



How do people think about economic valuation of biodiversity? First results of the Q method

BIOMOT is a European project that focuses on understanding people's diverse motivations to act for biodiversity, and the way these motivations are connected with social norms, institutions, legislation, as well as economic and political context. One of our research lines investigates the economic methods that are used to express the value of biodiversity in monetary terms. This has been a popular approach over the past two decades. Its proponents claim that it helps to give nature a voice in the world of politics and business, and may motivate people to protect nature once they see that it may have economic advantages to do so.

However, the practice of monetary valuation is controversial and has been the centre of a wide ranging debates. In scientific publications but also on blogs, in newspapers and in civil society it has been the object of a number of critical responses: that it crowds out intrinsic moral values by transforming all values to money; that it aggregates individual preferences, which leads to a neglected expression of social values; that it gives lower value to the preferences of the poor; that it assumes the commensurability of all values associated with biodiversity ; that it is mostly concerned with bio production and neglects ecosystem sustainability (Paul Knights et. al. *Economic Environmental Valuation: An Analysis of Limitations and Alternatives* European Union FP7: Brussels, 2013 http://www.biomot.eu/docs/BIOMOT_WP1_Deliverable_1.1-FINAL-16.08.13.pdf).

Discussion about this issue is to be found not only among university economists, but also among actors in governmental institutions and NGO's. It has become a societal discussion about how we should make choices about biodiversity conservation.

We aimed to systematically examine the various different discourses about monetary valuation. The results matter to policy making. Socially legitimate decisions require that the distinct voices in society should be heard in public debate and decision making.

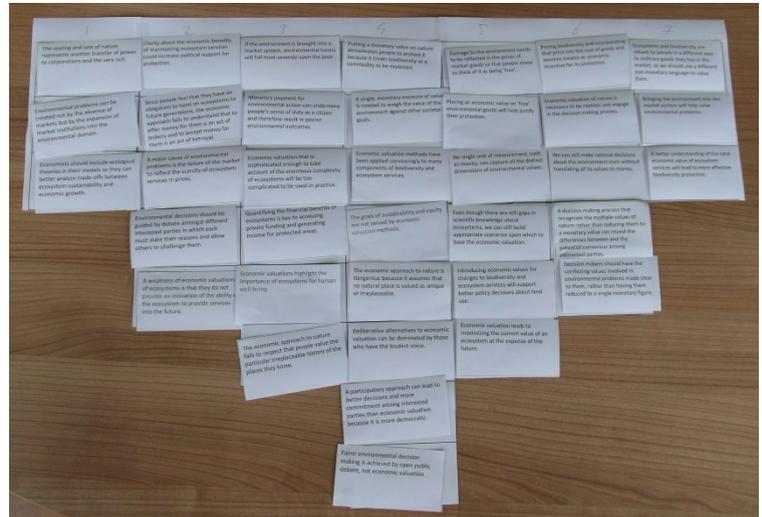
Exciting research method

To examine the different discourses, the project used a research method, Q methodology, that has been gaining popularity among scientists over recent years. Where there are topics in society that arouse serious disagreements regarding the advantages and disadvantages of different policies, Q methodology can clarify the discussions by identifying the underlying discourses expressed in these arguments.

Our hypothesis was that there are three philosophies about economic valuation: one of enthusiasm, one of criticism and one of pragmatism.

Q methodology has a few simple steps.

1. First, all statements representing different views about a topic are collected. We collected statements about economic valuation of biodiversity from scientific literature, policy declarations and other grey literature such as blogs and journalism, which also form a part of the arena in which the discussions take place.
2. Out of this list of more than one hundred statements, we distilled a shorter list of 36 statements (*the Q-set*) that represents as best as possible the total list. We devised a matrix to make this selection.
3. The Q-set was presented to people who participated in the debates about economic valuation of biodiversity. These included not only economists from universities or from governmental institutions, but also journalists, people from NGOs, and scientists from other fields of research that touch on the issue. The goal was to collect people from distinct positions, so that all opinions were taken up in the study.
4. The respondents ranked the 36 arguments on how much they agree or disagree with the arguments on a scale from -3 to +3. Within this data set, some statements cluster together in the answers of the respondents. Statistical analysis can be used to ascertain which groups of statements cluster together. These groups can be interpreted as representing distinct discourses about the topic.



The Q-set

Preliminary findings

Our first results of the factor analysis prove our hypothesis wrong. It found four distinct discourses, with two forms of criticisms being discerned in addition to enthusiasm and pragmatism.

Discourse 1: Enthusiasm for economic valuation.

The enthusiasm discourse is the clearest identifiable one in the data. In this discourse, a positive role is described to economic valuations in that they highlight the importance of ecosystems for human well-being, and help to justify their protection. It is believed that economic values will lead to better policy decisions and more effective biodiversity protection. Today's environmental problems are therefore mainly a result of inappropriate pricing of ecosystem services which should be improved.

Discourse 3: Value pluralism.

This discourse claims that values attached to the environment cannot all be captured by money, and therefore economic valuation fails to respect certain values people hold. These conflicting values should instead be recognized and communicated to decision makers, preferably through open public debate, rather than the closed and simplifying method of economic valuation. The discourse claims that it is possible and even desirable to come to rational decisions regarding the environment without translating its values to money terms.

Philosophy 3: Pragmatism.

Pragmatism states that economic valuation of biodiversity indeed has a couple of weaknesses. The method is limited in its usefulness for environmental decision making, unsophisticated regarding ecological systems, and does not provide guarantees of sustainable land use. However, introducing economic values will support better decision making and could increase political support for environmental protection.

4: Social justice concerns.

The social justice discourse is also critical but puts greater emphasis on equity aspects related to the monetary valuation of nature. This discourse agrees that a translation of all environmental values to money is not necessary to reach rational decisions about the environment and that a non-monetary language is needed to express these values. It also holds that economic valuation falls short on how ecosystems work. However, it puts more emphasis on the claim that a market system will shift the impacts of environmental damage to the poor, and will make the rich more powerful. It claims that in deliberative settings there is still a worry that the discussion will be dominated by the most powerful voices.

Discussion

The identification of these different discourses has implications for environmental policy. There is a danger in policy making that only a narrow range of the public discourses are represented. The consequence will be that the resulting decisions lack social legitimacy. By systematically identifying the different discourses the method can improve decision making and ensure that it is procedurally just and legitimate, by ensuring that all the potential values of biodiversity are given a voice. In particular it can inform the improvement of representation for deliberative methods in economic and environmental decision-making. Giving voice and appropriate expression to different modes of valuing of biodiversity is a necessary condition for a defensible procedures for arriving at environmental policy.

(This Findings for All was written by Jeroen Admiraal, Leiden University, about data that was gathered by the whole BIOMOT team.)

