

**Climate Change
and
International Political Co-ordination**

-Can Information have a Global Effect?

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Introduction

What are the possibilities of establishing co-ordinated international measures to limit global climatic changes? Existing political efforts to address international environmental problems have been confronted with considerable obstacles. International conferences on the issue have been criticised for leading to few practical changes and the lack of coercive power cripples much of the institutional set-up.¹

The successful co-ordination of international measures might ultimately depend on the issue being perceived in a similar way in different parts of the world. It has been argued that an increased international agreement on causes, consequences and possible and desirable measures would facilitate collective action.² An increased international consensus might thus facilitate international collaboration and contribute to the solution of some of today's most serious problems.

This paper explores the cognitive prerequisites for international co-operation. Two questions are asked: a) Can a certain set of beliefs about a common problem gain global influence? and b) If a certain set of beliefs gain global influence, will it really lead to collective action?

There are several major obstacles that might obstruct the creation of a globally agreed upon perception of causes, consequences and possible and desirable measures. A range of contextual factors generally influences people's perceptions about political issues. The results of earlier studies on information effects, although mainly conducted within a single political, cultural and economic setting, suggest that the possibility of achieving global information effects is limited. Contextual factors influence the perception of new information.

International problems generally have radically different implications for people living in different parts of the world.³ Furthermore, the spread of similar beliefs about a problem must involve a source of information that is seen as credible in different parts of the world. This source must be able to provide information that can be assimilated by individuals living in radically different contexts.

¹ Gupta 1997, Paterson 1996.

² See for example Jasanoff & Wynne 1998, Haas 1990 and Ostrom et al. 1999.

³ Mwandosya 2000, Okoth-Ogendo & Ojwang 1995.

But assuming that it is possible for a certain set of beliefs to gain global influence, would this lead to collective action? The answer to this question depends on which set of beliefs gain global influence. Give a moment of thought to the slogan “Think globally, act locally”. This slogan presupposes that global thoughts lead to local action. But do beliefs about global interdependence or concern about the global environment really lead to environmental action? Local environmental destruction can be sufficient to motivate environmental action. It can be directly beneficial, not least economically, to combat local environmental degradation⁴, and further motives might not be needed. Local environmental action influences the global environment, but knowledge about the global environment might not be needed to motivate local action. It is possible, for instance, that more thoughts about global interdependence could be counterproductive. It could make people feel too small to act. The perceived inefficiency of individual action might increase when thinking about the number of actors necessary to limit adverse changes.

All types of information or sets of beliefs disseminated globally might not lead to collective action. However, some sets of beliefs might do so. Information disseminated globally might, for example, enhance collective action if it makes intended action more efficient. Many people are already worried about global environmental change. Some of the mental models used to understand these changes might lead to inefficient action. It is, for example, not uncommon that the depletion of the ozone layer is confused with the increased greenhouse effect and climate change.⁵ A person might be worried about climate change and want to prevent it. If he believes that the depletion of the ozone layer is the major cause of climate change, he could address this by not buying pressurised cans containing CFCs.⁶ Some misconceptions might thus lead to inefficient action and hinder people from acting according to their preferences.

Furthermore, even if an increased concern about global interdependence does not necessarily provide incentives for local action, it might provide incentives for engaging in international political issues. The management of global environmental problems does not only involve local action. It also requires a broader co-ordination of measures. People not only have

⁴ Martínez-Alier 1995.

⁵ Löfstedt 1992, Löfstedt 1993, Kempton et al 1995, Kempton 1997. These results are also supported in a study conducted by the author in Sweden and in Tanzania.

⁶ Kempton et al. 1995, Kempton 1997.

influence over local action, but also over regional, national and international political action. A broader engagement in international agreements would not only increase the legitimacy of these agreements, but also enhance the prospects of implementing them.

Two tasks are performed in this paper. First, I suggest a possible set of beliefs that might have an impact on global public opinion. A model for international public opinion change is constructed. Secondly, I provide a brief illustration of how this model is used to conduct a study on what set of beliefs lead to collective action and thus contribute to the solution of common problems.

Part one: What factors influence global public opinion?

Elite Centred Theories and Cross National Communication

Public opinion influences the prospects of successful international collaboration. Public opinion influences national and international political decisions and the prospects of co-ordinated action. However, studies of international co-operation have traditionally not directed much interest towards public opinion. In traditional studies of international politics, the state is the main actor in the international system and is assumed to act in a unitary and rational way to maximise its gains in an anarchical world order. These studies often use a game theoretic approach to define the logic of the action or inaction of states in the international system.⁷ This view of the state and its relation to the international system necessarily limits attention to other factors, such as individual or public values, beliefs and opinions.

Domestic factors often remain neglected in studies of international co-operation, although interest in these factors is on the increase. Several domestic factors might influence whether or not citizens act in accordance with international agreements. These factors include the preference of interest groups, the dynamic of the party system, the personality of national or local decision makers, local decision making structures and the interest of capital.⁸

Shift in global public opinion is the result of certain sets of beliefs gaining influence in society. Co-ordinated action is often the result of some sort of cross-national communication.

⁷ Milner 1992:467.

⁸ Gorevitch 1987; Milner 1988, Ikenberry 1990, Odell 1982, Milner 1992:495.

Some factors facilitate the ability of beliefs to gain world-wide influence. If, for example, the information is widely believed and relevant, it stands a better chance of gaining influence. Hence, if the sources of information enjoys authority, and if it contains information that makes sense to people affected by the problem, it is more likely to influence opinions and beliefs, and lead to collective action.

Several different sets of beliefs might influence citizen action. In environmental politics, scientists and experts are often considered to be authorities when it comes to determining causes, consequences and possible measures. This has been recognised by Peter M Haas, among others, and has contributed to the construction of the theory of epistemic communities. According to Haas' definition, an epistemic community is a "professional group that believes in the same cause and effect relationships, truth tests to accept them, and shares common values; its members share a common understanding of the problem and its solution". An epistemic community thus furnishes governments and negotiators with "expert" information. Policy makers tend to seek advice from the epistemic community in international political issues where both uncertainty and interdependence prevail, which is the case in most environmental issues today.⁹ Since the community members are part of an extensive international network of like-minded experts, they co-ordinate states' expectations and facilitate international agreement.

As in many other studies emphasising the importance of cross-national communication, Haas emphasises the importance of cross-national communication *between elites*. What is less documented, however, is the way in which these elite contacts can lead to local action. In "Saving the Mediterranean. The Politics of International Environmental Co-operation" (1990), Haas suggests that an epistemic community gains influence because their members gain access to influential positions in their home countries. Haas hypothesises that "The strength of co-operative agreements will be determined by the domestic power amassed by members of the epistemic community within their respective governments".¹⁰ His study shows that "the strongest supporters of the Med Plan were the countries in which the epistemic community was most active".¹¹

⁹ Haas 1990:55.

¹⁰ Haas 1990:57.

¹¹ Ibid 218-219.

While the correlation between older environmental bureaucracies and support for the Med Plan is suggestive, Haas has no theory about domestic politics explaining why and when an epistemic community can have an impact on the domestic system: “He simply assumes that without scientist involvement, national policy would have been different”.¹²

How and through which mechanisms can the ideas proclaimed by institutions of this type gain world-wide acceptance?¹³ An increased knowledge of the ways in which environmental science can gain world-wide acceptance could greatly enrich traditional approaches to understanding international co-operation.¹⁴

The study presented in this paper suggests a shift in focus from the members of these communities to the *information* these communities provide and the impact this information has on global public opinion. This approach has three important advantages. First, it provides an opportunity to investigate whether or not this set of beliefs, mainstream scientific and expert information, can influence global public opinion and co-ordinate action. It would thus investigate whether or not this information is perceived as relevant to people in different contexts. Second, it specifies how epistemic communities can gain world-wide influence. A wide acceptance of the ideas provided by the community can facilitate community members’ access to influential positions, and also have a direct influence over ordinary citizen action.¹⁵ Third, if epistemic communities are an important international power, influencing political decisions and international agreements, a study of the general acceptance of these ideas provides an opportunity to assess both the legitimacy and the prospects of implementing these decisions and agreements. If the general public does not accept the beliefs that influenced elites and hence the content of international agreements and political decisions, legitimacy might be threatened. If decisions and agreements are illegitimate, the prospects of implementing them are substantially diminished.

¹² Milner 1992:489.

¹³ Milner 1992:479, Jasanoff and Wynne 1998.

¹⁴ Jasanoff and Wynne 1998 :47.

¹⁵ The political power of international organisations of this sort can be problematic from certain points of views. The values and world views guiding these experts become very important.

Going public: Epistemic Communities and International Public Opinion Formation

There are several reasons to believe that the information provided by these communities has good prospects for influencing public opinion. Perhaps the most important reason to believe that epistemic community information can have an important impact today is the fact that many political issues are increasingly complex and technical. Many political issues, not least within the environmental field, are more technical and more complex today compared with just a few decades ago. The issue of global climactic changes provides an illustration of the complexities that can be involved in some political issues today. Public opinion research and theory suggests that the influence of scientific or expert information increase when issues are complex. The more limited the possibilities for the ordinary citizens to understand an issue, the more we tend to rely on experts.¹⁶ An expert organisation providing expert information thus seems to have good prospects for influencing public opinion. Epistemic communities also possess another advantage that might increase their influence. It is an international organisation. The participation of researchers from different parts of the world might somewhat reduce cultural and political biases in the information it provides, and hence increase world-wide credibility.

Furthermore, scientific results and expert information have gained increased access to the media, where otherwise inaccessible or impenetrable scientific knowledge are conveyed to sectors of the public. The scientist has greater autonomy today compared with the past, since there is an increased “knowledge gap” between researchers and the generally educated public. This knowledge gap, together with an increased institutionalisation of the scientist’s professional role, a general agreement within society about who can be deemed an expert and agreement that these experts provide accurate knowledge, contributes to the increased exposure these experts are given in the media.¹⁷ An important part of the flow of information in society is either communicated directly or shaped by experts.

However, cultural and contextual differences influence people’s perception of information and make the effect of new information hard to predict. The overwhelming majority of the studies in which general theoretical conclusions are drawn are conducted within a single cultural,

¹⁶ For examples of how this expert information can be processed see Petty & Cacioppo 1979 and Petty, Cacioppo & Goldman 1981. For an overview of studies examining the impact of expert information see Baren et al 1989.

¹⁷ Buchi 1998;1.

economic and political setting, mainly the United States¹⁸ Furthermore, scientific information about global climatic changes would necessarily entail describing the causes and effects as both long term and uncertain.¹⁹ Scientific information could thus be abstract and hard to assimilate. However, many of the changes predicted can be imagined using cues that relate to personal experiences (weather change, storms, flooding). If people use this cues, scientific information seem less abstract.²⁰

The effect of expert information is thus complex and difficult to predict. However, scientists and experts seem to have substantial possibilities to influence the public. Expert information is not only often believed, it is also given exposure in the public debate.

A model for the analysis of international public opinion change

What influence can epistemic community information have on global public opinion? Epistemic community influence on national decisions and national decision-makers can be summarised in two broad categories of effects. First of all, epistemic communities can elucidate cause and effect relationships and provide advice about the likely results of various courses of action. An epistemic community can also shed light on the complex inter-linkages between issues and thus influence decision makers' beliefs about the potential negative feedback effects of action within a specific policy area on other policy areas.²¹

Second, epistemic communities' not only present facts, they may also influence political decision-makers' *willingness* to act. An epistemic community can convert facts into policy relevant conclusions and propose policies to achieve goals. It can increase support for

¹⁸ The audience's original perceptions of the issue might differ, and different cues are used to interpret new information It is perfectly possible that the original cultural model (perception of the issue) that people share within a certain cultural setting effectively engages people to act. If part of this cultural model is substituted by a scientific model (or scientists perception of the issue), people's willingness to act might decrease. For further examples of how peoples original models may influence how they process information see Kempton et al. 1995, Graber 1988 and Markus and Zanjonc 1985. Furthermore, global or international issues generally contain radically different implications for people living in different parts of the world. Taking the issue of global climatic changes as an example, both the effects of a change in climate and the possibilities of preventing or adapting to these changes vary considerably in different parts of the world. This is likely to influence people's perception of the issue, and hence the effect of information.

¹⁹ Antropogenic climatic changes are described as subtle and very slow, and changes hard to grasp at the level of the ordinary individual. Since changes are not visible and the consequences are long term, knowledge about the issue is necessarily limited. Scientists build their predictions on scenarios, making assumptions about a future reality . In these scenarios it is impossible to take all possible variables into account.

²⁰ See Kempton 1997.

measures, not least economic support. Likewise, the communities seem to be able to reinforce or create international co-operation, helping states or groups within states to define or redefine their self-interest and identify salient points of negotiation. Epistemic communities can thus make participants more constructive participants in international meetings, and increase support for international agreement.²² Furthermore, if certain data gain world-wide legitimacy, trust in other actors may increase and further enhance the willingness to act.²³

Epistemic community information might have a similar effect on public opinion.

The views that community members share with each other might be possible to disseminate to a larger public. Epistemic communities share similar beliefs about the need to preserve the physical environment and share similar views on the problem (i.e. the origins and severity of pollutants, the policies necessary to control pollution, the research needed etc.)²⁴ Hence, members of an epistemic community share similar beliefs about causes, consequences and possible actions. They also see action and change as something desirable.

The discussion so far is summarised in Figure One. Two possible types of effects are suggested: beliefs about causes, effects and possible measures, and willingness to support and implement local, national and international measures. Country or regional specific factors such as differences in the cultural, economic, political and geographical setting determine the effect of information.

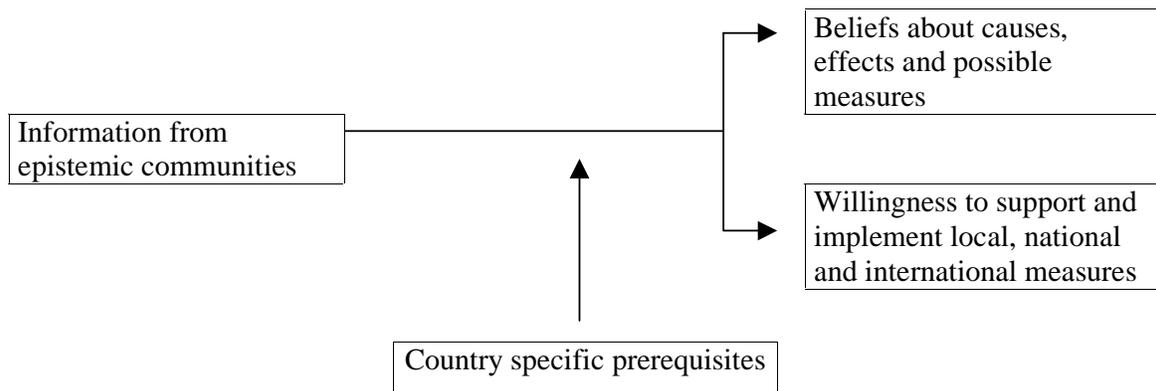
²¹ Haas 1992:15.

²² Haas 1989:388, Haas 1990:55 Haas 1992; 2,15, Haas 1989:388.

²³ See also Ostrom et al. 1999:282.

²⁴ Haas 1989:384.

Figure 1. A model for international public opinion change²⁵



Part two: Will it enhance collective action?

Conducting a Study on International Public Opinion Change

Does the influence of epistemic community information enhance collective action? In the following, the design of the study that will answer this question is briefly outlined. The study is currently being conducted, and results will be available in the near future.

The questions asked in this study are broad and general. To be able to determine whether or not information can have a global effect, studies would ideally be needed in every part of the world. This puts an additional demand on the selection of interesting cases. The study is conducted in two countries with radically different prerequisites for change: Sweden and Tanzania. The differences between these two countries make it comparatively hard to find similar information effects, which increases the validity of the findings.²⁶

In the study, an experimental design is used to compare information effects in Sweden and Tanzania. University students' beliefs about climate change and their willingness to support environmental measures and international agreement is investigated, as is the effect of

²⁵ This model summarises the discussion in this paper, and should not be viewed as a fully developed model on epistemic community influence on international public opinion change. The model is under construction.

²⁶ One of the factors that obstruct the possibilities of achieving successful international co-operation on the issue of global climatic changes is the difference between the countries involved. The contribution of industrialised countries to the increased amount of greenhouse gases in the atmosphere is generally much greater than the contribution of non-industrialised countries. Furthermore, the effects of climate change are very different in different parts of the world. Developing countries are generally more vulnerable to climate change.

exposure to international expert information on these opinions. The material used in the study is based on a selection of IPCC (Intergovernmental Panel on Climatic Changes) material.²⁷

The project presented in this paper thus 1) determines whether epistemic community information can create a global legitimacy for political measures and contribute to environmental action, and 2) determines which aspects of international expert information on global climatic changes can be perceived and assimilated among citizens in an African and European context, respectively. This study will thus not only provide a framework for assessing the international impact of science, but will also identify problems and possibilities facing future international co-operation surrounding the issue of global climatic changes.

²⁷ I am currently producing an information film and information material addressing "misconceptions" about the issue of global climatic change in Sweden and Tanzania. Please contact the author if you are interested in a more detailed description of the study and results.

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