Violence, Nurture, and Survival Machines

Ioan-Alexandru Gradinaru
Alexandru Ioan Cuza University of Iasi

Abstract

My paper focuses on Steven Pinker's argument concerning the decline of violence in human societies. In his widely discussed book – *The Better Angels of Our Nature*: *Why Violence Has Declined* – Pinker tries to provide sufficient evidence for the fact that the belief according to which violence is increasing in contemporary societies cannot be backed by statistical data. The illusion is perpetuated by multiple factors, among which media biases constitute a central one. A careful examination of the history of violence shows, in fact, a significant decrease in time. Several historical forces have contributed to this (the modern nation-state, the process of feminization, the growth of commerce, the emergence of cosmopolitanism, the growing power of reason), while four inner mechanisms are also at work (moral sense, self-control, empathy and reason). Moreover, this progressive stance is in danger of being held back by destructive elements such as dominance, predatory violence or the need for revenge.

Keywords: violence, evolutionism, Hobbesian trap, cultural software, reason

Introduction

With every publication, leading Harvard psychologist Steven Pinker tries to produce a certain form of symbolic dismantling in the mind of his readers. This doctrine of intellectual shock – to paraphrase Naomi Klein (2007) – has the undisputed advantage of provoking strong reactions and of creating meaningful debates. In *The Better Angels of Our Nature: Why Violence Has Declined* (2011), Pinker asserts the unthinkable (at least, unthinkable for some intellectuals): an overview of human history shows a significant decline in violence, corroborated with a tendency towards peace, collaboration and conflict solving. The present times, as

dangerous as they may seem, are actually times of peace, and this decline is perceivable in many areas of human behaviour (war, justice, minorities, animals, racial problems). When it comes to finding an explanation for this decline, Pinker points out towards five *historical forces* (in his own coinage), namely the *Leviathan*, the increase of commerce, the process of feminization, the emergence of cosmopolitanism and the growing power of reason. These forces do not stand alone in this terrible fight to reduce the cycles of violence, but are supported by four inner mechanisms (coined "four better angels" by Pinker), namely empathy, moral sense, self-control and, again, reason. These mechanisms, by the way, received strong support from the cultural software of humanity (law, religion, myths, founding stories). But, Pinker says, there is also a big danger lurking in the dark: the influence of our inner demons that could trigger violence outbursts at any given moment. These demons (Pinker continues his analogy) are our tendency towards practical violence (or predatory violence), domination, the urge of revenge, sadism and the overcoming power of ideology.

The revolutions of rights produced substantial change in modern societies. As the author argues, each revolution led to the decrease of certain patterns of violence. For instance, the civil rights movements proved decisive in the decline of lynching and racist crimes. These movements re-shaped the public understanding of the others and created a frame for social inclusion. The women revolution resulted in the decline of rape rates and domestic abuse, while the discussions concerning the rights of children produced significant progress in terms of reducing the rates of violent behaviour such as spanking or bullying. Moreover, starting with the civil rights movements, the revolution of sexual minorities achieved not only a higher degree of social acceptance, but also the decriminalization of homosexuality in many countries. The last one is the revolution of animal rights. People acknowledged the fact that cruelty and severe punishment are not only uncalled for, but also terrorizing and sadistic. The all-encompassing humanitarian revolution (Pinker 2011, 177-184) created new cultural frames that helped eliminate superstitious killing (against witches or blasphemers, for examples), dismissed

slavery and despotism and vastly contributed to the increase of social empathy. The human life had to be respected and the progress of civilization had to be taken even further. If in the past it would have been honourable and elegant to engage in a physical fight, today this kind of behaviour "is the sign of a boor, a symptom of impulse control disorder, a ticket to anger management therapy" (Pinker 2011, 25).

1. Taming the Beast. Survival Machines and the Decline of Violence

Humans are survival machines. In our species, like in any other cases, violence has been a key mean of survival. This translates into the simple idea that violence is biologically rooted. But, of course, the biological perspective obviously doesn't tell the whole story. For instance, how much could cultural frames help societies in keeping things under control? How much violence should we keep in our society systems? Could we live without it or should we remember that the spectre of wars is always around? Moreover, how can we upgrade our educational modules concerning violence? First, as Pinker points out "Anyone who has ever seen a hawk tear apart a starling, a swarm of biting insects torment a horse, or the AIDS virus slowly kill a man has firsthand acquaintance with the ways that survival machines callously exploit other survival machines. In much of the living world, violence is simply the default, something that needs no further explanation. When the victims are members of other species, we call the aggressors predators or parasites. But the victims can also be members of the same species. Infanticide, siblicide, cannibalism, rape and lethal combat have been documented in many kinds of animals." (2011, 32)

This *default* status that violence has for the vast majority of beings in the living world is a fact. But do we have to accept it as such in our world, too? Humans have developed ingenious tools for the reduction of violence (such as the principles of morality) and strived for centuries to eliminate the causes of war and conflict. In fact, if we look at the intellectual history of Europe, we see movements like the Enlightenment which were fundamentally preoccupied with world peace.

Thomas Hobbes did not share the optimism of other thinkers, and offered us a grim image of the world. For the evolutionary theories of today, Hobbes is not a pessimist, but a realist who tells the truth about the world using the vocabulary available in his time. As Pinker put it, "Hobbes considered competition to be an unavoidable consequence of agents' pursuing their interests. Today we see that it is built into the evolutionary process. Survival machines that can elbow their competitors away from finite resources like food, water and desirable territory will out-reproduce those competitors, leaving the world with the survival machines that are best suited to such competition." (2011, 33)

The combination of evolutionary explanation schemata (genetic relatedness, parental investment, fitness) and game theory helps us understand better why our ancestors fought difficult wars and had slim chances of avoiding them. As John Tooby and Leda Cosmides claim (2010, 193), the use of violence helped individuals and groups remove obstacles to fitness promotion. Less resources meant harmful effects (bigger costs) for one group of people, and this was sufficient to start wars. The coalitional psychology that we study today has been built by selection factors. Morality, as Baumard, André and Sperber suggest (2013, 59), is a form of maximizing the benefits of the complex relationships between people. Usually, the members of a group that were collaborating less than the rest would be left out of the group, while the extremely altruistic members would get exploited. This entire picture, the authors say, looks like a classical bargain that leads to an agreement and, consequently, to a contract. Although it is not completely clear if morality resulted from a pure game of bargaining or it was boosted also by a certain sense of fairness, posited by Rawls (1971), we nevertheless notice how a new and important pathway was created in human emerging societies.

Pinker thinks that this type of progress slowly shaped the frame for the modern state, which had the uncontested advantage of controlling the use of legitimate force. Individuals and groups could not settle their dispute by direct fight, this time, and could not easily exploit other groups. The growth of commerce produced a double effect. On the one hand, it connected people from different spaces and cultures. This led

not only to exchanges of information and knowledge, but also to meaningful communication and, sometimes, mutual understanding. It is true, though, that Pinker doesn't insist too much on the negative aspect of intercultural meetings: not everything went smoothly when two distant cultures interacted, to say the least. On the other hand, the value of a person or of a group of persons grew because now the use of violence against the other created significant damage to the economic balance: a living person can and probably would produce something, while an injured one would not. The development of commerce is directly related to cosmopolitanism, the driving force behind the triad *knowledge of the other – empathy for the other – acceptance of the other*. The progress in transport and media extended our grasp of foreign peoples and of their rituals and behaviours. For Pinker, a close examination of human history shows that, in spite of the natural scepticism, reason became more and more relevant as a tool for solving problems and dissolving conflicts. By calculating the consequences of our actions, we became aware of the dangers of repeated violence and of the possibilities of mutually beneficial agreement. These outer, historical forces rhyme with inner mechanisms such as empathy, self-control or moral sense. The happy output is, for instance, the fact that for long periods of time conflicts are rare, and we get lower rates of killings and fighting. The interval from 1945 until today represents, in Pinker's own terms, a form of *Long Peace*, namely a situation in which the mighty political powers of the planet wisely avoid major confrontations.

So why, then, we have the perception of our time as a violent one? Here, the answer has to be found mainly by examining the tactics of contemporary media. Pinker cites Barbara Tuchman (1978, xviii) and her well-known "law" that states that reported violence is multiple times bigger than the actual facts. The salience of stimuli makes people stay tuned to the "breaking news" sequences and is, of course, lucrative for the management. To this we have to add the politics of fear, usually deployed by cunning agents when violent acts occur. I wonder if self-control is so much different from reason so that Pinker's option to assign two categories instead of one would be

acceptable. Apart from our habitude to use these different categories, I am not sure whether they are, in fact, two different descriptions of a single object, namely the activity of the prefrontal cortex (which also includes planning, making decisions or making evaluations). In an empirical depiction, self-control ensures that we, humans, do not (always) give in to our impulses and there is a form of inhibitory resistance to the usual course of action. For instance, if someone offends me, my immediate reaction would be to strike back physically and get my revenge on the spot. Self-control tools make me realize that this hasty action may not be appropriate and may involve future costs. The work of reason, Pinker claims, consists in the enlargement of our world perspective. The mechanisms of judgement help us see the wider picture and help us understand why our own preoccupations are small comparing to what really matters. If we think in a more detailed manner, we see that reason is a powerful tool for both the technique of reframing and the process of calculus.

On the one other hand, I do not think that Pinker talks enough about the contextualization of violence. Take revenge, for instance. Pinker presents it as one of our inner demons, and I think there is sufficient evidence in world history for the terrifying consequences of revenge, especially when it is conducted on a large scale. He cites more than one example in which certain tribes carefully plan revenge and then execute it in the cruellest ways imaginable, sometimes torturing and killing all the members of the rival tribe. But, on the other hand, the use of violence (including revenge) has unfortunately proved to be one of the few ways to solve a difficult situation. Let's look at one famous example, given by Aleksandr Solzhenitsyn in his *The Gulag Archipelago*. Solzhenitsyn describes how, at first, well-educated political prisoners from the military had to face torture and humiliation not only from the guards but also from the gangs of criminals that were organized inside the camps (and which unofficially did the dirty work of the guards in exchange for privileges). These gangs cynically took care of themselves while harassing, marginalizing and even killing the others. They knew how to cut a deal with the guards, they knew how to get items that

could be redesigned as weapons, and they were not shy to use them. This situation went on and on for years, until some of the inmates had enough suffering and decided to strike back, assassinating villains and gang chieftains. That was the moment when the tables were turned, and the gangs knew that their prison colleagues meant business. Violence was the signal correctly interpreted by the delinquents: this time, they faced real opposition. Again, unfortunately, in such social frames violence was the only mean to send a clear message to the rival.

2. Hobbesian Traps

Violence could never be fully explained without mentioning Hobbesian traps. A constant presence in Pinker's books (1997, 2002), a Hobbesian trap is born out of fear and distrust: what if my enemy strikes? Shouldn't I strike first in order to nullify the threat? This can lead to an arms race and to the diminution of cooperation possibilities. Also, the escalation of fear usually results in actual conflict and massive manifestations of violence. As Pinker wonders, "How can intelligent agents extricate themselves from a Hobbesian trap? The most obvious way is through a policy of deterrence: Don't strike first; be strong enough to survive a first strike; and retaliate against any aggressor in kind. A credible deterrence policy can remove a competitor's incentive to invade for gain, since the cost imposed on him by retaliation would cancel out the anticipated spoils. And it removes his incentive to invade from fear, because of your commitment not to strike first and, more importantly, because of your reduced incentive to strike first, since deterrence reduces the need for preemption. The key to the deterrence policy, though, is the credibility of the threat that you will retaliate." (2011, 34)

In order to get out of the trap we can try two options. One of them consists in discouraging the aggressor and the second involves the creation of trust between parties. But, if we take a closer look at the traps, haven't we been already caught inside a devious one? Even if we reject the idea that humans are violent by nature, we must accept the fact that violence has been an important feature of our species throughout history. How can we hope for a society characterized by lower rates of

violence if this is such an intimate part of our history? To this, Adrian Raine responds without any shadow of uncertainty, asserting that "biology is not destiny. We can unlock the causes of crime with a set of biosocial keys forged from a new generation of integrative interdisciplinary research combined with a public-health perspective" (2013, 10). Our selfish genes led to the development of violent behaviours that ensure their survival. Conversely, communities formulated moral codes that would prevent people from becoming deadly violent. But the cultural software incorporates the seeds of danger, also. It seems that the solution to the first trap opened the possibility of yet another trap: sets of ideas, practices or behaviours that increase the potential of violence. Unfortunately, history proved exactly that, and if we are to think about religious wars, political battles, cultural clashes or moral conflicts we get a lot of examples that illustrate our thesis.

Hate is probably strongly correlated with feelings of revenge or urges to attack that precede violent strikes. Tooby and Cosmides (2010, 194) consider hate, as well as anger, as "evolved computational programs". The angry person usually gets what he or she wants and maybe even more. But hate hasn't been only a nature-type element, but also a nurture-type element. For instance, a restrictive political code can easily find enemies and issue death sentences. A totalitarian regime quickly identifies its opponents and marginalizes them or, even worse, turns the population completely against them. In these cases, the subsequent violent acts are not determined by biological roots, but by culturally filtered cues. Contemporary Europe now faces the challenge of the Hobbesian trap when it comes to acts of violence. The complexity of the matter calls, yet again, for carefully planned response.

3. Endangered Angels

I wonder if the better angels described by Pinker could become, in suitable contexts, actual demons. This would surely cast doubt upon Pinker's classification and would also bring the old puzzle of duality back. Reason, as discussed above, can help us develop a more comprehensive perspective of the world, but in the meantime can be a tool for discrimination or, as it

happened, for extermination. If you educate your people in the spirit of racist hierarchy, then it will be much easier to convince a youngster that killing a person is a reasonable deed. The same goes for a 20 year old boy who just got drafted in the army and who sees a deadly enemy in every political prisoner that he meets (again, a Solzhenitsyn-like example). He would probably feel little remorse, if any, if he had to kill the prisoner on the spot. In this case, killing seems reasonable. But what about numbers and cost efficiency? Isn't it reasonable to let a few thousand people die instead of spending huge sums of money for medical research and technologies in the situation of a rare disease? The latter would probably be a case of passive violence.

What about moral sense? Any society is built around moral codes that constitute a central part of children's upbringing. This process shapes the inner world of the child and creates a strong interpretive frame for events and social interactions. Suppose that such a child assists at the stoning of an adulterous person and sees the joy on the faces of the people that accomplished the task set by the punishment. Isn't it likely that stoning a person would get the attributes of "reasonable" and "morally necessary"? The child in our example might feel genuine feelings of empathy, but not with the victim. He would feel a strong connection with the members of his community and he would be happy to have taken part in righteous violence. Note that our child experienced empathy, evaluated a social situation, demonstrated self-control and knowledge of behavioural standards.

In recent history, not just one "angel" helped us reduce violence, but a useful and perhaps strange combination of them. In the days when homosexuality was a crime, the moral sense would get people to condemn gay behaviour. What probably turned the tables – beyond the work done by activists – was the increasing empathy for fellow members of the same communities. A gay man has not been perceived anymore as an ill person in need of treatment, but as a person with similar cares, motives of joy or anxieties as a heterosexual one. The same goes for ethnic minorities or slavery. While the work done by empathy goes along the lines from the above case, reason steps in and reframes the whole situation: a slave is no longer a

dispensable tool, but a human being who has rights, who has to be freed and helped. Rawls's sense of fairness illuminates the fact that the difference of status between slave owners and slaves is artificial.

Pinker is right to assert that in the battle with the demons of predatory violence and dominance, self-control can sometimes prevail and make us go beyond our immediate ends and beyond our usually incessant quest for glory. But, in many cases, it is precisely the predator instinct and the love for power and prestige that drive a person towards a better niche. Much more difficult to handle is the binomial revenge – self-control. It took a new religion to alter things, but nowadays we keep on identifying with the harshness of retributive justice. Moreover, as Tooby and Cosmides put it, "natural selection favors the evolution of design features that enhance the ability to inflict costs". (2010, 196) It is understandable, then, that intelligence and good calculations skills can develop violent strategies in order to win.

One of the major stakes of the book is the nature – nurture debate. Pinker advises us to get rid of the trap of simplistic views such as the one that states that violence is rooted in our evolutionary trajectory and controlled or ruled out by cultural means. This "nurture solves nature" argument is not to be taken seriously, because it simplifies the matter in such a manner that it becomes unrecognizable. The decline of violence, he claims, is a function of both cultural and material factors. But is it really a decline?

This seems to be a key interrogation raised by Pinker's arguments. Many authors argued that what Pinker offers is just a presentation of the statistical data, an account given from a certain view point. First, such a standpoint entertains the false impression that we are moving closer to a utopian state of affairs in which conflicts will be reduced to a minimum, if not completely eliminated. Even if he repeatedly says that the current trend is not guaranteed, he seems to think, nevertheless, that we are moving in the right directions. This stance has been attacked from two different directions. Some scholars have pointed out to the "cover up" aspect of Pinker's theories, who seems to set aside easily the numerous conflicts

in which the US have been involved in the past decades. Moreover, colonial and imperialist attitudes are also left unscrutinised. On the other hand, we could bring on the situations of the twentieth century where death tolls were grievous, indeed. Is it right to focus mainly on rate (number of people who violently died per person)? Or should we think about absolute numbers (how many violent deaths can we count in the past century)?

Conclusions

Violence does not have just a single definition, and Pinker does not provide one either. He rather describes different forms of violence in societies and explores their patterns. Also, there could be more than just one logic of violence deployment. If we still are the survival machines that we have been for the past three hundred thousand years, isn't it reasonable to think that we would continue to use violence as a means to outcompete our enemies? Pinker claims that our current knowledge of the evolutionary roots of violence, rule out the hydraulic theories that received strong support from the writings of Freud. In my view, even if we do have suitable explanation of the evolutionary aspect of violence, we still need hydraulic theories in order to explain particular cases. The fact that, somehow, negative energy is accumulated in the system seems intuitive, and the same goes for the outbursts of violence that arise correspondingly. Pinker is right when he says that the decline in violence in our time is not at all guaranteed in the future. The clouds of scepticism are brought by the simple idea that "war is found throughout prehistory" (Tooby and Cosmides 2010, 191), and it doesn't seem to vanish. Actually, this is a major line of argument for his potential critics. It is relevant that now we have eliminated sources and contexts of violence, but the fact that we switched from axe to nuclear missiles sheds a new light on the matter. The process of feminization had, indeed, a consistent contribution to the decline of violence. In Raine's terms, "we all know that men are more violent than women. It's true across all our human cultures, in every part of the world. The Yanomamo are not the only group whose men gather together to conduct killings in

other villages. There has never in the history of humankind been *one example* of women banding together to wage war on another society to gain territory, resources, or power. Think about it. It is *always* men. There are about nine male murderers for every one female murderer. When it comes to same-sex homicides, data from twenty studies show that 90 percent of the perpetrators are male. […] The simple evolutionary explanation is that women are worth fighting for. They are the valuable resource that men want to get their hands on. Women bear the children, worry about their health, and make up the bulk of the parental investment." (2013, 33) Feminization meant not only that societies show increasing respect for the interests of women (Pinker 2011, 394-415), but also produced a subtle transformation of values and behaviours, from war-oriented behaviours towards peaceful conduct and cooperation.

I think Steven Pinker would agree with Bertrand Russell (2013, 23) when he states that the discovery of a system that would eliminate wars is "a vital need of our civilization". But the chances for such a system to be discovered – or invented, I would add – are very slim. The reason for this, Russell continues, is the unhappiness of people. The source of the latter resides in the sentiment of self-disgust. We have to work on that and we have to also work on "liberation from the tyranny of early beliefs" (Russell 2013, 26). These sometimes represent the demon of ideology, and contribute decisively to the acceptance of illusory images about the world. So, in order to progress further we need to both continue the humanitarian revolution and start a psychological, individual revolution that sets us free from harmful phantasms. For Baumard, André and Sperber (2013, 60), not all the cooperative behaviours constitute, in fact, moral acts. But, on the other hand, it is impossible to conceive moral evolution without cooperation. In the same vein, it is difficult to imagine moral systems that are not altruistic. This result reinforces Pinker's idea that there were and there still are historical trends that fuel our cooperative and altruistic behaviours and thus shaping a less violent future. Of course, there will always be the danger of the

sociopaths: they always play the role of the generous people only to increase their profit (Baumard, André and Sperber 2013, 62).

Since the publication of the book, the situation in the Middle East did not become better, to give just one example. Steven Pinker consciously assumed a great risk when he embarked on his journey. In an age still full of wars and crime and with the fresh memory of the World War II it is mandatory to share Pinker's optimism in order to preserve the energy necessary for believing in a quieter future.

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Ioan-Alexandru Grădinaru (PhD. in Philosophy in 2008) is currently associate professor at "Al. I. Cuza" University of Iasi, Department of Communication Sciences and Public Relations. His main research interests are: analytic philosophy, with a special focus on the theories of meaning, rhetoric, and communication studies. He published *Limbaj şi discursivitate în filosofia americană a secolului XX* (*Language and discursiveness in 20th century American philosophy*), 2011. He is a member of the Editorial Board of *Argumentum. Journal of the Seminar of Discursive Logic, Argumentation Theory and Rhetoric.*

Address:
Ioan-Alexandru Grădinaru
Faculty of Philosophy and Social-Political Sciences
Al. I. Cuza University of Iasi
11 Bd. Carol I, 700506-Iasi, Romania
E-mail: alexandru.gradinaru@uaic.ro