Ecospace, humanspace and climate change

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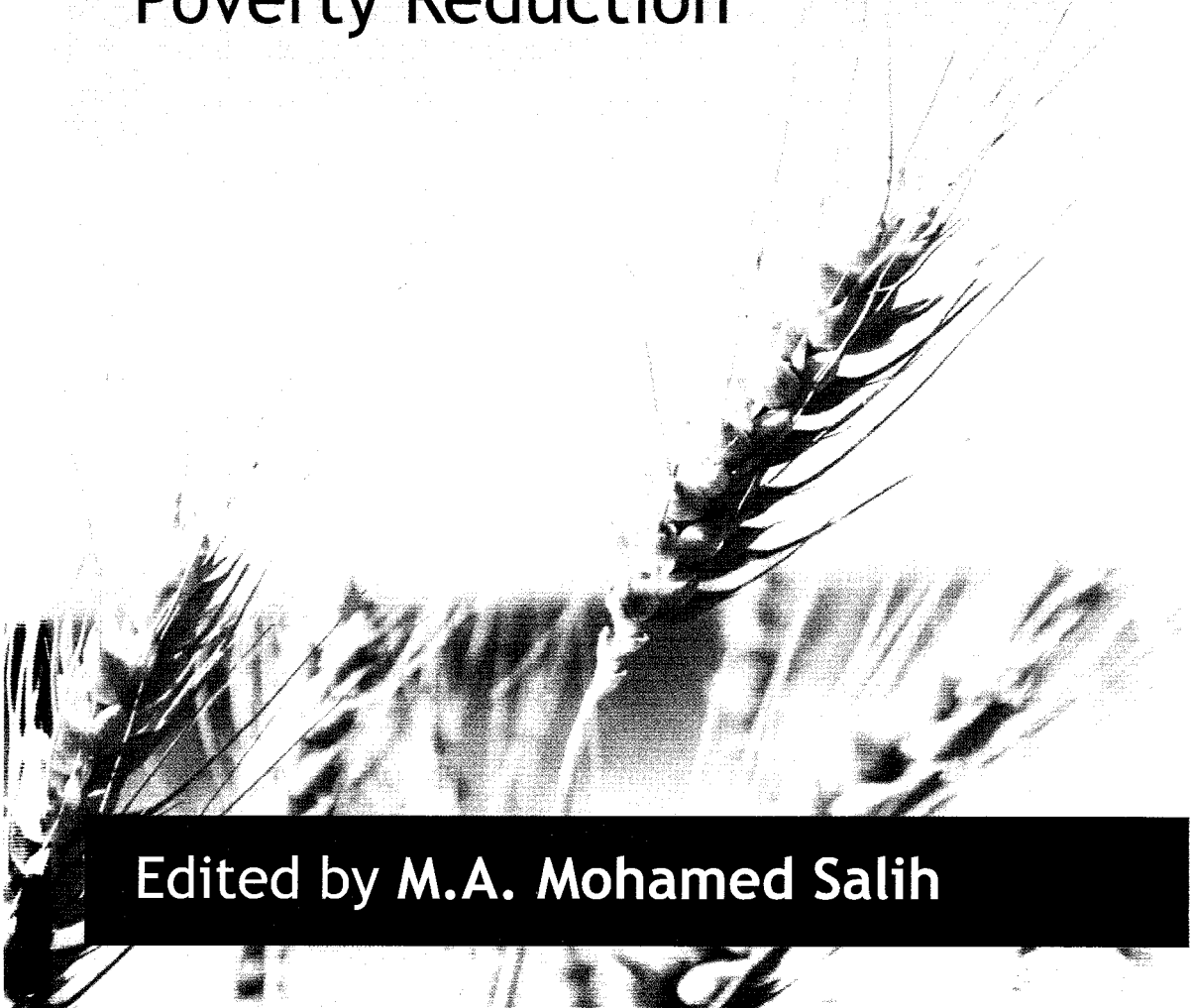
New Challenges for Poverty Reduction



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3. Ecospace, humanspace and climate change

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Geography as an academic discipline is back on stage after a century of gradual marginalization. Many scientists who call themselves economists, sociologists, hydrologists and so on, are contributing to our collective knowledge about the relationship between *man* and *environment*, the classic home ground of geography. Hans Opschoor is one of them. He was one of the nongeographers contributing to a recent book (in Dutch) entitled *From Natural Landscapes to Risk Society* (Dietz *et al.* 2008). The public and scientific worries about climate change have done much to revitalize geography, together with the improved abilities of geographers to visualize spatial and spatial-temporal phenomena, with the use of Geographical Information Systems (GIS). The dynamics of people's relationship with the earth result in a blend of earth sciences, social sciences and history. Particularly long history (or as the French say, *longue durée*) is part of that blend and it implies questions about the timescale to be used, but one can also not escape the question about spatial scale.

Issues of climate change put the terrestrial system centre stage, as well as extraterrestrial influences such as solar heat and its fluctuations and varying impact on the earth. In the distant past, meteorite collisions with the earth caused major climate change. Reconstructions and predictions of climate change for the earth as a whole are already complicated. Reducing levels of scale to regions on the earth is even trickier (see van Boxel 2008; Leemans 2008). Humankind's ability to understand climate fluctuations is only a recent phenomenon and the collection of systematic weather data is only a century old (in China a bit older). Proxy measures based on palaeobotanic and chemophysical evidence now allow scientists to formulate hypotheses about climates of older times, but there is much more to discover. We are only beginning to understand the dynamics of climate change coverage on geological and biological timescales (between 3–4 billion years), and of the evolutionary and migration histories of *Homo sapiens* (scale of 200 000 years) and its predecessors *homo:* 2.5 million years; *hominins:* 6–7 million years; *anthropoids:* 35 million years; and mammals in general: 200, but

primarily, 65 million years ago. Some scholars see the current era of climate change or, more generally, of human predation on earth's life support systems as the sixth extinction, in which humankind might be a victim too. The geological and biological timescale has sobering thoughts to offer. In the words of the authors of a fascinating book published by a geologist and a palaeontologist of the University of the Witwatersrand in South Africa:

> The geological record has something to say about our being here. We know that 99.9% of all species that have ever lived are extinct, that they failed to meet the challenges of an ever-changing world . . . many species disappeared in mass extinction events . . . when environmental conditions changed abruptly – so fast that there was simply not enough time to adapt. The extinction toll in many of these events is frightening, especially in the so-called Big Five mass extinctions: 85% of the species lost at the end of the Ordovician, about 80% at the end of the Devonian, 96% at the end of the Permian, 76% at the end of the Triassic, and 70–80% at the end of the Cretaceous (McCarthy and Rubidge 2005, p. 299).

If we extend the timescale to astrophysical proportions, the thoughts become even more sobering. At some distant point in time, earth and the solar system will simply disappear and its remains become part of new constellations, with or without life, but certainly without humankind.

Perhaps we should use a timescale we can comprehend better, the lifespan of a single individual. Even then, the changes are overwhelming. If we consider the lifetime of Hans Opschoor, humankind was developing a tool of mass destruction, the atomic bomb, at the time of his birth and used it even before he could walk. A large part of humankind was busy killing each other by the millions. After humankind's recovery from that ordeal, we can now say that humankind experienced its most successful expansion as a species ever. The human population went from 2.5 billion when Hans was a toddler to the current 6.7 billion. Humankind developed an unprecedented growth of average economic well being, communication, average health and education levels. We developed tools for worldwide governance, which sped up globalization, including standards for human rights, nature conservation and, until now, the ability to keep the weapons of mass destruction in check. Still can humankind also develop global governance tools to keep climate change manageable and avoid its inclusion in the ongoing sixth extinction?

CLIMATE CHANGE AS A GOVERNANCE CONCERN

During Hans Opschoor's life the average temperature on earth increased 0.5°C, and CO_2 levels increased at least 70 ppm (or almost 25 per cent) (van

Boxel 2008, pp. 173–174). Data about The Netherlands show increased temperatures with the warmest months on record nearly all found in the years after 1980 and the coldest months almost all before 1940. The current worldwide attention for the causes and effects of climate change are a result of those facts, but certainly also, a result of the successful alliance of scientists, the media and politicians. Framing the changes as a problem for humanity has done much to give it its current urgency. The addition that the problem is 'caused by humanity's greed' and some would say, short sightedness, did and does add to a feeling of collective guilt and of a collective task. There are solutions formulated both to mitigate the ongoing changes and to adapt better to these changes. Yet, between mitigators and adaptors, uneasy tensions exist. The mitigators think that as many efforts as possible should be directed to lower greenhouse gas (GHG) emissions (or avoid their rise to dangerous levels) and the adaptors feel that massive funds are needed to protect humankind and nature against inevitable changes. Despite this uneasiness, both mitigators and adaptors are fighting sceptics, who do not believe in human induced climate change, in the severity of its consequences, or regard it as one among many challenges for humankind, of which some deserve far more attention than climate change.

Climate watchers first started measuring GHGs in the 1950s and by the mid 1960s saw the first signs that GHG concentrations in the atmosphere were rising. In addition, scientists soon made the connection between the rising levels of GHGs and the rising levels of fossil fuel consumption in industry and transport, and to the expanding rice cultivation and growing livestock numbers. An American NGO, the Conservation Foundation, was the first to formulate a concern (in 1963), followed in 1965 by a presidential advisory committee. The 1970s pointed at the risks of major droughts and desertification, spurred by devastating droughts in Africa. The United Nations organized a conference against desertification in 1977 and created a separate UN Environmental Programme (UNEP), with its seat in Nairobi. A world climate conference in 1979 asked for more data about suspected climate change, but did not formulate any policy recommendations (Agrawala 1998). This lasted until 1985 when the World Meteorological Organization (WMO) warned of a rise in world temperatures 'without precedent in human history' at their famous Villach conference. In 1986, the International Council of Scientific Unions (ICSU) started its major research programme to speed up data collection: the International Geosphere Biosphere Programme. Particularly in the United States, fights had started at that time about the necessity for political action. The oil, energy and automobile industries were not prepared to invest heavily in what they viewed as, at most, an unclear problem where more research is

needed, supported by a Republican party that was fuelling pleas for less politics, more market. Conversely a strong environmental NGO community and the Environmental Protection Agency (EPA) lobbied for serious measures, supported by politicians and voters with a more Democratic outlook. The two international organizations which could be expected to take the lead (WMO and UNEP) had to engage carefully, dependent as they were on US government funding. Media coverage of some disasters led to sudden outbursts of attention and calls for action, like the heat waves in the US in 1987 and 1988 and the effects of hurricane Gilbert in the Caribbean. The fracturing of a major ice mass from Antarctica also caught media and popular attention. Meanwhile another atmospheric problem the world did attempt to tackle is, today, regarded as a showpiece of global governance: the limitation of CFC production to protect the ozone layer (the Montreal Protocol signed in 1987; see Junne 2008). Something had to happen, but the US faced an internal political impasse and has for the last 20 years. With pressure from the UK, Sweden and The Netherlands, and with the involvement of WMO, UNEP and ICSU, the formation of the Intergovernmental Panel on Climate Change (IPCC) was a way out. This body drew upon the global scientific community to study the severity of the problem and to come up with scenarios of likely effects, but it was not a global policy organ as it should have been (Agrawala 1998). Gradually the reports of IPCC became ever more alarming and convincing, based on a growing consensus among a large number of scientists. If one compares the 1995 and the 2007 reports, the change in tone is obvious (IPCC 1995, 2007b). Increasingly diverse scientists gradually began participating. In The Netherlands, initial dominant involvement of RIVM and KNMI led to an overwhelming presence of physical scientists (and some medical scientists). Later the involvement of NWO and its social science council MAGW led to growing participation of economists, human geographers, sociologists, political scientists and gradually psychologists, communication experts and legal experts in the ongoing research programme on Vulnerability, Adaptation and Mitigation (VAM). The Netherlands has been particularly successful in contributing to the development of integrated assessment models, like the IMAGE model, which tries to connect the dynamics of land and energy use with emissions, the carbon cycle, atmospheric processes, and effects on coasts, ecosystems, agriculture/food and health (Leemans 2008).

Soon after the start of IPCC, in May 1992, world leaders agreed to sign a UN Framework Convention on Climate Change, followed by the Kyoto Protocol in 1997. However, it only officially started after major disagreements, particularly with the sceptical US government under G.W. Bush that had taken over from the Clinton-Gore administration in 2000. For the

first time, goals had been formulated about emission levels of industrialized countries and about mechanisms to reach those goals, in and outside those countries (such as the Clean Development Mechanism, and Joint Implementation before 2012). Amidst controversies, the US administration did not ratify any agreements; hence the country with the largest GHG emissions on earth is still at large. Even if the US ratifies, reaching the 2012 goals would be impossible and even if it were possible, it would not be enough to keep global warming in check. Not only because of the insufficiency of targets for the industrialized world, but also because of increased emissions by the many newly industrializing countries over the past decade (China, India, Brazil, Turkey, Mexico and many others); changing the world's division of labour towards a pattern of northern services and southern factories. The best one can say is that the Kyoto Protocol offers room for policy experiments such as pricing of GHGs and international trade in emissions, until now, with dubious results. It is obvious that the negotiations that would lead to a new protocol for the period after 2012 need to incorporate fully the southern industrial countries and require global targets that are more robust and more forceful global implementation measures (see van der Gaast 2008). The worldwide growth of GHG emissions currently appears to be faster than in the most pessimistic scenarios of the IPCC (according to IPCC 2007b with currently 70 per cent more GHG emissions than in 1970), resulting in ever more dramatic horror scenarios that also led to very successful products from the entertainment industry. Ronald Emmerich's *The Day After Tomorrow*, released in 2004, shows the alarming prospects of dramatic climate change, leading to the paradoxical effect of a new Ice Age in the Northern Hemisphere as a result of global warming. Of course, it included Hollywood inspired scenes of droves of environmental refugees from the United States scrambling into Mexico and tearing down the fence that was meant to keep Mexicans out of the US. In 2006, Al Gore's *An Inconvenient Truth* used essentially a PowerPoint presentation as a tool to influence a truly global audience, although not yet with the necessary political impact in his own country. Documentaries by *National Geographic* show what would happen if the world's temperatures rose 1, 2, 3, 4, 5 or even 6°C during this century. An influential book by Jared Diamond, *Collapse* (2004) adds historical parallels to feed a millenarian feeling of apocalypse.

These and other messages result in numerous initiatives by municipalities and states (including many in the United States) to become more emission neutral and speed up mitigation measures, like clean energy, energy saving, transport rearrangements, carbon sequestration and underground storage, among many others (see Bulkeley 2003 for early experiences). World business has discovered that there is a future and niche, as well as

pioneer profits, in a more proactive stance, resulting in numerous initiatives by companies and public–private partnerships and with sometimes surprising collaborations between companies and NGOs. The chorus of socially responsible businesses give strong voice to environmental sustainability and to being wise protectors of earth's atmosphere, and by implication of humankind. Feel good economics also plays a more prominent role now in convincing world leaders about possible win–win scenarios such as calculating the costs of climate change mitigation against the benefits of saving on adaptation or on lower healthcare costs (see Mitchell and Parson 2001). Some governments, such as Norway and Costa Rica have now even gone so far as to declare goals for their countries to become completely climate neutral. The European Union has taken the lead in formulating more serious mitigation targets and preparing more serious targets and implementation mechanisms for the decades to come. These are promising signs, but they are late, and maybe too late. Compared to the fast action with regard to CFCs and the ozone layer, GHG mitigation appears to be a much more complicated portfolio, as the causes and impacts are geographically so diverse. Now it is time to turn to geography.

CLIMATE CHANGE AND GEOGRAPHICAL DIFFERENTIATION

Earth's ecospace consists of a large number of ecozones in which some have proven to be very attractive as humanspace and others regarded as harsh lands for human occupation and usage. Basic geography tells us that some of it has to do with intrinsic site values of the ecozone as a habitation and livelihood basis for human occupation, given the technologies at people's disposal and given the cultural valuation regarding what is useful, beautiful and safe, or for that matter, useless, ugly or dangerous. Other reasons to make ecozones attractive have to do with situational aspects, their location vis-à-vis other places, hence, with aspects of centrality and isolation (or relative costs to deal with those situational aspects). On a global scale, the most attractive areas – in terms of demography – have as many as 50 000 inhabitants per square kilometre as in parts of Hong Kong. The most demographically unattractive areas are still huge expanses of unoccupied territory where no human has ever set foot, as in parts of Antarctica. The population explosion the world has witnessed, just since the middle of the twentieth century and the scientific and technological revolutions accompanying it have already resulted in rapid and massive changes in turning ecospace into humanspace and in changing the properties of ecospace itself, often dramatically. Climate change is now adding a

prospect of major additional shifts in the opportunities for humanspace, and in the composition of ecospace, some regarded as positive and others negative, although that qualification also depends on the valuation of both ecospace and humanspace and the cultural specificity of that valuation.

The slow implementation of mitigation measures, and the growing levels of GHG concentrations, will, at best, result in a bit less dramatic growth. The need for adaptation is obvious now and that begs for a more specific assessment of the geographical differences in the impact of climate change, not just by looking at doomsday scenarios. It may be superfluous to say that many things are not at all clear, yet, despite major recent gains in scientific knowledge, as the climate system is extremely complex with many positive and negative feedback loops. Particularly, the behaviour of the oceans in absorbing CO_2, in causing El Niño and La Niña disturbances and in creating Gulf Stream dynamics are not well understood yet, even as ever more (historic) data becomes available to fill gaps in our knowledge (see Caviedes 2007). The interconnectedness of climate and vegetation (both plants on the land and algae in the seas) does cause chain reactions locally, with poorly understood global repercussions. Regional scenarios of climate change expectations, in terms of rainfall and storms, are speculative as well and different models often give completely opposite outcomes (for West Africa, see for instance van Boxel 2004). Nevertheless, let us see what we do know.

A higher average temperature on earth definitely leads to sea level rise. For low lying island states, such as Tuvalu or the Maldives, this may mean the end (Barnett and Adger 2003) and for a country like Tuvalu, evacuation scenarios have already been developed, in this case assisted by New Zealand. Of course, low lying coastal areas are endangered as well, particularly when there are no dunes, dikes or dams to defend these areas against rising sea levels and storms. Rich countries with a history of defence works against inundation, such as The Netherlands will invest further in building higher dikes, constructing dams that are more robust and defending their dune system (see Borger 2008). The prospect of *Amersfoort at Sea* is a metaphoric warning with strong appeal, also because the western part of The Netherlands has an additional problem of tilting towards the sea due to physical processes in its peat soil, partly from increased drainage. The experience of the 1953 inundations (*watersnood)* is a strong reminder of what might happen, engrained in popular image, but nowadays the number of people living in threatened areas is much higher, as are the economic assets that could be lost versus half a century ago (Bouwer and Vellinga 2008). Civil engineering, architecture, spatial planning and public administration started to experiment with possible solutions for a variety of adaptations. Still, what happens in areas with less experience? Even the

United States had to be hit by a disaster of the magnitude of Katrina (1836 victims and USD 81.2 billion in damages in 2005) before it realized the vulnerability of its coastal zones. The public was confronted by what stared them in the face – the poor are the ones to be hit most, as they are generally in the most vulnerable locations, and often do not have the insurance and recovery capabilities the rich have, even if some of the rich lost more assets in absolute terms. Compared to a century ago both in absolute and in relative terms, many more people now live in vulnerable coastal areas, which have become the most sought after humanspace in many countries. Massive migration movements of people towards coastal areas, where economic prospects are generally better, have supplemented the global population explosion at least compared to isolated inland areas. West Africa is an interesting example. Between 1960 and 1994, almost everywhere, the coastal population increased at least fourfold (Dietz and Veldhuizen 2004). Many more people than before live in extremely vulnerable coastal cities, often with chaotic and incompetent municipal administrations.

Rising average temperatures will result in overall increases in rainfall and probably in higher likelihoods of rainstorms, leading to swollen rivers and downstream inundations. The Netherlands is more vulnerable in this respect, because it is a delta of rivers from a variety of watersheds, which together cover a relatively large area. Again, The Netherlands is in a position to defend itself and to spend considerable tax money on river dikes and other defensive and preventive structures, even leading to major investments in water planning (see van Schendelen 2008). On the other hand, the higher average rainfall, higher groundwater levels and higher water transport by rivers will (on a world scale) result in higher water availability for human, animal and plant consumption, countering somewhat the expected growing water stress because of growing water demand per capita (Donkers 2008; Allen 2003; Vörösmarty *et al.* 2000).

Storm frequencies and severity will likely grow as well. This requires stronger buildings and other civil engineering structures, more prudence and a health and insurance system that can deal with storm consequences. In Florida, this already causes major problems, with increasing costs for those who want insurance and higher risks for insurance companies. There is a moral problem as well. If the causes of storm damage are mainly found in the North, and the disasters mainly in the South; and if the insurance densities in the South are much less than in the North, should there be a global insurance polis, in which the 'polluter pays principle' is used as an element of global environmental justice (see Adger 2001)?

The expected changes in rainfall and storm regimes together with increased evapo(transpi)ration levels due to higher average temperatures will not be equally distributed over the earth's surface. Popular images of

climate change invariably use droughts and famine as icons of danger, but this is not what to expect, generally. Many areas will receive more rainfall on average. Some areas will face drier conditions on average, due to changes in weather patterns. However, it is not very clear where these areas might be. What is clear is that climates will become less predictable and that seasons are, no longer, as they used to be. Farmers all over the world experience greater insecurity. The start of the rainy season is no longer normal; periods of rainstorms followed by long periods of droughts, often during parts of the agrarian cycle where it is most unwanted have become the norm. Of course, farmers everywhere always dealt with weather insecurity, but it seems that insecurity is growing and farmers have become more vulnerable. Higher average rainfall may increase possibilities for irrigation, although storms could damage the irrigation structures.

The major cause of climate change, higher levels of CO_2 in the atmosphere, does also have positive effects on farming, as some crops grow better under conditions of higher CO_2 levels. On average, this and higher average rainfall globally will probably result in better prospects for agriculture and better results per hectare. Moreover areas, which function as icons of doom (the Sahel, in particular), are not necessarily facing worsening agricultural conditions. Of course, the drought between 1970 and 1985 had severe consequences, but after 1986 rainfall improved significantly and sequential satellite images show a much greener environment. Better rainfall and farmers who have adapted remarkably well to greater insecurity, plus a more stable, more reliable government and market environment are all reasons for optimism (Dietz *et al.* 2004; Batterbury and Warren 2001; Reij *et al.* 1996), until the next major drought.

In areas with a winter stop for plant growth, higher temperatures will result in longer agricultural seasons and probably higher yields. Higher temperatures will also push the vegetation and crop boundaries to areas further North, South and to areas higher up in the mountains. Because of the distribution of land surfaces on earth, it is a fact that at higher latitudes in the Northern Hemisphere a lot of land waits for colonization by (agricultural) plants. This could mean an enormous increase in potential cropland in Canada, Alaska, Siberia, Scandinavia and maybe even Greenland (where an agricultural settlement once existed, see Diamond 2004). Many of these lands are currently quite empty and mainly home to nomadic pastoralists, if used at all. One may expect major migration movements northward, and for the current inhabitants, the Inuit of America, the Samen of Europe and the various groups in Siberia, which either means a change to a more mixed economy or further moving northward following their food. Biologically one can expect a major increase of vegetation in these Northern zones, and hence a lot of additional CO_2 sequestration as a result.

In the stories of doom and gloom, some negative effects get far more attention: the melting of the taiga underground will release enormous amounts of methane, enhancing GHG emissions, destroying a lot of infrastructure now built on solid (frozen) ground. There are many oil and gas pipelines among it and that may be an ironic revenge of history. In mountain areas, rapid changes are happening as well and we see the same contradictions there in increased possibilities for habitation and agriculture, but maybe the end of a lucrative winter sports industry and of a tourist industry marvelling at the glaciers and snow caps of the world's mountains. The loss of Kilimanjaro's majestic cap of snow is an icon of doom indeed. What is probably far more destructive is the impact of changing temperatures on the Himalayas and the Andes, feeding the world's most important river systems and potentially disturbing the Ganges, Indus, Brahmaputra watersheds, the Amazon basin and many other river systems, on which major ecospaces and humanspaces depend.

Higher temperatures in areas with already high summer temperatures will lead to growing water stress among plants, animals and people. In some areas, it will make agriculture no longer viable and will probably lead to depopulation (as is currently occurring in inner Spain). It may also undermine tourism; the perception is that some of these holiday destinations are becoming intolerably hot, despite the growing and ever more expensive use of air conditioners. Heat waves like the one in France in 2005 caused alarming numbers of additional deaths during the summer months in areas formerly considered temperate zones. Health risks are also moving geographically; with ecozones for the malaria mosquito and the tick moving north (see Martens and Moser 2001). Heat and drought also pose a major fire risk and a risk for vegetation, built structures and human life. Forest fires in California and the Mediterranean get a lot of publicity and frequently connect to climate change. Forest fires in Kalimantan caused a lot of smog in cities like Singapore and released a lot of sequestrated CO_2, with potentially spiralling effects. Climate change is not the only cause of these forest fires. A lot of it is a result of manmade changes in the rain forest, part of it deliberately caused to make room for humanspace or to feed the greed of forest and biofuel entrepreneurs.

In colder areas, higher average temperatures create the opposite, better habitats for humanspace, with more options for outdoor activities and lower energy bills. The recent *Mediterraneanization* of some North European coasts speaks for itself. As with many aspects of the dynamics in the relationship between humanity and our environment, climate change has winners and losers. One may expect that many of the winners can be found in the North (with cases like The Netherlands requiring massive investments to continue being part of those winners) and many of the losers in the Tropics, particularly among the poor in the most vulnerable humanspaces in the low latitude and low prosperity areas of the world. Risky places attract the most vulnerable people that can least afford those risks.

Global warming does provoke questions of global environmental justice and questions of geopolitics and international law as can be seen in the geopolitical tensions at the North Pole and the prospects there of oil, gas and new transportation routes. Redistribution of wealth and a global system of insurance against the risks posed by the variety of impacts of climate change should be high on the agenda of global governance institutions combined with the concerns of environmentalists and the development industry.

Redistribution also plays a role with regard to one of the solutions, which currently has reached the policy and media coverage level of another hype – the global expansion of bio- or agrofuels. Brazil has been busy for years changing its fuel dependency from fossil fuels to ethanol produced from sugar cane. Currently biofuels provide only two per cent of global energy demand (32 billion litres per annum). The International Energy Agency (2004) talks about ten per cent in 2025 and 30 per cent in 2050: ethanol and biodiesel based on sugar cane (mainly in Brazil), maize (mainly the US), palm oil (mainly from Southeast Asia), linseed oil and soy oil (mainly in the EU), and other vegetable oils (with Jatropha a rising star, mainly in Africa). This is a likely but very controversial development. Energy experts point at the inefficient way in which solar energy transforms into fuel via plants and wonder if more investments in real solar energy would not be more useful in the end. One of the most controversial elements has to do with its geography. The ecospaces that will most likely be developed as biofuel plantation zones will mainly be found in the (sub)tropics, undermining remaining areas of rain forest and other natural environments and potentially undermining food production in former subsistence or local market providing areas.

The first effect will potentially increase global warming; so that one form of mitigation (nonfossil fuel energy availability) becomes a threat to mitigation in general and hence will increase global warming. The second effect will increase income opportunities for those with access to land and it might further increase the overall prices for agricultural produce that are already happening as a result of growing urban and Asian demand for global food and energy. The scale that is required will favour large scale producers and will provide employment for many workers across the globe. Many of these large scale producers will be global firms and quite a number of them with history and headquarters in the global South, thereby adjusting further the unequal power structures in the global economy. It

is all a matter of balance. If growing incomes and employment opportunities based on biofuel and lower energy prices outpace the growing prices for food, the overall effect might be positive, but then it depends on who gains and who loses, as ever. Serious attention on these issues would also establish some kind of balance between the effects on humanspace and the effects on ecospace. What parts of nature will be more sustainable and what parts will be the victim of these developments?

That brings us back to those core notions in Hans Opschoor's own work: the combination of the balance between instrumental and intrinsic values of ecospace and the balance between current humanity (and its widely divergent interests), future humanity and other elements of the world's ecological heritage. It begs for a continuation of the work started by Hans Opschoor in the 1980s, with its combination of economic analysis and moral appeal (see Opschoor *et al.* 1989), though with due attention to geography and questions of spatial and temporal scale.

NOTES

1. Professor Ton Dietz was the Scientific Director of the Netherlands Research School for Resource Studies for Development (CERES) of which Professor Hans Opschoor was Chair of the Board

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A personal afterword
(not included in the book)

Hans Opschoor was chair of the Board of CERES, the national research school for resource studies for development in the Netherlands, when that Board decided to appoint me as its scientific director for a period of five years: between 2002 and 2007. Hans has always been lukewarm about CERES. He saw the importance of a national agency for PhD training, for research coordination and stimulation, and for stimulating a more active science-policy-society interface. He also saw its strategic importance for the Institute of Social Studies, where he was Rector at the time, and he acknowledged ISS as one of the institutional core members of CERES, but also kept it somehow at a distance. His ambivalent relationship partly had to do with his criticism of the overall quality of the field CERES covered. He very much supported the attempts to develop a CERES-specific valuation tool for assessing quantity and quality of scientific production in that field, and he was happy that, partly thanks to the application of this tool within the research school, these indeed improved considerably over time. But his ambivalent relationship to CERES and to the field of development studies in general, was also based on his criticism about lack of focus, and particularly lack of serious attention for the longue durée questions of the relationship between (wo)men and environment during an era of climate change. At the occasion of my farewell party as CERES director in June 2007, Hans Opschoor was one of the keynote speakers, and he made it obviously clear that CERES was not doing enough in this field. The irony of it was that he was talking to one of the few people in CERES who did (I showed him the book that we had produced about our research about the impact of climate change in West Africa, that I co-edited; see Dietz, Ruben & Verhagen, 2004) and another irony was that at that occasion my successor was inaugurated, Han van Dijk, who had also played a prominent role in that project, which had been a collaboration between CERES, and Wageningen-based economists and agro-climatologists. But I agreed, and still agree, with Hans, that more could and should have been done, certainly if you see the numerical strength of senior and junior CERES members. With hindsight, I also find it remarkable that fruitful collaboration with quite a number of other research schools had been established during my time in office, but hardly with SENSE, the research school for environmental sciences, and the real academic home of Hans Opschoor.

What appeared to be difficult in CERES, I tried to do as part of my work in Amsterdam, as a geographer. During the past years I co-organised an academic course for the (Dutch-speaking) 'general public', in which Herman van der Wusten, Frank den Hertog, and I did try to focus on the 'big questions' of our times with regard to Man-Environment relationships. We called it "Aardrijkskunde in het Groot" (Big Geography), in which we invited experts to talk about aspects of Big Geography. Half of these experts call themselves human or physical geographers; the other half came from a variety of other backgrounds, including environmental economists. Hans Opschoor was one of them. He talked about ecospace; or in Dutch 'milieugebruiksruimte en milieugebruikswaarden'. Later he contributed one of the chapters (Opschoor, 2008) in the book that was a product of that endeavour: 'Van Natuurlandschap tot Risicomaatschappij' (From Natural Landscapes to Risk Society; Dietz, Den Hertog & Van der Wusten, 2008). One of the six major sections of that book deals with the impact of climate change (Dietz et al., 2008, pp. 159-200). It is in Dutch, but as a tribute to Hans Opschoor, I have made this look-alike in the English language. Hans, there are at least some people within CERES who take this issue serious!