Method 4
Discourse analysis

Summary of method

Discourse analysis is a structured method for investigating conflicts and alliances among different knowledge holders or stocks of knowledge when discourses are emerging. The aim is to identify the key issues and actors, distinguish between certain and uncertain knowledge, and determine which knowledge claims are points of conflict between different groups in society and the sciences.

The focus is on arguments, procedures or putative facts that are seen as correct or true by the actors under analysis, rather than on whether they are true. Discourse analysis can therefore reveal why a particular understanding of a given environmental problem at some point gains dominance and is seen as authoritative, while other understandings are discredited.

Key references

There are no international methodological guidelines or standards for conducting discourse analysis. There are different traditions, based on different underlying theories, or understandings of the meaning of discourse (Antaki *et al.* 2003; Hewitt 2009). The following references provide information about possible methods. Hewitt (2009) describes a ten-step approach to structured discourse analysis.

Antaki C at al (2003) Discourse Analysis Means Doing Analysis: A Critique of Six Analytic Shortcomings. *Discourse Analysis Online*. URL: https://extra.shu.ac.uk/daol/articles/open/2002/002/antaki2002002-paper.html

Hewitt S (2009) Discourse Analysis and Public Policy Research. Centre for Rural Economy Discussion Paper Series No. 24. URL: http://ippra.com/attachments/article/207/dp24Hewitt.pdf

Phillips N and Hardy C (2002) *Discourse analysis: Investigating processes of social construction* (Vol. 50). Sage Publications. NOT OPEN ACCESS.

Examples of application

While there are many examples of research to evaluate or understand the development of environmental policies (see, e.g. Griggs and Howarth 2017), we have not found an example

of discourse analysis being used as a knowledge synthesis method in a science-policy interface.

Griggs S and Howarth D (2017) Discourse, policy and the environment: hegemony, statements and the analysis of UK airport expansion. *Journal of Environmental Policy & Planning*, 1-15.

Discourse analysis	
Cost	Several person-months for acquiring and analysis of interactions and texts (interviews, protocols, newspaper articles, policy documents, ...)
Time required	2-10 months
Repeatability	Rather high, but interpretation is involved; framing matters a lot
Transparency	Can be quite high
Risk of bias	Moderate. Depends on what material you include/leave out, interpretative bias can be limited by inter-coder agreement
Scale (or level of detail)	All scales, generic arguments rather than detailed opinions
Capacity for participation	Low. Scope of informants can be broad, participation in actual analysis of data is limited (usually carried out by a discourse analyst, no participation of outside actors usually involved)
Data demand	Adequate documents and possibly interviews required
Types of knowledge	All
Types of output	Narrative description of the understanding and perceptions of issues/problems, and the ways in which different societal groups understand them
Specific expertise required	Discourse analysis methods and approach; background in interpretative policy analysis

Strengths	Weaknesses
Can address highly controversial issues Covers all types of knowledge Identifies specific points of contention and uncertainty Can be used to set research priorities, or communication priorities	Only synthesizes perceived knowledge, rather than actual scientific evidence