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Climate change and the language of human security

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Abstract

The language of ‘human security’ arose in the 1990s, including from UN work on ‘human development’. What contributions can it make, if any, to the understanding and especially the valuation of and response to the impacts of climate change? How does it compare and relate to other languages used in describing the emergent crises and in seeking to guide response, including languages of ‘externalities’, public goods and incentives, cost-benefit and cost-effectiveness analysis? The paper examines in particular the formulations in those terms in Stiglitz’s *Making Globalization Work* and Stern’s *The Economics of Climate Change and Blueprint for a Safer Planet*, and how they are left groping for frameworks to motivate the changes required for global sustainability. It undertakes comparison also with the languages of human development and human rights, and suggests that, not least through enriching our skills of ‘narrative imagination’, the human security framework supports a series of essential changes in orientation—in our conceptions of selfhood, well-being and situatedness in Nature—and contributes towards a required greater solidarity and greater awareness of our inter-connectedness.

Keywords

Climate change; human security; incentives; motivation; global public goods; global public spiritedness; economic cost-benefit analysis; narrative imagination; solidarity.

Climate change and the language of human security¹

1 The (absence of) ethics of global environmental change and the need for a language about being human

A great deal is known now about current global climate change:- the serious risks of moving irreversibly outside the climate-bands to which human societies across the world have become adapted over very long periods; the likely largely irreversible effects from build up of greenhouse gases in the atmosphere, and the danger of triggering large-scale melting of the polar ice caps; the now commencing and unavoidable phase of ‘early harvest’ costs that will hit poorest groups and poorest countries the most; and the substantial possibilities of subsequent phases of major deterioration and even catastrophe (IPCC, 2007; Stern, 2007; UNDP, 2008; World Bank, 2009).

Much has been written also about the ethics of global environmental change. The 2007-8 *Human Development Report* provides a forthright introduction to the absence of ethics in current policy and practice (e.g.: section 1.6, pp. 166-171, 185 ff.). To use Biblical language, the sins of the fathers will be visited on other men’s sons, in a ‘Slaughter of the Innocents’; and from those who have little shall be taken what little they have. From those that already have, do not (if judging from past behaviour rather than past language) expect much; not even sympathy or attention can be presumed (UNDP 2008: 66). Rich countries that invest massively in their own security have often claimed, for example, that there is too much uncertainty to invest on a large scale in climate change ‘mitigation’ and global climate security. However, from those from whom much will be taken may well eventually come back more than is presently foreseen by business and political leaders in rich countries—in the form of violent conflict, migration, disease, trafficking of persons and drugs, piracy, and other such forms of ‘adaptation’.

For scientific knowledge and ethical argumentation to have influence requires more than merely publication. It requires a context of frameworks of thought that stimulate and channel attention, interest and passionate energies, amongst leaders, opinion formers and wider publics. Otherwise, materials that are too uncomfortable soon get overlaid by other concerns, as we have seen throughout the past two generations.

Predominant contemporary frameworks of thought are economic, reflecting the predominance of global capitalism. Much modern political, academic and journalistic discourse privileges ‘the economy’, which is taken as central; this is the perspective of businessmen. We hear of ‘the world economy’ rather than ‘the world’, of ‘the Western economies’, ‘the emerging economies’, and so on. Left in second and third place are ‘society’ and ‘environment’. ‘Environment’ is the unconsidered mess- and shock-absorber where one

¹ Presented at the conference on ‘Integrating Development Ethics and Climate Change Ethics’. Rock Ethics Institute, Pennsylvania State University, April 14-16, 2010. I would like to thank Donald Brown and Nancy Tuana, the conference organisers. An early version of ideas in parts of the paper is found in Gasper 2009.

dumps wastes; it serves as ‘sink’ and recycler, we hope. ‘Society’, a residual category that includes the realms of social life not covered by the money economy, likewise provides implicitly various ‘sink’ and recycling services, we hope. It is, like ‘environment’, treated as an accommodating mother-equivalent that absorbs ‘external effects’ and provides succour and refreshment for ‘the economy’, that autistic child driven by inner compulsions. Most aspects of reproduction—biological, environmental, emotional, psychological, cultural, familial, organizational, political—are underweighted or ignored by a conventional economics obsessed with production, or to be precise with monetized production. Oblivious to broader reproduction, economics not merely pushes many things to the margin of calculated profitability, it pushes other things beyond the margin of attention and thus into and beyond the margins of risk.

Beyond the phase of autism and the assumption that mother, including Mother Earth, will tidy up after us, comes a second phase, of attempts to use market-derived economics reasoning to assess the ethical and policy implications of environmental change. As seen even in the 2007 Stern Review, these attempts misrepresent and vitiate some of the important implications. The economics language of ‘public goods’, ‘public bads’ and ‘market failures’ is relatively comfortable and familiar, and very useful in understanding many aspects of climate change and global insecurity (e.g., Kaul et al., 1999), but is too impersonal to motivate basic rethinking and political reorientation. It contains little discussion of the human meaning of these ‘failures’, including the likely resulting anger, conflict and desperation that will bring further layers of costs. Correspondingly, together with its bias to measurement in terms of ability to pay, it tends to generate overoptimistic projections and unbalanced evaluations.

In a third phase, more strongly exemplified in Stern’s recent work (2010), economic analysis can be redirected and kept in perspective: its role is to help in identifying ways for preserving the environment efficiently, not for trading-off environmental values against (other) monetized values. At points in his disquisition on preserving global public goods, Stern like Stiglitz (2007) glimpses that even this economic analysis is not enough. For preservation of public goods requires more than enlightened self-interest; it requires a sense of public spirit, otherwise free-riding by self-interested participants can destroy a system.. Preservation of global public goods calls for global public spiritedness. That spirit includes at least the following principle, enunciated in the 2007-8 Human Development Report and expressed earlier by, for example, Onora O’Neill (1996): that the relevant ‘we’ comprises all those whom our actions affect. One must treat equitably those with whom one trades and whom one affects, regardless of borders. A more maturely human fourth phase is required, aware of and sensitive to fellow humans and to humans as parts of a fragile ecosphere.

Section 2 of the paper presents the critique of existing economics-based treatments of responding to global warming, taking two of the strongest exemplars available: the work of Nobel Prize winner Joseph Stiglitz and his successor as Chief Economist at the World Bank, Nicholas Stern. We will see how they both grope for an ethical vision that can inspire the sorts of societal

redirections that their exercises in policy economics identify as essential for global stability and human decency. Section 3 suggests that the perspective of ‘human security’, which has grown out of the fields of socio-economic development theory, including development ethics, as well as from critical security studies, human ecology and public health, offers more of the necessary vision and moral energy. Human security thinking can be seen as a major line in development ethics thinking, that takes further the move ‘from economism to human development’ (Gasper 2004) and human rights, into a more adequate synthesis (Gasper and Truong 2005; 2010). Section 4 compares the potential of a human security perspective as a language for human transition to sustainability, with the potential of these other prominent policy languages, and sums up.

2 The insufficiency of conventional economic languages

Stiglitz: Making things ‘work’? – Fine-tuning incentives to provide and protect global public goods

The lesson here, as in much of the rest of this book, is simple: incentives matter, and governments and the international community must work harder to ensure that the incentives facing corporations are better aligned with those they touch, especially the less powerful in the developing world (Stiglitz 2007: 210)

Joseph Stiglitz’s incisive and well-intentioned *Making Globalization Work* (2007) offers a virtuoso exercise in progressive technocracy: we must re-engineer the market system to ‘get incentives right’, and Stiglitz supposedly shows us how. The book uses an untheorised concept of incentives, which Stiglitz defines simply as ‘carrots and sticks’ (p.176) in his chapter on climate change, ‘Saving the Planet’. Implicitly the incentives are largely monetary; for example, by placing tariffs on imports from the USA if that country tacitly subsidises its producers by not requiring them to pay for the environmental damage they cause (p.177). Stiglitz advocates some use of non-monetary ‘sticks’, such as making corporate executives bear criminal liability for environmental despoliation for which they are responsible (p.204), a liability which in fact would have to be enforceable everywhere in the world. ‘Corporate incentives can be reshaped. If we are to make globalization work, they will have to be’ (p.189).

The questions arise: reshaped by whom? *quis custodiet ipsos custodes?* (who will guard the guardians?) and, from Robert Goodin: how can we “motivate political morality?”. But Stiglitz only discusses re-engineering of markets, without consideration of a need for cultural and political transformations. He mostly seeks to avoid or conceal moral argumentation, claiming for example that: ‘In Smithian economics, morality played no role’ (p.189) – as if Smith did not see that markets cannot work if most people do not willingly follow rules, and not merely follow rules because they think they cannot get away with breaking them. Similarly, economic growth is presented as self-evidently good and as potentially the solvent of most difficulties—“Their growth [that of LDCs] will enhance our growth’ (p.59)—despite Stiglitz’s awareness elsewhere

of the severe welfare misdirection given by the GNP indicator (e.g., p.153 ff). Finally, human rights are hardly mentioned.²

Belatedly, some ethical issues creep to the surface in the book's final pages. Stiglitz declares that we are all interconnected; that we should give special attention to the interests of the weakest, not, as at present, to the strongest (p.278); and that since important values compete we need to make value-choice explicit, rather than believe that technocratic calculation can suffice. Conceivably some of the book's earlier concealment is tactical; after previous chapters have shown, step by step, the imbalances and iniquities in a series of arenas in the post World War Two global system, the final chapter gives a value-critical diagnosis of how the system was created by US elites to institutionalize their own advantage. All international economic cooperation and management was delegated to technocratic organizations which pretend that no fundamental value choices are involved in their operations, which as result sideline most important values.

The term 'we' becomes prominent in these final pages, as in the following component of a proposed 'new *global social contract*' (emphasis in original, p.285).

A recognition that we—developed and less developed countries alike—share one planet, and that global warming represents a real threat to that planet—one whose effects may be particularly disastrous for some of the developing countries; accordingly, we all need to limit carbon emissions—we need to put aside our squabbling about who's to blame and get down to the serious business of doing something... (Stiglitz 2007: 285).

The introduction here of a global 'we' comes with an asserted requirement that the poor too must limit emissions.

Any move to a new global social contract will require much evolution of perceptions and motivations, not merely a technical exercise of 'getting incentives right' to sort out 'market failures'. Only on the very final page of the 2006 edition does Stiglitz make the required moral step: the 'Declaration of Independence does not say: "all Americans are created equal," but all men are created equal' (p.292 of 2007 edition). This universalist principle should inspire and structure the book as a whole.

Climate change as market failure, continued: Stern and economic cost-benefit analysis

Climate change is the greatest market failure the world has ever seen (Stern 2007: xviii).

The economics interpretation of public goods is an attempt to discuss aspects of life which do not fit the market model, but in terms which are derived from that model via comparison. Public goods, in the neoclassical formulation, are goods which are non-rivalrous (my consumption does not reduce the

² Page 291 touches on human rights for virtually the first time. The book's index mentions 'human rights' just once: for the fleeting reference on p.6.

possibility for your consumption) and/or non-excludable (you cannot prevent me from gaining access). In other words, the conditions required for provision and allocation of such goods to be relatively satisfactorily arrangeable via capitalist enterprises are absent. Given, for example, non-excludability—as with respect to access to radiowaves or the atmosphere—positive/favourable ‘externalities’ exist but a self-interested producer ignores the benefits that accrue to others who do not pay him, so that underproduction results, as judged in terms of a wider calculus of costs and benefits. Conversely, where negative externalities exist, overproduction results, as in the case of processes that generate greenhouse-gases. These are types of systemic market failure.

This conceptualisation of public goods proceeds in terms of what the goods are not, rather than of what they are. As with a category like ‘non-government organisations’, defined only negatively, it leaves us with a perspective that may miss core elements of what is involved, in this case concerning the spheres of societal reproduction and public meaning-making and prioritization (Gasper 2002). It is a theory of public goods based on too little understanding of the content in ‘public’.

Two lines in economics discussions on responding to the problems set by public goods and externalities are as follows: first, to create real or virtual markets in order to place economic values upon these goods, which can then be traded-off against other goods through calculation and judgement – the approach of, for example, economic cost-benefit analysis; or, second, to adopt required target levels of public good provision or assurance, as derived from considerations of basic needs and human rights and/or other considerations, including minimum necessary environmental stability, and then to consider how to effectively meet these target levels – a type of cost-effectiveness analysis. Let us examine these two lines in turn, as highlighted by, respectively, the 2007 Stern Review and Stern’s more recent book (2010 edition).

The Stern Review on climate change (Stern 2007), commissioned by the UK government, essayed an economic cost-benefit analysis (ECBA) of climate change. All foreseen (monetizable) effects of the present path of economic activity and of some possible alternative paths were projected, to then compare the costs and benefits of efforts to change the present path. The costs of global warming were seen as the ‘consumption losses’ that it causes (for example because someone dies prematurely). The commission concluded that measures to mitigate impending climate change would be enormously advantageous; the costs prevented would be vastly greater than the costs of the mitigation measures. The ‘present value’ of the costs of not acting to reduce climate change were calculated to be far greater (of the order of 20% of current consumption, this year and for ever; p.188) than the present value of the costs of acting, even when using what Stern (2010) now acknowledges as the over-optimistic mainstream picture prevalent in 2006 concerning the speed of climate change and the scale of its effects.

Stern (2007) discusses carefully some limits to the applicability of standard ECBA procedures such as the use of a single and fixed rate of discount for comparing future values with present values. He stresses that the standard procedures were designed for considering relatively small incremental investments in very largely stable situations, not for actions of huge magnitude

which can change the whole nature of an economy. He passes more quickly by the deeper objections to applying a method meant for short- and medium-run business calculations instead to long-run decisions that involve life-or-death implications for many people, especially poor people and future generations (pp. 163-4).

First, the logic of comparison via market or quasi-market valuations employed in ECBA has bounds to its relevance and acceptability, set for example by principles of basic human rights. Bounds are set also (in combination with human rights principles) by the estimated limits of flexibility in our physical environment. Destabilization of the Earth's regenerative and climate cycles cannot realistically be substituted for by having more of other capital types: human, social, and human-built physical capital. Structural limits must be central in our analysis of climate change. Beyond the limits, things can snap.

Second, the value principles built into ECBA mean the following: only monetized effects matter; a rich person's benefits are considered more important, since weighted by his greater purchasing power; distribution is unimportant – gains to the richer can (and typically do) outweigh costs counted for the poorer and can even (and often easily do) outweigh the deaths of the poor. The same evaluation approach that serves in this case to justify global warming mitigation programmes is used by the UK government to justify climate-damaging airport expansions; for the minutes saved for highly-paid executives readily outweigh, in this monetary calculus, the loss of livelihood and even loss of life for very poor people elsewhere as result of increasing desertification, climate instability and sea level rise (Monbiot 2008). The language of economics can fundamentally misdirect us.

The key decisions in policy analysis are made before analysts apply a technique. They are the decisions about choice of technique. Built-in to the techniques are 'framing' decisions, about who and what are to be considered – what to include and with what weights (e.g., in ECBA we include monetized values that disproportionately reflect the interests of the rich), implicitly what things to leave out (in ECBA we exclude non-monetized values and penniless people), and tacit assumptions about the range of validity of a technique. ECBA assumes that any type of future cost, including lost lives, can legitimately be mathematically discounted in the same way as potential monetary benefits or costs (Shue 2006). So the poor, whose lives are already largely discounted through use of a monetary calculus in which their activities have little weight, are scientifically 'written off' when the loss of their 'consumption streams' is outweighed by the growth of consumption streams of the already rich. While the commensuration in ECBA is helpful and legitimate when dealing with legitimately commensurated goods, when morally non-commensurable criteria pull sharply in different directions the appropriate advice must not be to fabricate complex imputed comparisons but to seek a different, better option that does not involve that 'trade-off', the sacrifice of what should not be sacrificed (Etzioni 1991). We should reject an option that causes deaths for the sake of saving minutes for business travellers, and force ourselves to create and consider other options (Shue 2006).

The Stern Review insisted on including and highlighting an ECBA of investments in mitigation of and adaptation to global warming, though it warned: ‘Such exercises should be viewed with some circumspection’ (Stern 2007:34). The choice for inclusion appears to have been, first, for purposes of political and public communication in hostile settings. Credibility in many elite circuits of British economic decision-making required simplistic, supposedly sophisticated, calculations. Secondly, ECBA constitutes the worldview in which generations of economists have been trained since the 1960s, concerning how to extend market economics principles to analyse and supplement a world of imperfect markets and market failures. It is how Stern and Stiglitz and their generation of economists themselves think.³

It reflects also, thirdly, a continuing commitment to economic growth. ECBA is a tool of ‘welfare’ maximization within a perspective of managing and pursuing economic growth (Little and Mirrlees, 1974; Dasgupta et al., 1972). The Stern Review was very assertive that high income countries did not need to forego ‘strong’ economic growth (see e.g. pp. xvii, 267). While more demure on this, and with emphasis instead on LDCs’ right to growth and their need to have it if they are to cooperate, Stern’s new book still quietly advocates rich country economic growth, for in fact the same reasons, even though Stern is now more worried about the little time available for changing direction and about the limited braking powers of markets. Stern judges that only responses to climate change that allow and promote rapid (economic) growth in the South—but also, he implies, and sometimes explicitly says, in the North too⁴—will be internally consistent and feasible.

Lastly, the choice reflected also the significantly lesser degree of worry that Stern and colleagues still had in 2006 about the costs of climate change than he had when writing *Blueprint* just three years later. In 2006 it still seemed to make sense to proceed in terms of ECBA’s ‘nicely-calculated less or more’, rather than of ensuring endangered human security. The Review’s accumulation of findings about the dangers of ‘threshold effects’, such as rapid acceleration of the melting of the polar ice-caps, of extreme events, and of interactions between various of the separately estimated possible negative effects (2007: Ch.3), go well beyond the scenarios conservatively modelled by IPCC,⁵ and implied the need for a type of thinking different from business-derived utilitarian calculation. But that step was not taken. Leaving the discussion in market-based economic terms could then be used by writers like Bjorn

³ “The appropriate response to a substantial market failure is not to abandon markets but to act directly to fix it” (Stern 2010: 11), for example through better information flows, including through raising the price of options that cause damage. But this breaks down when we talk of the market for kidnapping, the market for child sex, and even the market for commodities that indirectly cause loss of other people’s habitats, their livelihoods, and sometimes their lives.

⁴ E.g., pp. 4, 8, 10. Stern is no Green economist, in contrast to say Tim Jackson, chief economist of the UK Sustainable Development Commission, who researches on prosperity and progress without economic growth.

⁵ IPCC (the International Panel on Climate Change) has always been conservative in its estimates (Stern 2010: 32), to try to maintain consensus support amongst scientists and credibility amongst wider publics who do not welcome bad news.

Lomborg (2007) and their sponsors, to argue that markets show us that people want economic growth now so much and do not care enough about the future risks, that we should rationally reject major current adjustments aimed to reduce the possible massive costs and risks for the next generations.

On the other hand, by framing its ECBA, like most of its analysis, at a global and not a national level, the Stern Review moved in one key respect beyond the parochialism of conventional economic analyses. It carried those analyses' air of political authority into a new arena, declaring that a nationally framed discussion of the costs and benefits associated with climate change would be pointless, for only globally coordinated action has a chance of effectiveness when we face such massive and wide-spreading external effects (2007: 49). The global ECBA allows Bangladeshi delta-dwellers' lives to be written-off for the sake of saved minutes for businessmen, but that happens already via market calculations. The longer-term incremental impact of putting policy discussions into a global normative framework might be to help open for wider critique from global publics some of the iniquities that are implemented through market structures and condoned via economic calculation.

Economics as handmaiden: Stern's Blueprint for...How We Can Save the World

Stern's new book is interestingly different from the Stern Review, even if not fundamentally changed. He still speaks emphatically "as an economist", not least when seeking at the outset to establish his grounds of authority. He asks: 'What are the magnitudes, in economic terms, of the risks which the science has identified?' (2010: 2), rather than of 'in human terms'. He talks of 'the economy', rather than of society or humanity, and of 'economic policy' rather than public policy (e.g., pp. 2, 11); and he uses without qualification the concept of 'efficiency', by which he in general means efficiency in economic terms, as assessed in terms of market purchasing power and the resulting market- or market-equivalent values. The Stern Review similarly constantly declared its use of 'many recent advances' in economics, as a way to build its authority and to reduce the possibility of any feeling by politicians and publics that the Review criticised their past choices.

Now, after three years of intense debate with growth-first economists and climate skeptics such as Lomborg, *Blueprint's* chapter 5 on 'Ethics, discounting and the case for action' includes a stronger critique of the assumption that society's ethical values can be reliably imputed by looking at market values. Stern spells out why market valuations and ECBA are not adequate for our biggest decisions, for which forms of public discussion and politics are required. And he treads a tightrope in trying to balance between what he considers politically feasible and palatable and the increasingly somber natural science projections that he is now aware of.

1. "...emissions are growing substantially faster than previously thought" (2010: 22).
2. The impact of these emissions on greenhouse gas (GHG) levels in the atmosphere is much quicker than previously expected, since the carbon-

absorption capacity of the oceans is estimated now as lower than believed a few years ago. The target ceiling GHG level of 450 ppm (parts per million) CO₂-equivalent, widely identified as a safe level to prevent major temperature rises, appears extremely likely to be exceeded. We are already almost that high. Stern now takes 500 ppm as a realistic target, hopefully both attainable and yet tolerable in its consequences. It is well below the 550 ppm sometimes emolliently adopted in his 2007 Review (e.g., p.337) even though he recognised there that ‘550 pm CO₂-e would be a dangerous place to be’ (p.329).

3. For, what are the implications of these GHG levels for temperatures? The 500 ppm target level almost certainly will not prevent a global temperature rise of more than the 2 degrees C that has been widely considered as the maximum ‘safe’ increase, but it should avoid a 3 degrees rise that is estimated to bring high risk of more severe destabilization, including ‘a high risk that the major rainforests will collapse’, meaning the loss of immense ‘carbon-sinks’ (Stern 2010: 29).
4. Recent research suggests that the impacts of these temperature rises on climate and physical geography will be more severe and more damaging than estimated even a few years ago by the IPCC and the Stern Review (Stern 2010: 27, 39). To take one small but striking example of current trends: ‘average glacial retreat in Bhutan...is 30-40 metres per year’ (2010: 29).
5. Recent research also shows that the impacts on human populations of these changes in climate and physical geography will, in turn, be worse than previously estimated – with, in particular, massive risks for the low-income populations of South Asia and Sub-Saharan Africa.

In sum, there are great risks of irreversible mega-damage.

Stern therefore proposes and uses a 500 ppm GHG ceiling in this ‘Blueprint’ to ‘Save the World and Create Prosperity’. He deems such a ceiling to be: feasible, technically and politically; safe, enough, just about; and an economically attractive investment. The rough estimate he gives of the costs required for respecting a 500 ppm ceiling is 2% per annum of world product (2010: 48), for the next 50 years – very little compared to the estimated risks and costs of climate collapse.

Blueprint gives more attention than did the Stern Review to issues of rights-and-duties, and much less emphasis to ECBA calculations. In effect Stern recognises that their zone of relevance has been left behind. Implicitly, we need value-guidelines from outside economics. As seen above, he estimates a maximum acceptable level of GHG concentration, not on the basis of economic calculation but from a mixture of environmental, political and human rights type estimations; then takes that as a given, not something to be traded-off against other objectives expressed in market values, and uses a sort of cost-effectiveness analysis to look for methods (including market-based methods, but also many others) to fulfil that fixed objective. This line of reasoning could be found in parts of the 2007 Review also, but with less prominence than the ECBA.

How to implement the 500 GHG ppm ceiling? Since Stern assumes continuing economic growth, worldwide—as he thinks that without it there

can never be the political agreement and stability required to make the required changes—respecting the ceiling requires reduction by 2050 of GHG emissions-per-unit-output by a fearsome 80% or so overall. Having used the ‘economics of risk’ to advocate emissions ceilings, he applies the ‘economics of cost’ to advocate their implementation via markets for the allocation and reallocation of emission rights, on grounds of (economic) efficiency (2010: 99). Taxes on GHG emissions would be too uncertain in their estimation and impact, therefore he advocates instead quotas which can then be traded.⁶ A quota system gives us the necessary certainty about total emissions. In addition, regulations about required performance standards and maximum permissible emissions will be necessary to counteract businesses’ and consumers’ fallibility and inertia, for example over use of energy-saving methods such as low-energy light-bulbs.

Creation and promotion of suitable technologies requires enormous state involvement and support, given the lags, risks, and externalities involved. Past experience shows the dangers of inertia: investment worldwide in energy research is tiny and halved in the 1980s and 90s, to about 6% of the level of energy subsidies (Stern 2010: 113). This suggests the likelihood of governmental as well as societal inaction when immediate economic and political pressure is absent. Having discussed the choices of ‘carrots’ and ‘sticks’ to apply to producers and consumers, Stern’s chapter 6 on ‘Policies to reduce emissions’ ends with mention of institutions. In particular he calls for action coalitions to generate ideas and commitment in national discussion fora (such as the 2007 Grenelle d’Environnement in France) and to maintain pressure on governments for follow-up. A further system of sticks and carrots can be set up to induce action on commitments made in such fora; for example, the UK Government must nowadays explain to Parliament if it does not accept the advice of the Climate Change Commission, and is legally required to follow whatever environmental targets it does set itself (Stern 2010: 122).

In other words, we can try to devise further clever carrots and sticks to induce governments to generate and enforce carrots and sticks for others. Yet, to repeat, the record of the past two generations is mostly of inertia. Will even ‘many recent advances in economics’ make much difference to this? Who will motivate the motivators?

*But: “how to motivate action”?*⁷

After the extended policy design presented in its chapter 6, Stern’s Blueprint moves in the next chapter beyond the world of the carrot and stick. Without highlighting that he now transcends that level of discussion, conducted in terms of assumed motives of narrow self-interest (taxes, regulations, carbon pricing, etc.), Stern in effect accepts in his Ch.7—‘Individuals, firms, communities: the power of example’—that those types of incentive are not

⁶ Stiglitz differs, arguing that there will be no agreement on national target levels. He prefers a global carbon tax (2007: 180-182).

⁷ Stern (2010: 124).

enough, because, implicitly, that picture of motivation and theory of private and public action is not enough (cf. Stretton and Orchard 1994; Crawford 2009). We need attention to other types and channels of motivation and behaviour-change. In the terms of policy theory, beyond carrots and sticks lie ‘sermons’ and dialogue (Bemelmans-Videc et al., 1998; Sinha and Gasper, 2009), including education, information-sharing, and promotion of new and old ideals and of culture-change.

Inducing or changing deeply rooted patterns of action requires change of ideas, perceptions and pictures of what is possible, expected and acceptable; for example, changes in the public’s active expectations regarding business behaviour. Environment-friendliness must become an essential criterion for corporate respectability. Corporations would then, Stern hopes, start to lobby governments to introduce more environment-friendly policies rather than the reverse; both because it will help their image and because those policies will give them a more stable future for which they can securely plan (2010: 138). Changing perceptions and bridging the gaps between thought and action require presentation of vivid concrete examples, and Stern tries to provide many in this chapter 7.

The same sequence of discussion—a technocratic policy design, as in chapter 6, followed by a search for the human meanings that could motivate its implementation, as in chapter 7—recurs in the remaining chapters. Chapter 8 proposes ‘The structure of a ‘global deal’, a plan for how to progress in a world of multiple stakeholders with different and partly competing interests and perspectives. Unless different actions fit together and reinforce each other, then many of the individual actions will not be started in isolation or will not work. Rich countries must commit unilaterally to major emissions cuts and invest greatly in new technologies, if there is to be a chance that the currently low and low-middle income countries will—if rich countries have met their commitments and appropriate financing mechanisms are established—agree by 2020 to targets and time-paths for emissions reduction. 2020 is the end of the time-window of opportunity for Stern’s package of adjustment-without-(much)-pain to be workable. After the elaborate discussion, in this his longest chapter, of proposals for emergence of a global carbon market, a program to halve deforestation, and so on, the following chapters 9 (‘Building and Sustaining Action’) and 10 (‘A Planet in Peril’) turn to how to make such schemes attract attention and support and to truly take-off.

In the same fashion as Stiglitz did at the end of his book, after chapters of technocratic detail Stern shifts, without highlighting the change of register and change of implicit model of persons and of public action, to questions of solidarity and altruism, vision and inspiration: ‘a spirit of collaboration’ (2010: 181) and ‘commitment and communication’ (p.182). Whereas in the Stern Review, discussion at this point in the argument was about ‘behavioural and organisational factors affecting economic rationality in decision-making’ (2007: 427), and attitude change received only three pages (448-451) out of 700, the new book devotes a large part of its chapters 7 and 9 to the theme. After the details of carbon trading Stern now finds it necessary to invoke the, very

different, spirit of Gandhi and Mandela (2010: 182-3). Evidently we require something more than ‘recent advances in economics’.⁸

Without firmly saying so, Stern here recognises that cooperation around (global) public goods cannot be conducted only in ‘economic man’ terms, via clever manipulation of carrots and sticks. First, people are not economic men, unflagging and unfailing calculators of narrow self-interest. They fail in this calculation very often (see also Stern 2007, Ch.17). For example the narrow-spirited past estimates of how the U.S. may gain in various ways from global warming, in contrast to at-risk countries in the tropics, underestimated how ‘because of the United States’ vast wealth, the value of the potential damage [from climate disruption and extreme climate events like Hurricane Katrina], even if it is less extensive, will be enormous’ (Stiglitz, 2007: 170). People are both unhabituated and often unable to calculate *indirect* effects (such as the impacts on the U.S. of disruption in the tropics, via migration, disease, conflict, fundamentalist movements and the like), and thus fail to move to the stage of enlightened self-interest. Ironically, incorporation of such effects is more likely to occur if people move beyond that stage of self-conscious calculation of private interest, to a stance of sympathetic cooperation with others. For they then become more attuned to impacts on others and the resulting indirect effects on themselves. Secondly, for other reasons too, co-operativeness is a public good needed for the effective operation of markets. Not least, what will motivate the motivators and policy managers? Shared norms and institutions are required for shared security.

Public action around public goods requires an appropriate feeling of what is the public, including some sympathetic feeling for ‘distant others’ and future generations. And besides such reflection or unconscious adaptation concerning who are ‘we’, it will sometimes require reflection on: Who am I, what is my ‘self’, and what really is its ‘interest’: what is a good life? Stern fails to investigate the images of identity and ‘interests’ that structure and constrain behaviour (in contrast to, for example, Jackson 2006). He offers a policy ‘blueprint’ rather than serious reflection on motivational values; and works with insufficiently examined assumptions about the identity of the ‘We’ (Treasury and World Bank economists; well-intentioned Establishment advisers) who supposedly can, in the title of his book, ‘Save the World’.

⁸ These elements could conceivably be compatible within an overall system—Bill Drayton, a father of emissions trading, is also the father of Ashoka, the global foundation for promoting progressive social entrepreneurship (Bornstein 2004)—but we require more self-conscious and self-critical attention to how that could be so.

3 Human security thinking

Human security thinking provides us with a more adequate framework for these tasks. I have elsewhere summarised such thinking as follows:

A human security perspective...involves a system of ideas: a focus on individual human persons and on stability in fulfilment of their basic needs; attention to causal interconnections regardless of conventional disciplinary boundaries; and emphasis on 'tipping points' and felt insecurities. It includes strong attention to the contents of individual person's lives and to human depth in understanding of security; a synthesis of features from the normative languages of human needs, human rights and human development; and a framework for situation-specific wide-ranging explanatory syntheses. (Gasper 2009: 16)

Such a framework has been known under the name 'human security' since the early 1990s, especially following the Human Development Report 1994 (UNDP 1994). But it had been emerging for a generation before that under diverse other names: in work on basic human needs, on human ecology, and on conflict, violence and peace, such as by the Palme Commission and the South American Peace Commission in the 1980s. It is currently championed in particular by the Human Security Network of around a dozen medium-powers such as Canada, Norway and the Netherlands, by the governments of Japan and Thailand, and by a variety of organizations including UNESCO (e.g., UNESCO 2008) and the U.N. University Institute for Environment and Human Security (UNU-EHS). One leading articulation of the perspective is the volume *Human Security Now* (CHS, 2003) by the Commission on Human Security, 2001-3, chaired by Sadako Ogata and Amartya Sen that was commissioned by the UN Secretary-General and the Government of Japan.

We will consider the perspective in four stages. First, we look at the concept of 'human security' and note a family of concept-variants around a defensible core meaning. Its emergence in the context of the UNDP Human Development Reports and its relation to the ideas of human development and human rights deserve attention from the outset. Second, we are dealing with a discourse, a system of ideas, as introduced above, not merely a single concept. The disputes over defining the concept become relatively minor—except in terms of who claims 'ownership' and controls research funding—when the system of ideas is grasped. Third, the discourse has a number of characteristic roles, as a 'boundary object' and policy *leitmotif*, accessible and useful to a variety of audiences including for bringing in unconventional themes and guiding relevant policy analyses. Fourth, the discourse in various ways synthesises and transcends several prior discourses, including those of human rights and human development. It is not a separate add-on or rival, but a member of a larger discourse family. In Section 4 we will address this last theme with reference to sustainability and climate change.

The concept of human security, within the family of human discourses

The United Nations-led work on 'human development', now established for 20 years, involves: a reaction against prevalent inhuman styles of development,

and a move away from a focus on having things, in national aggregate, to a focus on how all individual people can live; in a context of understanding the real interconnections between spheres of experience that have been conventionally treated as separate, such as economy, environment, displacement, conflict, disease and migration. Neglect of those connections contributes to the inhumanity of prevalent development approaches. This last feature, the stress on interconnection, can be given the name 'joined-up thinking'. Equally important is the 'joined-up feeling' that is implicit in attention to how all human individuals live, regardless of their purchasing power and of their place of birth or residence. This last feature builds on ideas of human dignity and basic human rights.

We need to go further than the original human development discourse, represented by the Human Development Reports at global, national and subnational levels, to think more about meanings and aspects of the central notion: 'human'. Human security discourse does so. It focuses on how people seek security of various sorts—physical, economic, and psychological—and on the priority capacities and vulnerabilities that form the grounds for basic rights. Human security discourse's narrower focus has helped us to go deeper, to ask and explore more about what is distinctive and of priority in 'human', and ultimately to understand more broadly. Paradoxically, less has been in some respects more. The discourse involves a stronger concern with felt experience than in most of the legal-led work on human rights and economics-led work on human development. It leads us to close concern with the textures of everyday life and connects strongly to human subjectivity, thereby increasing both explanatory force and motivational power. To more individualistic human rights thinking it adds an emphasis on the human species as a whole and on our shared security, insecurity and vulnerability.

The concept of human security thus concerns the security of human persons against important threats to their basic needs. It represents a prioritising format within human development thinking: a focus on the priority objectives within the human development approach's concern for expansion of the attainable 'doings and beings' that 'we have reason to value'. Priority, needs-based, objectives are given human rights status. So, attention is given to: guaranteed minima per person, not only to expansion, aggregates and averages; top priority areas, not all valued areas; guarantees, basic rights for all, not only nice talk followed in practice by sacrifice of the weak; and stability, not just overall average fulfilment over time.

In comparison to conventional concepts of security, human security analysis involves a focus on the security of all individual persons not of general entities such as the state or average national income; and second, a wider scope in the areas considered under 'security', corresponding to basic human needs. Leading on from this it also involves a wider scope in, thirdly, attention to contributory factors, and fourthly and consequently, in attention to possible countermeasures to insecurity (Gasper 2010).

Different formulations circulate and compete concerning what are these basic values, threats to which form threats to human security. These differences lead to definitions that range from as narrow as bodily security against intentional physical threats, through 'freedom from fear and freedom

from want', to security in terms of quantity of years lived (adjusted for life quality) against all threats to life, whether physical or not and intentional or not (Picciotto et al. 2007). The diversity of definitions is not a real problem; different formulations can fit different socio-political and decision-making contexts. All the formulations involve a shift to a concern with major threats to major values in the lives of ordinary people, compared to traditional security studies' preoccupation with the state and its preservation.

A discourse not just a concept

Behind the definitional features at the concept level lie bigger themes at the discourse level: the motivating concern of 'joined-up feeling', in a form adapted from human rights work, and holistic 'joined-up thinking', giving wide-ranging attention across human experience, especially to transgressive causal interconnections, transgressive with respect to the territorial habits of established disciplines such as economics or international relations (Gasper and Truong, 2005, 2010). The attention to interconnections involves an awareness of fragility, possible 'tipping points' and even breaking points in social, physical and biological systems.⁹ This joined-up thinking means that definitional disputes decline in significance. Even if one uses a narrow physical violence definition of human security, use also of a transdisciplinary causal perspective, in which different forms of insecurity – physical, political, environmental, health, economic, military, psychological – can all strongly affect each other, means that both in analysis and action one must engage broadly across areas of 'non-traditional security'.

Leading on from the immersion in the basics of daily experience, the themes of joined-up feeling and joined-up thinking connect in a focus on interpersonal relationships not just on the range of valued choices, in contrast to 'human development' theory. The combination of the two themes also strengthens the basis for human solidarity. 'Joined-up thinking' can reinforce 'joined-up feeling': awareness of effects—actual, probable or possible—on others from one's actions may support feelings of sympathy, even responsibility; and awareness of boomerang effects—actual, probable or possible—on oneself can generate feelings of caution and actions of precaution. Similarly, feelings of solidarity across both time and space together, in other words solidarity with future generations in other parts of the world, may be promoted by joined-up thinking that raises awareness that the security of your inheritors in your 'own' family and society will depend on the security of their global contemporaries and thus on the security of your contemporaries too.

Compared to the older language of 'basic human needs', the 'human security' language adds an orientation to the dangers of triggering fundamental damage when we lapse below or exceed certain thresholds; and it increases

⁹ UNESCO's survey of its research on human security, and of expert views on experiences with the concept and approach (2008: 133 ff), unfortunately conflates the issue of thresholds, beyond which there is accelerated and dangerous change, with the more extreme notion of 'point of no return'.

attention to feelings and subjectivity, besides objective life circumstances. In both respects it increases explanatory perceptiveness. Compared to the older language of ‘human development’, the human security language adds attention to the stability, not just the extent, of valued opportunities and attainments, and a prioritizing focus on access to basic goods, including with respect to each individual, not only in aggregate. This leads it to engage further with the mundane, quotidian realities of life as lived and felt, and to reflect on what ‘human’ means: to realise that we are ‘encumbered subjects’, each with a body, gender, emotions, identity, and a life-cycle. Human security discourse thus potentially has additional emotional and motivational appeal as well as greater explanatory insight.

Roles of human security discourse

The concept of human security functions as a ‘boundary object’ that brings different intellectual and policy communities into conversation (Gasper 2005). Human security discourse functions as a boundary discourse that serves to open up, reorient and enliven attention to unconventional but fundamental problems such as climate change.

The sociologies of science and policy indicate that for fruitful (or even any) communication to occur between different scientific and/or policy groups, suitable ‘boundary work’ activities of bridging, bonding and broking are required. The activities need to be instituted in certain boundary objects—certain ideas, organizations and practices—that are found usable and helpful by each side (see e.g. Jasanoff & Wynne 1998). Study of boundary work has shown that a high proportion of creative advances occur in this way (see e.g. Dogan & Pahre 1990). While having to beware of the danger of total dissipation of meaning, one must be prepared to tolerate some ambiguity in boundary objects.

Many authors now find the concept and discourse of human security to be, in effect, valuable boundary objects in making progress on major global challenges, not least for climate change (O’Brien et al., 2010). For example:

it is possible that the human security concept will serve as an inclusive meeting place to all the stakeholders because of the simplicity of its conception, with less possibility of discrimination based on expertise areas or degrees of literacy than more elaborated concepts such as those promoting sustainability (Gomez and Saito, 2007: 14);

human security provides a powerful “political leitmotif” for particular states and multilateral actors by fulfilling selected functions in the process of agenda-setting, decision-making and implementation ... [O]veremphasising the shortcomings of leitmotifs means to underestimate their potential, which exactly relies on its ambiguity/flexibility (Werthes and Debiel 2006: 8, 15).

This policy *leitmotif* has proven to be operational and fruitful when used in a flexible adaptive way. A human security approach does not require that we study the effect of everything on everything else, nor does it propose a single fixed and precise policy research blueprint or conceptual grid such as given in economic cost-benefit analysis. Its key roles are to generate an appropriate

broad and flexible orientation, and an openness to which are the priority threats and key linkages in particular situations; it leaves their identification to be done case-by-case. We see this exemplified in the series of national Human Development Reports that have adopted a human security approach (see the survey by Jolly & BasuRay, 2007), and the series of regional surveys commissioned by UNESCO (summarized in UNESCO 2008), not least the surveys of Eastern Europe (Tadjbakhsh & Tomescu-Hatto 2007) and Western Europe (Burgess et al. 2007).

4 A language for transition?

The steps required: rethinking well-being and relationships to others and to the Earth

How we approach issues of climate change—with what categories, criteria and degree of concern—depends on how we identify and situate ourselves causally and affectively in the world. What do we see ourselves as primarily: members of an Earth community, a common humanity; or members of some limited human community; or purely as individuals? How far do we see shared interests between people, thanks to pervasive causal interdependence? How far do we value other people and their interests?

The Earth Charter and the Great Transition project (Raskin et al. 2002; Raskin 2006) identify three value shifts required for human sustainability on earth: from a preoccupation with the acquisition and consumption of commodities to a broader and deeper picture of what gives quality of life; from an overwhelming individualism to a human solidarity, based indeed on respect for individuals; and from an attitude of mastery and domination of nature to an attitude of stewardship for ‘Mother Earth’. Critically, these value transitions involve shifts in perception. We remain in aggregate enormously distant even from the first shift, to focus on quality of life rather than on volume of commercial throughput. The ‘progressive’ Stern Review conducted its analyses largely in terms of impacts on the profoundly misleading criterion of per capita GDP, arguably thereby misdirecting much of the discussion.

With relevance especially to the second of the indicated shifts, towards greater human solidarity, but also to the first one, on rethinking quality-of-life, Martha Nussbaum proposes that to have ‘people who can function with sensitivity and alertness as citizens of the whole world’ (1997: 8), the following capacities are necessary: ‘the capacity for critical examination of oneself and one’s traditions’ (p.9); ‘ability to see [ourselves] not simply as citizens of some local region or group’ (p.10); and perhaps most central and underlying the other two: ‘the narrative imagination. This means the ability to think what it might be like to be in the shoes of a person different from oneself’ (pp.10-11). These capacities are capacities of perception. How can they be promoted?

We—humans—perceive and act in large part through language. The transitions in human societies to move to sustainable pathways require languages for transition, not merely cost-benefit calculations, ‘blueprints’, plans for incentives, or even talk of respecting and enhancing human rights and reasoned freedoms. While all are relevant in varying degrees, none of these

ways of talking and thinking contains an adequate vision of humanity, humanity on Earth, as pervasively interconnected and mutually constitutive, causally, semiotically and affectively. By ‘language’ we refer here to a way of ‘seeing’, of giving and making sense: a discourse, not merely a list of separable concepts and rules. I suggest specifically that human security thinking promotes two essential qualities: the capacity of narrative imagination and the perception of an intensively interconnected global ecosystem which we share. Compared to the other languages mentioned here, it thus adds importantly in terms of both logos and pathos to understanding and preserving ‘global public goods’, and favours the fundamental changes of perspective that are needed in how people perceive our shared interests and shared humanity.

Human security thinking and the logos and pathos of argumentation on global public goods

Human security thinking emphasises and extends the logic of global public goods, in particular the logic of global public health: that there can be no security in one neighbourhood alone. The public goods jeopardised by global warming on the scale that is being generated by current emissions levels and trends are so fundamental that all countries will be damaged, including rich temperate-zone countries, directly and also indirectly through the backwash effects of multidimensional crises in many low-income tropical and subtropical countries.

Human security thinking goes somewhat further, and crucially so. It promotes ideas of human worth, and human co-membership in a global ecological system, ideas that could motivate cooperation to supply and maintain global public goods. Public goods provision cannot be reduced solely to calculations of self-interest, otherwise free-riding by selfish participants can easily destroy the system. As we saw, stable and sufficient provision of public goods rests also on public spiritedness: pride in and commitment to the collectivity. Authors like Stiglitz and Stern have participated vigorously over the past generation in, and indeed led, an instrumentalist, economic, reductive and alienated style of treatment of public goods (Stretton and Orchard 1994). While having the merit of giving strong attention to public goods, they have promoted a mindset derived from market economics—with an assumption of a world essentially of clever selfish calculators—that lacks ingredients that are essential for environmental preservation and for survival with equity. To counterbalance this they presume a wise and benevolent central disposer, a God-like Benthamite authority, who will receive and implement their technical advice; rather than a real modern polity, the product and producer of capitalist consumerism and of the forms of electoral democracy that this coexists with and controls. We saw that Stiglitz was forced to invoke the spirit of universal human rights, on his final page, when seeking to justify and energize the action required to ‘Make Globalization Work’ and Stern was left to belatedly invoke the spirit of Gandhi and Mandela when seeking to imbue motivation to act on his policy blueprint. But such spirit—and the spirits of public-spiritedness, cooperativeness and human rights—could be incompatible with other aspects of Stiglitz and Stern’s programmes. A

conception of human security offers a more integrated and cohesive perspective.

Human security thinking and the narrative imagination

There is overwhelming agreement that, while the holistic aspect and non-fixed definition of human security is a problem that continues to draw criticism and doubt as to the efficacy of the concept, it is precisely its breadth and multidimensionality that make it relevant. (UNESCO 2008: 136).

Human security thinking involves attention to a diverse but situation-specific set of interacting threats and how they affect the lives of ordinary individuals, especially the most vulnerable. The sheer range of factors and of their interconnections means that the type of assertive story-telling found in conventional economics – if we do X then Y will follow – is unattainable. Instead a more self-aware storytelling results: ‘here is what might result from some current factors and their possible linkages’; ‘there lies another possible future and what might lead to it’.

This type of storytelling has been formalized in the scenarios approach that is well developed in futures studies (see e.g., a special issue of the journal *Development*, 47(4), 2004, or www.GTInitiative.org). Scenarios are explicitly stories, using pictures, figures and charts as well as words, about how an ensemble of interacting forces could drive events. They give us a way to better grasp the range of possible futures, to sense the diverse potentials of complex interactions. They essay holistic interdisciplinary analysis, in a simplified way that retains manageability but at the same time reveals risks, possibilities and opportunities that can otherwise be overlooked.¹⁰ They thereby help to counter both over-confidence and passivity. Scenarios help people to perceive connections and possibilities that are normally screened out by their conventional mental frames and routines and authority structures. They free-up thinking. They convey events and choices in a way that fits the way we experience them in reality, and thus do better than abstract models, for building the links through from exposure to understanding to communication

¹⁰ The Stern Review for example contains separate chapters on economic costs of climate change in rich countries and in poor countries, each based on an accumulation across different sectors of quantitative projections concerning impacts. This approach underweights 1. the non-quantified effects such as political instability, 2. the interactions between sectors, such as the impacts of political instability, especially when that goes beyond routine minor variation, and 3. the impacts on rich countries of instability in poor countries, again especially outside the range that can be projected by quantitative analysis of past variation. Thus the chapter on rich countries notes briefly ‘Large-scale shocks and financial contagion originating from poorer countries who are more vulnerable to climate change (Chapter 4) will also pose growing risks for rich countries, with increasing pressures for large-scale migration and political instability’ (Stern 2007, p.139). It provides another perfunctory mention in its final two sentences (p.158), but does not incorporate those factors in its many pages of costing possible individual impacts in rich countries. Fig. 6.3 and associated text (pp.171-3) show some of these fundamental biases in past economic modelling of climate change impacts.

to credence to active response. Human security thinking can be seen as a vehicle for generating relevant scenarios, in contrast to misleadingly assertive simplistic stories, about say ‘the economy’, projected for decades ahead.

Narrative imagination in a broader sense than meant by Nussbaum—not only sensitivity towards others but also the ability to think about how the world will be if some things become different for oneself, for example as one ages—is often needed in order to generate changes even in one’s self-interested patterns of action. Many of the people who fail to save adequately towards their retirement are financially well able to do so. And similarly many, probably most, people fail to seriously consider how life will become for them, as well as their children and grandchildren, as greenhouse-gas driven climate change unfolds.

Story-telling is influential because it feels real: it links past, present, and future, in relation to imaginable real human actors. When we try to explain a human situation, we describe who are the characters/actors, who did what to whom (the past), and why, the motives, mechanisms and emotions, which together lead us into the future. Stories typically contain and evoke emotions which are remembered too, and help us in later recall and activation of the associated ideas and lessons. Stories can strengthen the narrative imagination, the ability to imagine what it is like to be someone else. Human security narratives (like Raskin et al. 2002; Raskin 2006) think concretely about the impacts of possible future scenarios for the lives of ordinary vulnerable individuals, in terms of their physical security, food security and other economic security, physical and mental health, security of habitat and affiliation. They thereby increase awareness of shared humanity, and of what we substantively share—specific forms of fragility, vulnerability, emotion—beyond more abstracted characterisations in terms of freedom, dignity or abilities to desire, reason, calculate and choose. Perception of others as in most ways like oneself in needs and potentials also provides the basis for perceptions of unfairness in terms of actual situation and opportunities.

Preparation of scenarios can further be helpful in facilitating cooperation, if used to bring together diverse stakeholders for two- and multi-way learning. Storylines about the future may be more vivid, stimulating and fruitful objects for debate than are generalised models or theories; and a particular scenario can become accepted as relevant by several different groups each for different reasons. The processes of discussion can, potentially, increase trust between diverse participants, increase creativity, and promote commitment for cooperation to achieve a superior scenario.

The human security approach and its partner languages

Each of the ‘languages’, the formulations and discourses we have looked at, can have its own zone or zones of usefulness, each suiting different purposes and audiences; so that they are partly complementary, not merely competitive. The degree of impact of the Stern Review in some rich-government circles depends partly on its hundreds of pages of marshalled data and standard economic argumentation. We saw however that utilitarian-type monetization and aggregation in order to make basic policy choices is a very different and

less acceptable matter, compared to the use of markets to help implement policy goals set by non-market considerations. And further, cooperation around global public goods cannot be conducted satisfactorily only in 'economic man' terms, guided by clever manipulation of carrots and sticks. Standard economics can function as sorcerer's apprentice more than as handmaiden. There are limitations and contradictions of seeking to respond to climate change solely by using adapted versions of forms of thinking that have fuelled it: calculated pursuit of self-interest; well-being seen as 'utility' gained through acquisition and consumption of commodities; and Nature seen as a cornucopia, sink and recycler, a bountiful mother that provides without limit and always tidies up afterwards. Shifts of thinking in these three areas are required, as summed up in The Earth Charter and elsewhere: a conception of and commitment to a 'we', over time and space, for otherwise free-riding and seizing of selfish advantage whenever possible are likely to undermine schemes for administering public goods; a rethinking of well-being, as grounded in relationships and self-control more than in things and self-indulgence; and a different vision of and feeling of responsibility to Nature (Kates et al., 2006). A Stern Review does not suffice, as seems confirmed by subsequent trends, including the failure to move forward at the Copenhagen climate conference.

Human security thinking takes insights from public economics and public health and adds greatly to them. It brings holistic attention, through an implicit or explicit storytelling style, to the interactions between different sectors of life, and avoids the self-blinding restriction to analysis within single sectors or to only numerical models of inter-sectoral relations. This increases its advantages over the types of calculation conducted by economists such as Stiglitz and Stern.

In comparison too to the approaches of human rights and human development, certainly in their pre-existing versions, human security thinking has advantages for making progress on the Earth Charter's agenda. It grounds those approaches better in the nature of being and wellbeing, through focussing on ordinary people's daily lives and the contingencies and consequent sequences of disadvantage that can arise. The stresses on basic requirements, shared fragility and felt experience strengthen 'joined-up feeling', the foundation for solidarity. In contrast, the human development approach's language of increased options for attainment by individuals is open to neo-liberal and consumerist uses. Human rights thinking too can be overly individualistic. Human security thinking adds emphases on the human species as a whole, our interdependence and the potential ramifying chains of threats, including through triggering of threshold effects, and on the subjective felt meanings that contribute to extend such chains when particular threats arise to what are understood as basic human rights. It gives us a more adequate basis for considering cross-sector interactions and dangers, and for responding to them. It may be a particularly helpful legacy from development ethics for the discussion of climate change.

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