Publishing (SSEP) and Social Science Research Network (SSRN) 2008-).

Book series:

Cognitive Linguistics Research (CLR), series editors Dirk Geeraerts, Rene Dirven, John Taylor, Ronald Langacker (Mouton, 1990-).

Human Cognitive Processing (HCP), series editors Marcelo Dascal, Ray Gibbs, and Jan Nuyts (Benjamins, 1998-).

Cognitive Linguistics in Practice (CLiP), executive editor, Günter Radden

    (Benjamins, 2004-).

Constructional Approaches to Language, series editors Miriam Fried, Jan-Ola

    Østman (Benjamins, 2004-).

Language, Context, and Cognition, series editor Anita Steube (Mouton, 2004-).

The Expression of Cognitive Categories (ECC), series editors Wolfgang Klein,

    Stephen Levinson (Mouton, 2006-).

Applications of Cognitive Linguistics, series editors Gitte Kristiansen, Michel

    Achard, Rene Dirven, Francisco J. Ruiz de Mendoza (Mouton, 2006-).

Advances in Cognitive Linguistics, series editors Vyv Evans, Ben Bergen, and

    Jørg Zinken (Equinox, first title forthcoming 2007).

Cognitive Theory of Language and Culture Series (University of Chicago Press,

    1995-).

Please note the large number of new book series that have been added in recent years. Also, note that the Mouton de Gruyter Company and the John Benjamins Publishing Company both have a number of other book series in other areas of linguistics. The University of Chicago Press website catalog uses a subject category "Cognitive Science and Linguistics," of which the vast majority are on cognitive linguistics. The Oxford University Press also published many books on cognitive linguistics, but their subject arrangement in their website is a

broad category of linguistics, which includes many from other fields of linguistics.

Introductory Cognitive Linguistics Textbooks

I highly recommend that a law librarian or legal researcher interested in learning about cognitive linguistics first read one of several introductory textbooks in order to get a good overview of the subject area. Such reading may suffice for purposes of becoming familiar enough to recommend book purchases and further reading to interested patrons. For purposes of creating research projects or trying to apply cognitive linguistics within the workplace itself, I would recommend further study. For the legal researcher, these books would help define the component of cognitive linguistics that appears most relevant to the researcher's own studies.

Lee, David. *Cognitive Linguistics: An Introduction*. Melbourne: Oxford University Press 2001.

> Written both as an introductory textbook and as an introduction to cognitive linguistics for the public, this is the most accessible book for those first trying to learn what cognitive linguistics is. Its layout is easily grasped, and the reading level is within the grasp of librarians without resort to other material. It has been reprinted many times. I highly recommend it to anyone starting out. At $45 in paperback, it is somewhat pricey for its size, having for some reason not been included in the Cambridge Textbook series. I further recommend it because the author uses two chapters to relate cognitive linguistics to discourse studies, which is another area of linguistics that can be used in a complementary manner with cognitive linguistics.

Croft, William, and D. Alan Cruse. *Cognitive Linguistics*. Cambridge, UK: Cambridge Textbooks in Linguistics, 2004.

> Croft and Cruse and well-respected linguists who have written for a long time. They did not start out as cognitive linguists. This is one of the most thorough of the introductory textbooks on cognitive linguistics and is heavily used in many linguistics departments.[38] It is more difficult than

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38. Please note that I list the Evans and Green text as an encyclopedic work in the next section of this bibliography, even though it uses the term "Introduction" in its title. It, too, is used as a classroom introductory text.

some of the other textbooks. It also spends more time on issues that are of primary significance to linguistics, but not so important to law librarians, such as cognitive grammar. This book would be useful for those who intend to do further study in cognitive linguistics, as it introduces more concepts that are employed in the field and it references about three times as many sources. The layout is from broad concept downward, rather than from basic components upward, which is how as David Lee's text is laid out.

Ungerer, Friedrich, and Hans-Jörg Schmid, *An Introduction to Cognitive Linguistics* (2d ed. Longman 2006).

This introductory text is more on the order of a nutshell book. It is very bare bones. While not a thorough introduction, it would indeed be very helpful for someone wanting to get some sense of most of the themes from cognitive linguistics that are used in disciplines other than linguistics, e.g., by law professors and anthropologists. The first edition, published in 1996, was essentially the first introductory textbook in the field. In this second edition, they added some update from more recent findings and put more effort into construction grammar and conceptual blending, which were treated very minimally in the first edition.

Dirven, René, and Marjolijn Verspoor (with many chapter authors). *Cognitive*

Exploration of Language and Linguistics. Amsterdam: John Benjamins

Publishing Company,1998.

This introductory text is organized differently from those that deal

specifically with cognitive linguistics. This is the English version of an

introductory text also written in six other European languages, as part of a

project to create a common introduction for foreign exchange

undergraduate students. The chapters follow the traditional disciplines

within linguistics generally, such as lexicology, morphology, syntax,

phonetics and phonology, cultural studies, pragmatics, historical

linguistics, and language comparison. What makes it "cognitive" is the use

of concepts from cognitive linguistics at every step within these chapters.

This introductory text might be helpful to a law researcher versed in other

types of linguistics, especially those trained by linguists of the generative

grammar tradition. It may also be helpful to those who have only a cursory

introduction to cognitive linguistics, such as those who have researched

only conceptual metaphor theory, and want to branch out farther, but

desire a more traditional approach than one that is completely through a

cognitive linguistics lens.

Kövecses, Zoltán. *Metaphor: A Practical Introduction*. New York: Oxford University Press, 2002.

> Kövecses, a Hungarian linguist with an international reputation, has written a good introduction to the cognitive theory of metaphor. For those wishing a faster introduction to this particular theory that offers more completeness in scope that the landmark texts and subsequent field studies, this is a good book. It would be particularly useful to law professors concerned with word interpretation and its implications, e.g., should a corporation have first amendment rights.

Taylor, John R. *Cognitive Grammar*. Oxford: Oxford Textbooks in Linguistics, 2002.

> Taylor's text is a very readable presentation of grammar from the cognitive perspective. At 620 pages, it is considerably larger than most such textbooks, but grammar from a cognitive perspective requires inquiry into most of the common areas of regular cognitive linguistics, plus a concentration on those problems that cognitive linguists feel are necessary to discuss in order to show how cognitive linguistics solves problems that Chomskian transformational generative grammar cannot. This also includes incursions into kinds of problems that the ancillary studies of generative grammar, namely pragmatics and relevance theory, study. However, a caution should be given, as Taylor does to some extent in his book, that grammar is a part of the natural process of construction of

meaning and that the grammatical components, according to some cognitive linguistics, may not be very separable from other types of meaning construction. In this regard, I would warn the reader that this book pays more attention to Langacker's Cognitive Grammar and similar theories than to Goldberg's Construction Grammar, Croft's Radical Construction Grammar, or Fauconnier's Mental Spaces theories. As the two construction grammar theories are in some sense a reaction to Cognitive Grammar, the books does help elucidate the elements of that theory and aid a researcher who would later progress on to the other two theories.

Taylor, John R. *Linguistic Categorization*. Oxford: Oxford Textbooks in Linguistics, 3rd ed., 2003.

Taylor's text is a well-developed portrayal of prototypicality and the cognitive linguistics onslaught to traditional Aristotelian categories. This book would prove very useful in helping academics reach the depth of understanding of the shift in paradigm that cognitive linguistics presents. For those who might struggle with Lakoff's *Women, Fire, and Dangerous Things*, or Winter's *A Clearing in the Forest*, this book can help.

Langacker, Ronald W. *Cognitive Grammar: A Basic Introduction*. New York: Oxford University Press, USA, 2008.

As Langacker, one of the founders of cognitive linguistics nears the end of his brilliant career, he decided to write an introductory text to his theory of

cognitive grammar. Normally he is given to lengthy and thorough

explanations that only another linguistics professor could love, but this

book is a remarkable condensation and an exceptionally nice read. It is

more recent that Taylor's introductory text, *Cognitive Grammar*. It does

not elucidate on other theories on grammar, but is a valuable first

introduction to his theory, and it is still 584 pages.

Encyclopedic Works

Geerearts, Dirk, and Hubert Cuyckens, eds. *The Oxford Handbook of Cognitive*

Linguistics, New York: Oxford University Press, 2007.

This excellent, monumental 1,300 page book is a must have for any major

research law school library. As it was produced in late 2007, I held off

producing this bibliography for several months in order to be able to

include this stupendous work. Each of its 49 chapters was written by a

leader in the field, many typically written by the most noted expert on the

topic of the chapter. Each chapter contains an extensive bibliography of

the reference sources used for the chapter. The book can be put to best use

by someone who is somewhat familiar with cognitive linguistics, having

read at least one of the basic introductory texts listed below (Lee, ?, Croft

and Cruse, ?, and Ungerer and Schmidt, ?) and perhaps one or two of the

more specific works. The *Handbook* is especially useful in that each

author is careful to give the history and lay of the land with regard to the topic of the chapter.

Evans, Vyvyan, and Melanie Green. *Cognitive Linguistics, An Introduction*. Mahjah, NJ: Lawrence Erlbaum Associates, Inc. (In USA and Canada), Edinburgh University Press (rest of the world), 2006.

This 830 page work has been highly praised by leaders in the field, primarily because the two authors were so good and precise at describing the various movements and theories within cognitive linguistics. The book has 23 chapters divided in four parts: an overview of cognitive linguistics, cognitive semantics, cognitive grammar, and the last chapter, which takes a try at the philosophical implications of cognitive linguistics. The book is a bit short on its description of construction grammar and on applications of cognitive linguistics to other disciplines, but it does a better job of showing the inter-relational aspects of the many theories covered than the *Oxford Handbook of Cognitive Linguistics*, probably simply because the two same authors wrote all the chapters.

Lakoff, George, and Mark Johnson. *Metaphors We Live By*. Chicago: University

of Chicago Press 1980, 2003 afterword.

> The publication is this book is marked by many as the beginning of
>
> cognitive linguistics. It continues to be quoted, and its examples have
>
> become commonplace in their use throughout the profession. George
>
> Lakoff, a linguistics professor from the University of California, Berkeley,
>
> and Mark Johnson, a philosophy professor from the University of Oregon,
>
> detail how we use metaphor in our everyday speech, so much that we no
>
> longer even notice, but that the effect of their use remains a component of
>
> our understanding. This was the first work to maintain that much
>
> semantic understanding is actually done on the subconscious level.
>
> Empirical proof came within a few years from cognitive psychology and
>
> cognitive science. This work spurred on much of that development and
>
> led to the notion of the second generation (the now accepted generation) of
>
> cognitive science.

Lakoff, George. *Women, Fire, and Dangerous Things: What Categories Reveal*

about the Mind. Chicago: University of Chicago Press, 1987.

> Of all the landmark book in the field of cognitive linguistics, this one is
>
> probably the one that would have the greatest effect on the field of law. It
>
> is a seminal work which is difficult to understand, mostly because the

theory runs so counter to that to which most Western scholars were trained. Herein, Lakoff develops his theory as to how the human mind creates categories based on prototypes, rather than according to traditional Aristotelian notions of essences. His notion of idealized cognitive models is another elaboration of the broader notion of frames, and this work helps to create depth and spur others to further work in that inquiry. If this work proves difficult, I recommend Taylor's *Linguistic Categorization*, which also includes more recent development in the line of inquiry begun here.

Langacker, Ronald W. *Foundations of Cognitive Grammar, Volume 1:*

Theoretical Prerequisites. Stanford: Stanford University Press, 1987.

Earlier work by Langacker helped establish him as one of the founders of cognitive linguistics, but this work provided a classic portrayal of theory that helped tie together the several disparate developments in cognitive linguistics at that time. Practically every author since has cited some portion of this text as a beginning point or a tie-in concept when writing on cognitive linguistics. Historically, this work was the one that drew the line between cognitive linguistics and its predecessor, Chomskian generative grammar, by going directly after cognitive aspects of grammar, rather than concentrating on more pragmatic aspects of semantics. It is a long read, but worth it for the intense scholar.

Langacker, Ronald W. *Foundations of Cognitive Grammar, Volume 2:Descriptive Application*. Stanford: Stanford University Press, 1991.

> The companion volume shows a wonderful variety of cases wherein Langacker has applied his principles of cognitive grammar. These expansions of examples are arranged by the normal topics, e.g., nouns, clauses, allowing one to use portions of the book intermittently and still retain a sense of the whole.

Winter, Steven L. *A Clearing in the Forest: Law, Life and Mind*. Chicago: University of Chicago Press, 2001.

> This is the first and so far only classic treatment of the law from a cognitive linguistics perspective. Law Professor Winter combines a survey of cognitive linguistics with discussion of legal doctrine as examples, pursuing an underlying theme that neither traditional legal process theory nor postmodern legal theories, such as critical legal studies, can avoid numerous difficulties because they rely on traditional Aristotelian categories. He shows how interpretations can be changed in order to make law more sensible, i.e., make it match more with our reasonable expectations, if our embodied nature can be realized.

Lakoff, George, and Mark Turner. *More Than Cool Reason: A Field Guide to Poetic Metaphor.* Chicago: University of Chicago Press, 1989.

This landmark book used conceptual metaphor theory to examine the traditional use of metaphor of poetry and literature. The authors showed that such use is on a continuum with our use of metaphor in more ordinary cognitive functions. In the process, they debunk older theories as to the semantics of metaphor. They also employ the newly created concept of image schema in one of its earliest uses.

Fauconnier, Gilles. *Mental Spaces: Aspects of Meaning Construction in Natural Language.* Cambridge, UK: Cambridge University Press, 1994.

This book is one of the earlier places where Fauconnier introduces his theory of mental spaces. Although philosopher Mark Johnson is credited with first espousing the notion of mental spaces, it is Fauconnier who gives it scientific rigor through reports of cognitive science experiments and further elaboration. In a sense, mental spaces is a broader term for both frames and idealized cognitive models, but with more emphasis placed on the creation of such spaces in context, rather than as universal or near universal observations. The combination with other aspects of cognitive linguistics is quickly obvious, such as metonymy. A more fully developed accounting of this theory is found in Fauconnier and Turner's *The Way We Think*, which came out eight years later and includes more information from non-linguistic fields.

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Fauconnier, Gilles, and Mark Turner. *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities.* New York: Basic Books, 2002.

> This is a summation of their work on mental spaces. Those wishing to gain considerable insight into mental spaces, and their linguistic corollaries, frames and idealized cognitive models, would profit from this read. Much of the discussion is actually cognitive linguistics in different words. Their work in mental spaces, itself being a more inclusive concept than metaphor, schema, or frame, and then the blending of them, gives a very substantial grounding for theoretical aspects of cultural linguistics and thinking in general. This work should be considered a classic if, for no other reason, it has been quoted so much since even before it came out. Frankly, it is one of the best books I have ever read.

Palmer, Gary B. *Toward a Theory of Cultural Linguistics*. Austin: University of Texas Press, 1996.

> Although this work may not appear on other lists of landmark books in cognitive linguistics, it should. Professor Palmer is a cultural anthropologist, whose aim in this book is to merge cognitive linguistics and cultural anthropology. His work has been highly influential to a core group in anthropological field studies. Furthermore, the book also forms a basic theoretical tenet for the use of cognitive linguistics in teaching second languages. See, for instance, *Applied Cultural Linguistics* in the next section. He also presages later studies, such as Kövecses' work on

cultural metaphor. (Even in 1996, he was fully aware of Kövecses'
studies.)

Other Books in Cognitive Linguistics

Gonzalez-Marquez, Monica, Irene Mittelger, Seana Coulson, and Michael J.

Spivey, eds. *Methods in Cognitive Linguistics*. Amsterdam: John Benjamins

Publishing Company, 2007.

This book is a collection of essays from faculty participants at the several

Empirical Methods in Cognitive Linguistics (EMCL) Workshops, which

started in 2003 and are now held annually in conjunction with various

international conferences. The EMCL Workshops are intended to train

dissertation level students in the several methods used for empirical

studies. While the book itself will not train one in the use of the various

software programs and equipment that are taught at the Workshops, it does

highlight the methodologies and their uses and limitations, and gives

sample results. The book would be useful to any researcher or member of

a research panel, especially in establishing a proper method to study a

proposed hypothesis. Many of the methods would be directly usable in a

legal discourse environment. (See discussion in the essay beginning at

page 41.)

Kövecses, Zoltán. *Metaphor in Culture: Universality and Variation*. New York: Cambridge University Press, 2005.

> Kövecses's work is an in-depth cross-cultural study of metaphor. His findings are that some of the metaphors thought to be universal, i.e., understood by all cultures, are actually cultural, just broadly known. Also, metaphors in use sometimes have different connotations in different cultures. He develops some useful theoretical observations from these results. This book is a valuable resource for anyone planning to do a discourse study or similar study at a law library or courthouse. The variant cultures that need to be handled in such locales would give rise to variant semantics for self represented litigants.

Kristiansen, Gitte, Michel Achard, René Dirven, Francisco J. Ruiz de Mendoza Ibáñez, eds. *Cognitive Linguistics: Current Applications and Future Perspectives*. Berlin: Mouton de Gruyter (A Mouton Reader), 2006.

> This collection of very noteworthy recent reports of research is intended for readers already versed in cognitive linguistics. It would be very useful for those intending to create empirical studies employing cognitive linguistics in the law library or courthouse.

Jan-Ola Östman and Mirjam Fried, eds. *Construction Grammars: Cognitive Grounding and Theoretical Extensions.* Amsterdam: John Benjamins Publishing Company (Constructional Approaches to Language series), 2005.

"Construction grammars are form-meaning configurations larger than morphemes and words which are conventionally conceptualized as a whole." This is linguist-speak for phrases that have definitive meaning in certain discourses or universally. This is follow-up work on Charles Fillmore's studies and provides an interesting link with discourse analysis. This type of analysis would be very good in working with the disconnect between lay people and legal discourse. An example of a construction grammar might be "discrete legal services", which is thought by lawyers working with self represented litigants to be clearer to lay people than "unbundling," since it does not entail baffling metaphorical reference, but is still as vague to them because they lack the frame provided by common legal discourse.

Langacker, Ronald W. *Concept, Image and Symbol: The Cognitive Basis of Grammar*. Berlin: Mouton de Gruyter, 1991.

This is a collection of articles by one of the founders of cognitive linguistics that he re-wrote to provide a more coherent whole. They articles cover some of the same ground as parts of his two-volume classic *Foundations of Cognitive Grammar*. Some articles cover areas not covered in the other work.

Heine, Bernd. *Cognitive Foundations of Grammar*. New York: Oxford University Press, 1997.

> Heine, a longtime linguist from Germany, does not, as one would expect, follow in the footsteps of Langacker. Rather, he starts from the European perspective of "typological universal grammar," which seeks to find the cross-linguistic regularities of grammar from examining many languages. But it differs from this tradition by resting on the claim that language structure can best be understood with reference to the conceptual foundations on which it rests. Thus, he finds himself exploring cognitive linguistics, but keeping one foot in the traditional Chomskian generative grammar. In other words, he hopes to use cognitive bases to end up with a traditional grammar. It is an interesting alternative view that I do not find convincing.

Goldberg, Adele E. *Constructions at Work: The Nature of Generalizations in Language*. Oxford: Oxford University Press, 2006.

> Although she borrows from cognitive science and from other linguistics fields and theories, this work is primarily cognitive linguistics. *Constructions* are various types of pairings of words that occur routinely. What causes them to pair up is their root semantic content. Constructions are learned, and once learned, they help formulate the person's deployment of concepts in later situations. This relatively new area of linguistics is expanding cognitive linguistics beyond its preference for

universals. This is a bridge between universals and context-sensitive semantics.

Lakoff, George, and Rafael E. Núñez, *Where Mathematics Comes From: How the Embodied Mind Brings Mathematics into Being*. New York: Basic Books, 2000.

This important book establishes how the conceptual theory of metaphor can be made to apply to a discipline thought to be based solely on abstract ideas. Lakoff, the linguist, teams with Núñez, a cognitive psychologist with a background in mathematics education for children. Together, they explore how the embodied mind can come up with mathematical ideas. They report on the psychological and linguistic experiments that show how humans create the various concepts of math. Since mathematical ideas are a component of logic, this book can provide background for those attempting to understand legal process theory, how it develops, and its pitfalls.

Turner, Mark. *Cognitive Dimensions of Social Science: The Way We Think About Politics, Economics, Law, and Society.* New York: Oxford University Press, 2001.

Turner, one of the most wide-ranging of writers in cognitive linguistics, tackles the task of examining how social science employs cognitive integration (use of mental spaces and its coordinate effects, e.g., metaphor) in creating both hypotheses and overall professional discourse. The book

is good background, but I wish he would have honed in more specifically on the individual disciplines listed in the title.

Fauconnier, Gilles, and Eve Sweetser, eds. *Spaces, Worlds, and Grammar*. Chicago: University of Chicago Press, 1996.

This is a compilation of several renowned linguists who examine how linguistic form is used to mark mental space structure. In effect, it is an expansion of cognitive grammar up to the level of mental spaces, just as other writings on mental spaces have examined other aspects of cognitive linguistics.

Kövecses, Zoltán. *Metaphors of Anger, Pride, and Love: A Lexical Approach to the Structure of Concepts*. Amsterdam: Johns Benjamins Publishing Company, 1986.

In one of the early works on "emotional" metaphors, Kövecses develops a large set of examples that are used subsequently by other writers on metaphor. In that sense, it is a foundational book.

Kövecses, Zoltán. *Emotion Concepts*. Springer-Verlag, 1990.

Kövecses carries further his work on emotional metaphors. His study is one of very few on emotion concepts.

Kövecses, Zoltán. *Metaphor and Emotion: Language, Culture, and Body in Human Feeling*. New York: Cambridge University Press, 2000.

This book challenges the simplistic beliefs that emotion is either biological or cultural by showing how human emotions are to a large extent

"constructed" from individuals' embodied experiences in different cultural settings. Kövecses demonstrates how cultural aspects of emotions, metaphorical language, and human physiology are all part of an integrated system. The book could be useful in dealing with litigants in an emotional state, or at least in studying how courts and law libraries handle them.

Kövecses, Zoltán. *Language, Mind, and Culture: A Practical Introduction*. New York: Oxford University Press, 2006.

Kövecses offers a unified account of meaning in a wide variety of social and cultural phenomena, using cognitive linguistics as his mode. He believes cognitive linguistics is a broader enterprise than is commonly accepted–both inside and outside the field. He includes use of cognitive capacities that humans possess independently of their ability to use language.

Ortony, Andrew, ed. *Metaphor and Thought*. Cambridge, UK: Cambridge University Press, 2nd ed., 1993.

This particular compilation contains many classical articles on cognitive linguistics that are constantly referred to, including some written by non-linguists, such as philosopher John R. Searle and science sociologist Thomas Kuhn. First written in 1979,then updated in 1993, it is a classic.

Fox, Barbara A., Dan Jurafsky, and Laura A. Michaelis, eds. *Cognition and Function in Language*. Stanford, CA: Center for the Study of Language and Information, 1999.

This book contains a selection of papers from the Third Conference of Conceptual Structure, Discourse, and Language held at the University of Colorado, Boulder, 1997. While mostly field studies of little interest to law librarians, the book includes two landmark articles: Seana Coulson and Gilles Fauconnier, "Fake Guns and Stone Lions: Conceptual Blending and Privative Adjectives," and George Lakoff, "The System of Metaphors for Mind and the conceptual System of Analytic Philosophy: A Study of the Metaphorical Constraints on Philosophical Discourse." The latter is an excellent example of the blending of cognitive linguistics and discourse analysis.

Coulson, Seana. *Semantic Leaps: Frame Shifting and Conceptual Blending in Meaning Construction*. New York: Cambridge University Press, 2001.

An expansion of her dissertation under Gilles Fauconnier, this work combines Fauconnier and Turner's Mental Spaces and Conceptual Blending Theory with Charles Fillmore's Frame Semantics Theory. She also includes a chapter on frame shifting in metaphor and helps make the case that Blending Theory may in some instances account for metaphorical uses better than Conceptual Metaphor Theory. The book also has a chapter on moral discourse and cultural models, but it would aid

those researching political discourse more than those researching legal discourse.

Michael Achard and Suzanne Kemmer, eds. *Language, Culture, and Mind*. Stanford, CA: Center for the Study of Language and Information, 2004.

This book compiles 35 papers chosen from the 75 given at the 6th Conceptual Structure, Discourse, and Language Conference in 2002. The papers were rewritten for this book. "The papers in this volume represent a wide spectrum of perspectives, methodologies, and theoretical frameworks. What unites all of them, and brings them together ... is that each addresses in its own way the fundamental and age-old problem of the way that language relates to human culture and cognition." While not extraordinarily different from many books excluded from this bibliography, I included it because it was about 2002 when a significant number of scholars began to first look at the cultural components of cognitive aspects of discourse analysis. Thus, there is a larger than usual amount of philosophical perspective within these field reports. It also marks that time when cognitive linguistics authors would delve into philosophical aspects without feeling the need to respond to critics from a generative grammar background.

Sharifian, Farzad, and Gary B. Palmer, eds. *Applied Cultural Linguistics:*

Implications for Second Language Learning and Intercultural

Communication. Amsterdam: John Benjamins Publishing Company, 2003.

Cultural linguistics is a sub-field of cognitive linguistics in that it

specifically melds cultural anthropology and cognitive linguistics. See

Palmer's *Toward a Theory of Cultural Linguistics*, in the previous section.

This book discusses cultural linguistics as an aspect of second language

learning. With respect to the issues of Limited English Proficiency and

Cultural Competency, two related issues facing courts, legal service

agencies and libraries, the use of the findings in this book and others by

these authors cannot be overemphasized. Included within this work is also

discussion of cultural sub-groups who speak in dialects other than the

standard business dialect of their country. While representing a small

contingent of scholarship, it is one that the justice system should be made

aware of.

Dancygier, Barbara, and Eve Sweetser. *Mental Spaces in Grammar: Conditional*

Constructions. Cambridge, UK: Cambridge University Press, 2005.

Both Professors Sweetser and Dancygier have been interested in

conditional statements and the words that make them conditional for some

time. They joined forces, not only to work together, but to incorporate the

Mental Spaces and Conceptual Blending Theory of Gilles Fauconnier and

Mark Turner. There has been a substantial amount of use of the theory on

issues of grammar, so much that Mental Spaces theory now is considered

one of the four theories dealing with cognitive aspects of grammar.

Conditionals is one of the areas that is particularly hard to grasp, from a

grammatical perspective, as their use is so often dependent on the situation

and discourse occurring between speaker and listener. This book is

included for researchers who would like to take a cognitive approach to

logical presentations, such as courtroom testimony.

Werth, Paul. *Text Worlds: Representing Conceptual Space in Discourse.* New

York: Pearson Education, Inc. (Addison Wesley Longman Singapore (Pte)

Ltd.), 1999.

Paul Werth died in 1995, and this work was published from his notes by

his family. The book is well organized nonetheless, but it does suffer from

some shortcomings as a result of the death of the author. Werth was a

discourse analyst trained in generative grammar, but who found and

became excited with cognitive grammar. The conceptual space he refers to

is the very large space of a whole discourse environment, the complete

background behind a statement made within a discourse, a "text world".

As such, it should not be confused with Fauconnier and Turner's Mental

Spaces and Conceptual Blending Theory, although there are obvious

complementary components within this theory. (Werth did not get the

chance to read or work with Fauconnier or Turner, which is our loss.) The

great value of this book is his attempt to create mental spaces for

discourse, and he adds things that are different from Mental Spaces

Theory, such as sub-areas or "sub-worlds". This book could present some

novel viewpoints to a researcher writing on legal discourse.

Elizabeth Couper-Kuhlen and Bernd Kortmann, eds. *Cause, Condition,*

Concession, Contrast: Cognitive and Discourse Perspectives. Berlin: Mouton

de Gruyter, 2000.

> This particular book of individual essays on "the 4 C's" is included
>
> because the four C's are so very important as elements of legal discourse.
>
> Some of the articles include not just cognitive linguistics and discourse
>
> analysis, but also consideration of treatment from other traditions, such as
>
> Sperber and Wilson's relevance theory, which is grounded in Grice's
>
> pragmatics theory, which is based on traditional logic approaches, such as
>
> that of Bertrand Russell. How cognitive linguistics handles these matters
>
> should be of interest to jurisprudence scholars. Plain language researchers
>
> wishing to understand natural language discourse in relation to discourse
>
> that assumes traditional logic, such as legal discourse, may find this
>
> helpful as well.

Johnson, Mark. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press, 1987.

> This is a landmark book for the philosophy built from findings in cognitive science and cognitive linguistics that is known variously as embodiment philosophy, embodied philosophy, and experientialism. It explores the ways that meaning arises from bodily sensory experience. The philosophy contends that the mind-body distinction found in philosophy from Descartes on is wrong. He particularly lays into Frege and later philosophies of language. Johnson is also said to have invented the term *image schema* in this book, used to great extent by cognitive scientists subsequently.

Johnson, Mark. *Moral Imagination: Implications of Cognitive Science for Ethics*. Chicago: University of Chicago Press, 1993.

> Johnson, a philosophy professor and one of the creators of the conceptual metaphor theory, applies the work of cognitive linguistics (actually more than cognitive science) to moral theory. This is a precursor to the landmark book, *Philosophy in the Flesh*. It was also useful in giving George Lakoff his basis for *Moral Politics* and his subsequent political activism.

Johnson, Mark. *The Meaning of the Body: Aesthetics of Human Understanding*.

Chicago: University of Chicago Press, 2007.

Philosopher Mark Johnson once again tackles the meaning of the body and
its philosophical implications. This time, he uses considerably more
findings from neuroscience, especially those noting the emotional roots of
all understanding and value judgment. (See the works by Antonio
Damasio listed in this category.) Johnson employs American pragmatist
philosophy, modernized with embodiment philosophy, and neuroscience
to show the aesthetic core to our understanding the world. It has been
obvious to scientists, philosophers, and theologians that any theory of
knowledge needs to have some sort of overall elegance. This book tells
you why.

Lakoff, George, and Mark Johnson. *Philosophy in the Flesh: The Embodied Mind
and Its Challenge to Western Thought*. New York: Basic Books, 1999.

This monumental work, 583 pages, plus one of the best list of references
on the topic, is considered foundational reading for the philosophy of
experientialism, as Lakoff and Johnson now call embodiment philosophy.
The book sets out a review of metaphor and the use of folk theory in
cognition. Then it systematically goes through several basic philosophical
ideas to show their basis in conceptual metaphor. Then it examines other
Western philosophies and applies the theory to them. It then concludes
with a short espousal of embodied philosophy.

Turner, Mark. *The Literary Mind: The Origins of Thought and Language*. New

York: Oxford University Press, 1996.

> This is a short book that unifies some central problems in cognitive
>
> science, cognitive linguistics, neuroscience, psychology and philosophy.
>
> Turner contends that literary mental powers are the basis for everyday
>
> thought. This book is especially helpful in explaining the power of the
>
> "story", and the fact that the story is the basis of our conceptual
>
> understanding.

Turner, Mark. *The Artful Mind: Cognitive Science and the Riddle of Creativity*.

New York: Oxford University Press, 2006.

> Although longer, this book is somewhat of a companion to his earlier
>
> works on cognitive linguistics and literary works. It does, however, also
>
> include more references to mental spaces, reflecting his recent work with
>
> Gilles Fauconnier. It is perhaps the other half of the work done by Nancy
>
> Andreason.

Feldman, Jerome A. *From Molecule to Metaphor: A Neural Theory of Language*

Cambridge, MA: MIT Press,(A Bradford Book), 2006.

> This book is an excellent wrap-up of the work of the several fields that
>
> link together, as the findings of cognitive linguistics go hand in hand with
>
> findings in cognitive science, artificial intelligence studies, and
>
> neuroscience. Essentially, there is nearly a continuous line between the
>
> chemical reactions in the brain and the metaphorical thinking process and

mental spaces described by cognitive linguistics. Where the links are not

certain is more along the lines of "not yet found how they work," but the

models from one field work very well in aiding the creating of testable

hypotheses in the next. For those who may doubt cognitive linguistics,

this book, showing the correlations in the other fields, should help to

convince them.

Levin, Samuel R. *Metaphoric Worlds: Conceptions of a Romantic Nature.* New

Haven, CT: Yale University Press, 1988.

This is an example of an early use of the cognitive theory of metaphor,

otherwise known as the conceptual theory of metaphor. It is historically

interesting in the Levin tries to relate the theory both to his own studies of

Romantic poets and to modern philosophers.

Tom Ziemke, Jordan Zlatev and Roslyn M. Frank, eds. *Body, Language and

Mind*. *Volume 1: Embodiment*. Berlin: Mouton de Gruyter; 2007.

Roslyn M. Frank, René Dirven, Tom Ziemke, and Enrique Bernárdez, eds. *Body,

Language and Mind*. *Volume 2: Sociocultural Situatedness.* Berlin: Mouton

de Gruyter; 2008.

The first volume focuses on *embodiment*, i.e., the bodily and sensorimotor

basis of phenomena such as meaning, mind, cognition, and language. The

second volume addresses *social situatedness*, i.e. the ways in which

individual minds and cognitive processes are shaped by their interaction

with sociocultural structures and practices. The writers in the first volume

dwell mostly on theoretical issues, making the volume very good for those

studying the core concepts that cross between disciplines in the various

cognitive studies. The writers in the second volume, while incorporating

more case studies, report their findings in connection with the larger

themes. This volume also includes some very theoretical works. This

volume would be very good as background for those wishing to apply

cognitive linguistics and other cognitive sciences to such needs as helping

litigants understand legal discourse.

Andrea Tyler, Mari Takada, Yiyoung Kim, and Diana Marinova, eds. *Language*

in Use: Cognitive and Discourse Perspectives on Language and Language

Learning. Washington, DC: Georgetown University Press, 2005.

This collection of papers comes from the 2003 Georgetown University

Round Table, an annual linguistics event with different themes each year.

During the early 2000's, the GURT worked primarily from a discourse

analysis perspective, with participation from such discourse analysis

heavyweights as Deborah Tannen. There are several articles that would be

useful for a legal researcher interested in cognitive influences on discourse

analysis. Except for Adele Goldberg, I did not recognize any authors as

being heavily implanted in the cognitive linguistics tradition. There is a

whole section on second language learning, but surprisingly there is no

mention of cultural linguistics or applied cultural linguistics.

Sociolinguistics, which has in recent years developed into a strict

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statistical discipline, is used heavily here. Nevertheless, the incursion of

cognitive science into discourse analysis is evident here.

Books on Other Types of Linguistics That Are Useful to the Problem

Please note that these books were chosen for their potential for

application. An exhaustive search of other types of linguistics was beyond the

scope of the bibliography. The ones listed are not necessarily better than others

that were not included, and I have not yet attempted to discern the landmark

books in the other fields.

Gee, James Paul. *An Introduction to Discourse Analysis: Theory and Method*

New York: Routledge, Taylor and Francis Group, 2nd ed., 2005.

This short, but extremely good introduction to discourse analysis, provides

readers a good foundation for this type of linguistics study. Discourse

analysis has matured dramatically since its early expositions in the 1980s

and early 1990s. In the United States, discourse analysis has distinguished

itself from the more European "discourse studies" with its Foucaultian

political component. Discourse analysis provides some real theoretical

observation points for observing language as it is actually used. Discourse

analysis developed from sociology (with some postmodern thought) and,

as such, does not subscribe to Chomskian generative grammar as part of

94

its basis. This distinguishes it from *pragmatics*, which studies the same area, but offers completely different types of analyses. Cognitive linguists believe that discourse analysis will eventually be subsumed into cognitive linguistics, and its compatibility is shown by the joint work of several linguists.

Lawrence Erlbaum Associates, Arthur C. Graesser, et al, eds. *Handbook of Discourse Processes*. Mahwah, N.J.: L. Erlbaum, 2003.

This is a good compilation of articles that give a sense of applied discourse analysis. While none of the studies are on legal discourse, they are good examples of discourse studies. Anyone wishing to do adequate examination of discourse practices in a courtroom or at a library reference desk would be advised to read this book.

Lynne Cameron and Graham Low, eds. *Researching and Applying Metaphor*. Cambridge, UK: Cambridge University Press, 1999.

This book collects several field studies and discussions of research methodology on observing the actual use of metaphor in everyday life. Joint studies employing either discourse analysis or corpus studies are combined with observation of cognitive aspects, i.e., observing both the local and universal use simultaneously. This book would be exceedingly useful for someone developing a field study on such problems as studying the loss of meaning for self represented litigants trying to work with legal discourse.

Jean-Pierre Koenig, ed. *Discourse and Cognition: Bridging the Gap*. Stanford,

CA: Center for the Study of Language and Information, 1998.

    Covering such topics as conceptual structure and grammar, discourse,

metaphors, mental spaces, and the semantics/pragmatics interface, this

work is useful at aiding the potential for theoretical blending of discourse

analysis and cognitive linguistics. These very notable authors provide

depth to anyone who is working out the research issues of a viable

linguistic study in a courtroom or law library. Chapters 11 and 12 of

Lee's *Cognitive Linguistics: An Introduction* would provide a good

foundation for reading this work.

Katz, Albert N., Cristina Cacciari, Raymond W. Gibbs, Jr., and Mark Turner.

Figurative Language and Thought. New York: Oxford University Press, 1998.

    These four noted linguists engage in a dialogue on why we speak

metaphorically. The book is an interesting reflection on metaphor in use,

with implications for discourse analysis. It is a short book that can

provide a lot of theoretical information to anyone developing an empirical

study, such as an examination of discourse in a courtroom or law library.

It is for the advanced student.

Adam Jaworski and Nikolas Coupland, eds. *The Discourse Reader.* New York:

Routledge, 1999.

    This book has a definite international feel and is broader in philosophical

perspective than the *Handbook of Discourse Processes*. It carries article

from the more American style of discourse work, often called "discourse

analysis", which tend away form political judgment of finding, and the

more European style of discourse work, often called alternatively

"discourse studies", which takes its cue from Michel Foucault and similar

critical philosophers that discourse necessarily affects political belief, and

blending into "interactional sociolinguistics," which comments on how

society affects language. This book is mostly useful for the present

concern in that it shows broadly some of the different themes and

approaches taken to discourse throughout academia and internationally.

Deignan, Alice. *Metaphor and Corpus Linguistics*. Amsterdam: Johns Benjamins

Publishing, 2005.

Deignan is one of the leading linguists combining cognitive linguistics and

corpus studies. Corpus studies is the systematic use of a corpus (i.e., a

very large amount of written information from a well understood source)

for studying how words correlate. Deignan displays how corpus studies

can show how often certain words are used in metaphorical ways, as

opposed to basic uses. Her explanation of methodology and discussion of

ways of avoiding experimental bias make the book particularly strong.

Although pricey, this book is a valuable addition to anyone doing field

work on semantics through corpus studies. A possible corpus for study

would be something like Lexis-Nexis or law journals, or possibly trial

transcripts involving self represented litigants.

Stefan Thomas Gries and Anatol Stefanowitsch, eds. *Corpora in Cognitive Linguistics: Corpus-Based Approaches to Syntax and Lexis.* Berlin: Mouton de Gruyter, 2006.

This a compilation of research reports using cognitive linguistics as a basis for creating hypotheses for corpus studies. The range of the studies is broader than Deignan's book, as it examines other aspects of cognitive linguistics, such as prototypicality, grammar, and synonymy.

Huang, Yan. *Pragmatics*. New York: Oxford University Press (Oxford Textbooks in Linguistics), 2007.

This textbook is included for those who would wish to know how a Chomskian linguist would deal with the changes in meaning that occur in context. Pragmatics grew from the need to study meaning as posited by the "natural language" analytic philosophers, Austin, Grice, Strawson, and Searle. This book is a good explanation of Sperber and Wilson's relevance theory. Huang has read cognitive linguists and introduces them at certain definition points, while maintaining their views do not meet all the goals of understanding meaning. Cognitive linguists would probably grant that and suggest that discourse studies would be a more fruitful method than pragmatics, since pragmatics is "burdened" with the Chomskian body-mind split. Anyone seriously planning to write about cognitive linguistics should read this book or one like it to understand "the other side."

Ifantidou, Elly. *Evidentials and Relevance*. Amsterdam: John Benjamins

Publishing Company, 2001.

> This book has nothing to do with cognitive linguistics, but I included it
>
> because it is an example of the attempts by scholars brought up in the
>
> Chomskian tradition, who have followed the "relevance theory" of Dan
>
> Sperber and Diedre Wilson, to deal with the kinds of problems that led to
>
> the development of cognitive linguistics. The relevance theory has
>
> nothing to do with relevance as it is known in legal discourse, nor do the
>
> "evidentials." Unfortunately, relevance theory seems content with
>
> descriptive understanding of the phenomena and fail to relate how people
>
> come to know the meaning intended.

Mares, Edwin D. *Relevant Logic: A Philosophical Interpretation.* Cambridge,

UK: Cambridge University Press, 2004.

> "The central aim of relevant logicians has been to give a more intuitive
>
> characterisation of deductive inference." Essentially, the hope of this
>
> philosopher is to use relevance theory to make traditional symbolic logic
>
> more applicable to semantics. This book also has nothing to do with
>
> cognitive linguistics, except to show by contrast how bereft of any
>
> meaningful depth this examination turns out to be. The author reverts to
>
> syntactic rules, a la Chomsky, or calls for restricting the semantic
>
> boundaries of the examples he gives. Yet this book is actually more

acceptable within most philosophy departments than an embodiment philosophy such as Mark Johnson's.

Teun A. Van Dijk, ed. *Handbook of Discourse Analysis*. London: Academic Press, 1985, 4 vols.

This is an early landmark work in discourse analysis, with 53 separate articles from very notable scholars. The four volumes are (1) Disciplines of Discourse, which contains an article on linguistics by cognitive linguists founder Charles Fillmore and an article on legal discourse by a European scholar (without use of cognitive linguistics, which was still new then) (2) Dimensions of Discourse, which even includes non-verbal discourse and an article on semantic discourse analysis, (3) Discourse and Dialogue, parent-child, storytelling, etc., and (4) Discourse Analysis in Society. Unfortunately, the set is very expensive and hard to get.

Matthews, Peter H. *Oxford Concise Dictionary of Linguistics.* Oxford, UK: Oxford University Press (Oxford Paperback Reference) 1997, 2005.

Matthews is a Cambridge professor of linguistics. He is a Chomskian generative grammar scholar, so the dictionary is weighted more toward terms and concepts developed in that tradition. Nevertheless, the book is helpful for those who are not versed in the standard vocabulary of linguistics. For in-depth delving into concepts, I would recommend a web search, but this can get you started.

Popular Works: Political Writings of George Lakoff and Others

Who Come from a Cognitive Viewpoint

Lakoff, George. *Moral Politics: How Liberals and Conservatives Think.* Chicago:

University of Chicago Press, 2nd ed., 2002.

Building on the moral law folk theory first enunciated by Mark Johnson in

Moral Imagination, George Lakoff employs two folk theories based on the

family, the strict father model and the nurturant parent model, to describe

the different cognitive frames used by conservatives and liberals,

respectively. The first nineteen chapters are observations made by Lakoff

as a cognitive linguist. The last four chapters describe Lakoff's reasoning

for preferring the nurturant parent model and liberal politics. Note that the

book was published by an academic press, as it is preponderantly a social

science text.

Lakoff, George. *Don't Think of an Elephant: Know Your Values and Frame the Debate, The Essential Guide for Progressives.* White River, VT: Chelsea Green Publishing, 2004.

> This very short book was written explicitly with a liberal bias. It is intended as an instruction manual for Democrats to learn to "frame the debate" employing metaphors that evoke their own values, rather than relying on metaphors created by Republicans. This book employs the folk theories for political debate as described in his *Moral Politics*.

Lakoff, George. *Whose Freedom?: The Battle Over America's Most Important Idea*. New York: Farrar, Straus and Giroux, 2006.

> This book, building on themes from both *Moral Politics* and *Don't Think of an Elephant*, examines how Lakoff contends that conservatives have altered the basic meaning of the word "freedom" in political discourse in order to assert their agenda. He reiterates his theme that American politics is divided by two opposing world views.

Lakoff, George, and the Rockridge Institute. *Thinking Points: Communicating our American Values and Vision, A Progressives Handbook.* New York: Farrar, Straus and Giroux, 2006.

> The Rockridge Institute was a small institute devoted to improving communication for progressives. (It has since dissolved.) George Lakoff was its senior fellow. This book once again presents the theme of improving communications for progressives by employing the findings of

cognitive linguistics. Of the short books on this topic, this is perhaps the easiest to read, if one's purpose is to understand at least some of the underlying theory.

Lakoff, George. *The Political Mind: Why You Can't Understand 21ˢᵗ-Century American Politics with an 18ᵗʰ-Century Brain.* New York: Viking, 2008.

This book delves further into the underlying neuroscience that supports Lakoff's political theory as expressed in his *Moral Politics*. It is not as complete in that regard as is Drew Westen's book, *Political Brain*, which came out a year earlier, but it is easier to read. In that sense, it is meant more for a popular audience than Westen's work. The second part of the book deals with specific political challenges. The third part of the book gets back to the linguistic roots of his political philosophy and their application in his political endeavor.

Westen, Drew. *The Political Brain: The Role of Emotion in Deciding the Fate of the Nation.* New York: Public Affairs, 2007.

Westen is a professor of psychology and psychiatry at Emory University, who also consults with Democratic political leaders on their campaigns. Versed in cognitive psychology and cognitive linguistics, Westen gives a fairly good popular account of how the emotion centers in the brain work in conjunction with our logical reasoning and how political rhetoric, based on cognitive priming, can affect our thoughts. Like Lakoff, his purpose is to improve communications for progressives in political discourse, and the

second half of the book is his take on how that can be done. Westen's

work is dense in spots for the average reader, but easily understandable by

any scholar, lawyer, or librarian.

Hartmann, Thom. *Cracking the Code: How to Win Hearts, Change Minds, and*

Restore America's Original Vision. San Francisco: Berret-Koehler Publishers,

2007.

Hartmann, a progressive political radio commentator, is also a trained

psychologist who has written substantially in non-political areas of

psychology, such as attention deficit disorder. This work employs his

training in cognitive psychology in order to enlighten progressive political

discourse. The devices are much the same as recommended by both

Lakoff and Westen. Hartmann's book is a good step-by-step book on how

to create a convincing argument to an opponent who comes from a

different framing of the problem. I have used the book as a basis for my

own presentations on legislative advocacy at various workshops. It is

shorter, simpler, and more straightforward for that purpose.[39]

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39. Interestingly, although Hartmann is well acquainted with Lakoff's work,

he uses the political philosophies of Thomas Hobbes and John Locke as the core to

the political stances of the conservative and liberal traditions in America,

respectively, rather than Lakoff's theory of the metaphorical use of strict father and

nurturant parent family models. Given the use otherwise of basic cognitive models,

rather than lofty philosophical discourse, I presume that he does so in order to avoid

Domke, David. *God Willing? Political Fundamentalism in the White House, the "War on Terror," and the Echoing Press*. London & Ann Arbor, MI: Pluto Press, 2004.

> Domke, a communications professor at the University of Washington, Seattle, uses this book to report publicly the results of his ten-year examination of word choice employed by George W. Bush in his political speeches. He shows how Bush switched from being a "policy wonk" to a "down home speaker" (my words) through the use of focus groups to determine word choice. He employs Lakoff's views on political discourse to describe how the Republicans became so effective at getting their message across and "staying on message."

Domke, David, and Kevin Cole. *The God Strategy: How Religion Became a Political Weapon in America*. New York: Oxford University Press, 2008.

> While this work does not quote directly from any works on cognitive linguistics, Domke and Coe examine political discourse in a manner that bespeaks of Domke's familiarity with the principles of cognitive linguistics, especially those of storytelling and making cognitive connections, as more fully outlined in Domke's book *God Willing?* and in Lakoff's works.

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the potential for controversy and getting off track that Lakoff's theory might present to some liberals.

Other Popular Works Reviewed

These works are only tangentially connected to cognitive linguistics. Some present alternative evidence that an embodied philosophy may be "correct" in that it is sustained by recent findings. Others simply present problems and solutions that are reminiscent of the thinking of those who have used cognitive linguistics on the same matters. These are listed because they heighten the public's awareness of a possible changing paradigm for human consciousness.

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Andreason, Nancy C. *The Creating Brain: The Neuroscience of Genius.* New
York & Washington, DC: Dana Press, 2005.

Andreason, a psychiatrist with a Ph.D. in English Literature, has been studying "genius" for a couple of decades. Her neuroscience information is engaging. This book does not discuss cognitive linguistics at all. But it does employ a considerably amount of cognitive psychology.

Pinker, Steven. *Words and Rules: The Ingredients of Language.* London: Phoenix, 1999.

Pinker is a well-known cognitive psychologist who, at the time of writing, held a position more closely allied with Chomskian generative grammar than cognitive linguistics, with respect to language. This book, intended for the popular press, is to some basically an apology

for generative grammar. He attempts to show that semantics and syntax

remain separate in the Chomskian tradition, in the face of evidence to the

contrary, by explaining the Chomskian innate capacity of grammar as

having "creative rules." He quotes Lakoff derisively, but simply avoids

discussing his biggest foe, Langacker, or his disciples.

Pinker, Steven. *The Blank Slate: The Modern Denial of Human Nature.* New

York: Viking, 2002.

This is more recent work from Pinker, a well-known cognitive

psychologist who is a Chomskian with respect to language, i.e., that

language is an innate capacity different from other natural capacities. This

book discusses his thinking as of the date of the book, that both nature

(genetics) and nurture (environment) play a role in developing man's

capacity for cognitive processing. That would seem to lead him to be

open to the linked findings between cognitive science and cognitive

linguistics. He remains a traditionalist, however, and still does not

recognize cognitive linguistics as contributing to the debate.

Pinker, Steven. *The Stuff of Thought: Language as a Window into Human Nature.*

New York: Viking, 2007.

This work, more recent than *The Blank Slate*, seems to me to show Pinker

developing a bit further along the line of cognitive linguistics. In this

work, Pinker speaks glowingly of some of Lakoff's work, but calls Lakoff

into question on a number of key points. Pinker remains true to his belief

of language as an innate capacity. Pinker's criticism of Lakoff comes mostly from Lakoff's assertion that conceptual metaphor is so ingrained in use that people do so unconsciously and cannot grasp the core underlying metaphor. Pinker points out that people can and often do.[40]

Gladwell, Malcolm. *Blink: The Power of Thinking without Thinking*. New York: Little, Brown and Company, 2005.

This is a completely popular work in that it was written by a *New Yorker* staff writer with practically no reference to any empirical studies or academic theories, but large amounts of reference to pop culture. The

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40. I agree with Pinker on that point. Several cognitive linguists and philosophers who adhere to cognitive linguistics have noted similar difficulties. WILLIAM CROFT AND D. ALAN CRUSE, COGNITIVE LINGUISTICS (2004), at 207-209; Tim Adamson, *Is Cognitive Linguistics Our Best Phenomenology of Language? A Philosophical Challenge*, LANGUAGE, CULTURE, AND MIND 93-108 (2004). My response would be to incorporate Blending Theory into the discussion of Conceptual Metaphor Theory. Fauconnier and Turner note the facility of humans to "decompress" conceptual blends. See GILLES FAUCONNIER AND MARK TURNER, THE WAY WE THINK: CONCEPTUAL BLENDING AND THE MIND'S HIDDEN COMPLEXITIES 113-138 (Basic Books 2002). See Joseph E. Grady, Todd Oakley, and Seana Coulson, "Blending and Metaphor," METAPHOR IN COGNITIVE LINGUISTICS 101-124 (John Benjamins Publishing Company, Raymond W. Gibbs, Jr., and Gerald J. Steen, eds., 1999), also available at http://cogweb.ucla.edu/CogSci/Grady_99.html.

book is included, however, because his premise is that we often do a lot of thinking subconsciously and are often prepared in unknown ways to accept or reject certain scenarios. Had he done much research in cognitive linguistics, he would have had a considerable amount of rigorous study to validate his claims.

Selected Books on Cognitive Science and Neuroscience

In listing the books on neuroscience that could accompany this bibliography, I debated long and hard. Eventually, I decided to limit the choices to ones that informed me in understanding cognitive linguistics. There are competing theories, and in their telling, some of the authors have increased my own general information about the brain and how it works. However, these authors, when discussing language as a part of brain function, have chosen to accept the generative grammar paradigm that is in opposition to cognitive linguistics or to try to accommodate generative grammar by supposing that a specific language module developed through a long period of evolution. The authors I excluded as a result were Noam Chomsky and his supporters, Stephen Mithen, Terence Deacon, Paul Bloom, William H. Calvin and Derek Bickerton. Most of them fail to account for the evidence available in the writings of Gerald Edelman and Antonio Damasio, which speak against the modularization of higher level brain functions. I included Steven Pinker in the popular works section, but

he, too, fails in this regard, in my opinion. Others prominent authors that I did not

include, mostly because they did not speak to the issues at hand, were Robert

Orenstein and Oliver Sacks. Elkhonon Goldberg, a recent popular author, has a

theory that is in sync with that of Gerald Edelman, but his only work that bears

much on such matters, *The Executive Brain: Frontal Lobes and the Civilized

Mind* (Oxford University Press, 2001) contains only a short section on language.

Edelman, Gerald M., and Giulio Tononi. *A Universe of Consciousness: How

Matter Becomes Imagination*. New York: Basic Books, 2000.

> This is a shortened version of the trilogy of *Neural Darwinism*,
>
> *Topobiology*, and *The Remembered Present*, that Edelman wrote in
>
> 1987-89, with some advances included. Albeit somewhat technical in
>
> spots, most law researchers should be able to wade through it.
>
> Edelman is considered by cognitive linguists to be probably the most
>
> sophisticated among neuroscientists, undoubtedly due in part to the
>
> fact that his theory is wholly compatible with the basic tenets of
>
> cognitive linguistics. Edelman and Tononi present a very good case
>
> that language, and indeed consciousness and the human sense of self
>
> are all evolutionary developments that do not require any special
>
> modules. Indeed, Edelman shows rather well that the brain simply
>
> does not work in modular fashion at all on the large scale. The brain
>
> utilizes neural nets across regions of the brain during cognitive

processing and is wholly embodied as well. Continued evidence from neuroscience to this day seem to back up Edelman's view and help strengthen the case for cognitive linguistics.

Edelman, Gerald M. *Bright Air, Brilliant Fire: On the Matter of the Mind.* New York: Basic Books, 1992.

Written just after his famous trilogy of *Neural Darwinism*, *Topobiology*, and *The Remembered Present*, Edelman here writes a book for the public that gives the core to his theory in fairly straightforward terms. The book has been cited by cognitive linguists ever since. As with *A Universe of Consciousness*, its main tenets continue to get proved by further neuroscience experimentation. This is a good introductory text to Edelman's neuroscience. I still recommend it over Edelman's more recent book, *Wider that the Sky*, partly because it was better written and partly because in the latter book, Edelman ventures into philosophy, but does not complete that task well.

Damasio, Antonio R. *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: Putnam and Avon Books, 1994.

This breakthrough book by eminent neurologist Damasio brought proof from his clinical practice and experimental work, as well as that of others, to show that reason and emotion cannot be separated. In fact, an injury to one of the emotional centers in the brain will lead to a

disoriented, nonrational existence. The title refers to this proof that the mind cannot be separated from the body. He is cited much by cognitive linguists, especially those who work in conceptual metaphor theory, as concrete bodily concepts are most often the root metaphors for our abstract concepts.

Damasio, Antonio R. *The Feeling of What Happens: Body and Emotion in the Making of Consciousness.* New York: Harcourt and Harvest Books, 1999, 2000.

This more extended work follows on the work in *Descartes' Error*, and gives a fuller theory about brain function, but it delves further into consciousness. His theory is compatible with both that of Edelman, although it varies in certain details, and with the general thinking with cognitive linguist circles. Damasio is often cited by cognitive linguists.

Damasio, Antonio R. *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain*. Orlando, FL: Harcourt and Harvest Books, 2003.

Like Edelman, Damasio also ventures into philosophy after having divulged his main theory in several other writings. Like Edelman, while his points are noteworthy, as a philosophical writer he is less skilled. However, I put this book on the list because his substantial work on appetites, emotions, and feelings and on his theory of levels of cognition of them are cited by cognitive linguists, especially those

doing metaphor research on our descriptions of emotional states, which often employ bodily physiological states as metaphors.

Koch, Christof. *The Quest for Consciousness: A Neurological Approach.* Englewood, CO: Roberts and Company Publishers, 2004.

This book provides a connection between neuroscience and cognitive science. It gives the latest findings on how consciousness is developed in the brain, with explicit discussion of that perplexing problem of neural correlates of consciousness. Its lengthy discussion of color perception is reminiscent of the pioneer work of Eleanor Rosch. The book is understandable to a lay public at a college level. It does not give much insight for law librarian issues, but does provide support for the scientific basis of cognitive science. The book is highly promoted by the Association for the Scientific Study of Consciousness.

Searle, John R. *Freedom & Neurobiology: Reflections on Free Will, Language, and Political Power*. New York: Columbia University Press 2004, English version 2007.

A major philosopher in the analytic tradition since his publication of *Speech Acts* in 1968, Searle has been present in cognitive science circles ever since his postulation of the Chinese Box consciousness problem. In this recent work, a publication of a major lecture series at the Sorbonne in Paris, Searle argues that consciousness and rationality

are a product of evolution, and free will is a part of that. This work

may be of interest to academics.

Pico, Richard M. *Consciousness In Four Dimensions: Biological Relativity*

and the Origins of Thought. New York: McGraw-Hill, 2001.

While this book is not one that is a favorite of cognitive linguists, I

found it useful in helping formulate my understanding about the

temporal aspects of consciousness and cognitive functions. Combined

with Edelman's Reentry Theory, it helped me to formulate how long

term memory can be different for humans, as compared to animals and

to account for the inclusion of cultural and lingual information in our

memory. Biological relativity is like physical relativity in only the

loosest sense, but his use of the metaphor is useful in getting one away

from the notion that the brain is static and computational.