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Geopolitical and Personal Nonkilling Choices in Times of Collapse

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Preface

By Ted Trainer

Most people in rich countries have no idea of the costs their affluent ways impose on the rest of the world's people. Manuel draws attention to an aspect of this issue which gets little or no attention, the way our energy affluence kills people, especially the energy poor.

There does now seem to be increasing recognition that rich world resource-intensive "living standards" would not be possible if we were not getting far more than our fair share of the world's resources. And recent research has shown that a large fraction of the environmental cost of our resource imports is left in the countries from which the minerals, oil and timber etc are extracted. Another kind of cost is the appropriate, desirable development foregone when poor countries are obliged to pursue conventional (that is profit-driven) development. The resources they could have been using to build viable self-sufficient cooperative villages thriving on local gardens and crafts etc., are instead drawn into exporting into the global market typically with negligible "trickle down" benefit.

These mechanisms built into the grossly unjust global economic system generate a great deal of conflict and violence and avoidable death. A peaceful world cannot be achieved unless they are attended to. There is a large critical literature on the violence associated with the effort to secure resources, most obviously petroleum, but Manuel is unusual in dealing here with effects generated when we consume what we have acquired, that is with the violence to life that is indirectly caused by our consumption of fossil fuels; the "Killing through carbon emissions" of human and non-human beings.

Hopefully Manuel's account of this issue will add to the growing understanding that some of our basic rich world ways are fundamentally and irretrievably mistaken, that there is no way of reforming a society driven by the fierce and mindless pursuit of affluence and growth and profit, and that we must face up to radical system change to ways that are far less resource intensive. This in turn means we must shift from competitive individualism to some kind of cooperative communalism, and especially to "frugal abundance.". Many now recognise this, evident in the Ecovillage, Transition Towns and Degrowth movements. Some of the best examples are to be found in Spain.

Acknowledgments

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Geopolitical and Personal Non-killing Choices in Times of Collapse

Nonkilling Responses to Climate Chaos

My reflection will have two main parts. The first one will be dedicated to the geopolitical importance of nonkilling choices in times of civilizational collapse, and the roots of this collapse. And in the second part I will speak about our common responsibility as what I have called “fractional indirect delayed carbon killers”. But, first, let me begin with a little terminological criticism regarding the term “climate crisis”.

“Climate crisis”?

In the title of this conference we can see the term “Climate CRISIS”. It is terminology that we can find not only in conference titles, or news articles but also increasingly in activism campaigns (for example, the famous Extinction Rebellion movement) and even in academic works.

Yet, I think this use of the word “crisis” is quite wrong. And I will try to explain why. The word “crisis”, both for its ethymology and its use in most world languages, has a meaning of temporality. If we look at the various meanings in an English dictionary like the Merriam-Webster, for example, we will see that it refers to a “turning point”, an “attack”, an “event”, a “moment” ... This means that a “crisis” is, by definition, something limited in time —usually a short time. And if you speak of a crisis as a historical event, it means that it has a short duration in historical terms: typically, some months, years or, at most, decades.

But what we, industrial *Homo sapiens* (or as sociologist William R. Catton used to call us, *Homo colossus*), have done to the Earth’s climate is not a crisis because it is not temporary. This is obviously a “change”, so the classic “Climate Change” term is correct. But this is not a brief change which could be reversed or finished and then come back to the previous state or give passage to a new state of equilibrium. That’s the reason why I don’t think we should use this term. Because it’s not correct and, what is worse, it could give society the impression —through the common

understanding of “crisis” as an event limited in time— that this change is not here to stay.

But I am a nonconformist and a hyper-critic, so I do not even like the classic “Climate Change” terminology much. And this is for a similar reason. Correct though it may be, the word “change” immediately gives people the false impression of taking us from one stable state to another state, also stable. You can find lots of news in mainstream media telling us that the warmer climate of our regions will make possible to grow some new crops from southern areas. For example, they say that my Atlantic green country of Galicia will be more like the Mediterranean parts of Spain, or that Siberia will be a prosperous agricultural area with warmer temperatures. But that is a wrong picture of what lies ahead. We have definitely destroyed Holocene’s climate stability and we are entering a period of chaotic climate conditions that will last hundreds or even thousands of years before it eventually reaches a new equilibrium. That is what happens when you mess with such complex dynamic systems as the Earth’s Climate system is. And that is what climate scientists and system dynamics scientists are telling us.

So, the term “Climate Chaos”, which I prefer and which I will use in my lecture, will be the more accurate, more informative and descriptive.

Geopolitical importance of nonkilling choices in times of civilization collapse

The classic work by Glenn Paige, *Nonkilling Global Political Science*, gave a clear outlook of the various forms of killing that we can find in modern societies and how a nonkilling approach could work to remove them from individual choices, from societal structures and from our very own cultures. And that was a fair account for the times of business-as-usual of global society, but now we have entered an exceptional historical time, with no precedents in human history, so I consider that an updated nonkilling approach is needed.

The absolute novelty in our historical times is not only Climate Chaos, as we all know by now, but also the end of cheap and abundant energy. And there would be a third major aspect of our age that is totally new for humans: the high level of biodiversity loss, what many have called the Sixth Massive Extinction. The fact that this Extinction is caused by humans would be very pertinent for our outlook, and that it is not only a massive killing, but also a *definitive* killing, a complete extinction of species by the thousands

each and every year¹. But I will have to leave this fact outside of the equation for the scope of this text and I will just limit my analysis to the anthropocentric point of view.

Now let us take a look at Peak Energy. Of course this is the other side of the problem of Climate Chaos, because industrial society is disrupting the Earth's climate system mainly by burning up all these huge amounts of cheap-to-get fossil fuels. But the social debate is centering on the climate side of the problem forgetting or just ignoring the energy decline side. That is very dangerous, which could be exemplified with the so-called "Energy Transition", which has entered the social and political agenda only in recent years. Politicians, most thinkers and activists often take it for granted that all we have to do is to transition from finite fossil and nuclear fuels to renewable energies. But this is not so simple. I would dare to say that it is even impossible, if by *transition* we mean to change the energy source of our industrial megamachine and just keep on doing the same things, but just *cleaner and greener*, and keep on growing for ever and ever. Just as if we could take out the fossil battery of our planetary industrial metabolism and replace it with a *green* one.

No, that will not be possible. I will not extend here detailing all the limits of renewable energy that would make this replacement unfeasible. Let us just say, in the words of Australian activist and thinker Ted Trainer that "Renewable energy cannot sustain a consumer society". That is the point to focus on before we even start to try any transition away from fossil fuels. Biophysical scientists, Peak Oil researchers, promoters of Degrowth, Ecological Economists, all have given enough evidence of this, if we take the time to search for it and are bold enough to drop our *technolatriy* beliefs, as Spanish philosopher Jorge Riechmann often calls it, which usually makes people blind to the laws of physics and to the impossibility of technological miracles.

Riechmann has written: "We are headed for genocide together with ecocide". And that is what I call an "omnicide" (the killing of *all* life on Earth, what some have started to call the "Gaiacide"). Because runaway climate chaos could turn our beloved and miraculous Earth into a dead planet like Venus, which is believed to have suffered its own runaway climate change thousands of millions of years ago, losing all possibilities to sustain life.

¹ https://wwf.panda.org/our_work/biodiversity/biodiversity/

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And we could well cause this if we do not stop carbon emissions, because even though fossil fuels are entering their decline period, after Peak Oil, Peak Coal and Peak Gas, there are still plenty of them and enough to fry the biosphere. To stop aggravating Climate Chaos, it is necessary to stop carbon emissions, and for that mission there is no other way than to stop economic growth, to let global GDP drop, and it may be necessary to make it drop quickly. I will repeat this absolutely fundamental idea: *no green transition to renewable energies will stop emissions if we do not stop growing our economies in the first place!*

A growing number of authors are speaking in terms of *civilizational collapse*. To make clear what we mean by this, we can look to one of the authors who has done a better job studying and describing the collapse of past civilizations —Joseph Tainter. In his words, a *collapse* is a sudden loss of complexity in a complex society. In other words, you have a complex society, and then for some reason, complexity is quickly lost and you end up with a much simpler society. Tainter measures time in historical terms, so “sudden” in this definition would translate into human terms as several decades to a few centuries. Nothing more than that —I mean a collapse is not the Apocalypse— but nothing less either. For societies like the industrial global society, which have only known continuous growth since a couple of centuries ago, this is quite a change!

And the main driving force behind the upcoming collapse of our civilization, apart from the ecological consequences of climate chaos, loss of biodiversity, loss of soil and fresh water and other aspects of the current ecological predicament... is energy decline. And that is because *complexity is a function of energy*: when societies manage to get more energy, they can afford more complexity —a stronger and more complex State system; more and better services; more careers and professions; more public workers, hospitals, schools, universities; more kinds of economic organizations and sectors, etc. Even just maintaining a given level of social complexity requires *increasing* amounts of energy... just like the Red Queen in Lewis Carroll’s *Through the Looking-Glass*, you have to run faster and faster just to stay at the same place. So, when total available energy starts an overall decline for the first time in millenia, a reduction in social complexity is unavoidable. And that is exactly what we mean by *a collapse*.

Many people say: “‘Let’s save the planet’ is a wrong slogan, because the planet will continue anyway, life on Earth will continue, no matter all the damage humans could inflict on it. We humans are the only ones in peril”. But that’s not true at all. There are genuine real possibilities, if all

prehistorical carbon is released through runaway climate change, triggered by positive feedbacks like clathrates and methane released from permafrost in the Arctic, the loss of the Amazon rainforest, etc. These kinds of events could trigger the same effect on Earth that is believed to have happened on Venus aeons ago. Our sister planet once had conditions for life and water and an atmosphere, but runaway climate change caused its complete loss of water and atmosphere and then it became a planet no longer able to sustain life. So, it is true that we humans could eventually kill planet Earth, kill the Biosphere, comet Gaiacide, if we do not put a strong brake on climate chaos, stopping all greenhouse-gas emissions before it is too late.

So, here we have the great Killing with a capital K, the “omnikilling”, the omnicide which I was talking about.

And together with this ominous outlook we have the added problem of human competition versus human cooperation, of killing versus nonkilling, of democratic solutions versus the Hobbesian fight of everyone against everyone else.

Glenn Paige said: “Nonkilling sharing of scarce resources is not unthinkable”. Of course it is not unthinkable, but that is very far from the present official geopolitical agenda of how to manage this Climate Chaos and this Energy Decline.

Since we have reached the planetary limits to growth, and no escape from this planet is realistic, we must conclude that every nation that persists in pursuing economic growth, will be able to do so *only* temporarily and *only* by depriving other nations of the resources required to feed that (temporary) growth. I can easily imagine the European Union trying its own Energy Transition and Green Growth and Green Deal and all of that... by exacerbating extractivism and neo-colonialism or neo-imperialism in the Global South, by taking its most polluting factories to China or somewhere else, by taking the scarcest minerals for itself,² the last fossil fuels from outside its borders, and defending them by all means necessary. By military means, of course, but also by economic means, just to keep on growing a few decades more until all this is also gone, until all solar panels and wind turbines need replacing³ and there are no more materials and no more

²And by doing so the EU will be just doing what the so-called OCDE's *energy watchdog*, the IEA, cynically recommended in an official report in 2021, *The Role of Critical Minerals in Clean Energy Transitions*: <https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions>

³ They last no longer than a human generation —25 years.

fossil energy to mine for them in Europe or abroad. I can imagine that very easily because it is *already* happening.

And I can even more easily imagine America trying to do the same. Australia trying the same. Every rich nation or wannabe-rich nation trying to do the same. And tragically many of them with nuclear power, as Spanish engineer and energy expert Pedro Prieto reminded us in a frightening article published by *15/15/15* magazine⁴.

Let me repeat this idea. When total energy declines, if you want to keep your per capita consumption levels, the only way is by stealing the others' part of the shrinking pie. Just as it has proved difficult to distribute the reduction of carbon emissions with international justice, it will be equally or more difficult to make all countries agree on the distribution of the last carbon consumption, the last drops of oil or natural gas or uranium or lithium or copper or phosphates. The geopolitical and cultural obstacles are just the same, or even worse. They are on both sides, the source side and the sinks side of our same metabolic global predicament. Let us remember Bush senior's words at Rio de Janeiro Earth summit in 1992: "The American way of life is not negotiable". Enough said!

So this imperialistic, non cooperative, non democratic rush for the last resources in times of climate chaos will make the nonkilling perspective more necessary and more urgent than ever before in history.

Nonkilling in these times of civilization collapse needs to translate into ethical maxims such as this: "I will only maintain a consumption level that does not kill you and that can allow you to enjoy a similar consumption level". Or as Mahatma Gandhi famously put it: "To live simply so others may simply live".

And to end this first part of my reflection, I will not forget, as this conference takes place physically in Scandinavia, that a good example of a nonkilling, nonviolent, internationally fair approach to the energy descent that could help to collectively achieve a peaceful descent path, is the Uppsala Protocol. This document was proposed by British retired geologist Colin Campbell in 1996, and was subsequently developed in 2005 in book format by American expert Richard Heinberg with the title of *The Oil Depletion Protocol: A Plan to Avert Oil Wars, Terrorism, and Economic Collapse*.

⁴ "Ejercicio práctico para escépticos del Peak Oil: 2ª parte (Propuesta de solución)", 2018-10-25. URL: <https://www.15-15-15.org/webzine/2018/10/25/ejercicio-practico-para-escepticos-del-peak-oil-2a-parte-propuesta-de-solucion/>

Fractional indirect delayed carbon killers

Let us begin this second part with two clear facts:

- Fact number 1: *Climate Change* —or Climate Chaos— *is already killing people* throughout the World. Some die from various health impacts⁵, others die in floods, hurricanes, wildfires, heatwaves and other extreme weather events, others by famine caused by extreme droughts and crop failures, others in the course of migration routes trying to escape these problems —all of this directly linked to Climate Chaos.
- Fact number 2: *Climate Chaos is not an accident*. It's caused by excess carbon emitted by humans, which cannot be re-absorbed quickly enough by the biosphere.

So the obvious conclusion should be: *Humans are killing other humans* —together with thousands of other living beings— *by disrupting the climate with their carbon emissions*.

We can visualize this invisible genocide in various ways. For example, each time we turn the key of our petrol-run car we are triggering a bullet that will kill (or at least help to kill) somebody, not at that very moment, of course, but at some time in the future. Maybe our own children or grandchildren. And it could even be ourselves.

Why do I say this? Because each and every day we are contributing with some kilograms of carbon dioxide to worsen Climate Change, and the effects of Climate Change are already killing people. So, even if we do not see the blood, even if we do not hear the screams... *we are killing people day-by-day*.

It is a kind of a boomerang effect. It might sound like a *karma* effect, and in reality karma can be interpreted in scientific terms, specifically in Systems Dynamic concepts, because every act in our lives has feedback. And that is the real-world translation of the karma concept: *dynamic feedbacks*.

But how can we measure our responsibility? I think this is a very important question, which, of course, is not easy to answer.

Since the Earth's Climate is a dynamic system, answering this question would require a complex calculation, because our emissions probably will not kill people this year but at some time in the future. And people dying

⁵ <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

because of Climate Chaos this year are being killed by carbon emitted during past years, maybe by our own parents' emissions. To make it even more difficult to calculate, the climate system has feedbacks, so simple extrapolations into the future would not be very accurate. But let us keep it simple for the moment, and make some easy and conservative calculations, to just approximate our liability in this massive criminal case.

The simplest approach would be to divide the number of climate victims per year by the total carbon emissions, so we find the total deaths per kilogram or per metric tonne of carbon. Then you only need to multiply this number by your emissions.

So let us begin with the first figures: how many people are dying now from Climate Chaos? Calculations can only be approximate, as the World Health Organization recognizes. But numbers of around 250,000 deaths per year⁶ have been proposed. Please, remember that this is a *very conservative* number which greatly underestimates the real number of deaths⁷.

I have taken numbers given by the WHO for 2030 because the residence time of CO₂ in the atmosphere can be estimated to be around 10 years. So what we are emitting in 2020 will be having killing effects for a long time, but especially until 2030 (and this is not taking into account any feedbacks). That is not to say that after those 10 years our emissions are reabsorbed—they keep on causing damage for a long time after that first decade. But for simplicity we could say that the worst is done during those first ten years of mean residence time.

I want to point out that these figures do not include general deaths by air or water pollution, which are in numbers of millions per year worldwide, as we can see from WHO statistics. Nor have I taken into account deaths in wars and other armed conflicts triggered or worsened by Climate Chaos, like Syria's, where nearly half a million people have died in the civil war which began in 2011⁸. So, I remind you that the above figure is a very low estimate. Now, let us continue with our carbon killing calculations.

⁶ <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

⁷ A 2021 study at Monash University (Melbourne) suggests a number 20 times bigger: <https://www.monash.edu/medicine/news/latest/2021-articles/worlds-largest-study-of-global-climate-related-mortality-links-5-million-deaths-a-year-to-abnormal-temperatures>

⁸ <https://www.nationalgeographic.com/science/article/150302-syria-war-climate-change-drought>

Given that anthropogenic emissions of CO₂ and equivalents are about 50 gigatons per year⁹, that is 50 trillion kilograms (I warn my international audience that I use *trillion* as used in English, that is: 10¹²). Divided by the total number of deaths it gives us *200,000 tons* (200 million kilograms) *corresponding to one death*. For a reference, to be able to compare this amount of carbon, per capita per year emissions are: 17 tons for the USA, 17 for Australia also, 5.7 for Spain, 7 for China, 8.5 for Finland (one of the biggest in Europe¹⁰), 12 for Russia, 9 for Japan... but only 1.6 for Costa Rica, 2.5 for Cuba, 2.4 for Egypt, 2.2 for Vietnam, 0.6 for Nigeria, etc. So, *it takes 11,765 US citizens to kill one person* with their yearly emissions, and 28,571 Spaniards for the same killing. My hometown in Galicia has a population around that number: we could dramatically visualize this killing in a metaphorical way —it IS like me and all of my neighbours making a yearly ritual in which we take a human being and sacrifice him or her in the town's central square to the cruel God of Carbon Consumption! New York city, with a total rounded population of 8 million would make a similar sacrifice, let us say at the iconic Times Square, of 680 human beings each and every year!¹¹

If total deaths per ton are 1/200,000 (0,000005), then each time you travel by car and do, for example, 10 kilometers, and your car emits 100 grams per kilometer¹², then you are emitting 1 kilogram of CO₂-equivalent. And from the relation previously established, we could say that *you have killed a 0,00000005 part of a person*. That might not seem a great crime and it would take 200,000,000 journeys of 10 kilometers to kill one person. But just think for a moment: how many commuting car journeys of such a distance

⁹https://en.wikipedia.org/wiki/Carbon_dioxide_in_Earth's_atmosphere#Anthropogenic_CO2_emissions

¹⁰ <https://sciencenordic.com/carbon-climate-change-climate-solutions/average-danish-household-has-fifth-highest-carbon-footprint-in-europe/1449383>

¹¹ Some time after I gave the original speech in which this text is based, I knew about some similar calculations made by John Nolt in 2011. In his article “How harmful are the average American’s greenhouse gas emissions?”, *Ethics, Policy & Environment*, vol. 14, n. 1, 2011, he calculated a very conservative figure: through his/her GHG emissions, each American is responsible for the suffering or death of, at least, one or two people in the future. This article was cited in Jorge Riechmann’s *Simbioética*, 2022. It seems that my own calculations are even more conservative and Nolt’s work suggests that the real killing is much greater than I had estimated.

¹² Example for the most selling car in Europe in 2019: Volkswagen Golf. Source: <https://www.nextgreencar.com/emissions> (approximate average of various Golf models).

are done in our cities each day? Then that number already starts to seem tragically realistic, does it not? And every driver has their own equal small part of the blame for the correspondent homicide. And please remember we are just taking into account Climate Change, not the other pollution effects of car-driving, that kill people by the millions worldwide each year!

Feel guilty? Some fraction of guilt is on your head? Some drops of blood on your carbon-consuming hands? Well, then you can obey the good-thinking mentality, the green industry marketing slogans or your Ministry of Energy Transition advice and send your petrol car to the scrapheap. Then take the generous subsidies especially targeted to middle-upper class people, and buy a brand-new electric one, with so-called “zero emissions”, so you can feel you are killing “zero people” when you drive it! But... wait a minute! Think twice. Electric cars and their batteries are not built from thin air: they consume oil in their construction, *a lot* of oil. And consequently, they emit *a lot* of carbon. It is said that an electric car, before its first kilometer, has already emitted between 5 and 35 tons of CO₂ depending on the model¹³. That means that it takes building between 5,700 and 40,000 electric cars to kill a human being, depending on model, type of battery, etc. If we change all cars in the World (1.2 billion) to electric—like most people think we should do to “save the planet”—that would mean, before their first kilometer, killing between 30,000 and 210,000 people. A huge human sacrifice to preserve our present day hyper-mobility and our car factories, is it not?

And I remind you once again: the numbers of future victims I have used for these calculations are clearly *underestimated*. If you just think of the hundreds or thousands of millions of predicted climate refugees and their probable fate in a world in chaos¹⁴, where every country will be trying to save only its own people, closing its borders to any other—as we are seeing right now in Europe with just a small fraction of future expected refugees—we can easily recognize that the future victims of our high levels of consumption could be counted by the millions! So, our killing power through carbon emissions is certainly much greater than my calculations have shown.

Of course, we emit carbon in more ways besides building or driving cars. If we want to make calculations fit reality we should not only include direct emissions (by our car or plane travel) but also those indirect emissions produced to build the stuff and services we consume, to build

¹³ <https://www.eea.europa.eu/publications/electric-vehicles-from-life-cycle>

¹⁴ <https://www.cbsnews.com/news/climate-change-refugees-united-nations-rules/>

and operate our homes and offices, to grow, transport, preserve and prepare our food, etc. It is the *embedded energy* of the products, the total *carbon footprint of our lifestyles* that will give us the whole picture. It is our total carbon footprint, aforementioned, that counts. Cars or planes are just one of the weapons of our collective climate killing. In general, transportation and housing are the main contributors to our general carbon footprint in industrialized countries¹⁵. There are quite a bunch of carbon calculators online¹⁶, and you can use them like a good nonkilling tool to reduce your own involuntary fractional homicides.

Yes. We are committing a collective crime¹⁷. And it is very asymmetrical depending on what country you are living in¹⁸, depending mainly on your life-style, on your personal carbon footprint. Rich people living rich lifestyles, have a carbon footprint quite bigger (could be more than three times that of their poorer neighbours¹⁹). We could even call them “unconscious carbon *serial* killers”. So inequity has a lot to do with this collective crime²⁰, but the saddest thing to think is that even poor people — especially in rich countries— are killing maybe their own grandsons and daughters. For example, the 10% poorest households in the US emit 18 tons per year (data related to 2009). And that is a lot more than the average in many countries of the world. The relation between income and emissions creates what some have called the “equity-pollution dilemma”, that is, that when you raise the income of poor people, that correlates with an increase in their emissions. But here we do not have the space to explore that dilemma, interesting as it may be.

You could rightly say: it is not that easy, because the total number of people killed last year (for example) by climate change cannot be related to emissions produced this year. And that is true, as I acknowledged before. Carbon emissions have big inertia, so present emissions will only cause effects many years ahead, in a cumulative way. But that question makes no

¹⁵ <https://www.zdnet.com/article/how-location-household-size-and-income-impact-your-carbon-footprint/>

¹⁶ The US EPA has it own at <https://www3.epa.gov/carbon-footprint-calculator/>

¹⁷ <https://unu.edu/publications/articles/climate-change-victims.html>

¹⁸ <http://www.globalcarbonatlas.org/en/CO2-emissions>

¹⁹ <http://www.lse.ac.uk/GranthamInstitute/news/a-rich-american-household-typically-produces-more-carbon-dioxide-emissions-each-year-from-driving-than-the-entire-carbon-footprint-of-a-poor-household-over-8-months/>

²⁰ <https://www.vox.com/energy-and-environment/2017/12/1/16718844/green-consumers-climate-change>

argument against my previous calculations, because present emissions are greater than past emissions, so there will be *more* people dying in the future due to climate change, in total and per unit of emissions, precisely because of that inertia and that cumulative effect. So, this argument still makes sense, a tragic sense.

Vesselin Popovski, from the Institute for Sustainability and Peace at the United Nations University, puts it very clearly: “Climate change victims are victims of human rights violations”. And he adds “Climate change victimization can be linked not only to violations of civil and political rights, but also to violations of social and economic rights”²¹.

Then, the human-rights choice, the nonkilling approach, would imply stopping fractionally and indirectly killing people in the future, by stopping firing those *time-travelling bullets*, this is: by stopping emitting carbon. The less we emit, the less we kill. It is that simple. And it is not only fewer future homicides, of course. If you believe in karma, then ours will be liberated from the guilt of killing maybe thousands of other living beings, of hurting Mother Nature, Gaia, which we all are part of. If we do so, we will stop being cancer cells, killing bit by bit the greater organism we belong to.

Of course this killing through carbon emissions is in part behavioural violence and in part structural violence. It is behavioural because, within our individual or family lifestyles, with our consumption choices as a non-profit or for-profit company or university we can choose to have very different footprints. But it is also quite structural because the very structure of industrial capitalism makes it almost unavoidable to have a minimum carbon footprint no matter what our personal lifestyle choices are. We can choose if we use electricity from a renewal energy cooperative but we do not have the power, as consumers, to close our nuclear powerplants. If we were living in *true* democracies, then we would be fully accountable for all the structure as well, as far as we could really change it through democratic elections. But as we, the people, do not have the real power in our present political systems—which could be better defined as *elective partitocracies*—we are not fully responsible for the structural part of the emissions in our countries. But we are indeed fully responsible for a good part of them, the part which depends on our consumer choices.

From an anthropological and historical point of view this kind of killing—fractional, delayed and long-distance—is totally new. So it is understandable that we are still greatly confused about it and about the

²¹ <https://unu.edu/publications/articles/climate-change-victims.html>

ways to stop it. Even in Glenn Paige's works and others published by the Center for Global Nonkilling and other pacifist organizations worldwide it's still mostly absent. Paige used to make the point, to defend the nonkilling nature of our species, that, through all of our history, the immense majority of humans did not and do not kill other humans. But industrial civilization, the arrival of *Homo colossus* and mass consumption societies based on the burning of tremendous amounts of fossil fuels have radically changed that. As tragic as it may be to think or say, today, the immense majority (if not all) human beings in modern societies are collectively killing other humans!

I believe that this deserves both profound social and personal consideration, and a radical new approach for nonkilling political science and action. And also for ethics, as we desperately need an approach that gets us away from the close-circle morals to a new set of planetary morals, long-range and large in scope, which should ideally include all living beings. A change from *my family, my tribe, my country* as exclusive narrow moral references, towards *the whole biosphere* or Gaia as the inclusive wide moral reference for our actions. Within this new approach we should consider not only guns, armies or nuclear bombs, but the immense majority of industrial consumer goods and services in our societies as weapons of life-destruction.

And, of course, we should not take the easy moral shelter of considering that everybody's fault is nobody's fault. Let us assume responsibility: we, the people of industrialized countries, are killing people. The good news is that our lifestyles are our guns, so making them very much simpler, drastically reducing our carbon footprint, will be like dropping those guns to the floor and giving up these fractional delayed homicides and also the gaiacide.

So I encourage all of you, all of us, to seriously consider this new ethics, this new nonkilling approach for the sake of life on Earth.

Let us all become carbon conscientious objectors!

About the Author

Manuel Casal Lodeiro is an advocate for Degrowth and public speaker and writer on eco-social issues and threats to industrial civilization. Author of *La izquierda ante el colapso de la civilización industrial*, *We, the detritivores* and coordinator of the *Guía para el descenso energético*. Founder and coordinator of *15/15\15 Magazine for New Civilization* and of Instituto Resiliencia, part of RCE-Galicia acknowledged by the United Nations University.

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Guidelines for contributions

The Center for Global Nonkilling launched in January 2010 its Global Nonkilling Working Papers series. Following the Center's mission of "promoting change toward the measurable goal of a killing-free world", the series are dedicated to theory and research incorporating original scientific works that tackle issues related to the construction of nonkilling societies, where killing, threats to kill and conditions conducive to killing are absent. The Global Nonkilling Working Papers series have a multidisciplinary perspective, open both to theoretical and empirical works on topics such as:

- Nonkilling and neuro-bioscience
- Nonkilling and gender relations
- Nonkilling and education
- Nonkilling and economics
- Nonkilling and the environment
- Nonkilling and the media
- Nonkilling, science, and technology
- Nonkilling in spiritual and philosophical traditions
- Nonkilling and the arts
- Nonkilling and sports
- Nonkilling and the professions
- Role of the military and police in nonkilling social transformation
- Nonkilling futures
- Nonkilling and leadership

A wider list of possible research topics can be found in the two following publications: *Nonkilling Global Political Science* (2002; 2009) by Glenn D. Paige and *Toward a Nonkilling Paradigm* (2009), edited by Joám Evans Pim. Both available for free download at the Center's website.

The collection is published on an occasional basis as texts are delivered by authors and reviewed by the Nonkilling Research Committees. The series will be distributed both on print and online, all issues being available for

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Authors must submit a title, a 100 word summary and a 80 word biographical sketch, prior to acceptance of the complete proposal. After approval, authors will have four months to complete the final text, with an extension between 10,000 and 20,000 words. The Chicago Manual of Style should be used for reference.

For additional information contact series Editor at info@nonkilling.org

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