

A Sustainable Future: How can we get there?

Why think about the future? Well, the first reason is that we're likely to be spending quite a lot of time in it. Whilst some are happy to just wait and see what happens in their personal future we still spend quite a lot of time thinking about it and planning for it. Have I bought that birthday present yet? Is it time I booked the holiday? Will life feel different when I'm 40? These are all questions about our personal future. There may be proposed developments for your local community. Do you feel these will enhance community well-being or hinder it? At a national level, we are offered various versions of the country's future by different political parties. Which does one trust to create a fairer and safer future?

Thinking about the future

So, we are all engaged in thinking about the future in different ways. An important reason for this is so that one can be prepared for different eventualities that may come about. This may relate to personal, local, national or even global futures. In times of rapid and troubling change it is easy to lose one's bearings and for life to feel more uncertain. It is useful therefore to set time aside sometimes to think through particular issues or important choices that need to be made. Doing this will certainly have an effect on one's future and so it should be time well spent. Whilst decisions are made in the present the consequences that follow are in the future, whether in minutes, days or decades. A key advantage is one will be better prepared for what may be to come whether for oneself, one's family or community.

We generally talk about the future (singular) rather than futures (plural). It's useful to talk about futures in the plural because, at any point in time, a number of different possible futures could come about. It is a reminder the future is not fixed but flexible and open to change. Our actions, individually and collectively, have an impact on the future. The present that we live in is the result of innumerable conscious and unconscious decisions made by people over recent decades and centuries. It is also true we do not have equal power in helping shape the future. Whilst global companies, financiers, economists and politicians have a lot of influence over the future compared with individuals, so do groups of ordinary citizens when they choose to work collectively together in movements for positive change.

Global trends, all of which have local impacts, are monitored regularly by the Worldwatch Institute. Here are some examples:

- Growth of global solar and wind energy continues to outpace other technologies
- Agriculture and livestock remain major sources of greenhouse gas emissions
- Automobile production sets new record, but alternative vehicles grow slowly
- Development aid falls short, while other financial flows show rising volatility
- Peacekeeping budgets equal less than two days of military spending

If each of these trends continues to deepen which would you consider to be helping create a better future? Which trends do you feel need enhancing or reversing? How might each impact on your own life and community?

One of the most useful distinctions futurists make is between probable and preferable futures. Since the future is not clearly known it is still a flexible place. However, some futures are more likely to come about than others given current trends and events, and are thus labelled probable futures. They are futures we *expect* to come about. This can hold true at different levels from the personal to the global. As mentioned above it is past and current trends and events that help shape the future. Futurists and others thus analyse and project local, national and global trends to ascertain their possible and probable impact on the near, middle and long-term futures.

Preferable futures are a different category of future. These are the futures we most *hope* to see come about based on our deepest values and beliefs. When humanity has made great progress, it is often because of the work of many individuals and groups working for positive change, even if it doesn't occur in their lifetime. The abolition of slavery, the eradication of illiteracy, votes for all, the creation of the NHS, greater protection of the natural world, all came about because people had a dream, a vision of a better future for society. We benefit from the visions our parents and former generations struggled to bring about for the future well-being of society. Every generation surely has a responsibility to do the same.

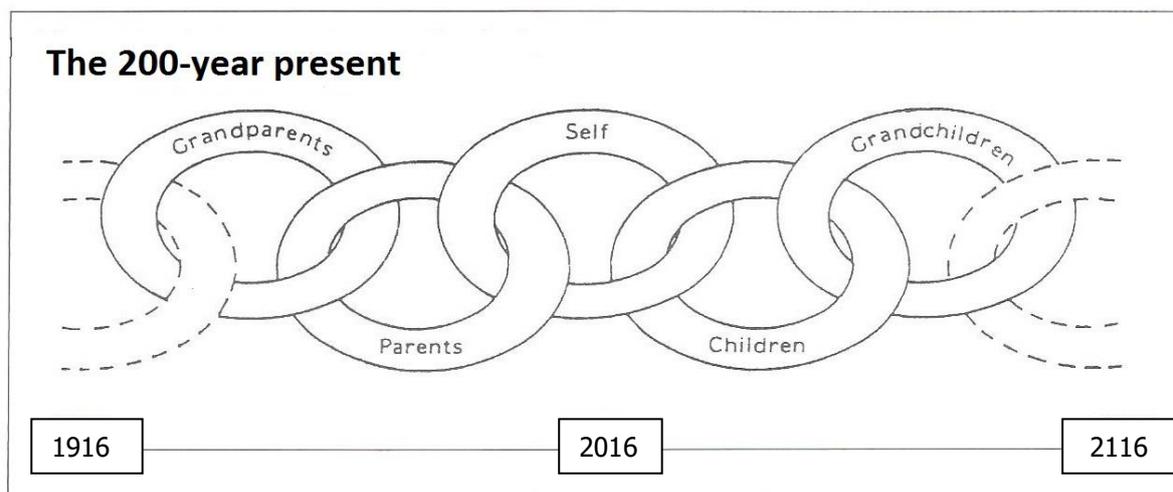
So the difference between probable and preferable futures is really important. Where it looks as if we're going may not be the same as where we'd actually like to get to. On a global scale climate change is more than just a probable future because its impacts are being felt now. Nationally one might note social commentators have observed the UK becoming more individualistic, materialistic, less caring and tolerant over the last thirty years. This trend is driven by economists and politicians who believe everyone is responsible for their own fate, that competition solves everything and that support from the state is an obstacle to progress. Unless seriously challenged such a trend will only lead to greater inequality and intolerance.

Visions of a better world can sometimes be unrealistic, they may never get off the ground or they may fail ignominiously. But they may also come about in another form or they may be created by the next generation. Truly great ideas may need long periods of gestation and may be picked up by future generations to realise. What is crucial in the context of climate change is having a positive vision to plan from and work towards – and we know that in this case it needs to be a low-carbon future. If we can't imagine what this might look like and what a society needs to do to create it, it will be impossible to get there. This is why being able to clarify what a safe, clean and healthy future looks like is of vital importance to all.

From the middle of the twentieth century onwards the probable future, we were told by politicians, scientists and economists, was also the preferable one. Economic austerity, growing inequality and global warming may make us want to review that argument.

Increasingly today what seems probable feels far from preferable. It is vital, therefore, that we distinguish between the two.

Past, present and future are also connected through the different generations in a family as shown below. Here in the present we may know people who are in their nineties or even



older. So we have connections that go back a hundred years. Babies born today may also live to a ripe old age, so we have connections that may go forward in time a hundred years. It is thus argued that whilst the present moment may last for a fleeting second it can also be seen as a 200-year moment because of these generational connections. What have older generations passed on to us? What in turn do we wish to pass on to the future?

Sustainable v. unsustainable

There are many frameworks that can be used to help understand the issues we're facing today. Of particular value is the concept of sustainability, the meaning of which has been somewhat muddled since its emergence in the 1980s. As Engelman observes:

We live today in an age of *sustainababble*, a cacophonous profusion of uses of the word *sustainable* to mean anything from environmentally better to cool. The original adjective – meaning capable of being maintained in existence without interruption or diminution – goes back to the ancient Romans. Its use in the environmental field exploded with the 1987 release of *Our Common Future*, the report of the World Commission on Environment and Development.

The muddying of the waters came from two main directions. Increasingly popular usage of the term watered down its sense to mean something vaguely 'green' or generally good for the environment. Then many big corporations took over the term to signify their alleged commitment to the principle – a process known as 'greenwashing' - where anything could be described as 'sustainable', from airlines and oilfields to office practice or making slightly more effort than usual. Some thus argue the term has become meaningless, for example when a

fossil fuel company talks about sustainable mining it means mining that will give the biggest profits for as long as possible. So, it's important when this term is used to judge whether it's being used loosely or has been deliberately co-opted.

At the simplest a process or practice is sustainable if it can bring well-being to people and the environment over a long period of time. Alternatively, it is unsustainable if it is causing harm or damage to people and the environment. If one cuts down more trees than one replants this is unsustainable forestry, one fells and then moves on. When forest cover is removed it can lead to greater run-off and flooding and the loss of trees that would normally soak up carbon dioxide from the atmosphere. It may be a win for the logging company but not for local communities. Replanting as many or more trees than have been felled is an example of sustainable forestry. Slopes are protected from heavy run-off from rain and carbon dioxide absorbed from the air.

In many parts of the world seas have been nearly fished to extinction by the practices of large commercial fishing fleets. Everything that can be caught, large or small, has been taken and those not considered of value thrown back. This decimates the fish population which may take years to recover or not recover at all: an unsustainable process. Sustainable fisheries look to long-term outcomes. To ensure a constant supply of fish one needs to limit both the size and the amount that is taken. If the size of mesh on the net lets young fish go free they will live to reproduce and replenish. If the amount taken is also appropriately calibrated fishing can go on almost indefinitely, it is sustainable.

Major disquiet about the impact of human activity on the environment hit the headlines in the 1960s and 70s. Rachel Carson's book, *Silent Spring*, which explored the widespread impact of pesticides on wildlife was decisive in generating this concern. Organisations such as Friends of the Earth, Greenpeace and the Sierra Club in the US contributed to the emergence of a growing environmental movement, as did the 1972 UN Conference on the Environment. The Club of Rome's report, *The Limits to Growth*, showed that if current global trends continued there could be major problems ahead for society in the twenty-first century. It was the widespread blossoming of environmental concern in this period which later led to the emergence of sustainability as a key organising idea in this and other fields. What is encouraging today is the way in which issues of sustainability are now seen as infusing all areas of life.

A good example is Wayne Visser's, *The Top Fifty Sustainability Books* which highlights the most influential writing in this field over a forty-year period. So the notion of sustainability is not a new idea but a well-honed and well-used concept. A companion volume sets out key sustainability initiatives and events which also occurred over that forty-year period.

Environment, society and economy

Whilst early definitions of sustainability focused on environmental matters it soon became clear that the concept could and should be applied much more widely. For some time now, it has therefore been taken to embrace the three vitally interrelated areas of life below.

- *Environment:* for example air, water, land and living things
- *Society:* for example, well-being, education, equality and justice
- *Economy:* for example, work, business, finance and trade

The point one must start from and to which one must continually return is the planet itself on which we live. It was in the 1960s a powerful new image - the first ever photographs of the Earth from space - and it immediately filled one with the deepest awe and wonder. What is crucial to our well-being and all life on the planet is the functioning of the biosphere. Given the pressures of daily life it may take some effort to grasp this bigger picture but it's essential for our survival and all that we love. When we talk of the natural world we're actually talking about the biosphere, that narrow layer of atmosphere, land, water, flora and fauna which surrounds the world and is our life-support system. If that were not present there would be no life on the planet. The Earth's biosphere is the equivalent to the skin of an apple in its depth. If we imperil this, our life-support system, we imperil ourselves, our children and all of life. So, in thinking about preferred futures, it is vital to bear in mind what a more sustainable society could look like and how this is being created in different communities. The bottom line for any human activity is whether, knowingly or unknowingly, it damages the biosphere and degrades the free services that this life support system offers. A parallel would be living in a room with very heavy smokers over a long period of time whilst imagining this couldn't possibly have any impact on one's health or the air quality in the room.



I used to ask my students, many of whom would become teachers, when they had first become aware of the natural world. When they paused to think about this they were back in their childhood, jumping in puddles, excited by icicles, smelling flowers, running in woods, paddling on beaches, climbing trees, listening to the bees. When I asked them what feelings they associated with these experiences they came up with excitement, joy, fun, inquisitiveness, enjoyment of the senses, astonishment, longing and passion. When I then asked them where those feelings were as adults they looked a bit sheepish and embarrassed, finally mumbling that these

were childhood feelings not adult ones. I suggested this needed to change as one of the aims of education is to instil and develop a sense of wonder in children. How could they do this without being able to find their own?

Education, both formal and informal, has a vital role to play in nurturing this sense of wonder, passion and excitement and keeping it alive. To feel this deeply is to intuitively understand what sustainability is about and to act responsibly in relation to the natural world. Being outdoors in interesting and exciting natural environments is something young people deeply enjoy. It nurtures body, mind and soul. The other side of the coin is that with this sense of pleasure there arises a concern to protect and nurture the natural world, without which there would be no life at all.

Societies are complex human systems which vary enormously over time and space. A sustainable society is one characterised by higher levels of equality, cohesion, cooperation, justice and well-being, to the benefit of all. Conversely, an unsustainable society would demonstrate higher levels of inequality, fragmentation, conflict, injustice and ill-being, to the detriment of many. This is one of the reasons why a number of indexes of social well-being, such as the Happy Planet Index, have been developed in order to assess the societal quality of life. The HPI, for example, has three components: life expectancy, experienced well-being and ecological footprint, and is applicable at national levels.

It is with economics one runs into the greatest difficulties - the field of knowledge that deals with the production, distribution and consumption of things. Human impact on the environment can occur in many different forms but the form of economics we choose to follow has the biggest impact of all. This is because the raw materials to create all the stuff we have and use come initially from the natural environment. Its production and distribution impact on the natural environment as do the sort of commodities we choose to produce. The disposal of such stuff also impacts on the natural environment. Increasingly many economists like to think their subject is a science, but actually it is no such thing. Its form is deeply influenced by the values its proponents hold, thus free-market economics, welfare state economics and green economics are each driven by differing value beliefs. They may all be about how production, distribution and consumption work best, but beyond that they are entirely different creatures. A more sustainable form of economics makes a major distinction between *more* (excessive consumption) and *enough* (maximising well-being) and why the latter is more beneficial to people than the former.

Free-market economics has become the dominant form of economics over the last forty years. It is based on the belief that the 'market' should not be subject to any national or international control but free to evolve in its own way. Thus inventors, entrepreneurs, financiers, banks, businesses and industry all play a vital part in the market. It is said that what the market reflects is what people rationally choose to buy. A product is 'good' if lots of people choose to buy it and 'bad' if lots of people don't. Advertising, of course, plays a major part in the decisions that people come to, itself a subtle psychological game to make people always want more. There are no ethics in such a system, one which encourages businesses globally to go where wages are lowest, environmental legislation non-existent and profits high for their shareholders.

One therefore needs to know something about what more sustainable ways of living look like in practice, one which does not cause damage to others, wherever they may live in the world, or to the natural environment. At the same time one needs to oppose unsustainable activities, those that cause harm to others or the natural environment. Recognising the activities that have a dangerous effect on people and the environment and working to minimise these is part of sustainable living. The way we understand and live our lives in the light of sustainability issues will vary. Some are inspired to help create a more sustainable lifestyle and work thoughtfully and imaginatively to create this in their own lives and communities. Others are shocked by the unsustainable practices they see around them and spend more time working to transform such practices. Many do both as the two courses of action are equally important. Whilst significant damage has and is being done there are many researchers, activists, NGOs and others working to protect different aspects of the environment at local, national and international levels.

In this context, as well as climate change, it is important to highlight loss of biodiversity and the limits to growth. It is known that in the geological past, before humans arrived, there were five major periods of mass species extinction. Whilst these were caused by volcanoes, asteroids and sudden natural climate change we are now heading towards a sixth mass extinction this time caused by human activities. Between 1970 and 2010 the population of vertebrates (any creature with a backbone) has halved over this forty-year period, land creatures by 39 per cent, freshwater species by 76 per cent and marine species by 39 per cent. This is as a result of agriculture, industry, deforestation, pollution and urban growth. Such loss of biodiversity is the equivalent to seriously damaging vital bridge supports and imagining this will not affect its structural safety. At heart we are damaging the planetary life-support system because we ask too much of it and dump too much waste into it. Either would be serious errors of judgement in any other life-support system as earlier examples of forestry and fishing showed.

Asking too much relates to our use of the Earth's resources to satisfy our needs, whether that is clean water, more roads, more energy, more buildings, nicer clothes or greater speed. The quantity we desire may be more about our wants than our needs. Fulfilling my basic needs for food, health, company and being loved is different from wanting a new car, the right clothes, a better house and more stuff. As Gandhi noted, 'The world has enough for everyone's need, but not for everyone's greed'. In today's world needs and wants are commonly confused and the mantra now seems to be that people want more of nearly everything. Indeed, many believe that constant growth is the answer, whether in economies, businesses, possessions or popularity. Much of this has been driven by the deliberate rise in consumerism fostered over the last thirty years.

A sustainable society

I have used the well-established concepts of sustainability and unsustainability as tools to explore the options we face today and the choices we need to make, whether personally, in

the community or at a planetary level. The twentieth century saw great technical and scientific progress at all levels of society, yet great inequality still exists and damage to the natural environment continues to increase. Rather than enhancing human and environmental well-being, which is what we had hoped we were doing, this has been at the expense of the planetary support-system. Even if climate change was not occurring, given the long-standing unsustainable hazards that the old ways have created, we still need to move towards a more sustainable society without delay. The good news is that we have some fifty years of analysis, research and good practice to draw on. In the face of climate change, to move towards a safe and clean low-carbon economy, will require all the insights and expertise gained from this fruitful history. Haydn Washington, in his book *Demystifying Sustainability*, observes:

We have seen that our economy is broken, our society is broken, and that the ecosystems that support us are breaking. Also ... we delude ourselves that 'everything's fine'. Yet the interest in 'sustainability' within society today shows that many of us (at least in our inner hearts) realise that everything is not truly fine. So sustainability is the task of *healing these broken things*. This is what a meaningful sustainability should be. It has to be about creating a culture that lives in harmony with Nature (and each other) into the future.

To limit climate change and adapt to the changes it brings we need not only a low-carbon economy based on renewable sources of energy but one which acknowledges the limits to growth in a finite world. Living sustainably needs to become our norm, one which respects and protects the planet we live on and those we share it with.

Abridged from Hicks, D. (2016) *A Climate Change Companion: For family, school and community*, available from Amazon as eBook or paperback.