

# Facing the Future: The Challenge to our Species

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## ∞ Introduction: The Coming Collapse of Civilization ∞

Several global trends have become clearly visible since the turn of the millennium and are converging towards a future point that can only be accurately described as catastrophic. To minimize their effect on the planet and the human species we must start planning as soon as possible, with the widest possible strategic thinking, even though solutions initially may be on the smallest scale. An impending collapse of the global economy threatens in the very near future, possibly before 2010, and this is treated separately in Paper B5, “Metaeconomics,” which also makes the case that we are now on the edge of a new economic paradigm, in which growth, profit and “the wealth of nations” will no longer be taken as the aims of economic activity. The main trends treated here do not take account of other serious factors such as the worldwide shortage of water, threatening what have been called “water wars,” since the consequences are too unpredictable. For the same reason the paper does not include geopolitical crises now building up, as the struggle for the world’s energy resources creates new alliances to prevent America from taking control of them through its superior military strength. The resurgence of Russia as a major power, based on its massive oil and gas reserves, and its budding military alliance with China portend a change in the world order we have taken as normal for the past half century. Important as they are without question, they are not so far-reaching in their consequences as other socio-economic changes, eight of which are identified here.

## ∞ Eight Impending Global Crises ∞

### 1 The demographic explosion

This is the most critical, since it is the source of all the other aspects of impending global crisis. In less than a century the world population has gone from 2.2 billion to its present 6.6 billion and, barring pandemics, etc., is likely to reach 9 billion by 2050. The only country so far which has seriously attempted to stop runaway population growth is China, forcibly, inhumanely and with limited success. Many countries are actually encouraging large families by offering financial inducements to parents. Logically, the only way out of this impasse is to offer inducements to limit families, but no national leader has ever attempted this, nor has the United Nations even suggested it.

As against the Old Testament commandment to “increase and multiply and fill the earth”, there is need now for a global ethic and for a “church” that will teach a new commandment, “Thou shalt not have more than 1.5 children,” and preach it with as much zeal as “Thou shalt not steal” or “Thou shalt not commit adultery”, for it is a moral issue and, to use old-fashioned language, to insist on our freedom to procreate at will is a sin against humankind and our beautiful planet.

## 2 “Peak Oil”

The term is now commonly used to refer to the now established fact that, at current rates of consumption, the world will run out of oil about the year 2045. Given that our whole civilization rests upon cheap fossil fuel, it is fair to say that civilization as we have known it for two centuries will come to an end. It is naive to think that we can continue to run cars by switching to alternative fuels such as hydrogen, if only because the tyres, being plastic, are ultimately made from oil. When the oil runs out, there will be no more plastic bottles, clothing, fabrics and carpets made from synthetic fibres or the myriad objects of daily life that are now made from plastic.

## 3 The exhaustion of natural gas

Supplies are at present abundant, but the curve of increasing usage, for home heating and electricity generation, is going up steeply. While we could until recently have predicted that gas would not run out until about the year 2,150, the most probable date for total effective exhaustion is probably closer to 2,070, well within the lifetime of our children.

## 4 Catastrophic fall in the world’s food supply

We are already looking at exhaustion of traditional fishing grounds and new drought areas due to climate change, but the killer will be lack of fertilizer, since the feedstock for artificial fertilizer is natural gas, and as supplies of gas diminish to zero, so too will the supply of fertilizer. Approximately 85 per cent of crops worldwide depend on artificial fertilizer, which has already soared in price, and will soon become unaffordable before it runs out entirely. Inexorably, therefore, the world’s supply of wheat and other crops will reduce to some 15% of its present level. In the past India and large parts of Africa have been saved from famine by surplus grain, mostly from the US. To make matters worse, the depletion of aquifers in the central plain of America will in itself reduce crop yields by an estimated thirty per cent. When there is a grain deficit worldwide, the death of scores of millions of people in famine-prone regions will be unavoidable, however much our minds may recoil from suffering and death on this scale. It is self-delusion to address the problem by repeating like a mantra, “Something will turn up” or “Science will find an answer.”

## 5 Denudation of the world’s forests

This will not only accelerate climate change but will result in a worldwide shortage of timber, for construction, paper, furniture, etc. We will not be able to use plastics as a substitute (as we often do at present), because, as just mentioned, the feedstock of almost all plastics is oil. Coal and fibreglass are certainly developable as substitute sources for plastics in some limited instances, but the technology is as yet in a primitive state.

## 6 Impending exhaustion of mineral resources

The available figures are inexact, because there are still ore deposits to be discovered which will make previous forecasts of depletion out of date. Nevertheless, it is widely believed that most of the world’s mining resources have been already

identified, and the demand for metals by the booming economies of China and India is using up existing sources far more rapidly than previously estimated. Given these intersecting curves of dwindling supply and rising demand, it would appear that the world has between 35 and 50 more years supply of tin, copper, zinc, silver, gold and nickel, about two hundred years supply of iron and aluminium, and unlimited silicon. Even if the figures are out by a whole magnitude, the resources are finite and will run out sooner or later - an obvious fact that strangely has never entered into common consciousness or economic theory. Within two generations conservation and recycling will be necessary on an unimagined scale, and for the rest of man's occupancy of the planet it will play a central part in economics as in every day life. The throw-away society which the West takes for granted will be seen as a brief lunatic interval in human history.

## 7 Collapse of global financial and economic systems

This is a more complex issue, involving several factors whose interconnection is dealt with in Paper B5. The two major factors are the impending collapse of the US dollar and the rise of China (and other Far East countries to a lesser extent) as a global manufacturing base. The cheap and over-abundant labour supply of 1.3 billion Chinese is being exploited by transnational companies as an industrial resource, with the result that the US, like the UK and other western countries has had its manufacturing capacity hollowed out, to the point where it is hardly possible to buy any manufactured object today that is not "Made in China". Traditional economic theory, still based on Adam Smith's *Wealth of Nations*, is completely unable to cope with this new global development. An eminent economist has recently said that the economic rise of China may prove to be more significant in human history than the industrial revolution.

The situation is frightening enough in itself, but when it is combined with the indebtedness of the US created by a deliberate policy of printing dollars, or their equivalent in treasury bonds, the economic and social consequences become so great that they can hardly be taken in. Every hour of every day the US goes \$80 million deeper into debt with other countries, including those with which it has conflicting global interests. It is estimated that by the year 2008 \$6 out of every \$10 earned by Americans will go to service this debt. A tipping point of some sort is probably less than five years away, as a slow economic contraction suddenly turns into catastrophic depression. Because the nations of the world are now linked together so tightly as a global market, this will be far worse than the 1929-39 depression. Now, as then, if the US falls over the cliff, we all follow, including China. However, it is very possible that recent Sino-Russian treaties are aimed at creating a self-contained bloc of producers and consumers which would be a counter to the so-called "dollar empire" and relatively insulated from economic collapse in the "Western world". There are worrying similarities between this new political axis and the Hitler-Stalin pact of 1939, and though it may begin with economic self-interest, there is no shortage of trigger points, such as Iran and Taiwan, for future military conflict.

## 8 The pensions crisis

Global economic breakdown will exacerbate a particular aspect of the demographic explosion in the "West". Whereas in 1960 there were about five working people to

one retired person, the figure is now about three and a half to one and falling. This is the cumulative effect of declining birthrate, longer life expectancy and earlier retirement. We may expect by 2050 that more than a third of the average worker's pay will have to go in taxes to pay the pensions of an army of retired. The UK government's response so far has been to raise retirement age to a notional 68 years, a totally unreal figure which may balance the actuarial equation but ignores the fact that no serious physical work can be done at this age.

What do we do when there are too few workers to support pensions at a survival level? One answer must be the reinvention of the extended family, where the needs of the elderly are met by their children, and grandchildren, nephews and nieces. This simple conclusion points to a future restructuring of society at a fundamental level. The idea of retiring on a pension, whether private or state, would have been barely thinkable little more than a century ago. In a future world where there will be far too many pensioners to be supported by the economic system, it will not matter how much notional money the pension fund or individual pensioner may have saved up, for there will be no one to put that capital to work. In such a situation, the concept of capitalism, and indeed of money itself, will call for radical reassessment, for money is meaningless when there is nothing to spend it on.

### ☞ The Need for Greater Vision ☞

The "Hot Frog Effect" is now well known. If a frog is put in hot water, it will jump out. If it is put in cold water, which is then heated slowly to the same temperature, it will stay there and adjust until it dies. The inability of the world's leaders, let alone ordinary citizens, to foresee the coming collapse of civilisation is due partly to simple lack of information and of interest but mostly to their inability to imagine, like the frog, the long term effect of incremental change.

The social and economic trends listed above converge uncannily around the year 2050, when futurologists of different kinds see climatic systems, population trends, energy and food supplies reaching crisis point almost simultaneously. One cannot, however, make straight line projections from several sets of different kinds of data, and when certain unacceptable facts have become too obvious to ignore, even for the most inertial political frog, minor tipping points will be reached and some preventive action will doubtless be taken. The point of this paper, however, is to draw attention to the major tipping point, when we shall have to radically reconstruct our familiar world in all sorts of unimaginable ways - socially, politically, economically, ecologically. In about fifty years from now we will be facing a change as traumatic as happened in the past when our ancestors were forced to abandon the life of hunter-gatherers (the effect of overpopulation and over-hunting) and go against age-old ways of thought and behaviour. Patchily and over a period of thousands of years they were forced to leave behind the excitement of the chase and adjust to a settled agricultural life, and eventually "un-learn" clan-consciousness in order to live together in an urban environment. The very word "politics" means the art of living in cities. Each move along the path of change was traumatic, but essential if civilization was to develop. Now we live in the so-called "global village", but that is a misnomer, for it is a village riven by tribal wars, and the forthcoming challenge will be nothing less than building a new kind of global civilization in which old barriers are broken down and new social groupings

created. There is no blueprint for this, though many lessons to be learned from history. One in particular is frequently cited by ecologists, namely the extinction of human life on Easter Island, brought about by overpopulation, chronic food shortages and permanent warfare. They argue, with complete logic, that the problem of Easter Island is the problem of the planet in microcosm. Vast as the globe may seem, it is a closed system, and we must learn to see it as "Island Earth".

It will be calamitous to adopt the common man's philosophy of "It doesn't matter till it matters," for to do so will make us all passive victims of fate. This paper is written in the hope that it will strike a chord in the kind of person who wants to do something about the future, even though that "something" is at present quite unclear. The first thing that needs to be done, and with urgency, is to start raising awareness, and the second is to find ways of bringing together those whose consciousness has been raised with a view to taking action. This will entail a new kind of association, whose structure and principles of operation will need to be worked out from scratch. Although it may begin as a network, it must develop an executive focus, for otherwise all that will happen is endless talk. Without doubt, as consciousness is raised, various active centres will emerge, each with its own set of answers. Some will see political agitation as the answer, some will put their trust in the United Nations, some will think in terms of self-preservation by "heading for the hills" to form a community of the like-minded. The Americans already have a term "survivalists" for these latter. While not dismissing any of these as partial solutions, the present paper takes a much longer term view of the problem, assumes that the world cannot avoid a new Dark Age that will last perhaps a couple of centuries, and insists that whatever we do, we must avoid the temptation to try and return to a version of the world we have known, even a much improved version.

We are facing a challenge on an evolutionary scale, which will be at the same time an enforced opportunity to change society and the species. To talk thus may seem to some hopelessly idealistic and unrealistic, but the logic behind it is unbreakable. The underlying premise of the Global Family Papers is that a better world cannot be built without better people, and the second is that our species has not yet reached the end of its development, and that we therefore have unrealised potential. The theory of evolution will ultimately prove to be the world's salvation, for it implies that we are, in a word, only half the human beings that we could be and we know only half the happiness that we are capable of enjoying. That is, of course, an act of faith at this point, but it is more plausible than the contrary act of faith, that human evolution has come to a stop. To approach with evolutionary optimism the global catastrophe now bearing down on us will eventually determine what kind of answers we seek. Even if we wished to restore the world we once knew, which is impossible, we would only restore all the human traits and social structures that have created the present dysfunctional state of humanity, including two world wars "to end all war," and continuing outbursts of genocide, from the Nazi Holocaust, through to the ethnic cleansing of Cambodia, Bosnia and Ruanda - and what next?

We are wasting our time unless we start from the firm belief that *a new kind of human being and new kinds of social structures are now required*. This is the framework within which the argument of these papers is written. So fundamental a change can only be a long-term goal, and one can only proceed step by step, but there is no implicit contradiction in this. The first requirement will be understanding of the problem, which will call for an uncomfortable stretching of the imagination, and the second will be willingness to undertake what is required for self-transformation.

## What is to be done?

There is such a bewildering array of impending crises that it is difficult to see the problem in the round. To take one obvious instance, the world in 2050 will have almost no airplanes in the sky or cars on the road. To project such a future, therefore, is almost like winding back the clock to 1900, yet there is, of course, no systematic way of going forward to a simpler past, nor are there any existing institutions fitted to do it. Furthermore, the problems in 2015, 2030 and 2050 will be different from each other in critical respects, each one more severe and socially dislocating. Without doubt, the most devastating consequence of the trends above will be mass starvation, as the world's present food production is drastically reduced for lack of artificial fertiliser. It is hard even to imagine what this will mean, and if we cannot even imagine the problem, let alone the answers, we will invariably try to shape it into a problem for which we already have answers.

In the longer term, new kinds of community must be created on every scale, but it is natural for anyone who is concerned about the future to ask, "What can I do now?" Only when there has come into existence a body of individuals with common awareness of the challenge can anything be done. Thus, the first step is to develop awareness. This task will in turn call for building up a corpus of facts and a means of disseminating them. In this first phase of consciousness-raising the following steps suggest themselves:

- 1 Production of a body of information in different media - purpose-designed booklets, recommended reading, websites, CD's and videos, audio-tapes - which will generate the kind of consciousness that is now required to see global and individual problems in the light of the crisis outlined here. Those participating will be connected at first in network mode, the point about a network being that it has maximum individual freedom, calls for no commitment, has no constitutional aims and no executive structure. Its function in the present context is to enable each individual to consider whether or not they would wish to be associated with a movement which is in process of formation but which seems to be going in a direction they wish to take.
- 2 The formation during this period of a core-group of those who feel drawn to commitment, are qualified enough to build up the kind of learning material that will be required and who will set themselves to organising other groups for discussion and action. As with any emerging new association, from a football club to a new political party, action must be initiated by a self-selected small group of enthusiasts, but when the association is in existence, the founding group steps down and an executive is elected by nomination and voting.
- 3 Since the dissemination of facts is a prerequisite to generating a new kind of awareness, it is essential in the first phase to do this as effectively and rapidly as possible. In this respect, the "Pass it on" principle seems to be the best way to go. This envisions that every person who is concerned about a global future registers his or her interest with the initiating group and then forwards the basic material to three friends who they think may wish to receive it. The figure three is a modest target, but it would result in a rapid expansion of would-be co-operators. From within their numbers the more dedicated could form an active group-within-a-group, and expert advisors may be identified and given a specific brief. The friendship network may be, in fact, the only practical way to avoid the automatic switch-off that is now a fact of life in our age of information fatigue.