THE LAST PARADIGM? DELIBERATE VISIONS ON A SUSTAINABLE WORLD

Gaston Meskens

Introduction – Sustainably clearing up conceptual fog

What is the purport of global politics around global challenges within the framework of sustainable development today? It does not need thorough and in-depth research to conclude that global negotiations on how to tackle serious issues such as climate change, poverty, environmental degradation and unsustainable production and commodity consumption have made little to no progress during the last decades. The first reason for this might indeed be called "situational", as it is obviously very difficult to "turn the tide" of the dynamics of a set of interlinked processes that function according to their own rationalities. Global politics recognises that the world has become more complex, and that the challenges mentioned, multifaceted in themselves, are essentially emergences of the complexity of the dynamics and inter-linkages of these global socio-economic processes. Taking into account declarations such as the Universal Declaration of Human Rights and Agenda 21,[1] one can say that our society has made progress in developing and formulating *ideas* about what needs to be done. These ideas are ethically grounded as they typically (and rightly) refer to fundamental values such as human equity and the value of nature, but also in the way they refer to more modern "organisational" values such as transparency and fair play in politics and the market economy. Guided by these ethics, while faced with the observed or expected malaises, one could wonder why deliberations on what would be the right thing to do remain deadlocked over conflicting rationalities or, in the best case scenario, in

[1] Agenda 21 is a comprehensive plan of action to be taken globally, nationally and locally by organizations of the United Nations system, governments, and major groups in every area in which human beings impact on the environment. See http://www.un.org/esa/dsd/agenda21/.

vague (re)formulations of non-binding commitments. Is it only political self-interest to blame or is there more at stake?

The adagio goes that interest groups (nation states, private sectors, cultural communities, etc.) would need to "show political will" by putting the higher interest first and then seek to maintain their integrity consistent with (or despite) the policies and measures that would serve this higher interest. Everybody would agree that this is an extremely difficult exercise. In contemporary arenas, however, the complexity of the challenges faced is *only* perceived as that of a thorny political exercise of negotiating trade-offs between conflicting interests in the social-economic-ecological playing field. In this arena, politics only focuses on negotiating socioeconomic incentives and disincentives at the level of the practices under investigation, but deny the fact that the reference knowledge used to motivate argumentations in these negotiations tends to be ill-considered or strategically mediated already in itself. In deliberating what to do, actors seek to protect their integrity and their search for evidence to stimulate what to do is troubled by the search for evidence to motivate the maintenance of their own integrity. The reference knowledge used to motivate both argumentations is thereby typically mediated into "thin rationalisations" that undermine the quality of the debate. One can observe that, in the face of cognitive and axiological complexity, political actors strategically "talk next to each other", as they avoid jointly scrutinising references for consent and dissent and refrain from critically assessing proclaimed mutual understandings of each other's interests. Open debate about realities is to a large extent semantic and conceptual discourse aiming only at maintaining actor integrities instead of clarifying uncertainties and ambiguities. The result is that trust, in essence the prime quality criterion of political deliberation, in itself also needs to be negotiated. And, beyond semantics, this seems to be a lost cause in any case.

I state this tendency as a second reason why deliberations do not result in significant practical progress. It would be a mistake to think that conflicting values unambiguously relate to conflicting interests. Before a socio-political society can see *how interests really conflict*, it should be prepared to "clear up conceptual fog at the knowledge-policy interface". It can do this by also engaging in "negotiations of meaning" and in reflections on what we can and *cannot* know and should and *should not need* to know with respect to a particular issue.

With the previous consideration in mind, my intention is to present a reflection on the need for a new politics of and for sustainable development, and shall do this in a rationale that develops in two sections. The first takes a critical look at how sustainable development is understood and tackled today, and focuses on issues that, each in their own way, represent specific challenges to understanding, using and instrumentalising the principle of sustainable development. While taking into account their rather "philosophical" nature, the relevance of these issues is recognised as such in academic and informed civil society circles, one can also observe that they do not feature prominently on the political agenda. A second section makes some key considerations on what I understand as these new politics.[2] They can best be described as "advanced deliberate approaches" to policy supportive of knowledge generation and subsequent decision making in face of the socioeconomic and ecological challenges nowadays tackled under the rationale of sustainable development. While this description may seem too vague and too general, it becomes more specific with the basic premise that underpins this view, namely that the quality of governance essentially depends on the quality of the working of the knowledge-policy interface.

In the general context of agreeing on what development should be in order for it to be called "sustainable", the global political community would in principle need to make a fundamental choice: it could continue the debate by "bargaining over conflicting evidences", or engage in more deliberate approaches to knowledge generation in order to "better" deal with cognitive factors (uncertainty, ambiguity, complexity) and axiological factors (values, identities, abstract "ideological" references) in political decision making. In practice, this would mean that, within the context of a specific theme or issue, the arenas of negotiations that face these cognitive and axiological factors would be prepared to engage in deliberate generations of (what I call) "critical consensus knowledge", and this as an intermediate phase preceding traditional negotiations on policy options. Critical consensus knowledge does not converge on "truths", but integrates scientific facts and ideas, observations, discourse and reference with the outcome of joint

[2] The views presented in this paper are based on the research programme performed by the author under the title "The Reflexive Knowledge Society" (v. http://www.theacademia.org).

reflections on the *usability* of those facts, ideas, observations, discourses and references and on the *motivation* of actors to bring these "knowledges" into the debate.

I state that, in the absence of a rational link between "normative ethics and pragmatic architectures" in the context of designing fair and effective sustainable development governance policies, building trust in negotiating the way forward can only be done through these deliberate and advanced approaches, as they constitute in themselves "the possibility to generate trust". I call a socio-political society that makes these approaches work a "reflexive knowledge society". The conditions for a reflexive knowledge society to "happen" are twofold and simple in principle: they are set "in the academy" and need to be enabled in the Agora around the governance negotiation arena. Today, there is no excuse for the academy not organising applied research and reflection in transdisciplinary inclusive settings for the sake of global governance of/for sustainable development. Neither is there any excuse for political delegations and civil society not to enable and stimulate "dialogues" – in the sense of concrete reflexive and transparent knowledge generation settings – in global negotiation processes. These settings by themselves would not generate pragmatic architectures, but at least "liberate" actors from the pressure of choosing between references to ethics on the one hand and proposals for pragmatic architectures on the other hand. This kind of "capacity building" for reflexive and transparent knowledge generation is, in a way, the most important responsibility of all actors involved, and is also the only one key responsibility that is shared without differentiation.

A critical assessment of sustainable development – thinking

1. Sustainable development appropriations

The concept of sustainable development is, as a policy principle, some 40 years old. While its main understanding was still connected to "environmental protection" at the time of the first World Summit on Sustainable Development in Rio de Janeiro in 1992, the second World Summit saw a shift towards a more humanitarian approach, with poverty eradication and

equity at the centre of concerns. At the same time, sustainability gained a last, new connotation. Instead of denoting *a limiting factor on* development, it came to be understood as *a positive quality of* development. The basis of this positive vision was the understanding that the organisation of economy, ecology or social systems cannot be tackled in isolation. The famous "three-pillar" approach to sustainable development persists in supporting sustainable development policies through to today. Henceforth, it was only a small step to starting to use "sustainability" as a quality touchstone for (or the necessary condition of) policies that had the ambition to tackle socio-economic challenges taking into account their context and interconnection. The concept of "sustainability assessment" was born (see for example (Gibson 2005)). As expected, together with this ambition came the obvious question of how sustainability can and should be understood, and how it can be used as a guiding principle and be translated into concrete policies that, in turn, are amenable to "testing" in terms of their effectiveness after implementation.

Today, the adjective "sustainable" is used to characterise a "wanted" quality for virtually every possible, imaginable human activity, from the original policy context related to energy, environment, and production & consumption to tourism, cities, families, cars, livelihoods, health care, design, leadership, sports, buildings, value chains and dance clubs. This trend is no sign of a democratisation or effective instrumentalisation of the concept. The proliferation of appropriations of the concept, and the tendency to stretch the characteristic from the narrowest to the broadest all-embracing areas of human activity make "sustainability" a paradigm that can remain forever, but this tendency makes it at the same time hollow and essentially meaningless. Furthermore, the observation that in most of these popular-cultural appropriations, no attempt is made to rationalise the link between the sustainability of the activity on the one hand and the overall paradigm of sustainable development on the other hand, one could also note the absence of a usable set of criteria and indicators to "test" the sustainability of these specific practices bottom-up.

2. Questioning growth

The least one can say is that, thus far, sustainability has an ambivalent meaning, as it denotes both "stability" or "continuity", as well as the idea of "progress". One could say that the meaning of what needs to be "con-

tinued" under the banner of sustainability has shifted throughout modern history. The scheme in Figure 1 aims to suggest this by identifying four "periods" marked by a specific vision on the economic and related political challenges to tackle in the interest of preserving the environment and humanity as such.

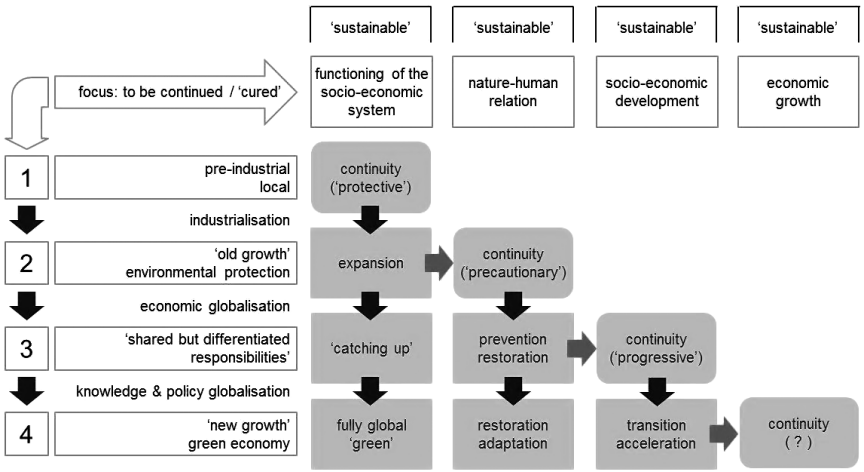

Figure 1 – *Four phases of understanding sustainability*

Reading the scheme from the top downwards, the second phase came with industrialisation and the third with economic globalisation. While the original meaning of continuity (denoting stability in the sense of protecting the integrity of local communities) was typical for pre-industrialised cultures, it was the very modern development through industrialisation and economisation that, based on the raised awareness for the "limits to growth", resulted in another understanding of the meaning of continuity. The rising awareness of the human impact on the ecosystem made scientists, analysts and policy makers connect the notions of stability and continuity to the societal "collective well-being", taking into account the limits of our planet, both in terms of resources and capacity of recovery from environmental impact. That stance inspired a rethinking of the relationship between man and nature, but the approach was essentially pragmatic, as environmental impact assessment was about anticipating and avoiding the higher costs of restoring the negative impact of practices; the first conceptions of

sustainable development spoke of anticipating and avoiding development that would lead to the complete exhaustion of "resources" (including the earth's recovery capacity).

The third phase describes the world today, in its continuing economic globalisation. The focus is on development, or more precisely, on the need to continue development. Based on the classical view of seeing economic growth as a measure for the "well-being" of a socioeconomic society, development is thereby understood in the sense of "progress" and, more concretely still, in the sense of "growth". In the vision of, for example, the Organisation for Economic Cooperation and Development (OECD), sustainability is a means to the end of economic growth. In the introduction of (OECD 2001), it is noted that "… without sustainable practices, economic growth can also lead to excessive degradation of natural and social resources. Governments face the complex challenge of finding the right balance between the competing demands on natural and social resources, without sacrificing economic progress (…)". According to this rationale, the responsibility of our socioeconomic society is thus to make sure that specific sub-practices are sustainable in order to ensure "proper" economic growth. Although the previous language suggests that national political authorities have prime responsibility here, the logic is extended by suggesting that the capacity to ensure the sustainability of practices can in principle be created within the economy itself: "As levels of material welfare have increased, so have opportunities for addressing a range of unmet social and environmental concerns and the abilities of societies to adapt to adverse impacts (…)" (*ibid.*).

Obviously not everyone believes in growth. It is known that the above described paradigm that connects sustainable development to economic development (in a "means-ends" rationale, with the first as a condition to ensure the second) has been questioned throughout modern history. The Club of Rome report "The Limits to Growth" proclaimed the idea of "zero growth" and can be considered the first international systematic and scientifically underpinned study that links economic growth with environmental degradation. The more stringent vision is that of "de-growth". De-growth-advocates claim that the story of global wealth creation through economic growth is misleading and justify this by questioning the logic of growth as such. The argument is that one does not need meta-ethics to understand that in a closed system ("the finite world"), "winners need los-

ers". In this view, the real problem is productivist capitalism that stimulates overproduction and overconsumption. It is worthwhile noting that many de-growth rationales however reject the idea of sustainable development instead of appropriating it in order to link it to their own view on socio-economic organisation. Ideas on equity and distributive justice (as such essential to de-growth rationales) can, in a conceptual meaning, be connected to a vision on *social* development, but there is apparently no clear view on what the meaning of the adjective "sustainable" would need to be in that case. Up till now, the de-growth rationale has generated little impact on national and global policy discourses and deliberations in the context of sustainable development.

On a global scale in this third phase, throughout the last two decades, the combination of the positive vision on sustainable development (sustainability as a quality of development) on the one hand and the urgent context of enduring poverty and unsustainable production and consumption patterns on the other hand has not really generated the necessary political commitment. The Johannesburg Plan of Implementation[3] is generally considered as containing less stringent commitments compared to the original Agenda 21 Document. Only in the pressing atmosphere of the recent climate change debates, one could observe political momentum, as the Stern Report (Stern 2006) restored the old pragmatic motivation for environmental protection with the simple statement (and calculation) that it would be more expensive to restore damage due to climate change than to prevent it. But this pragmatic stance was apparently insufficient to tackle the challenge of "historically shared but differentiated responsibilities" between the developed and the developing world. The failure of the Copenhagen climate change conference in 2009 is said to be due to "too high expectations", and many observers (and politicians) saw this "global policy crisis" as a chance to "rethink the way forward" and find solace in the idea of a "green economy".

The vision for the future (indicated as the "fourth phase" in the scheme above), as for instance presented by the United Nations (UN) in its preparation of the third World Summit on Sustainable Development ("Rio+20"), is that of a fully global socio-economic system working through a green

[3] V. http://www.un.org/esa/sustdev/documents/WSSD_POI_PD/English/POIToc.htm

economy and with an accelerated poverty eradication policy "to also take the poorest on board". When it comes to taking care of the environment, the focus would be on "restoration" and especially "adaptation". Obviously prevention is still a "first principle", but it would need to be taken up under a new conception of restoration. Many current visions on climate change and biodiversity claim that "we went too far already", and that we would try to keep what we have now and "adapt". What would need to be restored is thus not the original natural habitat as such, but the relationship between the human being and his/her natural environment. It is however clear that not everybody finds this an optimistic outlook.

The most important observation however is that in a green economy, the idea of growth seems to persist. In the context of preparing the Rio+20 Summit, the UN stresses on "the centrality of growth", claiming that "No country, howsoever rich, knows how to live without growth. The modern economic and financial system seems to require growth to maintain full employment and decent social services. Growth is the only sure recipe we have discovered for overcoming global inequality" (Banun 2010). The growth would however need to be different from current patterns of growth and could follow three strategic paths: "MDGplus (accelerate development and focus on the most vulnerable)", "internalise externalities" and "invest in an alternative growth strategy". The last strategy is thereby only concretised as a "renewable energy revolution".

The final question of this reflection on the basis of the scheme above is thus whether a combined policy of a green economy together with an extra effort to take the poorest on board would comply with "sustainable development". There are reasons to believe that this policy would anyway struggle with those ethical aspects of sustainable development that would necessarily fall outside any reasonable market-regulating framework. This consideration will be taken up again further on in the text.

3. Getting straight on risk-inherent technology

Is governance of technological risk compatible with sustainable development? In contemporary policy discourses related to energy technologies, food production, mobile phones and health care, the notion of "acceptable risk" plays a central role. One can however observe that views differ on *who*

should define and assess what would be the right "level" and character of acceptability of a specific technological risk, and on *how* this justification exercise should be undertaken. The picture becomes even more complex if one tries to relate the rationale on acceptable risk with that of sustainable development. To put it simply, in terms of designing assessment and decision making criteria related to specific risk-inherent technological applications, it is not clear how accepting a specific risk would (needs to) relate to "meeting our needs" and to "not compromising the ability of future generations to meet their needs". Is it sufficient to democratically ("fairly, deliberate and effectively") justify a technological risk (in light of expected benefits) to rationalise and defend the contribution of the specific technological application to sustainable development, or will long term uncertainties related to potential harm ensure the concepts of risk and sustainability always remain part of a trade-off? Or are they simply incommensurable in both their conceptual meanings and practical hands-on policies?

The issue of technological risk that dominates the actual global political agenda is clearly that of climate change, and the most important strategic framing that undermines the quality of climate change negotiations today is that around the issue of nuclear energy. A simple observation of the history of the negotiations tells us that, since the UN climate change conference in Kyoto in 1997, nuclear energy has never been subject to official discussion in open negotiation sessions. The reason is not the inherent complexity of its risk assessment, but because parties don't want to discuss it, as there are other state-related interests at play (being the economic (in search of a market position or energy-autonomy) and the military). Apparently, the industry and also its opponents find benefit in sticking to their polarised positions in the Agora's around climate change negotiations (Meskens 2008). Policy documents such as those generated within the scope of the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Commission on Sustainable Development processes emphasise the freedom of nation states to consider the use of nuclear and speak of its "conditional acceptance" (safe operation, safe waste management, protection from malevolent use), without going deeper into the complexity of its (democratic) justification. At one point in time, in the UNFCCC process, the concept of "advanced low-carbon technologies" was introduced in the negotiating texts to please both advocates and opponents of nuclear, as anyone could

perceive and use the meaning of the concept in accordance with their own stance on the issue.

The technological risks of fossil fuels and of nuclear technology are essentially incomparable, and therefore the proclaimed contribution of nuclear to combat climate change is as such contested. Even its objective benefit (being a low-carbon energy technology) is subject to controversy, as opponents claim they are seriously underestimated. The real problem is that it is impossible to calculate the total CO_2 emissions generated from the nuclear fuel cycle, which makes it in principle impossible to undertake an impact analysis with the aim of comparing this burden with that of alternative energy technology options. For nuclear energy, CO_2 emissions result from different process stages over the entire fuel cycle. A life-cycle assessment offers the possibility to properly calculate these emissions. However, it shows that estimates of the total CO_2 emissions of the nuclear fuel cycle depend very much on the choices made by scientists when it comes to taking into account technical, practical, social and political factors in the assessment of these process stages (Beerten 2009).

The reason nuclear energy should be openly and formally discussed at climate change negotiations is not to make it accepted or rejected once and forever, but because it exists. Today the nuclear sector benefits from a renaissance that is driven by economic incentives and is apparently "backed" up by growing public support, in spite of the latest disasters in the Japanese nuclear centrals. Two critical thoughts can be made here. Given the remaining uncertainties around the real costs of dismantling and waste management, the budgeting of provisions therefore, and consequentially the proclaimed economic incentives, are open for interpretation and narrow framing, which means that, in the end, surplus costs risk "leaking back" from the private to the public sector. Secondly, if public support really exists, then there are reasons to believe that this does not build on a sudden belief in the technology as such, but on a fear of climate change. The justification of risk-inherent technologies such as nuclear faces a cognitive and axiological complexity that brings about a need for specific normative conditions for the working of the science-policy interface. For various reasons, the necessity to engage in reflections on these required conditions is not always acknowledged by the intellectuals and, particularly, by the scientific, industrial and political world. Especially in the nuclear case, deliberate research and policy making is hindered by too many strategically demarcated

non-overlapping comfort zones. After decades of public and political debate, a serious reflection on the contextual justification of nuclear technology is still hijacked in a polarised (and polarising) discourse, characterised by positionism on the basis of (all but not strategically inspired) "simple" narrow pro/contra framing in the broad public and political sphere. In the concrete case of the climate change negotiations, this serious reflection is needed more than ever, and only the UN can organise it and call on parties and civil society to participate.

4. Rationalising the theme-driven governance approach

The most difficult challenge for designing policies under the banner of sustainable development seems to be: how to link the meaning of sustainable development as a meta-working method (holism, integration) and a meta justice principle (equity, solidarity) to a responsible governance approach, or thus to designing, deliberating and implementing specific multi-level thematic and sectorial policies, taking into account their "cross-cutting issues". It looks as if framing sustainable development into a theme-driven approach (energy, water, food, health, …) (see Figure 2) is a way out, as it provides a conceptual method to design policy processes that can lead to practical outcomes. This does not mean that meta-reflections would be irrelevant in these cases. Only through "framing", the connection with meta-levels (such as "the planet" or "overall well-being") and the connection with other frames (through so-called cross-cutting issues) will become "workable". Nevertheless, our society still struggles with defining "the right themes". To give only one example: while "energy" and "biodiversity" have no essential practical issues in common, they both meaningfully overlap with the theme of "sustainable production and consumption of commodities". In addition, of those three, biodiversity, although an essential concern, seems to be the most unworkable in terms of setting clear goals that can be translated into unambiguous policies and measures. A practical solution would be to drop biodiversity as a theme as such, and "ensure" it within the policies and measures to guide "sustainable production and consumption". But that, in turn, would overly emphasise the impression that our natural environment is only there at the service of global trade.

For sure, it is worthwhile striving to define the right themes in order to negotiate clear "vertical" (top-down/bottom-up) policies that can be connected to socioeconomic sector responsibilities and that would unveil unambiguous cross-cutting issues to be connected with transversal cross-sectorial policy responsibilities. But even then, it would look as if the social of sustainable development (poverty eradication, education, labour rights) would, as cross-cutting issues, only need to be taken care of to serve the other pillars of sustainable development, being economic development and environmental protection. Which brings us again to the essential question: what does it mean to pragmatically organise a theme-driven approach to sustainable development while ensuring an equal treatment of its three pillars of social development, economic development and environmental protection?

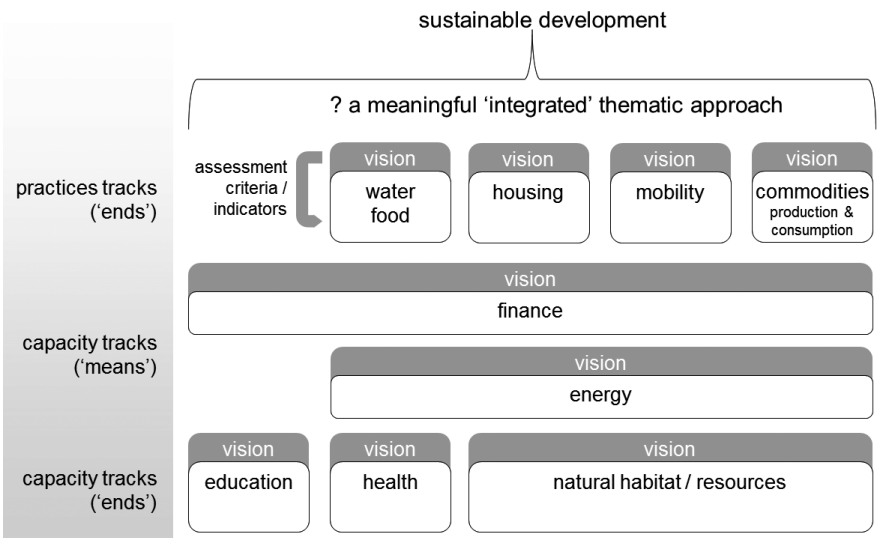

Figure 2 – *Framing sustainable development into a theme-driven approach*

5. Voluntary committing beyond (or in absence of) the law

The reality of the endless sputtering and wandering political negotiations shows that, as reaching consensus on the *idea* of what would be the

right thing to do under the banner of sustainable development is already utterly difficult, pouring this consensus into binding global law seems to be almost impossible. Nations unite to tackle global problems – caused by specific transnational sectorial activities – to design transnational thematic and sectorial solutions, to be consolidated by international and multilateral binding agreements that would enforce translation into national law. While this sounds like a logic that is "closed" to reasoning, reality is clearly different. Agenda 21 was still ambitious in designing and promoting the advancement of international law with respect to the environment, trade and social aspects, but the character of the Johannesburg Plan of Implementation, as with the outcome of the second World Summit, showed clear stagnation in the development of international law in the field of sustainable development (Pallemaerts 2003). The only clear progress made seems to be international trade law. During the negotiations in Johannesburg, an attempt to add to the final text a specification that the principle of "mutual supportiveness" of trade and environment "should be consistent with WTO Principles" was foiled in the last phase. A specification of this kind would in principle have meant nothing less than a subordination of multilateral environmental agreements to international trade law (*ibid*. 210).

While early industrialisation and the expansion of economic activities ("the root of the problems") happened in the absence of national protection or competition (everybody had the right to "jump on the development train"), global governance now needs to be negotiated and organised by nations that try to protect their national integrity and maximise their competitive position. This "situational complexity" comes on top of the fact that, due to cognitive complexity and essential value-based pluralism, there exist different visions on solutions "within" specific sectorial contexts that are state-independent. The difficulty of designing and implementing international environmental law has not so much to do with issues of protection and competition in principle, but with the fact that the negotiating actors distinctly differ on criteria that have nothing to do with the nature of the problems as such. Thereby, the fact that economic development has been mainly a North/West story is a historic evolution that was not driven by a global strategic plan (although post-colonial critical theorists would put a relevant side note here). Therefore, shared but differentiated responsibilities among developed and developing nations imply a global moral problem, but not a case of guilt.

Still today, opinions differ over whether nation states, as policy actors, are the solution to global problems, or rather represent an additional fundamental methodological problem. While this reflection may be called essential, the issue as such is a topic of discussion in academic and civil society contexts, but obviously not in political debate in the context of the global negotiations. Is there, in relation to the meaning of sustainable development, and taking into account the historic evolution of the political world as a group of nation states, still a rationality to formulate in defence of having the nation states as leading actors of global governance? If not, what would be a realistic alternative in the long term?

The making of citizenship for sustainable development

Today, sustainable development is seen by many policy makers as *the* rational "meta-criterion" to motivate or test specific policies for global problems. Others think the criterion can only *inspire* discussions on governance (and government), taking into account its vague and ambiguous meaning. Last but not least, there are many sceptics who consider the concept flawed as such, as, according to them, it provides a way for autocrats, technocrats and corporate powers to disguise their old habits with a sense of socio-political responsibility. Whatever the view on the concept of sustainable development is, as set out in the introduction, and as hopefully underpinned in the previous part, I state the situational complexity of balancing conflicting interest is not the only reason for the staggering global negotiations under the framework of sustainable development, and claim that, before a socio-political society can see how interests really conflict, it should be prepared to engage in an advanced politics with the aim of "clearing up conceptual fog at the knowledge-policy interface". As will become clear in the rest of the text, the advancement would need to be found in "new human attitudes" in the way we deal with knowledge (referential, factual and discursive) in socio-political interaction, and the idea of the reflexive knowledge society will be sketched in this sense. However, in the interest of an advanced dealing with sustainable development, two essential focus shifts are needed to enable this reflexive knowledge society "to get to work": we should rethink the nature of our bare necessities and accept that we have no choice but to "think" anthropocentric.

1. Struggling out of the anthropocentric view

The original Brundtland definition of sustainable development may be said to be driven by a sense of protection and justice ("Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs"). Although during the last decades, this definition has inspired many thoughts on the value of our natural habitat, in its essential meaning, the formulation is purely anthropocentric. The value of nature comes in only indirectly, as a mean to preserve the possibility to meet *human* needs. Since then, socio-political discourses have struggled with using the value of nature as a reference in reflections on human responsibility. Is this responsibility to be defined in the spirit of a higher meta-ethics (the value of nature, and the necessary humble position of humans in the order of things) or can it only be "among ourselves", out of a stance of "deliberate responsible anthropocentrism"?

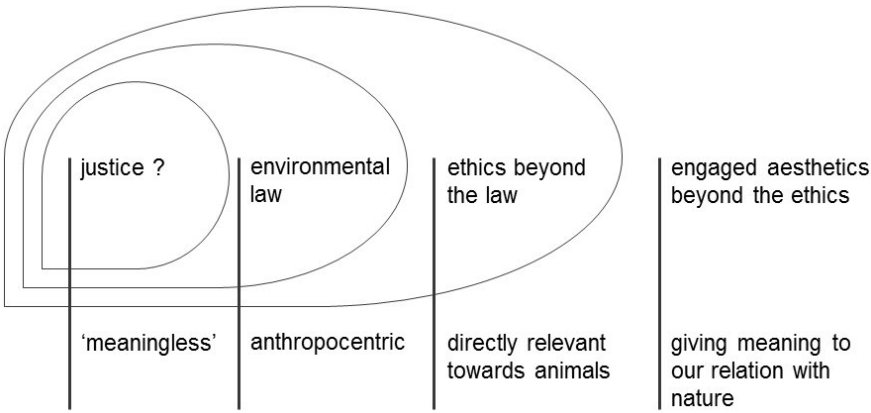

Figure 3 – *Possible references in discourses on the protection of the natural habitat*

Thinking in terms of the "acceptable occupation" of nature is reasonable, but it is impossible to force this stance into an eco-centric perspective. Nature has a value as such, but it cannot be regarded as "absolute",

as we do not know what this would mean, and therefore we cannot use this absolute character as point of reference. The alternative cannot be more than "responsible anthropocentrism" stretched into a perspective of engaged aesthetics beyond ethics (see Figure 3).

2. Rethinking the bare necessities

The bare necessities of early human beings were the same as those of animals: food (including water) and shelter. The early development of living standards was made possible by means of socially organised settlement, agriculture and the use of energy (fire and mechanically generated power). With the progression of "organised living", energy became the third bare necessity of a civilised society, joining food and shelter (the last now called "housing"). Today, in a society that relies on a complex system of interdependent production processes of goods and services, human bare necessities are no longer food, energy and housing, but the *logistics* to provide food, energy and housing. This counts for developed as well for underdeveloped societies. To push the reasoning further, today "organising logistics" apparently puts a burden on the ecosystem and does not ensure distributive justice in a straightforward way. With the specific unavoidable cognitive uncertainties and the high degree of complexity that characterise current challenges, it appears that different rational views on solutions exist, based on references to different value frameworks. From out of a pragmatic ethics (or ethical pragmatism), one could thus conclude that human bare necessities are not the logistics to provide food, energy and housing, but a *collective interactive intelligence to organise these logistics*, and *an effective and fair decision making system to produce this intelligence and to implement its findings*. But out of these various value frameworks, not everyone would agree with the last claim.

3. Finding ground in between normative ethics and pragmatic architectures.

In a world wherein the proper designing of socially, economically and ecologically fair and effective policies is complicated by inherent cognitive

uncertainties and value-related pluralisms, politically negotiating the way forward to a large extent comes down to "negotiating meaning"; that is: the meaning of concepts, knowledge and values behind or "in front of" these uncertainties and pluralisms, and in the face of various "contexts of urgency". Negotiating "meaning" instead of "direct action" can sound unintelligent and irresponsible, given the fact that some of these contexts of urgency, such as poverty and the deterioration of the natural habitat, are, in their harsh reality, clearly visible and for many of us directly tangible. Furthermore, in the case of global problems that become ever more apparent (such as climate change), the needed precautionary action can in principle be easily translated into practical policies "in the real world" (such as emission cuts). Despite these phenomena that require direct action rather than semantic and philosophical reflection, the global political world (supported by science and society) chose to tackle them "all together", and to make this endeavour guided by the concept of sustainable development. The reason to handle all global problems together is not philosophical but rational, as there is the clear insight that they are all interlinked in various ways. The reason to put them under one guiding reference may also seem rationally driven by a concern with respect to the evolution of the global state of affairs of humanity on the globe, and inspired by a stance of intergenerational justice. The Brundtland report said indeed that "sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". But one does not need to be a historian or a policy analyst to observe that, since then, uncountable views have emerged on what that would mean in practice.

Since the beginning of negotiations over designing policies for sustainable development (such as those under the auspices of the UN Commission on Sustainable Development,[4]) deliberations have been morally grounded by making reference to two general ethical principles that are said to have a fundamental character (in the sense that "nobody can be against"). These principles are human equity and fair play. The general principle of human

[4] The United Nations Commission on Sustainable Development (CSD) was established by the UN General Assembly in December 1992 to ensure effective follow-up of United Nations Conference on Environment and Development (UNCED), also known as the Earth Summit. See http://www.un.org/esa/dsd/csd/csd_aboucsd.shtml.

equity informs in its turn the "derived principles" of (1) inclusion of the (potentially) affected in decision making, (2) intra-generational solidarity as an account towards the weak (the underdeveloped / the poor) and (3) intergenerational solidarity as an account towards future generations. The principle of fair play, on the other hand, traditionally supports a generally acknowledged need for transparency and accountability of authorities and the private sector, based on an understanding that political authorities and markets can (and should never try to) shape their own ethics, but that they have the moral right and duty to take part in the intellectual socio-political debate about them.

In recent decades, numerous useful mechanisms, instruments and architectures in the interest of sustainable development have been suggested by policy makers, academics and consultants, and in their pragmatic approach, most of them seem so "logical" that one could wonder why the global political community does not accept, instrumentalise and implement them right away. A way to understand why some rational-pragmatic architectures (such as a CO_2 cap-and-trade system; (see, for example, Aldy and Stavins 2009) do apparently not inspire and stimulate political consensus on the way forward would be to question how these architectures rationally relate to the normative-ethical framework sketched above. The answer would be: they do not, at least not in a direct unambiguous way. This does not mean that it would be useless to think in terms of ethical principles and frameworks in the interest of sustainable development on the one hand, or, pragmatically ("bottom-up"), to design workable architectures on the other hand. The important insight is that *it would not be necessary* for designers and policy makers to prove that architectures rationally "connect" to the normative-ethical framework sketched above. The simple argument for this claim is that it is impossible to unambiguously "extract" these architectures out of this fundamental ethical framework and that, vice-versa, it is impossible to "stretch" them in order to prove that they comply with that fundamental ethical framework. The reason for this impossibility is that in most thematic contexts (energy, biodiversity, health, sustainable production & consumption, among other issues) a number of issues exist "in between the normative ethics and the pragmatic architectures of which their rationalisation (in terms of role and impact) is hindered by typical cognitive factors (unknowables, unknowns, uncertainties and ambiguities) and axiological factors ("pluralism"), which makes these issues in principle

not subject to rational resolution within that "imperative" context. The problem is now that, driven by value-related or simple protective interests, these unknowables, unknowns, uncertainties and ambiguities provide room for mediation of these issues into "thin rationalisations" (either by denying them or by strategically mediating or framing them) that tend to "erode" the quality of the knowledge-policy interface in the context of the sustainable development debate. A typical example is the polarised "nuclear is (not) sustainable" issue. A second example is the approach to product life cycle assessment that typically assesses aspects *within* the lifecycle of the product but forgets to assess the justification of the very existence of the product itself.

4. Better living, in false atmospheres of trust

What are these issues that exist "in between the normative ethics and the pragmatic architectures" and of which their rationalisation (in terms of role and impact) is hindered by typical cognitive and axiological factors, which makes them susceptible to mediation into "thin rationalisations"? They are certainly not global concerns such as poverty, aids or terrorism. Although solutions to these matters cannot also be rationally extracted out of the normative framework sketched above, there is the simple understanding that nobody would want to try to rationalise them as an unavoidable consequence of the complexity of our contemporary society. The issues of which their rationalisations need to be scrutinised are concepts that, although unwanted in the way they manifest, have a "neutral" character, as society accepts them as inevitable consequences of current socio-political, socio-cultural, technical and economic interaction. The concepts are identifiable and recognisable in the way the adjective "acceptable" can be meaningfully connected to it, and a few key examples are set out in the following table.

		"unwanted but neutral" organisational concept
Ecology (natural environment):	/ acceptable …	occupation
Technology:	/ acceptable …	risk
Socio-economy:	/ acceptable…	exclusion
Organisational systems:	/ acceptable …	functionality
Politics:	/ acceptable …	authority
Politics:	/ acceptable …	delegation
Media:	/ acceptable …	mediation
Consumerism (market economy):	/ acceptable …	dependency
Socio-cultural environment:	/ acceptable …	formation
(all adding up to…) Welfare:	/ acceptable …	inequity

Table 1 – *Examples of concepts susceptible to misuse in false atmospheres of trust*

What do I mean by "thin rationalisations"? At various manifestations of the knowledge-policy interface, these unwanted but neutral organisational concepts become susceptible to misuse in strategically created or mediated "false atmospheres of trust". In this view, the fact that an atmosphere of trust is "false" is not a problem, but the fact that it can be strategically created or mediated is. Living in false atmospheres of trust is a human thing. Since emerging as sensible creatures, through reflective interaction, human beings have constantly tried to make sense of themselves and of the world around them, facing unknowables, uncertainties and ambiguities of which many still persist today. The notion of "false" denotes an atmosphere of mutual trust built on what one "believes but cannot prove" and should thus initially not be understood in a negative way. The awareness for possible misuse comes with the conclusion that, due to the existence of specific unknowables, there is no rational evidence available to determine *in consensus* what would be an *acceptable*

occupation, risk, exclusion, functionality, authority, delegation, mediation, dependency, formation or inequity.

If a socio-political society (the political arena and its Agora's) would want to create "transparency" in the interest of arriving at consensus on the available and needed knowledge to be able to judge what would, for instance, be an acceptable technological risk, an acceptable environmental occupation or an acceptable socio-economic exclusion, it would need to engage into a kind of "epistemic mediation". Epistemic mediation starts from a set of questions meaningful in the context of a challenging societal setting (what is at stake? / what do we need to know? / what is possible in terms of knowledge generation and use?) in order to motivate a "collective stance" beyond the need for individual self-justification and protection of integrity. This stance can be described as a joint awareness for and recognition of "(in)capacities" in interactive discursive knowledge generation. Therefore, "better" living in false atmospheres of trust requires recognition of and awareness of the consequences of the limits to our knowledge producing capacities, being:

- limits to the capacity to show reasonable concern, denoting a "lay" perplexity
  ("what you fear but cannot account")
- limits to the capacity to deliver social warranty, denoting a "discursive" perplexity
  ("what you hope but cannot guarantee")
- limits to the capacity to show factual evidence, denoting a "scientific" perplexity
  ("what you believe but cannot prove")

As a next step, the "act of epistemic mediation" would facilitate a collective inquiry into the usability of a specific knowledge brought into a discourse setting, and into the relevance of the actor's motivation to introduce it, in order to come to a "justified critical consensus knowledge" with regard to a specific issue at stake. Critical consensus knowledge does not converge on "truths", but integrates scientific facts and ideas, observations, discourse and reference with the outcome of joint reflections on the *usability* of those facts, ideas, observations, discourses and references and on the *motivation* of actors to bring these "knowledges" into

debate. Important to note is that these. In this sense, epistemic mediation would essentially inform a discourse deliberate acts of critical consensus knowledge generation are negotiating acts in themselves, as they essentially aim to negotiate "meaning" and to reflect on what we can and cannot know and should and should not need to know with respect to a particular ethical issue that "better" relativises truth by way of creating a "hermeneutic transparency" around the usability and motivation of a specific proposition. This better relativization would enable in its turn an "advanced" understanding of notions of authenticity and legitimacy (connected to the proposition), and of their functioning in the interest of "trust building".

As these happenings would be conceived of as formal materialisations of the knowledge-policy interface in which various formal and informal knowledge generation processes on a particular issue would converge, this deliberation of knowledge essentially needs to be fully inclusive. Last but not least, it would require actors to move (and be stretched) beyond the traditional attitudes of those principal mediators of knowledge typically active at the knowledge-policy interface, being "the politician", "the scientist", "the stakeholder" and "the activist". However, in a governance arena, before transparency can be stretched, it needs to be "unlocked" in a culture of reflexivity. While transparency can be "organised", reflexivity needs to be "fostered" in the academy, the research institutes and in general public discourse about the issues at stake. This will be taken up in the next and last part of this text.

5. The idea of the reflexive knowledge society

However "logical" specific architectures, instruments and mechanisms for sustainable development policies may be perceived, the considerations above illustrate the argument that the soundness of their science, the rationality of their economics and the pragmatism of their politics will always have to be based on "opinions that cannot be turned into facts". This means that, in the context of the issues touched upon above, but also in the general context of agreeing on what development should be in order for it to be called "sustainable", the global political community would in principle need to make a fundamental choice: it could continue the debate by "bargaining over conflicting evidences" (as is still too often the case today),

or engage in more deliberate approaches to knowledge generation in order to "better" deal with cognitive factors (uncertainty, ambiguity, complexity) and axiological factors (values, identities, abstract "ideological" references) in political decision making, as was sketched before.

So where can these epistemic mediations and conceptual demystifications happen in reality? Although the idea of "governance" generally refers to concepts related to culture and politics, or more specifically to a process relying on laws, regulations and conventions, it cannot be seen as something driven and steered by an autonomous "system" that would keep on running in the absence of people. Governance can only be done where people come together and interact. It is in these places that global civil society "materialises", and where a global reflexive knowledge society can come to exist in reality in a concrete political setting. This reflexive knowledge society has the intra-generational moral responsibility of inclusion. The reflexive knowledge society, understood as an *interaction between people*, includes the categories of indigenous, lay-person and expert knowledge (and all variations in between). In this sense, it is important to see the knowledge society as an organised deliberate transversal knowledge exchange in the public sphere, connecting the citizenry, the private sector, informed civil society, the academies and the political world. As a general definition in this sense, participation can be understood as the involvement of non-mandatory concerned and (potentially) affected individuals and groups in a mandatory organised knowledge exchange. This applies as much for the political context as for the context of policy-supportive (but "non-committal") research, discourse and opinion making. Taking into account the reasoning of the previous paragraphs, reflexivity should be understood as an individual attitude of awareness of an agent (involved in a discursive "knowledge exchanging" interaction) of (1) the (im)possibilities of "making a claim" , (2) the way his/her knowledge has been shaped and formed and (3) the character of his/her knowledge (multiplicity, variety, integration, coherence). In this sense, reflexivity does not necessarily denote "knowledge about the contextual character of own knowledge" (which specific philosophers would call an impossibility anyway) but a normative responsible individual *intention*.

Taking all this together, the knowledge society cannot be but a discourse society. While this sounds like a downgrade in the concept (is that all we have?), its perspective is actually of a higher intelligence than the one that would strive for unambiguous clarity and evidence "at the science-society-

policy interface". The knowledge society is the "population" of a holistic, trans-disciplinary, inclusive and practice-oriented science-society-policy interface. Holism, trans-disciplinarity, inclusiveness and practicability are thereby no fixed unambiguous qualities of its knowledge generation, but *intentions that inspire the practices* of knowledge generation. Last but not least, the knowledge society is self-reflexive in the way it maintains processes of generating, capturing, disseminating, assessing, applying and evaluating ideas. The reflexive knowledge society is an unselfish knowledge society, and therefore the only possible knowledge society for the sake of the general interest.

The conditions for this society to emerge, happen and work are twofold and simple in principle: they are set "in the academy" and need to be enabled in the Agora around the governance negotiation arena. Today, there is no excuse for the academy not to organise applied research and reflection in trans-disciplinary inclusive settings for the sake of global (environmental) governance. Neither is there an excuse for political delegations and civil society not to enable and stimulate "dialogues" in the sense of concrete reflexive and transparent knowledge generation settings in global negotiation processes. These settings by themselves would not generate pragmatic architectures, but at least they "liberate" actors from the pressure of choosing between references to ethics on the one hand and proposals for pragmatic architectures on the other hand. This kind of "capacity building" for reflexive and transparent knowledge generation is in a way the most important responsibility of all actors involved, and is also the only one key responsibility that is shared without being differentiated.

Sustainable development is social development

For a large part of the political world, it is clear today what sustainable development can and needs to be: the implementation of a "green economy". The previous reasoning has hopefully showed that the concept of economic growth is conceptually flawed and therefore dangerous, and also that a "green economy" will not ensure in itself socio-economic well-being. It does not ensure "by design" the fundamental ethical principles of equity and fair play mentioned above. While it may in some respect guarantee a form of pragmatic intergenerational solidarity (in accounting for the next

generations) by way of restoring the old idea behind environmental assessment, there is no reason to assume that it would ensure the principle of inclusion of the (potentially) affected in decision-making and the intra-generational solidarity accounting for the underdeveloped (the weak and the poor).

A green economy may be the (future) motor of the "logistics" of the socio-economic society, from a global ethics point of view, the social capacity that needs to be built in the interest of sustainable development comprises much more. In terms of the idea of solidarity, a global ethics for sustainable development would in essence imply the possibility of an "intellectual-discursive" globalisation and give a new meaning to the conception of the global citizen. Its foundation would be the human right to enjoy individual intellectual development that stimulates curiosity and critical-contextual thinking and that would strengthen and motivate every citizen to follow transversal trajectories between self-maintaining cultural, social and political territories, and to enter or create joint interactive and solitary reflection spaces. In face of the global challenges envisaged, this potentiality would need to be supported bottom-up by multilevel (sub-national and regional) social policies to rethink and reform education and research. But this approach would require a specific relativism with regard to cultural, social and national identity and integrity. Looking back on decades of global negotiations among cultures, nations and sectors, and on the way they remain hiding behind their protective curtains of conceptual fog, this might be the most difficult challenge to tackle.

References

Aldy, Joseph E., and Stavins Robert N., eds. 2009. *Post-Kyoto International Climate Policy: Summary for Policymakers*. New York: Cambridge University Press.

Banun, Tariq, Director Division of Sustainable Development, United Nations Department of Economic and Social Affairs, *Green Economy and Sustainable Development*, UNCSD2012 Official website,

http://www.uncsd2012.org/index.php?option=com_content&view=article&id=122:green-economy-and-sustainable-development-presentation&catid=40:green-economy&Itemid=87

Beerten, Jef, Erik Laes, Gaston Meskens and William D'haeseleer. 2009. *Greenhouse gas emissions in the nuclear life cycle: A balanced appraisal*. Energy policy, 37(12): 5056-5068.

Gibson, Robert. 2005. *Sustainability Assessment Criteria, Processes and Applications*. London: Earthscan Publishing.

Meskens, Gaston. 2008. *Bali COP13 and beyond – the debate on nuclear at the UN climate change meetings is dead, but does anybody care?*. ENS News Issue No. 19 (January 2008) http://www.euronuclear.org/e-news/e-news-19/cop13.htm.

OECD. 2001. *Sustainable Development – Critical Issues.*

Pallemaerts, M. 2003. *International Law and Sustainable Development in and after Johannesburg*, in *Making Globalisation Sustainable? The Johannesburg Summit on Sustainable Development and Beyond*, VUB. Brussels: University Press.

Stern, Nicholas. 2006. *Stern Review Report on the Economics of Climate Change*. The Grantham Research Institute on Climate Change and the Environment, The London School of Economics and Political Science. http://www2.lse.ac.uk/GranthamInstitute/Home.aspx.