

# Toward a Nonkilling Paradigm

Edited by  
Joám Evans Pim



Center *for* Global Nonkilling



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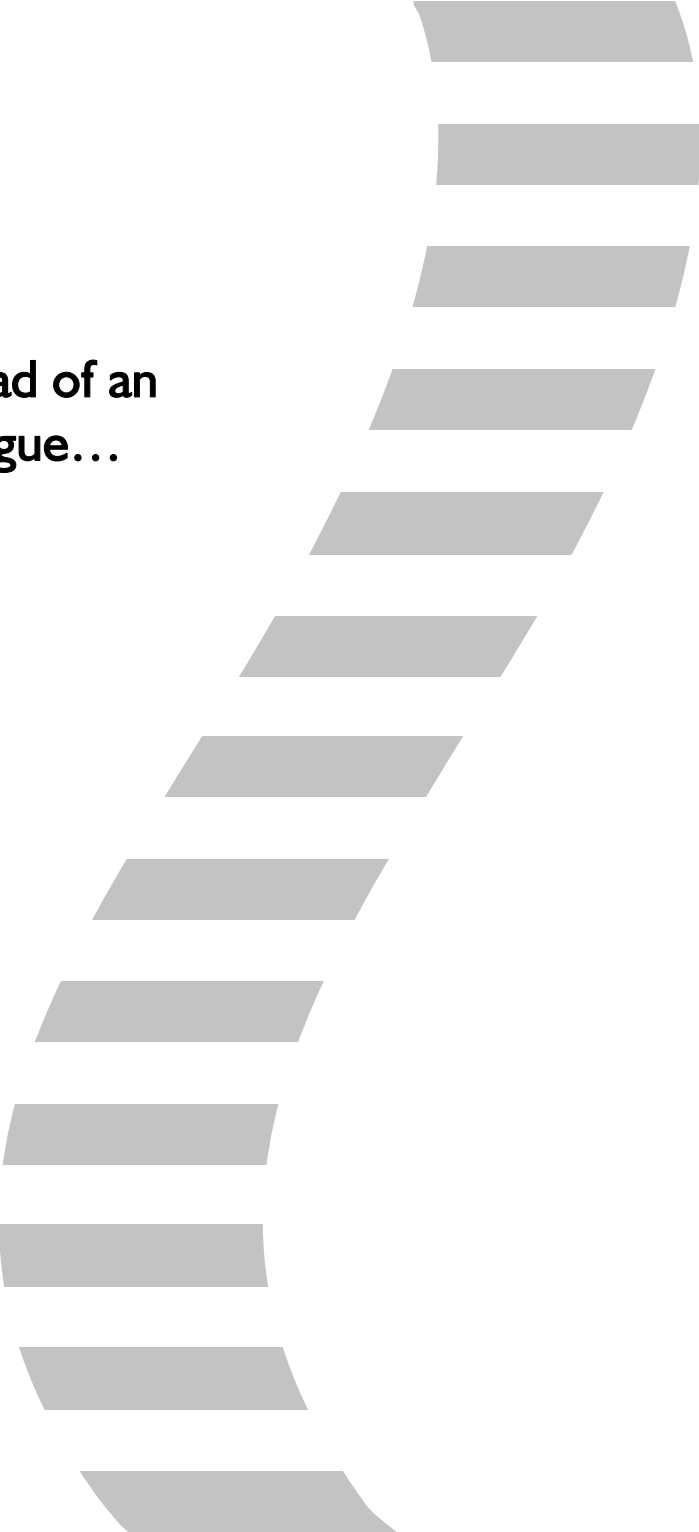
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**Instead of an  
Epilogue...**



# A Utopia Worth Pursuing

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1. *Preliminaries.* This is not a scene from TV. A policeman is chasing a criminal, who holds a revolver in his right hand. He aims at the policeman. Under such clear-cut circumstances, the officer could open fire. He does not. When the case is evaluated at the precinct, the officer explains: *I looked at his face. The classes I took in physiognomy informed my action. I knew he would not shoot.*

From the vantage point of anticipation, to “read” someone’s facial expression is to assume that we know enough about how the complexity of our possible actions translates into the “story” the face “tells.” It also implies something else: Since each of our actions is the result of many deliberations in our mind, we can find those actions signaled in the brain almost 800 milliseconds before they are performed. We become aware of them at around 450 milliseconds before they are carried out. Moreover, we have only a very short time—150 milliseconds—to change our mind, and not act as originally signaled. The police officer and the criminal had only 150 milliseconds to kill or to opt for an alternative.

Obviously, the drama of a chase is not the same as dropping bombs, triggering a missile, or poisoning a field, a river, or people’s minds (intentionally, or through a lack of any sense of consequences). An extremely subtle knowledge informed the police officer’s nonkilling action; lack of knowledge (or false knowledge), in some cases, explains the great amount of killing that humans, often claiming the best intentions, still commit.

These introductory remarks are intended to put my modest contribution to this impressive volume in perspective. It is dedicated to Glenn and Glenda Paige, and therefore it has to address the sense of urgency that their work expresses. Indeed, nonkilling cannot be postponed to the time when we eventually understand it. The subject’s urgency explains why the Paiges, as well as many others dedicated to the matter, see it not as an ideal toward which we move (and might not reach), but rather as a reality of decision that translates future studies into current practices.

In January 2009, when I was asked to consider contributing to the volume, I knew I wanted to. The subject has obsessed me since my earliest traces of

awareness. On the hills of my home city, where thousands were hiding in order to avoid being bombed or killed by the gunfire from the airplanes of the Allied forces fighting the Germans, I learned what nonkilling is through an experience I've carried with me all my life. My mother, of blessed memory, covered my body with hers: the shield of love as nonkilling "technology." Many innocent people were killed or wounded on that August day. During the war, after being hit by a military ambulance, I spent many months in a hospital. I could see the airplanes attacking the town; I could see the bombs they dropped; and hours later I could see the wounded being brought in for treatment. It goes without saying that there were also many dead. Nonkilling did not exist as a subject at that time, but I experienced it as a child who would like to discover a world without pain and killing. This is one from among the reasons why I promised to write. And this is also why I asked for time.

It took me six months of work on a few pages (to follow shortly) that expressed my science of anticipatory systems as it relates to the idea of nonkilling technology, in the only form of expression I found justified: no technical terminology. That the Editor, Joám Evans Pim, whose effort I want to deliberately call to the readers' attention, bestowed upon me the honor of closing the arguments of this book, is relevant only to the extent that I became the author of an Epilogue to a book that I had not yet read. This does not excuse any shortcomings of my writing, as it does not negate the misgivings some readers of my manuscript had (in particular the copy editor and Glenn Paige himself). It says, however, that we might not share in our understanding of nonkilling, in particular in the fact that their view is fundamentally deterministic, while mine, as insignificant as it might be, is anchored in my understanding of anticipation, that is, nondeterministic.

It needs to be said in these preliminary notes: Utopia might rub some readers the wrong way. It means to them the impossible, what cannot be reached; to me it means something that takes longer to achieve. Although the notion of Utopia itself emerged in relation to nonkilling (cf. Thomas Moore, 1516), activists are not eager to pursue a Utopian project, because it is driven by final causes. I understand that. But all we do, if it is significant, takes time, and is accomplished in ways we could not fully foresee. Anticipation is what distinguishes the living from the inanimate, the physical. It turns out that our brain, unbeknownst to us, processes information pertinent to the living in a different area than the one where it processes information on the physical. Would the act of triggering a pistol, in chasing a criminal, or in any other situation, be processed in the areas reserved for the living, or in those reserved for the physical? From all I know, Utopia, as

a realization in the infinite space of possibilities from which anticipations eventually translate into action, is connected only to the living. Machines do not anticipate; neither do they make Utopia possible. Is nonkilling technology willing to go as far as to genetically manipulate the human being in order to eliminate killing? This is one possibility. If yes, then we'd better keep in mind how genetic intervention could also become the new killing technology! Talk about nondeterminism!

2. *Killing is a matter of agency.* As the saying goes, "Guns don't kill, people do." Directly, as in targeting and triggering the deadly weapon; or indirectly, as in building machines that kill, or writing programs to drive some machine, be it a computer or a guillotine, that will perform the operation. Or in constructing killer robots to which the task can be delegated. Or dispensing poison, in so many forms, from the famous arsenic to the insidious poisons of religious, ideological, political, moral, or scientific fanaticism. Brute force, which includes messy decapitations, as well as dropping an atomic bomb. Careless driving is another way of killing. Irresponsible acts—waste disposal by production facilities and industrial farming methods—kill. So do sloppy medical interventions, and legal tricks that let killers go free (they kill the trust in justice!). Some methods of killing are slow, and some faster than predicted by the persons who calculate the costs of pollution or professional misconduct. And more often than we like to think, we can kill by not acting at all. Accepting killing as part of life, as an unavoidable by-product of existing. Albeit, nonkilling technology, which should be an answer to the ever broader forms of killing practiced in our days, would have to cover the huge territory of human actions, whether these are well intentioned—industrialization, for example, or genetic engineering—or criminal—e.g., wars of all kind. Technology, being deterministic by nature, could only attempt to reduce the complexity of human action, to simulate the nondeterministic within a deterministic model. This is a high-order goal.

Creating life is still a matter of a realization in a limited space of possibilities—from sexual encounters to artificial insemination—and the associated probabilities. As long as no anticipatory processes can be associated with the artificial, life is not the outcome, to be either celebrated or destroyed (killed). However, artificial or synthesized life can become an agency for killing. Yes, killing conjures an infinity of means, and it is always driven by *telos*, the end. The metaphors encapsulate the agency factor: the look that kills ("We look, they die," was a description used, many years ago, by some MIT researchers developing intelligent weapons for their sponsors); the



thoughts, the mindlessness, the indifference. We die so many times in our lives as we experience deceit, betrayal, injustice, humiliation, hunger, thirst, illness. No limit to these possibilities, just as there is no limit to stupidity. Nonkilling technology will have to address not only literal killing, but also metaphorical killing. Generations were killed, in the metaphorical sense mentioned, by acts stemming from intolerance, discrimination, insensitivity, or political ideology, although they continued to exist physically, to eat, to make love, to reproduce, to be miserable.

The reason for placing the issue of nonkilling technologies in the broadest possible framework of life proper, as well as metaphorical, is simple: Is it really possible to erase the act of killing of other human beings, plants, animals, insects from our existence? Can humankind invent something—whatever—that will prevent killing? The trigger is squeezed, the bullet flies, but no one is killed because this “nonkilling” something was deployed. Is this what nonkilling technology is supposed to be? Some magnificent invention that will prevent human beings from killing human beings? Is this at all conceivable?

Behind the atomic bomb, there is physics (capturing the determinism of the inanimate). None of those amazing minds that contributed to our better comprehension of matter (radioactivity, in particular) were themselves killers. Even those who ended up working on the mass-killing technology that brought an end to the murderous World War II did not do so animated by what is called “the killer instinct.” The desire to stop the barbaric extermination of civilians and to avoid having the world taken over by insane dictators, supported by fanatics converted to the agency of death, motivated those scientists to carry out their assignment. After the destruction was documented, many of those scientists dedicated their efforts to prevent the future lethal use of the energy they unleashed.

To address killing is to address its specific rationality, as irrational as the act of killing appears to us. The same applies to nonkilling science and technology. In our world of quantified economic considerations, to focus on killing means to focus on the *return* associated with the act. It can be money, diamonds, power, recognition, satisfaction. In the animal realm, killing is associated with survival. Survival is the expression of nondeterminism. Within humanity, killing followed the path from survival to affluence, and at each step reflected the motivations of life itself. The first tools made life easier; they were reductions of the nondeterminism of nature to the determinism of machines. But all of them, embodying the physics of the lever and of the wheel, also made life more susceptible to death: A hammer kills more efficiently than the fist. Let us face it, the process we call human progress is ac-

tually that of increased efficiency taking place in human *self-constitution*. We are what we do. The human quest for efficiency has resulted not only in more successful hunts and better crops, improved shelter, labor-saving devices, and self-improvement, but also in more efficient means for killing. Omitting implements for hunting and defense, the quest for efficiency drew on positive motivations. Fertilizers increase crop yields, but their ingredients can be used for making bombs. Remember Oklahoma? Nuclear reactors are efficient means of generating the energy on which human life and well-being depend. But on the same order of magnitude, they are turned into means of killing and destroying. Likewise the amazing technology that embodies our ability to automate mathematics—computers in their myriad manifestations and functions—made possible levels of prosperity that most people could not have imagined. Even the innocuous cell phone, through which lives can be saved, can be an agent of killing when used to remotely trigger explosions, or when it distracts someone driving a vehicle. In Africa and Asia, the cell phone engages many citizens in the local economy, keeping them from starvation. But it also made some conflicts bloodier than ever, as instruments of coordination and remote control of destructive explosives.

To understand the broader picture of what we call technology, including that dedicated to killing and murder, let us take a short detour. To repeat: We are what we do. We are poets when we write poetry, mothers when we give birth and nurse an infant, scientists when we pursue knowledge. And killers when murder is carried through. Or: well-intended individuals or groups when we pursue nonkilling technology. To prevent killing. This definition cuts through the whole history of humankind. The only change is in the circumstances under which we *make ourselves*. Myth and ritual—in which killing played a central role—responded to natural rhythms and incorporated them in the life cycle. Killing was part of it, as life unfolded from birth to death. Nonkilling technology would have meant not the abolition of stones or knives, but of all the reasons for killing in the first place. Once human self-constitution extended beyond nature, creating its own realm, observance of natural rhythms took new forms. These new forms were more able to support levels of efficiency appropriate to the new condition achieved in the experience of farming. It was no longer the case that survival—sometimes at the expense of someone else's life, equaled finding and appropriating means of subsistence in nature.

In our days, efficiency facilitates prosperity—beyond any previous expectation—but also misery. We are more productive, and more destructive. Should nonkilling technology reduce our productive capabilities? Killing is an

expression of who we are and how successful we want to be. The millions of people killed in previous wars—the wars of the Industrial Age—went through the glory and despair of confrontation. Airplanes hitting the Twin Towers in Manhattan, or the use of “intelligent bombs” in the wars still going on, have a direct impact. But in each situation, we are what we do; active military, scientists conceiving weapons of mass destruction, engineers perfecting killing machines. Or activists against killing, scientists working on nonkilling technology. The new condition of science, i.e., living science, moves the target of nonkilling from the deterministic (machines that kill) to the nondeterministic (life that kills some other forms of life). Genetic wars, in extension of the bacterial scripts of those killing fanatics who became heroes of books more than victorious fighters, are closer to us than we are willing to accept. And we are not prepared for them, neither mentally, nor technologically, never mind emotionally. Killing in this realm will be the result of conflicting anticipatory processes. As nondeterministic outcomes, the result can go either way.

What is new in humankind’s condition is the rapid expansion of killing on account of living processes and the slow but inescapable transition to a psychopathic condition: no self-reflection, no sense of wrong, no sense of guilt. Killing like sneezing, or making casual love, or watching some sports event. Should nonkilling technology address the progressive psychopathic condition of individuals living more and more for themselves, and less and less for society? Maybe the place to start in the attempt to conceive nonkilling technology is in making awareness of the consequences of killing possible. Even more: necessary. Among many other factors, the game obsession, not *Tetris* but *Killer* (as one game is even called), needs to be mentioned. Games, whether we want to admit it or not, are part of the technology of death; addictive playing, as it is practiced, entails the numbing of hearts and brains. Wars became television events watched during dinner, or in the context of a *hookup* (nothing consequential, not even sex). Death and games, television and killing are not in causal relation; better yet, the relation is very subtle. The targets we see on high definition screens are no longer real for the viewer. The means of annihilation are themselves driven by virtual actors—someone in Nevada controlling a drone in Waziristan—performers in a large-scale game where the distinction between life and death is suspended. Or so some think.

In view of the broad understanding of killing presented here and how people are becoming more efficient at killing, and less sensitive to it, the question to be posed is: How inevitable is killing? Because even to entertain the utopian notion of a world free of killing will not result in turning back time. The past cannot be undone. If time were reversible, there would be no vic-

tims of killing. The answer has to lie in some other place: the return on killing. In other words, why do people kill each other? The *How*, embodied in technology, is in effect a translation of the fundamental *Why*. Sure, "What is the return on nonkilling technology?" is also an unavoidable question. Is it only humanism? (Many people don't even know what this word means.) Sense of guilt? Psychopaths do not have it. A new scientific or technological challenge? A new way to get rich fast? To become famous? To feel good?

If someone justifies killing by fearing for one's life, the equation states: My life is more important to me than the life of the person I killed. The return is a sense of self, on which basis all those who kill implicitly affirm their own importance. Can we advance toward a society in which every life is equally important? Nonkilling technology would have to result in this condition of the human being.

I killed because the person wanted to rob me. The equation is: What belongs to me, of trivial or great value, is more important than the life of the would-be robber. Can we advance toward a society in which ownership is not more important than life? Nonkilling technology might have to address ownership as well.

I killed because they killed those dear to me, my friends, my fellow countrymen, my fellow-religionists, my gang pals, my fellow-travelers. In other words, some people are more valuable than others by virtue of some association or relation. Can we advance toward a society in which differences among us are less important than what we have in common? Or better yet: a context in which we can tolerate them instead of trying to make us all the same?

I killed because that was the only way to get rid of someone who deserved to be killed. Such a person could be a serial killer, a psychopath, a fanatic, in the guise of president, king, commander, political leader, or theocrat. Killing in such situations affirms that we can prevent murder, and other extremely damaging acts, through murder. In other words, some killings are better, more justified, than others. Can we advance toward a society which realizes that killing = killing (i.e., killing equals killing), no matter how we justify it? Yet again, nonkilling technology will have to effectively override any justification for murder. Even for those obsessed with power at any price.

Humans bear the burden of a long history of killing. Within this history lies the distinction between murder, a premeditated act, and killing, which can sometimes be unintentional. It carries with it understandings that made sense in different pragmatic contexts: The ones you don't kill will kill you. Or, another layer: If someone took someone else's life, and the act is fully documented, society can impose the death penalty. Or: killing someone out of

love—yes, love is called up as a motive for killing—out of desperation, or in a situation of diminished self-control. But we do not live in the past. And since each and every person is subject to change, the condition of killing is changing. Struck by lightning was sometimes interpreted as an act of divine punishment. Today it is an extreme event, brought about by actions not fully explainable in science, or inescapable for reasons other than religious. The nonkilling technology is called a lightning rod. Decapitation in virtue of being different, and standing for different values, goes back to an understanding of homogeneity associated with a sense of self-righteousness that resulted in the herd mentality. Hitler's advanced technology and methodology for killing is not fundamentally different from that of contemporary terrorism.

"Made a killing," a way of describing how huge profits are made—carries with it an experience that during a period of crisis (such as the current recession) has become very clear to those involved. Profit as the engine of capitalism explains competition in all there is good to it, but also in all that is damaging to it. Killing cannot be disassociated from profit, as death cannot be understood independently of life. Technology that serves killing is never justified by what it accomplishes, but rather by what it promises in terms of profit. Unfortunately, as we, as a society, become less concerned about the human consequences, we enter a stage of psychopathic action within which the pain of others no longer affects us. The psychopath is a machine—victory of technology over the living.

The Utopia of a nonkilling society implies, of course, many forms of human interaction. They return a better value than killing, and celebrate human creativity, not profit-making. Envy, alienation, disease, intolerance, inequity, inability to accept differences can be murderous. The inability to cope with change—our own included, i.e., the change from adulthood to senescence is probably harder to take than the change from childhood to adolescence—is also associated with the extreme act of taking someone else's life. Is mercy killing less killing? Anything and everything can kill. Technologies developed for the sole purpose of killing are only more obviously dedicated to the act, not necessarily better, and never more justified. Nonkilling technology is probably a reflection upon our own understanding of what is called (demagogically) "the sanctity of life."

In the final analysis, to kill means to consider your own life worth more than someone else's. If and when circumstances leading to this deadly inference are erased, life and death will make our expertise in killing superfluous.

3. *Infinite beginnings.* As stated in the Preliminary note, Utopia is always an anticipation, a possibility among the many others that inform our present thoughts, ideals, and acts. (Distopia would be the realm of never-ending killing, for reasons, or lack thereof, ranging from selection, maintaining order, security, etc.) For a scientist, what counts is progress in shared knowledge and understanding, not individual recognition. In this respect, the dynamics of science is always driven by *telos*. Science is not in reaction to reality, it is in anticipation of the realities it makes possible. Yes, we need to react, here and now, to any killing. But nonkilling qualifies a world that transcends the notion of an end. If life did not necessarily end, there would be no killing. The more generous understanding of infinite beginnings is what makes nonkilling worth pursuing.