

## Nonviolent struggle

Having looked at militarised technology, it is intriguing to ask, “what would technology be like if it was motivated by an entirely different goal?” There are, of course, many possible nonmilitary goals. The relevant one here is nonviolent struggle.

To many people it may seem that military weapons are so sophisticated and powerful that it would be impossible to stop them except by other weapons. This line of thought is sensible so far as the weapons are concerned. Its flaw is that weapons do not operate themselves.<sup>1</sup>

To win a battle or a war, humans must cooperate. To begin, victory requires that “the enemy” stops resisting. The enemy army may be defeated and disarmed, but the population can continue resisting. What then? The people can simply be killed until they agree to cooperate. If they continue to resist, then all of them can be killed. End of story. In reality, populations do cooperate, at least to some degree, well before total extermination.

But there is another sort of cooperation required: cooperation by the commanders, soldiers and civilians in the victorious power. It is impossible to continue to kill “the enemy” if no one agrees to do it. This is where nonviolent action comes in. It works, in part, by promoting noncooperation.

Methods of nonviolent action include petitions, slogans, rallies, marches, strikes, boycotts, fasts, sit-ins, setting up alternative institutions, and many others. Any method not involving physical violence is a possibility. Nonviolent action can be used by workers seeking higher pay, women opposing male violence or local citizens opposing a freeway. When nonviolent action is used systematically to obtain a particular objective, such as stopping arms shipments to a country or opposing racial harassment, this will be called nonviolent struggle or a nonviolent campaign.

As the term “nonviolent action” suggests, the emphasis is on action, not passivity. But the action has to be nonviolent, meaning that it does not cause physical harm to others.<sup>2</sup> Violent actions include imprisonment, beatings, maiming, torture and killing.

Like any distinction, the distinction between violence and non-violence is not always clear-cut. What about violence against property, such as sabotage? What about “emotional violence”? What about self-immolation? What about a nonviolent technique that leads to physical harm, such as a strike by maintenance workers that leads to people being hurt in accidents? These and other issues have been and need to be debated, since the answers derive as much from social values as from logic. In any case, the main distinction is clear enough. Military methods are based centrally on threatening and using violence against people and property. Nonviolent methods are built on refusing to cooperate without causing physical harm to others.

All the available evidence shows that human beings have no instinctual urge to physically harm other people.<sup>3</sup> Indeed, cooperation is much more “natural” than competition.<sup>4</sup> Without day-to-day cooperation, what is called society would be impossible.

Military forces have to work hard to get over the natural resistance that humans have against killing each other. Most people do not want to join armies, hence the need to promote nationalistic fervour and, if necessary, introduce conscription, especially in wartime. To get a person to kill on command—as is required in armies—requires extensive training. To prevent soldiers from fleeing in the face of battle, stiff penalties, including summary execution, are used.

As the standard of living rises, people are less and less willing to be conscripted, and many armies are becoming fully professional.<sup>5</sup> In this situation, the main motivation for joining up is no longer compulsion, patriotism or peer pressure, but jobs and careers. When most of those who join do so because they are unable to obtain other jobs, this can be called “economic conscription.”

Another factor is that most members of high-technology armed forces do not engage in face-to-face combat. The vast majority remain behind the lines as planners, mechanics, cooks, accountants and the like. Even many of those who are on the “front line,” such

as pilots and tank drivers, do not see the eyeballs of those they are trying to defeat. Killing is much easier at a distance.<sup>6</sup>

On the front line, soldiers may kill because they have been trained to do so, to protect their buddies, to maintain their self-image or out of fear of being killed themselves. Dehumanisation and hatred of the enemy make this easier. They also make it easier to rally civilians behind the military effort. Commanders—both politicians and military chiefs—regularly create fear about the danger from the enemy. Aggression by the “other side” is used as a justification for retaliation, even if the “retaliation” is vastly disproportionate to what preceded it. German Führer Adolf Hitler, in justifying the invasion of Poland in 1939, created a fabricated attack by Polish troops. US President Lyndon Johnson in 1964 used the alleged Tonkin Gulf incident in Vietnam as the excuse for a massive mobilisation of US troops.

These examples illustrate that violence often provides the justification for counterviolence. When one group or one country uses violence, the other side feels justified in using violence in return, thereby justifying the original violence. This process is behind the familiar idea of military races. In the case of violence, the principle of fighting fire with fire simply leads to a bigger fire.

Nonviolent action challenges and undermines the cycle of violence. If one side in a struggle renounces violence, then soldiers on the other side need not fear for their lives. As well, the justification for violence is greatly weakened. This means that it becomes much harder for the commanders on the side still authorising the use of violence to actually get soldiers to obey orders to use it.

One of the most famous uses of nonviolent action was the struggle for independence of India from Great Britain, waged under the leadership of Mohandas K. Gandhi. This struggle went on for several decades until independence was achieved in 1947. Some of the methods used were rallies, marches, boycotts of British textiles, Indian production of cloth in villages as a symbol of autonomy, and civil disobedience to laws prohibiting manufacture of salt. On the Indian side, the independence campaign was largely, though not entirely, nonviolent. The British, in turn, did use violence at times—there were some major massacres of unarmed civilians, and thousands of Indians killed overall—but were remarkably restrained.

Many people attribute this restraint to the British being particularly kind colonialists. Other evidence suggests a different view. In Kenya, another British colony, the independence movement in the 1950s—called the Mau Mau rebellion—had an armed wing. British settlers carried out the most dreadful violence on the native Kenyans, perpetrating massacres and setting up dozens of concentration camps in which anyone suspected of being a Mau Mau was liable to be tortured relentlessly, leading to numerous deaths.<sup>7</sup> The obvious explanation for the difference between British behaviour in India and in Kenya is that the limited armed struggle by the Mau Mau provided a justification for massive British violence. By maintaining nonviolent discipline, the Indian independence movement inhibited British violence.<sup>8</sup>

In both cases, a key element was public opinion in Britain itself. Within both India and Kenya, more violence might have been used against the independence movements except for the political repercussions back home. Massacres of unarmed civilians in India caused outrage within Britain. However, massacres in Kenya created less impact because the struggle was—and was seen to be—violent on both sides. Even so, when reliable reports of extensive torture and deaths in Kenyan concentration camps became known in Britain, this was a key factor in the granting of independence. Significantly also, many British troops and commanders in Kenya were appalled at the violence perpetrated by the British settlers.

Nonviolent campaigns are largely struggles for loyalties. First is the loyalty of the people waging the nonviolent struggle, such as the Indians under British rule. Initially, only some may support the struggle and only a few may be willing to take a stand. Using only nonviolent methods allows others to join in, since anyone can participate in nonviolent actions, unlike armed force where young fit men are the main participants. If the other side uses violence against the nonviolent resisters, this is likely to create outrage in the community and generate increased support.

When the Palestine Liberation Organisation endorsed the use of violence to oppose Israeli rule in the occupied territories, this limited the degree of support from the Palestinians themselves. Only a few Palestinians participated in secretly organised violent acts, often against civilians—commonly called “terrorism”<sup>9</sup>—intended to overthrow Israeli military occupation. In 1987, a spontaneous

unarmed opposition to Israeli rule developed, called the intifada. Independent of the PLO, it involved rallies, vigils, strikes, tax refusal, boycotts of Israeli businesses, shop closing, self-sufficiency through local gardens, home-based schooling when schools were shut down, and many other tactics. Many Palestinians threw stones at Israeli soldiers, but otherwise almost all the methods used were nonviolent. The range of nonviolent methods used meant that everyone could be involved, for example by observing a boycott. As a result of the nonviolence of most of the methods, many more Palestinians became involved in the intifada than had ever been involved in terrorism, and many more Palestinians supported the resistance than before, for example including rich Palestinians.<sup>10</sup>

Nonviolent action is also effective in winning the loyalty of soldiers on the other side. If they are opposed only by nonviolent methods, they are less likely to be willing to obey orders to beat or kill. The fear of being killed themselves is largely removed, and the justification for killing is greatly weakened. Many Israeli soldiers were repelled by their commanders' orders or expectations that they beat unarmed resisters. Another example occurred in 1986 in the Philippines during the popular nonviolent resistance to the Marcos dictatorship, in what was called "people power." Hundreds of thousands of people lined the street in protest. Soldiers refused to fire on the demonstrators. A small contingent of troops declared their loyalty to the popularly elected president Cory Aquino. These troops were "defended" by massive numbers of nonviolent demonstrators in the surrounding streets. Pilots sent to bomb the rebel soldiers did not carry out their mission for fear of harming the nearby civilians.

Nonviolent action thus can be effective in winning the loyalty of two key groups: the participants or potential participants in the nonviolent struggle and the soldiers on the other side. It is also effective in winning the loyalty of a third group: people elsewhere in the world, especially those in the country deploying the troops against an unarmed population. Killing of unarmed civilians is a cause for outrage; military action against a population using only nonviolent methods is likely to stimulate the creation of an opposition movement. The intifada quickly won the sympathy of people around the world for the plight of the Palestinians, something that years of terrorist activity by the PLO had never achieved. The massacre of civilians at Sharpeville in South Africa in 1960 generated enormous

opposition to apartheid throughout the world. By contrast, killings of far more people in the course of guerrilla warfare seldom lead to any attention or concern at all.

There are numerous historical examples of the use of nonviolent action, some of which are mentioned in later chapters.<sup>11</sup> For the purposes here, it is only necessary to note that nonviolent struggle is a possible alternative to armed struggle. Rather than using violence to subjugate or destroy the enemy, nonviolent struggle works by building the will to resist and by undermining the will of the opponent.

Nonviolent methods are widely used in social struggles. One famous example is the civil rights movement in the United States, led by Martin Luther King, Jr. Campaigns by environmentalists, feminists and many others are almost entirely nonviolent, though sometimes violence is used against them.

It is possible to imagine organised nonviolent action as an alternative to military defence. When a community makes systematic plans and preparations to use nonviolent action to defend itself against aggression or repression, this can be called social defence, nonviolent defence, civilian defence, civilian-based defence or defence by civil resistance.<sup>12</sup> Social defence can be considered to be a special application of nonviolent struggle, namely to defend a community against military aggression or repression. The community could be a town, an ethnic group, a country or a transnational organisation.

In reality, no sizeable community has ever introduced social defence, so discussions about how it would operate are based on what is known about actual nonviolent struggles. There are some important differences in the way that nonviolent defence is conceived. Some see it as a functional replacement for military defence, focusing on national defence, with the rest of society pretty much unchanged. This orientation is often associated with the name civilian-based defence.<sup>13</sup> A different orientation, indeed almost a different definition, sees social defence as virtually any form of nonviolent action against governments, and aims at major social change through nonviolence. This orientation is adopted by many grassroots activists.

My preference is to define social defence as an alternative to military defence, but not restrict “defence” to defence of the state. Rather, defence of “community” is the key, leaving considerable ambiguity in the term community. This is compatible with the grass-

roots orientation to social change but retains an emphasis on defence against military aggression and repression.

Whatever the definition, there are some important differences between military defence and social defence, as suggested by the following table.

	<b>Military defence</b>	<b>Social defence</b>
Means of struggle	Violent action	Nonviolent action
Participants	Mostly professional soldiers, especially young fit men	Potentially everyone
Thing defended	The state; ruling class	Community; a way of life
Method of organisation	Bureaucracy; chain of command	Network, consensus and/or bureaucracy
Characteristic technologies	Weapons	Network communication and community self-reliance

### Why use nonviolent methods?

For those who do not have armies or sophisticated weapons, non-violence is likely to be more effective than violence.<sup>14</sup> Groups that oppose a military dictatorship, for example, have no chance of matching the firepower of the state. Militaries have planes, tanks, missiles and advanced surveillance technologies. Guerrilla opponents often have little more than guns, and also usually far fewer soldiers.

Technological developments have increased the military advantage held by governments over opponents. In a direct military confrontation, guerrillas will almost always lose. Their only chance is to use political means to win popular support and undermine the cohesiveness of the ruling group. Guerrilla warfare is in practice mainly a form of political struggle with precisely this aim. Guerrillas can win support by promoting land reform, opposing exploitation by local elites, carrying out labour to help the people, and by being honest and frugal rather than corrupt.

However, the impact of guerrilla warfare as an oppositional strategy is limited by its use of violence. Nonviolent methods are more

effective in winning support from the uncommitted population and in causing splits among the supporters of the regime.<sup>15</sup>

Nonviolent methods are more participatory and democratic. To use violence usually means that only small numbers can be involved and that secrecy must be maintained. Nonviolent methods allow nearly everyone to be involved who wants to be. Because less secrecy is required, there can be more open discussion of goals and strategies, thus fostering a more democratic culture in the opposition movement. Thus, even if those cases where nonviolence does not undermine rulers as quickly in the short term as violence, activists with a priority on participatory democracy have good reasons for favouring nonviolent action.

By fostering greater participation and democracy in opposition movements, there is a greater chance that, after a dictatorial regime is toppled, the new society will be an improvement. A great danger in successful guerrilla struggles is that the secrecy, centralised command and violence—not to mention ruthless annihilation of factional opponents—will usher in a new regime in which secrecy, centralised command and violence continue to be used against opponents. Nonviolence, by allowing women to participate equally and by fostering a model of courage without violence, helps to undercut the mutually reinforcing package of violence and stereotypical masculinity. In addition, nonviolent methods provide a suitable means to oppose male violence against women.

Supporters of violence (even as a last resort) argue that the end—a better society—justifies the means. The contrary view is that the means become incorporated in the ends and that, for example, secrecy, centralised control and violence are likely to perpetuate rather than undermine themselves. Ensuring that the means reflect or incorporate the ends is a safer strategy for social change. If a nonviolent struggle for change succeeds, the methods used set a precedent for continuing their use in an ongoing fashion. If the struggle fails, at least in the short run, the process may still lay the basis for future nonviolent struggles.

Finally, nonviolent struggle is less likely than violence to lead to death and suffering along the way. Those who practise nonviolence do not cause death and suffering by their own actions, though it is always possible and sometimes likely that violence will be used against them. But because nonviolent methods are less of a threat



and because it is harder to get soldiers or police to attack nonviolent resisters, there is usually far less violence from the other side. For example, in Algeria the guerrilla struggle for independence from France left a million people dead. The death toll in the largely nonviolent struggle for Indian independence was in the hundreds or thousands, out of a far larger population than Algeria.

Pacifists refuse to engage in warfare because they believe it is morally wrong. To use violence requires a certain arrogance, a belief in the righteousness of one's cause that warrants the irrevocable step of taking another's life. If one accepts the possibility that people—including oneself—might change their minds and that dialogue is a path for seeking the truth, then nonviolence is a suitable process for moral struggle. Violence, on the other hand, undermines and overwhelms dialogue.

Nonviolent action is compatible with a pacifist commitment, though not all pacifists support or engage in nonviolent struggle.<sup>16</sup> But to support nonviolent action it is not necessary to be a pacifist. Probably the majority of activists who choose to use nonviolent methods do so for pragmatic reasons, namely because they believe nonviolent action will be more effective and more compatible with the sort of society they are seeking.

The question is, "what sorts of technology would aid nonviolent struggle?" Existing technologies have been massively shaped by military priorities. What would they look like if instead they were shaped by a priority on nonviolent struggle?

Most of the debate about defence policy is built around the assumption that defence means military defence, and usually the capacity for military offence as well. Quite a few supporters of nuclear disarmament want to retain so-called conventional weapons, such as tanks, submarines, aircraft and explosives. In the days of the cold war, a key decision in many countries was whether to be aligned with one of the two blocs led by the superpowers (the United States and the Soviet Union), whether instead to become or remain nonaligned, or whether to become neutral (like Switzerland). Many debates were carried out concerning these options. A few governments considered "defensive defence," in which offensive weapons, such as bombers and long-range missiles, would be eschewed in order to reduce the threat posed to other countries. In the Third World,

guerrilla struggles have been waged for decades and have been seen as a model by some revolutionaries in the rich countries.

Although many types of defence systems have been used and proposed, all but one of them ultimately rely on organised violence. For each of these, then, violence thus becomes a key motivator for technological development, as shown by the following table. Only social defence provides a fundamentally different incentive.

Defence system	Role of technologists
Nuclear	Making weapons of war, including nuclear weapons
Conventional, aligned	Making weapons of war
Conventional, nonaligned	Making weapons of war
Armed neutrality	Making weapons of war
Defensive military defence	Making weapons of war (defensive only)
Guerrilla warfare	Making weapons of war (mostly small scale)
Social defence	Making tools for nonviolent struggle

The following chapters focus on technology that can support a social defence system, namely a community defence system based on nonviolent action.

### **Sabotage**

Sabotage includes such things as jamming factory equipment, destroying computer files and putting sand in a vehicle's fuel tank. There is a long history of sabotage in the workplace, much of it due to workers being bored, alienated or seeking revenge on bosses.<sup>17</sup> There is also some use of sabotage in a more directed fashion to resist repression. For example, some workers in Nazi-occupied Europe slowed down factory production in various subtle ways, trying to hurt the Nazi war effort without being easily identified and consequently punished. There has been some debate among nonviolent activists and scholars about whether sabotage—violence against property—

should be considered violent or nonviolent, as well as whether it is a good tactic. Here, though, I want to address a different issue: is sabotage a useful way to push for changes in technologies and the social arrangements associated with them?

A few writers and activists have supported a strategy involving sabotage.<sup>18</sup> This approach has the advantages of encouraging action rather than passivity, of attacking the direct manifestation of oppression without hurting people, and of causing economic harm to the owners of the technology. There are also some severe limitations to this approach. Because most saboteurs do not want to be caught, using sabotage fosters secrecy and individualism and makes groups vulnerable to infiltration. It can alienate potential supporters. Opponents of monkeywrenching routinely claim that it causes danger to life and limb, such as to workers in timber mills at risk due to hidden nails in trees. This rhetoric highlights the importance of not only being nonviolent but of being seen to be nonviolent.

For the purposes here, a key problem is that sabotage is negative: by itself, it offers no picture of a desirable society. The idea of technology for nonviolent struggle, by contrast, is based directly on such a picture.

There are some principled saboteurs, such as the peace activists who hammer missile nose cones, pour blood on military files or damage rail lines used to transport nuclear materials, and who after taking action then fully acknowledge their responsibility and surrender themselves to police.<sup>19</sup> These sorts of actions can be thought of as a form of civil disobedience, with the primary impact occurring through symbolism rather than economic disruption.

It would be possible to investigate the most appropriate technologies for engaging in sabotage, whether carried out covertly or openly, as part of a grassroots nonviolent struggle against repression, aggression or oppression—acknowledging the view by some activists that sabotage is incompatible with the principles of nonviolent action. I have not done this here, so this remains an area deserving further investigation.

## Notes

1. Robots and other automatic devices do operate themselves to some extent, and this may be a future emphasis in warfare. But this only moves the discussion back to the design of weapons. Robots do not design themselves—at least not yet.

2. This is a narrow definition of nonviolence. Some activists and scholars prefer a broader definition, such as the Gandhian conception of nonviolence as a way of life and a principled method of challenging oppression and building a self-reliant and self-governing society. See Robert J. Burrowes, *The Strategy of Nonviolent Defense: A Gandhian Approach* (Albany, NY: State University of New York Press, 1996).

3. Jeffrey H. Goldstein, *Aggression and Crimes of Violence* (New York: Oxford University Press, 1975); Ashley Montagu, *The Nature of Human Aggression* (New York: Oxford University Press, 1976).

4. Alfie Kohn, *No Contest: The Case Against Competition* (Boston: Houghton Mifflin, 1986).

5. David Cortright and Max Watts, *Left Face: Soldier Unions and Resistance Movements in Modern Armies* (Westport, CT: Greenwood, 1991).

6. Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society* (Boston: Little, Brown, 1995).

7. Robert B. Edgerton, *Mau Mau: An African Crucible* (New York: Free Press, 1989).

8. This comparison of India and Kenya was made by Robert J. Burrowes, *The Strategy of Nonviolent Defense: A Gandhian Approach* (Albany, NY: State University of New York Press, 1996), p. 239.

9. Terrorism as normally defined refers only to small nonstate actors. Arguably, terrorism on a far larger scale is carried out by governments. See for example Edward S. Herman, *The **Real** Terror Network: Terrorism in Fact and Propaganda* (Boston: South End Press, 1982).

10. Souad R. Dajani, *Eyes Without Country: Searching for a Palestinian Strategy of Liberation* (Philadelphia: Temple University Press, 1994); Andrew Rigby, *Living the Intifada* (London: Zed Books, 1991).

11. Numerous examples are given in Gene Sharp, *The Politics of Nonviolent Action* (Boston: Porter Sargent, 1973), the classic source in the field. See also Jacques Semelin, *Unarmed against Hitler: Civilian Resistance in Europe, 1939-1943* (Westport, CT: Praeger, 1993).

12. Anders Boserup and Andrew Mack, *War Without Weapons: Non-violence in National Defence* (London: Frances Pinter, 1974); Burrowes, *op. cit.*; Theodor Ebert, *Gewaltfreier Aufstand: Alternative zum Bürgerkrieg [Nonviolent Insurrection: Alternative to Civil War]* (Freiburg: Rombach, 1968); Gustaaf Geeraerts (editor), *Possibilities of Civilian Defence in Western Europe* (Amsterdam: Swets and Zeitlinger, 1977); Stephen King-

Hall, *Defence in the Nuclear Age* (London: Victor Gollancz, 1958); Bradford Lyttle, *National Defense Thru Nonviolent Resistance* (Chicago, IL: Shahn-ti Sena, 1958); Brian Martin, *Social Defence, Social Change* (London: Freedom Press, 1993); Michael Randle, *Civil Resistance* (London: Fontana, 1994); Adam Roberts (editor), *The Strategy of Civilian Defence: Non-violent Resistance to Aggression* (London: Faber and Faber, 1967); Gene Sharp, *Making Europe Unconquerable: The Potential of Civilian-based Deterrence and Defense* (Cambridge, Mass.: Ballinger, 1985); Gene Sharp with the assistance of Bruce Jenkins, *Civilian-Based Defense: A Post-Military Weapons System* (Princeton: Princeton University Press, 1990); Franklin Zahn, *Alternative to the Pentagon: Nonviolent Methods of Defending a Nation* (Nyack, NY: Fellowship Publications, 1996).

13. Gene Sharp is the most prominent advocate of this perspective.

14. Nonviolence can also be more effective than violence for those who *do* have armies. Many of the points below apply.

15. Stephen Zunes, "Unarmed insurrections against authoritarian governments in the Third World: a new kind of revolution," *Third World Quarterly*, Vol. 15, No. 3, 1994, pp. 403-426.

16. Some pacifists oppose social defence because it perpetuates the idea of the enemy. They believe instead that the goal should be a cooperative society. Supporters of social defence accept that it is impossible (or even undesirable) to eliminate conflict and argue instead that the goal should be to wage conflict using nonviolent rather than violent methods.

17. Pierre Dubois, *Sabotage in Industry* (Harmondsworth: Penguin, 1979). For numerous examples see Martin Sprouse with Lydia Ely (eds.), *Sabotage in the American Workplace: Anecdotes of Dissatisfaction, Mischief and Revenge* (San Francisco: Pressure Drop Press, 1992).

18. The most notable are David F. Noble, *Progress without People: In Defense of Luddism* (Chicago: Charles H. Kerr, 1993) and the radical environmental group Earth First!, for which key books are Dave Foreman and Bill Haywood (eds.), *Ecodefense: A Field Guide to Monkeywrenching* (Tucson, AZ: Ned Ludd Books, 1988, second edition) and *Earth First! Direct Action Manual* (Eugene, OR: DAM Collective, 1997). See also *The Black Cat Sabotage Handbook* (Eugene, OR: Graybill, n.d.) and the magazine *Processed World*.

19. See for example Per Hørgren, *Path of Resistance: The Practice of Civil Disobedience* (Philadelphia: New Society Publishers, 1993); Liane Ellison Norman, *Hammer of Justice: Molly Rush and the Plowshares Eight* (Pittsburgh: PPI Books, 1989). I thank Andreas Speck for helpful comments concerning sabotage.