

Argument Mapping at Work

Some questions answered

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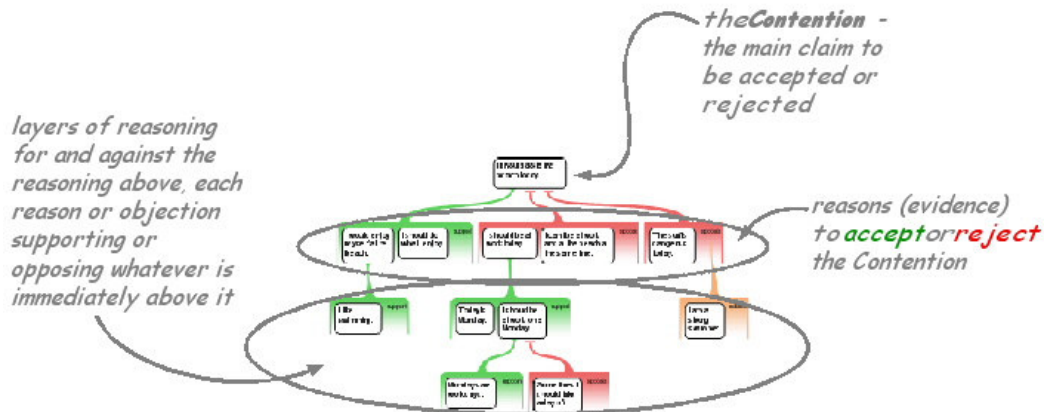
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What is Argument Mapping?

Argument mapping is a way of laying out visually **reasoning and evidence** for and against a statement or claim. A good map **clarifies** and **organizes** thinking by showing the logical relationships between thoughts that are expressed simply and precisely.

Argument maps are driven by the question, '**Why should I believe that?**'.



The statement in the top box is the contention under consideration. The top level of boxes underneath the contention are the reasons for (green) and against (red) it. The lower levels show further reasoning or evidence supporting or opposing claims immediately above.

You can produce two kinds of argument maps in *Rationale*TM:

1. **Reasoning** maps, which lay out arguments in a quick, intuitive way
2. **Analytic** maps, which enable a more careful and rigorous analysis of an argument.

You can see some samples of each type at the end of this booklet.

How does Argument Mapping differ from other kinds of mapping?

Different kinds of map are defined by the nature of the relationships they depict – what the boxes and lines mean. What kind of map something is depends on:

- what goes in the boxes; and
- what the connecting lines indicate.

Argument Maps show only **evidential (inferential)** relationships between **claims**. In Argument Maps, the lines mean something very specific: that something is a *reason to believe* or a *reason not to believe* something else. Argument maps are driven by the question, '**Why should I believe that?**'. Any map driven by that question is an Argument Map.

Why would I map?

Argument maps

- help you organise and navigate around complex information
- clarify reasoning
- communicate reasoning quickly and effectively
- support critical thinking.

Organise and deal with complex information

The human mind simply cannot encompass at one time all aspects of a complex debate. The truth is that we can only ever focus on one or at most a handful of things at once. Generally what happens is that we focus on those few aspects of the debate which are particularly salient to us—often because they support our prior opinion—and neglect the rest.

Argument mapping expands our capacity to grasp complex debates by presenting the argumentation in two-dimensional spatial layout. It translates abstract conceptual structure into a simple spatial structure. A very large part of our brain is devoted to getting around in physical space—seeing where things are, and keeping track of our position in relation to things. An argument map taps into this vast reserve of processing power, bringing it to bear in understanding the conceptual layout of some complex issue.

Clarify thoughts

Mapping encourages us to express thoughts and their interrelationships much more precisely than we usually do, either when thinking alone or when debating with others. By stating claims simply and unambiguously, and by having to draw lines of inference between such claims, we understand the precise nature of the argument much better.

Communicate reasoning quickly and effectively

Argument maps give you access both to the overview and to the detail at a glance.

Road maps capitalise on spatial layout to present a lot of complex, interrelated information precisely and concisely. In the same way, argument maps communicate quickly and effectively information that might otherwise be buried in pages and pages of text.

The hierarchical structure of argument maps allows the reader to see instantly the 'gist' of the argument at the top level of the map. The reader can then drill down the map to see as much detail as he or she needs to know about.

Argument maps show only what is directly relevant to an argument. By stripping away rhetoric and extraneous information, they convey the essential logic of a case.

Think critically

Critical thinkers make good **judgments** by being able to **analyse** and **evaluate** arguments well.

They can grasp the “gist” of an issue and weigh up the pros and cons, answering questions like

- What am I being asked to accept?
- Should I accept it or not?
- Why? What are the arguments and how strong are they?

Argument maps support Critical Thinking by providing a convenient and highly effective way to **analyse** the exact structure of an argument, showing just those elements that are relevant to making your **judgments**.

While the mapping process itself encourages clearer thinking, a good argument map articulates the reasoning clearly, making it easier to consider the case systematically.

When would I use Argument Mapping?

You use argument maps when you want to

- **organise** an argument;
- **assess** and **develop** the argument, alone or as a team; or
- **present** an argument.

Because argument maps are clear and concise representations of reasoning, they are helpful when

- you have a complex case you need to **organise**;
- you have a complex or difficult case you need to **consider** and **assess**;
- you want to **facilitate discussion**, and **focus** that discussion on the merits of the arguments;
- you want to **present** your own case in order to **persuade** a rational audience.

How would I use Argument Mapping?

To organise a complex case, you may map alone or with a team, laying out precisely what the arguments are. If you simply need to organise a complex case, a **reasoning** map may be sufficient.

To consider and assess a case, map it and then use the map to evaluate each argument in turn before finally judging whether or not to accept the contention. If you wish to identify and examine hidden assumptions, an **analytic** map is more appropriate.

To facilitate discussion, you may:

1. present a printed map or insert a map as an image in a PowerPoint slide and encourage systematic consideration of the issues on the map; or
2. map a debate "live" with *Rationale™* and a data projector, so that the map grows as new considerations come to light.

The second method will also give you a record of the relevant parts of the discussion, and maintain organisational memory.

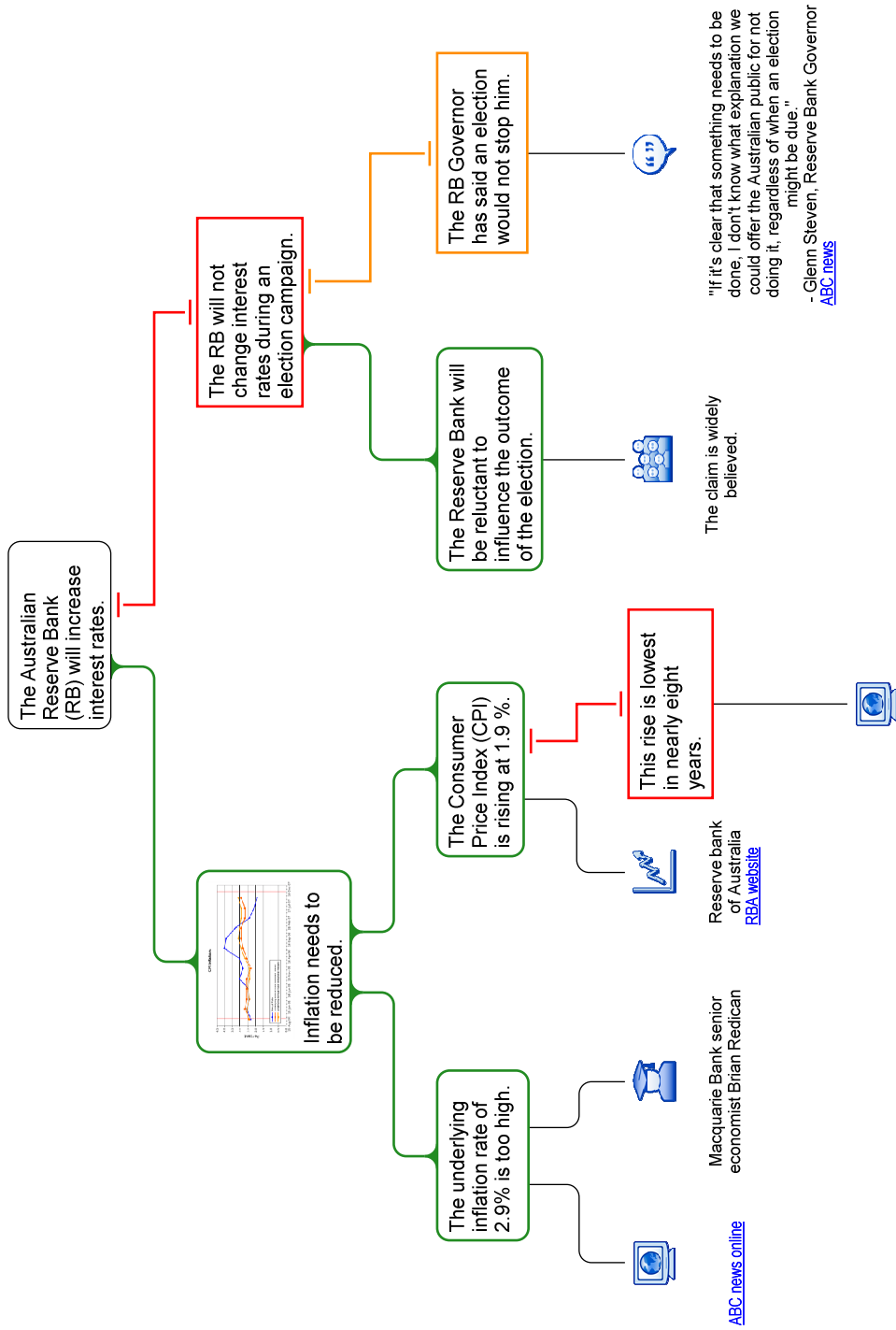
To present your case, you may:

- circulate a printed map either on its own or embedded as an image in an explanatory document;
- display a map using *Rationale™* and a data projector;
- export your map as an image into a PowerPoint presentation.



Draw the right conclusion!

Sample maps - Reasoning



Sample maps - Analysis

