#### HIROSHIMA LECTURE - 2007

# GLOBAL CITIZENSHIP and the DILEMMAS of SECURITY in a TIME of CHANGING CLIMATE

What I want to do today is to look at some issues that may be useful as you do your readings during this seminar. I hope to provide you with some ideas that may be worth considering as you try to make sense of the material, and perhaps to provide some alternative ways of seeing the issues. I hope to do this by looking broadly at the idea of security, and various ways in which it can be viewed in a time of climate change. Secondly, I want to look at what some of the deeper implications of our current way of life in terms of structural violence and positive peace. Finally, I want to examine some alternative views about economics and our relationship to the environment and to see how they might fit in with long-term views of security, ours and the planet's.

# **Security**

In the discipline of international relations, security has been seen in different ways. For some, especially those who see the world as an intrinsically dangerous place, it is seen as stemming from power - if you have enough power to attain a dominant position you will acquire security as a result. Others see security as a consequence of peace - only a lasting peace would provide security for all.

In general, the theorists, and especially those who see security as resulting from power, have had a very **state centric** view of the world. In the past they have tended to discuss security in terms of security of the state and in particular in terms of war. Security is often defined as a freedom from war and a high expectation that if there was a war our side would not lose.

In other words, when we talk of security we tend to focus on a state's ability to be **safe from outside attack** by another country or other countries. This means that our state should be able to muster considerable force to maintain order and security internally and be able to muster enough force to try to preserve what it values from outside interference. Almost all states maintain armies to counter military threats.

This is of course not unreasonable - the frequency and destructiveness of armed conflicts throughout history explains why states are so preoccupied by perceived **military threats** to their security, and why national security is seen in military terms. Of course, there can be a downside to this. Our arming for security may be seen as a threat by our neighbours, leading to costly and dangerous arms races that leave everyone poorer and less secure than when they started.

#### **OVERHEAD - Bombs**

Slowly we are coming to realise that all threats are not merely threats to the state. In this era of globalisation we are realising as never before that some threats are global. The do not respect our notions of national security. They may threaten our very existence and the existence of our planet and cannot be solved by any given nation state, even the most powerful, alone. They require a certain degree of international governance because, for example, no matter how many missiles or aircraft carriers or bombers a country may have, they are absolutely useless in confronting threats

such as environmental ones. In fact, they may be part of the problem.

**Ecological threats** can come from natural disasters such as earthquakes, floods, typhoons and tsunamis or from global warming which results from the overproduction of greenhouse gasses. Generally the threat is a threat to all, but at times one state or group of states may be particularly threatened ecologically by the actions of others (for example some low-lying Pacific island countries are threatened with submergence under rising sea levels caused by global warming that in turn results from greenhouse gas production in more developed countries).

In short, there are different types of threats, but traditionally military threats have been thought of as the most important in security considerations and while the international system is anarchically structured, without any international police or enforceable international law, they will remain vitally important. However, we should note that the relevance of military threats, especially for the most developed states, is declining when compared to the other forms of threats especially ecological threats. And, as ecological threats are global, they affect us all. However, in the long run it is less developed countries, those that have contributed least to the problem, that will have the hardest task of securing their citizens against the consequences. Ironically, this in turn may mean waves of environmental refugees invading the richer countries, the countries facing the least military threat.

## **Violence: Direct and Structural**

To give context to these concerns, what I want to do here is look at peace and violence in broad terms, much broader than the absence of war and the hoped for, but never reached, goal of military security. I want to look at peace in some sense in very individualistic terms, but also in the most interconnected planetary terms. I want to look at a peace of permanence not merely one that sees nation states scrambling for some short-term, usually illusory, achievement of military security.

At the outset, I must point out that there are probably as many definitions of peace and violence as there are definers. For those of us in the west the definitions tend to be negative telling us that peace is a freedom from, or cessation of, war, or a freedom from civil disorder. Of course there are also affirmative definitions: for example the Hebrew word *shalom* means "completeness" or "wholeness"; while the Sanskrit word *shanti* means spiritual contentment, inner peace, a profound integration of the inward life of a person.

And, if peace is to be construed positively as wholeness, there can be no rest until the possibility of wholeness and fulfilment has been opened up for all and all have a share in the power which is an essential ingredient in a fully human existence. In other words, according to the "father" of modern western peace research Johan Galtung, it is simply not enough for us to be only worried about death and physical injuries.

Let's tease this out a little. It is obviously violence to shoot somebody with a gun or hit them with a fist. This is direct violence, actor generated violence. An absence of direct violence is negative peace. But there is more to peace because violence can also be far more subtle than shooting or hitting someone. There are also indirect forms of violence. Can it be called violence if we treat someone badly, use them as mere means to our ends, instead of treating them as valuable ends in their own right? Might it be violence if we will have a good lunch while many around the world

starve, especially when there is enough food to go around? Or if we contribute to environmental damage because we demand high standards of living when the main burden may fall on others who have no hope of reaching a standard of living anything near ours?

Here I would like to introduce the concepts of "structural violence" and "positive peace". For theorists such as Galtung, the idea that because there is an absence of a shooting war the world is at peace was totally inadequate. He set out a broader notion of peace than the negative definitions provided.

Peace for him is more than an absence of direct violence (which he calls negative peace), there is also "structural violence". When there is an absence of both direct and structural violence, we have "positive peace". Positive peace includes the concepts of social, economic and international justice. In other words, the opposite of peace is violence *not* war, it is *violence* and violence can have a very broad definition.

If I stop hitting you, we will have negative peace - an absence of direct violence. We may still hate each other and try to harm each other in less direct ways. But there are people whose lives are always a misery and no one may actually intend it to be miserable. There are people born into poor families, in poor countries, who never have the chance of an education, can never even know what their human potential may be. No one person is being directly violent to them, but there is a structure of violence that oppresses them nevertheless.

"Structural violence", then, is unintended harm done to human beings. It is structure generated, not actor generated. It is indirect violence built into social, political and economic structures that gives rise to unequal power and consequently unequal life chances. It includes exploitation, alienation, marginalisation, poverty, deprivation, and misery and exists when basic needs for security, freedom, welfare and identity are not being met when these in fact could be met. And of course, the consequences of global warming can be seen as an example of structural violence.

In defining peace, most world powers focus on a negative definition tied to the concepts of military security and military defence. But think for a moment in terms of structural violence.

## Is it violence:

Where mass unemployment is caused by the nature of the capitalist economic system?

Where women are oppressed by patriarchal social structures? After all, women make up half of the world's population and do two-thirds of all the work in the world, but receive one-tenth of the income and own less than one percent of the property.

Where social, ethnic, racial and religious groups are suppressed by political elites?

Where the world economic system dooms the majority of humanity to live in depravation and poverty, and which subjects up to two-thirds of the young children of these poor to the risk of permanent brain damage due to inadequate nutrition and other effects of poverty.

Where the vice-president of a country that makes up just 5% of the world's population and uses up over a third of everything says that "our way of life is not negotiable"?

Where Pacific atoll islanders, who have produced very little by way of greenhouse gasses, see their homes go under water due to climate change-induced rising sea levels?

In order to examine what global citizenship and security may mean in a time of potential environmental crisis, we need to think about the meaning of sovereignty when global threats require global solutions. We need to think about how we view economic growth when it seems that it is our current patterns of production and consumption are causing the problem, and whether we as a species need to re-evaluate our perception of our place in the natural environment if we are to have any chance of saving it.

I do not have time today to say too much about potential alternative forms of global governance here, although there are such alternatives worth considering. Suffice it to say, our international anarchical system of sovereign states doing what they see as being in only their own narrowly defined and short term economic national interests cannot circumvent the looming environmental crisis. In fact, it is this very system that we have built which is the major cause of the problem.

We need a different and more comprehensive way of conceptualising security. We need to ask fundamental questions such as what exactly it is that we are talking about when we talk of security. Security for who? The answer has to be for people, not states or governments. State security must only be a means to an end, the real measure is how people feel. And security for people must encompass all security threats that people feel, and these need not, and in fact are not, restricted to military security. Security has to be considered in several dimensions - military, and economic, and now increasingly obviously environmental. The state can be quite secure from invasion while many of the population feel insecure.

## OVERHEAD - I Only Want to Live Once

We can all be armed to the teeth, we may no longer (perhaps self-deceptively) be worried about being destroyed in a nuclear war, but can we be sure that, in the words of Jarred Diamond, we are making the environmental choices that will allow us to survive, or ones that will ensure that human society collapses and fails? These decisions will have to be taken in global forums such as the United Nations.

I want to spend the bulk of the rest of this lecture looking at the relationship of the environment to peace (and this will tie in to some of what I said earlier about Galtung's views of the broadness of the concept of violence to include exploitation and the inability of some to reach their full potential, and Gandhian nonviolence as encompassing everybody. As the Mahatma said: the world has enough for every person's need but not for every person's greed. Further, I want to explore Mahatma Gandhi's idea that the quest for Truth (with a capital T) is the very aim of life. And this was a quest for truth that saw all of humanity, and even all of nature, as one. A truth that could not be approached unless we were at peace with others and ourselves and with the natural world because they are so interrelated. I will explore these themes by looking briefly at what has become know as "deep ecology" and "Buddhist economics".

## The Economics of Peace.

First, let me say something about economics. Of course, economics plays a part in standard International Relations. We have all heard the term "guns or butter", meaning that if there is only

so much money to go around, choices have to be made as to how it is spent. Does it go for military defence or to development for example? And this, as I mentioned before, may come down to what we consider to be the greatest threats to our security.

In discussing economics and peace, we should note that there are different views of what economy means and what is and is not economical. **Henry David Thoreau** was a major American writer and peace activist. He decided that he did not much like the hurry and bustle of the fast-paced consumerist world of the American late 1840s. He spent two years in a hut he built for himself in the forest by a pond communing with nature and supporting himself with odd jobs and writing about the value of a life in nature and a non money-accumulating way of living. The resulting book, *Walden*, is one of the great classics of American literature. He starts the book with a chapter called "Economy". There he mentions a bet with a friend. They bet about who could get to town 30 miles away the quickest. Thoreau says he will walk and beat his friend, who laughs and says that Thoreau can't possibly beat him because he will catch the train. Thoreau answers that he is free to catch the train, but that they must both start off without any money. His friend would have to find a job and work for at least one day to earn the money for the fare, then he could catch the train, whereas Thoreau was ready to start walking now! Even if his friend found a job immediately, Thoreau would beat him by half a day.

The important social critic, **Ivan Illich** pushes this line further in his book *Energy and Equity*. Try this: How fast on average do you travel in your car - 100mph, 60, 40?, Illich says you don't, because you really must add in the hours you work to pay for the car, the registration, the insurance, servicing of the vehicle, petrol, tyres etc. If you add all these hours plus the hours you actually spend in the car travelling at whatever kilometres per hour you drive at and divide the number of kilometres travelled by all these hours, guess what you get? Six kilometres an hour, the same that the Indian peasant gets travelling by bullock cart. He points out that our entire society now uses more time for the sake of traffic than we saved. Where is the economy here? Sure our lives are different, we have much more mobility, but we also spend a great deal of time in often soul destroying jobs and working to pay taxes for roads and car parks and for hospitals to pick up the collateral damage of our over reliance on motorised transport. Of course we can't go back to bullock carts, but Illich simply asks us to look at this as an exercise in economics and realise the costs. By the way, can you think of a more economically efficient form of transport? Illich tells us that a bicycle does not cost much, costs little in maintenance, does not need to be registered or filled up with petrol. When you do the mathematics for bicycle transport it is three times as efficient as a car or bullock cart, giving about 18 kilometres per hour. And of course it helps to keep you fit through exercise (where you are not breathing car fumes) and is environmentally friendly.

The questions raised by these writers is: what is real economy and how should we measure it? When we talk about the production of some item, do we factor in the carbon emissions which later will have to be taken out of the atmosphere at great cost? When we calculate the cost of electricity from nuclear power, do we factor in the costs of guarding installations from terrorism or the costs of storing the waste products for possibly hundreds of thousands of years? Why is it that we seem to be working longer hours to pay for all the "labour saving" gadgets we are told that we need?

A way in to allow us to examine these questions is by looking at E.F.Schumacher's economical

ideas of "Small is Beautiful" or, as it is often known, "Buddhist Economics".

Early in its history, economics was referred to as the "dismal science" because it was seen as being devoid of any moral underpinning and because it seemed to be about untold riches for some and abject poverty for others. Modern economists, of course, do not see it this way. They tend to see the market as being a value-neutral mechanism that is quite good at arranging for a wide and relatively equitable distribution of wealth. Some critics, however, point out that now that technology has enabled the production of countless goods for human consumption, it has not only made possible unlimited consumption and greed but also legitimised it. As demand grows, the problem of unfulfilled needs (at least in the affluent world) becomes one of unfulfilled wants, that are too often treated as if they were needs. Economists tend to claim that the maximisation of consumption and the continual raising of "living standards" are the measures of success. Their critics assert that the expansion of production that led to this also leads to environmental problems, which seem to be coming home to roost now, and that so-called efficiency leads to unemployment, exploitation and international inequalities and large-scale structural violence. This expansion is not only aimed at satisfying wants but also at creating ever new ones. In short, for these critics The Science of Economics is not just dismal, but has became the art of the rat race. What does a nonviolent economist like Schumacher have to say about this? After all, Schumacher's landmark book Small is Beautiful was subtitled "Economics as if People Mattered."

In the mid-1950s, Schumacher undertook an assignment to Burma as a British governmental economic adviser. Later he recalled that,

Within a few weeks of my arrival in Rangoon and after visiting a few villages and towns, I realised that the Burmese needed little advice from a Western economist like me. In fact we Western economists could learn a thing or two from the Burmese. They have a perfectly good economic system which has supported a highly developed religion and culture and produced not only enough rice for their own people but also a surplus for the markets of India.

Schumacher had realised that western economic philosophy could not simply be transferred to Burma because it would merely lead to an introduction of western demands. Further, on that trip, he realised that "overseas development aid really was a process where you collect money from the poor people in the rich countries, to give it to the rich people in the poor countries."

He came to realise that there was something very wrong with the notion of limitless and completely indiscriminate growth, and of the consequences of our inability to distinguish between renewable and non-renewable resources. As a result of his criticisms of the way we structured our economic system, Schumacher was labelled a crank by fellow economists. With his ever present sense of humour, he replied: What is wrong with a crank? The crank is the part of the machine which creates revolution and it is very small. So, I am a small revolutionary! I will take that as a compliment.

Following the Burma trip, Schumacher gave an example of contrasting views on freight rates between the thinking of an economic expert and a "Buddhist economist". A traditional economist

may be inclined to advise that the rates per ton/mile should "taper-off", so that they are the lower the longer the haul. He may suggest that this is simply the "right" system, because it encourages long distance transport, promotes large-scale, specialised production, and thus leads to an "optimum use of resources".

The Buddhist economist, on the other hand, would argue the opposite:

Local, short-distance transportation should receive every encouragement but long hauls should be discouraged because they would promote urbanisation, specialisation beyond the point of human integrity, the growth of a rootless proletariat—in short, a most undesirable and uneconomic way of life. (Now we would also add far more greenhouse gas emissions.)

Later, Schumacher came to the conclusion that what was needed was a "non-violent economics". In 1960, he published what was to become his manifesto:

A way of life that ever more rapidly depletes the power of earth to sustain it and piles up ever more insoluble problems for each succeeding generation can only be called "violent". ... In short, man's urgent task is to discover a non-violent way in his economics as well as in his political life. It is obvious that the two are closely related. ... Non-violence must permeate the whole of man's activities, if mankind is to be secure against a war of annihilation. Economics, like politics, must be led back to an acceptable philosophical base. Present day economics, while claiming to be ethically neutral, in fact propagates a philosophy of unlimited expansionism without any regard to the true and genuine needs of man which are limited.

And we may add without regard for the future of the planet which may be in dire straights.

For him, nonviolent production meant employing modes of production which both respected ecological principles and attempted to work with nature rather than "attempting to force their way through natural systems in the conviction that unintended damage and unforseen side-effect can always be undone by the further application of violence. All too often one problem is 'solved' by creating several new ones."

Schumacher pointed out that there are two types of mechanisation: the use of tools which enhance skill and power, and the use of machines which turn work over to mechanical slaves and then leave the worker in a position of having to tend the slave. Further, he noted that we are moving ever more rapidly into a world dominated by the large-scale; complexity; high capital intensity which eliminates the human factor; and violence. In order to ensure our survival he recommended new guidelines which point towards smallness rather than giantism, simplification rather than complexity ("any fool can make things complicated, it requires a genius to make things simple"), capital saving rather than labour saving—and towards nonviolence. The profit motive throws humanity and the planet out of equilibrium. The emphasis has to be shifted back to the person rather than the product, capital has to serve humans rather than humans remaining the slaves of capital. Costs have to be measured in human terms by taking cognisance of happiness, beauty, health and the protection of the planet. How often are these factors fundamental considerations when a new product is being planned?

Schumacher noted that the affluence of a small part of the world was pushing the whole world into three concurrent crises concerning resources, ecology and alienation - and in many regards things have become much worse since he wrote 30 years ago.

In *Small is Beautiful* Schumacher points out that "While the materialist is mainly interested in goods, the Buddhist is mainly interested in liberation". The keynotes of Buddhist economics are simplicity and nonviolence, while for modern economists who measure "standards of living" by amounts of consumption, this is difficult to understand. In modern economics, consumption is the end and purpose of economic activity, in Buddhist economics, on the other hand, ownership and consumption are merely means to an end. He also affirmed Gandhi's dictum that "high-thinking is inconsistent with complicated material life", noting that "all real human needs were essentially simple, therefore only frivolities and extravagances like supersonic transport were invariably complex."

Just before his death, Schumacher outlined his personal philosophy of the meaning of human life, talking of the transformation of the inner self, through "inner work". In a film, *On the Edge of the Forest*, in language that could have come straight from Gandhi, Schumacher explained that the "religion" of economics is the enemy of all the things that really matter—beauty, sympathy and harmony; that it is, in fact, uneconomical because it produces waste. In this "religion" the only thing considered worthy of economising is human labour—paradoxically the very thing that is free and of which there is plenty and, in any case, our attempts at economising on labour through labour saving devices, all too often seem to be counterproductive. Schumacher emphasises that we are part of the environment, that if we win the fight against nature we will find ourselves on the losing side. Finally, he emphasised that if we do not develop an economics of permanence then we are too "clever" to survive, that we can be classified as a species in danger of extinction.

In short, the message from Schumacher is: unrestricted growth where we don't seem to care if what we take is renewable or non-renewable, is violent and will destroy us. Globalisation can be problematic where it destroys less alienating and more carbon neutral localisation. The economics of today, whatever its supporters say, is NOT ethically neutral. It leaves more and more problems for future generations.

## **Peace with the Environment**

I would now like to mirror what I have said about peace and economics with a brief look at peace and the environment.

If you go back half a century and read any of the standard International Relations text books, for example Hans Morganthau's *Politics Among Nations*, you will not find any mention of the environment. Pick up any of the recent IR textbooks and they all contain chapters on the environment. Again, as with what I have just said about economics, I do not want to cover too much of the same ground that IR does. In the IR literature, there is some talk about the damage that war can do to the environment, and how if it is a nuclear war that results in a nuclear winter, it can damage the environment to the degree that life would become impossible. We would all die even if no weapons exploded near us and radiation fallout did not reach us. And there is even more discussion of the reverse, how damaging or over exploiting the environment can lead to civil strife

or war. We have all heard about environmental refugees and understand the conflict that can arise with the unregulated movements of large numbers of people, and we have heard quite a lot recently about the possibility of water wars - future fighting over an ever diminishing but essential recourse.

Here I want to do something a little different. I want to explore a different environmental philosophy that is related to peace in the broad sense in which I defined it at the start of this lecture. If we talk about peace as harmony with nature, as knowing where we fit in the larger scheme of things, as living in security, the debate shifts away from standard IR questions.

I would like to use the vehicle of what has become known as "deep ecology" to provide us with a different way of looking at the environment and our place within it. And perhaps we need a radically different way of seeing if we are to avert an impending crisis and give any sensible meaning to the word "security".

Although a conservation ethic had been around for decades before the publication of Rachel Carson's ground-breaking book *Silent Spring* in 1962 and studies such as Club of Rome's *Limits to Growth* in 1972, Norwegian philosopher **Arne Næss** took environmental philosophy into new areas with his call for a "deep ecology", the way his pupil Johan Galtung took peace studies into new areas with his definition of structural violence.

In 1973 Næss published a short article, "The Shallow and the Deep, Long-Range Ecology Movement. A Summary", that was to take on paradigm-shifting proportions. It introduced us to a terminology that has since become commonplace even though his name has not. In the article, Næss points out that a shallow but influential ecological movement and a deep but less influential one compete for our attention. He characterises the "shallow" ecological movement as one that fights pollution and resource depletion in order to preserve human health and affluence, while the "deep" ecological movement operates out of a deep-seated respect and even veneration for all ways and forms of life, and accords them the "same right to live and blossom."

Næss puts the contrast between the two in its most stark form: shallow ecology sees that "natural diversity is valuable as a resource for us." He notes that from this perspective "it is nonsense to talk about value except as value for mankind", and adds that in this formulation "plant species should be saved because of their value as genetic reserves for human agriculture and medicine." On the other hand, deep ecology sees that "natural diversity has its own (intrinsic) value" and he notes that "equating value with value for humans reveals a racial prejudice", and adds that "plant species should be saved because of their intrinsic value", not merely because of what they may provide for us.

In 1984, Arne Næss and an American colleague jointly formulated a set of basic principles which they presented as a minimum description of the general features of the deep ecology movement. In summary, they said that all life, human as well as nonhuman, has intrinsic value. The richness and diversity of this life also has value and humans have no rights to reduce this richness and diversity except in very exceptional circumstances. They go on to claim that our human culture can survive with a large decrease in human population and that the flourishing of nonhuman life may depend on it. So we have to reduce our numbers. And finally, as we are having an increasing negative

impact on nature we must change our way of life. We need to think more of the quality of our lives, rather than what we have called our "standard of living". And if we don't do this soon enough, as James Lovelock (the originator of the Gaia hypothesis) has been reminding us of late, we will have to face the revenge of Gaia.

For Arne Næss deep ecology is not fundamentally about the value of nature *per se*, it is about who we are in the larger scheme of things. He notes the identification of the "self" with "Self" in terms that it is used in the Hindu sacred text the *Bhagavad Gita* (that is, as the unity which is one) as the source of deep ecological attitudes. In other words, he links the tenets of his approach to ecology with what may be seen as giving meaning to our lives, perhaps even pointing the way towards self-realisation.

The link between self-realisation and Næss' environmental philosophy can be clearly seen in his discussion of the connection between nonviolence and self-realisation in his analysis of the context of Gandhian political ethics. Here the link between peace at the deepest level and environmentalism become evident.

## (OVERHEAD)

- (1) Self-realisation presupposes a search for truth.
- (2) In the last analysis, all living beings are one.
- (3) Violence against oneself makes complete self-realisation impossible.
- (4) Violence against a living being is violence against oneself.
- (5) Violence against a living being makes complete self-realisation impossible.

In a Gandhian way of feeling rather than intellectualising, Naess adds: "if you hear a phrase like, 'All life is fundamentally one', you should be open to *tasting* this, before asking immediately, 'What does this mean?" In Naess' expanded environmental ethic, it is not just us who are global citizens. All living species are, and we are inextricably connected.

Naess suspects that a shallow ecological approach may not be enough to save our planet from environmental collapse. It however is influential, and the shallow immediately self-serving message may need to be propagandised to buy us time until a deeper ecological consciousness, a change in the way we need to see the world and our place in it, can take hold. This deeper ecology may give existential purpose to our lives beyond mere consumption and the vision it entails may be a necessary one to convince us that we should not be using nature in ways that may lead to our eventual physical demise.

#### Conclusion

If we recall what Galtung said about structural violence, then that which blocks us from discovering our true selves, or even blocks us from having the ability to pursue such lofty matters, is violent. And it seems that into this definition of violence, for these and the reasons Schumacher reminds us of, our economics is one of violence and our up till now accepted approach to our environment is also violent. In order to pursue our full potential, in order to ensure that our standard of living does not block others' quality of life, and in order to guarantee that we are not a species in danger of extinction in a short time-frame, we need to reconceptualise the meaning of security as the long-term security of all, and not just humans (after all, if all living beings are one, if they are all inextricably linked parts of Gaia, then fighting to preserve nature is an act of self-defence). To do this we need to take the threat of global warming seriously and take measures to counter it. It is your generation that will have to come up with approaches that our governments are not yet willing to adopt because of still far too narrow views of security and economic well-being. Perhaps we can start to point the way. After all it is your future that we are talking about here, and as a parent I have to believe, that for the sake of my child, humans are too cleaver to destroy themselves.

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#### REFERENCE LIST

For Schumacher, Naess and Galtung, see Thomas Weber, Gandhi as Disciple and Mentor.

For Schumacher, see E.F.Schumacher, Small Is Beautiful: A Study of Economics as if People Mattered.

For Thoreau, see Henry David Thoreau, Walden.

For Gaia and Lovelock, see James Lovelock, The Revenge of Gaia.

For Illich, see Ivan Illich, Energy and Equity.

For Diamond, see Jared Diamond, Collapse: How Societies Choose to Fail or Succeed.