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Globalisation and the Environment —
On Triangle Concepts and Three Pillars' Strategies*

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I. INTRODUCTION

The transition to a globalised world is progressing rapidly, but the transition to a sustainable one is not. Globalisation and the environment are still “worlds apart”, as a title of a recent book says (Speth 2003). Therefore, I am grateful for the efforts undertaken to find answers to the question of how to reach globalisation of environmental management.

I would like to start my presentation with four introductory remarks:

1. First of all, congratulations! The Institute of Environmental Sciences (CML) stands for 25 years of imaginative and successful environmental research. That is quite a long period of time; that means quite some experience. I have seen many institutes and researchers coming during those years; quite a few of them then disappeared…Thanks, therefore, for inviting me to this special event; and let’s start for another 25 years today!

2. International advertisements of the University of Leiden used to begin with a wonderful motive: “The Universiteit Leiden never hesitates to push aside what is outdated or obsolete, yet values tradition and the attainments from the past. It often has to lead the way, and always takes a critical stance on fashion and trends”. I very much like that motive, and intend to make it my own.

3. The first speaker at a symposium or conference should never try to give all - or even the “final”- answers to the questions asked by the organisers. Better leave that to the other speakers or the rapporteur. For today’s event, and in view of the excellent speakers you invited, this old wisdom should hold all the more. Instead of giving final answers, I shall start with some observations and add a few more questions, before coming to some possible priorities on how to proceed with global environmental management.

4. The Institute of Environmental Sciences (CML) obviously is fond of “triangles” or “three pillars’ models”. The CML is doing work (1) on Environment and Development, (2) on Environmental Biology, and (3) on Industrial Ecology - one such triangle. Today’s symposium is also structured like a triangle or three pillars’ model. The main question of the organisers was: Should environmental problems and globalisation of environmental management be approached in
II. GLOBAL ENVIRONMENTAL GOVERNANCE

Using such a triangle, at first glance, the picture may look quite harmonious:

Figure 1:  Global Governance

Global Governance may have three major groups of actors (or stakeholders): governments, corporations, and civil society, and may consist of the active and fair interplay between them.
Globalisation of environmental management then may partly be supra-national, multi-lateral, and private in character. All these actors or elements, no doubt, are relevant; basically they all could have equal say or equal strength.

Even when using a three pillars’ model, things at first glance look similarly harmonious. All the three pillars may be necessary to build the house (the temple) and to support its roof. So, we could have an “upright temple”.

**Figure 2:** Globalisation of Environmental Management
But, at second glance, how would the building look like if the three pillars were of different size or strength?

First, there could be the “inclined temple”.

Figure 3: The Upright Temple

Figure 4: The Inclined Temple
Second, there could be the “broken temple”.

![The Broken Temple](image)

**Figure 5:** The Broken Temple

Analogies and metaphors do have their merits but, no doubt, they also have their limits. And general hypotheses or concepts, in all practical cases, may need to be specified. That could be the very first conclusion, or answer to the question asked by the organisers.

In addition, conclusions or answers always depend on the way we define a problem. For instance: How to define a public or collective good?

First, there are different forms of public goods. Common to all, however, is that the market does not provide them in sufficient quantity or quality.

This fact is undisputed, both in economic and in political theory. What is disputed, however, is what consequences should be drawn from this theoretical insight in actual practice…
James Buchanan once differentiated between constitutional and post-constitutional contracts:

**Constitutional contracts** are on securing individual rights in a democratic setting.

**Post-constitutional contracts** are on cooperation: The political system has to assure that public goods are provided which will not or not sufficiently be provided by the market. Hereby, the state should not be seen as a producing unit, a product provider, only; in many cases it’s only the framework conditions for private activities that have to be provided. Many public goods need private corporations or civil society as cooperation partners; they may even depend on very active cooperation. And they depend on a broad normative consensus to determine their value or the criteria of their promotion. In this sense, public goods are symbols of a democratic process, on the national or the global level, in which freedom, solidarity, and inter-generational equity do have a high position.

![Figure 6: Environmental Problems](image)
Quite generally, environmental problems (as public bads) can be (or are) differentiated according to their character and scope. They may be local, regional, or global. In the literature, the “commons”, both local and global, found special interest, and were further differentiated in various ways.

For truly local (and even for regional) environmental problems we may not, at first sight, need any supra-national (or multi-lateral) institutions (i.e. organisation, authority, or agreement). But, if local problems are abounding and become ubiquitous, the sheer scale and volume they have and the danger they entail may make multi-lateral or supra-national approaches necessary, particularly in cases of lacking competence and capacity at the local level.

Drinking water may be a case in point. So far, there is no truly global arrangement in place as regards to water quantity and quality. But as more than 1.2 billion people are unable to reach or to afford safe drinking water, and about 2.4 billion people have no access to basic sanitation, articles 24 to 28 of the “Johannesburg Plan of Implementation” have made water a quasi global good, to be supplied efficiently and distributed fairly, with the help of the North, with the support by private corporations.

The answer to the main question of the symposium also, no doubt, depends on our perception of the role and performance of our institutions. Again a triangle (or three pillars’) type of global governance may be seen to be relevant because of the fear or the fact that major traditional institutions fail.
One view is that inherent market failures as regards to environmental effects of production and consumption ask for new forms of governance. Another, competing view is that governments also often fail and that non-governmental actors must assume responsibility. Only governance as regulated self-regulation may be adequate to attain sustainable development on a global scale.

The mainstream of thought on sustainable development since the Brundtland Report of 1987 and the Rio Conference of 1992, uses another conceptual triangle or three-dimensional concept, the “triple bottom line”.

Figure 7: Governance of Sustainable Development
This general concept, however, is heavily debated the very moment you focus on any one practical problem. Though it may indeed be necessary and advisable to always consider the economic, the social and the environmental effects of any practical decision-making, the actual decision made will always reflect different priorities in space and time, depending on the differing interests of the various actors involved.

However, this inherent drama of environmental management (particularly the “tragedy of the commons”) since long is on the international agenda, in terms of theoretical discussions, of practical scenarios, and of political suggestions. In the following, I would like to pick up one example of each – and in this way give further “food for thought”.

Figure 8: Triple Bottom Line
III. DISCUSSIONS, SCENARIOS, SUGGESTIONS

(1) Assuming further growth of world population and world product, efficiency gains as regards technologies and use of products may not suffice to conserve the environment; the scale effect of population and affluence may (will) outweigh the positive environmental management effects, both at the national and the global level. In addition to any efficiency strategy, therefore, the potential of sufficiency and consistency strategies should be addressed – another triangle or three pillars’ approach of environmental management.

![Environmental Strategies diagram](image)

**Figure 9:** Environmental Strategies

Contrary to what most experts believe, there is a certain potential for sufficiency strategies. Traditional religious and cultural values could be linked up with or re-activated in view of the accumulating global environmental problems. “Enough is enough”, this is a principle quite some parts of society have sympathy with, even in (especially in) economically affluent countries.
Consistency is about better adjustment of our economic and social systems to the basic principles of ecological systems. “Industrial Ecology” meanwhile is an established academic undertaking (and the CML is among the leaders in the field).

(2) In the year 2002, the German Advisory Council on Global Change (WBGU) in a policy paper (“The Johannesburg Opportunity”) reflected on the reform of the international environmental policy system, and gave priority to a supra-national approach. Three major suggestions, or key elements of a negotiation strategy were submitted:

*Figure 10: Key Elements of a Negotiation Strategy*

- Establish a Global Environmental Organisation
- Ensure and improve environmental funding
- Improve the knowledge base

a) Transformation of the United Nations Environment Program (UNEP) into a truly Global Environmental Organisation (GEO), with proportional North-South decision-making, and on equal footing with the World Trade Organisation (WTO).
b) Innovative financing (and control) mechanisms, in the form of charges on the use of global commons, especially the oceans, airspace, and the atmosphere.

c) Establishment of international panels of experts on soil degradation and biodiversity, in analogy to the rather successful Intergovernmental Panel on Climate Change (IPCC); and creation of transnational structures for *sustainability science*, in line with the Amsterdam recommendations of 2001 (Global Change Open Science Conference; see IGBP et al., 2001).

(3) The World Business Council for Sustainable Development (WBCSD), a leading international group of major corporations, has sketched three different paths in environmental governance, especially a combination of multi-lateral and private approaches: FROG, JAZZ, and GEOPolity.

![Figure 11: Paths in Environmental Governance](image)

FROG (or First Raise Our Growth) is a business-as-usual scenario, a path to failure, even in the eyes of the WBCSD.
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Under *GEO*Polity, intergovernmental institutions and treaties are in the focus of global environmental management. While today’s *GEO*Polity is destined to fail, many innovative ways exist to improve the decision-making process:

a) As happened with the “Montreal Protocol”, the Conference of the Parties (COP) to a convention could be empowered to make regulatory decisions that would not need to be ratified as separate treaties.

b) New procedures could be installed, whereby a super-majority, a double majority, or a mere majority of the members could make decisions binding for all.

c) International expert bodies could be entrusted with rule-making and standard-setting powers.

The other path to better environmental management is to take JAZZ to scale. JAZZ, probably, is the most exciting arena for action today - and obviously very much in the minds of the organisers of this symposium.

Under the JAZZ scenario, the world is full of unscripted initiatives that are decentralised and improvisational, like the “type-2 initiatives”, public-private partnerships, pioneered and promoted at the Johannesburg summit. It’s about an outpouring of bottom-up, of voluntary actions from businesses, governments, and non-governmental organisations. Governments facilitate more than they regulate; NGOs are very active; and businesses see strategic advantages of doing the right thing.

There is certainly much that can be done to encourage and support the JAZZ scenario – and in this way prove the sceptics wrong that globalisation and the environment are “worlds apart”.

(4) Three decades of empirical research have revealed many complicated histories of environmental management. Sometimes these histories tell us about Hardin’s tragedy of the commons. Sometimes, however the outcome is more like McCay’s comedy. Often,
the results are somewhere in between, filled with some ambiguity. But drama is always there.

That is why the Committee on the Human Dimensions of Global Change (CHDGC) of the US National Research Council called its collaborative report “The Drama of the Commons” – because environmental management entails history, comedy, and tragedy…

The Committee’s report on what has been learned over decades of research into how the drama of the commons plays out also entails a triangle or three pillars’ model:

![Diagram of the Commons Model](image)

**Figure 12: Understanding the Commons**

The major contribution of scholarship has been to make much clearer which concepts must be brought to bear and which distinctions made in understanding a given environmental
management problem. In the view of the Committee, these include a clear distinction between

a) the resources (or the sinks) themselves,
b) the arrangements used to govern access to the resource (or the sink),
c) and the key properties of the resource (or the sink).

The Committee refers both to the “lessons learned”, and the “unanswered questions and areas for future research”. For today’s purpose, I would like to quote only some of those lessons but all the three unanswered questions.

Some lessons learned:

1. There is need to define the performance of an institutional arrangement in terms of both environmental and human (economic, social, political) dimensions.
2. The importance of the initial situation – as it affects the emergence, performance and costs and benefits of institutional arrangements.
3. The importance of the distinction between the characteristics of the resource or sink (common-pool resource or sink) and the regime that manages the resource or the sink (common-property regime or some other kind of regime).
4. The need to understand how changes in rules and procedures affect the distribution of income and wealth or other important aspects of the creation of strong and durable institutional arrangements.
5. The need to compare the costs and benefits of various institutional arrangements for a given resource or sink, etc…

But, even if all these (and other) lessons were respected, some questions still remain open, and future research may be needed.
Three open questions:

1. How do multiple levels of environmental management interact and affect overall performance?
2. What is the effect of group size (of the number of actors) on the performance of institutional arrangements?
3. What are the roles of different mechanisms for dispute settlement?

IV. CONCLUSIONS

I started with some additional questions to the topic of the symposium, and again ended with some. But I’m sure that the “lessons learned” will be picked up by the invited experts in the fields of climate change, a common-pool sink, and ocean fish stock depletion, a common-pool resource. And may be, the “open questions” at the end of the day will have been answered, at least partially.

Still, devising better ways of governing resource and sink systems will continue to be a major issue for research in the future. Practitioners will continue to seek solutions and to debate the appropriate roles for governments, corporations, and civil society. Considerable uncertainty still exists about how different property regimes and associated institutional forms affect sustainability of the resources and the sinks. Also, institutional performance may not only be assessed using traditional evaluative criteria like efficiency and equity. Criteria such as consistency, accountability, credibility, and adaptability may come into view. No institutional arrangement is likely to perform well on all such evaluative criteria at all times.

Thus, in practice, tradeoffs among performance criteria are involved that may ask for additional research – one of the necessary conditions for a sustainable development of the Institute of Environmental Sciences (CML), and other institutes…
Selected Literature


World Summit on Sustainable Development (2002): Political Declaration and Johannesburg Plan of Implementation; published as WZB Paper No. FS II 02-405, Berlin: WZB.