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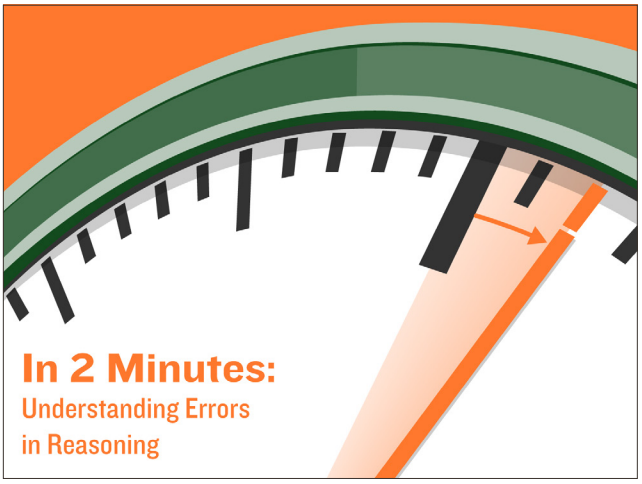
By James B. Stiff, Ph.D. | May 2017

The Science of Persuasion: Understanding Errors in Reasoning

Lawyers and expert witnesses carefully develop, then set forth, logical arguments supported by sound evidence. An analytically-sound presentation provides the framework by which jurors should rationally evaluate a case. Certainly, legitimate reasons exist for why jurors may arrive at different conclusions than those propounded by presenting trial attorneys. Often, however, disparity between lawyers' and jurors' final determinations of case matters comes about as the result of errors in jurors' reasoning. In Chapter 7 of *Persuasive Communication*, Paul Mongeau and I discussed many of the fatuous deduction processes jurors adopt. This article describes some of the most common errors in reasoning, as well as ways that attorneys can guard against their occurrence.



Some of the most common logical fallacies to which jurors fall prey include:

Affirming the Consequent: This formal logic error (a pattern of reasoning utilizing defective argument structure) occurs when a person improperly infers a converse argument from the original statement. It is denoted by the argument form: "If A, then B. B, therefore A." For example, jurors might be told that, "People who drink contaminated groundwater (A) will have a higher incidence of cancer (B)." They might also might be told, "There is a high incidence of cancer in a community (B)." This information might lead jurors to falsely conclude that the high cancer rate was caused by exposure to toxic groundwater (A). The logic is fallacious because provided information does not indicate the community has contaminated groundwater, nor does it indicate that residents drank impure water, nor does it mention the myriad of other potential causes of cancer.

Denying the Antecedent: This formal fallacy involves incorrectly inferring the inverse from the original statement. "If A, then B. Not B, therefore, not A." For

In August of 2016, Jim Stiff and Paul Mongeau published the third edition of *Persuasive Communication*. The book is a comprehensive review of the theory and research on persuasive communication that spans more than 80 years of academic work in the fields of communication and social psychology. This research note is part of a series that briefly discusses topics related to the science of persuasion. It describes the practical implications persuasive communication techniques offer to lawyers practicing their craft.

example, jurors might believe that, "If the power tool was defectively designed (A), then people using it would be injured (B). They might hear testimony that there have been no reported injuries from people using the power tool (Not B), and therefore, they might conclude the tool was not defectively designed (Not A). While the fact that no injuries occurred might serve as compelling evidence that the power tool was not defectively designed, it is not absolute evidence. The power tool could have been defectively designed, even if there were no reported accidents from people using it. Incidents could have been unreported, reporting could have been incomplete or ineffective, moreover, people using the tool may have taken extra precautions to prevent injuries that would have otherwise occurred.

Argument from Silence: This informal fallacy (a pattern of reasoning that is incorrect, not because of faulty argument structure, but because of imprecise language, misstatements, or improper presuppositions) occurs when a faulty conclusion is reached on the basis of an *absence* of evidence. A classic example of this type of fallacy is, "Because Marco Polo never mentioned the Great Wall in any of his writings, therefore, he must not have visited China." In a legal context, jurors might argue that, "The board of directors meeting minutes failed to notate any discussion about fraudulent accounting, therefore, the board must not have been aware of the fraud." Of course, members of a board of directors might have been aware of fraudulent accounting, yet refrained from making formal discussion of the matter at a board meeting. It is, as well, quite possible that meeting minutes were not properly transcribed, nor thorough.

Fallacy of the Single Cause: This informal error in reasoning results from jurors oversimplifying the information presented to them, which leads them to conclude that a single cause, rather that the combination of multiple causes, was responsible for occurrence of an event. For example, one might argue that soft drink manufacturers are responsible for teenage obesity because the high levels of high fructose corn syrup found in soft drinks can cause teenage obesity. The defect in this argument is that it ignores other factors that contribute to obesity, such as genetics, diet, and inadequate exercise.

Proving the Negative: This informal fallacy is sometimes referred to as "shifting the burden of proof" or "an argument from ignorance." It occurs when a proposition is presumed true because it has not been, or cannot be, proven false. (or conversely, a proposition is presumed false because it cannot be proven true). In the courtroom, this error occurs when jurors embrace a position that lacks substantiating evidence, solely on the basis that the other party in the case failed to prove that the position was false. Specifically, such fallacious arguments sometimes occur in criminal trials, when jurors might support the prosecution's unfounded allegations that a defendant committed a violent act, solely because the defendant failed to prove he or she did not commit such act. Another example might be in a misappropriation of trade secrets case, where jurors might argue that a defendant company failed to prove that it did not rely on a competitor's trade secrets when it developed a competing product. This error in reasoning occurs because jurors view the inability to prove a negative as proof of the affirmative, and, in part, because they misapply the burden of proof.

There are several approaches that lawyers and expert witnesses can take to restrict occurrence of these errors in reasoning. They can:

Recognize that when jurors engage in fallacious reasoning, they often do so to bolster existing, deep-seeded, personal attitudes or values. In other words, a juror may have a *conformation bias*, that is, a tendency to favor information that confirms existing beliefs or a tendency to interpret new evidence in ways that confirm those existing beliefs. In other words, they are seeing what they want to see. Attorneys must recognize that jurors who hold strong opinions about a party or issues are most likely to commit such errors in reasoning. They can safeguard their case against people who hold staunch conformation biases by making careful selections during voir dire, presenting strong expert witnesses who can refute biases

during the trial, and by using visual displays to set forth evidence that disconfirms biased suppositions.

Ensure that conclusions to arguments are explicitly stated. Often lawyers present arguments, but forgo stating outright the conclusions to be reached from their arguments. An attorney may neglect to do so due to a mistaken belief that the conclusion is so apparent that calling attention to it will serve to condescend the audience. Failure of attorneys to offer explicit conclusions, however, extends implicit invitation to jurors to draw their own conclusions, which increases the chances that jurors' judgments will result from improper reasoning processes. Jurors should be encouraged to reason along with attorneys, and then to accept the conclusions offered to them.

Another reason attorneys might refrain from stating conclusions to the arguments they present is the belief that jurors will be more dedicated to those conclusions they reach on their own. While there is substantiation for the existence of *ownness bias*, that is, a person's preference for a decision reached on his or her own, [1] leaving people to fill in the blank as per their conclusion often results in their reaching a conclusion consistent with their initial attitudes, rather than the conclusion intended by the source.[2] Thus, often, the benefits of encouraging self-generated conclusions are outweighed by the pitfalls of leaving conclusions unstated. Moreover, researchers have found that externally-generated thoughts are often more predictive of attitude change than are internally-generated cognitions. [3]

While the general recommendation is that trial attorneys' explicitly relay the conclusions to be reached from arguments, it bears mentioning that this recommendation is exclusive of them making final pronouncements concerning a witness's credulity. Judgments about the honesty and integrity of witnesses are highly personal. Jurors often bristle when a lawyer concludes for them that a witness is untrustworthy. Therefore, greater heed should be paid to the concept of ownness bias in relation to jurors' witness credibility assessments, than it should in relation to their final evaluation of arguments.

Be on guard for opposing counsel's attempts to engage jurors in fallacious reasoning. For example, if an attorney tells jurors, "You will see no evidence that the board of directors ever discussed the issue of fraudulent accounting," he or she is fostering the fallacy of *Argument from Silence*. That fallacy, as well as any others opposing counsel employs, should be called to jurors' attention.

Openly address errors in logic during trial. Fully explain to jurors why such thinking is unsound. Thankfully, most jurors view their role in meting out justice very seriously, and they, thus, will be receptive to arguments that help them avoid pitfalls of false reasoning.

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1. Perloff, R. M. & Brock, T. C. (1980). And thinking makes it so: Cognitive responses to persuasion. In M. Roloff & G. Miller (Eds), *Persuasion: New directions in theory and research* (67–100), Beverly Hills, CA: Sage.
2. Bettinghaus, E. P., Miller. G. T., & Steinfatt, T. M. (1970). Source evaluation, syllogistic content, and judgments of logical validity by high- and low-dogmatic persons. *Journal of Personality and Social Psychology*, 16, 238–244.Steinfat et al. (1970).
3. Bretl, D. & Dillard, J.P. (1991). Persuasion and the internality dimension of cognitive responses. *Communication Studies*, 42, 102–113.