



The Tasmanian Midlands. We used the Institutional Grammar Tool to analyse the policy for managing the impact of a large-scale irrigation scheme in the region. Image: Sarah Clement

The language of policy: a tool for evaluating and designing institutions

- The Institutional Grammar Tool offers policymakers objective guidance for designing new policies and evaluating the intent and purpose of existing policies.
- It offers particular guidance on analysing the principles and processes contained in policies, and on revealing how people might interpret them.
- For a given policy, the tool generates information that can help policymakers better understand the factors affecting implementation such as the delegation of power and authority; the clarity of roles and responsibilities; and whether compliance is based on rules, strategies or norms.

Research summary

Policies have an important role to play in slowing biodiversity loss and improving the health of ecosystems. Australia's high rate of biodiversity loss suggests that policy reform could lead to better biodiversity outcomes.

Evaluating policy is, however, a complex task. Policies comprise many individual statements that are interpreted collectively by the individuals and organisations involved in biodiversity conservation at different levels of governance.

The Institutional Grammar Tool offers policymakers a structured way of analysing policies by first breaking them down into institutional statements. Information obtained by applying the tool can then be aggregated and analysed to identify problematic policy areas and improve their design.

Better policies, better biodiversity outcomes

Policies have an important role to play in slowing biodiversity loss and improving the health of ecosystems. Australia's rate of biodiversity loss is one of the highest in the world, so evaluating our current policies and identifying ways to improve them is a pathway to better biodiversity outcomes.

Evaluating policy is, however, a complex task. Policies consist of many individual statements that influence the behaviour of decision-makers, the people targeted by the policy, and other organisations involved in conserving biodiversity. While the intention of a policy may be clear to the authors, it is often interpreted quite differently in practice.

The Institutional Grammar Tool offers a way to uncover this 'black box' of policy choices and influences.

The Institutional Grammar Tool

The Institutional Grammar Tool is an objective way of analysing the language of policy and revealing how people might interpret it.

Institutional statements

The tool first breaks down policy into its constituent pieces — institutional statements. Institutional statements are the basis of policy; they describe the actions that are prescribed, permitted and/or obliged. For a given policy document, the tool identifies and categorises institutional statements, describing in detail what actions are prescribed, permitted and/or obliged; who can participate; and under what conditions.

Rule, norm or shared strategy?

After breaking down a policy into institutional statements, the tool inspects each statement and, using a syntax known as the ADICOB (see table on next page), determines whether the statement is a rule, a norm or a shared strategy.

- **Rules** are prescriptive statements (ADICO or ADICOB syntax).
- **Norms** are statements that rely on shared group perceptions of what is proper and improper behaviour in a particular situation (ADIC or ADICB syntax).
- **Shared strategies** try to create mutual understandings as a way to guide people's behaviour (AIC or AICB syntax).

<i>The minister</i>	<i>may</i>	<i>approve</i>	<i>the taking of an action or a class of actions</i>
attribute	deontic	aim	object
<i>subject to Subdivision C</i>	<i>in accordance with an endorsed policy, plan or program</i>		
Condition 1	Condition 2		

Example institutional statement. This statement from the *Environmental Protection and Biodiversity Conservation Act 1999* (Cwlth) has been coded using the Institutional Grammar Tool. In the statement, there is no 'Or else' component to indicate punitive action would be taken if a rule is not adhered to. So the statement is a norm, meaning it relies on shared perceptions of what is proper and improper behaviour.

Syntax component	Description
Attribute	the individual or organisation obliged, forbidden, or permitted to act
Deontic	what is permitted, obliged, or forbidden (for example: will, shall, shall not)
aim	the goal or action of the statement
Condition	when or where the aim applies
Or else	punitive action if rule is not adhered to (for example, a fine)
oBject	the object (person/thing) on which the action is performed (for example, a plan)

ADICOB syntax. The Institutional Grammar Tool uses the ADICOB syntax to determine whether a statement is a rule, a norm or a shared strategy.

What to do with the data – a Tasmanian case study

The Program Report for the Tasmanian Midlands Water Scheme ('the program report'), which was approved under Part 10 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth), sets out the policy for managing the impact of a large-scale irrigation scheme in the Tasmanian Midlands. We analysed the program report using the Institutional Grammar Tool.

The data from the tool can be organised in different ways, depending on the purpose of the analysis. This example offers insights into a) how the tool can be used and b) how follow-up interviews with decision-makers, landholders and other stakeholders can supplement the analysis.

Norms and rules

The program report is comprised of 90% norms, and contains only one rule. It also tends to use 'will' (deontic) rather than 'must'. Both 'must' and rules have the strongest effect on compliance.

This emphasis on norms means that the program report relies on landholders to do what they think is appropriate. Although there are prescriptions and sanctions (ie rules) in legislation, the link between these rules and the norms in the program report is not strong.

Roles and responsibilities

For policy to be implemented effectively, with clear lines of accountability, roles and responsibilities must be clear, especially when multiple individuals and organisations are involved. In the program report, the delegation of roles and responsibilities is often unclear. These issues became apparent because it was difficult to identify the 'attribute' with the tool. The issues were confirmed in in-depth interviews.

Authority and process

Both the program report and Part 10 of the EPBC Act outline procedures to be followed rather than outcomes to be met. Analysing the 'aim', 'object', and 'condition' components of the institutional statements highlighted this emphasis on procedures. For example, the action required (the 'aim' component) tended to be 'soft' (for example, provide, consider, facilitate).

In-depth interviews revealed a common view that authority was not strong enough to prevent irrigation from negatively impacting biodiversity, especially the cumulative effect of intensification of agriculture across the landscape.

How policymakers can use the tool

Depending on the objective of evaluating the policy, policymakers can use the Institutional Grammar Tool to:

- review current legislation and policies or those being developed
- make sure that roles, responsibilities and accountabilities are clear
- analyse the links between a set of policies and make sure that these links are clear
- understand the messages of the policy (for example: Is this a general statement of policy, where norms and strategies are appropriate? Does this situation require prescriptions, rewards and/or sanctions, and are they clear?)
- assess the likelihood of compliance with the policy, either in reference to the targets of the policy or the decision-makers who will use it
- analyse qualitative or quantitative data (for example, surveys or in-depth interviews) to reveal insights or fine-tune research questions
- analyse spoken language (for example, interview transcripts) to understand how policies are implemented in practice.

Where to from here?

We have used results from our application of the Institutional Grammar Tool to inform development of alternative governance arrangements designed to address the challenges of conserving biodiversity in the Tasmanian Midlands.

Who are the researchers?

Sarah Clement



Sarah is a human ecologist and a PhD scholar in the hub's Social and Institutional Futures Project. She specialises in understanding the social and institutional dimensions of environmental problems.

Sarah Clement
E: S.Clement@murdoch.edu.au

Professor Susan Moore



Susan is a researcher in the environmental and conservation sciences at Murdoch University, Western Australia, and a co-leader of the hub's Social and Institutional Futures Project.

Prof Susan Moore
P: 08 9360 6484
E: S.Moore@murdoch.edu.au

Associate Professor Michael Lockwood



Michael is an environmental social scientist at the University of Tasmania and a co-leader of the hub's Social and Institutional Futures Project.

Dr Michael Lockwood
P: 03 6226 2834
E: Michael.Lockwood@utas.edu.au

Dr Michael Mitchell



Michael is a social researcher and research fellow in the hub's Social and Institutional Futures Project. He specialises in the social dimensions of natural resource management.

Dr Michael Mitchell
P: 02 6051 9819
E: Michael.Mitchell@utas.edu.au

Further reading

Clement S, Moore SA & Lockwood M (2015) Authority, responsibility and process in Australian biodiversity policy. *Environmental and Planning Law Journal*, 32(2), 93-114.

About the NERP Landscapes and Policy Hub

The Landscapes and Policy Hub is one of five research hubs funded by the National Environmental Research Program (NERP) for four years (2011–2014) to study biodiversity conservation.

We integrate ecology and social science to provide guidance for policymakers on planning and managing biodiversity at a regional scale. We develop tools, techniques and policy options to integrate biodiversity into regional-scale planning.

The University of Tasmania hosts the hub.

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