Reflections on EU politics and 'postmodern' science: Making energy policy by emission regulation ?

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We are not yet beyond the range of normal variability. In spite of the current warmer conditions, annual mean temperatures [in Northern Ireland] still remain within the range seen in the previous two centuries.
--C.J. Butler et al. International Journal of Climatology 25, 2005

"Based on recent research, the consensus view is that we don't expect global warming to make a difference to the frequency of hurricanes," explains Julian Heming, from the UK Meteorological Office… Activity is naturally very variable in terms of frequency, intensity and regional occurrence; in the Atlantic, there are active phases and not so active phases, and currently we're in the middle of an active phase. ..It's very dangerous to explain Rita or Katrina through global warming, because we have always had strong hurricanes in the USA - the strongest one on record dates back to 1935." BBC News Online, 24 September 2005
http://news.bbc.co.uk/1/hi/sci/tech/4276242.stm (Analysis by Richard Black ,BBC

The G8 agreement [on climate change] must be made to work so we develop together

the technology that allows prosperous nations to adapt and emerging ones to grow sustainably; and that means an assessment of all options, including civil nuclear power. --Tony Blair, 27 September 2005 (CCNET, 30Set.05)
Tony Blair has admitted that he is changing his views on combating global warming to mirror those of President Bush - and oppose negotiating international treaties such as the Kyoto Protocol. His admission, which has outraged environmentalists on both sides of the Atlantic, flies in the face of his promises made in the past two years and undermines the agreement he masterminded at this summer's Gleneagles Summit. And it endangers talks that opened in Ottawa this weekend on a new treaty to combat climate change.
--Geoffrey Lean & Christopher Silvester, The Independent on Sunday, 25 Sept.2005

Now, to their horror, these soggy left 'Green' pundits are finding themselves abandoned by the world, and they are sounding more and more shrill (and extremely shallow). They are increasingly in denial, often failing to pick up on the plate tectonic shifts in climate-change politics that have been slowly accumulating around the globe - shifts which that ever-consummate politician, Tony Blair, has more astutely grasped. As I have said before, it is time for the British media to grow up over the politics of climate change. The infantile foot-stampings of newspapers like The Independent should be left in the nursery.
--Philip Stott, 25 September 2005

Politics has become a contest between different brands of doom-mongering.
http://www.spiked-online.com/printable/0000000CAD7B.htm

UK schools' new dumbed-down, issues-led science curriculum will inculcate students with suspicion about scientific endeavour.
http://www.spiked-online.com/articles/0000000CAD81.htm

Introduction: Post-modern Science

I have decided to say little about post-modern science and may misinterpret the term. By it I mean, using GC Models (Climate as 'underpinning' authority for policy, complaining that they

A. DO NOT CLEARLY DIFFERENTIATE BETWEEN VALUES, FACTS AND INTERPRETATIONS ;

B. DO NOT CLEARLY STATE UNCERTAINTIES AND PROBABILITIES;

C . Do not convey to users and advocates their methodological short-coming and ignorance/speculations. This applies to the manipulation of both natuRal and social science data.

What is the result of basing policy – or rather justifying policy, on such science? ….

That depends, in my view, on the politics behind science, on what is really driving the policy process, or the no-regret and win-win strategies that have become associated with the 'prediction' of future environmental scares, such as forest death of the global hothouse. In the big world of global or EU politics science is always only on tap, not on top. Post-modern science is funded to be relevant, not 'true'.

I would claim that the public and most politicians have no idea of how fragile the basis is on which forecasts (projections to some, predictions still to others) about the future behaviour of the atmosphere are based. Post-modern science, some call it junk science, is used to persuade and advocate, not to inform about what is known and what is not. Numerical models are experiments, not fortune-tellers, yet this is how they are treated by too many. Computer models are also relatively cheap compared to empirically validated knowledge. They are readily 'tweaked' or manipulated to suit policy, and policy in my understanding must serve the interests of states, or rather bureaucracies and their beneficiaries.

I am particularly critical of mathematical models that claim that they can predict the future decades ahead. Their advocates tend to claim that something 'will' happen rather than that something 'may happen' IF all model assumptions were correct and IF everything important were known. Hence: Computer models that predict future environmental damage are socio-political constructs that await empirical testing before they can be called real science. Also, to serve the EU or UN they are required to be politically correct, as demonstrated by various IPCC related disputes.(economic value of individual life, emission scenarios) – hence their methodological flaws.

I am against the excessive use of mathematical models in air pollution policy-making and suspect that the real drivers of EU efforts to achieve clean air (which must be global to achieve their objectives) are energy and technology policy consideration, not to mention political ambitions. We Europeans once expanded by saving souls while also harvesting and mining; today we claim to want to save the planet while enhancing energy security, selling knowledge and technology abroad in the name of sustainability. We are sending out new missionaries, the aid NGOs and businessmen, to do good and earn. This is how the world works….

However, such politics of interest should not be disguised as planetary ethics. The future remains very uncertain, perhaps unknowable, only present interests and beliefs are really

known and therefore, claims by those who use the future to justify policy, should be closely examined for their interest components, interest very broadly defined.

The future is not predictable, certainly as far as the atmosphere and climate are involved. Post-modern science then becomes a politically useful tool of persuasion and calculation, underpinned NOT by science in the sense of nature understood, but by ideology, in our case environmentalism, the religion of Northern middle –classes and elites. Ideology tends to be selected to serve 'interests'; interests that are rarely declared in political negotiations and are therefore 'predicted', leading to further distrust in negotiations.

Has this combination of EU politics and post-modern science as asserted 'authority' led humanity into a new era of imperialism – green imperialism? If so, I would argue that the drivers are not science and expertise in general, but stakeholder politics derived from a variety of motives, ranging from green ideology and the desire to enhance energy security, to finding new markets for new technologies and enhance bureaucratic competences.

Air Pollution Control

Air pollution control can be seen a one of many environmental problems faced by industrial society that is being solved by administrative action.[1] Paehlke argued years ago that because of the 'insurmountable obstacles' in doing this effectively, 'a more democratic approach to administrative inquiry and practice is needed'. This is now generally called the stakeholder approach in which experts and administrators are expected to fing a 'better' or more readily implemented policy. But how are the stakeholders? Their selection is clearly a politicla process and the danger is that decision-making becomes hopelessly politicised.

We have had several decades of this 'wider dialogue' with increasing emphasis on green ethics and hence NGO participation, rather than 'rational' debates about the implications of our environmental policies. Have better decisions been made? The air has become cleaner. At what cost?

I am arguing that matters overall (for society , nature I am not so sure that we can know) may have become worse because 'democratisation' or stakeholder participation has led to undue influence going to environmentalist bodies. Such bodies may, on the one hand, provide a guise for other interests to access to public purse unduly; or they may act as allies to bureaucracies engaged in expanding thier competences and access to resources.

This, I am arguing, has also led to the politicisation of the underlying science base, that is to post-modern science. The concepts of public interest and common good are now endangered by single issue politics, and science has become politicised as carricatured in Michael Crichton's eco-thriller, State of Fear.

Solution and Promise :Decarbonisation

[1] R.Paehlke and D. Torgerson, Managing Leviathan 2nd edition, Broadview Press, Canada , 2005.

"They (coal fired power stations) will close because the EU's Large Combustion Plant directive will set efficiency and pollution standards that most cannot possibly meet when it takes effect in 2008."

What is the objective of the EU policy?

In my interpretation, the EU bureaucracy and its allies do not promise environmental salvation via the control of climate!) but rather enhanced energy security and new markets at home and especially abroad. Experts on the technology, that is solution side, speak of the transfer of clean technology and the seeking of first mover advantage. According to UK policy, renewables and fossil fuels now require a level playing field BUT with only fossil fuels being required to 'internalise their costs'[2].

Worldwide, nuclear power is making a come-back and a number of green groups (and James Lovelock) are now calling for fusion and fission as humanity's secure future energy sources.[3] Others claim that we do not need a nuclear renaissance, but most become much more energy efficient. Energy efficiency will not only keep us all rich, but the atmosphere free from too much carbon dioxide[4]. These big and costly packages for a transition to a world no longer dependent on fossil fuel world is sold to the public with the promise that speedy action will save them and the planet from global warming... and even Africa from poverty and everybody else from malaria and worse! Global warming, at least in the UK, has become an issue of world diplomacy.[5]

Is the improvement in health achieved by reducing air pollution worthwhile compared to the same amount spent on other health issues? Bjorn Lomborg has been much criticised by environmentalists for raising this important question. Or, is human health, like ecological damage, merely a politically effective means to get public approval for transferring public resources to mainly private interests?

IF health, like ecological scares, ensure public support in favour of official action, then those benefiting from regulation and 'incentives' can be expected to encourage participation. The role of fear in governance is well understood by political science.[6] If self-interest, fear and ignorance drive the desire for public participation how can energy policy be made attractive to the paying public?

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[2] S.Retallack and T.Grayling, Catalysing commitment on climate change, Paper for the International Climate Change Task Force, IPPR, London , 2005 (registered charity www.ippr.org)

[3] S.Brand, Environmental Heresies, Ten Emerging Technologies, Technology Review Special Issue May 2005: 60.

[4] Amory Lovins (and six others) Small is profitable by Amory Lovins, Rocky Mountain Institute 2002

[5] "As Tony Blair prepares to host the G8 leaders at the gathering in Gleneagles, the prime minister is on the brink of brokering a global agreement on climate change, one which explicitly recognises that science compels the world to act to contain greenhouse gases." (G8 heads on brink of climate agreement, By James Blitz and Alan Beattie , Financial Times, July 3 2005 22:21.

[6]11 Frank Furedi, professor of sociology at the University of Kent and prolific critic of our contemporary culture, *Politics of Fear: Beyond Left and Right*, Continuum , 2005. This explains why he has focused his fire on politics, analyses the exhaustion of public life in Britain and the USA, and comes to a stark conclusion that the end of the historic struggle between left and right has taken us, not towards a more secure future of greater choice and consensus, but into a pre-political age dominated by misanthropic mistrust.

Simplifying myths like *Waldsterben* and Global Warming (understood as both anthropogenic and solvable by emission reduction) fit the bill well. Rising energy costs which hit poorer groups and societies most, are the price our political classes seem to be prepared to pay. The poor or isolated are rarely at the decision-making table, but are they not primary 'stakeholder? The poor have never had much political power, and they have little today. Who could look after their interests? (Surely not environmentalists).

Luckily, we quickly forget environmental scares,[7] once they have delivered the 'other' non-environmental – commercial or political - goodies! On global warming, it is my view, this closure is only just beginning because a policy which primarily involves moving public sector money into private pockets is not yet complete. The movement of this money is based on the promise that the recipients will provide solutions to a catastrophe only decades away, the buzz word is carbon neutrality or decarbonisation. The solutions are marketed as being of political and commercial benefit long before catastrophe strikes. Aren't we being scared into paying more for energy?

Those who dare to question the problem therefore have a difficult time, and science has become polarised and politicised.

By doubting the problem, the solutions clamouring for state assistance and popular approval are obviously threatened. This is the only way I can explain the widespread denigrations, especially in Europe, of climate sceptics and the refusal of policy-makers to enter into proper debates with them.[8] Much has been written in recent years about the growing politicisation of science, with those who benefit from this process on either side accusing their critics of generating 'junk science'.[9] Too much is still at stake for those promising to provide solutions to listen to critics of the problem definition. Politics does not yet need them, though I perceive signs of change.[10]

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[7] I remind you of forest death, and Chernobyl. Here is an extract from Fred Singer's September newsletter: "The long-awaited UN report on Chernobyl is an eye-opener (Item #8). After all the hype, there are only some 50 deaths among personnel involved in the immediate accident, and 9 deaths from thyroid cancer. The report talks about 4000 eventual cancer deaths, but these are statistical calculations based on the unrealistic Linear-No-Threshold hypothesis and are more likely zero. (But even the 4000 number represents only a 3% increase in naturally occurring cancer deaths.) The most important after-effects were psychological and caused by fear of radioactivity.

[8] I could give much detail here. People with very little knowledge about climate are now believers in global warming in a pseudo religious sense. Others who should know better are defending careers, reputations, or helpful policies. Sceptics are called deniers, have difficulties in getting published or are condemned as supporters of Bush, or funded by the fossil fuel lobby.

[9] This is my current research project on the nature and influence of climate scepticism, but have written little of this up because I have become directly engaged in the debate and its editing.

[10] A helpful summary of publications by sceptics, and their public statements will be included in A Rorsch et al Climate Change on a Watery Planet, available in Dutch and soon to be published in English. The authors, a group of very senior Dutch scientists from outside the climate change network, are causing trouble for their Met office people, in the UK the House of Lord's Select Committee Report on the Economics of Climate Change is promising to have 'destabilising ' effects as the issue moves into the political arena. Their ideas have been published in Energy&Environment, as have many other IPCC critics on the natural and social science side.

Listening to all voices is an extremely difficult task for bureaucracies and their failure to do so I indeed most human! However, air pollution abatement strategies also promise benefits to bureaucracies, for they will in the end select, promote and monitor new technologies and regulations.

One major question nevertheless arises for the proponents of 'climate protection technology': why should emission reduction be based on the end of the production chain, on cutting emissions from suppliers, rather than mitigating power needs? [11] Why have power stations and to a lesser degree now also cars, aeroplanes and especially households, become the foci of regulatory action? This leads to interesting political reflections and reveals bureaucracies as major actors in clean air policy-making. Reducing overall demand for energy is not an option attractive to our economic system; it may make individual enterprises more competitive but only if the demand for its products does not decline. Regulating demand also creates serious extra problems for administrations and their political masters.

The Politics of Air Management

The environmental problem is clearly the use of the atmosphere for waste disposal. "Waste" may get a poor press, but it is a thermodynamic inevitability - you don't get useful work other than with an ultimate sink. It is interesting that nature also evolved CO2 as its low-grade, end-of-pipe sink, for a good reason.[12]

The atmosphere is a sink, with the ocean, and why should it not be used thus? Why has the atmosphere become the subject of so much environmental attention since the 1980s, that is after the sea had been divided up between nation states? The answer to the second question is easier:

- the air moves fast and pretty unpredictably, and especially in horizontal directions, thus crossing human boundaries, inviting international politics.
- The atmosphere is important for weather and climate and hence very much else; it cannot be owned, only air space can and is. Hence the atmosphere is a wonderful 'political football' for states, intergovernmental bodies, international research lobbies and national NGOS and the 'transies': the 'trans-national' NGOS who live of states in order to wrest power from them. It is also a football that is popular.
- And lastly, the atmosphere is not at all well understood – its chemistry, interactions with oceans and biosphere, its responses with extraterrestrial forces. Thanks to technological developments, it has became a primary research object of earth systems science after WW2; an experimental medium for many new technologies and especially supercomputers. This brings the research enterprise (and its many divisions) into the policy-picture as actors and stakeholder (receiver of public monies) and especially as creators of futures (model 'predictions') from which other political actors can select to make demands on the state.

[11] I am grateful to Max Brenan for this idea in an email discussion in August 2005. To me the answer is clear, there more sensible idea does not appeal to 'market forces' and is too difficult to implement by regulation.

[12] Presumably chemical Gibbs free energy , I am told.

Climate Change as Tool for Framing Energy Competition Issues

The 'overarching' aim of UK/EU energy policy and hence air pollution abatement strategy is not planetary protection but achieving global competitiveness. Other polices must strive to serve this goal. Why has EU energy policy, after privatisation and deregulation during the 1980s and 1980s turned to decarbonisation and hence into emission planning and trading, both highly interventionist activities even if they make use of market mechanisms? I have already suggested that this solution promised many other benefits, but will it deliver the primary objective? I doubt that it will unless higher energy costs are globalised, hence the astonishing effort by the Commission in support of the Kyoto protocol.

I have written a book with an Australian professor of government interested like me in energy and international relations, when we examined the specific interests behind the Kyoto process.[13] The global warming hypothesis was clearly used to promote ' Clean Air' and attempts to define carbon dioxide into a pollutant are gaining ground, to the horror of many natural scientists I know.

To 'mitigate' climate change (i.e. reducing CO_2 emission – or will it be methane? – by 80%) promises to gain public acceptance of nuclear power and promote the sale of expertise, finance and technology to countries like China. The UK view is well known.[14] It encourages the reclaiming of bureaucratic control over the liberalised and privatised energy sector. Specific energy interest (including government departments and most energy companies (including those that own or sell natural gas, and that is most of them) and their research allies, are therefore seen as the main drivers of so-called climate protection policies.

If this analysis is correct, then experts, 'outside' scientists and even the public and NGOs cannot but be lesser players in a much bigger game that the public cannot influence much if at all. Both would be tools expected to support the system rather than agents of change. Our discussion here would be rather superficial.[15]

Policy-making Implications

Since protection or rewards arising from 'pollution control' may arise less for 'nature' or even human health than for bureaucracies, treasuries, pressure groups and the purveyors of new products, a political analysis of the policy-making process is essential for understanding and assessment.

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[13] S Boehmer-Christiansen and A Kellow, International Environmental Agreements: Interests and the failure of the Kyoto process, E Elgar, 2002.

[14] According to the IPPR- the Institute for Public Policy Research (a Blairite think tank) this is to decarbonise the global economy.

[15] Would this matter? Probably yes, for without the moral suasion and other pressures put on scientists , experts and politicians (i.e. to save the planet, repent adnd makeup for environmental sins) , these groups might have made more rational decisions serving humanity as a whole better.

With foresight, many willing participants in policy-making may not simply benefit at the end, but may seek to participate actively as 'stakeholders' in decision-making.[16] Why might this be so? Groups with 'other', i.e. non-environmental interests, clearly and correctly perceive the environment as an opportunity for gain or advancement. As 'stakeholders', they will clamours for partnership in decision-making. This includes those who promise to have the solutions (be it for commercial, getting government research grants or political benefit).

Groups that benefit from pollution control will always stressed the risks arising from 'pollution' and ignored the benefits of free waste disposal to society and even nature and the costs (and hence forfeited other benefits) of pollution control. Purity is an ideological value. **This raises the question of what is 'pollution'? Is pollution measured by the amount of waste discarded (and hence end-of –pipe control)? Or is a term only applicable if damage to the environment is known and considered unacceptable? Is pollution even a scientific term?**

Environmental decision-making should therefore be discussed in its cultural and historical context. Here participation, ethics, and democracy are clearly current buzz words. But does more participation by stakeholders, especially poorly informed or biased ones, ensure better decision for the

- **common good, or**
- **participating groups/interests or**
- **beneficiaries of public spending and regulation?**

I tend to argue now that decisions in the common good are not likely to be made when the participating groups are also the beneficiaries of policy, as often tends to be case when 'stakeholders' are present and influential.

However, has the concept of common good still any relevance today? What institutions define the common good and hence the meaning of 'pollution'?

Who acts for the common good? Who decides what it is? Surely not environmentalists or pollution control experts alone, though the latter are more likely to be aware of the costs and broader implications. Who will make better policies: single issue pressure groups, bureaucracies or the political system – that is political parties/parliament?

I do not know of research giving answers to these questions, participants here may have them. All I noted more than a decade ago was that too much money went to research into environmental damage and how it might be measured and reduced rather than into implementation research. Theory is more attractive than practice both to the research enterprise and bureaucracy.

My own view is that general policy should be made in the 'round' before it reaches the experts, that is by parliamentary processes that have a strong influence within the administration and links with a large variety of NGOs, not just environmental groups,

[16] As explored by David Ball and Boehmer-Christiansen- Ball D. J. (2002) Understanding and Responding to societal concerns. Sudbury: HSE Books.

but also trade unions, representatives of low income groups, consumer bodies, taxpayers. These groups should give advice, but not participate in the decision-making process. Parliament and bureaucracy in particular also need the advice of independent (not NGO funded) experts from a wide range of disciplines. Even this advice needs to be examined by the real decision-makers, usually senior and middle ranking bureaucrats, for political interest stakes.

In brief with respect to making decisions about energy in the public interest and balanced with respect to the knowledge base, I would still trust bureaucracies more than NGOs, for only are former is accountable (in the end) and have some responsibility of funding policy ambitions. Government is certainly responsible for implementation in practice, the weak point of so much policy. What would this mean for global warming, or rather decarbonisation policies? I am speculating. First of all we might need an IPCC like process that is free from having to serve a treaty that has already decided that damage is done and by whom. We would need a scientific community that is funded differently… a topic I do not deal with here, but one which Crichton explores. [17]

The cultural contexts, the world view of Northern elites engaged in as well as threatened by globalisation and possibly plagued by guilt feelings arising from 'over-consumption' therefore also needs to be taken into account.

It was again Michael Crichton who pointed out in his Commonwealth Club lecture some years ago that "environmentalism had become the religion of Western elites. Indeed it has. Most notably, the burning of fossil fuels (a concomitant of economic growth and rising living standards) is the secular counterpart of man's Original Sin. If only we would repent and sin no more, mankind's actions could end the threat of further global warming. By implication, the cost, which is never fully examined, is bearable. So far the evidence is not convincing. It is notable that 13 of the 15 older members of the European Union have failed to achieve their quotas under the Kyoto accord -- despite the relatively slow growth of the European economies." [18]

I also want to quote a British climate sceptic (again), a retired geographer, who wrote very recently:

> *"We are currently living in increasingly dark days, in which religious fundamentalism - from perverted forms of Christianity, Islam, and 'modern' environmental paganism (not to mention sheer stupidity) - are challenging our hard-won Enlightenment understanding of the world, an understanding that has helped to release humankind from the bondage of superstition and irrationality. The Enlightenment has helped to set us free, granted in a naturally dangerous world, but also one that is wonderful to understand. We must resist with every intellectual sinew those who would plunge us back into*

[17] See 'State of Fear', 2004, by Michael Crichton. While this best seller about 'global warming' sees the needs of the US environmental movement for income as the driving force of eco-terrorism, it also delves quite deeply into the scientific debate and discuss the dangers to science arising from its politicisation.

[18] Wall Street Journal, The Theology of Global Warming, James Schlesinger, August 8, 2005: 10.

the world of capricious and dangerous 'gods' and simplistic and over-simplified evil."[19]

The above view also indicates that science is in trouble. It can be misused to provide authority where there is little, and generate futures that it should not be called 'predictions', or even scenarios without probability testing. To justify policy with science that remains very uncertain, may mean giving in to forces which are undermining our faith in scientific truth and objectivity.

This 'post-modern' view of knowledge also undermines the role of the expert (a citizen) and of the administrator (also a citizen). Both groups need to be aware of their own prejudices, now called 'values' and need to possess political sophistication. Without these powers and capacities, environmental policy-making may turn a political free for all those that manage to get a seat at the table, or a charade attended by people with no responsibility or accountability. The subservience of science to politics was enabled by 'post-modern' science, another creation of the green movement. This tries to merge values with facts and ethics with knowledge and muddles decision-making more than is necessary. The GW debate still suffers from this. Interests are disguised as values, and assumed values, e.g in the Special Report on Emission Scenarios used by the IPCC models, are not declared.[20]

Some Tentative Conclusions

Whenever less waste material is to come out of a chimney or tail pipe, somebody with influence in the decision-making process needs to ask what and who is actually to be protected, and at what cost and benefit to whom. Cost and benefit here must be much broader categories then economic costs.

Without political analysis, pollution abatement strategy may become mindless innovation policy serving private interests, or it may ignore economic realities and hence fail. Major interventions in economies as those envisaged for decarbonisation require rational not ethical justification; there is no single ethic. Scientific prediction derived from incomplete or misused computer models cannot provide justification and predictions from models should not be treated as facts.

Air pollution control strategies at national and international levels have not yet undergone adequate overall risk-benefit analyses and have rarely been supplemented

[19] Philip Stott, 2 September 2005, Hurricane Katrina and the need to hold on to enlightenment values, Philip Stott stott@probiotech.fsnet.co.uk.

[20] Several articles by Castles and Henderson, and others, in E&E, including letters written to the World Bank demonstrate this, as several contribution to House of Lord Select Committee on the Economics of Climate Change, London, 2005.

by explicit political interest analysis. I am not sure what is done inside the EU Commission.

Giving priority to environmental protection will by definition lead to a reduction in waste discharges, but this may be irrational and harmful to other public needs. The risks and the benefits of pollution, and of its abatement, need to remain balanced and action taken should be in the public, not private, interest. This is a task only a multi-disciplinary and politically sensitive decision-making body can attempt; its advisory bodies needing careful selection on the basis of their knowledge and interests Environmentalists should be but one among many ‘stakeholders’ representing the public interest, and future scares should not be used to deprive living generations.