

Judicial decision-making and extra-legal influences

Neurolinguistic Programming as a candidate framework to understand persuasion in the legal context

Abstract: Trial advocates seek to influence the outcomes of judicial decision-making processes using persuasion, but the existing literature regarding persuasion in the courtroom is surprisingly piecemeal, focusing on individual techniques in isolation; no comprehensive frameworks for integrating these techniques, or for systematically analyzing advocates' attempts to enact persuasion in the courtroom, have been developed. We propose a popular commercial technology for persuasion, Neurolinguistic Programming (NLP), as a candidate framework that might be modified and adapted to fill this gap. First we present a wide-ranging, discursive analysis of judicial decision-making processes and extra-legal factors that influence them. Next, core aspects of NLP theory are subjected to careful examination. Finally, these threads are synthesized into a multifaceted assessment of NLP's potential utility as a comprehensive and integrative framework for understanding and describing how litigators enact persuasion in the courtroom. We argue that NLP can describe these behaviors and strategies both by way of a self-reflexive logic resulting from its popular influence, but also as a more general, context independent model by virtue of a large number of correspondences between NLP concepts and findings from the scholarly literature. Although these correspondences are superficial, the fact that NLP integrates its simplified, folk concepts into a coherent framework spanning argumentative and presentational dimensions of persuasion suggests that it might readily be adapted into a useful descriptive model for understanding persuasion in the courtroom. Further scholarly attention is indicated.

Table of Contents

I. Introduction.....	4
1. Purpose	6
2. Methodology	7
a. Advantages and Limitations	7
II. Judicial Decision Making: Theoretical Models and Extra-legal Influences	8
1. Persuasion in the Courtroom.....	8
2. Extra-Legal Influences and Theoretical Models	10
a. Extra-Legal Influences on Judicial Decision Making	11
i. Priming.....	11
ii. Anchoring.....	15
iii. Hindsight bias	20
iv. Miscellaneous extra-legal influences on judicial decision making.....	22
v. Summary.....	24
b. Major Theoretical Models of Judicial Decision Making	24
i. Legal Formalism and Legal Positivism	25
ii. Legal Realism and Judicial Behaviouralism	27
iii. Comparative analysis and possible alternatives	29
III. Neurolinguistic Programming: Processes and Empirical Correlates.....	33
1. NLP: What it Is, What it Isn't, and Implications for Analysis	33
2. Introduction to the Basic Frameworks and Techniques of NLP.....	37
a. The Meta Model: Distortion, Deletion, and Generalization.....	38
b. Mirroring and Rapport	42
c. Sleight of Mouth	45
i. Beliefs: Equivalencies and Cause-Effect Relationships	46
ii. Frames and Re-Framing	48
IV. NLP as a Framework for Understanding Judicial Persuasion.....	53
1. NLP as a Self-Reflexive Interpretive Framework	55
2. NLP as a Context-Independent Interpretive Framework.....	61
a. Interpreting Argumentation.....	63
b. Interpreting Presentation	65
V. Concluding Remarks	66
References.....	69

I. Introduction

Scholars, litigators, and laymen generally acknowledge that the judicial process amounts to somewhat less than a foolproof exercise in evidence-based objectivity. After all, unlike chemists, lawyers are rarely afforded the luxury of empirical clarity; instead, they are tasked with the much more ambiguous job of articulating detailed, salient, and multimodal arguments. Arguments that are, moreover, expressly designed to influence the decision-making processes of key stakeholders in order to obtain a desired outcome. But how, exactly, is this accomplished?

Despite decades of research on this topic, the field remains surprisingly obscure and controversial. In a 2001 article published in *Law and Social Inquiry*, Gillman opened with a basic question: “Does law influence judicial decision-making?” (p. 466). Three years later, Simon asked an equally basic question that avoided Gillman’s binary frame: “How do judges and jurors decide cases?” (2004, p. 511).

Given the persistent opacity of the judicial decision-making process itself, then, it is not especially surprising that empirical evidence regarding the efficacy of techniques designed to influence it is fairly sparse as well. There is virtually no disagreement, however, that many, if not most, trial attorneys actively pursue strategies to do just that.

For decades, trial attorneys have acted as amateur psychologists; through intuition and experience, [they] have developed techniques of persuasion in an effort to be more effective in the courtroom. These amateur techniques have led to a more scientific approach to jury persuasion... Former [U.S.] Supreme Court Justice Tom Clark has suggested that attorneys pay attention to communications research in order to understand the kinds of techniques that influence a jury. (Voss 2005, p. 301)

Trial advocacy is at once a *logos* and a *techne*, a science as well as an art, which first achieved widespread prominence in the 1970s. In the decades since, “volumes of scientific literature” have been published on the topic (*Ibid.*). Today, it is a highly complex and multidisciplinary field that draws upon insights and techniques from areas as diverse as social psychology, cognitive neuroscience, computer-generated animation, narrative theory

and even tactical military doctrines (McElhaney 1974; Balch 1990; Lubet 2004). The literature that has grown up around this topic is nothing short of fascinating; it offers rich fodder for analysis, and the tips, tricks, and tactics for influencing judicial perceptions and decisions sometimes seem endless. Yet there is a curious gap in this body of literature as well: attempts to integrate the laundry list of techniques into a coherent heuristic or interpretive framework appear to be all but absent.

The reasons for this are not exactly clear, although a few possible explanations come to mind. Perhaps it is in the interest of trial advocacy consultants to tightly guard their respective strategic playbooks as proprietary secrets of the trade, for instance. Alternatively, perhaps seeking to design and test such a tool is simply excessively difficult from an empirical perspective: a heuristic is not exactly an algorithm, and variations in lawyers' presentational styles (not to mention between cases themselves) could make rigorous analysis impossible due to the absence of meaningful control groups and a plethora of potential confounding factors. Whatever the reason, we are left with a body of literature that is full to bursting with psychological and rhetorical tactics, but which is virtually devoid of strategy. At the same time, legal advocates indisputably *do* attempt to integrate techniques for persuasion to serve larger strategic goals.

This is not to say that integrative, process-oriented approaches to persuasion are nonexistent, however, just that they are extremely uncommon in the empirical literature. The popular science and commercial self-help literatures, however, are another story entirely: so what if we broaden our scope to include this occasionally dubious body of work?

Developed in in the 1970's by Richard Bandler and John Grinder, Neurolinguistic Programming (NLP) was initially intended to be a therapeutic approach that bore a broad conceptual resemblance to cognitive-behavioral therapy (CBT). Briefly, NLP sought to leverage the relationship between cognitive and linguistic representational schemes in order to help clients think about issues in new, and potentially more adaptive, ways. Rather than attempting to develop NLP as an academic framework for psychotherapy, however, Bandler and Grinder elected to commercialize it for financial gain, marketing it as a technology for persuasion grounded in what they described as cutting-edge science. Bandler and Grinder offered to teach the NLP framework to anyone who would pay, using

books, schools, and seminars. During the marketing process, they made sensationalistic claims that tarnished its reputation among the scholarly community while making serious empirical investigations challenging. They succeeded, however, in making NLP an immensely popular approach to persuasion: despite persistent controversies surrounding its more extravagant claims and allegations that it is ultimately pseudoscientific, schools, seminars, and classes dedicated to the topic remain popular today. Notably, some lawyers and trial advocates have reported adopting the approach (Zadeh 2009).

1. Purpose

This state of affairs creates a unique set of challenges and opportunities for the interested researcher. On the one hand, there is a notable gap in the scholarly literature regarding how cognitive and perceptual biases can be systematically leveraged in the interest of persuasion (or, more specifically, influencing the outcomes of judicial decisions). On the other hand, a commercialized approach of dubious empirical legitimacy has achieved immense popularity in the public sphere. The empirical debates regarding the validity and efficacy of NLP are ongoing (a process which is both prolonged and obscured by the laundry list of goals and effects promoted, at one time or another, by Bandler and Grinder), so NLP cannot be imported directly to fill this gap in the scholarly literature. It may be possible, however, to use NLP as part of a descriptive study in order to lay the groundwork for future research into how the components of persuasion might be integrated into coherent, systematic approaches.

The research presented here undertakes to do just that, taking an innovative, cross-disciplinary approach in hopes of creating an impetus to fill this gap in the literature. Rather than seeking to evaluate whether NLP techniques can effectively influence judicial decisions, we investigate whether it can be used as heuristic device, as a model or a framework that can give insight into how advocates structure and organize their persuasive efforts in the courtroom. In undertaking this exploration, we quite explicitly do not attempt to weigh in on evidence for or against NLP as an approach to persuasion. Instead, we seek to assess whether it could reasonably be used to understand the behaviors of lawyers seeking to persuade decision-makers in the courtroom context.

2. Methodology

Achieving this goal requires a wide-ranging, interdisciplinary, and profoundly discursive analysis. We begin by exploring the literature on judicial decision-making, including major theoretical models and documented extra-legal influences on outcomes in the judicial decision-making process, including priming, anchoring, hindsight bias, and others. We compare and contrast competing philosophies of legal interpretation, such as the debate between formalism and realism, and look at the decision-making models associated with them.

Next, we introduce NLP as a framework for understanding the mechanics of persuasion not as a theory, but as a practice. We take a close look at what NLP is and is not, and what this means for our analytic approach. We then explore the basic frameworks and concepts of NLP (such as the meta model, including introductory discussions regarding the purported processes of distortion, deletion, and generalization), as well as techniques deployed by trained NLP practitioners; building rapport through mirroring and sleight of mouth as a rhetorical technique receive particularly detailed treatment. Throughout this discussion, we seek to relate the features of NLP to findings from the research literature; the aim here is not to offer empirical support for NLP, but rather to indicate certain similarities and homologies that could have significance for the descriptive power of NLP. Finally, these threads are synthesized into a multifaceted assessment of NLP's potential utility as a comprehensive and integrative framework for understanding and describing how litigators enact persuasion in the courtroom.

a. Advantages and Limitations

Overall, we argue that NLP has real potential as a candidate model for the interpretation and analysis of advocates' attempts at influencing judicial outcomes through persuasion and persuasiveness. The primary advantage of using NLP in this way is that it takes a first step toward addressing a major gap in the literature on persuasion in the courtroom; at minimum, this study offers substrate for further analysis and perhaps creates an impetus for further research. Other advantages include a surprising number of correspondences between NLP techniques and behavioral phenomena described in the

academic literature which are expected to be relevant to the context of persuasion, the fact that NLP is a popular approach that has directly and indirectly influenced courtroom behaviors already, that it offers an explicitly integrative set of strategies for persuasion and argumentation that are relatively consistent. Disadvantages include NLP's lack of comprehensiveness (e.g. it does not exhaustively incorporate techniques designed to exploit every cognitive bias explored below), the risk of conflating its terminology with closely-related but distinct scientific terms, and the possibility that using it as a descriptive model for analyzing how persuasion is enacted in the courtroom could be misconstrued (whether intentionally or unintentionally) as an endorsement of its efficacy as a technology for implementing persuasion.

II. Judicial Decision Making: Theoretical Models and Extra-legal Influences

1. Persuasion in the Courtroom

Costopoulos defined persuasion as the act of “influencing the minds of others by arguments or reasons, by appeals to both feeling and intellect... the art of leading another man’s will to a particular choice or course of conduct” (1971, p. 384). The structure of the judicial process reflects a distinctly rationalist understanding of how such persuasion occurs in the context of the courtroom; it is predicated upon the assumption that jurors “reach verdicts utilizing facts and evidence while putting aside pre-existing bias, emotions, feelings, and so on” (Boyll 1991, p. 163). Additionally, “non-evidentiary, extraneous factors” are assumed not to significantly impact the decision-making process in this setting (*Ibid.*).

Few would dispute that the scenario outlined above is at best highly idealized, and naive or implausible at worst. In light of this difficulty, Voss offers a somewhat more grounded description of what constitutes persuasion in the courtroom, arguing that it entails the “organization of legal arguments and evidence within the framework of court procedures in a way likely to cause the jury to make a certain decision.” (2005, p. 301). While this definition scrupulously avoids contradicting the formalist model in any explicit sense, by suggesting that the judicial decision-making process is informed not just by the

content of an argument but also by how that argument is presented, it deftly leaves the door open to legal realist models as well.

Indeed, a growing body of evidence suggests that certain extralegal attributes of various stakeholders, including judges, attorneys, juries, and witnesses, can, at least in some cases, play as powerful a role as evidentiary or juridical considerations in determining outcomes (Hahn & Clayton 1996). Gillman sums up this fascinating disconnect between formalist and behaviorist approaches to judicial decision-making succinctly and cogently:

“Does law influence judicial decision making?... The entire structure of legal education and the nature of the judicial process... is premised on the assumption that, one way or the other, law matters. But not everyone agrees... increasingly even within the ranks of the law professorate, it is widely considered a settled social scientific fact that law has almost no influence on the [US Supreme Court] justices... decades of social science research... has demonstrated instead that ideological and political considerations drive decision-making... it is considered the common sense of the discipline that [US] Supreme Court justices... should be viewed as promoters of their personal policy preferences rather than as interpreters of law.” (2001, p. 466)

Boyll points out, on the one hand, that the degree to which such extra-legal (rather than evidentiary) factors influence outcomes appears to be negatively correlated with the strength of the evidence itself. On the other hand, he notes that, because only a small minority of cases actually goes to trial, juries are often presented with ambiguous situations in which evidentiary factors are less than decisive.

[C]ases that reach trial are often the evidentially close, emotionally charged... or large-stake ones. In these cases non-evidentiary factors—a critical moment of emotion or an impressive key witness—can be crucial and may be outcome-determinative. (Ibid.)

For Matoesian, a legal scholar perhaps best known for his analyses of the symbolic and linguistic strategies used by attorneys seeking to dismantle and reconstruct narratives

during rape trials, social structures are necessarily “embodied in and reproduced through” social action, and the courtroom is no exception (1993, p. 1). Matoesian’s work documents, in part, attorney behaviors that appear to be carefully constructed to generate “critical moments of emotion” like those mentioned by Boyll, as well as dramatic moments in which witnesses are led to (seemingly) contradict their own testimony. The means by which these feats are accomplished are, perhaps unsurprisingly, linguistic in nature.

Matoesian frames cross-examination as “an adversarial war of words, sequences, and ideas,” wherein reality is presented, “finessed,” re-presented, and even transformed through a special kind of discourse termed *trial talk* (*Ibid.* pp. 1-2). The nature of the interaction between defense attorney and alleged victim is at once procedural and performative, and the values that guide the cross-examination are intimately linked to implicit social ideologies, but it is through narrative and linguistic techniques that attorneys shape the verbal reconstruction of the rape incident:

Language categorizes, objectifies, and legitimates our interpretations about social reality, sustaining some versions while disqualifying others... Language is a system of power for those who control it, and, in the context of the rape trial, talking power transforms the subjective violation of the victim—the victim’s experience of sexual terror—into an objectivity: namely, consensual sex. (1993, pp. 1-2)

Thus, the courtroom should be understood not only as a forum for the presentation and rational evaluation of evidence and testimony, but also for a dynamic social interaction involving “linguistic power and persuasion” (Cotterill 2007), a normative ritual that is at once embedded in broader social structures and infused with potent cultural meanings. In other words, the courtroom might be better conceptualized as a place where truth is constructed than as one where truth is found...

2. Extra-Legal Influences and Theoretical Models

This section begins by exploring a selection of the existing literature on extra-legal influences on judicial decision-making, including priming, anchoring, hindsight bias, trivial persuasion, and a miscellaneous review of other assorted extra-legal factors that have been

shown to impact judicial outcomes. Next, it introduces some of the dominant theoretical approaches to understanding how decision-making processes function in the judicial context. The formalist, realist, and cognitive coherence models in particular are subjected to comparative analysis.

a. Extra-Legal Influences on Judicial Decision Making

Given its introductory nature, the present discussion is limited by design to inducible cognitive, perceptual, and interpretive biases that have been subject to rigorous empirical analysis, and which are generally accepted by the scholarly community as phenomena that (a) have been reliably documented, and (b) are likely relevant to the courtroom context. This is not to suggest, however, that the neurological, conceptual, and/or psychosocial mechanisms underlying these phenomena are necessarily well-understood; those questions are, after all, better left to scholars in their respective disciplines. Our interest here is simply to establish the existence of certain factors which, despite being quite separate from the facts of a given case or legal dispute, can nonetheless impact how those facts are received, interpreted, or recalled, and which can therefore influence legal outcomes. Techniques and strategies for influencing decision-making outcomes that have not been explored with specific reference to legal contexts are excluded from the present discussion, as are those that have not been subject to evaluation in peer-reviewed academic literature

Broadly speaking, the cognitive biases explored below can be grouped into two loose categories, *memory effects* and *judgment effects*. Memory effects are those related to the salience of certain facts or impressions and how this influences the accessibility of such information when it is recalled. *Judgment effects*, on the other hand, are those related to how individuals make certain assessments, of numerical quantity or the relative balance between risk and reward, for instance, in ways that are not always strictly rational.

i. Priming

In psychology, the effect known as *priming* has been empirically documented since at least the 1970's. Stanichi describes priming as "process in which a person's response to

later information is influenced by exposure to prior information” and offers a particularly illuminating analogy to describe, in lay terms, the significance of the effect:

For example, if we are primed to think about baseball, we are more likely to remember seeing a baseball on a table even if the table is crowded with many different objects of which the baseball is only one. This will happen even if you glance at the table only momentarily; you will perceive—and remember seeing—the baseball... [it] will be the most vivid object to you. Subconsciously, when your mind looked at all the objects on the table, it was “looking” for the baseball.¹ (2010, p. 306)

Thus, priming is an effect that impacts both memory and perceptual awareness. Perhaps unsurprisingly, interest in priming is not limited to psychologists. It has attracted the attention of a wide audience, from politicians and sociologists to media scholars and, as we shall see in short order, legal professionals (*Ibid.*; Scheufele & Tewksbury 2007)

It is an understatement to say that the research on memory and cognition is still developing, however impressive its pace. Broadly speaking, however, the priming effect is related to a broad and seemingly deep-seated categorical distinction in terms of memory functionalities: namely, that between implicit and explicit memory (Schacter 1987 p. 501). Explicit memory is related to recognition, and its contents can be likened to objects: it includes factual knowledge, memories of life events, and things of that nature. Implicit memory, by contrast, can be conceived as a lens through which the world is viewed, which shapes how we interact with it; it can influence us in nonobvious and difficult-to-detect ways. When we type on a keyboard, play an instrument, or ride a bicycle, for example, we are relying on a type of implicit memory known as *procedural* memory. Crucially, implicit and explicit memory appear to operate separately, a finding drawn, fascinatingly, from amnesiacs’ occasional ability to access “free-floating mental content” (Tulving, Schacter & Stark 1982 p. 336)

Today, priming has been characterized in detail and is even observable, in some cases, in electroencephalography readings. Indeed, the effect has been studied so

¹ Analogy loosely drawn from Fazio (2001), pp. 127-28

thoroughly that it is less often the subject of psychological studies than it is an important component of methodologies seeking to assess other aspects of memory function. While it is beyond the scope of the present discussion to enunciate the research on priming in detail, it is arguably one of the more fundamental sources of extra-legal influence on judicial decision making, and understanding its basic dimensions will prove fruitful later on.

First, priming can be either *positive* or *negative*; that is, it can either enhance or degrade (respectively) how a given stimulus is processed (Malley & Strayer 1995). Positive priming can increase the salience of a given stimulus, while negative priming can cause one to ignore the same stimulus (*Ibid.*). Second, primes can be categorized based on stimulus type; common, somewhat overlapping, categories include *perceptual*, *conceptual*, *semantic*, and *associative priming*.

Perceptual priming occurs when the priming stimulus matches a later stimulus with respect to how it is perceived by the senses (Wiggs & Martin 1998). Conceptual priming is based on the meaning of the stimulus through semantic encoding and is consequently not modality specific (Schacter & Buckner 1998, pp. 186-187). Semantic priming takes place through shared categories of knowledge or meaning (e.g. depending on the situation, a motorcycle might serve as a positive prime for a car, because both items belong to the same conceptual category of “vehicle”) (Collins & Loftus 1975). Associative priming is a version of semantic priming in which stimuli share a close syntactic relationship but may, somewhat counter-intuitively, belong to semantically unrelated categories (e.g. “bread” and “butter” or “Pavlov’s” and “dog”) (Matsukawa, Snodgrass & Doniger 2005, p. 518).

Speaking to the specific context of legal advocacy, Stanchi (2010) points out that emotional priming can be crucial as well. This is usually accomplished through narrative, a story, whether written, acted, or spoken, descriptions of a behavior, or even scrambled words designed to suggest, for example, violence (*Ibid.* p. 309).

Once an impression is primed, it tends to last. We are inclined to pay less attention to subsequent information, even information that contradicts the impression... The potential power of priming in legal advocacy is evident. The early sections of a brief... can prime the reader to see the case [as a whole] in a

particular way by pushing the theme of the case and evoking particular emotions in the reader... (Ibid. p. 310)

Priming does not only operate at the large, thematic scale, either. It can also be used by advocates seeking to present “neutral or ambiguous information” in a way that predisposes the reader to adopt a desired orientation to that information (*Ibid.* p. 311). Using narrative primes to induce a certain emotional state can also impact judicial decisions, as individuals experiencing positive moods approach and analyze information differently than do individuals who are feeling sad or angry (*Ibid.* pp. 317-20).

Being primed with an archetypal story of injustice can induce anger, which encourages rapid decision-making, and increases the likelihood that the decision will be informed by a desire to allocate blame and redress wrongdoings; a sad story, on the other hand, can make narratives of helplessness and non-agency more salient (*Ibid.*). Similarly, while negative moods can predispose individuals to take a detail-oriented approach to information, seeking to induce or prime a positive mood can be advantageous “for cases that have an impressive big picture aspect to them, such as cases that implicate bigger policy questions,” because positive moods tend to correlate with ambitious, sweeping decisions (*Ibid.*).

Stanchi is careful to note, however, that priming is not without risks, and the courtroom context is far more complex and contested than the tightly-controlled environments that dominate empirical investigations into the effects of priming:

One of the primary differences between the legal context and most priming studies is that... in the legal context there are two sides vigorously pushing their clients' often diametrically opposed positions... Advocates should still take advantage of priming... but... should also be cognizant about what the data does not tell us. (Ibid. p. 346)

For instance, when two parties are seeking to engage competing sets of primes, which wins out in the decision-making process, the power of first impressions (i.e., the *primacy* effect) or the elevated salience of the most recently-received information (i.e. the *recency*

effect)?² Additionally, unlike in the empirical setting, decision-makers are subjected to a range of primes in the courtroom, all of varying quality, effectiveness, and salience. On top of this, it is important to keep in mind that competing advocates are almost certainly priming one another, a process that appears to begin as early in legal negotiations as the writing of demand letters, where traditional techniques could lead attorneys to inadvertently prime their opponents “for a long, competitive, hostile negotiation process” rather than “cooperation, fairness, and empathy” or even “creative thinking about interest-based solutions” (Sperling 2010, p. 141). How this array of mutually interacting factors and biases plays itself out is poorly understood; questions abound, and the answers are not always easy to predict.

What is certain, however, is that implicit memory impacts how we view the world; and, furthermore, that implicit memory can be actively manipulated through priming, be it as subtle as using positive perceptual primes to heighten one’s awareness of key features of a scene or as overt as employing archetypal narrative structures in hopes of encouraging a reader or listener to action, inaction, or even certain types of action. Finally, it is all but certain that advocates actively seek to engage in such manipulation in hopes of obtaining favorable outcomes in the judicial process. The prevalence and efficacy of this practice is unknown, however, constituting a major gap in the research literature.

ii. Anchoring

An important aspect of the judicial decision-making process relates to the challenging task of issuing rulings that seek to quantify what is effectively un-quantifiable: the qualitative misdeeds of the party found to be at fault. This often takes the form of a fine or monetary award; in criminal proceedings, it commonly takes the form of sentencing. In the absence of strict, algorithmic guidelines or other institutionalized specifications, this process can be both ambiguous and extremely subjective. It makes intuitive sense, then, that it would be subject to cognitive bias, but it is also clear that, unlike priming, the

² Stanchi suggests that primacy “seems to have a slight advantage over recency,” although she notes that “this varies by context.” (*Ibid.* p. 347)

relevant bias in this case would be expected to relate to judgment, rather than to memory or perception.

While it is plausible that multiple biases exist in this situation, anchoring bias is particularly relevant. The explanation offered by Mussweiler and Strack is quite a helpful one:

Numeric judgments are often made under uncertainty. In such situations, they are easily influenced by a standard or anchor that may be explicitly or implicitly provided to the judge. Regardless of its source, considering such a standard typically leads to an assimilation of the numeric estimate toward it. (2000, p. 495)

While this is quite a succinct and accurate description of anchoring bias, it does admittedly fail, to some extent, with respect to illustrating the extent to which this bias can impact judgment in ways that are patently and overtly illogical. An example, rather than a forthright description, might be better suited to that task. The classic (and, indeed, possibly seminal) example of anchoring is probably a demonstration described by psychologists Tversky and Kahneman in their 1974 treatise on heuristics and biases observed in individuals making judgments under uncertain conditions.

In the demonstration, subjects were divided into groups and asked to estimate what percentage of United Nations member states were located in Africa. The anchor was provided by spinning a wheel of fortune numbered 0-100; unbeknownst to the subjects, the wheel was rigged to stop at 10 for some groups, and 65 for other groups (*Ibid. p. 1128*). First, subjects were asked whether the “random” number produced by the wheel was higher or lower than the quantity they had been asked to estimate (the percentage of African countries in the UN). Next, they were asked to move either upward or downward from the number given by the wheel to their estimate. In groups where the wheel stopped at 10, the median estimate was 25%. In groups where it stopped at 65, however, the median estimate was 45% (*Ibid.*). In short, simply being presented with a number, even one they believed was totally random and which had no bearing whatsoever on the quantity they had been asked to estimate, was sufficient to significantly influence subjects’ estimates.

The cognitive mechanisms that underlie anchoring are subject to ongoing research, although some suggest that anchoring could be a unique form of semantic priming (Mussweiler & Strack 1999). Even if this turns out not to be the case, there is a possible connection to the implicit memory processes that generate the priming effect:

The presence of the anchor could influence what information is retrieved; for example, information similar to the anchor might be selectively primed... [E]vidence from a number of recent studies points to anchors as a type of memory prompt or prime to activate target information similar to the anchor... Further research is needed to specify more precisely the activation processes that produce the anchoring effect. The evidence is mounting, however, that anchoring involves a constructive process of priming or memory retrieval that influences judgments of preference and belief. (Chapman & Johnson 2002, pp. 14, 17)³

Of course, pointing out that anchoring is an established and uncontroversial cognitive bias is not quite the same as demonstrating that it is especially relevant to judicial decision making specifically. After all, courtroom decision-makers are often legal professionals; where they are not, guidance and education is available. Additionally, sentencing decisions are typically subjected to serious consideration. One assumes that, for the most part at least, judicial decision-makers tend not to deal in off-the-cuff judgments on matters they are only passingly familiar with.

The anchoring effect is, however, quite a powerful bias. As a matter of fact, there is evidence to suggest that it can and does influence sentencing proceedings. Two studies in particular have sought to demonstrate the extent to which anchoring can shape judicial outcomes.

Pointing out that “largely disparate sentences are often given for identical crimes”, Englich and Mussweiler (2001) conducted three studies in order explore the question of whether or not prosecutorial sentencing demands can bias judges’ sentencing decisions through anchoring. In the first study, 19 participants (all of whom were current, if fairly

³ There are a number of competing models seeking to explain the anchoring effect; the possible connection to priming is included here only in light of its relevance to the previous sub-section.

new, trial judges in Germany) were presented with “identical materials describing a hypothetical case of alleged rape” and asked to make a sentencing determination and rate their level of certainty with respect to the appropriateness of that decision (*Ibid.* pp. 1538-39). The only difference in provided materials was in the prosecutor’s sentencing demand, which was set at either 2 months or 34 months; half the sample received the low sentencing demand, and half received the high demand. The low demand group delivered an average sentence length of approximately 19 months, while the high demand group delivered an average sentence of about 29 months. Crucially, there was no difference in the two groups’ certainty about the appropriateness of the sentence lengths (*Ibid.* p. 1539-40).

The second study recruited German law students in their final year before graduation as participants. The methodology followed the same general contours as that of the first study, with the exceptions that (a) the low sentencing demand was raised to 12 months on the basis of participant feedback from the first study, and (b) participants were asked to indicate whether the prosecutor’s demand was relevant or irrelevant when making their sentencing determination. The mean sentences delivered by high demand *versus* low demand groups differed by approximately six to seven months (*Ibid.* pp. 1442-44).

The third study was methodologically identical to the second study, except that, rather than recruiting senior law students, the participant group (n = 16) was made up entirely of trial judges with at least fifteen years of experience (*Ibid.* pp. 1545-48). The high demand group delivered a mean sentence of almost 36 months, while the low demand group delivered a mean sentence of 28 months. Interestingly, despite displaying an anchoring bias not dissimilar from that obtained in the first two studies, the experienced trial judges also communicated the highest degree of certainty as to the appropriateness of their decisions (*Ibid.*).

All told, the results obtained by Englich and Mussweiler suggest that it is absolutely legitimate and justified to assume that legal professionals are susceptible to anchoring bias, and that prosecutors’ sentencing demands can act as an anchor exerting “a strong influence” on the sentences delivered by judges hearing criminal cases (*Ibid.* p. 1547). Finally, on the basis of certainty ratings and relevance judgments, decision-makers appear unable to reliably identify when their decision making process is being influenced by anchoring bias.

[T]his effect appears to be independent of judges' experience. Specifically, experienced judges who are highly certain about their sentencing decisions are also influenced by a sentencing demand that they judge to be irrelevant. In fact, the size of the bias does not appear to differ from the one apparent in the judgments of less experienced law students. (*Ibid.*)

In a more recent study, English, Mussweiler, and Strack (2006) manage to underscore the susceptibility of judicial decision making to anchoring bias in even more dramatic fashion. The methodology closely resembles that described above; as before, three closely related experiments were conducted. In all three cases, experienced legal professionals were recruited to participate, presented with a hypothetical rape case, and then asked to determine a sentence and gauge their level of certainty that the sentence was appropriate (*Ibid.* pp. 188-190).

This time, however, the anchor was never dressed up as a hypothetical-yet-nonetheless-reasonable sentencing demand made by an imaginary prosecutor. In the first experiment, the anchor took the form of a question from a hypothetical journalist: "Do you think that the sentence for the defendant in this case will be higher or lower than 1/3 years? (low/high anchor)" (*Ibid.* p. 191).

In the second experiment, an imaginary prosecutor presented the anchor as a sentencing demand, but participants were given an even greater reason to disregard it; the demand was accompanied by instructions explicitly indicating that it had been generated at random.⁴ In the third experiment, participants were instructed "to randomly determine the prosecutor's sentencing demand themselves by throwing a pair of dice"⁵ (*Ibid.* p. 194). Participants were even explicitly encouraged to reject the anchor: the "random" dice throw

⁴ The instruction read: "For experimental purposes, the following prosecutor's sentencing demand was randomly determined; therefore, it does not reflect any judicial expertise: the prosecutor demands as a sentence for the accused Lena M. 3/9 months on probation. Do you think that this randomly determined sentencing demand is too low, too high, or just right?" (*Ibid.* p. 192). Note: as before, the format here is *low anchor/high anchor*, and participants would have either seen "3 months probation" or "9 months probation"; not both.

⁵ The authors loaded the dice to ensure that the resulting high and low sentencing demands would match those from the previous two experiments.

was explained as a means used by the researchers “to ensure that [the sentencing demand did not influence] participants’ responses to the experimental questionnaire (*Ibid.*). Shockingly, participants in all three experiments were nonetheless significantly influenced by the anchoring effect. The authors’ summary is as brief as it is concerning:

The present research... demonstrates that the sentencing decisions of experienced legal professionals are influenced by irrelevant sentencing demands even if they are blatantly determined at random. Participating legal experts anchored their sentencing decisions on a given sentencing demand and assimilated toward it even if this demand came from an irrelevant source, they were informed that this demand was randomly determined, or they randomly determined the demand themselves... Expertise and experience did not reduce this effect. (Ibid. p. 188)

Of course, unlike priming, it is difficult to imagine a situation in which anchoring bias simultaneously influenced multiple domains of the judicial decision making process. Instead, it seems to be limited as an effect to a single domain: making numerical judgments under decidedly uncertain conditions. Even so, studies examining anchoring in the courtroom context offer a straightforward and compelling demonstration that even seemingly obvious extra-legal factors can influence decision making in the courtroom context, even when decision-makers actively seek to dismiss them.

iii. Hindsight bias

The preceding sub-section on anchoring highlighted a non-obvious cognitive limitation: at least in some situations, it is not possible to “correct” our own biases even when we consciously attempt to do so. As it happens, however, important courtroom processes appear to rely on the assumption that this is not only possible, but actually so simple to achieve that nothing more is required than an explicit directive to do so. In the United States, for instance, Harley points out that jurors are presented with a “difficult” responsibility: “They must ignore negative outcomes, and judge the defendant’s pre-outcome actions in a fair way.” (2007, p. 48). The problem is not unique to courtrooms in the US, however; judicial decision makers the world over are, at some time or another,

obligated to “turn a blind eye” to evidence that has been deemed inadmissible and testimony that has been compromised or determined to be irrelevant.

By now, it will be probably not be altogether unexpected when we suggest that this is easier said than done. The cognitive bias implicated here is known as *hindsight bias*, a cognitive phenomenon arising from peoples’ tendency to “update” their understanding of the world once they are given information about a given result or outcome, then use this new, updated model to retroactively assess what should have been predictable, all while ignoring “the change in their beliefs that learning the outcome inspired.” (Guthrie, Rachlinski, & Wistrich 2000, p. 799). In short:

Hindsight vision is 20/20. People overstate their own ability to have predicted the past and believe that others should have been able to predict events better than was possible... Few judgments in ordinary life require people to assess the predictability of past outcomes, but such judgments are pervasive in the law. (Ibid. pp. 799-800)

Casper, Benedict, and Perry (1989, p. 293) offer a simple example: that of a medical malpractice or product liability lawsuit. In this situation, the plaintiff is seeking damages for being “wrongfully” harmed, that is, for being harmed in a way that he or she believes was eminently preventable. Thus, deciding whether to rule in favor of the plaintiff or the defendant requires the relevant decision-maker(s) to make a judgment “about the defendant’s behavior *prior* to the occurrence of the harm”, for instance, whether or not the defendant took reasonable precautions and exercised due care in light of the prevailing circumstances *at the time* (*Ibid.*). “Of course,” the researchers note, “in all such cases, some bad outcome has occurred and is the cause of the lawsuit.” (*Ibid.*).

In fact, Casper *et al.* employed a clever experimental design that provided early, compelling evidence that hindsight bias can significantly influence judicial decision making. The premise of their study involved civil suits aimed at police officers accused of conducting illegal searches. Participants were asked to make judgments regarding the legality of searches; in doing so, they were asked to ignore previously-received information about both the severity of the crime the officer suspected had occurred and the outcome of the search (e.g., whether or not it produced evidence indicating that the plaintiff was guilty

of the crime in question) (*Ibid.* pp. 296-297). Although this last factor, the outcome, does not impact the legality of the search (which is why participants were directed to ignore it), it did significantly impact participants' determination regarding whether or not to award damages.

Using a sample composed of judges, Guthrie *et al.* conducted a similar study, finding that knowing the outcome of an appeal impacted their retrospective assessments of the likelihood that certain outcomes would occur (2000, p. 802)

iv. Miscellaneous extra-legal influences on judicial decision making

While the sources of decision-making bias explored above constitute some of the major categories that have received serious treatment in the academic literature, they are far from the only unexpected, counter-rationalist, extra-legal factors influencing judicial outcomes. A demonstrative selection of other sources of cognitive, perceptual, and attentive biases is summarily presented below.

One important way that individual decision-making process diverges from rational-actor models relates to how options are categorized and possible outcomes are evaluated. This is especially true for risky decisions, when individuals tend to assess their options *as* potential benefits and potential liabilities, categories which are defined, or *framed*, in relation to “a salient reference point” like the current state of affairs, for instance (Guthrie *et al.* 2000, p. 794). These decision-making processes are somewhat murkier than a straightforward, mathematical cost-benefit analysis; rather, people exhibit a pronounced tendency to avoid risk when they perceive possible gain, while paradoxically exhibiting a comparatively high risk tolerance in the face of potential losses (*Ibid.* pp. 795).⁶ This is, of course, a quite obvious example of an extensionality violation.⁷ Because the courtroom is

⁶ For related theory, see prospect theory and the certainty effect.

⁷ As an interesting side note, Tversky and Kahneman (the psychologists responsible for popularizing the concept of anchoring) are also known for their work on this gain/loss framing effect, particularly with reference to how representing identical information as either a potential gain or potential loss through semantic manipulation can impact risk tolerance. E.g. participants presented with the prompt “A disease outbreak is expected to kill 600 people. If Program A is adopted, 200 people will be saved. If Program B is adopted, there is a 1/3 possibility that 600 people will be saved and a 2/3 possibility that no people will

typically a forum where gains are made and losses suffered, framing bias is a relevant consideration:

[In] civil lawsuits... litigation produces a natural frame... plaintiffs choose either to accept a certain settlement from the defendant or to gamble, hoping that further litigation will produce a larger gain [and vice versa for defendants]... Thus, plaintiffs... are more likely to prefer settlement, the risk-averse option, while defendants are more likely to prefer trial, the risk-seeking option (Ibid. p. 795).

Interestingly, framing effects are not only relevant to litigants' strategic decisions; in fact, they are surprisingly pervasive in the legal domain, impacting "judicial management of lawsuits" when judges serve as mediators during conferences, and even the development of certain legal procedures and doctrines, which exhibit a curious tendency to institutionalize "seemingly arbitrary distinctions between gains and losses", even when doing so is "inconsistent with an economic approach." (*Ibid.* p. 798). Could the old adage "possession is nine tenths of the law" be an expression of framing bias in legal doctrine?

So far, most of the biases we have examined deal with one kind of detail or another: primes, anchoring numbers, or facts to be ignored. The effects of priming relate to memory and perceptual awareness; anchoring is related to judgment effects; and hindsight bias, in some sense, straddles the two, located as it is at the nexus between factual memory and judgment. Judicial decisions can also be influenced, however, by the presence or absence of detail itself, specifically, the sheer *quantity* of detail present in testimony. In a widely-cited 1989 study involving two mock criminal trials (one for robbery and one for murder), Bell and Loftus found that witnesses able to produce detailed testimony were not only more likely to be viewed as credible by courtroom decision makers; their testimony was also more likely to be remembered. This effect translated into a measurable, and in some cases quite substantial, influence on larger outcomes such as the likelihood of producing a guilty verdict. Notably, the detailed information did not even have to be related "to persons

be saved. Which do you favor?" favored Program A nearly 3:1. By contrast, participants presented with the following (numerically identical) prompt favored Program B by nearly 3:1:x "If Program A is adopted, 400 people will die. If Program B is adopted, there is a 1/3 possibility that nobody will die, and a 2/3 probability that 600 people will die." (Tversky & Kahneman 1983).

directly involved in the incident in question... in order to be powerful”; even “seemingly insignificant and irrelevant” details could generate significant effects (Ibid. p. 677).

v. *Summary*

We have reviewed a number of cognitive biases with potentially serious relevance to the context of judicial decision-making, painting a fluid, ambiguous, and even uncertain picture of how judicial decisions function. Guthrie, Rachlinski, and Wistrich (2002) summarize the situation with an appropriate simile:

Just as certain patterns of visual stimuli can fool people’s eyesight, leading them to see images that are not really present, certain fact patterns can fool people’s judgment, leading them to believe things that are not really true. The systematic nature of the errors that these illusions produce can be analogized to the sort of errors that an expert marksman makes if his rifle sight is out of alignment: his shots land in a tight cluster, but away from the bulls-eye. (p. 44)

Indeed, the effects explored above influence processes as critical as memory, perceptual awareness, judgment and estimation, and the ability to accurately evaluate how one’s responses to a situation might vary as a function of what information one has access to at the time. This raises serious questions about whether and how judicial decisions are made in an objective, just, and consistent fashion. Some of the dominant theoretical approaches to this issue are explored in the following section.

b. *Major Theoretical Models of Judicial Decision Making*

In the preceding sub-section, we explored a diverse array of extra-legal influences that shape how judicial decision-makers approach, interpret, recall, and evaluate case information and trial proceedings; furthermore, it has been repeatedly emphasized that this discussion is not exhaustive, and as a matter of fact probably captures only a comparatively tiny slice of the myriad interpersonal, cognitive, and psychosocial factors capable of impacting case outcomes. With so many extra-legal variables interacting in such complex ways, it is a wonder there is any room for factual, rational, and legal factors to enter into the equation at all!

Indeed, as we shall see momentarily, some schools of thought contend that the empirical data on extra-legal determinants of judicial outcomes has grown so large that it has effectively eliminated the possibility of meaningful objectivity, that judicial decisions actually result from intuitive processes, and legal logic is only applied retroactively, as a sort of contrived justification designed to impart the veneer of legal authority to an already-determined decision (Danziger, Levav, & Avnaim-Pesso 2011). Others counter that such a state of affairs would amount to a judicial free-for-all, and point out that legal rulings exhibit an undeniable consistency that can only conceivably be achieved if laws, facts, and dutiful adherence to procedure are at the foundation of courtroom proceedings.

At the core of this often-spirited debate lies a surprisingly simple set of questions briefly mentioned earlier in the present research. How are judicial decisions made? How do judges judge?

Despite their deceptive simplicity, these questions will unfortunately not be resolved here; in fact, whether they will be resolved in the foreseeable future is an open question at present. Given that the present research is concerned with how judicial decisions are influenced, however, it is necessary to take a moment to consider how they are believed to be made.

First, two mainstream, competing theoretical models of judicial decision making are introduced and briefly discussed, with an eye to identifying areas of support as well as looming challenges. Next, the models are compared and critically analyzed in terms of advantages and disadvantages. A new emerging alternative model is reviewed to indicate current progress in the field and finally, the results are briefly summarized. It is important to emphasize that the aim of this discussion is not to single out one model as decisively or objectively superior; instead, these models are, at least for the time being, considered to have different degrees of utility in different contexts.

i. *Legal Formalism and Legal Positivism*

Unlike the study of psychology, the study of law has no ambitions to the detached empirical purity of descriptivism. Law is fundamentally and undeniably normative in nature; this is one of the most challenging aspects of law as an academic discipline, but it is also one of the most engaging. Because of this, to describe the formalist model of judicial

decision making as a purely abstract, value-neutral construct would be a misrepresentation, and possibly a gross one. Legal formalism puts the normative power into the hands of the legislator with the implicit assumption that they generate norms that have the capacity to operate almost algorithmically on objective, verifiable facts. The role of judicial decision makers, therefore, is not so much to act in an interpretive fashion as to faithfully execute the unavoidable conclusions turned out by the logic of the legal system itself.

Legal formalism has its roots in legal positivism but while the former is a theory of law, the latter is rather a theory of legal practice. Positivism holds that the legal validity of a norm depends on its sources, whether legislated or case law, and not its merits. It seeks to understand what norms are legally valid but does not provide guidance on whether they are just and should or should not be followed. As such, legal positivism is normatively inert and could be seen as a description of *what law is*, then legal formalism could be described as a positivist explanation of *how the law and legal systems operate*. In a very real sense, today's legal systems are based on foundations that implicitly take the tenets of formalism for granted.

In explaining the legal decision making process, the formalist model emphasizes deduction of facts and logical application of legal precepts and frameworks. Decisions are viewed almost computationally, and decision outcomes are viewed as being shaped primarily by the criteria explicitly under consideration. Hawkins describes this tradition, which he refers to as *rationalist*, as "serene and orderly," but which can be justifiably criticized as lacking in complexity, detail, and context (1986, p. 1181).

I regard rationalist work as positivist and normative in character. Emphasis here is given to notions such as rationality, information, and decision goals. Empirical research in this tradition usually focuses on input to and output from decision-makers, and the strength of any empirical association that can be demonstrated between the two. The rationalist approach to research design tends to take the official objectives inputted to a particular segment of the criminal justice system as a given... and then to see how the existing decision practices within that segment seem to measure up to those objectives. (Ibid. pp. 1179-80)

Of course, the bulk of this thesis serves as an almost direct refutation of the formalist tradition, and is at odds with many of the tenets of the legal positivist school as well; after all, both NLP and many theories of persuasion more generally are almost irretrievably informed by conceptual frameworks that subjugate rationality, at least in part, to emotional and unconscious influences on decision-making outcomes. However, it is important to be aware of the methodological and conceptual limitations that feature in some of the most vocal criticisms of formalism. These limitations are discussed in greater detail during our comparative analysis of decision-making models below.

ii. *Legal Realism and Judicial Behaviouralism*

Without a doubt, the legal realist movement offers the most resounding empirical answer to formalism. Legal realists hold that the formalist model does not sufficiently explain how judicial decisions are made, that laws are not treated algorithmically and that it is frequently impossible to make accurate predictions regarding decision-making outcomes by following legal principles alone. Although some variants of realism do allow for law and precedent to exert influence over decision-making outcomes, others, such as behavioralism, generally ascribe minimal significance to these factors, arguing that in some contexts (e.g. Supreme Court jurisprudence), doctrine and statutes have, at best, a negligible impact on decision outcomes.⁸ For this reason, Danziger, Levav, and Avnaim-Pesso (2011) note that legal realism is often “caricaturized by the trope that justice is ‘what the judge ate for breakfast.’” (p. 6889).

In any event, legal realism is generally acknowledged to be a predominately extra-legal model of the judicial decision-making process. By the 1930’s, proponents of sociological jurisprudence asserted that “rules based on precedents were nothing more than smokescreens,” whereas a “mature” jurisprudence would explicitly acknowledge that “there is no certainty in law” (George & Epstein 1992, p. 324). This somewhat extreme view reflects a frustration with and distrust of legal institutions, and more generally, a disregard for the importance of legal precepts.

⁸ By contrast, *the legal model*, another legal positivist school of thought, considers *stare decisis* to be the key determinant of judicial decisions (George & Epstein 1992).

In seeking to understand judicial decisions, realists look beyond the facts of the case; they contend that seemingly external political factors can shape outcomes, as can seemingly irrelevant internal variables, such as interpersonal interactions or even mood. They argue that openings are created both by the rhetorical skills of judges, who may use legal reasoning to retroactively justify decisions, as well as by contradictions and ambiguities inherent in existing law (Miles & Sunstein 2008).

To date, the characteristics most commonly examined by the New Legal Realists are the types of litigants, the nature of their claims... the procedural posture of the dispute... [and] the institutional context of judicial behavior... An important stimulus—and sometimes an important constraint—is the law itself. Some scholars play up the role of legal constraints, while others emphasize what they see as the decisive role of the values or commitments of particular judges (Ibid. p. 835-36)

Thus, realists describe a model of judicial decision-making that is quite distinct from that articulated by formalists. However, if legal formalists can be conceptualized as occupying one extreme of the formalism-realism spectrum, then behavioralists arguably occupy the other. While realists emphasize the importance of extralegal factors like those described above, for behavioralists such factors are viewed as determining legal outcomes to such a degree that they should be essentially predictable by means of quantitative, empirical data alone.

Behavioralism is oriented to input-output, stimulus-response relationships; it is not overly concerned with what happens in between, so long as it is possible to consistently and reliably map from one to the other (Mitchell 2002). For this reason, the behaviorist model of decision-making is sometimes referred to as the “black box.” Briefly, decision-makers are conceptualized as actors whose actions are partially informed by certain internal characteristics, including political beliefs, personal history, cultural background, self-concept, and other variables of that nature. These actors are, in turn, embedded in a

specific environmental context, which produces a range of stimuli; legal arguments may be among the relevant stimuli, but do not necessarily have to (*Ibid.*).⁹

When it is necessary to produce a judgment, a decision-making process is initiated. This process relies on several cognitive heuristics, for example, those related to information search, problem solving, drawing comparisons, and analogical thinking (Rouse & Morris 1986; Bettman, Johnson & Payne 1990; Holyoak, Gentner, & Kokinov 2001). Essential to this model is that virtually every aspect of the decision-making process is linked to the interaction between the internal attributes of the decision-maker and the stimuli provided by the external environment.¹⁰

iii. *Comparative analysis and possible alternatives*

As is often the case when dealing with opposing frameworks, there are meaningful homologies between formalism and realism. In some respects, they might even be described as inversions of one another; they are most clearly distinguished by the degree to which they prioritize certain data streams over others. For legal formalists, cases are distinguishable from one another primarily by the composition of legal principles that are invoked by the facts of the case: these principles are viewed as the relevant inputs that will determine the outcome of the decision-making process. Indeed, it is typically considered a basic tenet of legal ethics that personal characteristics not relevant to a given case, possibly including things such as race, ethnicity, gender, national origin, educational status, linguistic dialect, socioeconomic status, personality, and others, should not influence one's judgment regarding the facts of the case itself. Any judicial model that allows such factors to determine outcomes would be subject to serious ethical criticism. Thus, the formalist model of judicial decision-making relies on a set of convictions that clearly circumvent these factors; it is structured such that the facts of the case form a closed circuit with legal precedent in order to generate fair, just, and objective outcomes.

⁹ These stimuli may then be modulated and affected by the extra-legal influences that we have discussed above (e.g. primes, anchors, framing, and the perceived credibility of a witness)

¹⁰ Because of the extent to which the behaviorist model de-emphasizes content, scholars interested in taking an empirical approach have studied a wide range of decision-making behaviors, from making purchasing decisions to gambling.

Legal realists, on the other hand, consider the legal principles invoked to be but one of several aspects that differentiate the cases. And on the more extreme end of the spectrum, the legal behavioralists, consider these inputs to be of negligible importance: they distinguish cases on the basis of characteristics of the decision-maker and the context in which he or she is embedded. However, all models, at their core, presuppose that some measure of clarity and consistency can be found in the ways that decisions are made in the judicial context; they seek to generalize in such a way as to reduce the importance of specific cases; and both are ultimately concerned with mapping from inputs to outputs. In light of this, what do we make of the trope that for realists, the law is “whatever the judge ate for breakfast”? As it happens, this caricature has been subverted somewhat and reclaimed by realists, and perhaps most explicitly by Danziger *et al.* (2011). Citing emerging evidence from the psychological literature that repeated decision-making “depletes’ individuals’ executive function and mental resources” in a way that can bias the outcome of future decisions in favor of the status quo, Danziger *et al.* set out to evaluate the extent to which the sarcastic caricature might be supported by empirical evidence. Apart from pointing out that (a) the study utilized a sample consisting of experienced judges, and (b) the sequence of cases heard was exogenously determined, it is not necessary to look beyond the abstract for an unambiguous answer:

We record the judges’ two daily food breaks, which result in segmenting the deliberations of the day into three distinct “decision sessions.” We find that the percentage of favorable rulings drops gradually from [approximately] 65% to nearly zero within each decision session and returns abruptly to [approximately] 65% after a break. Our findings suggest that judicial rulings can be swayed by extraneous variables that should have no bearing on legal decisions. (Ibid.)

Of course, this finding is unlikely to come as a surprise to the reader; it is of part and parcel with the extra-legal influences on decision-making reviewed above, which by and large can be interpreted as evidence in support of the descriptive and predictive power of models originating from legal realism, such as judicial behavioralism.

Then again, formalists are not exactly left speechless by findings like this one, and it is worthwhile to consider what sort of rebuttal a formalist might offer. Such a rebuttal would

likely be expected to point out the biases and blind spots inherent in behavioralism. The blind spot is likely to be the complex big picture rather than the tangible details.

Indeed, these limitations are inherent in empiricism itself: any effort to rigorously verify that unconscious, emotional, and behavioral influences shape judicial decision-making would, almost by necessity, exhibit a distinct reliance on the conventions of positivism. The use of clear operational definitions and falsifiable hypotheses, in turn, leaves little room for complex, higher-order acts of interpretation and reasoning. Research questions must be framed such that discrete outcomes can be measured; clear predictions must be made. Because of this, formalists can criticize that these constraints leave behavioralists (for instance) to “test only those versions of formalist arguments that are... most easily falsified”; specifically, the idea of precedent, a variable in legal decision-making that is complex and subject to interpretation with respect to relevance and context, must be “operationalized for the purposes of hypothesis testing” in consistent (e.g. simplistic) ways (Gillman 2001, p. 468, 477).

In my view, however, formalists have an even more potent argument against rushing to embrace the realist view without deep and careful consideration: current legal systems are predicated in an essential way on formalist principles. Abandoning those principles indiscriminately would be tantamount to treating legal institutions with something close to distrust. The descriptive power of behavioralist models may be impressive, but they do not provide for the essential normative functions of judicial institutions. By all indications, these models function with or without considerations of fairness, justice, or equality.

This being the case, comparatively few scholars subscribe either to strict formalist or strict behavioralist models; it is generally acknowledged that, if taken to an extreme, either framework becomes somewhat problematic. At the same time, while it does seem to be a reasonable compromise, hovering indecisively *between* these two models (i.e. accepting that both legal principles and extralegal factors interact in order to produce outcomes) risks sacrificing the rigor and systematic approach that are the primary benefits of engaging a formal framework in the first place. Thus, it is reasonable to ask: what alternatives exist?

Although it has yet to gain widespread acceptance, the cognitive coherence model proposed by Simon (2004) offers an intriguing departure from input-output/stimulus-

response frameworks. Simon's model has its roots in an emerging area of psychology known as *coherence-based reasoning*:

Coherence-based reasoning posits that the mind shuns cognitively complex and difficult decision tasks by reconstructing them into easy ones, yielding strong, confident conclusions. The research reveals an unconscious transformation of the way decisions are mentally represented, ultimately leading to a seemingly straightforward choice between a compelling alternative and a weak one. (p. 513)

This exciting new area of psychological research is currently in a growth phase, and researchers are continuing to uncover specific ways in which this type of reasoning influences decisions. What is clear, however, is that Simon's cognitive-coherence model appears to diverge from strict formalist and realist models primarily by the role it assigns to processes of inference. Formalists view legal reasoning as being guided by legal precepts and the facts of a case; through a series of logical inferences, the decision-maker "advances from one state of belief to the next"; this logical sequence constitutes the rationale for a given decision (p. 511). In the realist model, unconscious processes guide the decision-maker toward a decision, influencing the result and outcome of inferences; legal reasoning is only used to justify this progression, and the rationale for a decision may even be produced retroactively: "creeping backward, from desired conclusions to their putative sources" (*Ibid.*).

The cognitive-coherence model takes a different approach to describing this process, one potentially capable of systematically allowing for the existence of exogenous or non-rational influences without eliminating the role of logic or law.

Complex decisions are solved rather by nuanced cognitive processes that progress bidirectionally between premises and facts on the one hand, and conclusions on the other. Ultimately, people make decisions through what appears to be a rational-like choice in which a strong alternative is... preferred over its rival. However, this dominance is the product of an unconscious cognitive process that reconstructs and transforms difficult and complex decisions into easy ones by amplifying the alternative and deflating the other (Ibid. p. 584).

This cognitive-coherence model is a comparatively new one, however, and only time, and data, can determine the extent to which it offers a viable alternative to the current formalism – realism dichotomy.

For the time being, the jury is still out on the true nature of judicial decision-making. The degree to which legal principles and truly rational inferences shape decision outcomes in the courtroom context is unclear, and due to the interpretive and contested nature of legal practice in combination with the methodological limitations of positivist empiricism, it is unlikely that the debate between formalists and realists will be resolved any time soon. However, the evidence available today does appear to suggest quite clearly that extra-legal factors exert a consistent and measurable influence over decision outcomes, even in the legal context. With this in mind, let us turn our attention to a popular technical framework that attempts to structure methods of influence: Neurolinguistic Programming.

III. Neurolinguistic Programming: Processes and Empirical Correlates

1. NLP: What it Is, What it Isn't, and Implications for Analysis

Neurolinguistic Programming (NLP) was developed in the early-to-mid-1970's by Richard Bandler, a student of gestalt psychology, and John Grinder, an assistant professor at University of California specializing in transformational linguistics. Grinder and Bandler asserted, first, that a relationship exists between cognitive and neurological processes, language, conceptual representations, and behavior; second, that unconscious processes influence communication in identifiable ways; and third, that one could leverage an understanding of the relationships between these processes in order to influence perception and bias decision-making, in a word, to be persuasive (Bradley & Biedermann, 1985). But there is one additional point that is particularly crucial: that because this mode of persuasion is based on analysis and intellectual understanding, it can be learned, ostensibly by anyone.

Persons who are extremely skilled at a task will have radically different processing sequences than those who perform poorly on that same task.

Understanding the structure by which the skilled person processes information, through the observation of eye scanning patterns and linguistic patterns, allows programs... to be codified, which can be taught to other persons. (Einspruch & Forman 1985, p. 589)

Although it adopts a decidedly scientific lexicon and is informed, to varying degrees, by insights derived from both gestalt psychology and linguistics, Neurolinguistic Programming (NLP) is not a scientific framework and should not be understood as such (Sharpley 1987). Similarly, clinical trials have established fairly conclusively that NLP offers little to no therapeutic benefit (*Ibid.*). It is more or less clear that Bandler and Grinder developed NLP primarily for the popular sphere, commercialized it as a framework for persuasion, self-help, and effective communication, and marketed it to businessmen, management consultants, and others. Insofar as it does not meet the criteria of a scientific framework, then, NLP should be understood for what it is: a commercial technology. When analyzing the works of Bandler and Grinder, it is important to keep in mind that they are businessmen, not scholars, and as such display an occasional tendency to make extravagant, sensationalistic claims about the life-changing power of their product; many such claims have been contradicted by empirical evidence (*Ibid.*).

However, as a commercial technology, NLP is also an immensely popular one, having spawned “numerous practitioners and schools” and having made multi-millionaires of some of its “most prolific gurus” (BBC 2010). Perhaps unsurprisingly, it is not without its proponents in the legal field, and it has been used as a framework for guiding dispute mediation as well as for enhancing trial advocacy by a growing number of legal practitioners (Zadeh 2009). In the legal context, critics “tend to downplay NLP,” noting that its methods fall outside mainstream practice; proponents, meanwhile, describe NLP as

...a way of teaching, of best presenting a case by telling a story in a strategically structured way. It is based on knowledge of how people learn.... Lawyers tend to be auditory learners which guides their presentation of a case. But most people are visually oriented. This realization helped lead to the tremendous increase in the use of courtroom graphics and displays in recent years—and to the tremendous growth in trial consulting. (Carter 2001, p. 60).

Given its commercialization as an intellectual commodity, misinformation regarding NLP is prevalent; to say the least, it has its share of critics in addition to the acolytes who made it such a popular, and lucrative, framework. As a result, contentious debates are common features of the discourse surrounding NLP and its implementation.

This situation presents something of a tricky situation from an analytic perspective. Certainly, weighing in on the efficacy of NLP is a task best left to more empirical investigations; considering the multitude of claims surrounding NLP, that task lies far beyond the scope of the present research. At the same time, while the psychological literature has certainly yielded a number of informative lessons regarding persuasion, persuasion as a practice, as a *techne* or technology, is another animal entirely.

The study of persuasive writing has been dominated by a kind of “armchair psychology”—a set of conventions and practices, handed down from lawyer to lawyer, developed largely from instinct and speculation. By and large, the information available... about persuasive legal writing reproduces these conventions and practices... without taking stock of the growing body of research from other disciplines... (Stanchi 2006, p. 412)

Even more evidence-based scholarly investigations into how persuasion is enacted in the courtroom tend to be descriptive in nature and limited in scope, exploring, for instance, how narrative structure or an emotional encounter influence decisions, what characterizes effective trial talk, or how attorneys frame questions during cross-examination (Boyll 1991; Matoesian 1993). Once more, however, these explorations amount to an accumulation of techniques more so than an integrative, holistic framework for implementing them. They are oriented toward identifying individual persuasive techniques or describing their use, not producing self-contained, prescriptive, action-oriented frameworks for implementing them. Indeed, the latter would amount to a primarily synthetic activity rather than an analytic one: it would yield not an academic exploration of persuasion, but rather a product, a method, or perhaps even an art.

Technologies for persuasion tend to occupy a somewhat more esoteric register: they may be directly commercialized, like NLP; they may be ad-hoc aggregations of insights regarding perception and decision-making that lack structure or guidelines for

implementation (these often appear in the literatures of business, marketing, and consumer behavior); or they may be primarily anecdotal, typically in the form of an expert salesman or politician conveying qualitative lessons in narrative form (opinion-editorials and self-help books on leadership are common formats for this category). Thus, attempting to explore how persuasion is enacted in the courtroom from a practical rather than a descriptive perspective requires us, at least to some extent, to tentatively venture beyond the black-and-white safety of empirical rigor and into somewhat murkier waters.

If this is the case, then despite its controversies, NLP actually offers quite an attractive starting point for several reasons. First, the basic principles that define its framework are fairly straightforward. Second, due to its origins as a novel therapeutic model, empirical literature on aspects of NLP does exist. Third, although interest in NLP has waned in recent years, on the whole it has achieved a remarkable popularity while also showing an impressive degree of endurance: seminars on the subject are conducted with some regularity locations around the globe, and occasionally at prestigious universities (Lee 2014). Fourth, there is sparing but explicit evidence that it is employed in the courtroom as a technology of persuasion (Zadeh 2009; Carter 2001; Bashir & Ghani 2012).

It is important to keep in mind, however, the nature and scope of the current exploration, which is not designed to determine, or even evaluate, the efficacy of NLP as a framework for persuasion. Moreover, it is explicitly not an endorsement of NLP or any of the claims regarding its potential uses. Rather, NLP is considered here not as a *logos* but as a *techne*, specifically, a commercial technology for persuasion that has potential relevance for the courtroom context, and which may be used in a way that either modifies the behavior of litigators, influences the judicial decision-making process, or both. Given the popularity of NLP over the course of the 1970's and 1980's, a period during which scholars flirted with the idea of making it a mainstream therapeutic framework, subjecting it to rigorous clinical trials even as millions of copies of how-to books were sold and ingraining the idea of "scientific persuasion" as a powerful tool in the popular consciousness, at a minimum it is reasonable to assume that NLP has at least indirectly shaped how trial advocacy consultants approach courtroom persuasion.

Before turning to NLP itself, a last qualification is required in the interest of analytic focus: Because NLP was designed and marketed for broad applicability as a framework for

enhancing communicative and interpersonal skills, it would be expected to shape only certain aspects of persuasion in the courtroom context; thus, the question of how to operationalize “persuasion” for the purposes of the present research could have a serious impact on the outcome of this exploration. For instance, Voss’s (2005) definition of courtroom persuasion, “the organization of legal arguments and evidence within the framework of court procedures in a way likely to produce a certain decision”, lacks the necessary emphasis on the interpersonal aspects of persuasion that NLP claims to impact most directly (p. 301). Thus, for the purposes of discussing the use of NLP in the courtroom, this research adopts Costopoulos’ (1971) much broader definition, which characterizes persuasion as the act of “influencing the minds of others by arguments or reasons, by appeals to both feeling and intellect... the art of leading another man’s will to a particular choice or course of conduct” (p. 384).

Of course, adopting this definition can be expected not only to shape how we approach the use of NLP in the courtroom; it also reflects, at least to some extent, a move away from the formalist model of decision-making in favor of a more realist framework. We believe this move is justified on the basis of robust empirical evidence that extra-legal factors can and do affect judicial outcome in a measurable way. Furthermore, even if this were not the case, a substantial proportion of practicing legal professional subscribe to this view (as evidenced by the sheer size of the trial advocacy industry, if nothing else). Because of this, even if formalism was ultimately vindicated as the model for explaining how judicial decisions are made, it would remain an inadequate lens through which to interpret the behavior of litigators as they attempt to engage in acts of persuasion in the courtroom today.

2. Introduction to the Basic Frameworks and Techniques of NLP

This section offers an introduction to the core concepts underlying the practice of NLP. It begins with a discussion of the basic assumptions guiding the practice as a whole, which are largely contained in the predecessor to NLP developed by Bandler and Grinder, known as the “meta model.” Next, we examine how these assumptions are manifested as interactive techniques designed to guide the behavior of the NLP practitioner, including

mirroring, sleight of mouth (including frames and re-framing), and the use of “patterns.” Next, we explore how these techniques might be integrated in the context of negotiation.

As we proceed, it might be useful to keep in mind that, for Bandler and Grinder, all models are fictional by nature (1976, p. 45). Thus, rather than relying on concrete criteria or rigid, binary categories, NLP is designed for flexibility and illustration. Phases and procedures are not necessarily executed sequentially, and certain indicators and cues could potentially signify more than one meaning: these things are not treated as “sharply distinguishable,” but rather are conceptualized as “flow[ing] into one another” (*Ibid.*). Once again, the focus is on practice and implementation, and the NLP model is intended to be just that: a useful tool for organization and interpretation.

a. The Meta Model: Distortion, Deletion, and Generalization

Neurolinguistic Programming began as a method for obtaining information from the speech of a conversational partner, and then using insights derived from that information to challenge underlying, unspoken assumptions and cognitive patterns (Bandler & Grinder 1975, p. 6). Einspruch and Forman offer a plain and straightforward summary of the practice:

NLP is a way of organizing and understanding the structure of subjective experience and is concerned with the ways in which people process information but not necessarily with the specific content of that information. (1985, p. 589)

This summary clarifies the nomenclature somewhat: the meta model, Bandler and Grinder’s first formal model, is thus named because it assumes that there is a fundamental distinction between the map and the territory, so to speak; it is “meta” in the sense that it privileges structure and process over content (Hoag 2015). NLP is distinct from other metamodels in large part because of the emphasis it places on linguistic features. Invoking vocabulary from the field of transformational linguistics, Bandler and Grinder argue that language systems are actually “derived representations of a more complete model,” comprised by the entirety of an individual’s experience.

Transformational linguists have developed a number of concepts and mechanisms to describe how the way that people speak—their Surface

Structures—is actually derived from their full linguistic representation—the Deep Structures. (1976, p. 3)

For the purposes of the present discussion, the meta model is primarily concerned with three key purported cognitive processes, termed *distortion*, *deletion*, and *generalization*. According to Bandler and Grinder, distortion involves making connections between perceived stimuli, their significance, and possible consequences. According to Zadeh (2009), the mind “distorts information” through labeling, interpretation, inference, before finally arriving at a conclusion (p. 8). To elaborate on the quote above, then, verbal communication is considered to be an act of translation and transformation from complex, multidimensional, interrelated deep structures to surface structures, the simplified arrangements of abstract and somewhat arbitrary symbols used to express them. In order to be intelligible, these transformations must also be simplifications: thoughts must be scaled down, and at least some assumptions must be omitted.

Thus, a common way in which distortions are believed to occur is through *presuppositions*, wherein sentences are formed around the assumption that both parties understand a certain fact or set of facts, without which the sentence can neither be parsed nor understood. Sometimes, the presupposed set of circumstances is obvious; in other instances, however, a speaker may take a certain set of circumstances for granted without having questioned the possibility of alternatives. In this case, the NLP practitioner may interrupt the flow of the conversation, by ignoring a question for instance, in order to challenge the dubious presupposition.¹¹ Distortions can also occur when motives, intentions, or meanings are falsely attributed to another party without reasonable justification (in NLP parlance, this is termed a *mind-reading violation*),¹² or by omitting the

¹¹ Example: “How much does Peter want to sell his car for?” Presuppositions: “Peter owns a car; he wants to sell it; the amount he hopes to receive in exchange for the car is relevant to the transaction.” Possible challenges: “Does the car actually belong to Peter?” “Does Peter actually want to sell it?” “Does it really matter how much he wants to sell it for, or will the price be determined by the value of the car irrespective of his preference?”

¹² Example: “He is going to end the cooperation if we don’t agree to his proposal, so do you want to tell the boss or should I?” Possible challenges: “Has he said that he would do that if we don’t agree?” “Why do you think he will end the cooperation?”

source or cause of a certain assertion or consequence through the use of passive sentences in order to obfuscate a potentially unreliable origin.¹³

Deletion, in turn, relates to the filtering and prioritization of stimuli, rather than to their interpretation. It refers to a process by which the experienced world is “reduced to proportions”; because attentional resources are scarce, Bandler and Grinder argued, people must use it selectively, attending to certain dimensions of experience while neglecting others (*Ibid.*). Generalization, meanwhile, refers to a process by which

...elements or pieces of a person’s model become detached from their original experiences and come to represent an entire category of which the experience is an example (Hoag 2015).

In other words, generalization describes an unconscious process of induction, of making an inferential leap from the specific to the general, in which the mind “unconsciously creates abstract principles and rules” based on experience, which shape future behaviors.¹⁴

Thus, at least from an extremely general, epistemic perspective, the basic assumptions of NLP do not differ dramatically from those underlying more mainstream, empirical therapies, such as cognitive-behavioral therapy, which holds that altering maladaptive thoughts can produce changes in affect and behavior. Thus, in CBT,

...errors in thinking such as overgeneralizing, magnifying negatives, minimizing positives, and catastrophizing are challenged and replaced with more realistic and effective thoughts, thus decreasing emotional distress and self-defeating behavior. (Hasset & Gevirtz 2009, p. 3)

The involved processes (e.g. the nature of the relevant cognitive distortions) differ, but from a meta perspective, the core principles and underlying assumptions are quite similar: individuals accrue learned thought patterns, or cognitive distortions, through experience; these distortions may confer an advantage in some situations but may be

¹³ Example: “Peter was often called an untrustworthy man.” Possible challenge: “Who called him that?”

¹⁴ Example: “I have to conclude this agreement at the next meeting.” Possible challenge: “What would happen if you don’t?”

poorly adapted to other situations, in which case they produce maladaptive behaviors; and through dialogue, a practitioner can identify these distortions and challenge or manipulate them to yield a desired cognitive or behavioral result.¹⁵

In NLP, the meta model functions as a tool: it is the framework by which the practitioner seeks to “identify problematic deletions, distortions, and generalizations” that shape thought processes and which emerge in “linguistic interactions”, and then attempt to alter or revise them (Hoag 2015). The means by which these modifications are made is ultimately dependent on how one’s interactional partner represents and understands the world. Because individuals vary in the relative degree to which they respond to visual, auditory, kinesthetic, and other stimuli, Bandler and Grinder argue, they construct different representational systems that emphasize these factors to different degrees, and furthermore, that depending on their mental state, individuals modulate the degree to which they emphasize these aspects of their representational system, an inflection known as “mode.” Finally, Bandler and Grinder believed that it is possible to “diagnose” the characteristics of the representational system used by any given individual on the basis of linguistic cues (Table 1).

Table 1: Representational Mode and Possible Linguistic Cues¹⁶

Representational Mode	Possible Linguistic Cues (idiomatic)
Visual	See you later, have a look, watch it, be clear, foggy, appears
Auditory	Listen, talk to, said, speak, hear, sounds like
Kinesthetic	Feelings, get in touch, hold, grasp, handle

Ideally, this diagnosis should be followed with some kind of therapeutic response: an NLP practitioner will seek to communicate with their client using idioms they find familiar and consistent with their representational system (e.g. the practitioner modifies his surface

¹⁵ This comparison is used for the purposes of explanation and illustration; it should not be interpreted as a statement of equivalence between NLP and CBT. The practices, methods, and even objectives of these methods are distinct. CBT is a theoretically grounded mainstream therapeutic framework widely used in clinical psychology; NLP is not.

¹⁶ Examples drawn from James (1999).

structures in order to facilitate more effective communication). Next, the practitioner might take steps to identify and correct distortions.

b. Mirroring and Rapport

An NLP practitioner will typically begin by seeking to build rapport with a client or other interactional partner. The intent is to increase the partner's level of comfort, engender trust, and establish effective and natural lines of communication. An important aspect of this process involves seeking to match the representational mode of the partner diagnosed covertly by the NLP practitioner using linguistic and other cues (e.g., eye position, posture). If the interlocutor appears to rely primarily on visual metaphors and idioms to communicate, then the practitioner will seek to do the same in hopes of increasing the salience of his statements (*Ibid.*).¹⁷

However, the process of building rapport can potentially begin even sooner, potentially from first moments following a meeting. According to NLP, just as representational systems and modalities can influence word choice, so too can they elicit subtle visual and physiological cues. One of the more controversial aspects of NLP is the use of eye position as an indicator of representational mode: Bandler and Grinder believed, for instance, that "when people look up, they're visualizing," while when they look "horizontally to the left and right, they're either remembering or constructing sounds" (*Ibid.*). Other cues used by NLP practitioners to gain insight into representational mode involve posture (e.g. do they sit forward on the edge of the chair?), grooming, and breathing patterns (e.g. do they breathe from the belly or the chest?) (*Ibid.*).

Because of this, NLP places a heavy emphasis on a practice called *mirroring*; seeking to match and reflect both verbal and non-verbal elements of the partner's behavior.

To the extent that you can match another person's behavior, both verbally and non-verbally, you will be pacing their experience. Mirroring is the essence of... rapport. There are two kinds of non-verbal pacing. One is direct mirroring... when I breathe at the same rate and depth that you breathe... Once you have paced well,

¹⁷ Practitioners are also encouraged to match frequently-repeated words, such as "like" or "actually." (*Ibid.*)

you can lead the other person into a new behavior by changing what you are doing. (Bandler 1979, pp. 79-80)

In NLP, mirroring also has auditory and verbal components in addition to the expressive and postural elements discussed above. Practitioners are taught to match the voice of their interactional partners in terms of “tone, tempo, timbre... and volume” (James 1999). If a conversational partner speaks slowly and softly, with frequent pauses, for instance, speaking loudly and rapidly would be viewed as not conducive to rapport building. Finally, there is a semantic element to mirroring and pacing. NLP practitioners also seek to match the “chunk size” of a given interlocutor. If the interlocutor tends to offer large, complex “chunks” of information all at once, then the practitioner should respond in kind; similarly, if the interlocutor prefers to make relatively simple, straightforward, and brief statements, then the practitioner should respond accordingly. The same principle applies for the level of abstraction the interlocutor appears to prefer. According to Zadeh (2009), the rationale for using mirroring and pacing to build rapport involves leading one’s partner to “develop trust” because he or she infers from these behaviors that the practitioner views the world as they do (p. 11). This technique is also believed to induce a feeling of familiarity and comfort.

Thus, while the NLP practitioner typically initiates rapport-building through matching, mirroring and pacing, once developed, rapport becomes a two-way street: NLP practitioners argue that interactional partners enjoy the bond and express this physically, by adopting mirroring behaviors of their own. This synchronicity is believed to be pleasant, and people are reluctant to break it; thus, the practitioner can lead as well as follow in a sort of unspoken, postural and physiological dance. During this process, the practitioner is subtly conditioning his or her partner to follow; as the interaction progresses, this learned behavior can be used as a means to lead the partner into modifying a maladaptive thought pattern (e.g., correcting a generalization, eliminating a habitual deletion, or altering a distortion).

In some respects, mirroring is arguably one of the most empirically supported components of the NLP framework. As a behavioral phenomenon, mirroring has been the subject of detailed psychological and even neurological studies, although there is

something of a terminological disconnect. In the context of NLP, mirroring refers to an interactive technique; in the context of the research literature, however, it is generally treated in a more limited, less functional, and more value-neutral sense. Additionally, different disciplines may emphasize different aspects of the behavior. Thus, the NLP technique of mirroring described above should be understood as bearing a close resemblance to its behavioral counterpart, but remaining distinct from it nonetheless.

For psychologists, the term *mirroring* denotes a behavior in which one individual unconsciously mimics some aspect of another's behavior or demeanor. Interestingly, it is a behavior that is exhibited not just by humans, but by a surprising number of species, including primates, birds, elephants, dogs, rodents, cetaceans, some tortoises, and even the cephalopoda *Octopus vulgaris*; this suggests that this behavior is driven by deep-seated evolutionary forces (Bonini & Ferrari 2011). In fact, mirroring is associated with a distinct class of visuomotor neurons known as *mirror neurons*, which discharge not just when an individual *performs* a particular action, but also when that individual *observes* the same action being performed by another (Ibid.; Rizzolatti & Craighero 2004).

Mirror neuron systems are believed to play an important role in a number of higher-order cognitive processes, including recognizing "others' behavior based on the activation of one's own motor representations," learning, understanding and predicting another organism's intentions, and even empathy (Bonini & Ferrari 2011; Schulte-Ruther, Markowitsch, Fink, & Piefke 2007). Because of this, it is not surprising that mirror neurons are vital for mediating social interactions, so vital in fact, that mirror neuron dysfunction is implicated in the "cascade of impairments" associated with autism spectrum disorders, including "deficits in imitation, theory of mind, and social communication" (Dapretto *et al.* 2006, p. 28). Conversely, those who are especially empathetic tend to exhibit more pronounced mirroring behaviors than others; even so, mirroring may occur even in circumstances in which social interaction is minimal: in the laboratory setting, this can extend to two otherwise unacquainted individuals who "had no goal to affiliate," suggesting that unconscious mirroring can shape "newly formed groups" as well as established ones (Chartrand & Bargh 1999, p. 907).

As a dynamic in the field of social cognition, mirroring relates to physiological synchronization as well as performed actions and even expressed emotions (Semin &

Cacioppo 2008). Postural mirroring can serve as an unconscious signal communicating one's openness to interpersonal involvement or to signal group affiliation (LaFrance 1985). Behavioral synchrony and postural symmetry can be used to communicate dominance in a highly inflected way, with symmetry-forming behaviors appearing to be at least as significant as symmetry-breaking behaviors (Stamenov & Gallese 2002). With respect to building rapport, behavioral mirroring in particular can serve as a kind of human "courtship dance" that occurs during opposite-sex encounters: "Behavioral synchronization is a form of coordinative interaction which is thought to be present in almost all aspects of our social lives," write Grammer, Kruck, and Manusson (1998, p. 3). They continue:

Movement synchrony can be expressed in sequential temporal aspects or timing of movements during an interaction.... The proximate function of this type of synchronization or interpersonal coordination is its apparent importance for establishing and maintaining rapport. Movement synchronization may also reflect an active and involved type of positive rapport associated with feelings of high positive affect, motivation, interest, and talkativeness. The total experience of rapport is constituted by interpersonal coordination together with emotional positivity and attentional focus. (p. 4)

Considering that NLP's approach to mirroring and synchrony pre-dates many of the studies cited above, its resemblance to this widely documented and much-studied phenomenon is impressive to say the least. Nonetheless, the studies cited above are descriptive in nature, and as such they treat mirroring with an objective empirical attachment: it is merely an observed behavioral phenomenon. NLP, on the other hand, is not primarily interested in description; it is a technology for persuasion. As such, it proposes to actively leverage conscious mirroring in a subtle dance designed to build rapport or negotiate dominance, creating an opening for, and to a certain degree partially constituting, persuasive influence.

c. Sleight of Mouth

Part of what makes NLP an attractive candidate as a descriptive model for how persuasion is enacted in the courtroom is that it is multimodal and integrative by design. It

does not rely purely on either conceptual structures like those contained in the meta model or exploiting unconscious behavioral communicative processes such as mirroring. This section examines another technique built on the NLP framework: a system of language patterns known as *Sleight of Mouth* (SoM). The discussion of SoM below examines the role of beliefs and equivalencies, frames and re-framing, and applications of SoM's linguistic and conceptual "patterns."

i. Beliefs: Equivalencies and Cause-Effect Relationships

As an application of the Meta model, SoM relies on leveraging linguistic patterns in order to implicitly influence how interlocutors conceptualize certain topics; it is perhaps the aspect of NLP that is aimed most explicitly at persuasion in the classical sense of challenging and changing the beliefs of a conversational partner. The "patterns" used in SoM focus on two types of beliefs or assertions in particular: those formulated as a complex equivalence between subject and predicate (e.g. "S is equivalent to P") or as a cause-effect relationship between subject and predicate (e.g. "S causes P" or "S is a result of P"). According to Robert Dilts (1999), the NLP practitioner who developed SoM, statements of belief most commonly follow one of these two structures; in fact, in the SoM model, a statement *must* be formulated in one of these two structures in order to qualify as a full "belief statement" (pp. 142, 156).¹⁸ Belief statements, in turn, are the fundamental units that SoM seeks to manipulate:

SoM patterns can be viewed as verbal operations that shift or reframe the various elements and linkages which make up the complex equivalences and cause-effects which form beliefs and belief statements. All SoM patterns revolve around using language in order to relate and link various aspects of our experience and maps of the world to our core values. (Dilts 1999, p. 156)

In SoM, both these formulations are vulnerable to misrepresentation and deconstruction. For Dilts, complex equivalences are inherently problematic because they involve oversimplifying (at the level of surface structure or, alternatively, in the process of

¹⁸ Dilts clarifies that in SoM, verbalizations that do not adhere to either formulation (e.g. "Everybody likes me") are considered "generalizations" related to core values, not belief statements (Ibid.).

verbal representation) relationships that are actually quite complex and qualified at the level of deep structures (p. 144). Conceptions of cause and effect, in turn, are often error-prone for the same reason: at the experiential level, sequence or correlation may easily be confused with causation. For example; most people, whether out of convenience or oversight, tend to prefer to articulate simple cause-effect relationships (e.g. a single cause produces a single effect) despite the fact that “causes are often less obvious, broader, and more systemic in nature than the particular phenomenon” one is interested in explaining (p. 147). Furthermore, Dilts notes that people tend to use the same cause-effect linguistic formulations in order to describe a wide range of possible cause-effect relationships, rarely discriminating verbally (or, perhaps even consciously) between precipitating, constraining, final, and formal causes (pp. 148-149).¹⁹

Of course, from a philosophical or academic perspective, the contention that these statements are vulnerable to the errors described above is almost laughably unremarkable. Indeed, philosophers have spent far more time wrestling with the question of whether any belief or any statement whatsoever is free of these structural limitations; at the risk of oversimplifying, this debate is the subject of the entire field of epistemology. Indeed, experimental results from the fields of psychology and neuroscience have even cast doubt on the legitimacy of what is perhaps the most basic and familiar cause-effect relationship of all: that the decision to act (e.g. to twitch a finger or raise a cup to your mouth) actually causes the corresponding action. Individuals can be easily duped in the laboratory setting into believing that they are exerting conscious control over random processes, and neurological studies have observed that certain processes, such as moving a finger to press a button, are consistently initiated at the cerebral level before subjects report having decided to take the action in question (Baumeister 2008; Libet et al. 1983).

¹⁹ Dilts's definitions of each of these causal categories: 1. *Precipitating causes*: “Past events, actions, or decisions that influence the present state of the system through a linear chain of action-reaction.” 2. *Constraining causes*: “Present relationships, presuppositions, and boundary conditions which maintain the current state of the system.” 3. *Final causes*: “Future objectives, goals, or visions which guide or influence the present state of the system giving current actions meaning, relevance, or purpose.” 4. *Formal causes*: “Fundamental definitions and perceptions of something... what are we presupposing about [the nature of the phenomenon in question]?” (pp. 148-151)

The fact that automatic, nonconscious processes are the direct causes of action seems now well established... There are several ways to interpret these findings... [perhaps] people do not have a direct, introspective way of knowing when they initiate action, and so they rely on salient clues to give them the feel and subjective impression of having acted or chosen, and this system of cues can be fooled. (Baumeister 2008, p. 16)

If the belief categories articulated by Dilts seem simple, common, even fundamental, then there is a simple reason: they are. SoM does not target these statements for deconstruction in spite of the fact that they are ubiquitous, but precisely because they are. Because the assumptions that underlie them pervade discourse and grammar while resting, nonetheless, on shaky foundations. Thus, if SoM can be viewed as a standardized method for rhetorical deconstruction and transformation in which communication is manipulated to yield subtly different understandings of socially constructed relationships and epistemically uncertain phenomena, then the rationale behind selecting “belief statements” as the fundamental unit of concern starts to make sense.

ii. *Frames and Re-Framing*

In SoM (as in NLP more broadly), the term *frame* refers to “a context or way of perceiving something” (Adler 2002, p. 293) or, to use Dilts’s (1999) somewhat more specific definition, “a general focus or direction that provides an overall guidance for thoughts and actions during an interaction” (p. 22).²⁰ Frames are considered to be useful because they are believed to serve an organizational function, allowing individuals to prioritize the relevant information in a given interaction somewhat hierarchically. They “establish the borders and constraints surrounding an interaction,” and so are categorized by the nature of these borders and constraints (Ibid.). SoM uses a number of frames; to offer just a few examples, *time frames* influence the degree of focus and investment in a given interaction or activity; *outcome frames* emphasize the goal or desired future state; and *problem frames*

²⁰ Note: this discussion is focused on “frames” and “framing” as NLP terminology. For the psychological usage, see section II.2.iv. (“Miscellaneous extra-legal influences on judicial decision-making”) above.

emphasize what is wrong with the present state of affairs, leading to “a focus on undesired symptoms and a search for their causes” (Ibid.).

In many cases, different frames can be used to draw attention to different parts of the same informational content or to signify the speaker’s orientation to this information. For instance, if one were to say, “It’s raining today *and* I’m happy,” the listener might hear either a statement of two causally unrelated facts, or could potentially infer that the speaker is happy *because* of the rain. If, however, the speaker had said “It’s raining today *but* I’m happy”, “It’s raining today *because* I’m happy”, or “It’s raining today *even though* I’m happy,” the listener might come to very different conclusions despite the fact that in each of these sentences, the speaker has offered the same two component facts: “It’s raining” and “I’m happy.” The grammatical and lexical construction of these sentences, however, changes their semantic content, modulating the relationship between these component facts, as well as between the speaker and each fact. In SoM, each variant would be evaluated as a distinct frame.²¹ By remaining attentive to the frames employed by an interlocutor, NLP practitioners hope to gain insight into the relationship between the speaker’s surface structures and the deep structures they are designed to represent.

This is not to say, however, that frames are value-neutral descriptors in the context of SoM; certain frames are typically preferred to others. Outcome frames, for instance, are almost always preferred to problem frames, because the former have a constructive orientation that could lead to a solution more quickly. A related example is that of feedback frames and failure frames: the former emphasizes improvement by identifying and correcting the processes or strategies that led to an undesirable result, while the latter suggests that the undesirable result, the “failure”, reflects one’s shortcomings or flaws. Thus, feedback frames are generally preferred to failure frames.

It is important to keep in mind that frames may vary from individual to individual and from circumstance to circumstance; there is no guarantee that all parties in a given interaction will adopt a shared frame. In the context of negotiations, for instance, collaborative frames (in which the parties seek to arrive at a mutually-beneficial solution)

²¹ Note: These frames are considered by NLP practitioners to be nothing more than descriptive labels that help identify certain conceptual patterns, rather than distinct subconscious processes.

are considered superior to competitive ones (in which each party seeks to “win” or come out ahead, implying, of course, that the other party “loses”). However, while collaborative frames may lead to the best outcome when shared by both parties, adopting a collaborative frame can be a liability if the other party does not do the same: the party approaching the negotiation from a collaborative perspective may make concessions in the interest of mutual gain, while the competitive party is likely to accept these concessions without offering reciprocation.

It is precisely this type of situation, however, that SoM is designed to address. Using this framework, practitioners believe that they will be able to not only “diagnose” the other party’s frame at an early stage using subtle linguistic cues and clues, but also take steps to encourage the other party to abandon ineffective frames and adopt more constructive ones, thereby yielding more desirable outcomes. This is called *reframing*:

...[T]o “reframe” something means to transform its meaning by putting it into a different framework or context than it has previously been perceived... In NLP, reframing involves putting a new mental frame around the content of an experience or situation, expanding our perception of the situation so that it maybe more wisely and resourcefully handled. (Ibid. pp. 33, 35).

Just as SoM categorizes frames based on emphasis and content, it categorizes approaches to reframing based on the type of alteration the practitioner hopes to make to the interlocutor’s frame (e.g. size, content, or context). These categories are treated with greater detail in the following sub-section, but for now it might be useful to take a moment to examine the concept of framing as it is used in the context of NLP and compare it with its counterpart from the social science research literature.

Even in the context of academia, frames and framing can be used in several distinct ways. In psychology and behavioral economics, framing effects are a form of cognitive bias or distortion, as described in section II.2.iv above. Framing bias is particularly implicated in prospect theory which typically describe the effect in terms of changing perceptions of costs and benefits through differential weighting of gains and losses. The standard example of this type of framing has researchers manipulate participants’ evaluation of equivalent options by emphasizing gains or losses (e.g. positive vs. negative framing).

In the context of sociology, however, framing has not one but two distinct meanings. The first was introduced by Goffman in his 1974 masterpiece, *Frame Analysis: An Essay on the Organization of Experience*. In Goffman's formulation, framing is a widespread, even ubiquitous, rhetorical and semiotic process that allows individuals to structure, organize, and derive meaning from experiences. Goffman's approach was indicative of a contemporary shift in approaches towards social phenomena in favor of constructivism, a conceptualization of meaning-making as a dynamic process rather than one restricted by concrete significance. For Jameson (1976), Goffman offers not just an invention of "something like a grammar and a set of quasi-syntactic abstractions for analyzing social life," but in the process also presents an "elaborate defense" of an intriguing proposition:

...[M]eanings, in everyday life, are the projection of the structure or form of the experiences in which they are embodied, and that they may most adequately be dealt with in terms of the ways in which such experiences are framed, in which they relate to, transpose... or cancel other frames. (p. 119)

The second way in which the concept of framing is used in the sociological context is actually an adaptation of Goffman's formulation (which deals primarily with experience and interactions at the level of the individual) to the context of social movements and social mobilization on a larger scale. Snow et al. (1986) propose that such movements flower when its organizers project values and perspectives (e.g. frames or "schemata of interpretation") that "resonate" with those of participants through a phenomenon termed *frame alignment*:

By frame alignment, we refer to the linkage of individual and SMO²² interpretive orientations, such that some set of individual interests, values, and beliefs and SMO activities, goals, and ideology are congruent and complementary... So conceptualized, it follows that frame alignment is a necessary condition for movement participation, whatever its nature or intensity. (p. 464)

It is clear that the concepts of frames and framing in the context of NLP and SoM lack both the objective, functional rigor of the psychological usage and the detail of the

²² Note: SMO is used to denote Social Movement Organizations.

sociological one. Not surprising considering that NLP is a framework explicitly designed for popular consumption. However, there is also an obvious qualitative resemblance between the idea of framing as described by NLP and that described by Goffman and, to a lesser extent, Snow. In both formulations, framing allows individuals to organize and structure their experience; it shapes perception, motivation, judgment, and decision-making. Similarly, both approaches describe frames as capable of coinciding or conflicting, and both hold that these configurations have implications for the effectiveness of communication and the salience of ideas. These resemblances are not, of course, equivalencies, and these terms are not interchangeable in any rigorous sense. Even so, they are hardly the first resemblances we have encountered throughout our discussion.

In the context of persuasion, however, it is important to point out that NLP is not necessarily quite as benign as described above. The courtroom is not a site for therapy; NLP-trained advocates are unlikely to be especially interested in gently correcting distortions or deletions they identify in a witness during testimony. Instead, it is reasonable to assume that the practitioner would seek to exploit these representational difficulties in order to undermine the credibility of a witness, to assess the limitations of a legal argument in order to outmaneuver it, or simply to confuse and confound rather than bring clarity.

There is nothing about NLP that implies it can *only* be used for therapy: after all, NLP seminars are marketed primarily to executives, salesmen, and public speakers rather than to therapists, teachers, or social workers. Although it remains largely unstated, NLP's success is likely partly attributable to its implicit promise of altering power dynamics between individuals: lurking under the surface of its practices, there is the subtle claim that NLP can be used to empower its practitioners with a clear set of rhetorical and persuasive tools while leaving the interlocutor to navigate by intuition and judgment alone. A natural way of communicating that, as we have shown repeatedly above, is error-prone at best and vulnerable to systematic misdirection at worst. The parallels between NLP and the research literature do not mitigate this risk, but rather make it all the more significant. That said, the same is true for the field of trial advocacy itself.

It might be useful at this juncture to pause and reflect on what has been reviewed and what remains to be done. Thus far, we have explored theoretical models of judicial decision-making processes and shown that these processes do not appear to be algorithmic

or even necessarily strictly rational. We have reviewed a number of presentational, interactive, cognitive and psychosocial factors that can influence judicial decision-making and examined the somewhat ad-hoc nature of the existing literature on persuasion in the courtroom. We have also reviewed Neurolinguistic Programming and Sleight of Mouth as widely-used popular technologies for persuasion, during which we sought to draw, wherever possible, parallels between the targets of these techniques (e.g. the cognitive or perceptual biases they are designed to exploit) and seemingly related empirical concepts.

We have, in other words, covered a lot of ground. However, the four domains we have explored thus far, theoretical frameworks for judicial decision-making, extra-legal influences on decision-making processes, NLP, and SoM, have been treated fairly independently, with connections being drawn from one domain to another only in passing. Having laid out this basic empirical, theoretical, and factual groundwork, then, it is time for us to turn our attention to an explicit and focused exploration of how these four stories combine in the context of the courtroom.

IV. NLP as a Framework for Understanding Judicial Persuasion

Lawyers have long been aware of the importance of nonverbal communication in interpersonal interactions (Remland 1994). Indeed, nonverbal signals are used strategically: in addition to leveraging these signals to *build* rapport (e.g. advocates seeking to create a trustworthy image of themselves and their clients in the minds of decision-makers), the legal literature has also considered using body language to assess some stakeholders' openness to persuasion (e.g. during the process of jury selection in the US) (Barkai 1990, p. 104). Indeed, according to Peters (2007):

Whether acting as a third party neutral, addressing a judge... or prepping a witness, an understanding of unspoken communication is essential to establishing rapport and gaining credibility... When a receiver views a speaker as similar to herself, the receiver perceives the speaker and his message as more attractive, and thus more persuasive. Similarity can be established through subtly mirroring the

other person's movements, communication style, or through shared dress, artifacts, or culture (pp. 88, 92)

Similarly, Bloom and Powdermaker (2006) argue that “for attorneys and witnesses, understanding [rapport] is paramount to establishing and maintaining” connections with courtroom decision-makers. Despite this growing acknowledgement of the importance of rapport and nonverbal communication for enacting courtroom persuasion, the literature exhibits a worrying tendency to list a range of individual tricks and techniques, apparently without a thought towards integrating them into anything resembling a coherent framework. Bloom and Powdermaker offer a compelling illustration of this trend as well. The following quote is composed of sentences drawn from a single page; in the actual text, three sentences or less separate each of the following prescriptions:

Many jurors have conveyed frustration toward attorneys and witnesses they perceive as arrogant in the courtroom... Crossing one's arms at the chest or body is protective and gives off the impression that one is closed, guarded, and defensive... Both witnesses and attorneys should try hard to avoid any fidgeting behaviors... Rubbing of the eyes or constant touching of the face can often make one appear uncomfortable... Standing too close can be perceived as too pushy yet standing too far away sends the message that one is hiding something. (p. 541)

And so on, sometimes it seems, *ad infinitum*. The result is a professional setting in which trial attorneys benefit from adopting the role of “amateur psychologists” in addition to their traditional function as interpreters of the law. Because the manner in which an argument is articulated can be as important as its content, trial consultants and legal advocates alike continue to closely observe the literatures of communications and psychology in order to improve their effectiveness in the courtroom (Voss 2005, p. 301). Despite this, such studies are descriptive, scientific, and empirical: they are aimed at identifying and describing cognitive and communicative processes more so than exploiting them in the interest of argumentation or persuasion. Indeed, rigorous, empirical frameworks for persuasion designed to be integrative are not only absent from the legal literature, but from the literatures of other (more closely-related) disciplines as well.

Because of this, NLP may offer a useful lens by which to understand the behavior of advocates in the courtroom when they seek to engage in persuasive behaviors. Can NLP in fact help us understand advocates' behavior as they seek to influence judicial outcomes?

If NLP is to be considered as a possible framework for understanding and interpreting how lawyers approach the task of enacting persuasion in the courtroom context, it is necessary to examine two distinct cases. First, because NLP is a popular framework, we must assess the possibility that NLP might, at least in some circumstances, shed light on how an advocate presents his case through either direct or indirect self-reflexivity (the most obvious case being that of a lawyer who has studied NLP and uses it in the courtroom). The second case is somewhat more challenging: we must consider whether or not it is reasonable to imagine NLP as a useful tool for understanding persuasion in the courtroom in a more general, context-independent fashion (i.e. regardless of whether anyone involved is familiar with its frameworks.)

1. NLP as a Self-Reflexive Interpretive Framework

As mentioned in the introduction to section III (above), some legal advocates and trial consultants openly admit to using NLP as a resource when structuring and presenting their cases (Carter 2001). Similarly, Schefflin (1998) points out that "Neurolinguistic Programming classes for lawyers, salespeople, and others are quite prevalent throughout the country" (p. 322).

In addition to advocates who have explored NLP individually, whether in their personal or professional lives, NLP is occasionally featured in trade publications as well. A 2002 article published in *Lawyers Weekly* illustrates this point particularly well. The article presents NLP as a viable technique for enhancing communication between advocates and judicial decision-makers, including discussions on anchoring, mirroring, and NLP's theory of eye movements that featured quotes and anecdotes from practicing attorneys. The following excerpt offers a good example:

"Anchoring" and "mirroring" are two non-verbal techniques that many lawyers now incorporate into negotiations, questioning and deposing witnesses, and presenting their case to the jury... Many lawyers swear by [anchoring]...

“Anchoring can and should be used by lawyers in every trial,” said Paul N. Luvera, an attorney practicing in Seattle. (Hsieh 2002, p. 14).

Hsieh’s article is not limited to introductory definitions and brief testimonials; it also includes lawyer’s descriptions of how they deployed anchoring in the context of specific trials. Luvera, for instance, described using a poster as an anchor that elicited the significance of three fundamental questions that underlay the theme of a malpractice case. Trial consultants from several firms offer basic guidelines on how anchors might be employed, including examples of how they used the technique in practice, such as using gestures to consistently indicate the same place on the floor (ideally close to the decision-makers one is seeking to persuade) when discussing an automobile accident in order to prevent decision-makers from psychologically distancing themselves from the accident by encouraging them to envision the accident not on some distant “roadway... but someplace right in the courtroom”, or anchoring important points of an opponent’s case to testimony or arguments that undermine them (Ibid.).

Mirroring is treated with even more detail. Hsieh begins by admitting that the idea of mirroring sounds “simplistic”, but asserts that “experts say it is a highly persuasive tool and people do it naturally with each other as a form of subconscious bonding” as a lead-in to the claim that “lawyers can consciously mirror a witness or juror to put a person at ease or establish rapport.” One of the concrete examples of mirroring the article offers is a personal injury attorney’s description of how he employed the technique in a construction case involving “faulty window installation” in order to obtain “a piece of evidence that had eluded his team for a year” during a deposition:

“I’m getting into my mirroring mode. He’s shaking his head, I shake my head. He folds his arms, I fold my arms. Suddenly I realize he’s looking more toward me. It’s getting towards the end of the deposition. He turned and put his hands down on his lap. I put my hands down on my lap. I said, ‘We can’t seem to find some records.’ He blurted out, ‘I reviewed some things at my house,’” Vesper [the lawyer] recalled. The witness ended up admitting that he had 40 boxes of documents at his house, in which a memo was buried confirming Vesper’s theory of faulty window installation. (Ibid.)

Vesper is later quoted as going on to suggest that mirroring can be used “every day” (Ibid.). The article continues to offer a brief discussion of how eye movements are used in NLP as indicators of individuals’ representational mode (e.g. visual, auditory, or kinesthetic; *see* Table 1 above).

This kind of anecdotal discussion is appropriate for journalism, but as we have repeatedly emphasized, it should not be understood here as a claim regarding the efficacy either of NLP as a whole, or any technique it describes. In the present context, however, this article *does* serve to (a) reinforce the claim that some lawyers deliberately and self-consciously use NLP techniques in presenting their arguments (although the prevalence of this is an open question that does not appear to have received scholarly treatment at the time of this writing), and (b) highlight the fact that trade publications occasionally discuss NLP in a detailed fashion, including concrete, real-life, practical examples and brief overviews of basic techniques.

Although it offers a particularly useful introductory illustration, Hsieh’s article is far from the only example of a trade publication suggesting that NLP might be useful to lawyers in the courtroom. Writing in a trade newsletter on the topic of juries and jury trends, for example, forensic interviewer Pat Mincey (2010) describes NLP as an “extremely powerful technique in the courtroom” that “not only works with juries” but also helps advocates communicate effectively with judges.²³ Similarly, Burkley and Anderson (2008) suggest that NLP can help lawyers improve their likability in the courtroom. A few brief references can even be found in the scholarly literature: in a 1997 article published in an American matrimonial law journal, Benjamin suggests that NLP techniques can facilitate effective mediation. Similarly, Zufryden (1984) notes that NLP is used to guide research into certain types of judicial decision-making, and Ronan (1993) suggests that NLP can be relevant to the courtroom context due to the implications its discussions of cognitive distortions (and especially deletion) have for the reliability of eyewitness testimony. McPeake (2007) notes an interest in NLP on the part of barristers and judges in the US and

²³ Although this testimonial is the only direct reference to NLP in the article, much of the discussion appears to be structured by concepts drawn from NLP, including visual/auditory/kinesthetic representational modes and their significance for choosing a communicative style.

UK with reference to the importance of storytelling as a tool for reconstructing reality in the courtroom. Chang (1986) suggests that mirroring, pacing, and rapport are all used not just in the courtroom, but also in the context of legal education. As noted several times above, Zadeh (2009) offers a direct exploration of NLP and its possible utility in the courtroom.

Whether empirical or not, whether scholarly or popular, this body of literature is not exactly insubstantial. This raises an intriguing possibility: that NLP might be employed to shed light on advocates' strategies of courtroom persuasion by way of a logic that is fundamentally self-reflexive in nature. What would this look like?

Actually, this is quite a simple scenario to imagine: it casts NLP in the dual roles of template and interpretive framework. To the extent that NLP influences the way a given advocate enacts persuasion, whether directly (e.g. he or she has studied NLP) or indirectly (e.g. by having been influenced by someone who has studied NLP, by a persuasive school that has drawn from NLP, or through exposure to trade literature like that discussed above), it might be used to deconstruct, understand, and possibly even predict how that advocate will behave in the courtroom. In other words: NLP is probably exceptionally well suited to describing efforts at persuasion based on its own principles.

In this case, NLP can be envisioned as a potentially very effective but also highly context-dependent framework for understanding persuasion in the courtroom. Additionally, this formulation places NLP and the judicial decision-making process (the presumptive target of persuasive efforts) into a relationship that is fairly indirect. To give a hypothetical example, Advocate A, who is familiar with NLP as a technology for persuasion, might recognize NLP techniques in Advocate B's presentation. This recognition could be used strategically: it would allow Advocate A to use his understanding of NLP in an interpretive fashion, allowing him to gain insight into Advocate B's overall persuasive strategy. This understanding could be used to make predictions regarding the structure of Advocate B's argumentation, how Advocate B might approach cross-examination, Advocate B's courtroom behaviors, and so on, allowing Advocate A to structure his own arguments and presentational strategies accordingly. In other words, Advocate A is familiar with Advocate B's playbook, and this familiarity confers a strategic advantage in a discursive competition whose ultimate goal is to influence the outcome of the judicial decision-making

process. For instance, Mayers (1993) describes the ways in which some lawyers employ NLP techniques “in preparing information to be presented in a courtroom setting and in maximizing the effectiveness of testimony”, using observations gathered from three separate cases as a data source:

...[T]he emphasis is placed on obtaining and presenting sensory-oriented descriptions and findings. These techniques have the capability to enhance the listeners' ability to relate to the subject of the testimony, to maintain their attention, and to increase their interest in the material presented. (p. 53)

While Mayers makes claims regarding the efficacy of NLP as a technology for persuasion, an area into which the present research is carefully declining to wander, an arguably far more interesting take-away from this quote is that using NLP during the preparation of a case modifies it in specific, and perhaps even predictable, ways.

It is important to emphasize a point made briefly above: NLP would be expected to have value as a self-reflexive interpretive framework even when its influence on a given case or advocate is extremely indirect. That the connection between NLP and case presentation can remain meaningful even when it is extremely attenuated is a function of two factors: the popularity of NLP, and the shortage of integrative, holistic frameworks for enacting persuasion in the legal, psychological, and communications literatures.

Trial advocates learn to be persuasive in very different ways; often it comes down to folk psychology, intuition, and experiential education under the guidance of more experienced mentors handing down tricks, tips, and tactics that they have found personally useful. Similarly, trial consultancy firms may have their own proprietary approaches to persuasion, which they maintain as an organizational knowledge resource. Thus, these non-academic theories of persuasion emerge from interactions and observations, from cultural practices and discourses of the professional community, and from certain kinds of shared or communal knowledge structures.

As the selections from the scholarly and trade literatures referenced above can attest, NLP has, for better or worse, played a part in shaping this discourse and the professionals who have participated in it. Furthermore, specifically in the US, the popularization of NLP coincided with an extremely formative time in the history of trial advocacy: it was not until

the early-to-mid 1970's that legal scholars in the US began to seriously consider adopting a licensing process for trial advocates (in the UK, trial lawyers or barristers have long constituted a distinct class of legal professional), let alone agree on the course of education that should lead to licensure (Burger 1973). It was during the same period that US law schools began to offer "formal interdisciplinary training programs in psychology and law," a discipline which has "grown rapidly since the 1970's"; this event marked a turning point for the field of trial advocacy, which increasingly began to adapt and adopt findings and techniques drawn from "psychological research on persuasion or jury decision making" (Ogloff, Tomkins, & Bersoff 1996, pp. 203, 212). For reference, Bandler and Grinder's bestselling introduction to NLP, *The Structure of Magic*, was published in 1975.²⁴

Because NLP enjoyed a spike in popularity precisely when legal education and trial advocacy were revising their approaches in order to incorporate useful information from the psychological literature (including information regarding the relationships between behavior, cognition, persuasion, and decision-making), because NLP was explicitly discussed in scholarly law journals and trade publications during this period, and because of the organic way in which organizational and communal knowledge structures regarding frameworks for persuasion in the courtroom are produced, perpetuated, and evolve, it is reasonable to expect that NLP's impact on how persuasion is enacted in the courtroom easily exceeds the limited (but still potentially significant) subset of situations in which an advocate has actually studied NLP in one form or another. Another moderating factor is that while NLP's success was especially pronounced in the US, the degree to which these direct and in-direct influences also apply in other geographies is unclear, but likely the relevance is further reduced. Quantifying the extent of its impact will require a study of its own; a qualitative recognition of the fact that NLP may influence persuasive behaviors in the courtroom in an indirect fashion is sufficient for our purposes. That said, it is important to note that the utility of NLP as a self-reflexive interpretive framework is indicated both by the extent of this indirect influence as well as the prevalence of its direct usage in legal contexts.

²⁴ Bandler and Grinder decided to write the book based, in part, on the success of their NLP seminars; thus, NLP was gradually making a name for itself before the publication of *The Structure of Magic*.

2. NLP as a Context-Independent Interpretive Framework

Because of the difficulties associated with quantifying and characterizing the nature and scope of NLP's potential direct and indirect influence on courtroom strategies of persuasion, self-reflexivity, while interesting, may offer a decidedly limited justification for serious inquiry into its utility as a descriptive framework. At the same time, however, the fact that it likely offers a useful framework by which to understand persuasive strategies in some contexts makes it reasonable to inquire whether it might also be useful in other contexts. Does the detailed exploration of persuasion, judicial decision-making, and NLP presented above offer any indication as to whether or not NLP might be used as schema for the interpretation of judicial persuasion in a less context-dependent fashion?

We argue that there are a number of reasons to believe that NLP may have a broad relevance quite apart from any self-reflexive logic. Conversely, however, we suggest that this more general applicability comes at the cost of predictive specificity.

Throughout our discussion of NLP, we made a distinct effort to highlight parallels between NLP as a model for persuasion and academic concepts drawn from the empirical sociological, communications, and psychological literature wherever relevant. For example, we compared the concepts of frames and framing as used in the context of NLP and SoM with the homonymous concepts described by Goffman and Snow. We pointed out that both usages referred to a means of structuring and organizing experience which had emotional and behavioral consequences; that both usages envision the potential for communicative synergy through coincident frames as well as the potential for conflicting or incongruous frames to undermine the effectiveness of communication and the strength of certain kinds of emotional connections. We also noted that despite these basic similarities, these usages are by no means interchangeable: NLP employs these terms in a decidedly simplistic fashion compared to the far more rigorous and complex way in which they are engaged by Goffman and Snow. The usages are not equivalent, but they do bear a certain resemblance to one another. Throughout our investigation we discovered many such parallels between academic theories grounded in empirical data and NLP's simplified folk formulations.

What are we to make of these conflicted and curiously inflected relationships? Or, to put it even more directly: are these apparent resemblances ultimately superficial in nature?

The only possible answer seems to be: of course they are. In spite of this, however, we should not be alarmed. For the purposes of the present exploration, even a superficial correspondence between these concepts is significant: we are interested in evaluating the prospect of using NLP as a placeholder, a descriptive framework designed to draw attention to a gap in the research literature, and perhaps as an illustrative demonstration of how that gap might be filled. The fact that aspects of NLP's framework coincide even superficially, whether by chance or by design, with established academic concepts is a meaningful finding in and of itself; that this popular commercial technology for persuasion dilutes these concepts to make them digestible to the layman is, quite simply, to be expected.

Thus, let us review the various correspondences that we have encountered over the course of this exploration in order to distill them into simple components and consider how, and to what extent, they connect.

The exact nature of the judicial decision-making process is subject to dispute and under prolonged active investigation, but it seems clear for the time being that neither formalism nor realism is capable, by itself, of producing an entirely satisfactory account of how judicial decision-makers decide. Realism appears constitutionally incapable of accommodating the restrictions imposed on decision-makers by the content of the law itself, while formalism is utterly unbalanced by the clear empirical evidence that extra-legal factors have consistent, observable, and in many cases, even quantifiable impacts on rulings. The cognitive coherence model, in turn, seeks to bridge the gap between formalism and realism by proposing a decision-making process that is characterized by "rational-like" choices on the one hand, but also by "unconscious cognitive processes" that distort comparative judgments of possible outcomes in order to progressively distance them from one another. This model certainly seems to assimilate the core contentions of formalism and realism into a single structure, but has yet to reach the level of popularity of the two others. If the strengths and limitations of these models are superimposed, however, certain facts are highlighted which are of eminent relevance to the aspiring persuader, who, after all, does not necessarily require a complete or coherent model of the judicial decision-making process in order to develop strategies to influence it; a list of characteristics is sufficient.

Precedent, legal logic, and quality of argumentation seem to matter. Unconscious factors also seem to be important, including those related to judgment, perception, memory, and emotion. It is not clear how these intersect and interact, or which has the greater effect; but taken all together we can summarily conclude that judicial outcomes are shaped both by the *content* of arguments and the way in which those arguments are *presented*. These are the two fairly certain avenues by which the judicial decision-making process can be influenced: through argumentation or through presentation, and ideally through both. What is required for truly effective persuasion, therefore, is a framework capable of coordinating and balancing these two domains in order to create persuasive synergies, as well as to use each as effectively as possible. Keeping that requirement in mind, then, let us review how each domain of persuasion functions.

a. Interpreting Argumentation

At first glance, argumentation appears to be the more rigid of the two; after all, the facts of the case and the content of the law, the basic units from which legal arguments are constructed, are already established to a large extent. On closer inspection, however, it becomes clear that a wide range of structures are possible, which may draw different connections, create different relationships, imply different causes, or simply emphasize different aspects of the same story. It is vital to ensure, for instance, that the receiving party understands as intended the constructed arguments. Part of this involves drawing the receiving party's attention to aspects of an argument which are of particular importance, but which may be embedded in longer or complex discussions. The ambiguous nature of communication leaves a lot at risk, considering that individuals may arrive at very different understandings despite having been presented with identical information.

To return to an earlier example: if one were to briefly show two people a crowded table and afterwards ask them to write down as many objects as they can remember, it is quite likely that the result will be two very different lists; priming can be used to ensure that both individuals notice the baseball on the table. In the courtroom, this type of *memory effect* may operate at many different levels, some of which, like the set of facts a witness views as salient when re-constructing relevant events through testimony, may not be particularly relevant to the topic of persuasion. Whereas others, such as the selective way

in which judicial decision-makers assign importance to some details more so than others when *hearing* testimony, which influences which details can be easily recalled later, are almost certainly relevant to courtroom persuasion. In NLP parlance, this kind of perceptual and semantic priming is known as anchoring: an important idea is repeatedly associated with a certain gesture, location or item (i.e. the anchor), so that the anchor can serve as a cue that evokes the idea (e.g. a prime).

In addition to memory effects like these, *judgment effects* can also strongly influence how narratives and negotiations are understood by judicial decision-makers. The scholarly literature has documented cognitive biases associated with judgment, such as numerical anchoring (distinct from the NLP concept denoted by the same term) and loss aversion, which can be manipulated through framing (psychological term) in the courtroom: even in making serious decisions, such as sentencing, judges tend to assimilate their assessments toward a previously-presented number, even if that number has been randomly generated; similarly, phrasing identical numerical trade-offs in order to emphasize either potential gains or potential losses can strongly influence an individual's judgment regarding the relative favorability or unfavorability of that trade-off. With its popular (i.e. less than rigorous) lexicon, NLP appears to conflate these judgment effects under the broad banner of "framing", though admittedly in a somewhat imprecise fashion.²⁵ There is, once again, a clear correspondence between specific applications of framing in the context of NLP and effects documented in the empirical literature, but this correspondence is somewhat looser than we have seen with other technologies. On the one hand, this arguably undermines, at least to some extent, the applicability of NLP as a context-independent interpretive framework; on the other hand, it would seemingly be easy to address this issue by adapting NLP with more precise terminology.

Finally, the interpretation of an argument is also contingent, in part, on the relationship the audience has to its content. Thus, rather than listing neutral or ambiguous information wherever it is convenient, strong arguments may use familiar narrative structures or other cues in order to encourage the audience to adopt a certain orientation

²⁵ Some aspects of numerical anchoring arguably fall under NLP's term "priming", depending on the circumstance and implementation.

(narrative priming). Similarly, the structure of an argument can encourage the audience to scale or “chunk” information in different ways, shifting the boundary between relevant and irrelevant information on the basis of level of detail. These alterations can have significance for what information is considered relevant when evaluating an argument, and even for which statutes or precedents should be invoked. In *Sleight of Mouth*, this is a major aspect of framing, which is designed to provide “a general focus or direction that provides an overall guidance for thoughts and activities during an interaction” (Dilts 1999, p. 22).²⁶ Framing involves seeking to manipulate the relationships between data points, or between a collection of data and the audience: should the audience assimilate this information with reference to an innocence verdict, or as a list of implicating factors? Is the judicial decision-maker using presented data to evaluate the fairness, efficiency, or liability?

b. Interpreting Presentation

Influencing judicial outcomes through presentational factors involves exploiting cognitive biases or emotional dispositions. Presentation can be manipulated, for example, at the level of phrasing: framing bias (psychological usage) can have a dramatic impact on how information is evaluated simply by presenting that information as either a potential gain or a potential loss. Framing and re-framing (NLP) seeks to manipulate focus in a similar way. One of the most tangible NLP technologies pertaining to presentational factors is the systematic usage of mirroring: postural, behavioral and prosodic mirroring can all be used by advocates seeking to increase the attractiveness of their message (Peters 2007).

Once again, it is not necessary that these correspondences between NLP and the psychological, sociological or communications literatures are substantive; our aim is to show resemblance, not equivalence. This is because these findings from the scholarly literature can be, and almost certainly are, used by lawyers in order to increase their persuasiveness and influence judicial outcomes. The question is whether they are being used in a systematic, coherent, or integrated way. NLP features a surprising number of

²⁶ Again, NLP tends to use the term “framing” as a general category with various applications; this section draws correspondences between empirical concepts and some of those applications, rather than connecting these concepts to “framing” as a broad category.

techniques that are designed to exploit biases that correspond in a superficial fashion to those described in the scholarly literature. Whether these techniques are effective or snake oil is irrelevant: what matters is that they are integrated in a clear and systematic fashion and correspond somehow to what is actually in use. And being so, NLP is indicated to have real potential as a context-independent interpretive framework.

V. Concluding Remarks

The judicial decision-making process is subject to a range of extra-legal influences. Trial advocates attempting to enact persuasion in the courtroom seek to exploit these extra-legal influences; however, the current literature on courtroom persuasion is spotty and ad-hoc, largely comprised of explorations of individual techniques in isolation. Integrative and holistic approaches to persuasive trial advocacy appear to be largely contained in uncodified communal knowledge structures generated by a combination of folk psychology, trial and error, speculation and anecdotal evidence. Neurolinguistic Programming, a popular commercial approach to persuasion, was closely examined and evaluated as a potential framework for understanding, in a systematic and integrative fashion, how legal advocates seek to enact persuasion in the courtroom. We argue that NLP is likely to have a potentially high degree of context-dependent descriptive power by virtue of a self-reflexive logic derived from its popularity and possible influence on communal knowledge structures. In order to evaluate the likelihood that NLP might also be useful as a general, context-independent framework for describing and analyzing courtroom persuasion, we relied on a synthesis designed to integrate theoretical and empirical findings with a critical analysis of NLP itself.

Based on this analysis, two items stood out as particularly relevant: the fact that NLP integrates a number of persuasive techniques into a single holistic framework comprising argumentative and presentational dimensions, and the fact these techniques, *even if dubious on their own*, correspond to similar empirically-based techniques and cognitive phenomena relevant to courtroom persuasion. Taken together, these two items suggest that NLP can be employed as a context-independent framework for understanding how lawyers seek to influence judicial outcomes through persuasion. It is not a framework that

can claim to characterize the complete process of persuasion, but it might well serve as a workable descriptive model for dissecting how that process plays out.

Adapting NLP into such a framework will likely require some work. For one thing, new terminology will need to be developed in the interest of avoiding confusion about whether terms like “framing” or “anchoring” are being used with reference to the NLP lexicon or the psychological one; eliminating the risk of conflating these terms will constitute a step forward in terms of utility. Despite such potential pitfalls, however, we conclude that further examinations of NLP along the lines outlined here could have theoretical as well as practical significance. We argue that the payoff could be substantial: an integrative model with which lawyers’ attempts to influence judicial outcomes through persuasion could be described consistently and systematically, moving from the most basic aspects of presentation (e.g., tone, pace, posture) to interactive behaviors designed to elicit cooperation (e.g. mirroring) or modify perception, judgment, or memory (e.g. priming/anchoring or numerical anchoring) and have applicability from basic aspects of argumentation to large-scale ones (e.g. framing and frame alignment, narrative/thematic priming).

Thus, this study has both practical and theoretical significance. From a practical perspective, we have shown that it may well be possible, at least in some cases, to make general predictions about how NLP-trained advocates (and possibly even those who have been influenced by NLP in a more indirect fashion) might structure their approaches to argumentation and persuasion due to the consistency of the framework. Future studies might build on this insight by, for instance, seeking to assess the prevalence of NLP training among advocates or gauging the frequency with which certain techniques are used in trial cases. From a theoretical perspective, this study makes a strong case that NLP can be invoked as a convenient preliminary framework for parsing and assessing how lawyers, whether influenced by NLP or not, seek to implement persuasion in the courtroom. In this way, the present study hopes to establish a foundation for future research, which might seek either to refine the NLP framework, or develop more accurate, alternative models.

In any case, there is a clear need for integrative approaches to understanding persuasion in the judicial setting as a complex, dynamic and dialectical behavior comprised

of communicative strategies and techniques assembled and enacted consciously as well as unconsciously. Increased scholarly attention to this important topic is strongly indicated.

References

- Adler, H. (2002). *Handbook of NLP: A manual for professional communicators*. Gower Publishing, Ltd.
- Bandler, R. & Grinder, J. (1975). *The Structure of Magic: A Book About Language and Therapy*. Science and Behavior Books, Inc.
- Bandler, R., & Grinder, J. (1979). *Frogs into princes* (Vol. 15). Moab, UT: Real People Press.
- Balch, C. D. (1990). Art of War and the Art of Trial Advocacy: Is There Common Ground, *The Mercer L. Rev.*, 42, 861.
- Barkai, J. (1990). Nonverbal communication from the other side: speaking body language. *San Diego Law Review*, 27, 101.
- Bashir, A., & Ghani, M. (2012). Effective Communication and Neurolinguistic Programming. *Pak. J. Commer. Soc. Sci*, 6(1), 216-222.
- Baumeister, R. F. (2008). Free will in scientific psychology. *Perspectives on psychological science*, 3(1), 14-19.
- Bell, B. E., & Loftus, E. F. (1989). Trivial persuasion in the courtroom: the power of (a few) minor details. *Journal of personality and social psychology*, 56(5), 669.
- Benjamin, R. D. (1997). Use of Mediative Strategies in Traditional Legal Practice, *The J. Am. Acad. Matrimonial Law.*, 14, 203.
- Berger, L. L. (2008). How embedded knowledge structures affect judicial decision making: A rhetorical analysis of metaphor, narrative, and imagination in child custody disputes. *S. Cal. Interdisc. LJ*, 18, 259.
- Bettman, J. R., Johnson, E. J., & Payne, J. W. (1990). A componential analysis of cognitive effort in choice. *Organizational behavior and human decision processes*, 45(1), 111-139.
- Bloom, J., & Powdermaker, K. (2006). The jury likes me, the jury likes me not: Building rapport in the courtroom. *TEX. BJ*, 69, 540.
- Bonini, L., & Ferrari, P. F. (2011). Evolution of mirror systems: a simple mechanism for complex cognitive functions. *Annals of the New York Academy of Sciences*, 1225(1), 166-175.
- Boyll, J. R. (1991). Psychological, cognitive, personality and interpersonal factors in jury verdicts. *Law & Psychol. Rev.*, 15, 163.
- Bradley, E. J., & Biedermann, H. J. (1985). Bandler and Grinder's Neurolinguistic Programming: Its historical context and contribution. *Psychotherapy: Theory, Research, Practice, Training*, 22(1), 59.
- Burger, W. E. (1973). Special Skills of Advocacy: Are Specialized Training and Certification of Advocates Essential to Our System of Justice, *The Fordham L. Rev.*, 42, 227.
- Burkley, E., & Anderson, D. (2008). Using the Science of Persuasion in the Courtroom. *The Jury Expert*, 1-5.

- Carter, T. (2001). Secret SWAY: More lawyers are using neurolinguistics to present their cases to jurors, with winning results. *ABA Journal*, 60-63.
- Casper, J. D., Benedict, K., & Perry, J. L. (1989). Juror decision making, attitudes, and the hindsight bias. *Law and Human Behavior*, 13(3), 291.
- Chang, W. B. (1986). Zen, Law and Language: Of Power and Paradigms. *NML Rev.*, 16, 543.
- Chapman, G. B., & Johnson, E. J. (2002). Incorporating the irrelevant: Anchors in judgments of belief and value. *Heuristics and biases: The psychology of intuitive judgment*, 120-138.
- Chartrand, T. L., & Bargh, J. A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of personality and social psychology*, 76(6), 893.
- Clancy, F., & Yorkshire, H. (1989). The Bandler Method. *Mother Jones*, 14(1), 23-64.
- Collins, A. M., & Loftus, E. F. (1975). A spreading-activation theory of semantic processing. *Psychological review*, 82(6), 407.
- Costopoulos, W. C. (1971). Persuasion in the Courtroom. *Duq. L. Rev.*, 10, 384.
- Cotterill, J. (2007). Representing reality in court: power and persuasion in trial discourse, as exemplified in the people v. Orenthal James Simpson. *International Journal of Speech Language and the Law*, 8(1), 161-163.
- Danziger, S., Levav, J., & Avnaim-Pesso, L. (2011). Extraneous factors in judicial decisions. *Proceedings of the National Academy of Sciences*, 108(17), 6889-6892.
- Dapretto, M., Davies, M. S., Pfeifer, J. H., Scott, A. A., Sigman, M., Bookheimer, S. Y., & Iacoboni, M. (2006). Understanding emotions in others: mirror neuron dysfunction in children with autism spectrum disorders. *Nature neuroscience*, 9(1), 28-30.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3713227/>
- Dilts, R. (1999) "Sleight of Mouth: The Magic of Conversational Belief Change", Meta Publications
- Dooley, L. (1994). *Our Juries, Our Selves: The Power, Perception, and Politics of the Civil Jury*. Cornell Law Review.
- Einspruch, E. L., & Forman, B. D. (1985). Observations concerning research literature on neuro-linguistic programming. *Journal of Counseling Psychology*, 32(4), 589.
- Englich, B. & Mussweiler, T. (2001). Sentencing Under Uncertainty: Anchoring Effects in the Courtroom. *Journal of Applied Social Psychology*, 31(7), 1535-1551.
- Englich, B., Mussweiler, T., & Strack, F. (2006). Playing dice with criminal sentences: The influence of irrelevant anchors on experts' judicial decision making. *Personality and Social Psychology Bulletin*, 32(2), 188-200.
- Fazio, R. H. (2001). On the automatic activation of associated evaluations: An overview. *Cognition & Emotion*, 15(2), 115-141.
- George, T. E., & Epstein, L. (1992). On the Nature of Supreme Court Decision Making. *American Political Science Review*, 86(02), 323-337.

- Gillman, H. (2001). What's Law Got to Do with It? Judicial Behavioralists Test the "Legal Model" of Judicial Decision Making. *Law & Social Inquiry*, 26(2), 465-504.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Harvard University Press.
- Graf, P., & Schacter, D. L. (1987). Selective effects of interference on implicit and explicit memory for new associations. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 13(1), 45.
- Grammer, K., Kruck, K. B., & Magnusson, M. S. (1998). The courtship dance: Patterns of nonverbal synchronization in opposite-sex encounters. *Journal of Nonverbal behavior*, 22(1), 3-29.
- Guthrie, C., Rachlinski, J. J., & Wistrich, A. J. (2000). Inside the judicial mind. *Cornell L. Rev.*, 86, 777.
- Guthrie, C., Rachlinski, J. J., & Wistrich, A. J. (2002). Judging by Heuristic-Cognitive Illusions in Judicial Decision Making. *Judicature*, 86, 44.
- Guthrie, C., Rachlinski, J. J., & Wistrich, A. J. (2007). Blinking on the bench: How judges decide cases. *Cornell L. Rev.*, 93, 1.
- Hahn, P. W., & Clayton, S. D. (1996). The effects of attorney presentation style, attorney gender, and juror gender on juror decisions. *Law and Human Behavior*, 20(5), 533-554.
- Harley, E. M. (2007). Hindsight bias in legal decision making. *Social Cognition*, 25(1), 48-63.
- Hawkins, K. (1986). On legal decision-making. *Wash. & Lee L. Rev.*, 43, 1161.
- Hassett, A. L., & Gevirtz, R. N. (2009). Nonpharmacologic treatment for fibromyalgia: patient education, cognitive-behavioral therapy, relaxation techniques, and complementary and alternative medicine. *Rheumatic Disease Clinics of North America*, 35(2), 393-407.
via <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2743408/>
- Hoag, JD. (2015) "The NLP Meta Model" NLPLS. via <http://www.nlpls.com/articles/NLPmetaModel.php>
- Holyoak, K. J., Gentner, D., & Kokinov, B. N. (2001). Introduction: The place of analogy in cognition. *The analogical mind: Perspectives from cognitive science*, 1-19.
- Hsieh, S. (2002) "Understanding body language can give lawyers an edge in the courtroom" *Lawyers Weekly (USA)* 447, June 24, 2002, pp. 14, 31
- James, T. (1999) *An Introduction to NLP: Some Basic Concepts*.
- Jameson, F. (1976). On Goffman's frame analysis. *Theory and Society*, 3(1), 119-133.
- LaFrance, M. (1985). Postural mirroring and intergroup relations. *Personality and Social Psychology Bulletin*, 11(2), 207-217.
- Lee, L. (2014) "Cornell NLP Seminar, Fall 2014" Cornell University NLP Group. via <https://confluence.cornell.edu/display/NLP/Cornell+NLP+Seminar,+Fall+2014>

- Libet, B., Gleason, C. A., Wright, E. W., & Pearl, D. K. (1983). Time of conscious intention to act in relation to onset of cerebral activity (readiness-potential). *Brain*, 106(3), 623-642.
- Lubet, S. (2004). *Modern trial advocacy: Analysis and practice*. Ntl Inst for Trial Advocacy.
- Malley, G. B., & Strayer, D. L. (1995). Effect of stimulus repetition on positive and negative identity priming. *Perception & Psychophysics*, 57(5), 657-667.
- Mayers, K. S. (1993). Enhancement of psychological testimony with the use of Neurolinguistic Programming techniques. *American Journal of Forensic Psychology*. 11(2), pp. 53-60
- McElhaney, J. W. (1974). Toward the Effective Teaching of Trial Advocacy. *U. Miami L. Rev.*, 29, 198.
- McPeake, R. (2007). Fitting stories into professional legal education—the missing ingredient. *The Law Teacher*, 41(3), 303-313.
- Miles, T. J., & Sunstein, C. R. (2008). The new legal realism. *The University of Chicago Law Review*, 831-851.
- Mincey, P. (2010) “Your lips are moving, but...” *ExecStrat: Juries and Jury Trends*. Summer 2010, pp. 20-21
- Mitchell, G. (2002). Taking Behavioralism Too Seriously? The Unwarranted Pessimism of the New Behavioral Analysis of Law, 43 *Wm. & Mary L. Rev.* 1907
- Mussweiler, T., & Strack, F. (1999). Hypothesis-consistent testing and semantic priming in the anchoring paradigm: A selective accessibility model. *J. Exp. Soc. Psych.*, 35, pp. 136-64.
- Mussweiler, T., & Strack, F. (2000). Numeric judgment under uncertainty: The role of knowledge in anchoring. *Journal of Experimental Social Psychology*, 36, 495–518.
- Mussweiler, T., & Strack, F. (2001). The semantics of anchoring. *Organizational behavior and human decision processes*, 86(2), 234-255.
- Ogloff, J. R., Tomkins, A. J., & Bersoff, D. N. (1996). Education and Training in Psychology and Law/Criminal Justice Historical Foundations, Present Structures, and Future Developments. *Criminal Justice and Behavior*, 23(1), 200-235.
- Peters, P. (2007). Gaining compliance through non-verbal communication. *Pepp. Disp. Resol. LJ*, 7, 87.
- Remland, M. S. (1994). The importance of nonverbal communication in the courtroom. *Atlantic Journal of Communication*, 2(2), 124-145.
- Rizzolatti, G., & Craighero, L. (2004). The mirror-neuron system. *Annu. Rev. Neurosci.*, 27, 169-192.
- Ronan, W. J. (1993) *Memory, Suggestion and Truth*. *Journal of the Institute for Psychological Therapy*. Vol. 5, no. 2.
- Rouse, W. B., & Morris, N. M. (1986). On looking into the black box: Prospects and limits in the search for mental models. *Psychological bulletin*, 100(3), 349.

- Schefflin, A. W. (1998). Ethics and Hypnosis: A Preliminary Inquiry Into Hypnotic Advocacy. *Current Thinking and Research in Brief Therapy: Solutions, Strategies and Narratives*, 2, 307.
- Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of communication*, 57(1), 9-20.
- Semin, G. R., & Cacioppo, J. T. (2008). "Grounding social cognition: Synchronization, entrainment, and coordination" in *Embodied grounding: Social, cognitive, affective, and neuroscientific approaches*. Semin, G.R. & Smith ER (eds). New York: Cambridge University Press, pp. 119-147.
- Sharpley, CF (1987). Research findings on Neurolinguistic Programming: Nonsupportive data or an untestable theory?. *Journal of Counseling Psychology* 34 (1): 103-107. doi:10.1037/0022-0167.34.1.103.
- Simon, D. (1998). Psychological Model of Judicial Decision Making, *A. Rutgers LJ*, 30, 1.
- Simon, D. (2004). A third view of the black box: Cognitive coherence in legal decision making. *The University of Chicago Law Review*, 511-586.
- Snow, D. A., Rochford Jr, E. B., Worden, S. K., & Benford, R. D. (1986). Frame alignment processes, micromobilization, and movement participation. *American sociological review*, 464-481.
- Spaeth, H. J., & Segal, J. A. (2001). *Majority rule or minority will: Adherence to precedent on the US Supreme Court*. Cambridge University Press.
- Sperling, C. (2010). Priming Legal Negotiations Through Written Demands. *Catholic University Law Review*, 60(1), 107.
- Stamenov, M., & Gallese, V. (Eds.). (2002). *Mirror neurons and the evolution of brain and language* (Vol. 42). John Benjamins Publishing.
- Stanchi, K. M. (2006). Science of Persuasion: An Initial Exploration, *The Mich. St. L. Rev.*, 411.
- Stanchi, K. M. (2010). Power of Priming in Legal Advocacy: Using the Science of First Impressions to Persuade the Reader, *The Or. L. Rev.*, 89, 305.
- "The Power to Persuade: The Story of NLP" (2010) BBC. 29 Nov 2010. via <http://www.bbc.co.uk/programmes/b00w77k3>
- Tosey, P., & Mathison, J. (2003). Neuro-linguistic programming and learning theory: a response. *The Curriculum Journal*, 14(3), 371-388.
- Tulving, E., Schacter, D. L., & Stark, H. A. (1982). Priming effects in word-fragment completion are independent of recognition memory. *Journal of experimental psychology: learning, memory, and cognition*, 8(4), 336.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *science*, 185(4157), 1124-1131.

Voss, J. (2005). Science of Persuasion: An Exploration of Advocacy and the Science Behind the Art of Persuasion in the Courtroom, *The Law & Psychol. Rev.*, 29, 301.

Wiggs, C. L., & Martin, A. (1998). Properties and mechanisms of perceptual priming. *Current opinion in neurobiology*, 8(2), 227-233.

Zadeh, M. (2009). Missing Link: Enhancing Mediation Success Using Neuro-Linguistic Programming, *The Pepp. Disp. Resol. LJ*, 9, 527. via <http://digitalcommons.pepperdine.edu/cgi/viewcontent.cgi?article=1063&context=drlj>

Zufryden, F. S. (1984). A model for the prediction of juror decisions. *Decision Sciences*, 15(3), 434-444.