

The Big Melt

How One Democracy Changed after Scrapping
a Third of Its Firearms

Philip Alpers

In recent years, several democracies have dramatically reduced the availability of firearms to private individuals. I emphasize the word *democracies* because, contrary to Internet chatter, the countries in which voters have supported gun amnesties and buybacks are not dictatorships. They include the United Kingdom, Brazil, Argentina, and Australia, which in recent years destroyed a third of its privately owned guns.

Many observers continue to cite the official tally of guns destroyed by smelting in the Australian National Firearms Buyback as 659,940 newly prohibited weapons (Australia 2002). Yet the actual number of private weapons destroyed is now estimated at well over one million. As outlined in the essay by Rebecca Peters (in this volume), in the late 1990s all Australian states and territories agreed to new uniform legislation, the primary declared purpose of which was to reduce the risk of mass shootings. Owner licensing was tightened to require proof of “genuine reason” to possess a gun; the sale and transfer of

Philip Alpers is an adjunct associate professor at the Sydney School of Public Health, the University of Sydney.

firearms was limited to licensed dealers; rapid-fire rifles and shotguns were banned, bought back, and destroyed; and remaining firearms were registered to uniform national standards (Australia 1996). Two nationwide, federally funded gun buybacks made the headlines, but until now the number of additional, voluntary, and unrecompensed surrenders for destruction remained unquantified.

In the seven years up to January 1988 and before the Port Arthur shootings in 1996, six gun massacres (five or more victims shot dead) had already claimed the lives of 40 Australians (Chapman, Alpers, et al. 2006). According to articles in the print media published during the twenty-four years that followed, we know that 38 state, territory, and federal firearm amnesties ran for a minimum combined total of 3,062 weeks. From the reports in which numbers were published, a total of 948,388 firearms were surrendered to police for destruction. Of these, 67,488 (7.1%) were collected before the federal long-gun buyback which followed the 1996 Port Arthur tragedy. In the 1996–97 National Firearms Buyback of rapid-fire long guns (mainly semi-automatic rifles but also self-loading and pump-action shotguns) and in the 2003 National Handgun Buyback which followed, Australians gave up for destruction 728,667 newly prohibited firearms in return for market-value compensation.

Having measured the scale of the Australian experiment with more accuracy, I have found that at least 219,721 additional firearms were surrendered for destruction—a number which until now has been untallied and largely unrecognized. Although the Australian initiative was most often described as a “buyback” in which gun owners received cash compensation, of all the weapons handed in for destruction since 1988, nearly one in four yielded no financial return to its owner (Alpers and Wilson 2013). Such was the swing in public opinion that large numbers of gun owners sent lawfully held firearms to the smelter, even when there was no obligation to do so.

This tally of just under a million weapons destroyed is conservative. In published reports of 20 gun amnesties we found no count of firearms collected and so were unable to include the numbers handed in for destruction (Alpers and Wilson 2013). In addition, many firearms seized by police and destroyed, for example by court order, are not included in amnesty totals. Two small “weapon” amnesties included non-firearms in their published totals without separation. Taking into account these uncertainties, it seems likely that Australia collected and destroyed well over a million firearms—

that is, between five and six firearms per 100 people. A commonly accepted estimate of the number of firearms in Australia at the time of the Port Arthur shootings is 3.2 million (Reuter and Mouzos 2003, 130). This suggests that post-massacre destruction efforts reduced the national stock of firearms by one-third. If we accept a frequently cited estimate of 270 million privately owned guns in the United States (Karp 2007, 47), a similar effort in that country would require the destruction of 90 million firearms.

This is not to say that such a massive reduction in the national stockpile could be effected in the United States. Because no two jurisdictions share the same problems or legislative or social settings—let alone attitudes—none can claim to have discovered the magic bullet. The Australian experience also suggests that a reduction in the availability of firearms might only be temporary, as removal of several types of newly banned firearms was followed by a surge of replacement buying.

Australia no longer has a firearm manufacturing industry. Gun dealers source their stock from overseas—mainly from the United States. In the year of the main Australian buyback, firearm imports briefly doubled as owners replaced their banned, surrendered multi-shot rifles and shotguns with new single-shot replacements. But in the two years that followed, annual gun imports crashed to just 20 percent of that 1996–97 peak. For two years the trade remained stagnant and then began to recover. By mid-2012, following a steady ten-year upward trend in gun buying, Australians had restocked the national arsenal of private guns to pre-Port Arthur levels. They did this by importing 1,055,082 firearms, an average of 43,961 each year since destruction programs began (Alpers, Wilson, and Rossetti 2013) (this total excludes 52,608 handguns imported for law enforcement and other non-civilian use). To this should be added the national stock of illicit firearms, which by definition cannot be counted. Although claims of large-scale gun smuggling to Australia are common, almost all such stories are evidence-free. But a recent study from the Australian Institute of Criminology, recounting a cross-governmental effort to trace firearms seized in crime, confirms a more influential source. Smuggled guns represent a much smaller proportion of recovered illicit firearms in this island nation than do legally imported firearms that were subsequently diverted or lost to the black market by lawful owners (Bricknell 2012, 41–43).

A range of public health benefits has been both observed and disputed. As policy changes took effect in the wake of the Port Arthur massacre, the risk of

an Australian dying by gunshot fell more than 50 percent and stayed at that level (Alpers, Wilson, and Rossetti 2013a). The number of gun homicides fell from 69 in 1996 (this total excludes the 35 victims shot dead at Port Arthur) to 30 in 2012 (Alpers, Wilson, and Rossetti 2013b). In the decade before the country's change of direction, 100 people died in eleven mass shootings (Chapman, Alpers, et al. 2006). Following the 1996 announcement of legislation specifically designed to reduce gun massacres, Australia has seen no more mass shootings. Firearm-related deaths that attract smaller headlines still occur, yet the national rate of gun homicide—which before Port Arthur was already one-fifteenth the U.S. rate—has now plunged to 0.13 per 100,000, or 27 times lower than that of the United States (Alpers, Wilson, and Rossetti 2013c).

The most comprehensive impact study of the Australian interventions found that “the buyback led to a drop in the firearm suicide rates of almost 80%, with no significant effect on non-firearm death rates. The effect on firearm homicides is of similar magnitude but is less precise.” Important for any discussion of causality, the authors also found that “the largest falls in firearm deaths occurred in states where more firearms were bought back.” This study went on to cite survey results to suggest that Australia had nearly halved its number of gun-owning households and then estimated that, by withdrawing firearms on such a scale, this nation of nearly 23 million people had saved itself 200 deaths by gunshot and US\$500 million in costs each year (Leigh and Neill 2010).

The evidence is clear that following gun law reform, Australians became many times less likely to be killed with a firearm (Alpers, Wilson, and Rossetti 2013a). That said, causality and standards of proof are as contentious in Australia as in any community polarized by the gun debate. Central to the differing interpretations is that Australia's gun death rates were already declining prior to its major public health interventions. Taking this into account, one study concluded nevertheless that “the rates per 100,000 of total firearm deaths, firearm homicides and firearm suicides all at least doubled their existing rates of decline after the revised gun laws” (Chapman, Alpers, et al. 2006).

A countervailing study interpreted essentially the same empirical findings to conclude the opposite, namely that “the gun buy-back and restrictive legislative changes had no influence on firearm homicide in Australia” (Baker and McPhedran 2007). In an article for the National Rifle Association of America, one of the coauthors of this study was quoted as saying “The findings were

clear . . . the policy has made no difference. There was a trend of declining deaths which has continued” (Smith 2007). A third paper relied on different tests to find that Australia’s new gun laws “did not have any large effects on reducing firearm homicide or suicide rates” (Lee and Suardi 2010). These two “little or no effect” studies and their methodology have since been heavily criticized (Neill and Leigh 2007, Hemenway 2009, 2011).

To date, one conclusion has gone uncontested. In finding “no evidence of substitution effect for suicides or homicides,” the initial study of impacts showed that Australia’s interventions were not followed by displacement from firearms to other methods (Chapman, Alpers, et al. 2006).

The Australian experience, catalyzed by 35 deaths in a single shooting spree, marked a national sea change in attitudes, both to firearms and to those who own them. Led by a conservative government, Australians saw that, beliefs and fears aside, death and injury by gunshot could be as amenable to public health intervention as were motor vehicle-related deaths, drunk driving, tobacco-related disease, and the spread of HIV/AIDS. The obstructions to firearm injury prevention are nothing new to public health. An industry and its self-interest groups focused on denial, the propagation of fear, and quasi-religious objections—we’ve seen it all before. But the future is also here to see (Mozaffarian, Hemenway, and Ludwig 2013). With gun violence, as with HIV/AIDS, waste-of-time notions such as evil, blame, and retribution can with time be sluiced away to allow long-proven public health procedures. Given the opportunity and the effort, gun injury prevention can save lives as effectively as restricting access to rocket-propelled grenades and explosives or mandating child-safe lids on bottles of poison.

ACKNOWLEDGMENTS

The author thanks Belinda Gardner and Amélie Rossetti, skilled and willing researchers at GunPolicy.org.

REFERENCES

Alpers, Philip, and Marcus Wilson. 2013. *Australian Firearm Amnesty, Buyback and Destruction Totals: Official Tallies and Media-reported Numbers, 1987–2012*. Sydney: GunPolicy.org, Sydney School of Public Health. <http://www.gunpolicy.org>

- /documents/doc_download/5337-alpers-australian-firearm-amnesty-buyback-and-destruction-totals.
- Alpers, Philip, Marcus Wilson, and Amélie Rossetti. 2013. *Guns in Australia: Facts, Figures and Firearm Law (Imports)*. Sydney: GunPolicy.org, Sydney School of Public Health. http://www.gunpolicy.org/firearms/compareyears/10/firearm_imports_number.
- Alpers, Philip, Marcus Wilson, and Amélie Rossetti. 2013a. *Guns in Australia: Facts, Figures and Firearm Law (Total Number of Gun Deaths)*. Sydney: GunPolicy.org, Sydney School of Public Health. http://www.gunpolicy.org/firearms/compareyears/10/total_number_of_gun_deaths.
- Alpers, Philip, Marcus Wilson, and Amélie Rossetti. 2013b. *Guns in Australia: Facts, Figures and Firearm Law (Number of Gun Homicides)*. Sydney: GunPolicy.org, Sydney School of Public Health. http://www.gunpolicy.org/firearms/compareyears/10/number_of_gun_homicides.
- Alpers, Philip, Marcus Wilson, and Amélie Rossetti. 2013c. *Guns in Australia: Facts, Figures and Firearm Law (Compare Australia: Rate of Gun Homicide)*. Sydney: Gun Policy.org, Sydney School of Public Health. http://www.gunpolicy.org/firearms/compare/10/rate_of_gun_homicide/31,66,69,87,91,128,178,192,194.
- Australia. 1996. *Resolutions from a Special Firearms Meeting*. Canberra: Australian Police Ministers Council.
- Australia. 2002. *The Australian Firearms Buyback: Tally for Number of Firearms Collected and Compensation Paid*. Canberra: Commonwealth Attorney-General's Department.
- Baker, Jeanine, and Samara McPhedran. 2007. Gun Laws and Sudden Death: Did the Australian Firearms Legislation of 1996 Make a Difference? *British Journal of Criminology* 47:455–69.
- Bricknell, Samantha. 2012. *Firearm Trafficking and Serious and Organised Crime Gangs*. Canberra: Australian Institute of Criminology Research and Public Policy Series 116.
- Chapman, Simon, Philip Alpers, Kingsley Agho, and Michael Jones. 2006. Australia's 1996 Gun Law Reforms: Faster Falls in Firearm Deaths, Firearm Suicides and a Decade without Mass Shootings. *Injury Prevention* 12:365–72.
- Hemenway, David. 2009. How to Find Nothing. *Journal of Public Health Policy* 30:260–68.
- Hemenway, David. 2011. The Australian Gun Buyback. Boston: Harvard Injury Control Research Center *Bulletins* 4.
- Karp, Aaron. 2007. Completing the Count: Civilian Firearms. In *Small Arms Survey 2007: Guns and the City*, 38–71. Cambridge: Cambridge University Press.
- Lee, Wang-Sheng, and Sandy Suardi. 2010. The Australian Firearms Buyback and Its Effect on Gun Deaths. *Contemporary Economic Policy* 28:65–79.
- Leigh, Andrew, and Christine Neill. 2010. Do Gun Buybacks Save Lives? Evidence from Panel Data. *American Law and Economics Review* 12(2):462–508.
- Mozaffarian, Dariush, David Hemenway, and David S. Ludwig. 2013. Curbing Gun Violence: Lessons from Public Health Successes. *Journal of the American Medical Association* 1–2. Published online: Jan. 7, 2013. doi:10.1001/jama.2013.38
- Neill, Christine, and Andrew Leigh. 2007. *Weak Tests and Strong Conclusions: A Re-analysis of Gun Deaths and the Australian Firearms Buyback*. Canberra: The

- Australian National University, Centre for Economic Policy Research. *EPS Journal*, Discussion Paper 555.
- Reuter, Peter, and Jenny Mouzos. 2003. Australia: A Massive Buyback of Low-risk Guns. In *Evaluating Gun Policy: Effects on Crime and Violence*, edited by Jens Ludwig and Philip J. Cook. Washington, DC: The Brookings Institution.
- Smith, Blaine. 2007. Dim Bulb! *America's 1st Freedom*. Fairfax, VA: National Rifle Association of America, 8(2):34-54.