

Conservation, human values and democracy

What can turn humankind from the path of environmental exploitation and destruction?

Valentí Rull

Human activity is changing the climate, depleting biodiversity, destroying habitats and poisoning the earth, the water and the air. It is increasingly understood and accepted that natural resources are limited and that their use should be sustainable. Campaigns to raise awareness and improve education have highlighted to the general public that human civilisation is on an unsustainable path that could lead to ecological, economic and human disaster. Yet, humans continue to degrade the biosphere and deplete natural resources at an unprecedented rate.

There are many explanations for this apparent disconnect between knowing that our life style is unsustainable and doing nothing to change it. These include that the dominant economic model is based on continuous growth; that there is a lack of communication to stakeholders and policy makers; a lack of international coordination to address global problems; that people are reluctant to change their lifestyles; and that we do not experience the impact of global environmental problems on our daily lives. This disconnect also applies to other problems such as poverty, public health issues and hunger. Everybody dislikes the consequences, but nobody is willing to make the necessary sacrifices to address the issue.

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It therefore seems legitimate to ask whether humankind as a whole is interested in preserving nature for future generations and civilizations. In other words, do we care about the future of our species? Given our current rate of exploitation of natural

resources, a hypothetical alien observer might come to the conclusion that we do not.

Some commentators have suggested that perhaps humans are not yet sufficiently evolved to leave this self-destructive path and that, with time, biological and cultural evolution will remedy the problem [1]. From a biological perspective, however, there is no evidence that humans are evolving toward a more environmentally conscious state. Moreover, evolution is highly stochastic and contingent and, as a consequence, totally unpredictable. Such arguments rather seem to come from religious or moral beliefs that humans are predestined to live in harmony with nature.

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From a cultural or societal angle, we cannot observe an increasing tendency for humans to live in a more sustainable manner either. Rather the opposite is true: in North America and Europe we see an increasing demand for energy and a proliferation of environmentally harmful habits—despite our knowledge of the damage we are doing. Elsewhere, the rapidly growing middle classes in Asia and South America are repeating Western mistakes and disregarding the environment in their pursuit of happiness. Any change in attitude and action is therefore unlikely to come through cultural evolution or human intelligence, but will rather be the inevitable consequence of Malthusian laws—in other words, our profligacy will come home to haunt us. Waiting for eventual biological or cultural evolution to catch up with our attitude to nature is not an option given the immediacy of environmental problems.

And yet, we already have the tools for dealing with environmental decline—they are innate to humans: awareness, free will, creativity and ingenuity. The issue is whether we are willing to use these abilities to build a better future. To date, we have used our intelligence to try to understand the world and human existence, to prolong our lifespans and improve our lifestyles, to become richer, and to assemble ourselves into groups and societies. We have developed the disciplines of science, philosophy, medicine, economics, politics, engineering and technology, but we have failed utterly to apply these effectively and consistently to deal with environmental issues. As a result, our behaviour as a species is little different from other animals whose destinies are determined by ecological laws.

Those who care about conservation advocate applying our unique intelligence to deal with our wasteful use of natural resources. It is neither a matter of being right or wrong, nor of human destiny or superiority; the point is whether we are willing to survive as a species on the planet. But the pursuit of the survival of the species, rather than the individual, would imply that we are self-conscious as a species, rather than as individuals. If we are not, the ethical and biological arguments for caring about future generations fall short. Species consciousness does not seem to be inherent to human nature, as is manifest in our response to environmental and other socio-economic problems. It has been suggested that humanity, having out-competed other species, has organized itself in such a way that different nations, ideologies, races and social and economic classes compete with each other as though they were ‘cultural species’ [2].

The conservation of nature should involve not only the current and future preservation of the biosphere and biodiversity, but also the proper continuation of the evolution of every species on the planet. In other words, we should not interfere with or prevent the evolu-



Mountaintop removal strip mining for coal in Appalachia, USA. The mountain tops are blown off and dumped into river valleys in order to get access to the coal layers. It is a particularly destructive form of mining and leaves infertile mesas in what were once diverse temperate forests. - Goerge Steinmetz/Corbis.

tion of other species. This principle adds a new, non-anthropocentric dimension to conservation that might be called ‘telluric consciousness’, in reference to the whole Earth. Telluric consciousness implies that humans are fully aware that they are a functional part of the Earth’s biosphere, and the concept should not be confused with ecocentrism, which is a radical ethical posture. Again, telluric consciousness does not seem to be inherent to human nature and requires an intellectual effort to be properly assimilated and understood. Our intelligence seems to be able to cope with both species and telluric consciousness, but more work is needed to turn theory into action.

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Our lack of either a species-level and telluric consciousness is not, however, an excuse to continue to devastate the earth. Our natural deficiency can be compensated for by philanthropy and altruism. Philanthropy, by definition, considers human interests, while altruism, in its broadest sense, includes the entire biosphere. In addition to an ability to be selfless, altruistic behaviour requires a sufficient level of awareness to be able to identify problems, free will to make decisions, and creativity and ingenuity to find solutions. However, the cost in terms of the socio-economic transformations necessary for a sustainable way of living remains the largest impediment. It is especially difficult to convince those who are sceptical of environmental decline or the value of the biosphere and those who are comfortable with the *status quo* that something needs to be done. Unfortunately, many politicians fall naturally into these categories, while those showing some interest in conservation are

held back by the prevailing economic system—global capitalism—which has the utopian objective of unending growth.

Given that most of the major industrialised countries are democracies, the hope is that informing and educating people about environmental decline will lead to a change in public opinion that will sway politicians looking to be elected. Enhanced public awareness and support will be needed for the implementation of difficult solutions that could include population control, major political, economic and social transformations, and, eventually, de-growth strategies. Public awareness and support are also needed to bring to power a political class that is less influenced by the current economic model and more aware of the need for nature conservation. Though the effects of raising public awareness are likely to be powerful, this long-term approach may be too slow given the speed of environmental deterioration.

Another strategy for fighting environmental deterioration at a global level has been political negotiation. A landmark achievement was the Kyoto Protocol, by which countries agreed to reduce greenhouse gas (GHG) emissions to slow down global climate change. It was adopted by a majority of industrialized countries, but important exceptions included the USA and China, both of which are massive producers of GHGs. Implementation of the protocol was intended in two phases: the periods 2008–2012 and 2013–2020. At the end of 2020, it was planned that atmospheric GHG levels would be reduced below 450 ppm of carbon dioxide equivalent (CO₂e). However, the targets have not been met and global emissions have actually increased, despite follow-up conferences held in Copenhagen (2009), Cancún (2010) and Durban (2011). A large part of the problem is that the major GHG emitters are a serious impediment to progress. Failure to meet the Kyoto targets has been interpreted as the inherent difficulty in governing ‘the commons’—air, water, forests, fisheries, and so on. However, it could also be argued that the representatives of the currently dominant socio-economic system have no interest in overturning an economic model that has brought them to power. Paradoxically, most of these political leaders were elected through democratic procedures, but their interests are more aligned with capitalist goals based on short-term returns and economic growth. Something does not seem to be working with democracy.

Another proposed solution to address environmental decline has been to apply market rules by assigning monetary value to natural services and biodiversity and to incorporate these into the market economy. It has been estimated that the ‘value’ of the biosphere is between US\$16 and 54 trillion per year and that most of this value is outside the market. The biomes with less value include open oceans, grasslands, woodlands and temperate forests, whereas corals, coastal systems and wetlands are among the most valuable. Tropical forests have average values [3]. The proponents of this approach argue that, “in daily decision making practice (by governments, businesses and consumers) we explicitly or implicitly put a price on forests, wetlands, and other ecosystems. Often this price is very low, or even close to zero, not reflecting the variety of market and non-market

ecosystem services supplied by these multi-functional systems which is why we convert them into plantations, shrimp farms and other mono-functional systems without, or only partially, considering the costs of the loss of their services” [3].

The authors also warn that expressing ecosystem services in monetary units does not mean that we can or should commodify them or exchange them in markets; however, this approach is laying the foundation for this to happen. Indeed, rather than contributing to the protection of biodiversity and promoting more sustainable management, the monetary valuation of ecosystem services will likely lead to their open commercialization under capitalist rules. This is already occurring, as payment for ecosystem services within a market-based framework is gaining support among policy makers at local, regional and global levels [4].

Unfortunately, capitalist mercantilism neither respects nor supports sustainable practices. One example of this is the failure of the carbon market to decrease global GHG emissions: the richest countries buy more emission bonuses, while emerging economies have more immediate priorities than climate change [5]. Another example is the over-exploitation of crude oil to increase financial gains for oil companies instead of guaranteeing globally sustainable energy use; or the production of biofuels, which competes with food production. Perhaps one of the most dramatic examples of the perversity of the market economy in terms of social justice is the increase in the number of undernourished people by 74 million in only 2 years (2005–2007) owing to financial speculation driving up the price of wheat and maize [6]. So far, the most efficient solution has been to select specific areas to protect them from economic exploitation in the form of natural reserves, national parks and so on.

As noted above, the main cause of the lack of efficient global conservation policies is that the political sector is attached to the dominant model of continuous economic growth. This creates a gap between the needs of citizens and the actions of their political representatives. This situation is common to many countries, where elected governments are unable to meet the needs of citizens owing to political and/or economic constraints and commitments. For

example, many countries have political leaders who are almost exclusively concerned with satisfying the economic requirements of international creditor banks at the expense of the people. This scenario could be described as pseudo-democratic, as democracy seems to be restricted to the ephemeral electoral process. The same is true of global environmental governance: the main problem seems to be the unwillingness of policy makers to abandon the economic model that has kept them in power.

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In general, then, intelligence and altruism—the human attributes likely best suited to dealing with nature conservation and social justice—seem to be missing from the picture. An immediate and major revision of current democratic procedures is urgently needed to close the gap and reconcile political decisions with present and future human needs. To be legitimate, such a political turnover should come from the people and proceed upstream in a truly democratic fashion, rather than being dictated by ideology.

Because capitalism and its influence on our daily lives will not disappear overnight, we should consider more immediate actions within the *status quo*. The question is whether we can attain an equilibrium between capitalism and better conservation standards at a global level. At local and regional levels, some European countries—Germany, the Netherlands, Switzerland or the Scandinavian countries, for example—successfully combine highly competitive economies with high living and environmental standards. Both governments and citizens are willing to invest into more sustainable practices of energy production and consumption or greener production practices. If these countries succeed as examples, other countries could follow and thus begin a social and cultural evolution towards high conservation standards.

The weak point here is the global aspect. The economic growth of the richest countries would not be possible without global socio-economic inequality. Furthermore, it is very unlikely that our planet, with its finite resources, would be able to support a global growing economy and the living standards for all people as those of the richest countries.

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Another alternative path is the recent initiative—explicitly supported by the European Union—of the so-called Third Industrial Revolution (TIR), which is underway as an experiment in Germany. After the first and the second industrial revolutions, which were based on coal and oil respectively, the TIR relies on Internet technologies to decentralize energy production and distribution. A wide range of players are intended to generate energy from renewable sources, which is then stored and shared using Internet-like networks in

the same way that we currently share information [7].

If successful, the TIR might have the potential to transform global economic, social and political relationships, as it will democratize energy consumption and usage. However, it is still too early to tell whether the experiment will succeed in light of vested interests. Given the inability of the political caste to abandon a wasteful capitalist model, as well as the resistance of most citizens to changes in living standards, the future of the planet currently remains in question.

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Conflict of interest

The author declares that he has no conflict of interest.

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Valentí Rull is at the Botanic Institute of Barcelona (IBB-CSIC-ICUB), Barcelona, Spain
Email: vrull@ibb.csic.es

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