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Rational Basis Analysis of "Assault Weapon" Prohibition

David B. Kopel*

I. INTRODUCTION

One evening, a gang brawl broke out in the street next to the northwest Denver home of a young woman named Sharon Deatherage. A police car happened upon the scene, and sped away without taking any action, never to return. As a result of this experience, the young woman, who lived alone, decided that she would have to take measures to protect herself because she could not rely on the Denver City government for protection. Because of an injury to her wrist, she was unable to use a handgun. At the suggestion of a firearms instructor, she bought an M-1 carbine, which is a relatively small, low-powered semiautomatic rifle, and which has been commercially available for nearly half a century.¹ Not long after she bought the weapon, the City of Denver turned Ms. Deatherage into a criminal by declaring her M-1 carbine and its attached 30-round ammunition magazine an illegal "assault weapon."

Three states—California,² New Jersey,³ and Connecticut⁴—have enacted "assault weapon" prohibitions, as have over two dozen cities or counties.⁵ At the federal level, the Bureau of Alcohol, Tobacco and Firearms has used its authority over the import of "non-sporting" weapons to impose a 1989 import ban on certain rifles, and a 1993 import ban on certain pistols. As of August 1994, Congress had not enacted a comprehensive federal "assault weapon" prohibition. The Congressional (pg.382) prohibition is the "Feinstein Amendment," which outlaws 184 "assault weapons."⁶

Scholarly legal analysis of the "assault weapon" issue consistently puts "assault weapon" prohibition in the context of "gun control." Scholars have asked whether outlawing "assault weapons" would violate either the right to arms guarantee of the Second Amendment to the United

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¹ Deposition of Sharon Deatherage, State of Colo. ex. 60, at 3, 5-8, *Robertson v. Denver*, no. 90CV603 (Denver Dist. Ct. Feb. 26, 1993).

² CAL. PENAL CODE §§ 12275-12290 (West 1992).

³ N.J. STAT. ANN. §§ 2C:39-1 to 39-12, 43-6 to 43-7, 58-5 to 58-11 (West 1982 & Supp. 1993).

⁴ 1993 Conn. Legis. Serv. 93-306 (West).

⁵ See, e.g., New York City, N.Y. Local Law 78-88-823 (1991); HAW. REV. STAT. §§ 134-1, 134-4, 134-8 (West 1988 & Supp. 1993).

⁶ Peter G. Kokalis, *Feinstein Amendment Could Ban 184 Firearms, Not 19*, GUN WEEK, Jan. 14, 1994, at 7.

States Constitution,⁷ a state constitutional right to arms,⁸ or the militia clauses of the United States Constitution.⁹ Although such scholarship has been valuable, this Article suggests that the first, and perhaps dispositive, question in analyzing "assault weapon" prohibition is whether such legislation passes the rational basis test.

Employing the rational basis test, before analyzing the of right to bear arms provisions, is useful for several reasons. For example, the Second Amendment is of limited use in analyzing prohibitions enacted by states or subdivisions of states. Despite some recent Supreme Court dicta suggesting that the individual right to keep and bear arms is incorporated in the Fourteenth Amendment,¹⁰ federal courts have been unwilling to apply the Second Amendment to non-federal action.¹¹ Further, forty-three states have their own state constitutional right to bear arms. In all of these states, except Massachusetts, the right is considered to inhere in individuals, rather than the state government.¹² But seven states, including California and New Jersey, do not (pg.383) have a state constitutional right to bear arms. And even in states that do have a constitutional right, right to arms jurisprudence is not as fully developed as, for example, free speech or search and seizure jurisprudence. Thus, use of a right to arms guarantee to test the Constitutionality of "assault weapon" prohibition will involve the judiciary analyzing a Constitutional right with which many judges have little prior professional experience. In contrast, almost every judge with Constitutional law experience will have some familiarity with a rational basis analysis. To the extent that a right to bear arms analysis does become necessary, analysis of "assault weapon" prohibition under the rational basis test can help clarify the issues relevant to the right to arms.

This Article begins in Part II, with a brief summary of rational basis jurisprudence. Next, Part III applies the rational basis test to various characteristics that are said to distinguish "assault weapons" from other firearms. These characteristics include the weapons' rate of fire, ammunition capacity, ammunition lethality, design history, and the presence of features such as a folding stock and a barrel thread for a muzzle brake, or a bayonet lug. In Part IV, the article examines another basis for treating "assault weapons" differently from other weapons—the frequency with which "assault weapons" are used in crime. Finally, this Article discusses the rationality of a prohibition on firearms based on their suitability for sports.

⁷ See Eric C. Morgan, Note, *Assault Rifle Legislation: Unwise and Unconstitutional*, 17 AM. J. CRIM. L. 143 (1990); Robert A. O'Hare, Jr. & Jorge Pedreira, *An Uncertain Right: The Second Amendment and the Assault Weapon Controversy*, 66 ST. JOHN'S L. REV. 179 (1992).

The Second Amendment states: "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." U.S. CONST. amend. II.

⁸ Glenn Harlan Reynolds, *The Right to Keep and Bear Arms under the Tennessee Constitution*, 61 TENN. L. REV. (forthcoming 1994).

⁹ Keith R. Fafarman, *State Assault Rifle Bans and the Militia Clauses of the United States Constitution*, 67 IND. L.J. 187 (1991).

¹⁰ "[T]he full scope of liberty guaranteed by the Due Process Clause cannot be found in or limited by the precise terms of the specific guarantees elsewhere provided in the Constitution ... [such as] the freedom of speech, press, and the religion; the right to keep and bear arms" *Planned Parenthood v. Casey*, 112 S. Ct. 2791, 2805 (1992) (quoting with approval *Poe v. Ullman*, 367 U.S. 497, 543 (1961) (Harlan, J., dissenting)); *Moore v. East Cleveland*, 431 U.S. 494, 502 (1976) (quoting *Poe*, 367 U.S. at 543).

¹¹ *E.g.*, *Fresno Rifle Club v. Van de Kamp*, 965 F.2d 723 (9th Cir. 1992).

¹² The most thorough discussions of state constitutional guarantees may be found in Robert Dowlut, *Federal and State Constitutional Guarantees to Arms*, 15 U. DAYTON L. REV. 59 (1989); Robert Dowlut & Janet A. Knoop, *State Constitutions and the Right to Keep and Bear Arms*, 7 OKLA. CITY U. L. REV. 177 (1982).

II. TAKING RATIONAL BASIS SERIOUSLY

When legislation impinges on fundamental constitutional rights, judicial review of the legislation employs the "strict scrutiny" test. The legislation is declared constitutional only if the legislation is "narrowly tailored" to achieve a "compelling state interest," and there is no "less restrictive means" to achieve the same goal. In contrast, legislation which does not involve fundamental rights is usually reviewed under the "rational basis" standard; the court will not declare the law unconstitutional unless the court finds that the law lacks a rational basis.

This Article is based on the controversial presumption that the rational basis test actually matters. This presumption has clearly been false during most of the decades since the rational basis test was created. Many courts have treated the rational basis test as little more than a requirement that the law in question be defended by a government (pg.384) attorney who communicates in English and makes at least the attempt to provide a rationale for the law. In the days of the common law of contracts, it was said that "a peppercorn would suffice" to provide consideration. Many courts have been willing to find that a peppercorn's worth of argument will suffice for a law to pass the rational basis test.¹³

However, such is not necessarily, the proper application of the rational basis test. In recent years, the United States Supreme Court has sometimes applied the test seriously.¹⁴ As the court announced in 1976, the rational basis test "is not a toothless one."¹⁵ Since then, the Court has repeatedly used rational basis to strike down laws which the Court found to involve irrational discrimination, even though there was no protected class or specific constitutional right involved.¹⁶

Of particular significance is the case of *Cleburne v. Cleburne Living Center*,¹⁷ a case which illustrates some of the analytic techniques a court may use in rejecting purported rational bases of a law. The city of Cleburne had denied a special use zoning permit to a home for the mentally retarded. The Supreme Court overturned the holding of the lower federal court, and held that the mentally retarded were *not* a suspect or quasi-suspect class. Accordingly, the rational basis test was appropriate. In applying the rational basis test, the Court carefully examined each of the city's three stated justifications for its decision. One basis—fears of local residents—was found to be illegitimate. The Court found another basis—the building's location in a floodplain—was inconsistent with other city actions that had allowed other group care homes to be built in floodplains. Further, the Court found that the city (pg.385) had insufficiently demonstrated its concern

¹³ *E.g.*, United States v. Marshall, 908 F.2d 1312 (7th Cir. 1990).

¹⁴ *See generally* Gayle Lynn Pettinger, Note, *Rational Basis with Bite: Intermediate Scrutiny by any Other Name*, 62 IND. L.J. 779 (1986-87).

¹⁵ *Mathews v. De Castro*, 429 U.S. 181, 185 (1976); *Mathews v. Lucas*, 427 U.S. 495, 510 (1976). *See also* *Young v. Haines*, 718 P.2d 909, 917 (Cal. 1986).

¹⁶ *See, e.g.*, *Williams v. Vermont*, 472 U.S. 14 (1985) (holding that a tax credit for purchasers of out-of-state cars that only state residents could receive violates the Fourteenth Amendment's Equal Protection Clause; as in *Zobel v. Williams*, 457 U.S. 55 (1982), the decision was not based on the right to interstate travel); *Hooper v. Barnalillo County Assessor*, 472 U.S. 612 (1985) (rejecting tax exemptions for person who is a resident before a particular date); *Metropolitan Life Ins. Co. v. Ward*, 470 U.S. 869, 883 (1985) (eliminating statute that gave tax preference to domestic insurance industries); *Zobel v. Williams*, 457 U.S. 55 (1982) (holding that payment of benefits to state residents based on length of residence violated Equal Protection Clause); *Miller v. Carter*, 547 F.2d 1314, 1316 (7th Cir. 1977), *aff'd by an equally divided court*, 434 U.S. 356 (1978) (remanding Equal Protection Clause claim for further consideration). *See also* *Mahone v. Addicks Util. Dist.*, 836 F.2d 921, 937 (5th Cir. 1988).

¹⁷ 473 U.S. 432 (1985).

that the home would be overcrowded. Accordingly, the Court found that the statute violated the Equal Protection Clause.

The Court's willingness to declare every one of the government's purported rationales to be illegitimate, inconsistent, or insufficiently demonstrated suggests a new vigor in application of the rational basis test. The *Cleburne* decision also suggests three prongs for rational basis analysis: Illegitimacy, inconsistency, and insufficient demonstration.¹⁸ Although these three prongs are not necessarily the only reasons that a statute may fail the rational basis test, the three *Cleburne* prongs do suggest a framework for analyzing bases asserted to justify governmental actions. This Article, by employing the *Cleburne* framework, attempts in a small way to advance the analytic systemization and rigor of rational basis analysis.

Under state constitutions, state courts have sometimes forcefully applied their own state's version of the rational basis test.¹⁹ Under many state constitutions, it is no innovation for legislation to be declared unconstitutional after rational basis review.²⁰

While the rational basis test does not impose the very high burdens associated with the strict scrutiny test—such as the shifting of the burden of proof to the government and the requirement that the legislation be "necessarily" related to a "compelling" government interest—the rational basis test, if taken seriously, does not give the government a free ride.

It is true that, even after *Cleburne*, many courts consider a law's enactment to be tantamount to proof of its rationality. But, unless *Cleburne* and other Supreme Court rational basis cases from recent years are to be ignored, the rational basis should be taken seriously.(pg.386)

III. INCONSISTENT: PROHIBITION BASED ON THE CHARACTERISTICS OF "ASSAULT WEAPONS"

"Assault weapons" are said by gun prohibition advocates to possess certain unique features which render them far more dangerous than other firearms. This Part examines each of the various physical characteristics said to be unique to "assault weapons," and analyzes whether any of them creates a classification that can survive meaningful rational basis scrutiny.

At this point, it should be stated that this Article will not discuss assault rifles. As the United States Defense Department's Defense Intelligence Agency book *Small Arms Identification and Operation Guide* explains, "assault rifles" are "short, compact, selective-fire weapons that fire a

¹⁸ *Id.*

¹⁹ In Colorado, a classification "must be reasonable and not arbitrary and must be based on substantial differences" having a reasonable relation to public purpose to be achieved. *Dunbar v. Hoffman*, 468 P.2d 742, 744 (Colo. 1970). In California, it is required that "the court conduct 'a serious and genuine judicial inquiry into the correspondence between the classification and the legislation goals.'" *Elysium Inst., Inc. v. County of Los Angeles*, 283 Cal. Rptr. 688, 698 (Cal. Ct. App. 1991) (citing *Fein v. Permanente Medical Group*, 695 P.2d 665 (Cal. 1985)).

²⁰ *People v. Instawhip Denver, Inc.*, 490 P.2d 940, 943 (1971) (voiding regulation of dairy products because it lacked "a real and substantial relation to the public health, safety, morals and welfare"); *Branson v. City and County of Denver*, 707 P.2d 338, 340 (Colo. 1985) (voiding as irrational statute giving widows of firefighters in cities with more than 100,000 population less benefits than widows in smaller cities); *Gallegos v. Phipps*, 779 P.2d 856, 860-61 (Colo. 1989) (holding that it is irrational to make tavern owner's duty of care to a licensee higher than duty of care to an invitee).

cartridge intermediate in power between submachine gun and rifle cartridges."²¹ In other words, assault rifles are battlefield rifles which can fire automatically.²²

Weapons capable of fully automatic fire, including assault rifles, have been regulated heavily in the United States since the National Firearms Act of 1934.²³ Taking possession of such weapons requires paying a \$200 federal transfer tax and submitting to an FBI background check, including ten-print fingerprints.²⁴

Many civilians have purchased semiautomatic-only rifles that look like military assault rifles. These civilian rifles are, unlike actual assault rifles, incapable of automatic fire. For example, the AK-47 is an assault rifle formerly used by the Russian military, which now uses the AKM-74. Only a few hundred AK-47 firearms have been imported into the United States. On the other hand, tens of thousands of AKS (pg.387) firearms (a Chinese semiautomatic rifle which looks like the AK-47, but cannot fire automatically) have been imported into the United States and sold to civilians.²⁵ Similarly, the semiautomatic Colt Sporter rifle, of which tens of thousands have been sold, looks like the automatic U.S. Army M-16 assault rifle. "Assault weapon" legislation involves semiautomatic firearms, like the AKS and the Colt Sporter, but not automatic firearms, like the AK-47 or the M-16.

Other firearms manufacturers produce guns that do not look like an assault rifle, but that have a military appearance that some people find repugnant. Such guns typically have black plastic components, in contrast to the brown wood components found on more familiar firearms. The Calico M-900 carbine is an example of a gun which, although not related in design to any military firearm, has a military appearance. The TEC-9 handgun, not resembling a military gun, also has futuristic styling. Guns such as the Calico and the TEC-9 with futuristic styling are also singled out for prohibition by "assault weapon" legislation.

While the Defense Intelligence Agency's term of art "assault rifle" has a precise and technical meaning, the phrase "assault weapon" has a less certain meaning. No "assault rifle" (by Defense Intelligence Agency definition) is an "assault weapon" because all "assault rifles" are automatic, while no "assault weapons" are automatic.²⁶ "Assault rifles" are used by the military, whereas no "assault weapon" is used by the military.²⁷ "Assault rifles" are all rifles, but "assault weapons" include semiautomatic rifles, semiautomatic shotguns, revolver-action shotguns, semiautomatic handguns, and semiautomatic airguns.

²¹ DEFENSE INTELLIGENCE AGENCY, SMALL ARMS IDENTIFICATION AND OPERATION GUIDE - EURASIAN COMMUNIST COUNTRIES 105 (Washington: Government Printing Office, 1988).

²² Because the guns are "selective fire," the shooter can flip a selector switch to choose between automatic and semiautomatic fire, sometimes with the additional option of tri-burst fire.

²³ National Firearms Act, ch. 757, 48 Stat. 1236 (1934).

²⁴ 26 U.S.C. §§ 5811-5812, 5845 (1988).

As of May 1986, production of new automatics (including assault rifles) for the civilian market became completely illegal, although there have been some disputes among the lower federal courts about the constitutionality of the prohibition. *See Farmer v. Higgins*, 907 F.2d 1041 (11th Cir. 1990), *rev'g* 1:87-CV-440-JOF (1989), *cert. denied*, 498 U.S. 1047 (1991); *but cf.* *United States v. Dalton*, 990 F.2d 1166 (10th Cir. 1993); *United States v. Rock Island Armory, Inc.*, 773 F. Supp 117 (C.D. Ill.), *app. dismissed*, 1991 U.S. App. LEXIS 19505 (7th Cir. Aug. 13, 1991).

²⁵ Stockton murderer Patrick Purdy did not use an AK-47. He used a Chinese, semiautomatic gun known as the AKM-56S. *See* 135 CONG. REC. 19, S1871 (1989) (Testimony of James J. Baker).

²⁶ A few guns labeled "assault weapons" are revolver-type guns (such as the Striker 12 shotgun), while others are single-shot (able to fire only a single shot before reloading), such as the Encom CM-55 shotgun.

²⁷ Again, there are a few exceptions. The Uzi Pistol is used by the Israeli army.

Not surprisingly, attempted legislative definitions of "assault weapons" have varied widely. Some definitions are simply a list of guns.²⁸ Other definitions may involve a set of various characteristics. Still others may involve a list and a set of characteristics.²⁹ The discussion below examines the various purported characteristics of (pg.388) "assault weapons."³⁰

A. Rate of Fire

Foremost among the features which are said to make "assault weapons" different from other firearms is their "high rate of fire."³¹ If "assault weapons" were actually automatic firearms, such as machine guns, then the claim would clearly be true. With an automatic weapon, if the shooter squeezes and holds the trigger, bullets will fire automatically and rapidly until the trigger is released.

Semiautomatic firearms, however, are by definition not automatic. With a semiautomatic, pressing the trigger fires one, and only one bullet.³² To fire another bullet, the shooter must release the trigger, and then press it again. Thus, a semiautomatic can shoot only as fast as a person can squeeze the trigger. So, although gun prohibition advocates sometimes use the catch-phrase "spray-fire," a semiautomatic firearm, unlike a machine gun, cannot "spray fire," because the shooter must press the trigger for each shot.

The "semi" in "semiautomatic" comes from the fact that the energy created by the explosion of gunpowder, used to force the bullet down the barrel, is diverted away from the shooter. The energy is directed forward, and is used to reload the next cartridge into the firing chamber. Thus, in semiautomatic action firearms the shooter does not need to perform an additional step, such as cocking a lever ("lever action") or operating a slide ("slide action"), in order to load the next round. Although a semiautomatic firearm does not require a separate (pg.389) step to load the next round into the firing chamber, the semiautomatic is not unique in this regard. In a revolver or a double-barreled shotgun or rifle, the shooter can also fire the next shot as fast he can squeeze the trigger.

How does the actual rate of fire of a semiautomatic compare to the rate of other guns? The Winchester Model 12 pump action shotgun can fire six "00 buckshot" shells, each containing twelve .33 caliber pellets, in three seconds. Each of the pellets is larger than the bullet fired by an AKS. In other words, the Winchester Model 12 pump action shotgun can, in three seconds, unleash seventy-two separate projectiles, each capable of causing injury or death. The Remington Model 1100 shotgun (which is a common duck-hunting gun) fires semiautomatically and is not usually labeled an "assault weapon." It can unleash the same seventy-two projectiles in 2.5 seconds. In

²⁸ CAL. PENAL CODE, *supra* note 2; Conn. Legis. Serv., *supra* note 4.

²⁹ N.J. STAT ANN., *supra* note 3; Kokalis, *supra* note 6, at 7.

³⁰ The phrase "assault weapon" is used in quotes because, as will be detailed below, the phrase is not a legitimate definition of firearms that are in any meaningful way different from other firearms. In contrast, the phrase "assault rifle" is generally used without quotation marks, because "assault rifle" clearly defines a set of firearms that are distinguishable from other firearms.

³¹ CAL. PENAL CODE, *supra* note 2. Similarly, Bridgeport, Connecticut police chief Thomas Sweeney asserted: "World War II-era semi-automatics are not included in the ban [recently enacted by Connecticut] because they don't fire as fast as modern semi-automatics." *Cop Out*, SHOOTING INDUSTRY, at 173 (Shot Show Issue 1994).

³² A bullet is the single lead projectile that is fired from a rifle or handgun. Before being fired, the bullet is contained in a shell (usually made of brass) that also contains gunpowder and a primer. When the trigger is pulled, a firing pin strikes the primer, igniting the gunpowder, pushing the bullet out of the shell, and down the barrel.

The operation of a shotgun is essentially similar, except that the shotgun shoots a set of pellets, or shot, rather than a single bullet, and the shell is made of plastic (sometimes paper), rather than brass.

A "round" is a single unit of rifle, handgun, or shotgun ammunition, fully assembled.

contrast, an AKS would take about a minute to fire forty aimed shots, or perhaps twice that many without aiming and the AKS rounds would be slightly smaller than the pellets from the Winchester or Remington.³³ Similarly, an old-fashioned .357 revolver can fire six shots in as little as two seconds.

If one tests a firearm under highly artificial conditions—such as bolting the gun to heavy platform and squeezing the trigger by jerking one's arm back and forth—a semiautomatic will "cycle" slightly faster than other firearms. But the only meaningful rate of fire for a weapon is how fast a person, shooting at actual targets, can hit those targets. In terms of actually hitting a target, a study conducted by the United States Navy Seals is revealing. According to the Navy study, at close (pg.390) range, a bolt-action gun³⁴ cycles only one-tenth of a second slower than a semiautomatic; at longer ranges, the cyclic rate is the same for both types of guns. The Navy studies also confirmed something that most gun-owners understand—but something which persons whose familiarity with weapons is limited to "Rambo" movies do not—shooters who fire without aiming virtually never hit their target. It is nearly impossible for even trained shooters to fire on target at much faster than one shot per second.³⁵

Because, under highly artificial conditions, a semiautomatic can be shown to fire slightly faster than other guns, a prohibition of all semiautomatics might pass a lenient version of the rational basis test. Under this test, any distinction, no matter how slight or meaningless, would be held sufficient. Most "assault weapon" legislation, however, cannot clear even this low hurdle, at least in regard to rate of fire. The legislation almost always bans some, but not all, semiautomatics. All semiautomatics have one of three types of action design—recoil-operated, blowback, or gas operated³⁶—and the guns typically selected for prohibition are not exclusively of one type or another. Thus, some semiautomatics are prohibited because of their alleged high rate of fire, while other semiautomatics, with an identical rate of fire, are not prohibited. Accordingly, "rate of fire," standing alone, provides no more than a shred of a rational basis for prohibiting all semiautomatics, and provides no rational basis at all for banning only some semiautomatics.

³³ See Morgan, *supra* note 7, at 149; William R. McGrath, *An Open Letter to American Politicians*, POLICE MARKSMAN, May/June 1989, at 19; EDWARD EZELL, THE AK-47 STORY, (Smithsonian Institution 1986). See also Kent Jenkins, Jr., *Calls for Ban Boost Assault Rifle Sales*, WASH. POST, Mar. 6, 1989, at B1 ("[BATF] weapons experts say that the guns' firing mechanisms are no different from those of other rifles.").

According to testimony of the Bureau of Alcohol, Tobacco and Firearms:

The AK-47 is a select fire weapon capable of firing 600 rounds per minute on full automatic and 40 rounds per minute on semiautomatic. The AKS and AK-47 are similar in appearance. The AK-47 is an NFA [National Firearms Act of 1934] type weapon, having been manufactured as a machine gun. The AKS is difficult to convert, requiring additional parts and some machinery The AKS is a semiautomatic that, except for its deadly military appearance, is no different from other semiautomatic rifles. As a matter of fact, the identical firearm with a sport stock is available and, in appearance, no different than other so-called sporting weapons.

Morgan, *supra* note 7, at 148 n.29 (quoting Assault Weapon Import Control Act of 1989, 1989: Hearings on H.R. 1154 before Subcomm. on Trade of the House Comm. on Ways and Means, 101st Cong., 1st Sess. 70 (1989).)

³⁴ In a bolt-action gun, after one cartridge is fired, the shooter pulls on the bolt handle to load the next cartridge into the chamber. R.A. STEINDLER, THE FIREARMS DICTIONARY 15 (1970). The bolt-action rifle was the military firearm of the U.S. Army during World War I, and of military forces in other parts of the world for decades thereafter.

³⁵ Affidavit of Ron Phillips, Colo. ex. 29, at 2, Robertson v. Denver, *supra* note 1; Johnson aff., Colo. ex. 51, at 3, Robertson v. Denver, *supra* note 1 (Defense Intelligence Agency expert in assault weapons classification).

³⁶ STEINDLER, *supra* note 34, at 20.

B. Magazine Capacity

A second feature, supposedly unique to "assault weapons," is their high ammunition capacity.³⁷ In fact, most semiautomatic firearms, both banned and nonbanned, store their ammunition in detachable boxes or tubes called "magazines." The number of rounds a gun can fire without reloading depends on the size of magazine, an interchangeable, removable part that can be purchased separately. Thus, ammunition (pg.391) capacity has nothing to do with the gun itself. The magazine, not the gun, is the variable. Any gun that accepts detachable magazines can accept a magazine of any size.³⁸

It follows that the rational way to ban guns based on potential large ammunition capacity would be to outlaw all guns which can accept detachable magazines. Alternatively, a rational ban might apply only to guns in which large capacity magazines (however one defines "large") are actually inserted. Another approach to controlling ammunition capacity would be to regulate or outlaw magazines that hold more than a certain number of rounds. Such proposals have been made by former President Bush (fifteen rounds),³⁹ Senator Diane Feinstein (ten rounds),⁴⁰ and the lobby Handgun Control, Inc. (six rounds).⁴¹ This prohibition is at least minimally rational.

Whether such regulation would pass a rationality test is, however, debatable. Changing a magazine takes only a second or two.⁴² A person simply hits the magazine release button and the empty magazine falls to the ground. A new magazine is then inserted. In one firearms demonstration, a police shooter emptied a thirty round magazine attached to a banned Colt rifle in 5.9 seconds. The officer then fired a fifteen round magazine attached to an unbanned Glock pistol, changed magazines (2.25 seconds), and then fired another 15 rounds. The same thirty rounds were fired by the Glock in 8.92 seconds.⁴³ Does the difference between six and nine seconds to fire thirty shots constitute "a real and substantial" difference?

Certainly not in the Stockton, California schoolyard where mass murderer Patrick Purdy killed five children, and wounded twenty-nine in January 1989. Using a Chinese semiautomatic rifle with large capacity magazines, Purdy fired approximately 110 rounds in four to six minutes. The rate of fire could be duplicated by virtually every gun currently manufactured. Even including time for reloading, a simple (pg.392) revolver or a bolt-action hunting rifle can easily fire that fast.⁴⁴

C. Conversion to Full Automatic

One of the most widely-asserted claims about semiautomatic "assault weapons" is that they can easily be converted into fully automatic weapons. According to the Bureau of Alcohol, Tobacco

³⁷ CAL. PENAL CODE, *supra* note 2.

³⁸ Morgan, *supra* note 7, at 149; GARY KLECK, POINT BLANK: GUNS AND VIOLENCE IN AMERICA 79 (1992).

³⁹ N.Y. Times, May 16, 1989, at A1.

⁴⁰ Kokalis, *supra* note 6, at 7.

⁴¹ Richard M. Aborn, Testimony before the Committee on Codes of the Assembly of the State of New York (Jan. 3, 1991).

⁴² See James B. Jacobs, *Assault Rifles are Bad Targets*, NEWSDAY, May 28, 1993, at 58 ("[a] spent magazine can be popped out and a new one inserted in an instant.")

⁴³ Malcolm Gladwell, *Irrational Bans on "Assault Weapons" Draw False and Ignorant Distinction*, DISPATCH (Columbus, Oh.), Mar. 27, 1993, at 7.

⁴⁴ Phillips aff., *supra* note 35 at 2.

and Firearms (BATF), all so-called "assault weapons" are "difficult to convert to automatic fire."⁴⁵ The conversion requires several hours work by a skilled gunsmith willing to commit a major felony.⁴⁶ The (pg.393) gunsmith must also have access to expensive equipment, such as precision lathes. The origin of the easy convertability myth may lie with the semiautomatic M10 pistol. Versions of the pistol built during the early 1980s were easy to convert, requiring no technical skill and only five minutes of work. The BATF, using administrative authority, classified those early M10s as machine guns, requiring a federal license for possession.⁴⁷ Subsequent models of the M10 have been produced without the easy convertability.

D. Lethality of Ammunition

"Assault weapons" are also said to fire "high-power" or "high-velocity" bullets which are unusually destructive. Elementary ballistics show this claim to be false.

As detailed above, ammunition for genuine assault rifles (battlefield weapons such as the AK-47 or M-16) is classified as being "intermediate" in power. The ammunition for semiautomatic rifles which look like, but do not fire like, automatic rifles is the same. This ammunition uses bullets which weigh the same or less than bullets used for big-game hunting. For example, a 9mm bullet, used in the Uzi pistol, weighs between 88 and 147 grains (depending on the manufacturer and model); a 7.62 x 39 bullet, used in Kalashnikov rifles, weighs 110 to 125 grains; while the bullet for

⁴⁵ Statement of Edward D. Conroy, Deputy Associate Director, Law Enforcement, BATF, before U.S. Senate Subcommittee on the Constitution, Feb. 10, 1989, at 1; Charles Mohr, *Firearms Market Thrives Despite an Import Ban*, N.Y. TIMES, Apr. 3, 1989, at A14.

⁴⁶ S. REP. NO. 160, 101st Cong., 1st sess. 3 (1989) (testimony of Detective Jimmy L. Trahin of the Los Angeles Police Department Firearms/Forensics Ballistics Unit, stating that: "99% of these so-called assault weapons are not easily converted.")
A machine gun expert explains the complexity of converting a semiautomatic rifle to automatic:

If time and effort are of no consequence, any firearm, even a lever-action rifle, can be converted to fully automatic fire. Converting a semiautomatic-only AK to automatic fire requires a great deal of skill and knowledge and no small amount of effort and equipment. Without being too specific, the procedure is more or less as follows:

1) A portion of the receiver must be modified. A hole through each side of the receiver (larger on one side than the other) must be precisely located (to within 0.0015) and drilled to accept the axis pin for the auto safety sear and its coil spring. This special coil spring also retains the hammer and trigger pins. If not installed correctly, the hammer and trigger axis pins will not be retained, and these components will fall out of the receiver. A slot must also be carefully milled into the rightside bolt-carrier rail to accept the auto safety sear. The three new components required are not easily procured or fabricated.

2) The hammer must be built up by welding and then with great skill re-shaped to provide a notch not present on the semiautomatic-only version.

3) An extension must be added at the rear of the sear by welding and then re-shaped to contact the selector lever.

4) A portion of the selector-lever stop on the rightside exterior of the receiver must be removed and another detent milled into the receiver for the new semiauto position.

5) The bolt carrier must be built up by welding and then re-shaped to actuate the auto safety sear.

If welded components are not subsequently and properly heat-treated, wear will be accelerated and these parts will fail in a short period of time, often with dangerous consequences. Furthermore, if this conversion is performed on an AKM type with a sheet-metal receiver, failure to install a completely unavailable five-component, anti-bounce mechanical drag device on the hammer (especially if the firing pin is not spring-retracted) will probably result in a disastrous ignition out of battery.

Peter G. Kokalis, *Full Auto*, SOLDIER OF FORTUNE, Dec. 1989, at 16.

⁴⁷ Michael Hancock, *The Convertible Submachine Gun Boondoggle*, N.Y. TIMES, June 15, 1985, at A22.

the popular 30-06 hunting rifle ranges from 55 to 250 grains (twenty-one of the twenty-two bullet types for the 30-06 are 100 grains or above); the bullet for the ubiquitous Colt .45 pistol weighs 185 to 230 grains; and bullets for the 458 Winchester magnum weigh between 300 and 510 grains.⁴⁸

One of the reasons that the ammunition for the military-style rifle is smaller, and hence less powerful, is that it was created for soldiers who would have to carry large quantities of ammunition over long distances.⁴⁹ In contrast, standard hunting ammunition can be heavier, because a hunter will carry only a few rounds on a trip that is usually completed in a single day, or at most a few days.

The second major factor in the force of a bullet's impact is its velocity. Other things being equal, a bullet traveling at high velocity (pg.394) will be more destructive than a bullet traveling at lower velocity. The muzzle velocities for the ammunition types listed above are: For the 9mm, between 975 and 1,500 feet per second (fps); for the 7.62 x 39, from 2,100 to 2,500 fps; for the 30-06, from 2,100 to 4,080 fps; for the Colt pistol, 770 to 1140 fps; and for the 458 Winchester magnum, from 2,100 to 2,500 fps.⁵⁰

A bullet's power to damage its target depends mainly on the kinetic energy delivered by the bullet. Kinetic energy is produced by the combination of bullet weight and velocity.⁵¹ A typical 7.62 x 39 bullet for the AKS rifle (a Kalashnikov variant) achieves 1,445 foot-pounds of kinetic energy per second. In contrast, the 30-06 hunting rifle bullet carries 2,820 foot-pounds of energy.⁵²

The claim that the ammunition for semiautomatic pistols and shotguns is uniquely destructive is even less plausible than is the claim regarding semiautomatic rifles. Most "assault pistols" fire ammunition in the .45 or 9mm calibers, and have the same velocity as any other pistol in those common calibers.⁵³ The shotguns labeled "assault weapons" also fire shells identical to those fired by all other shotguns.

The great irony of the claim that the rifles dubbed semiautomatic "assault weapons" are uniquely destructive is that they are the only rifles that have ever been designed *not* to kill. The semiautomatic rifles use the same ammunition as battlefield weapons such as the M-16, which deliberately use intermediate power ammunition intended to wound rather than to kill. The theory is that wounding an enemy soldier uses up more of his side's resources (to haul him off the battlefield and then care for him) than does killing an enemy.⁵⁴

Colonel Martin L. Fackler, M.D., former Director of the United (pg.395) States Army Wound Ballistics Lab, the only research center in the world which studies wound ballistics, states:

⁴⁸ FRANK C. BARNES, *CARTRIDGES OF THE WORLD* 59, 92, 110, 231, 249 (7th ed. 1993).

⁴⁹ Gladwell, *supra* note 43, at 7.

⁵⁰ BARNES, *supra* note 48, at 46.

⁵¹ If the bullet enters and exits the target's body, only part of the kinetic energy is transferred to the target. If the bullet does not exit, all the kinetic energy will be transferred. Accordingly, bullets which are designed to deform on impact, and not exit the body, will generally do more damage than will other bullets. Bullets designed not to exit the target's body are available for virtually all types of firearms.

⁵² See Lindsey, *The Idolatry of Velocity, or Lies, Damned Lies, and Ballistics*, 20 J. TRAUMA 1068 (1980).

⁵³ The videotape produced by Handgun Control, Inc. as a part of the lobbying campaign for prohibition acknowledges that "assault weapon" bullets are nothing special. The tape includes an interview with Dr. Hermann, Director of the Institute for Forensic Sciences. Dr. Hermann explains that the Uzi bullet is "slightly larger and slightly faster than the .38 special [a medium-sized handgun bullet]. It does not produce a large cavitory destructive wound through the body." HANDGUN CONTROL, INC., *THE DEADLY DISTINCTION* (1989).

⁵⁴ Martin L. Fackler, *Getting Your Guns Straight*, WASH. POST, Apr. 24, 1993, at A25.

Military bullets are designed to limit tissue disruption—to wound rather than kill. The full-metal-jacketed bullet is actually more effective for most warfare; it removes the one hit and those needed to care for him ... newspaper descriptions comparing their effects with a grenade exploding in the abdomen ... must cause the thinking individual to ask: ... how is it possible that 29 children and one teacher out of 35 hit in the Stockton schoolyard survived? If producers of "assault rifles" had advertised their effects as depicted by the media, they would be liable to prosecution under truth-in-advertising laws.⁵⁵

Assertions that the bullets from Kalashnikov rifles will tumble as they travel through the body, thereby greatly increasing the size of the wound channel, are nonsense. Dr. Fackler writes: "As a combat surgeon in Da Nang in 1968, I operated on many who had been wounded by AK-47 bullets. The typical wound was no more disruptive than that caused by many common handgun bullets."⁵⁶ The .223 rifle round, used in many of the rifles dubbed "assault weapons" is described as producing wounds "less severe than those produced by hunting ammunition such as the 30-30."⁵⁷

E. Accessories

The more recent efforts at banning "assault weapons" focus on whether a firearm has two or more of a certain set of accessories.⁵⁸ Unlike classifications based on the false assertion that "assault weapons" fire faster, have more ammunition capacity, or use more (pg.396) destructive ammunition, the accessory-based definitions do pass the most minimal levels of rationality, because an "assault weapon" is defined as a firearm with a particular set of accessories. Likewise, a law which prohibited only pool tables which have bumpers in the playing area ("bumper pool") would likewise achieve minimal rationality. The classification would accurately separate certain guns from other guns. But, do the accessory-based classifications create a distinction without a difference? Let us examine the accessories which are usually used in defining an "assault weapon."

1. Pistol Grips

The major purpose of a pistol grip on a long gun is to stabilize the firearm while firing from the shoulder. By holding the pistol grip, the shooter keeps the barrel from rising after the first shot, and thereby stays on target for a follow-up shot. The defensive application is obvious, as is the public safety advantage in preventing stray shots.

It is true that a pistol grip allows a rifle to be fired without resting against the shoulder. Does this provide a rational basis for making the rifle illegitimate? Only if one also bans handguns; for every handgun, because it has a pistol grip, can be fired without resting against the shoulder.

⁵⁵ Martin L. Fackler, WALL ST. J., Apr. 10, 1989, at A15, col. 1 (letter to the editor).

⁵⁶ Fackler, *supra* note 54. See also EMERGENCY WAR SURGERY, SECOND UNITED STATES REVISION OF THE EMERGENCY WAR SURGERY HANDBOOK, UNITED STATES DEPARTMENT OF DEFENSE 24 (Thomas E. Bowen, M.D. & Ronald F. Bellamy, M.D., eds., 1988) ("[M]any wounds from this weapon resemble those caused by much lower velocity handguns."); Martin L. Fackler et al., *Wounding Effects of the AK-47 Rifle Used by Patrick Purdy in the Stockton Schoolyard Shooting of Jan. 17, 1989*, 11 AM. J. FORENSIC MED. & PATHOL. 185 (1990); Martin L. Fackler, *Wounding Patterns of Military Rifle Bullets*, 22 INTL. DEF. REV. 59 (1989); Martin L. Fackler, *Wound Ballistics: A Review of Common Misconceptions*, 259 JAMA 2730 (1980).

⁵⁷ VINCENT C. DIMAJO, GUNSHOT WOUNDS: PRACTICAL ASPECTS OF FIREARMS, BALLISTICS AND FORENSIC TECHNIQUES 146 (1985).

⁵⁸ Kokalis, *supra* note 6.

Unless self-defense is considered illegitimate (see discussion part V, *infra*), a pistol grip is a legitimate defensive tool. With a pistol grip, a rifle can be held with one hand while the other hand dials 911 or opens a door.⁵⁹ The application in a home defense situation is obvious, because burglary victims will not always have time to raise their gun to their shoulder, and may not even be in a position to take a shot from the shoulder.

2. Muzzle Brakes

A gunsmith can attach a muzzle brake to any gun. However, many semiautomatic rifles dubbed "assault weapons" have a threaded barrel for easy attachment of the brake. A muzzle brake reduces the gun's recoil and makes it easier to control.

Recoil vibrations look, mathematically, like a sine wave; as the (pg.397) recoil sine waves travel from the firing chamber toward the muzzle end of the barrel, the waves will "whip" the muzzle around slightly. As a result, accuracy is diminished; a bullet that exits the muzzle when the muzzle is being whipped in one direction, at the top of a sine wave, will travel in a different direction from a bullet that leaves when the muzzle is whipped in a different direction, at the bottom of the sine wave. A new muzzle brake, the Browning "Ballistic Optimizing Shooting System," allows the shooter to "tune" the barrel vibrations produced by recoil. Different types of ammunition will produce different recoil vibration waves. For example, in the 270 Winchester rifle caliber a 160 grain bullet with 51 grains of gunpowder will produce different vibrations from a 130 grain bullet with 55 grains of gunpowder. The Browning muzzle brake can be adjusted by the shooter based on different types of ammunition, to optimize the recoil vibration for each particular type. One reviewer described the results of the tuning allowed by the Browning muzzle brake as, "[t]he most significant advancement in rifle accuracy in my lifetime."⁶⁰ Other reviewers have been equally positive. They note that the Browning brake significantly reduces felt recoil to the shooter, and thereby reduces the "flinch" that causes shooters to jerk the rifle off-target.⁶¹

Clearly, a gun with a muzzle brake is different than one without. It is both significantly more accurate because the muzzle and the shooter are both less likely to move out of position, and more comfortable to shoot. Improved accuracy and shooting comfort seem a dubious basis for classifying a firearm as uniquely suitable for prohibition.

3. Flash Hiders

Another common accessory is the flash suppressor, which reduces the flash of light from a rifle shot. Reduced flash decreases shooter's blindness—the momentary blindness caused by the sudden flash of light from the explosion of gunpowder. The flash reduction is especially important for shooting at dawn or at dusk. Additionally, reduced flash means that a person shooting at an attacker at night will less markedly reveal his own position. The flash hider also adds about one to three inches to the barrel length, thus making the firearms more difficult to (pg.398) conceal.

In the summer of 1993, a Virginia Governor's Task Force held meetings on "assault weapons." Mr. Ed Owens, a senior official with BATF was asked "if the flash suppressor, the

⁵⁹ THE GUN DIGEST BOOK OF ASSAULT WEAPONS 46 (1st ed. 1986).

⁶⁰ Jon R. Sundra, *The Most Significant Advancement in Rifle Accuracy in my Lifetime*, SHOOTING INDUSTRY 36 (Shot Show Super Issue 1994).

⁶¹ Peter Maxwell, *Meet the "BOSS,"* NEW ZEALAND GUNS, Mar./Apr. 1994, at 56-57.

bayonet mount and the grenade launcher are features that affect the fire power?" Owens replied "it doesn't have a thing to do with it." Owens was then asked "if you had to pick the characteristics that give these weapons their killing power, what would be the main features?" Owens replied, "killing power is the cartridge, the larger the cartridge, the more deadly the weapon."⁶² (As noted above, "assault weapons" fire a smaller cartridge than standard hunting rifles.)

4. Night Sights

Another purported rational basis of "assault weapons" prohibition has been that many of the guns are said to be configured to allow easy attachment of night sights. It should be noted, however, that a mounting attachment which is perfectly configured to attach night sights is also perfectly configured to attach sights which work only during the daytime.

In any case, there is nothing illegitimate about night sights. While it is generally illegal to hunt at night, it is legal to defend home, person, and property at night. Turning on a light to try to find an attacker's position would reveal one's own position, and thereby give the criminal the first shot.

5. Folding Stocks

Guns with folding stocks are sometimes singled out for harsh treatment. For example, the New Jersey legislature's "assault weapon" ban outlaws the Ruger Mini-14 rifle, but only the model with a folding stock.⁶³ A folding stock makes a gun shorter and easier to carry, thus making it useful to hunters. A folding stock also makes a gun more maneuverable in a confined setting such as a home, and hence harder (pg.399) for an attacker to take away.⁶⁴ The reduced size makes the gun easier to conceal, for legitimate or illegitimate purposes. Unless all handguns are also deemed illegitimate, because they are far more concealable than rifles in any configuration, there is no rational claim that a rifle's folding stock makes it less legitimate than other firearms.

6. Bayonet Lugs

⁶² Memorandum from Richard E. Gardiner, NRA Legislative Counsel to James J. Baker, NRA Executive Director, regarding Virginia Governor's Task Force (transcript of Meeting on Assault Firearms Definition, July 8, 1993).

⁶³ N.J. STAT. ANN. § 2C:39-1(w)(3) (West 1993).

⁶⁴ Another useful defensive configuration is the ability to select different types of ammunition "on the fly." Imagine a parent confronted with a violent burglar. Shooting the burglar might be the only way to protect nearby children. But a conventional hunting rifle cartridge would penetrate the criminal, then a wall, and might hit a child. The parent would be better off with a shotgun loaded with light birdshot—to knock the burglar down, but not penetrate a wall.

On the other hand, suppose the burglar's entry had transpired a little differently. The whole family might be huddled in one room, while the burglar kicked and banged at the creaking door. Then the optimal self-defense shot would be a slug from a shotgun — to crash through the thick door and into the burglar.

In short, different home family defense situations require different ammunition. An excellent gun for home defense, then, would be a shotgun for which the shooter could rapidly select different loads. There is such a gun. The shotguns which are singled out by name in most "assault weapon" legislation, such as the Striker 12, are the only long guns with such beneficial features. The Striker 12 is so named because it is a shotgun with an external rotating cylinder. The shooter can quickly dial any of 12 different rounds.

Under legislation sponsored by Representative William Hughes in 1990, any gun which could accept a bayonet could be considered an illegal "assault weapon."⁶⁵ Bayonets are obviously of no sporting utility, although they could be marginally useful in the personal and civil defense contexts. The major problem with the bayonet-ban, however, is that *any* rifle barrel can be a bayonet mount. Moreover, how many, if any, criminals have ever charged their victims with a bayonet.

7. Grenade Launchers

Some guns are selected for prohibition because they have an attachment that allows for the easy mounting of a grenade launcher. A gun which launches grenades is distinguishable from a gun which does not. The explosion from a grenade is much more powerful, and much less discriminating than is a bullet from a firearm. But possession of grenades, as well as the components necessary to assemble grenades, is already strictly regulated by federal law, under terms (pg.400) similar to those applicable to machine guns. Possession of grenade launchers is similarly regulated.⁶⁶

Given the existing rational regulation of grenades, grenade components, and grenade launchers, it must then be asked whether the fact that a grenade launcher could be attached to a particular gun has any genuine impact on public safety. When asked by a *Wall Street Journal* reporter, neither the BATF nor the Department of Justice was able to indicate a single instance of a grenade launcher (or a bayonet attached to a rifle) being used in a crime in the United States.⁶⁷

F. Design History

The features discussed above all relate to the physical characteristics of a firearm. Besides physical traits, having a particular design history may also make a gun into an "assault weapon." A common statutory definition of an "assault pistol" is:

All semiautomatic pistols that are modifications of rifles having the same make, caliber and action design but a shorter barrel and no rear stock or modifications of automatic weapons originally designed to accept magazines with a capacity of twenty-one (21) or more rounds.⁶⁸

The definition raises serious problems regarding vagueness. Gun owners are required to know details of the design history of their gun, and of the models which preceded the gun they own.⁶⁹ Even assuming (pg.401) that small details of firearms design history were common knowledge

⁶⁵ Kokalis, *supra* note 6.

⁶⁶ 18 U.S.C. §§ 841-844 (1993).

⁶⁷ James Bovard, *The Assault on Assault Weapons*, WALL ST. J., Jan. 6, 1994, at A12. Grenade launchers were used by the ATF in its attack on the Branch Davidian compound in Waco, but it is not at this point clear whether the ATF's actions were criminal. *Id.*

⁶⁸ DENVER REV. MUN. CODE § 38-130(b)(1)(c) (1991).

⁶⁹ There is no reasonable way for a person of common intelligence to know if a particular pistol was originally based on a rifle design, or based on the design of an automatic weapon. Persons attempting to comply with this language must also learn not only from what guns their pistol was designed, but also learn the design history of the ancestor guns themselves—whether the ancestor automatic firearm was "originally designed to accept magazines with a capacity of twenty-one (21) or more rounds." DENVER REV. MUN. CODE § 38-130(b)(1)(c) (1991). It is irrationally burdensome to require citizens who wish to learn if their pistols are legal to research both how their pistol was designed, and how the ancestors to that pistol were "originally designed."

Having somehow discovered the design history of a pistol, a person must then attempt to discover its design mechanics—if

among ordinary gunowners, there is no rational basis for outlawing a gun based on its design history.⁷⁰ To whatever extent guns with an allegedly pernicious design history have common physical traits making them more dangerous, legislation can be drafted on the basis of those traits. To hold that a firearm's military design history creates a rational basis for prohibition would be the same as authorizing a prohibition on "CJ" Jeeps, which, although operationally similar to other civilian jeeps, have a military design history.

Moreover, to prohibit an object based on a mere historical relation to the military could, under *Cleburne's* illegitimacy prong, reflect an illegitimate bias against the military, and hence fail to survive careful rational basis scrutiny.⁷¹

G. Positive Operational Characteristics

Given the above discussion, which has pointed out how the guns labeled "assault weapons" are similar to other guns, one may wonder why anyone would want to own such a gun. Although a person's choice of firearms model, like their choice of automobiles, may reflect emotional or aesthetic values rather than practical ones, there are two significant reasons why many practical gun owners would choose an "assault weapon."

1. The Guns are Reliable, Rugged, and Simple

Most of the rifles dubbed "assault weapons" have a greater immunity to weather conditions and abuse than more traditional hunting rifles.⁷² A semiautomatic AKS can be dropped in the mud, (pg.402) dragged through brush, and can withstand the rigors of extremely cold or hot climates. Although the guns are not military arms, they do share many common components with the automatic assault rifles that they resemble. As a result, they share an imperviousness to rough conditions and a lack of cleaning with military guns. The ruggedness stems in part from the fact that the guns have fewer moving parts than specialized sports guns, and are hence easier for persons who are not firearms hobbyists to maintain.

In addition, many "assault weapons" have large trigger guards which are designed so that the shooter can press the trigger while wearing gloves. Plastic stocks (found on many "assault weapons") are superior because wood stocks, when cold and wet, may swell, thereby degrading the accuracy of the firearm. Plastic stocks are also less likely than wood stocks to break if the gun is dropped.

the pistol has the same action as the ancestor rifle. In redesigning a rifle into a pistol, the designer will often modify the action (such as by shortening the piston stroke). It is irrational to require ordinary persons to reconstruct the technical development of a complex part of their firearms.

⁷⁰ Cf. *Zobel v. Williams*, 457 U.S. 55 (1982) (conferring state benefits based on historical pattern of residence, rather than current residency status, is irrational).

⁷¹ The fact that the prohibited guns are descendants of military designs is often listed as a basis for the prohibition by prohibition advocates. DENVER REV. MUN. CODE § 38-130(a). It is true that many of the banned guns are related in design history to military guns, but so are most other guns. Civilian guns have always been derivative of, and often identical to, military guns. Morgan, *supra* note 7, at 155. Thus, a prohibition on "assault weapons" because of their military design history inconsistently, and irrationally, excludes the vast majority of firearms, which are also based on military design.

⁷² Steven R. Myers, *The Legitimate Uses of Assault Weapons*, WASH. POST, Mar. 4, 1989 (letter to the editor); Patrick Mott, *In Defense of the AK-47*, L.A. TIMES, Feb. 24, 1989, at V1, col. 1 (discussing design attributes and adaptability to field use).

The statements about reliability in this section do not of course apply to every single gun that is sometimes denominated an "assault weapon." The TEC-9 pistol, for example, is often criticized for jamming at the wrong moment.

The simplicity of design and ease of use of these weapons—only revolvers are easier to load and shoot—also makes them suited as weapons of self-defense for persons who are not gun aficionados. However, this ease of use is no advantage from the viewpoint of gun prohibitionists. Councilwoman Cathy Reynolds, sponsor of Denver's "assault weapon" prohibition, has complained that the guns "are very easy to use."⁷³

2. *The Guns are Very Accurate*

The firing of any gun produces recoil or kick. Recoil makes it more difficult to aim and control a shot. Guns with less recoil are easier to fire safely, and better-suited for self-defense. People without a great deal of upper body strength may find a low-recoil gun to be the only kind they can successfully use for self-defense. In a semiautomatic, the energy from the gun-powder explosion is directed forward, rather than backwards towards the shooter. This energy is used to load the next cartridge into the firing chamber, ready for a new trigger press. As a result, semiautomatics have less recoil than other guns, and are therefore quite appropriate for use in situations where accuracy is crucial for safety, such as self-defense in an urban environment.^(pg.403)

As discussed above, some rifles or shotguns dubbed "assault weapons" have a pistol grip in front of the trigger guard. The pistol grip helps stabilize the firearm, to keep the barrel from rising after the first shot, and thereby stay on target for a follow-up shot. Also enhancing the accuracy of a follow-up shot is the fact that in many "assault weapons" the stock is relatively level with the barrel—a configuration which helps the barrel stay on target after the first shot.

It would be rather irrational to ban a firearm because it was particularly accurate and, hence, posed a smaller danger of stray shots.⁷⁴ Public safety is enhanced if persons using guns for personal and civil defense hit their targets. The defensive use of firearms will sometimes involve more than a single shot. Of what rational benefit to public safety is a law that encourages citizens to use guns with high recoil that fire wildly, thereby endangering every person in the vicinity?

H. Conclusion Regarding Physical Characteristics

Can "assault weapon" legislation survive a careful rational basis test? In some cases, as in Connecticut, a legislative body defines "assault weapon" simply by listing particular guns, while other nearly identical guns are left uncontrolled.⁷⁵ In California, the model for many of the subsequently-enacted "assault weapon" prohibitions, the banned guns were selected by persons thumbing through a picture book of guns.⁷⁶ The incoherence of a picture-book-based firearms law was pointed out in a confidential memorandum from the California Attorney General's chief firearms

⁷³ Cathy Reynolds, *Headlines*, Summer 1989 (newsletter).

⁷⁴ The accuracy advantage is maintained only out to distances of about 200 yards. Above that distance, the tighter chambering of bolt-action rifles, despite the bolt-action's higher recoil, results in greater accuracy.

⁷⁵ Lolita C. Baldor, *New Gun Ban Has Loophole*, CONN. POST, Sept. 20, 1993, at A1, A4.

⁷⁶ Richard Gardiner, testimony at Florida Assault Weapon Commission hearings. Bovard, *supra* note 67, at A12 (stating that "San Francisco lawyer Don Kates suggested that legislators, in compiling the list of prohibited guns, appeared to have selected from 'some picture book ... of mislabeled firearms they thought looked evil.'").

expert, which observed that "[a]rtificial distinctions were made between semi-automatic weapons.... We can effectively control *all* semi-automatic weapons or leave them all alone."⁷⁷

Nor can the purported physical differences between "assault weapons" and other firearms form the basis of a rational classification. (pg.404) Contrary to the imagery promoted by the gun control lobby, so-called "assault weapons" do not fire faster and do not have a greater ammunition capacity than many other firearms. Some "assault weapons" do possess features or accessories such as pistol grips or muzzle brakes, but these features do not make "assault weapons" illegitimate. If it is assumed that accuracy, particularly in a self-defense context, is not a negative feature on a gun, then the accessories on "assault weapons" cannot form a basis for prohibition. The firearms commonly dubbed "assault weapons" are generally more rugged and reliable, and easier to shoot accurately than are many other firearms.

Indeed, Professor Jacobs, of New York University, observes that there is less of a rational basis for banning "assault weapons" than there would be for almost any other firearm:

Pistols are dangerous because they are easily carried and concealed; shotguns because they spray metal projectiles over a wide area; certain hunting rifles because they fire large caliber bullets, and certain "sniper rifles" because they are accurate over great distances. Assault rifles are not remarkable by any of these criteria.⁷⁸

Because the rational basis test precludes "discriminations which are entirely arbitrary,"⁷⁹ the physical characteristics of so-called "assault weapons" cannot survive careful rational basis review.

IV. INSUFFICIENTLY DEMONSTRATED USE IN CRIME

An alternative rational basis for the prohibition of "assault weapons" might be the frequency of their use in crime. After all, even if brown dogs are physically like black dogs, the fact that black dogs are ten times more likely to bite would form a rational basis for greater regulation of black dogs.

Whether the frequency of use in crime provides a rational basis for an "assault weapon" prohibition depends largely on the fact-finder's depth of inquiry. If the fact-finder unquestionably accepts the legislative findings that accompany an "assault weapon" prohibition, the legislative statement that "assault weapons" are frequently used in (pg.405) crime becomes a fact, and would form a rational basis for prohibition.⁸⁰ Likewise, if at an evidentiary hearing, the fact-finder accepted

⁷⁷ Memorandum from S.C. Helsley, Asst. Dir., Invest. & Enforcement Branch, Calif. Dept. of Justice, to Patrick Kenday, Asst. Atty. Gen. 3-4, Feb. 14, 1991 (emphasis in original).

⁷⁸ Jacobs, *supra* note 42.

⁷⁹ State v. Reed, 473 A.2d 775, 781 (Conn. 1984).

⁸⁰ In contrast to the rational basis test, application of the strict scrutiny/fundamental rights test would suggest that even compelling proof that "assault weapons" are frequently used in crime would not provide a constitutional basis for prohibition. See American Booksellers Assoc. v. Hudnut, 771 F.2d 323, 329-30 (7th Cir. 1985), *aff'd*, 475 U.S. 1001 (1986):

[W]e accept the premises of this legislation [against sexualized depictions of women as subordinate]. Depictions of subordination tend to perpetuate subordination. The subordinate status of women in turn leads to affront and lower pay at work, insult and injury at home, battery and rape on the streets ... Yet all is protected as speech, however insidious.

Similarly, the Colorado Supreme Court has explained that even the most urgent needs of law enforcement do not rise above

without question the statements of government officials who supported prohibition, a rational basis for prohibition would exist.

But such blind deference is not appropriate for application of the rational basis test. *Cleburne* found the city's fears about the risks of crowding caused by the location of a group home to be irrational because the purported harms had been "insufficiently demonstrated."⁸¹

The *Cleburne* approach appears consistent with what Justice Stone wrote in *Carolene Products*:

Where the existence of a rational basis for legislation whose constitutionality is attacked depends upon facts beyond the sphere of judicial notice, such facts may properly be made the subject of judicial inquiry, and the constitutionality of a statute predicated upon the existence of a particular state of facts may be challenged by showing to the court that those facts have ceased to exist.⁸² (pg.406)

State court jurisprudence also suggests that judges should not blindly accept the government's allegations regarding the factual basis for legislation.⁸³

If the assertions of government officials are subjected to any judicial scrutiny, then it rapidly becomes clear that the factual basis for prohibition is built on a foundation of sand. In Denver, for example, Chief of Police Ari Zavaras testified to the City Council that "assault weapons are becoming the weapons of choice for drug traffickers and other criminals."⁸⁴ In a lawsuit resulting from the prohibition that the Chief had endorsed, the Colorado Attorney General's office examined the Chief's *ipse dixit*. The State of Colorado inventoried every single firearm in Denver police custody as of March 1991. Of the 232 shotguns seized by the police, not a single one was covered by the ordinance. Of the 282 rifles in the police inventory, nine (3.2%) were covered by the ordinance. Of the 1,248 handguns in the police inventory, a mere eight (0.6%) were so-called

the Constitution: "[N]o matter how necessary to law enforcement a legislative act may be, if it materially infringes upon personal liberties guaranteed by the constitution, then that legislation must fall. Grim as it may be, if effective law enforcement must be dependent upon unconstitutional statutes, then the choice of the way ahead is for the people to act or fail to act under the amendatory processes of the constitution." *Arnold v. City and County of Denver*, 464 P.2d 515, 517-18 (Colo. 1970) (striking vagrancy ordinance although city argued "forcefully and quite compellingly" that ordinance was necessary to fight crime. *Id.* at 517.).

⁸¹ See *Cleburne*, 473 U.S. at 447-50.

⁸² *United States v. Carolene Prods. Co.*, 304 U.S. 144, 153 (1938) (citations omitted). Justice Stone had earlier written:

In ascertaining whether challenged action is reasonable, the traditional common law technique does not rule out but requires some inquiry into the social and economic data to which it is to be applied ... The judge, then, must open his eyes to all those conditions and circumstances within the range of judicial knowledge, in the light of which reasonableness is to be measured.

Harlan Stone, *The Common Law in the United States*, 50 HARV. L. REV. 4, 24 (1936).

⁸³ See *Englewood v. Apostolic Christian Church*, 362 P.2d 172 (Colo. 1961) (stating: "It is well established that whether [a law] has a reasonable connection [to its purpose] "is a question of the determination of the judiciary." *Id.* at 174.).

In *Colorado Springs v. Grueskin*, a city imposed a number of safety restrictions on the delivery of gasoline. There was no suggestion that the fundamental rights test should be used; and the city Fire Chief testified as to the safety advantages of the restrictions. Nevertheless, challengers of the ordinance provided expert testimony that convinced the trial court that the restrictions did not effectively promote public safety. The Colorado Supreme Court upheld the trial court's striking of the ordinance, notwithstanding the Fire Chief's arguments about fire safety. 422 P.2d 384 (1967).

⁸⁴ Affidavit of Avi Zavaras, Colo. ex. B., at 6, *Robertson v. Denver*, *supra* note 1.

"assault pistols" covered by the ordinance.⁸⁵ Of the fourteen banned guns in Denver police custody, only one had been used in a crime of violence. Half had been seized from persons who were never charged with any offense.⁸⁶

A. "Assault Weapons" are Used in Only About One Percent of Gun Crime

The following statistics summarize the findings of official governmental statistical surveys. Because different governments reported data for different years, or reported different types of data (e.g. (pg.407) homicides vs. gun seizures), the raw figures reported from each jurisdiction are sometimes not directly comparable.

Akron. Of the 669 guns seized by the Akron police in 1992, fewer than 1% were "assault weapons."⁸⁷ The 1% figure represents a decline from 1988, when about 2% of seized guns were "assault weapons."⁸⁸

Baltimore County. During the first nine months of 1990, out of 644 weapons logged in to the Baltimore County Police Property Room, only two were "assault weapons." Out of 305 murders in the city of Baltimore in 1990, only seven (2.3%) involved rifles and shotguns of any kind, much less any subset of those firearms labeled "assault weapons."⁸⁹

Bexar County, Texas (including San Antonio). From 1987 to 1992, "assault weapons" were used in 0.2% of homicides and 0.0% of suicides. From 1985 to 1992, they constituted 0.1% of guns seized by the police, according to Vincent DiMaio, the county's Chief Medical Examiner.⁹⁰

California. In 1990, "assault weapons" comprised thirty-six of the 963 firearms involved in homicide or aggravated assault and analyzed by police crime laboratories, according to a report prepared by the California Department of Justice, and based on data from police firearms laboratories throughout the state. The report concluded that "assault weapons play a very small role in assault and homicide firearm cases."⁹¹ Of the 1,979 guns seized from California narcotics dealers in 1990, fifty-eight were "assault weapons."⁹²

⁸⁵ Police Firearms Data, Colo. ex. 65, Robertson v. Denver, *supra* note 1. Even the low percentage of "assault weapons" was artificially inflated by police weapons retention policies initiated at the request of the City Attorney. Stipulation, Colo. ex. 66., Robertson v. Denver, *supra* note 1.

The author of this article represented Colorado in the trial court.

⁸⁶ Colo. ex. 64, Robertson v. Denver, *supra* note 1.

⁸⁷ *Assault Weapons Seized in Akron Last Year*, AKRON BEACON JOURNAL, Jan. 6, 1993 (quoting police Major Leonard Strawderman).

⁸⁸ Robert Hiles, *Police Gunning to Boost Odds*, AKRON BEACON-JOURNAL, March 13, 1989, at A9.

⁸⁹ Letter from Thomas E. Hickman, State's Attorney for Carroll County, to the Hon. John S. Arnick, Chairman of the House Judiciary Committee 2 (Feb. 14, 1991) (citing Ronald Banks, BALTIMORE EVENING SUN, Feb. 11, 1991 (letter to the editor)).

⁹⁰ Vincent C. DeMaio et al., *Assault Weapons as a Public Health Hazard*, 268 JAMA 3073 (1992) (letter to the editor).

⁹¹ David Alan Coia, *Assault Rifles Said to Play a Small Role in Violent Crimes*, WASH. TIMES, June 27, 1992 (quoting Torrey D. Johnston, REPORT ON A SURVEY OF THE USE OF "ASSAULT WEAPONS" IN CALIFORNIA IN 1990, Office of the Attorney General, California Department of Justice, (1991)) (the report, prepared in response to a request by a California State Senator, was suppressed by the California Attorney General's Office, which claimed that the report did not exist. A leaked copy was released to the media). See also Alan W. Bock, *Statistical Overkill on Banned Rifles*, ORANGE COUNTY REG., June 28, 1992, at K4; Mike McNulty, *The War on Gun Ownership Still Goes On!*, GUNS & AMMO, Dec. 1992, at 30-31, 90.

⁹² David Freed, *Assault Rifles are Not Heavily Used in Crimes*, L.A. TIMES, Apr. 21, 1992, at A18.

Chicago. From 1985 through 1989, only one homicide was (pg.408) perpetrated with a military caliber rifle.⁹³ Of the 17,144 guns seized by the Chicago police in 1989, 175 were "military style weapons."⁹⁴

Chicago suburbs. From 1980 to 1989, "assault weapons" totaled 1.6% of seized drug-related guns.⁹⁵

Connecticut. "Assault weapons" constituted 198 of the 11,002 firearms confiscated by police in the years 1988 through 1992.⁹⁶

Denver. A gun-by-gun examination of the firearms in Denver police custody as of March 1991 found fourteen "assault weapons" among the 1,752 crime guns. Only one of those guns had been used in a crime of violence (an aggravated assault).⁹⁷

Florida. The Florida Assault Weapons Commission found that "assault weapons" were used in seventeen of 7,500 gun crimes for the years 1986 to 1989.⁹⁸

Los Angeles. Of the more than 4,000 guns seized by police during one year, only about 3% were "assault weapons."⁹⁹

Maryland. In 1989-90, there was only one death involving a "semiautomatic assault rifle" in all twenty-four counties of the State of Maryland.¹⁰⁰

Massachusetts. Of 161 fatal shootings in Massachusetts in 1988, three involved "semiautomatic assault rifles."¹⁰¹ From 1985 to 1991, the guns were involved in 0.7% of all shootings.¹⁰²

Miami. The Miami police seized 18,702 firearms from January 1, (pg.409) 1989 to December 31, 1993. Of these, 3.13% were "assault weapons."¹⁰³

Minneapolis. From April 1, 1987 to April 1, 1989, the Minneapolis police property room received 2,200 firearms, nine of which were "assault weapons."¹⁰⁴

⁹³ Jay Edward Simkin, *Control Criminals, Not Guns*, WALL ST. J., March 25, 1991, at A10.

⁹⁴ Gene O'Shea, *Chicago Police Back Assault Weapons Ban Approved by Senate*, SOUTHTOWN ECONOMIST, June 12, 1990.

⁹⁵ KLECK, *supra* note 38, at 130 (discussing J.G. Mericle, *Weapons Seized During Drug Warrant Executions and Arrests*, unpublished report of Metropolitan Area Narcotics Squad, Will and Grundy Counties, Illinois (1989)).

⁹⁶ Letter from Major Kenneth H. Kirschner, Commanding Officer, Bureau of Police Support, to Lt. Col. George H. Moore, Commanding Officer, Off. of Admin. Serv., (Mar. 11, 1993) (on file with author).

⁹⁷ Reply Brief of State of Colorado, at 13-15, *Robertson v. Denver*, No. 90CV603 (Denver Dist. Ct., Feb. 26, 1993).

⁹⁸ FLORIDA ASSAULT WEAPONS COMMISSION, ASSAULT WEAPONS/CRIME SURVEY IN FLORIDA FOR YEARS 1986, 1987, 1988, 1989 (1990).

⁹⁹ S. REP. NO. 160, 101st Cong., 1st sess. 3 (1989) (testimony of Detective Jimmy L. Trahin of the Los Angeles Police Department Firearms/Ballistics Unit).

¹⁰⁰ Letter from Thomas E. Hickman, State's Attorney for Carroll County, Maryland, to Rep. John S. Arnick, Chair of the Maryland Senate Judicial Proceedings Committee, 2 (February 14, 1991) (on file with author).

¹⁰¹ M. Arnold, Massachusetts State Police, Firearms Identification Section, *Massachusetts State Police Ballistics Records*.

¹⁰² M. Arnold, Massachusetts State Police, Firearms Identification Section, *Massachusetts State Police Ballistic Records*, March 14, 1990 & April 11, 1991.

¹⁰³ Letter from Jess I. Galan, Criminalist, Crime Laboratory Bureau, to Richard Gardiner, Legislative Counsel, National Rifle Association.

¹⁰⁴ Memorandum from Sgt. W. Reins to Chief John T. Laux, 1 (April 3, 1989) (on file with author); MINNESOTA MEDICAL ASSOC. FIREARM INJURY PREVENTION TASK FORCE, *Firearm Mortality in Minnesota*, MINN. MED., Mar. 1994, at 23.

Nashville. Of the 190 homicides perpetrated in Nashville in 1991-92, none were committed with an "assault weapon."¹⁰⁵

Newark. According to surgeons at the University Hospital in Newark, in the 1980s there was one wounding in the city in that decade in which the bullet removed was the type found in "semiautomatic assault rifles."¹⁰⁶

New Jersey. According to the Deputy Chief Joseph Constance of the Trenton New Jersey Police Department, in 1989, there was not a single murder involving any rifle, much less a "semiautomatic assault rifle," in the State of New Jersey.¹⁰⁷ No person in New Jersey was killed with an "assault weapon" in 1988.¹⁰⁸ Nevertheless, in 1990 the New Jersey legislature enacted an "assault weapon" ban that included low-power .22 rifles, and even BB guns. Based on the legislature's broad definition of "assault weapons," in 1991, such guns were used in five of 410 murders in New Jersey; in forty-seven of 22,728 armed robberies; and in twenty-three of 23,720 aggravated assaults committed in New Jersey.¹⁰⁹

New York City. Of 12,138 crime guns seized by New York City police in 1988, eighty were "assault-type" firearms.¹¹⁰

New York State. Semiautomatic "assault rifles" were used in (pg.410) twenty of the 2,394 murders in New York State in 1992.¹¹¹

San Diego. Of the 3,000 firearms seized by the San Diego police in 1988-90, nine were "assault weapons" under the California definition.¹¹²

San Francisco. Only 2.2% of the firearms confiscated in 1988 were military-style semiautomatics.¹¹³

Virginia. Of the 1,171 weapon analyzed in state forensics laboratories in 1992, 3.3% were "assault weapons."¹¹⁴

¹⁰⁵ Letter from Sgt. Brooks Harris, Crime Analysis Section, Nashville P.D. to Sen. Harlan Matthews (June 2, 1993) (on file with author).

¹⁰⁶ Nicholas Veronis, *Newark Survey Finds Assault Rifle Used in only One Shooting in '80s*, STAR-LEDGER (Newark, N.J.), May 16, 1990, at 15.

¹⁰⁷ Testimony of Dept. Chief Joseph Constance, before the Maryland Senate Judicial Proceedings Committee 3 (March 7, 1991).

¹⁰⁸ Dan Weissman, *Florio Urges Ban on Assault Rifles, Stresses His Support for Abortion*, STAR-LEDGER (Newark, N.J.), July 18, 1989, at 15.

¹⁰⁹ Iver Peterson, *Both Sides Say Trenton's Ban on Assault Rifles Has Little Effect on Crime*, N.Y. TIMES, June 20, 1993.

¹¹⁰ *Handguns, not Assault Rifles, are NYC Weapon of Choice*, WHITE PLAINS REPORTER-DISPATCH, Mar. 27, 1989, at A8-A9.

¹¹¹ Frederic Dicker, *Real Story on Assault Weapons is Hit & Myth*, N.Y. POST, Jan. 10, 1994, at 14 (discussing unpublished data from New York State Division of Criminal Justice Services).

¹¹² Joe Hughes, *Smaller Guns are 'Big Shots' with the Hoods*, SAN DIEGO UNION, Aug. 29, 1991.

¹¹³ Morgan, *supra* note 7, at 151.

¹¹⁴ Margaret Edds, *Assault Weapons Rarely Used in Crimes, Gun-control Panel Told*, VIRGINIA PILOT & LEDGER-STAR, Aug. 4, 1993.

Washington, D.C. The *Washington Post* reports: "[L]aw enforcement officials say that the guns have not been a factor in the area's murder epidemic."¹¹⁵ "Assault weapons" were 3% of guns seized in 1990.¹¹⁶

National statistics. Less than four percent of all homicides in the United States involve any type of rifle.¹¹⁷ No more than .8% of homicides are perpetrated with rifles using military calibers. (And not all rifles using such calibers are usually considered "assault weapons.") Overall, the number of persons killed with rifles of any type in 1990 was lower than the number in any year in the 1980s.¹¹⁸

B. Police Shootings

Although people reading newspapers might infer that police officers by the score are being murdered by "assault weapons," police officer deaths in the line of duty are at the lowest level in decades.¹¹⁹ From 1975 to 1992, out of 1,534 police officers feloniously murdered in the (pg.411) United States, sixteen were killed with firearms defined as "assault weapons" by California law.¹²⁰ The *Journal of California Law Enforcement* wrote: "It is interesting to note, in the current hysteria over semi-automatic and military look-alike weapons, that the most common weapon used in the decade to murder peace officers was that of the .38 Special and the .357 Magnum revolver."¹²¹ The *Journal* found that "calibers which correspond to military-style shoulder weapons" accounted for 8% of total firearms used to murder police officers in California.¹²²

The impression conveyed by some television programs is that shoot-outs between police and criminals involve steadily escalating amounts of fire-power. However, according to the New York City police department study of shootings at police in 1989, the average number of shots fired at the police per encounter was 2.55, and this number represented a decline from previous years.¹²³

C. The Cox Newspapers Study

In contrast to the evidence discussed above, there is one report, from the Cox Newspapers chain, which finds that "assault weapons" are disproportionately used in crime.¹²⁴ If the rational basis test means "a shred of evidence," the Cox report would suffice as a shred. But if judicial analysis is

¹¹⁵ Kent Jenkins, Jr., *Calls for Ban Boost Assault Rifle Sales: Weapons not Considered Factor in Killings*, WASH. POST, Mar. 6, 1989, at B1.

¹¹⁶ K. BEA, CONG. RESEARCH SVC. REPORT FOR CONGRESS—"ASSAULT WEAPONS:" MILITARY STYLE SEMIAUTOMATIC FIREARMS FACTS AND ISSUES 18, table 5 (Cong. Research. Svc., May 13, 1992) (rev. ed. June 4, 1992) (citing G.R. Wilson, Chief, Firearms Section, Metropolitan Police Dept., Jan. 21, 1992).

¹¹⁷ Morgan, *supra* note 8, at 152.

¹¹⁸ In 1990, 3.7% of homicides were perpetrated with rifles. UNIFORM CRIME REPORTS 17 (1991).

¹¹⁹ Telephone Interview with L. Behn, FBI Technical Information Specialist (Mar. 25, 1993) (on file with author).

¹²⁰ ALAN S. KRUG, THE "ASSAULT WEAPON" ISSUE 16-17 (National Rifle Assoc. Publications, 1993 ed.) (using FBI, state and local police agency data).

¹²¹ GEORGE T. WILLIAMS & CHARLES B. MOORMAN, *A Decade of Peace Officers Murdered in California: The 1980s*, 46 J. CALIF. LAW ENF. 1, 6 (Feb. 1991).

¹²² *Id.*

¹²³ KLECK, *supra* note 38, at 78-79.

¹²⁴ Jim Stewart & Andrew Alexander, *Assault Guns Muscling in on Front Lines of Crime*, ATLANTA JOURNAL-ATLANTA CONSTITUTION, May 21, 1989, at A1, A8.

to be as searching as Justice Stone's opinion in *Carolene Products*¹²⁵ suggests, the Cox report may not bear close scrutiny.

The Cox reporters examined records of gun traces conducted by BATF and found that for drug offenses, "assault weapons" were involved in approximately 12% of the traces. Because "assault weapons" amount to less than 12% of all firearms and if they are used in 12% of all drug crimes, then assault weapons are disproportionately involved in drug crimes.¹²⁶ (pg.412)

Extrapolating from the trace data, the Cox Newspaper reporters asserted that "assault weapons" were used in ten percent of all firearms crime, and that because "assault weapons" were (by Cox's estimate) 0.5% of the total gun supply, "assault weapons" are "20 times more likely to be used in a crime than a conventional firearm."¹²⁷ Yet when asked about the figure, BATF wrote: "[C]oncluding that assault weapons are used in 1 of 10 firearms related crimes is tenuous at best since our traces and/or the UCR [Uniform Crime Reports] may not truly be representative of all crimes."¹²⁸

Police reports from major cities support the BATF viewpoint. As detailed below, the police statistics for the major cities report far less prevalence of "assault weapons" than the Cox report claimed to find. For example, the percentage of "assault weapons" reported by Cox newspapers, based on the BATF traces, was 10% for Chicago, 19% for Los Angeles, 11% for New York City, and 13% for Washington. In each of those cities, police departments conducted complete counts of all guns which had been seized from criminals (not just the guns for which the police department requested a BATF trace). According to the actual police department counts of crime guns in each city, the percentage of assault weapons were only 3% for Chicago, 1% for Los Angeles, 1% for New York City, and 0% for Washington, D.C.¹²⁹

Cox's problem may be that BATF traces are not an accurate indicator of which guns are used in crime. In an average year, there are about 360,000 violent crimes committed with firearms. Of those 360,000 crimes, BATF is asked to trace about 5,600 crime guns (less than 2% of total crime guns).¹³⁰ It is statistically likely that there would be a difference between the 2% of guns traced and crime guns as a whole. The 2% of guns selected for a trace request are not a random sample, but rather a select group chosen by local police departments. (pg.413) According to basic statistics theory, a non-random sample of 2% is unlikely to accurately represent the larger whole. A non-random sample becomes statistically valid only when 60% to 70% of the total relevant population is sampled. As the Congressional Research Service explains:

[T]he firearms selected for tracing do not constitute a random sample and cannot be considered representative of the larger universe of all firearms used by criminals, or any

¹²⁵ See *supra* note 82 and accompanying text.

¹²⁶ "Assault weapons" were also involved in 11% of traces relating to the Gun Control Act of 1968 (which criminalizes non-violent behavior such as the sale of a handgun to a person from another state, and imposes various record-keeping requirements on firearms dealers), and in 30% of the very small number of organized crime traces conducted by BATF. See Stewart, *supra* note 130.

¹²⁷ See Stewart, *supra* note 124.

¹²⁸ Letter from Daniel M. Hartnett, Bureau of Alcohol, Tobacco and Firearms, Letter to Rep. Richard T. Schulze 3 (Mar. 31, 1992) (on file with author).

¹²⁹ KLECK, *supra* note 38, at 75. To many people, it may seem surprising that the use of "assault weapons" in Washington, D.C. is so low. It should be noted that since Washington, D.C. passed its "assault weapon" liability law in 1990, which allows anyone who is injured by an "assault weapon" in Washington (even a criminal) to sue the manufacturer, not a single suit has been brought.

¹³⁰ KLECK, *supra* note 38, at 75 (citing 1990 BATF Report).

subset of that universe. As a result, data from the tracing system may not be appropriate for drawing inferences such as which makes or models of firearms are used for illicit purposes.¹³¹

There are a number of possible reasons why "assault weapons" would be more likely be selected for a trace request than other guns. Most "assault weapons" were manufactured relatively recently, and newer guns are easier to trace. Moreover, many "assault weapons" have an unusual appearance, which might pique curiosity (and, hence, generate a trace request) more than an old-fashioned, common crime gun such as a Smith & Wesson .38 Special. The vast publicity surrounding "assault weapons" may also have increased police interest in these guns, and hence increase the likelihood of trace requests.

D. Planning for the Future

Faced with evidence that, contrary to the legislative findings which underlay a prohibition, "assault weapons" are rarely used in crime, some courts have concluded that prohibition is still legitimate because "[t]he prohibition of a harmful act need not be postponed until it occurs."¹³² Because the future is unknowable, the courts' concerns about future criminal use of the guns is at least more plausible than some legislators' plainly erroneous claims that the guns are currently the "weapon of choice" for criminals. Nevertheless, for a law to pass a rational basis test, there must be at least credible evidence that the guns in question could become increasingly used in crime. Yet, semiautomatics are more than a century old, and large capacity (pg.414) magazines are older still.¹³³ If semiautomatics and large capacity magazines, after a century of availability, remain rarely used in crime, it is not rational to ban them based on the theory that they might one day become crime guns.¹³⁴ Any gun could become a crime gun in the future, but the possibility hardly means that a legislative body can ban any gun that it wrongly considers to be a criminal's "weapon of choice."

Consider, for example, the big-game hunting rifles that the gun control lobbies currently appear to approve. These rifles are extremely powerful, and are capable of being used at very long distances. The rifles are, after all, designed to kill animals such as an 800 pound elk with a single shot at a distance of a third of a mile or more. Accordingly, the big-game rifles would be well-suited for assassinations. Suppose that a future legislature bans these big-game rifles by calling them "assassination weapons," and a court reviewing the ban was presented with extensive evidence that big-game rifles (a/k/a "assassination weapons") are used in only about 1% of assassinations, and that there is no persuasive evidence of a trend towards increased use. Surely the court would not uphold the "assassination weapon" prohibition merely based on a legislature's self-inflicted and unfounded fear that big-game rifles at some point could become frequently used in assassinations.

V. ILLEGITIMATE: BANNING PROTECTIVE GUN OWNERSHIP

¹³¹ See BEA, *supra* note 116.

¹³² Arnold v. Cleveland, 616 N.E.2d 163, 172 (Ohio 1993) (citations omitted).

¹³³ See Fafarman, *supra* note 9, at 189 (first Winchester semiautomatic in 1903 and first Remington semiautomatic in 1906); HAROLD F. WILLIAMSON, WINCHESTER: THE GUN THAT WON THE WEST 13 (1952) (Volcanic Company was producing carbines which could fire 30 rounds without reloading in 1856).

¹³⁴ It should not be surprising that the guns are rarely used in crimes. All rifles and shotguns are difficult to conceal. So-called "assault pistols," which are quite large for handguns, are also difficult to conceal.

A. *The Legitimacy of Self-Defense*

"Assault weapons" are also said to be appropriate for prohibition because they are not suitable for sports—because they are, as the Denver City Council put it, "designed primarily for military or antipersonnel use."¹³⁵ Consistent with these findings, BATF exercised its (pg.415) authority to ban the import of certain "assault weapons" because the Bureau found that they were not "particularly suitable" for sports.¹³⁶ The Bureau also noted that several of the non-importable guns were well-suited for defensive purposes. Firearms expert Jack Lewis, whose two books on "assault weapons" are cited as authoritative by gun control advocates in their briefs defending "assault weapon" bans, likewise writes that almost all of the guns dubbed "assault weapons" are well-suited for defensive purposes, although some of the guns are too heavy and cumbersome for field sports.¹³⁷

A ban based on a weapon's utility for antipersonnel or defensive purposes fails the *Cleburne* consistency prong because virtually all guns (except for a few highly specialized models such as those used by biathletes) are designed primarily for anti-personnel use. Guns are generally made for injuring and killing people. It is irrational to ban particular guns based on a characteristic that they share with almost all guns. A law might as well assert that "assault weapons" are uniquely pernicious because they share the characteristic of using gunpowder.

But even assuming that there is a real line between sporting guns and defensive guns and that the "assault weapon" bans draw that line correctly,¹³⁸ drawing the line as prohibiting defensive guns fails the (pg.416) *Cleburne* legitimacy prong. Without reference to a particular right to keep and bear arms, use of deadly physical force for self-defense and the defense of others is lawful in every state. In fact, many state constitutions guarantee a right of self-defense, and American common law recognizes a self-defense right of very long standing.¹³⁹ Because self-defense is a recognized, lawful activity everywhere, prohibiting an object simply because it is useful for self-defense rather than for

¹³⁵ DENVER, COLO. REV. MUN. CODE, § 38-130(a) (1989). Similarly, the city of Cleveland's ban on "assault weapons" was predicated on the finding that "the primary purpose of assault weapons is antipersonnel..." *Arnold*, 116 N.E.2d at 172 (citing CLEVELAND, OHIO ORD. No. 415-89, § 628.01). California's ban includes the legislative finding: "The Legislature has restricted the assault weapons ... based upon the finding ... that its function as a legitimate sports or recreational firearm is substantially outweighed by the danger that it can also be used to kill or injure human beings." CAL. PENAL CODE § 12275.5 (Deering 1994).

¹³⁶ BUREAU OF ALCOHOL, TOBACCO AND FIREARMS, REPORT AND RECOMMENDATION OF THE ATF WORKING GROUP ON THE IMPORTABILITY OF CERTAIN SEMIAUTOMATIC RIFLES (1989).

¹³⁷ Of the semiautomatics evaluated by Lewis, virtually every one was praised for its utility in survival, law enforcement, or other civil defense type situations. The guns were also touted for day-to-day home defense, in part because of their reliability, in part because of their simplicity and ruggedness (meaning that persons who are not experts in gun care can maintain the firearms safely), in part because of their low recoil (making them easier for persons without great upper body strength to control), and in part because of their intimidating appearance, which could convince an attacker to flee or surrender without a fight. For example, the Steyr AUG-SA has "excellent bio-engineering," a superior and innovative safety, is easy to maneuver for self-defense, and hard for an attacker to take away. Its barrel is so well made that no amount of target practice will wear it out. The gun never needs cleaning, even if thrown in mud or snow. THE GUN DIGEST BOOK OF ASSAULT WEAPONS 46-49 (Jack Lewis ed., 1st ed., 1986).

The SIG SG-551 SP carbine works "like a fine Swiss watch" and does not have "any notable recoil." Its "fast second shot" is useful for defending livestock from coyotes, and is "perfectly suitable" for police and civilian defensive roles. THE GUN DIGEST BOOK OF ASSAULT WEAPONS 201-13 (Jack Lewis ed., 2d ed., 1989).

The M11 pistol finds its "best role as a home defense weapon," in part because its intimidating appearance would force "most burglars and intruders to consider instant surrender." *Id.* at 71.

¹³⁸ Most of the banned rifles are used in target competition. Some of these rifles, such as the Colt Sporter and the Heckler & Koch HK-91 are generally regarded as among the finest target rifles in the world.

¹³⁹ See e.g., RICHARD M. BROWN, NO DUTY TO RETREAT (1991).

sport cannot be legitimate. Hence, that prohibition cannot pass the "illegitimacy" prong of the *Cleburne* rational basis test.

B. Police Exemption

In response to the above analysis regarding the legitimacy of lawful self-defense, it might be suggested that "assault weapons" are not defensive weapons, instead they are offensive weapons, better suited for killing large numbers of innocent people than for protecting innocent life. The analysis of the physical characteristics of "assault weapons"¹⁴⁰ suggests that claims regarding the extraordinary offensive capabilities of "assault weapons" are incorrect. But the rationality of the offensive/defensive distinction can be addressed more directly by examining the inconsistency of the claim within the very legislation that makes the claim.

Every "assault weapon" prohibition ever enacted or proposed in the United States (or any other nation) includes an exception for police possession of these weapons. Yet, the only reason for police to possess firearms is for protection activities. It is irrational to ban firearms on the grounds that they are not suitable for protection, and to simultaneously allow the police to use them. Unlike police officers, ordinary citizens cannot make a radio call for backup that will bring a swarm of police officers within seconds. The lives of ordinary citizens are just as valuable as the lives of police officers, and ordinary citizens are just as entitled to use the best firearms available for protection.¹⁴¹

Conversely, are "assault weapon" only useful for massacring the innocent? If so, then such weapons have no rational place in the hands of domestic law enforcement. Unlike the security forces in other, less (pg.417) free countries, the American police do not need highly destructive weapons allegedly designed for killing large numbers of people at once.

VI. CONCLUSION

"Equal protection of the laws requires that statutory classifications be based on differences that are real in fact...."¹⁴² The classification of "assault weapons" is not based on differences that are real in fact. The banned firearms do not fire faster than many guns that are not banned. The banned firearms do not have a larger ammunition capacity than many guns that are not banned. In fact, the number of rounds a semiautomatic can fire without reloading has nothing to do with the gun. Rather, that capacity is determined solely by the magazine, a separate, detachable, and interchangeable part. All the other physical characteristics of "assault weapons" which might form a rational basis for prohibiting them are simply not valid (such as claims about ammunition lethality), are trivial (such as bayonet lugs), or make the gun more accurate (such as a muzzle brakes). Official statistics prove that so-called "assault weapons" are rarely involved in criminal activity, and hence the use of "assault weapons" in crime is insufficiently demonstrated to pass the rational basis test.

Banning "assault weapons" has been justified on the basis that these weapons are better suited for personal protection than they are for recreation. However, this justification is illegitimate because the use of deadly force for protection from grave, imminent harm is lawful in the United States.

¹⁴⁰ *Id.* at 6.

¹⁴¹ Such an exemption could not be defended on the grounds that the guns can only used by persons with special training; "assault weapon" prohibitionists may complain that the guns are "very easy to use." Reynolds, *supra* note 73.

¹⁴² *People v. Montoya*, 647 P.2d 1203, 1205-06 (Colo. 1982).

The demand for "assault weapon" prohibition is often accompanied by a self-righteous insistence that only a criminal or a maniac would oppose prohibiting extremely dangerous firearms which have no legitimate use and are the criminal weapon of choice. But the closer one looks at the reasons given for "assault weapon" bans the less one sees. The prohibition is no more rational than a prohibition on beer based on legislative "findings" that beer grows on trees, that a single sip always causes instant physical addiction, and that beer is more dangerous than other alcohol because it is stored in aluminum containers. If the rational basis test means anything, it means that an "assault weapon" prohibition is unlawful.