Has the Decline of Violence Reversed since The Better Angels of Our Nature was Written?

Steven Pinker

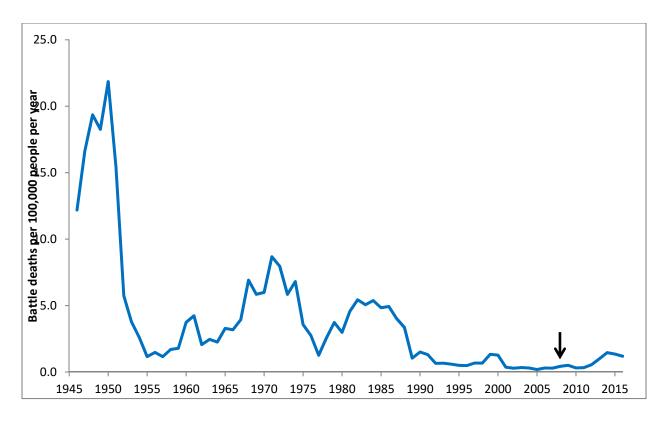
Many people, having read news about the civil war in Syria, the annexation of Ukraine by Russia, the rise of ISIS, police shootings in the United States, and other violent events have asked me whether the decline of violence has gone into reverse since *The Better Angels of Our Nature* was written. The question is a symptom of the same statistical misconceptions that led me to write *Better Angels* in the first place. People always think that violence has increased, because they reason from memorable examples rather than from global data. If at any time you list the most violent places in the world, then you'll discover that yes, it's violent. That says nothing about rates or trends in violence. It's only by looking at data on the world as a whole that you get an accurate picture of the trends.

Here are some graphs which show the most recent data available as of 2017 on several categories of violence covered in *Better Angels*. The data analyses in the book were closed in September 2010, and thus included statistics no later than the preceding year, 2009. In all the graphs below an arrow points to the last year plotted when the book first went to press.

War

If we use the standard definition of "war"—a state-based armed-conflict with more than 1,000 battle deaths in a year—then there have been zero interstate wars (one country fighting another) in the years since Better Angels was published. That, of course, means that there were no great-power wars. So the Long Peace (which applies to interstate and great-power wars, the most destructive kinds of war) is still in place.

The number of battle deaths in these conflicts did increase from 0.3 per 100,000 people per year in 2011 to 1.5 in 2014, before coming back down to 1.2 in 2016, almost entirely due to the civil war in Syria. But the global rate still does not come anywhere close to the rate of death in past decades:



Battle deaths, 1946-2016

Sources: Adapted from Human Security Report Project 2007. 1946-1988: *Peace Research Institute of Oslo Battle Deaths Dataset* 1946–2008, Lacina & Gleditsch 2005. 1989-2015: *UCDP Battle-Related Deaths Dataset version 5.0*, Uppsala Conflict Data Program 2017, Melander, Pettersson, & Themnér 2016, updated with information from Therese Pettersson and Sam Taub of UCDP. World population figures: 1950–2016, US Census Bureau; 1946–49, McEvedy & Jones 1978, with adjustments. The arrow points to 2008, the last year plotted in Fig. 6–2 in the book.

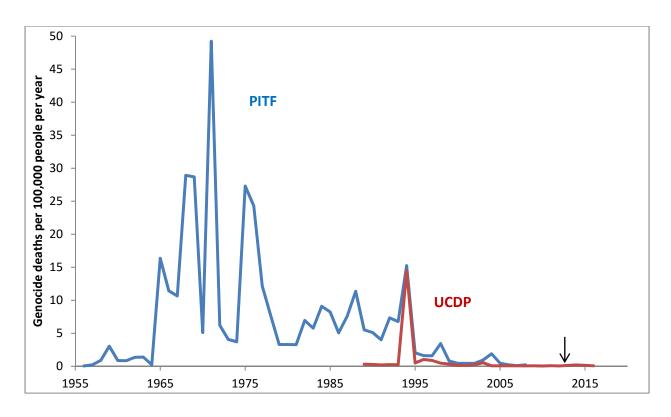
Followers of the news in the mid-2010s might have expected the Syrian carnage to have erased all of the historic progress of the preceding decades. That's because they forget the many civil wars that ended without fanfare since 2009, including Angola, Chad, India, Iran, Peru, and Sri Lanka, and to forget earlier ones that had massive death tolls, such as the wars in Indochina (1946–54, 500,000 deaths), India (1946–48, a million deaths), China (1946–50, a million deaths), Sudan (1956–72, 500,000 deaths, and 1983–2002, a million deaths), Uganda (1971–78, 500,000 deaths), Ethiopia (1974–91, 750,000 deaths), Angola (1975–2002, a million deaths), and Mozambique (1981–92, 500,000 deaths).

The geography of war also continues to shrink. In 2016 a peace agreement between the government of Colombia and Marxist FARC guerrillas ended the last active political armed conflict in the Western Hemisphere, and the last remnant of the Cold War.

This is a momentous change from just decades before. In Guatemala, El Salvador, and Peru, as in Colombia, leftist guerillas battled American-backed governments, and in Nicaragua it went the other way around, in conflicts that collectively killed more than 650,000 people. The transition of an entire hemisphere to peace follows the path of other large regions of the world. Western Europe's bloody centuries of warfare, culminating in the two World Wars, have given way to more than seven decades of peace. In East Asia, the wars of the mid-twentieth century took millions of lives—in Japan's conquests, the Chinese Civil War, and the wars in Korea and Vietnam. Yet despite serious political disputes, East and Southeast Asia today are almost entirely free from active combat. The world's wars are now concentrated almost exclusively in a zone stretching from Nigeria to Pakistan, an area containing less than a sixth of the world's population.

Genocide

The Uppsala Conflict Data Project has a category called "One-Sided Violence" which includes all incidents in which organized armed forces kill substantial numbers of unarmed civilians; this includes anything that anyone would want to call a genocide, together with other atrocities and war crimes. Since 2009 there has been an uptick in deaths from one-sided violence. It includes at least 4,500 Yazidis, Christians, and Shiite civilians killed by the Islamic State; 5,000 killed by Boko Haram in Nigeria, Cameroon, and Chad; and 1,750 killed by Muslim and Christian militias in the Central African Republic.² Still, the graph shows that this increase is barely noticeable compared to the decline since 1989, when the dataset begins. And of course the trajectory of genocide in the 20th century (Figure 6-7) shows that even the 1994 peak (from Rwanda) is a tiny fraction of the levels from the preceding decades. One can never use the word "fortunately" in connection with the mass killing of innocents, but the numbers in the 21st century are a fraction of those in earlier decades.

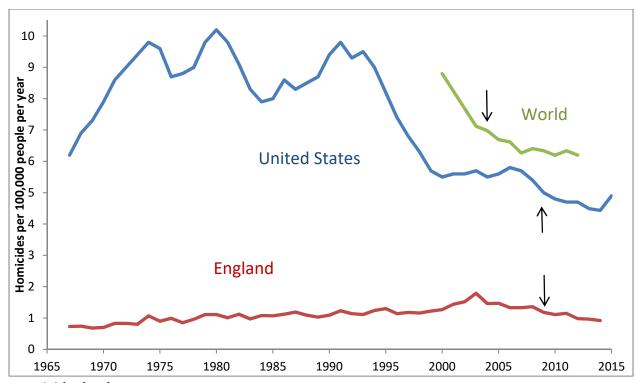


Genocide deaths, 1956-2016

Sources: PITF, 1955–2008: *Political Instability Task Force State Failure Problem Set*, 1955–2008, Marshall, Gurr, & Harff 2009; Center for Systemic Peace 2015. Calculations described in Pinker 2011, p. 338. UCDP, 1989–2016: *UCDP One-Sided Violence Dataset v. 2.5-2016*, Melander, et al. 2016; Uppsala Conflict Data Program 2017, "High Fatality" estimates, updated with data provided by Sam Taub of UCDP, scaled by world population figures from US Census Bureau. The arrow points to 2008, the last year plotted in Fig. 6–8.

Homicide

Battle deaths, in any case, are a misleading indicator of worldwide violence, because except for World Wars, many more people are killed in homicides than in wars. (In 2015, for example, there were 437,000 homicides worldwide, compared to 97,000 verified battle deaths.) In most countries the homicide rate has continued the Great Crime Decline that began in the 1990s. Here are the recent data for the US, England, and the world as of 2015:



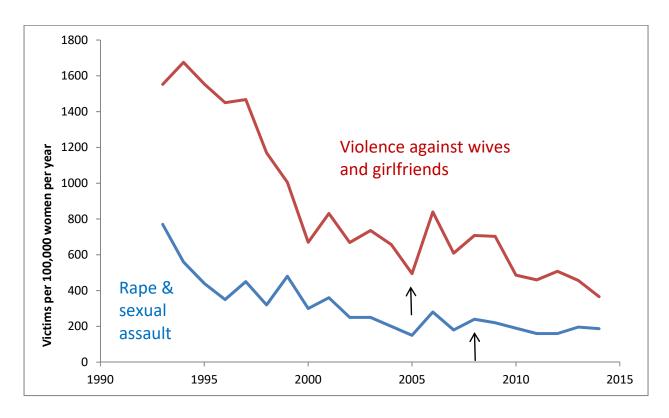
Homicide deaths, 1967-2015

Sources: US: FBI Uniform Crime Reports, https://ucr.fbi.gov/ and Federal Bureau of Investigation 2016. England (data include Wales): Office for National Statistics 2017. World, 2000: Krug, Dahlberg, Mercy, Zwi, & Lozano 2002. World, 2003–2011: United Nations Economic and Social Council 2014, Fig. 1; the percentages were converted to homicide rates by setting the 2012 rate at 6.2, the estimate reported in United Nations Office on Drugs and Crime 2014, p. 12. The arrows point to the most recent years plotted in the book for the world (2004, Fig. 3–9), US (2009, Fig. 3–18), and England (2009, Fig. 3–19).

Even the parts of the world with that are notoriously dangerous have seen declines in their homicide rates. Since *Better Angels* was published, much has been made of the horrific violence in Juarez and some other parts of Mexico. But one should keep in mind that historically, the rates in Mexico were even higher: they fell from 50.2 per 100,000 in 1943 to 10.4 in 2004, before bouncing up to 22.9 in 2013 and falling back to 12.8 in 2011. Other countries that are famous for their violence have also enjoyed steep declines, including Russia (from 19 per 100,000 in 2004 to 9.2 in 2012), South Africa (from 60.0 in 1995 to 31 in 2012), and Colombia (from 79.3 in 1991 to 25.9 in 2015).³ Among the 88 countries with reliable data, no fewer than 67 have seen a decline in the past 15 years.⁴

Violence Against Women

According to another media-driven moral panic, the United States is in the middle of a rape epidemic, particularly on college campuses. But this is based on bogus statistics; the latest FBI data show that rates of rape in the US have continued to decline, as have rates of domestic violence:



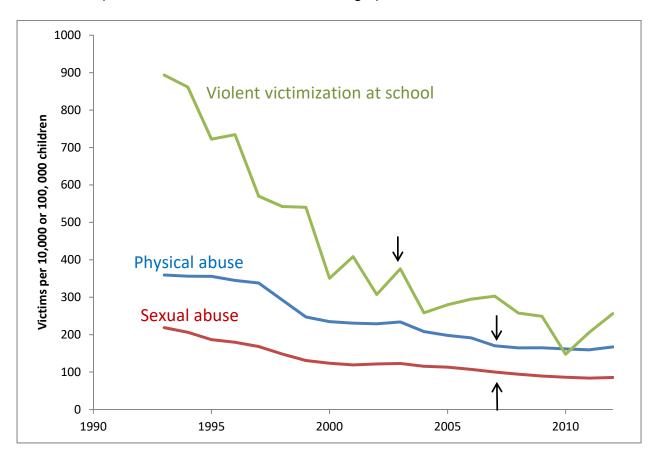
Rape and domestic violence, US, 1993-2014

Source: U.S. Bureau of Justice Statistics, *National Crime Victimization Survey* Victimization Analysis Tool, http://www.bjs.gov/index.cfm?ty=nvat, with additional data provided by Jennifer Truman of BJS. The gray line represents "Intimate partner violence" with female victims. The arrows point to 2005, the last year plotted in Figure 7–13, and 2008, the last year plotted in Figure 7–10, of Pinker 2011,

Worldwide data on sexual violence do not exist, but according to a report released in 2014, "The United Nations' top adviser on sexual violence in conflict, Zainab Bangura, said Thursday the last few years have seen 'a political momentum that is unprecedented' on the issue. ...Bangura catalogued high points of progress, including a U.N. declaration last year that 140 member states have since signed committing to end the use of rape in conflict, a similar declaration last year by the G8, and Democratic Republic of Congo President Joseph Kabila's announcement in October that he would appoint a special adviser on sexual violence for the conflict-destabilized eastern African region....[According to Bangura,] 'The foundation laid by various Security Council resolutions gave us the weapon and the opportunity to engage leaders... I think we've broken the backbone of it.'"

Violence Against Children

An equally virulent panic surrounds violence against children, including bullying, cyberbullying, and sexual victimization. But according to a 2014 literature review by David Finkelhor and his colleagues, "Of 50 trends in exposure examined, there were 27 significant declines and no significant increases between 2003 and 2011. Declines were particularly large for assault victimization, bullying, and sexual victimization. There were also significant declines in the perpetration of violence and property crime. For the recession period between 2008 and 2011, there were 11 significant declines and no increases for 50 specific trends examined. Dating violence declined, as did one form of sexual victimization and some forms of indirect exposure." The trends are visible in this graph:

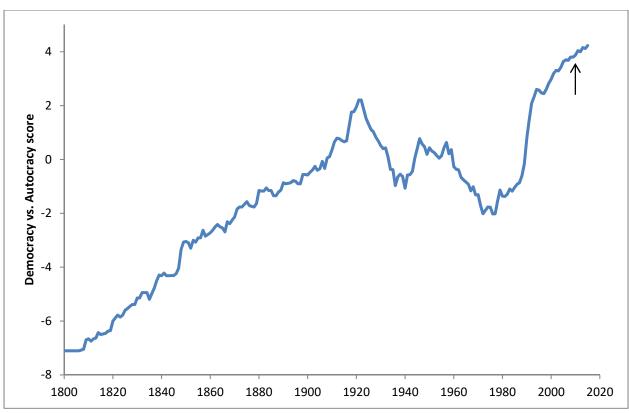


Victimization of children, US, 1993-2012

Sources: Physical and Sexual abuse (mainly by caregivers): National Child Abuse and Neglect Data System, http://www.ndacan.cornell.edu/, analyzed by Finkelhor 2014; Finkelhor, Shattuck, Turner, & Hamby 2014. Victimization at school: Bureau of Justice Statistics, National Crime Victimization Survey Victimization Analysis Tool, , http://www.bjs.gov/index.cfm?ty=nvat. Rates for physical and sexual abuse are per 100,000 children younger than 18. Rates for violent victimization at school are per 10,000 children age 12–17. The arrows point to 2003 and 2007, the last years plotted in Fig. 7–22 and Fig. 7–20 in Pinker 2011, respectively.

Democracy

According to another popular meme—again based on a few examples rather than global data—democracy is in retreat. The data say otherwise. The Polity Project at the University of Maryland uses a fixed set of criteria to assign a score between -10 and 10 to every country in every year indicating how autocratic or democratic it is, focusing on citizens' ability to express political preferences, constraints on the power of the executive, and a guarantee of civil liberties. The sum for the world since 1800, spanning the three waves of democratization, is shown here:

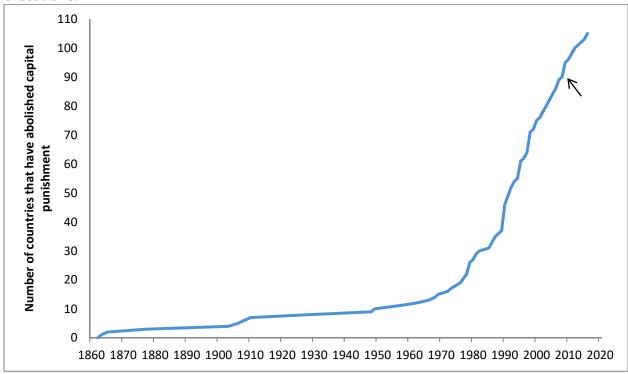


Democracy versus autocracy, 1800-2015

Source: HumanProgress, http://humanprogress.org/f1/2560, based on Polity IV Annual Time-Series, 1800-2015, Marshall, et al. 2016. Scores are summed over sovereign states with a population greater than 500,000, and range from -10 for a complete autocracy to 10 for a perfect democracy. The arrow points to 2008, the last year plotted in Fig. 5–23 of Pinker 2011.

Capital Punishment

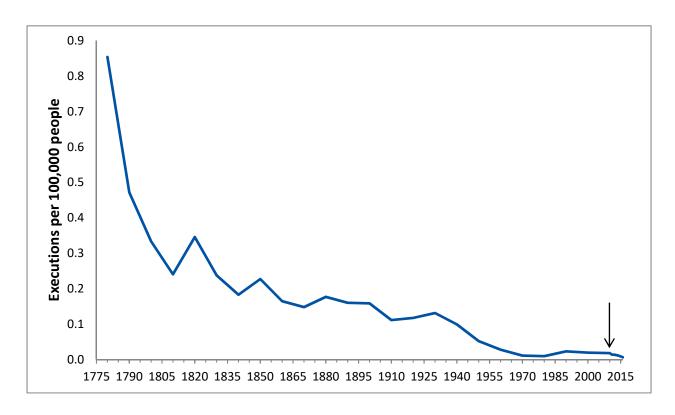
Finally, capital punishment continues its long-term plunge. In the past 35 years, between two and three nations have abolished the death penalty *every year*, and today only about a fifth of the world's countries have the death penalty and only about a tenth actually carry out executions.



Death penalty abolitions, 1863-2016

Source: "Capital Punishment by Country: Abolition Chronology," *Wikipedia*, retrieved August 15, 2016. Several European countries abolished the death penalty in their mainland earlier than indicated here, but the time line records the last abolition in any territory under their jurisdiction. The arrow points to 2008, the last year plotted in Fig. 4–3.

Even in the United States, an outlier among Western democracies, the rate of execution has plummeted since publication of *Better Angels*:



If current trends continue. the death penalty will vanish from the face of the earth by 2026.

Concluding Remarks

If one bases one's beliefs about the state of the world on what one reads in the news, one's beliefs will be incorrect. This is not because of a conspiracy among journalists to hide or distort the truth. It's because of an interaction between the nature of news—it's about things that happen, particularly bad things—and the nature of human cognition. Forty years ago Daniel Kahneman and Amos Tversky showed that people base their estimates of risk on how easily they can recall examples from memory. As long as rates of violence have not fallen to zero, the news media will always have examples of violence to serve us. It's only by (1) counting the violent incidents, (2) scaling them by the number of opportunities for violence to occur, and (3) seeing how this ratio changes over time that one can get an objective sense of trends in violence. When one does this, one sees that global trends since the completion of *The Better Angels of Our Nature* show no reversal of the historical decline of violence, and in every case except the effects of the war in Syria, a continuation of the decline.

Center for Systemic Peace. 2015. Integrated network for societal conflict research data page. http://www.systemicpeace.org/inscr/inscr.htm

- Eisner, M. 2014. Reducing homicide by 50% in 30 years: Universal mechanisms and evidence-based public policy. Paper presented at the Global Strategies to Reduce Violence By 50% in the Next 30 Years.
- Federal Bureau of Investigation. 2016. Crime in the United States by volume and rate 1996-2015. https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s-2015/tables/table-1
- Finkelhor, D. 2014. *Trends in child welfare*. Paper presented at the Carsey Institute Policy Series.
- Finkelhor, D., Shattuck, A., Turner, H. A., & Hamby, S. L. 2014. Trends in children's exposure to violence, 2003-2011. *Journal of the American Medical Association Pediatrics*.
- Human Security Report Project. 2007. *Human security brief 2007*. Vancouver, BC: Human Security Report Project.
- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. eds. 2002. World report on violence and health. Geneva: World Health Organization.
- Lacina, B. & Gleditsch, N. P. 2005. Monitoring trends in global combat: A new dataset in battle deaths. *European Journal of Population*, *21*, 145-166.
- Marshall, M. G. 2016. Major episodes of political violence 1946-2015. http://www.systemicpeace.org/warlist/warlist.htm
- Marshall, M. G. & Gurr, T. R. 2014. Polity IV individual country regime trends, 1946-2013. http://www.systemicpeace.org/polity/polity4x.htm
- Marshall, M. G., Gurr, T. R., & Harff, B. 2009. PITF state failure problem set: Internal wars and failures of governance 1955-2008. Dataset and coding guidelines: Political Instability Task Force.
- Marshall, M. G., Gurr, T. R., & Jaggers, K. 2016. *Polity IV project: Political regime characteristics and transitions, 1800-2015, dataset users' manual.* Vienna, VA: Center for Systemic Peace. http://systemicpeace.org/inscrdata.html.
- McEvedy, C. & Jones, R. 1978. Atlas of world population history. London: Allen Lane.
- Melander, E., Pettersson, T., & Themnér, L. 2016. Organized violence, 1989-2015. *Journal of Peace Research*, 53, 727-742.
- Office for National Statistics. 2017. Homicide.

 https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/compendium/focusonviolentcrimeandsexualoffences/yearendingmarch2016/homicide

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- Pinker, S. 2011. The better angels of our nature: Why violence has declined. New York: Viking. United Nations Economic and Social Council. 2014. World crime trends and emerging issues and responses in the field of crime prevention and criminal justice: Note by the secretariat.
- United Nations Office on Drugs and Crime. 2013. Global study on homicide. https://www.unodc.org/gsh/en/data.html
- United Nations Office on Drugs and Crime. 2014. *Global study on homicide 2013*. Vienna: United Nations.
- Uppsala Conflict Data Program. 2017. UCDP datasets. http://www.pcr.uu.se/research/ucdp/datasets/

¹ Center for Systemic Peace, Marshall 2016, http://www.systemicpeace.org/warlist/warlist.htm, total for 32 episodes of political violence in the Americas since 1945, excluding 9/11 and the Mexico drug war.

- ² Numbers are for 2014 and 2015, the most recent years for which a breakdown is available. Though these are the "high" estimates in the UCDP One-Sided Violence Dataset version 1.4–2015 (http://www.pcr.uu.se/research/ucdp/datasets/ucdp_one-sided_violence_dataset/), the numbers tally only the verified deaths, and should be considered conservative lower bounds.
- ³ Homicide declines in Colombia, South Africa, & other countries: Eisner 2014, p. 23. Russia: United Nations Office on Drugs and Crime 2014, p. 28.
- ⁴ Homicide declined in most nations: United Nations Office on Drugs and Crime 2013, 2014, https://www.unodc.org/gsh/en/data.html.
- ⁵ Polity Project IV: Center for Systemic Peace 2015; Marshall & Gurr 2014; Marshall, Gurr, & Jaggers 2016.