

“Lotts” More Guns and Other Fallacies

Infecting the Gun Control Debate

By Andrew J. McClurg¹

In this article, University of Arkansas Law Professor McClurg analyzes what he considers to be fallacious arguments on both sides of the gun control issue. Analyzing rhetoric from the National Rifle Association, from Handgun Control, and from other sources, Professor McClurg dissects various fallacies including: failure of each side to acknowledge the strongest arguments against the side’s preferred interpretation of the Second Amendment; unsupportable claims about the meaning of the Miller case; and a wide variety of statistical claims about the cause-and-effect relationship of guns and crime. Professor McClurg’s other journal articles on gun policy involve Child Access Prevention Laws; The Tortious Marketing of Handguns; The Rhetoric of Gun Control; Strict Liability for Handgun Manufacturers; and Handguns As Products Unreasonably Dangerous Per Se. He also teaches a seminar on “Gun Violence and the Law.”

I. Introduction

In 1992, I published *The Rhetoric of Gun Control*.² Concentrating on the pitiful “dialogue” surrounding passage of the Brady bill, I analyzed and critiqued numerous fallacies of reasoning on both sides of the gun control debate. Here we are almost eight years later. It would be nice to think we—“we” being the participants in the gun control debate—were eight years wiser, but that is not the case. Blatantly fallacious

argumentation continues to dominate popular gun control discourse.

A fallacy is a type of incorrect argument. A fallacious argument is one that appears correct and may even be extremely persuasive, but which proves upon examination to be logically defective. Examples of fallacies range from the commonplace (begging the question, straw man arguments) to the esoteric (*ignoratio elenchi*, undistributed middle term). David Fischer lists 112 fallacies in his classic work, *Historians' Fallacies*,³ and discusses even more than that. Fearnside and Holther analyze 56 common reasoning defects in *Fallacy: The Counterfeit of Argument*.⁴ Edward Damar discusses 64 fallacies in *Attacking Faulty Reasoning*.⁵ (All of these are recommended reading for persons interested in the art of practical argumentation.)

Fallacy-laden arguments in the gun control arena are destructive to the nation and the participants in the debate. They serve to inflame and further polarize already antagonistic opinions, making it impossible for us to move toward any middle ground. They also damage the credibility of both sides. A major reason the two sides of the gun debate are not listening to one another is because we do not trust the other's arguments.

Guns are a serious menace to public health in the United States. Gun control critics need to acknowledge at least that much about an instrumentality responsible for more than 35,000 fatalities and 100,000 injuries annually. On the other side, gun control advocates should accept that guns are here to stay. If it helps, I am not a gun prohibitionist. I probably would be if I thought prohibition would work, but in a nation where more than 200 million privately owned firearms circulate freely, I do not think it would work. Like everyone else, I do not want only the bad guys to have the guns. I have come to accept that, for better or worse, guns are a permanent fixture in our society. However, as a teacher of tort and products liability law who views all products and their associated dangers from a cost-benefit, injury

avoidance perspective, I strongly believe much closer regulation of guns is warranted.

As we prepare to enter the new millennium, our united goal should be the responsible management of our existing guns, or as Don Kates put it, “promoting solutions that are consistent with more guns.”⁶ To have any hope of moving effectively in that direction, both sides are going to have to work together, or at least be more honest advocates and willing listeners in the debate. Perhaps this essay, simply by virtue of its placement in this journal, is a small step in that direction.

A troubling aspect of the overall gun control debate is that both gun proponents and gun opponents end up writing largely for audiences that already agree with their respective positions. In the vernacular, the debaters are usually “preaching to the choir.” Neither side seems to be listening to the other. When we study opposing viewpoints, it is usually with the single-minded purpose of refuting them. I have been guilty of this on many occasions. Conversely, while opposing arguments are reflexively dismissed, we uncritically accept questionable studies, statistics and viewpoints that happen to coincide with our own position.

We cannot hope to move toward common ground concerning our nation’s gun policies—an excruciatingly oppositional issue *screaming* for common ground—unless and until we are prepared to honestly examine our own positions on issues vital to the debate. The fallacies of reasoning in gun control discourse are numerous and pervasively employed. Living in the heart of gun country, I could fill a multi-volume treatise of fallacies just by clipping letters to the editor from the local newspaper. For attention here, I selected just two areas to explore. They are notable both for their practical importance in determining firearms policy in the United States and the extent to which they are contaminated by fallacies. These two areas are: (1) the defective argumentation over whether the Second Amendment establishes an individual right to bear arms or only a collective state right, with special attention to the U.S. Supreme Court’s 1939 decision in *United States v. Miller*; and (2) statistical abuse and misuse,

concentrating on studies purporting to prove cause and effect relationships between guns, gun laws and gun violence, including John R. Lott, Jr.'s celebrated and scarily influential book, *More Guns, Less Crime*.⁷

Some preliminary observations are in order. First, this essay focuses on the methods of argumentation employed, not the correctness of the conclusions reached. I will attempt to be fair and balanced in critiquing fallacies committed by each side. However, I make no pretense of complete objectivity. I am a partisan. I support much stronger gun control, particularly safe storage and other product safety laws designed to prevent access to guns by unauthorized users. (I believe all advocates in the debate have an ethical obligation to disclose their allegiances where they are not otherwise clear from the context and to disclose any financial compensation paid to them by partisan organizations.)

Second, although reasoning fallacies often are intentional rhetorical tricks used willfully to skew an argument, many fallacies result from unconscious self-deception. We often accept false arguments or propositions because our passion and self-interest allow us to deceive ourselves. I will avoid ascribing improper motives to anyone with regard to the fallacies discussed.

Third, I confess, as I have before, that I have used fallacious reasoning in debating guns, especially emotional fallacies and statistical fallacies of the type discussed below. Fallacies are hard to avoid. They are endemic to the art of persuasive argumentation. Debaters use them precisely because they are effective, even if defective. Of course, the fact that fallacies are common is not a justification for resorting to them. We should all strive to avoid crooked thinking. I will try to avoid it here.

Finally, my opinion that gun control discourse is in a state of serious disrepair does not apply to all commentators on all firearms issues. The most egregious fallacies occur in popular, as opposed to scholarly, debate. There are a number of excellent

scholars writing in this area who contribute positively to the debate, including many of the people who serve on the Board of Advisors for this distinguished journal. I am not sure why there are not more “anti-gun” scholars. This seems paradoxical given the general left-leaning tendencies of academia. That there are virtually no women scholars in the area is also interesting.

II. The Second Amendment Debate: “It’s *Miller* Time”

Fundamental to any discussion of gun control is the meaning of the Second Amendment, which provides that “[a] well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.” The Amendment is subject to two very different interpretations: an “individualist” view that the Amendment protects an individual’s right to keep and bear arms and a “collectivist” view that the Amendment protects only a collective state right to maintain organized militia such as the National Guard.

Collectivists find support for their interpretation in the linguistic structure of the Amendment, arguing that the “well regulated Militia” preamble serves to restrict the clause relating to the right to keep and bear arms. Individualists such as Eugene Volokh rebut the linguistic argument by noting that the first thirteen words of the Amendment are merely its justification clause, an introduction of sorts to the operative “right to keep and bear arms” clause. More importantly, individualists focus on the fact that in the 18th century, the “militia” included all able-bodied males in the community, not just those who belonged to organized state defense groups.

Each side has an ace in the hole in the Second Amendment debate that the other side usually refuses to acknowledge. The individual rights theorists appear to have the greater weight of historical authority on their side. The vast majority of recent scholarly articles have concluded from the historical data that the constitutional framers intended the Amendment to create and protect an individual right to bear arms (although it should be

noted that a small cadre of prolific pro-gun scholars is responsible for most of these articles).

In the opposing corner, the collectivists have an overwhelming edge in judicial support. Federal courts since *Miller* that have squarely weighed in on the issue have, with one recent exception discussed below, usually rejected an individual right interpretation of the Second Amendment, ruling instead that the Amendment guarantees a right to bear arms only in connection with organized state militia.⁸

Understandably, in presenting the Second Amendment, each side touts its strength. Individualists focus on their historical and scholarly support and collectivists trumpet their almost unblemished judicial record. How do the individualists and collectivists deal with the troubling weaknesses in their respective positions? Usually by pretending they do not exist or, at best, downplaying them in misleading fashion. Individualists usually fail to mention the line of court decisions refuting their position. Collectivists act similarly with regard to the adverse historical data and scholarly support.

In behaving this way, each side commits the fallacy of one-sided assessment.⁹ It is fallacious to ignore countervailing evidence or arguments in an attempt to persuade. Virtually any argument can be made to sound convincing if relevant authority tending to disprove the argument is overlooked or ignored. Audiences lacking personal knowledge of an issue are easily led astray when they receive only one side of an argument that has two viable sides, which is true of most gun-related issues. Given the fundamental importance of the Second Amendment to the overall debate and the vital nature of the opposing arguments to a contextual understanding of the Amendment, these fallacies are egregious.

The web-sites for Handgun Control, Inc. (HCI)¹⁰ and the National Rifle Association (NRA)¹¹ serve as interesting paradigms of the gun control debate on many issues, including this one. Both web-sites are sophisticated, although the NRA

gets the nod as the better, more professionally constructed site from an aesthetic and technical point of view. Both sites contain extensive libraries of information concerning firearms issues. Both sites devote particular attention to legal issues, including the meaning of Second Amendment.

Not surprisingly, the HCI site asserts that the Second Amendment stands only for a collective state right to maintain an organized militia,¹² while the NRA site advances an individual right position.¹³ However, both organizations are guilty of committing the fallacy of one-sided assessment for inadequately acknowledging and addressing the strong authority against their respective interpretations. Since HCI and the NRA are probably the two dominant national sources of information on firearms issues, these omissions are unacceptable.

The HCI site tackles the opposing interpretative authority very superficially in a section refuting what the organization labels as “NRA MYTH 7,” which it defines as: “The authors of the Constitution clearly stated their intention that the Second Amendment protect the possession of arms, even absent a connection with the militia.”¹⁴ HCI devotes five paragraphs to the historical argument, explaining how the NRA has taken quotations from James Madison and Patrick Henry out of context. The presentation is biased and incomplete.

On the other side, the NRA web-site substantially downplays the overwhelming judicial rejection of its individual right position. A person interested in learning about the Second Amendment could visit the NRA web-site and read a substantial volume of material concerning the Second Amendment and gun rights generally—some of it of high quality—yet come away not understanding that every modern federal court except one ever to address the issue has linked the right to possess firearms to the maintenance of an organized state militia. For example, in a section called “Fables, Myths & Other Tall Tales,” the NRA page states: “Fable: The Second Amendment to the Constitution does not protect an individual right to keep and bear arms.”¹⁵ The text in support of this proposition cites a short statement about the

second amendment which was made in fourth amendment case (*United States v. Verdugo-Urquidez*), emphasizes the historical support for an individual right interpretation and states that several legal scholars agree with it, and quotes a wholly one-sided "observ[ation]" from *United States v. Miller*—but nowhere does it mention that every court but one to expressly consider the issue has rejected the NRA's interpretation. The NRA site gets some credit for offering a "Fact Sheet" listing and discussing federal court cases regarding the Second Amendment.¹⁶ However, the capsule summaries of each case are incomplete and almost wholly one-sided.

Throughout the modern era, the historical interpretative debate has been largely disconnected from and irrelevant to the real world of the constitutionality of gun laws. As in all matters of federal constitutional law, a constitutional provision does not necessarily mean what the framers intended it to mean. It means what courts say it means. Whether this coincides with the framers' intent is often just a matter of happy coincidence. Whether this is good or bad is not the point. It just "is."

As just one of many possible illustrations, it is as clear as anything in constitutional law that the drafters intended the Bill of Rights to restrict only federal action. The first eight amendments to the Constitution were not intended to apply to the states. The Court so held in *Barron v. Baltimore*¹⁷ in 1833. However, through some judicial sleight of hand occurring largely under the watch of Chief Justice Earl Warren in the 1960s, the Court "incorporated" almost all of the Bill of Rights into the Fourteenth Amendment due process clause and made them binding on the states. (Regrettably for the pro-gun movement, the Second Amendment is one of the only liberties in the Bill of Rights that the Court has not made binding on the states,¹⁸ which, I confess, is the wicked reason I chose the incorporation example to demonstrate my point.) As a result, states are bound by these restrictions despite the clear intent of the drafters to the contrary.

Law is what courts make it. The NRA knows that and should more openly and accurately inform the American public of the current state of the law. Conversely, HCI should make a fuller presentation of the historical evidence for and against its collective right position. Both proponents and opponents of gun control need and are entitled to accurate and complete information regarding this vital issue.

In this country, the ultimate arbiter of law is the U.S. Supreme Court. In the end, the Second Amendment means what the Supreme Court—the world’s most powerful tribunal—says it means nothing more or less. With so much at stake, it makes sense that both sides of the gun debate have devoted much attention to *United States v. Miller*,¹⁹ the Supreme Court’s only significant foray into Second Amendment interpretation. Unfortunately, they once again devolve into fallacious one-sided assessments when doing so.

The defendants in *Miller* were charged with transporting an unregistered sawed-off shotgun in interstate commerce in violation of the National Firearms Act of 1934. They claimed the indictment infringed their Second Amendment rights and the district court agreed, sustaining a demurrer to the indictment. On direct appeal, the Supreme Court reversed, holding that possession of the sawed-off shotgun was not protected by the Second Amendment.

Did *Miller* endorse the collective right view or the individual right view of the Second Amendment? We will see in a moment. But first it will be interesting to compare how the case has been presented by the two sides in the gun control debate.

Anti-gun forces interpret *Miller* as clearly establishing a collective right “organized militia” view of the Second Amendment, stating:

- The Supreme Court in *Miller* “ruled . . . that the Second Amendment has nothing to do with individual rights to bear arms but rather the right of the states to an armed militia.”²⁰

- The Supreme Court has “ruled at least three times that the Second Amendment has not the slightest thing to do with an individual’s right to bear arms,” *Miller* is claimed to be “the most trenchant of these decisions.”²¹
- “These words alone [two sentences from the Court’s opinion] undercut any individual right interpretation of the Second Amendment.”²²
- “It is firmly settled that there is no constitutional right to bear arms,” citing *Miller*.²³

In stark contrast to these collective right interpretations, pro-gun commentators have asserted about *Miller*:

- “[I]t is clear that *Miller*, even with its limitations, supports the view that the second amendment guarantees an individual right to keep and bear guns, including handguns.”²⁴
- “[D]espite the shortcomings of the *Miller* opinion, the Supreme Court correctly concluded that the Second Amendment protects an individual’s right to keep and bear arms and thus rejected the untenable collective right theory.”²⁵
- “*Miller* remains an affirmation of the constitutional protection of the popular right to keep and bear military weapons.”²⁶

Are all these people talking about the same case? *Miller* could not have established *both* a collective right interpretation and an individual right interpretation of the Second Amendment. Something is amiss, which is that both sides try to squeeze more out of *Miller* than is warranted by the Court’s opinion. The truth is, *Miller* offered a little something for everyone. It is an ambiguous decision that failed to unequivocally adopt either a collective right or an individual right interpretation of the Second

Amendment. To assert that the opinion clearly stands for one position without fully presenting the other side is a fallacious one-sided assessment.

The key passage from the Court's opinion, from which both sides draw support is this paragraph:

In the absence of any evidence tending to show that possession or use of a "shotgun having a barrel of less than eighteen inches in length" at this time has some reasonable relationship to the preservation or efficiency of a well regulated militia, we cannot say that the Second Amendment guarantees the right to keep and bear such an instrument. Certainly it is not within judicial notice that this weapon is any part of the ordinary military equipment or that its use could contribute to the common defense.²⁷

In the next paragraph, the Court explains how the Constitution originally granted Congress the power to call forth the militia to execute the laws of the Union, suppress insurrections and repel invasions, as well as the power to organize, arm and discipline the militia, while reserving to the States the power to appoint officers and train them according to discipline prescribed by Congress.²⁸ "With obvious purpose to assure the continuation and render possible the effectiveness of such forces," the Court stated, "the declaration and guarantee of the Second Amendment were made. It must be interpreted and applied with that end in view."²⁹

Supporters of gun control argue with some persuasiveness that by casting the issue in terms of whether a sawed-off shotgun bears a reasonable relationship to the maintenance of organized state militia, the Court endorsed the collective right interpretation. Opponents counter by quoting the Court's observation that the militia is comprised of "all males physically capable of acting in concert for the common defense."³⁰ This statement, they argue, makes the Court's emphasis on the militia consistent with an individual right interpretation.

Adherents of the individual right view also suggest that the defendants in *Miller*, who did not appear before the Supreme Court, lost only because of a failure of proof. They emphasize the Court's caveat in the above-quoted paragraph that "in the absence of any evidence" the Court would not take judicial notice that a sawed-off shotgun is a weapon that could be used by the militia to contribute to the common defense, suggesting that had such evidence been presented the result might have been different. Based on this, individualists assert *Miller* can be read to protect an individual's right to keep and bear any weapon with proven military utility.

But when all is said and done, the only certainty about *Miller* is that it failed to give either side a clear-cut victory. Most modern scholars recognize this fact. For example, Professor Eugene Volokh describes *Miller* as "deliciously and usefully ambiguous" in an article about using the Second Amendment as a teaching tool in constitutional law.³¹ That is probably the most accurate statement that can be made about the case.

We may finally find out what *Miller* "means" in the near future. The ante in the Second Amendment dispute was raised considerably in April 1999 when a Texas federal district court dismissed an indictment against a Lubbock man charged with unlawfully possessing a firearm while under a domestic restraining order. U.S. District Judge Sam Cummings ruled the statute prohibiting such possession (18 U.S.C. § 922(g)(8)) infringed the defendant's Second Amendment rights.³² This case—*United States v. Emerson*—is the first federal decision since the trial court's decision in *Miller* to declare a gun control law to be in violation of the Second Amendment. Much will be at stake if this case climbs the appellate ladder toward the Supreme Court. It will be interesting to watch how partisans on both sides construe *Miller* along the way.

III. Statistical Cause and Effect Studies: The Folly of *Post Hoc* Reasoning and Causal Oversimplification

The three classic rules for home buying, as any realtor will affirm, are “location, location, location.” The three rules for nineties-style arguing about gun control are “statistics, statistics, statistics.” Statistics rule the gun debate. They form the perfect pocket sound bite in our attention span-challenged society. Typically exaggerated, taken out of context or just plain misrepresented, gun control statistics are habitually spouted by pundits, politicians and partisan organizations. The media picks them up and disseminates them widely and repeatedly, often on editorial pages to back up pro or anti-gun diatribes. The most popular gun control statistics settle into the consciousness of mainstream America, where Joe Blow further distorts them in arguments at the coffee shop and letters to the editor.

My frustration with the statistical war recently prompted me to parody a “typical” gun control debate in my monthly humor column in the *American Bar Association Journal*. Here is an excerpt:

Gun Control Proponent: Last year in Japan, only one person was killed by a gun, while in the U.S. more than seventeen million people were killed just from getting hit in the head with ejecting shell cartridges.

Gun Control Opponent: Japan is a very regimented society. Only one Japanese citizen out of a hundred thousand gets to experience the excitement of dodging gunfire. Besides, every day in America, twenty million people use guns in self-defense and millions more use them to safeguard the country from British invasion.

Proponent: Nonsense. Studies show a gun in the home is one hundred and forty-six million times more likely to be used to kill a snail darter than for self-defense.

Opponent: Pro-gun control statistics are one billion times stupider than anti-gun control statistics.

Proponent: If you laid all the preposterous claims of gun control opponents end to end, they would circle the universe three hundred times and still have enough left over for infinity.

Opponent: There's a 99.99999999 percent chance that the rude remark I'm about to make concerning your mother will cause the veins in your neck to explode.

Proponent: Statistically speaking, gun owners are six-and-a-half trillion times uglier than non-gun owners.

Opponent: My machine gun can pump bullets into your abdomen at a rate of one-zillion rounds per minute.

Proponent: I'm a gazillion-bazillion times more likely to strike you in the head with this microphone than I was five minutes ago.³³

Unfortunately, while I can see levity in the battle of statistics, I also see danger. Each side is so mired down in statistical claims that we lose sight of the big picture. While reliable, relevant statistics are obviously useful to bolstering arguments, they are not a *substitute* for reasoned argument. However, too many lazy debaters rely almost exclusively on statistics to confer a veneer of substance on what are otherwise just naked opinions. Worse, too many members of the public seem willing to accept pure statistical "argument" of the issues. Since so many of the statistics bandied about are fallaciously misleading, this does not bode well for reasoned debate. Rhetoricians have identified several logical fallacies directly associated with statistics. David Fischer discusses several of them in *Historians' Fallacies*, including:

- the fallacy of generalizing from an insufficient sampling;³⁴
- the fallacy of statistical special pleading, which occurs when an investigator applies a double standard of evidentiary interpretation—one standard to evidence which sustains her generalizations and another to evidence which contradicts them;³⁵
- the fallacy of statistical impressionism, which occurs when one attempts to force an imprecise impressionistic interpretation into exact numbers;³⁶
- the fallacy of false extrapolation, which consists of extrapolating data beyond the breaking point to make future projections (Fischer gives this humorous example: since the average size of the American family was 3.71 persons in 1940 and 3.54 persons in 1950, one might, extrapolating from this data, argue that the American family is shrinking at an arithmetical rate of .22 persons per decade so that in 2070 the average size of the American family will be .90 persons);³⁷ and
- the fallacy of statistical nonsense, which Fischer describes as “a catchall category for a miscellany of statistical mumbo jumbo, all of which has one quality in common: it is, *in context*, literally meaningless.”³⁸

Examples of each of these statistical fallacies can be found in the gun debate. However, this essay will concentrate on a broader category of fallacy associated with statistics—causal fallacies—and explore how they are routinely abused in conjunction with statistical studies purporting to prove (or which are popularly interpreted as proving) cause and effect relationships between guns, gun laws and gun violence.

The gun control war has become far more sophisticated in recent years with the advent of these studies. On the anti-gun side are a number of studies funded by a wing of the U.S. Centers for Disease Control and Prevention (CDC) known as the

National Center for Injury Prevention and Control. Virtually all of these studies have reached results favoring gun control, finding correlations between owning guns and higher homicide and suicide risks and between gun control laws and lower crime rates. On the pro-gun side is John Lott's widely-publicized study contained in his book *More Guns, Less Crime*, which purports to prove that non-discretionary concealed weapons laws reduce violent crime.

As all lawyers remember from their first-year law school course in Torts, few legal doctrines are as bereft of meaningful content than that of causation. Even ignoring the illusory principles of proximate cause and concentrating on the comparatively concrete concept of causation in fact, "causality may have no more reality than a dragon or a mermaid."³⁹ This is because the search for a causal nexus, within or outside of the law, requires that we apply a hypothetical alternative test in which we must compare what happened under a set of known circumstances with what would have happened under a set of hypothesized circumstances. The problem is that we can never know with any degree of reliability what would have happened under the hypothetical circumstances because they never occurred.

As a result, we are often left to draw inferences based on causal oversimplification or *post hoc, ergo propter hoc* (after this, therefore because of this) reasoning. We reason that because one event followed another, the latter was caused by the former. While *post hoc* reasoning is universally condemned as fallacious,⁴⁰ it is not always defective. In some instances our everyday experience allows us to draw reasonable inferences of causation from a sequence of events. This is common, for example, in the law.

As an illustration, consider the simple facts of an old Louisiana case where a woman tripped and fell while descending stairs which were unlit and lacking a handrail. In a lawsuit against the railroad that owned the stairs, the court ruled that, even

absent specific evidence of causation, a reasonable inference could be drawn that the failure to light the stairs and provide a handrail caused the trip and fall.⁴¹ In effect, the court held that *post hoc* reasoning could be validly applied to determine the cause of this occurrence. While it is possible the woman would have fallen even if the stairs had been properly lit and a handrail provided, common experience tells us that traversing unlit stairs with no handrail greatly increases the chance of an accident occurring.⁴² Falling down unsafe stairs, the court said, is a natural and ordinary sequence of events.

While we still can never be certain of the cause, the three requirements for establishing a regularistic causal proposition between X (the fall) and Y (the unlit stairs and no handrail) are satisfied. Those three criteria are:

- a correlation between X and Y;
- a proper temporal relationship (X occurred before Y in a relevant time frame); and
- at least a presumptive agency that connects them.⁴³

In our example, a correlation does exist. The woman fell while using stairs that were unlit and with no handrail. A proper temporal relationship also exists. Most significantly, a presumptive agency connects the two events: the common body of experience which informs us that descending unlit stairs with no handrail is likely to lead to a fall. When dealing with simple, closely connected events with few variables, *post hoc* reasoning is not completely fallacious.

However, as events become more complex, *post hoc* reasoning becomes defective. The ability to draw reliable inferences of causation decreases rapidly and substantially as the number of causal variables increases. To isolate one event as “the cause” of another when there are hundreds or even thousands of relevant antecedents is a gross oversimplification that is virtually guaranteed to be fallacious. “[T]he real cause is the whole of these antecedents,” said John Stuart Mill, “and we

have, philosophically speaking, no right to give the name of cause to any one, exclusively of the others."⁴⁴

"Can any causal connection be answered by an empirical method?" asks Fischer in *Historians' Fallacies*.⁴⁵ The most plausible answer appears to be "Not very likely." Empirical studies can establish correlations, but a correlation can never by itself establish a cause. Every textbook on statistics warns against confusing correlation with cause.⁴⁶

I confess that I know very little about statistics. The discussion that follows is directed more at the rhetorical flaws of using statistics in the gun debate to draw causal connections than at the statistical analyses themselves. The discussion is in no way complete. More than 200 studies of guns and gun control have been conducted.⁴⁷ Cataloging all the statistical flaws in the gun control debate would require multiple volumes. I have selected for critique three causal fallacies on the pro-gun control side:

- the claim that the Brady bill has reduced violent crime,
- a comparative study of Seattle and Vancouver that purports to show that gun control laws reduce homicide rates, and
- a study of the correlation between suicide and guns kept in the home.

On the anti-gun control side, the choice for discussion was obvious: John Lott's book, *More Guns, Less Crime*. No study of guns has ever generated such a stir.

A. Statistical Cause and Effect Claims on the Pro-Gun Control Side.

1. "Brady bull."

Statistical cause and effect claims in gun discourse range from the simple to the highly sophisticated. At the "simple" end of the spectrum are obviously fallacious *post hoc* claims such as this one touted on an HCI web page: "CRIMES WITH GUNS

DOWN FASTER THAN VIOLENT CRIMES OVERALL, 1996 FBI Data Show Brady Law's Continuing Effectiveness In Reducing Gun Crimes."⁴⁸ Employing painfully defective *post hoc* reasoning, the text proclaims that violent firearm crime has declined since implementation of the Brady bill in February 1994 and that this data "provides more compelling evidence that the Brady law is working."

The *post hoc* fallacy is enormous. I support the Brady bill and feel confident it has prevented *some* crimes in denying handguns to 173,000 would-be purchasers who failed background checks and in deterring many convicted felons from ever attempting an over-the-counter handgun purchase. However, the fact that firearm violence dropped after passage of the Brady bill is hardly "compelling" evidence that the Brady bill caused the decline.

2. Gun laws and homicide rates.

At the "sophisticated" end of the statistical cause and effect pro-gun control spectrum are numerous public health studies funded by the CDC, almost all of which have reached negative conclusions concerning guns and gun ownership. The CDC-supported studies have been vigorously attacked by the pro-gun forces who assert the researchers are biased and their methodologies substandard.⁴⁹ Some of the accusations consist of unfair, *ad hominem*-laced partisanship, but some criticism is warranted.

In 1988, the *New England Journal of Medicine* published the results of a comparative study between Seattle, Washington and Vancouver, British Columbia, purporting to show an association between gun control laws and lower homicide rates.⁵⁰ This was one of the earliest and most widely publicized of the public health studies. The essential premise of the article was the Seattle and Vancouver are very similar cities in terms of demographics, geography and overall crime rates, but Seattle has a much higher homicide rate which, according to the article, is best explained by the fact that Seattle has lax gun laws and

Vancouver has strict gun laws. Specifically, the abstract of the article asserted:

Despite similar overall rates of criminal activity and assault, the relative risk of death from homicide, adjusted for age and sex, was significantly higher in Seattle than in Vancouver Virtually all of this excess risk was explained by a 4.8-fold higher risk of being murdered with a handgun in Seattle as compared with Vancouver. . . . We conclude that restricting access to handguns may reduce the rate of homicide in a community.⁵¹

The *Tale of Two Cities* article has been condemned by pro-gun researchers on several grounds, including the attempt to isolate Canada's gun laws as the primary cause for the discrepancy in homicides, downplaying or ignoring numerous other cultural and demographic differences between the two cities that could play a role in homicide rates. Criminologist Gary Kleck, a respected researcher, said of the study:

The research is worthless. There isn't a legitimate gun control expert in the country who regarded it as legitimate research. There were only two cities studied, one Canadian, one U.S. *There are literally thousands of differences across cities that could account for violence rates, and these authors just arbitrarily seized on gun levels and gun control levels as being what caused the difference.*⁵²

Kleck is correct. There are probably thousands of differences between the two cities. Not all of them are as relevant to the homicide rate as access to guns, but it seems impossible to isolate Vancouver's gun laws as a primary explanation for the difference in homicide rates, certainly not without devoting much more attention to other possible explanations than did the *Tale of Two Cities* study.

3. Gun laws and suicide rates.

Even if the statistical study itself is not causally fallacious, the popular interpretation of it may be. That appears to be the case with respect to a well-known CDC-funded study showing a strong correlation between firearms in the home and firearms suicide.

A web page titled “Firearms Facts” contained on the HCI web-site states, without explanation or qualification, that: “The presence of a gun in the home increases the risk of suicide fivefold.”⁵³ This factoid is derived from a study conducted by noted gun researcher Arthur Kellerman and several colleagues (collectively referred to here as “Kellerman” for purposes of convenience) published in a 1992 article in the *New England Journal of Medicine*.⁵⁴ Kellerman’s claim was actually a bit more modest. His study suggested that keeping guns in the home increased the risk of suicide by a 4.8 ratio rather than a 5.0 ratio. So already, before we even get to the study, we find the ratio being exaggerated without justification for popular rhetorical purposes by four percent.

Kellerman studied all suicides occurring in Shelby County, Tennessee (Memphis area) and King County, Washington (Seattle area) during a thirty-two month period between 1987 and 1990. Data was collected for each suicide from the police, medical examiner and by interviewing proxies for the victim concerning risk factors for suicide such as alcohol and drug use, history of depression or mental illness and gun ownership. Answers to the interview questions were compared to a set of control subjects from the same neighborhood, matched with the victim by sex, race and approximate age. The result was 438 matched pairs of suicide victims and controls.

Analyzing and comparing various risk factors for suicide present in the victims and the controls, the study concluded “that keeping one or more firearms was strongly associated with an increased risk of suicide in the home” by a ratio of 4.8.⁵⁵ The study found that firearms were more prevalent in the homes of

the suicide victims than in the homes of the matched controls. Guns were kept in 65 percent of the suicide victims' homes but in only 41 percent of the control subjects' homes.⁵⁶ Handguns, which were used in 72 percent of the firearm suicides studied,⁵⁷ were present in 49.5 percent of the victims' homes but in only 23.4 percent of the controls' homes.⁵⁸

To an untrained eye, the study appears to have been well thought out and carried out. Specific objections leveled against the study itself seem unwarranted. For example, Don Kates, in criticizing the study, emphasized a possible alternative explanation for the association between guns in the home and firearm suicides—that gun ownership may be associated with personality traits related to suicide.⁵⁹ However, he failed to mention that the authors noted this same possibility.⁶⁰ Kates also suggested the authors biased the study by excluding suicides outside the home.⁶¹ This criticism is unjustified since the very purpose of the study was to study the association between guns kept in homes and firearm suicides occurring in homes. Indeed, the title of the article is "Suicide in the Home in Relation to Gun Ownership."

However, even assuming the Kellerman suicide study was methodologically sound, causal fallacies have arisen in the oversimplified interpretation and presentation of the study offered by HCI and other gun control advocates. Uninformed members of the public might reasonably interpret the HCI factoid that "[t]he presence of a gun in the home increases the risk of suicide fivefold" to mean: "If I have a gun in my home, it's five times more likely that someone in my home will commit suicide." The naked unexplained "fact" suggests that guns in homes are responsible for causing suicide at a dramatically increased rate.

In truth, as Kellerman openly documented in the study, several suicide risk factors in addition to gun ownership were also far more prevalent for suicide victims than for control subjects. Depression or mental illness was present in 83.5 percent of the suicide victims, but only 6.4 percent of the control subjects.⁶² Thirty-six percent of the suicide victims took prescribed

psychotropic medication, while only 3.5 percent of the control group did so.⁶³ Alcohol abuse was reported in “substantially higher percentages” by the suicide proxies than by the controls.⁶⁴ Thirty-six percent of the suicide victims lived alone as compared to 18 percent of the control subjects.⁶⁵ The suicide victims were “far more likely” (27.8 percent vs. 8.5 percent) to have been arrested than the control subjects.⁶⁶ Illicit-drug use was reported by 19.2 percent of the suicide proxies but only 3.1 percent of the controls.⁶⁷

Thus, several risk factors other than the presence of a gun in the home correlate with suicide, some of them at much higher risk ratios than the 4.8 ratio for guns. According to the study, the odds of suicide for a person living alone are 5.3 higher than for persons not living alone.⁶⁸ The suicide odds are 4.1 higher for persons who did not graduate from high school than for graduates.⁶⁹ However, one does not hear people arguing that living alone or not graduating from high school should be avoided because they greatly increase the risk of suicide.

But again, this data was all fairly set forth in Dr. Kellerman’s study. As with many statistical claims, the fallacy occurs primarily in the reporting. One sentence-summaries of the results of complex studies will be grossly oversimplified and fallacious every time. Both HCI and the NRA employ similar lists of firearms “facts” on their web-sites. “Facts” that are subject to biased interpretation should be omitted from these lists.

Closing out this discussion, I feel compelled to mention that I am biased in favor the Kellerman study based on my belief—grounded in common sense rather than statistical analysis—that reducing guns in the home (or at least safely securing them) would reduce suicides. Suicide is often an impulsive act, particularly among adolescents. Firearms offer the easiest, quickest, most dependable and convenient means to end one’s life in a moment of despair. But that is the subject of another article, which, in fact, is in progress.

B. Statistical Cause and Effect Claims on the Anti-Gun Control Side:
"Lotts" More Guns, Less Crime.

John Lott is one of the most prolific and influential writers on guns and gun control of all-time.⁷⁰ No one will ever accuse Lott of suffering from writer's block. His guest editorials and op-ed pieces promoting concealed weapons carrying and opposing gun control have appeared in newspapers on at least 110 occasions.⁷¹ He has been referred to in more than 1,100 newspaper stories.⁷² Most of the attention he generates comes from his book, *More Guns, Less Crime*,⁷³ which itself has been mentioned by name in 218 newspaper stories.⁷⁴

This book—a massive nationwide statistical analysis that purports to prove that non-discretionary concealed weapons laws reduce violent crime—has achieved what every literary agent dreams of in an academic tome: “crossover potential.” Written for the stately University of Chicago press, as of June 16, 1999, the book charted a very respectable “490” on Amazon.com’s sales chart, the “Billboard chart” of book sales. An *Excite* Internet search of “John R. Lott, More Guns Less Crime” turned up 3,911,222 matches. While there are undoubtedly many false positives in this list (I did not go through them all), the first several dozen sites listed reveals that this book is making a dramatic impact on the consciousness of the American people.

Lott has developed a devoted cult following among gun lovers and has become a marked man among gun haters. A web page for the “Maryland Self-Defense League” markets “More Guns—Less Crime” bumper stickers and urges people to purchase Lott’s book.⁷⁵ The Violence Policy Center maintains a “Who Is John Lott” page that portrays Lott as an extremist by quoting excerpts from his academic and popular writings.⁷⁶

More Guns, Less Crime has provided potent ammunition for those who favor nondiscretionary concealed weapons laws—laws that require issuance of a concealed handgun permit to any person who meets the minimum state-prescribed criteria, which generally consist of passing a background check and a firearms safety course. Thirty-one states now have such “right-to-carry

laws.” Without committing my own *post hoc* fallacy, it appears Lott’s book and the buzz it has generated is playing a crucial role in the passage of these laws.

By any measure, *More Guns, Less Crime* is an important work, but is Lott’s conclusion that right-to-carry laws deter and reduce violent crime valid? I confess that Lott’s book *sounds* persuasive. Lott is articulate and a master of his field. Not being an econometrician, I would not hazard a critique of his methods. He could make mincemeat of me without even breaking a sweat. But therein lies part of the problem. Dependent as Lott’s book is on reams of data and “cross-sectional,” “time-series” and “regression” analyses, his statistical methodologies are impenetrable to most readers and, therefore, insulated from critical scrutiny to a large extent. One Amazon.com reviewer (the book has already generated forty-four reader reviews—another impressive stat) who gave the book a four star rating (out of five) said: “Regressions, scatter diagrams, means, standard deviations, whew! It’s enough to make the non-initiated’s head spin.”

Statistics is one of the most inaccessible of all fields to non-experts. In writing this article, I sought the help of two colleagues in answering what appeared to be a fairly straightforward statistical interpretative question. One colleague graduated with a mathematics degree from the University of Virginia with highest distinction. The other is completing his doctoral dissertation in sociology, which required completion of several courses in statistics. We think we figured out the answer, but only after considerable discussion. If three law professors with a combined twenty-five years of higher education have to labor over answering a single statistical question, how much of Lott’s study can possibly be understood by the average reader? Yet Lott’s book is being accepted as gospel by large numbers of the American public.

Of course, most believers will never even read the book. Instead, they will rely on word-bite summaries of Lott’s conclusions, which appear frequently in newspapers and other

publications. Here is how an article called "Gunfight Arithmetic" in *Guns Magazine* presents Lott's complex statistical study to its readers:

- "Says Professor Lott, 'The probability of serious injury from a criminal confrontation is 2.5 times greater for women offering no resistance than for women resisting with a gun.'" ⁷⁷
- "Explains Lott, 'The more people who obtain permits over time, the more violent crime rates decline. After concealed handgun laws have been in effect for five years, murders declined by at least 15 percent, rapes by 9 percent, and robberies by 11 percent.'" ⁷⁸
- "Professor Lott's authoritative research indicates that American citizens may use guns in self defense as often as 2 million times a year."⁷⁹ (Another layer of distortion: although Lott frequently cites the self-defense claim in op-ed pieces, it was Gary Kleck's research that came up with this number.)

Apparently, any pro-gun statistic takes on an aura of authority so long as it begins with "Lott says," even statistics he did not develop.

What do other experts say of Lott's study?⁸⁰ In the first published critique of Lott's work, Dan Black and Daniel Nagin reanalyzed the data and concluded it provides no basis for drawing confident conclusions about the impact of right-to-carry laws on violent crime.⁸¹ Among their findings:

The estimates [of the impact of right-to-carry laws on violent crime] are disparate. Murders decline in Florida but increase in West Virginia. Assaults fall in Maine but increase in Pennsylvania. Nor are the estimates consistent within states. Murders increase, but rapes decrease in West Virginia. Moreover, the

magnitudes of the estimates are often implausibly large. The parameter estimates that RTC laws increased murders by 105 percent in West Virginia but reduced aggravated assaults by 67 percent in Maine. While one could ascribe the effects to the RTC laws themselves, we doubt that any model of criminal behavior could account for the variation we observe in the signs and magnitudes of these parameters.⁸²

Black and Nagin concluded that the large variations in state-specific estimates raised the concern that Lott's results could be dictated by a single state for which Lott's model poorly fitted the data. They decided that state was Florida, due to its volatile crime rates influenced by a flourishing drug trade and the Marcel boat lift of 1980 and the fact that Florida passed several gun control restrictions during the relevant period. Reanalyzing the data without Florida, Black and Nagin found:

While the estimated impact of RTC laws on assault is relatively unaffected, without Florida there is no evidence of any impact on homicides and rapes. Thus, for these two crimes—the two crimes that account for 80 percent of the total social benefit of the RTC laws . . . —the evidence of a deterrent effect vanishes with the removal of a single state from the analysis.⁸³

Lott offered a detailed refutation of this reanalysis.⁸⁴

Dr. Stephen Teret, director of the Johns Hopkins Center for Gun Policy and Research, calls Lott's work "unsubstantiated," asserts it contains "factual and methodological flaws," characterizes his conclusions as "implausible," and states that Lott's methodology is "incorrect" and "discredited."⁸⁵ Lott responds to these criticisms in point by point rebuttals.⁸⁶

In his book, Lott discusses twenty-three specific criticisms lodged against the validity of his study.⁸⁷ As I studied each specific criticism, I thought: "Aha. A fatal flaw. They've got him now." Then I would read Lott's detailed response and not know

what to think. I finished the chapter scratching my head, essentially clueless about who had the upper hand.

"Who is right?" is not the relevant question for purposes of this essay. I note these critiques not to try to prove Lott wrong, but because they confirm my basic belief that it is impossible for any statistical study to reliably isolate one causal factor out of hundreds or thousands or millions and say *this* factor caused violent crime to decline by *this* amount. Lott boasts that his study contains "54,000 observations and hundreds of variables available over the 1977 to 1994 period" and that it contains "by far the largest data set that has ever been put together for any study of crime, let alone for the study of gun control."⁸⁸ This may be a plus, but the more calculations involved, the more potential there is for bias and error to creep into the analysis.

Even Lott makes statements such as:

- "Many potential causes of crime might fluctuate in any one jurisdiction over time, and it is very difficult to know which one of these changes might be responsible for the shifting crime rate."⁸⁹
- "While I make use of the arrest-rate information, I include a separate variable for each county to account for the different average crime rates each county faces, which admittedly constitutes a rather imperfect way to control for cross-country differences such as expected penalties."⁹⁰
- "This aggregation of crime categories makes it difficult to isolate crimes that might be deterred by increased handgun ownership and crimes that might be increasing as a result of a substitution effect."⁹¹

Although Lott offers detailed solutions to the concerns he raises, the more he turns to alternative analyses and variables to compensate for possible shortcomings, the greater my perception of the study as one gigantic statistical bootstrap undertaking.

Interestingly, in refuting criticisms of his study, Lott's weakest defense is to the simplest complaint: that he is guilty of fallacious *post hoc* reasoning.⁹² He concedes in response that "[a]n obvious danger arises in inferring causality because two events may coincide simply by chance, or some unknown factor may be the cause of both events."⁹³ He defends against the criticism by noting that "this study uses the most comprehensive set of control variables yet used in a study of crime." "For a critic to attack the paper," he opines, "the correct approach would have been to state what variables were not included in the analysis."⁹⁴

A multitude of causes contribute to either higher or lower violent crime rates. The deterrent effect of carrying concealed weapons is one of these factors. Other gun-related factors include the numbers of guns, gun distribution, gun marketing practices, types of guns, safe storage of guns, gun control laws, post-sale access to guns and firearm education. The list of non gun-related factors influencing the violent crime rate is almost endless: unemployment, poverty, illicit drug use, media violence, racial and ethnic demographics, police resources, mental illness, immaturity, alcohol abuse, arrest and conviction rates, lengths of prison sentences, the "broken window" effect, opportunity, the rise and decline of gangstra rap music, diet, climate, family status, cultural homogeneity, sexual disorders, bad tempers, road rage, private security guards, hopelessness, abuse as a child, despair, desperation, protective canines, crowded living conditions, home security systems, greed, educational levels, machismo, increased awareness of crime, gang membership and more.

Lott's study attempted to account for some of these causes, but not nearly all of them. There is no way it could. The bottom line is that any attempt to isolate the impact of one causal factor in a situation involving an extremely large number of other possible explanations seems doomed to be fallacious.

In discussing statistical cause and effect fallacies on the pro-gun control side, I mentioned the *Tale of Two Cities* study that attributed Vancouver's lower homicide rate in comparison to

neighboring Seattle to the fact that Vancouver has stricter gun laws. Recall the blistering critique of that study by pro-gun criminologist Gary Kleck, who said “[t]here are literally thousands of differences across cities that could account for violence rates, and these authors just arbitrarily seized on gun levels and gun control levels as being what caused the difference.” If there are “literally thousands of differences between cities” that contribute to violence rates, there must be literally millions of differences between the 3,054 counties in the United States studied by Lott.

My intuitive belief about the study is that—regardless of how carefully and thoroughly it was conducted—there are simply too many variables contributing to violent crime to isolate concealed weapons laws as a major cause in deterring or reducing it. It simply is not something that is capable of being proved by a statistical study. While Lott’s study is obviously far more sophisticated than simple *post hoc* reasoning, in the end, I believe it amounts to basically a *post hoc* argument that: States passed nondiscretionary concealed weapons laws; violent crime went down in some categories in some states; therefore, non-discretionary concealed weapons laws cause violent crime to go down. In the absence of other proof—which may never exist—it would be reckless for state legislators or anyone else to rely on this single study in making the major firearms policy decision to allow citizens to carry concealed handguns.

IV. Conclusion

Aristotle first classified logical fallacies in the fourth century, B.C., listing thirteen of them in *Sophistical Refutations*. As the art of practical argumentation evolved, so did Aristotle’s list. Modern rhetoricians have classified more than one hundred different fallacies. Many if not all of them are present in the gun control debate. Indeed, the gun control debate—because of the emotional nerve it touches—may be the most fertile breeding ground for reasoning defects in all of political discourse.

An issue as important to health and safety as the responsible management of 200 million instrumentalities capable of instantly ending human life demands reasoned discussion and consideration. The rampant demagoguery that pervades both sides of the gun control debate is detrimental to our national interest because it keeps us from inching towards much needed compromise solutions.

My modest goal in writing this essay was to generate some thoughtful consideration of how we should go about debating one of the most important public policy issues facing the nation. It was not my intention to change anyone's opinions concerning the substantive issues discussed herein, nor do I harbor any illusions that has occurred. I hope my attempt at evenhandedness (recognizing that my bias shows through in places) demonstrates my good faith and will encourage other participants in the debate to behave similarly.

There are reasonable arguments on both sides of almost every issue regarding guns and gun control. That is the threshold, critical point that all interested parties need to accept. We should stop automatically attaching *ad hominem* labels such as "gun nut" and "gun grabber" to our opponents and recognize that we have legitimate bases for disagreement. In addition to listening to what our opponents are saying, we need to begin critically examining our own arguments. Unexamined beliefs on any issue of substance—personal, political or professional—are dangerous.

What a pleasant surprise (or perhaps more accurately, a cardiac arrest-causing event) it would be to hear this type of response to an opposing opinion about gun control: "I understand where you're coming from. I can see why you would be worried about [fill in the blank]. My concern with your position is [fill in the blank]. Do you think there is some way we could come up with a proposal that would address both of our concerns?"

It could happen.

Author's Note

When David Kopel asked me to contribute to the 11th Journal on Firearms and Public Policy and said he welcomed my article submissions, I was flattered, although a bit bewildered. After all, the journal seems clearly designed for gun proponents, not longstanding gun critics like myself.⁹⁵ When I mentioned this concern to David, he explained that the one-sided content of the journal stems in part from the fact that he has a difficult time getting gun control advocates to submit articles, which is a shame. David deserves credit for his good faith effort to solicit differing viewpoints for this journal.

END NOTES

1. Nadine H. Baum Distinguished Professor of Law, University of Arkansas at Little Rock. E-mail: ajmclurg@ualr.edu. I am grateful to Debby Vickers for her exceptional research assistance. Copyright 1999, Andrew J. McClurg.

2. Andrew J. McClurg, *The Rhetoric of Gun Control*, 42 *Am. U. L. Rev.* 53 (1992).

3. David Fischer, *Historians' Fallacies* (1970).

4. W. Ward Fearnside & William B. Holther, *Fallacy: The Counterfeit of Argument* (1959).

5. T. Edward Damer, *Attacking Faulty Reasoning* (1980).

6. Don B. Kates, et al., *Public health pot shots: how the CDC succumbed to the gun "epidemic," Reason*, Apr. 1997, at 24. I would take issue only with the word "more." While I do not promote banning all guns, I support reducing the supply of new guns.

7. John R. Lott, Jr., *More Guns, Less Crime* (1998).

8. See, e.g., *United States v. Nelsen*, 859 F.2d 1318, 1320 (8th Cir. 1988) (responding to defendant's claim that Second Amendment protects a fundamental right to keep and bear arms, court said "this has not been the law for at least 100 years" and that "cases have analyzed the second amendment purely in terms of protecting state militias, rather than individual rights"); *Quillici v. Village of Morton Grove*, 695 F.2d 261, 270 (7th Cir. 1983) ("Construing the [Second Amendment] according to its plain meaning, it seems clear that the right to bear arms is inextricably connected to the preservation of a militia [W]e conclude that the right to keep and bear handguns is not guaranteed by the Second Amendment.").

9. What I am calling the “fallacy of one-sided assessment” also travels under different names. See Damar, *supra* note 5, at 60-61 (“Neglect of Relevant Evidence”); Jack L. Landau, *Logic for Lawyers*, 13 *Pac. L.J.* 59, 93 (1981) (“Suppressed Evidence”).
10. Handgun Control, Inc. Home Page: <http://www.handguncontrol.org>.
11. National Rifle Ass’n Home Page, <http://www.nra.org>.
12. See, e.g., *Guns and the Judiciary*, Interview with Dennis Henigan, in Handgun Control, Inc website, <http://www.handguncontrol.org/legalaction/c2/c2henigan.htm>.
13. See, e.g., *Fables, Myths & Other Tall Tales, About Gun Laws, Crime and Constitutional Rights*, in National Rifle Ass’n Home Page, ILA Research & Information Division, <http://nraila.org/research/Fables.html>.
14. *Exposing the NRA’s Second Amendment Mythology, A Guide for Gun Control Advocates*, in Handgun Control, Inc. Home Page, <http://www.handguncontrol.org/legalaction/c2/c2nrmyth.htm>.
15. *Id.*
16. *Fact Sheet, Federal Court Cases Regarding the Second Amendment*, ILA Research & Information Division, in National Rifle Ass’n Home Page, <http://www.nraila.org/research/rifcourt.html>.
17. 32 U.S. 243 (1833).
18. *Presser v. Illinois*, 116 S.Ct. 252, 265 (1886) (holding the Second Amendment declaration that the right to bear arms shall not be infringed “means no more than that it shall not be infringed by Congress. This is one of the amendments that has no other effect than to restrict the powers of the National Government . . .”). While it is true *Presser* was decided before any of the rights in the Bill of Rights were made binding on the states, *Presser* as of this late date remains good law and a painful thorn in the side of the pro-gun movement.
19. 307 U.S. 174 (1939).
20. Amitai Etzioni, *Gun Control: A Vanilla Agenda*, 1 *Responsive Community* 6, 9 (1991).

21. Wayne King, Sarah and James Brady; Target: The Gun Lobby, N.Y. Times (Magazine), Dec. 9, 1990, at 80.
22. Roy G. Weatherup, Standing Armies and Armed Citizens: An Historical Analysis of the Second Amendment, 2 Hastings Const. L. Q. 961, 999 (1975).
23. Eric A. Pullen, Guns, Domestic Violence, Interstate Commerce, and the Lautenberg Amendment: “Simply Because Congress May Conclude That A Particular Activity Substantially Affects Interstate Commerce Does Not Necessarily Make It So,” 39 S. Tex. L. Rev. 1029, 1070 n.308 (1998).
24. Richard E. Gardiner, To Preserve Liberty—A Look at the Right to Keep and Bear Arms, 10 N. Ky. L. Rev. 63, 92 (1982).
25. Nelson Lund, The Second Amendment, Political Liberty, and the Right to Self-Preservation, 39 Ala. L. Rev. 103, 110 (1987)
26. Ronald Docal, Comment, The Second, Fifth and Ninth Amendments—The Precarious Protectors of the American Gun Collector, 23 Fla. St. U. L Rev. 1101, 1120 (1996).
27. 307 U.S. at 178.
28. Id.
29. Id.
30. Id. at 179.
31. Eugene Volokh, et al., The Second Amendment As Teaching Tool In Constitutional Law Classes, 48 J. Legal Educ. 591, 604 (1998).
32. United States v. Emerson, ___ F. Supp. 2d ___, 1999 WL 198865 (N.D. Tex. 1999) (“The rights of the Second Amendment should be as zealously guarded as the other individual liberties enshrined in the Bill of Rights.”).
33. Adapted from McClurg, Hold Your Fire, supra note 6, at 14.
34. Fischer, supra note 2, at 104-109.
35. Id. at 110-13.
36. Id. at 113-16.
37. Id. at 120-25.

38. *Id.* at 116-18.

39. W.P. Montague, *The Ways of Knowing, or the Methods of Philosophy* 199 (J.H. Muirhead ed., 1928).

40. For a discussion of the fallacies involved in post hoc reasoning, see Damer, *supra* note 4, at 68-69; Fearnside & Holther, *supra* note 3, at 21-22; Fischer, *supra* note 2, at 166-67.

41. See *Reynolds v. Texas & Pac. Ry. Co.*, 37 La. Ann. 694, 698 (La. 1885).

42. *Id.* at 698 (explaining that where character of defendant's negligence greatly multiplies chance of plaintiff's accident and is of character naturally leading to occurrence of accident, mere possibility that accident might happen without defendant's negligence is insufficient to break chain of causation between negligence and injury).

43. Fischer, *supra* note 2, at 169

44. Quoted in *id.* at 183.

45. *Id.* at 164.

46. *Id.* at 167.

47. Lott, *supra* note 7, at 21-22.

48. CRIMES WITH GUNS DOWN FASTER THAN VIOLENT CRIMES OVERALL, 1996 FBI Data Show Brady Law's Continuing Effectiveness In Reducing Gun Crimes, in *Handgun Control, Inc. Home Page*, <http://www.handguncontrol.org/helping/gunuse/htm>.

49. See, e.g., Kates, *supra* note 5 (partisan critique of studies); Edgar A. Suter, Guns in the Medical Literature B A Failure of Peer Review, 83 *J. Med. Ass'n Georgia* 133 (1994) (partisan critique of studies); Gary Taubs, Violence Epidemiologists Test the Hazards of Gun Ownership, 258 *Science* 213 (1992) (describing criticisms of studies).

50. John Henry Sloan, et al., *Handgun Regulations, Crime Assaults, and Homicide: A Tale of Two Cities*, 319 *New Eng. J. Med.* 1256 (1988).

51. *Id.* at 1256.

52. *Firearm Regulations and Rates of Suicide*, Letter by Paul H. Blackman, NRA, 323 *New Eng. J. Med.* 136 (1990) (quoting Gary Kleck broadcast on All

things considered, National Public Radio, Dec. 16, 1989). I added the emphasis to Kleck’s argument that there are “literally thousands of differences” between cities because I intend to return to it when we get to John Lott’s national study of the effect of concealed weapons laws on violent crime rates.

53. Firearm Facts, in Handgun Control, Inc. Home Page, <http://www.handguncontrol.org/protecting/D4/d4firefc.htm>.

54. Arthur L. Kellerman, et al., Suicide In the Home In Relation To Gun Ownership, 327 New Eng. J. Med. 467 (1992).

55. Id. at 470.

56. Id.

57. Id. at 469.

58. Id. at 470.

59. Kates, supra note 5, at 27.

60. Kellerman, supra note 54, at 471 (“[W]e cannot exclude the possibility that gun owners (and people who live in homes with guns) may be psychologically predisposed to commit suicide.”).

61. Kates, supra note 5, at 28.

62. Kellerman, supra note 54, at 470.

63. Id.

64. Id. at 469.

65. Id.

66. Id. at 469-70.

67. Id. at 469.

68. Id. at 470.

69. Id.

70. This critique is not personal in nature. I debated John Lott at the Federalist Society’s Inaugural Faculty Division Conference in New Orleans in January 1999. I found him to be a pleasant, knowledgeable and fair debater. I respect his work. Lott has endured repeated, unfair ad hominem attacks (itself a virulent

fallacy) because of his position as an Olin Fellow at the University of Chicago. The fellowship is funded by the John M. Olin Foundation. John M. Olin also founded the Olin Corporation, a subsidiary of Winchester, Inc. that makes ammunition. Numerous news sources have attacked Lott's credibility by painting him as a hired gun (excuse the pun) for the firearms industry. This is false. The Olin Foundation is an independent foundation administered by a committee of University of Chicago law professors. According to the president of the Olin Foundation, the Foundation had no knowledge of who applied for the fellowships, nor did it ever suggest Lott be awarded one of them. Lott, *supra* note 8, at 125. This is a prime example of the treachery of fallacy in the gun debate. I confess that before I read Lott's book, I accepted the well-publicized accusations as true.

71. Search of NEXIS, NEWS library, PAPERS file (June 15, 1999) (search terms: "byline(john and lott)"). The search turned up 110 entries. I did not peruse each one.

72. *Id.* (search terms: "john /1 lott"). The search results included 1,176 documents, but some of them refer to other persons with the name "John Lott."

73. Lott, *supra* note 8. The book is based on an earlier article published by Lott and David B. Mustard. See John R. Lott, Jr. & David B. Mustard, Crime, Deterrence, and the Right-To-Carry Concealed Handguns, 26 *J. Leg. Stud.* 1 (1997). For purposes of convenience and because Lott is the sole author of the book, I refer to the concealed weapons research as "Lott's work," not intending to take anything away from Mustard's contributions.

74. Search of NEXIS, NEWS library, PAPERS file (June 15, 1999) (search terms: "more guns, less crime").

75. [Http://www.mcdl.org/mg'lc.htm](http://www.mcdl.org/mg'lc.htm).

76. [Http://www.vpc.org/fact_sht/wholott.htm](http://www.vpc.org/fact_sht/wholott.htm).

77. Gunfight Arithmetic, *Guns*, June 1999, at 14.

78. *Id.*

79. *Id.*

80. To Lott's credit, he willingly makes his data available to critics for review.

81. Dan A. Black & Daniel S. Nagin, Do Right-To-Carry Laws Deter Violent Crime?, 27 J. Leg. Stud. 209 (1998).

82. Id. at 214.

83. Id.

84. John R. Lott, Jr., The Concealed-Handgun Debate, 27 J. Leg. Stud. 221 (1998).

85. Critical Commentary on a Paper by Lott and Mustard, <http://www.health.su.oz.au/cgc/teret.htm>.

86. John Lott’s Response to Stephen Teret’s ‘Critical Commentary on a Paper by Lott and Mustard,’ http://www.best.com/~ddfr/Lott_v_Teret/Response_to_Teret.html.

87. Lott, supra note 8, at 128-57.

88. Id. at 147.

89. Id. at 22.

90. Id. at 26.

91. Id. at 28.

92. Id. at 152-54.

93. Id. at 153.

94. Id.

95. See Andrew J. McClurg, Child Access Prevention Laws: A Common Sense Approach To Gun Control, St. Louis Pub. L. Rev (publication forthcoming); McClurg, Hold Your Fire, A.B.A.J., Feb. 1999, at 14; McClurg, The Tortious Marketing of Handguns: Strict Liability Is Dead, Long Live Negligence, 19 Seton Hall Leg. J. 777 (1995); McClurg, The Rhetoric of Gun Control, supra note 2; McClurg, Strict Liability for Handgun Manufacturers: A Reply to Professor Oliver, 14 U. Ark. Little Rock L. Rev. 511 (1992); McClurg, Handguns As Products Unreasonably Dangerous Per Se, 14 U. Ark. Little Rock L. Rev. 599 (1991).