Group Decision Making:
How can we make it work better?
Webinar January 15, 2020

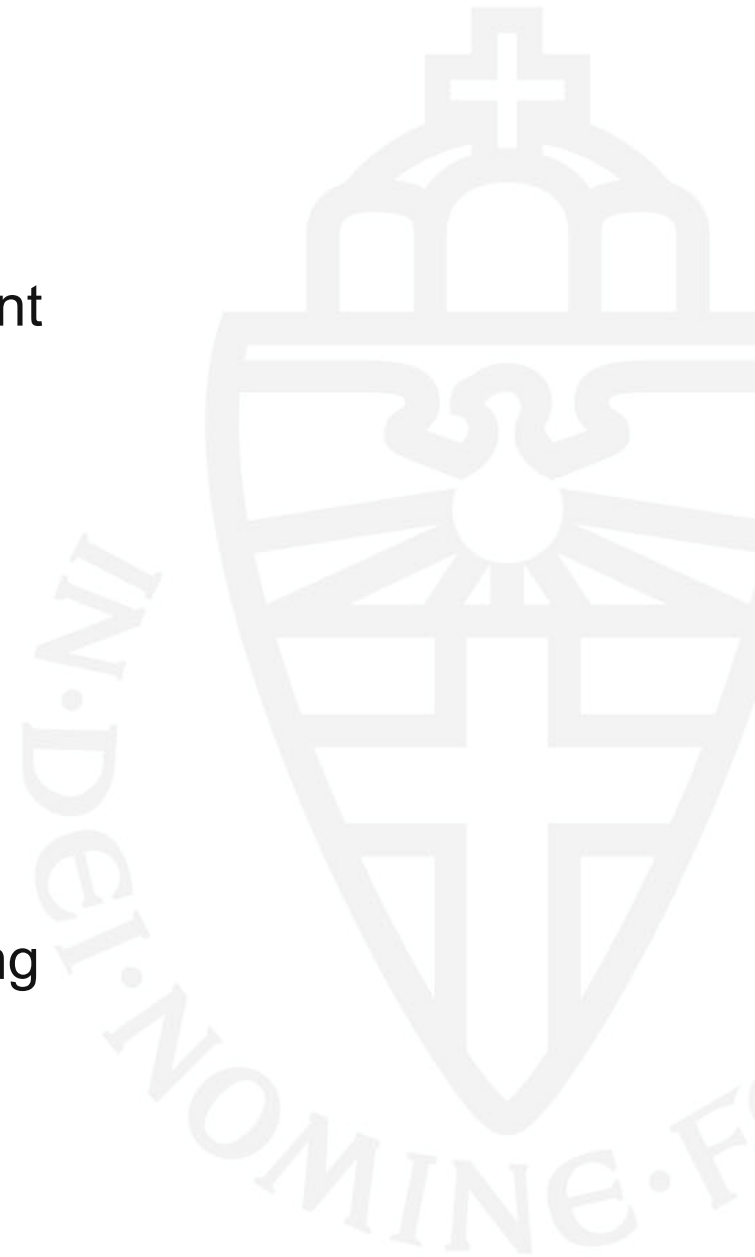Prof. Dr. E.A.J.A. Rouwette
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Nijmegen School of Management
Radboud University

Outline

- Group decision making: room for improvement

- Phases in decision making
  - selection
  - sharing
  - analysis
  - implementation

- Complex and messy problems

- Methods for supporting group decision making

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Group decision making: room for improvement

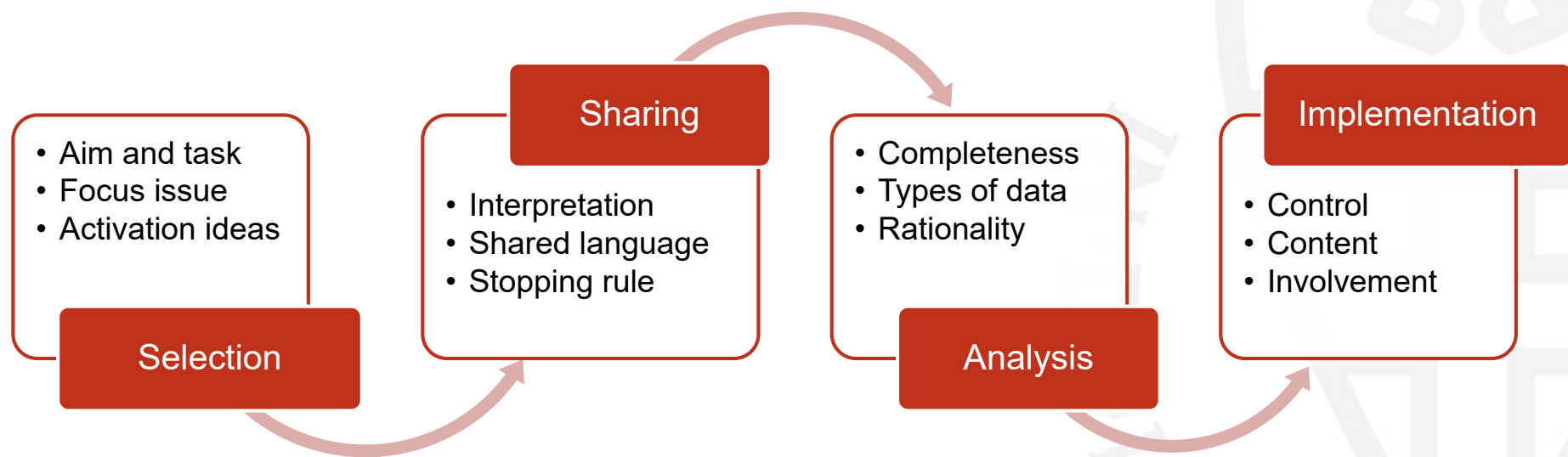| Tactic	Frequency of use	Adoption	Perceived benefits	Installation time
Debacles				
Persuasion				
Edict				
Best practices				
Benchmarking				
Participation - comprehensive - complete - delegated - token				

Cf. Nutt, 2002

Group decision making: room for improvement

Tactic	Frequency of use	Adoption	Perceived benefits	Installation time
Debacles				
Persuasion	36%	49 – 58%	Adequate to good	26 months
Edict	40%	38 – 50%	Adequate	17 months
Best practices				
Benchmarking	6%	90 – 100%	Good to excellent	11 months
Participation - **comprehensive** - **complete** - **delegated** - **token**	18% - (not observed) - 6% - 10% - 2%	80 - 89% - 90 – 100% - 79 – 84% - 67 – 70%	Good to excellent Good to excellent Good Adequate to good	14 months - 16 months - 10 months - 20 months

Cf. Nutt, 2002

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Phases in decision making

Selection
- Aim and task
- Focus issue
- Activation ideas

Sharing
- Interpretation
- Shared language
- Stopping rule

Analysis
- Completeness
- Types of data
- Rationality

Implementation
- Control
- Content
- Involvement

Selection problem

Why should I bother?
- Agenda setting
- Conflict personal and other goals
  - Colleagues - competitors
  - Departmental goals

What is my motivation?

Out of all available information, what is relevant?
- Data: mental, documents, numbers
- *'How do I know what I think until I hear what I say?'*
- Emotion is faster than cognition
- Essential assumptions are not always clear

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## Sharing information

Which question will I answer?
- Differences in context or background evoke different interpretations
- If the question is too hard, I will answer an easier one

How do I verbalise my ideas?
- Shared language: budgets and KPIs
- Shared history: task and social demands

When do we stop?

[pictures sharing ideas]

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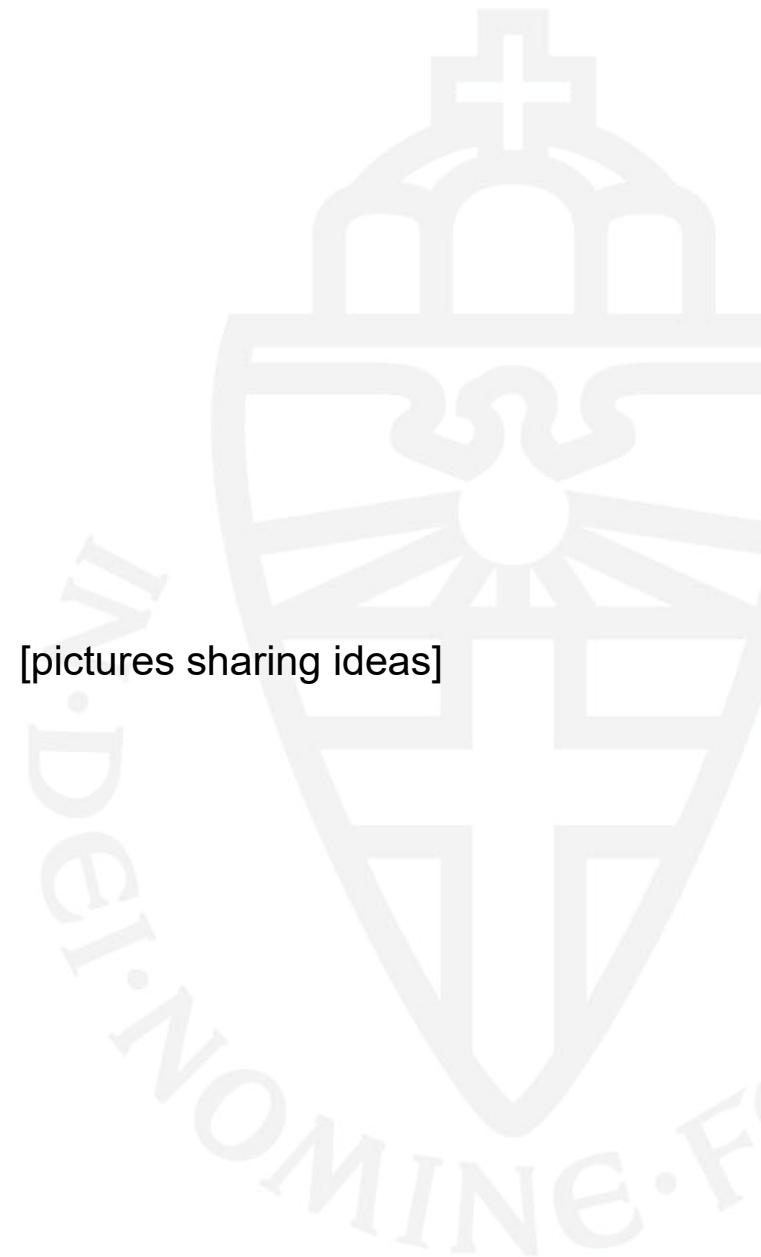
Wujec: how do I toast bread?

[pictures Wujec]

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An easier question

[picture skydiving]

Please answer the following question:

Which sport is more dangerous, mountaineering or paragliding?

- Availability heuristic, results in a biased estimate
- Other examples are selective perception, framing

- Biases are *'departures from the normative rational theory'* or *'deviations from some "true" or objective value'*

Cf. Gilovich, Griffin and Kahneman, 2002: 3

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When do we stop: group impacts

	member X	member Y	member Z
All information shared			
Pro-A Pro-B	$a_1\ a_2\ a_3\ a_4\ a_5\ a_6\ a_7$ $b_1\ b_2\ b_3\ b_4$	$a_1\ a_2\ a_3\ a_4\ a_5\ a_6\ a_7$ $b_1\ b_2\ b_3\ b_4$	$a_1\ a_2\ a_3\ a_4\ a_5\ a_6\ a_7$ $b_1\ b_2\ b_3\ b_4$

Cf. Stasser and Titus, 1985

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Mildly biased distribution			

Pro-A
  Shared
  Unshared
Pro-B (All shared)
	$a_1\, a_2\, a_3\, a_4$
	a_5
	$b_1\, b_2\, b_3\, b_4$
		$a_1\, a_2\, a_3\, a_4$
		a_6
		$b_1\, b_2\, b_3\, b_4$
			$a_1\, a_2\, a_3\, a_4$
			a_7
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Mildly biased distribution			

Pro-A
  Shared
  Unshared
Pro-B (All shared)
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	a_5
	$b_1\ b_2\ b_3\ b_4$
		$a_1\ a_2\ a_3\ a_4$
		a_6
		$b_1\ b_2\ b_3\ b_4$
			$a_1\ a_2\ a_3\ a_4$
			a_7
			$b_1\ b_2\ b_3\ b_4$

Severely biased distribution			

Pro-A
  Shared
  Unshared
Pro-B (All shared)
	a_1
	$a_2\ a_3$
	$b_1\ b_2\ b_3\ b_4$
		a_1
		$a_4\ a_5$
		$b_1\ b_2\ b_3\ b_4$
			a_1
			$a_6\ a_7$
			$b_1\ b_2\ b_3\ b_4$

Cf. Stasser and Titus, 1985

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Analysis

Is my information complete (enough)?
- Boundaries
- Confidence

Can I compare data types of data?
- Mental – conceptual - numerical
- Triangulation and testing

What action do I take now?
- Resolving differences
- Rationality

[picture elephant]

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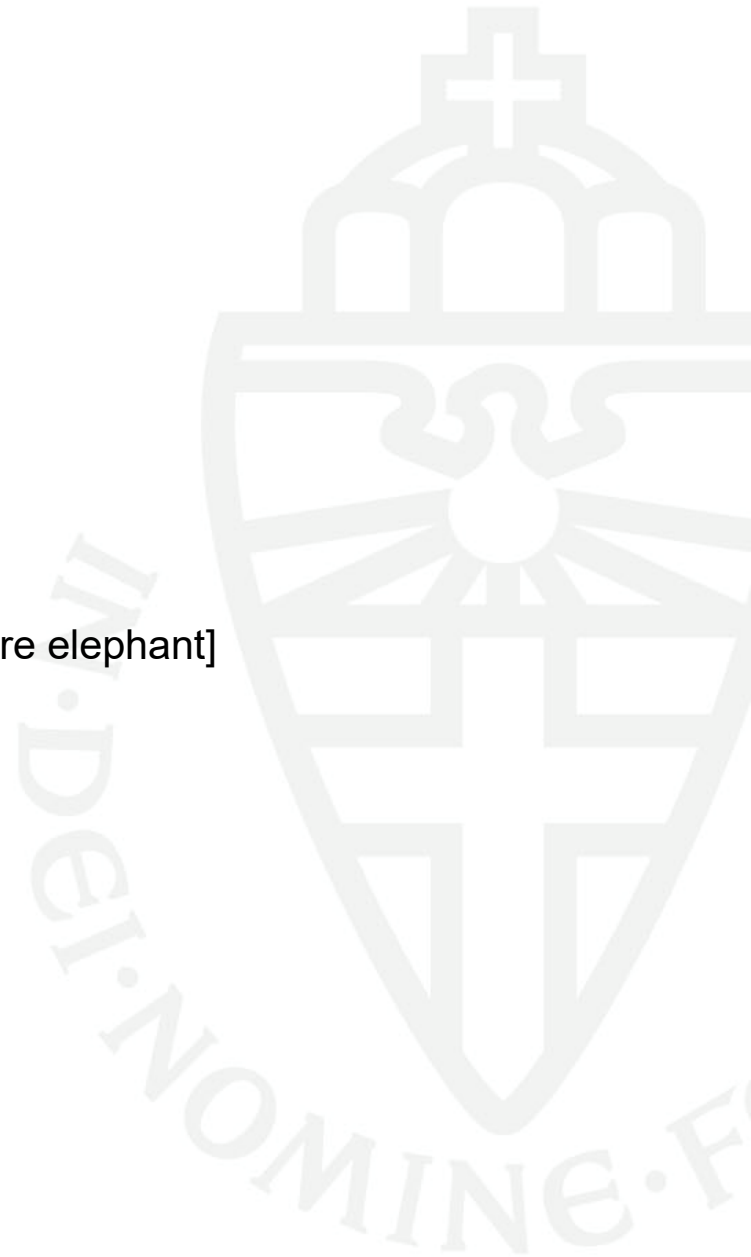
Implementation

Control
- Top down decisions in wicked problems
- Zero-sum game or increasing the pie?

Content
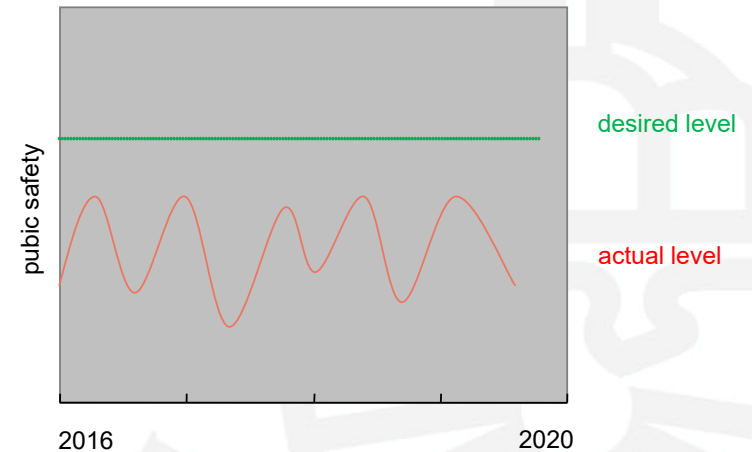- Is the decision in line with my interests?

Involvement
- Procedural justice: was I involved?

[pictures implementation]

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Messy and wicked problems

Problem

- Discrepancy between actual and desired situation or development

pubic safety

desired level

actual level

2016   2020

Messy problem (Vennix, 1999)

- Large differences of opinion on the problem, or whether there is a problem

Wicked problem (Camillus, 2008)

- Many stakeholders with different values and priorities
- Causes are complex and interconnected
- Difficult to solve and changes with each attempt to intervene
- Has no precedent
- Nothing indicates the right answer

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Methods for supporting group decision making

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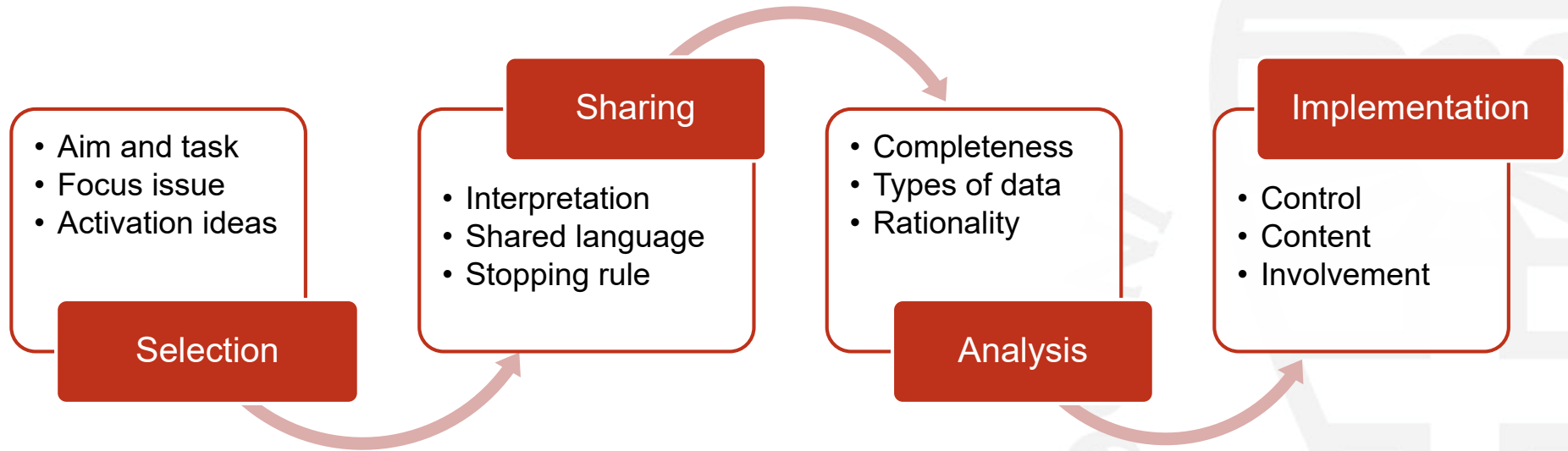
Focus, but ask an open question	Go beyond $ or € or £	Separate divergence from convergence	Involve decision makers, experts, stakeholders
Put participants in the role of 'researchers'	Encourage questions on terms and relations	Use a structured group memory	Clarify scope and outcome early on

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Methods for supporting group decision making

[pictures meetings, e.g. from Dilbert, by Scott Adams]

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Methods for supporting group decision making
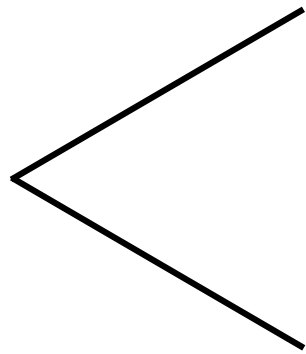
Divergence

[picture ideation frustration]

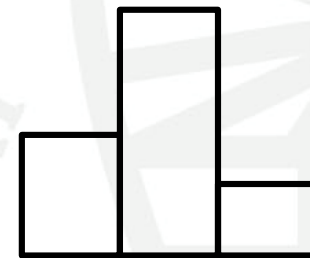Radboud Universiteit Nijmegen   UMC St Radboud
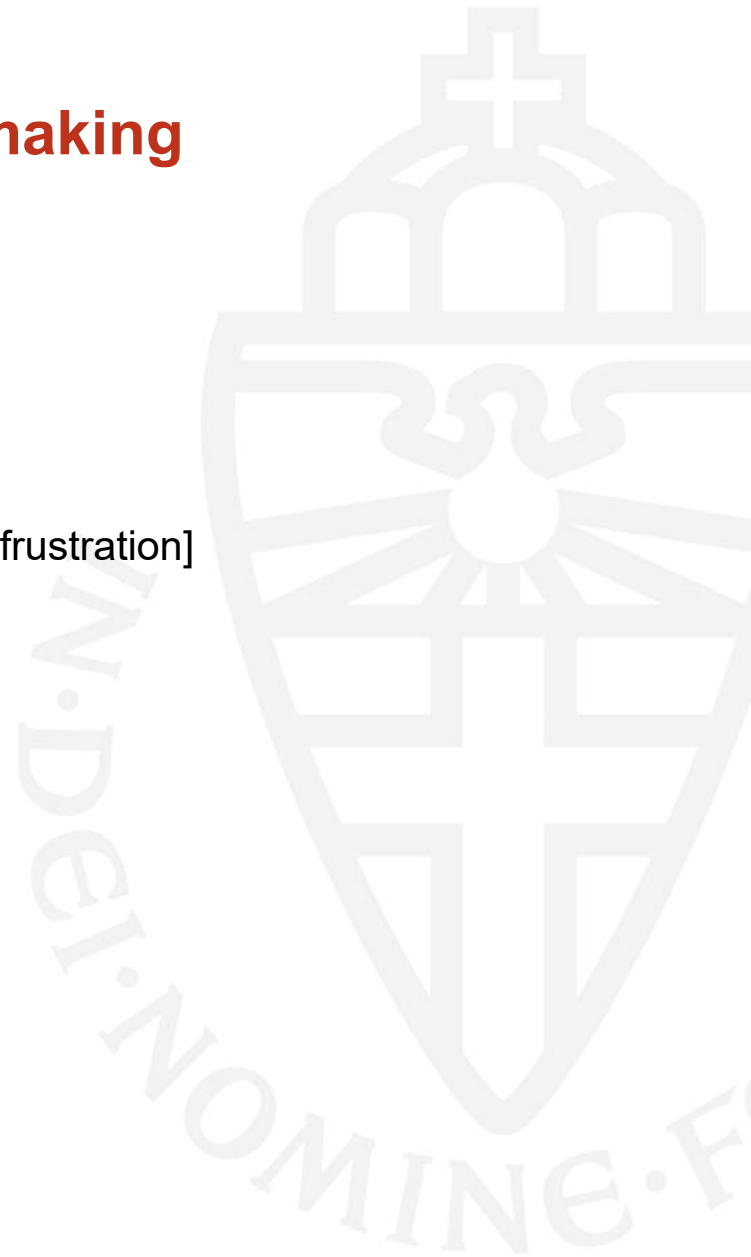
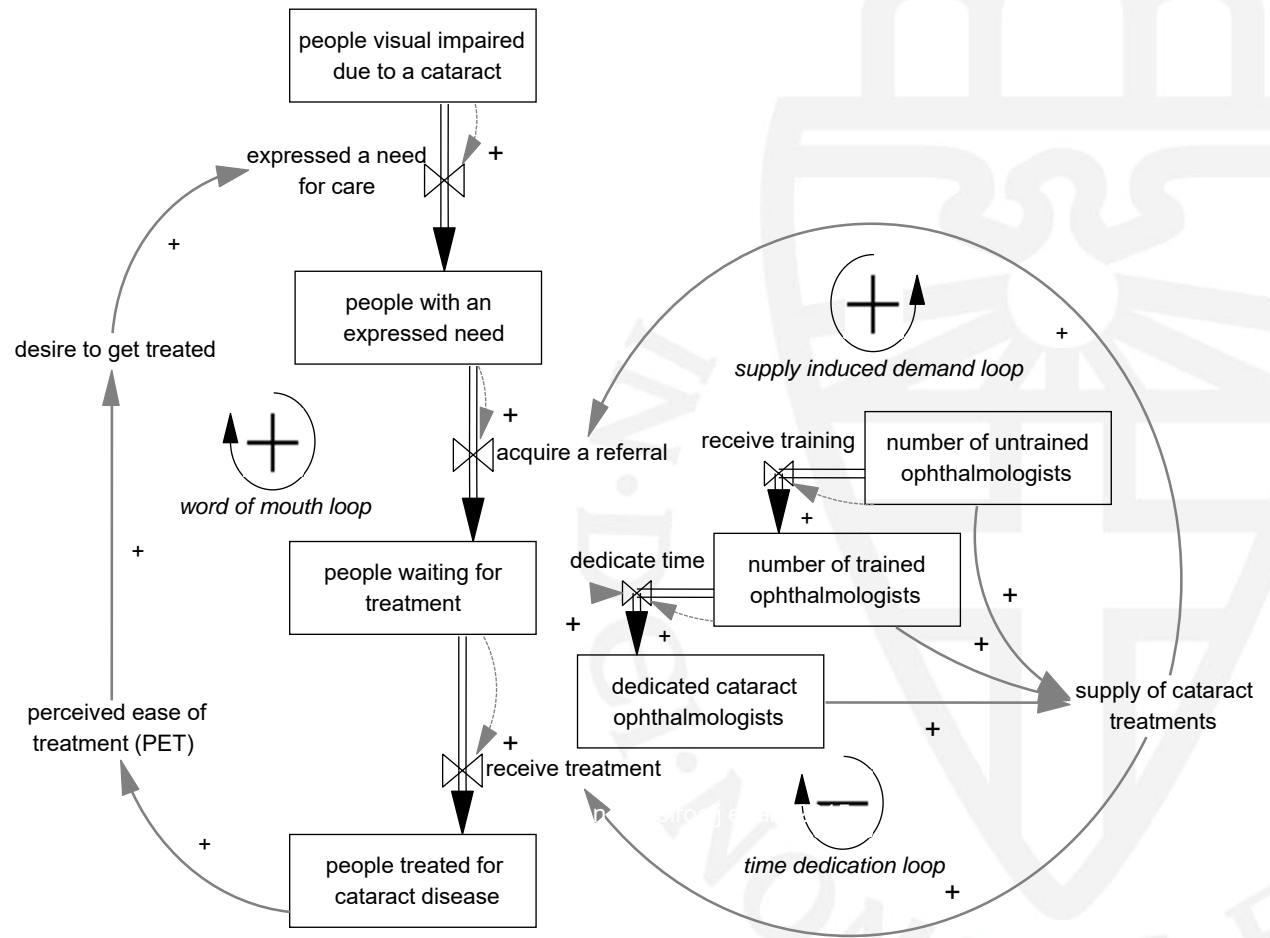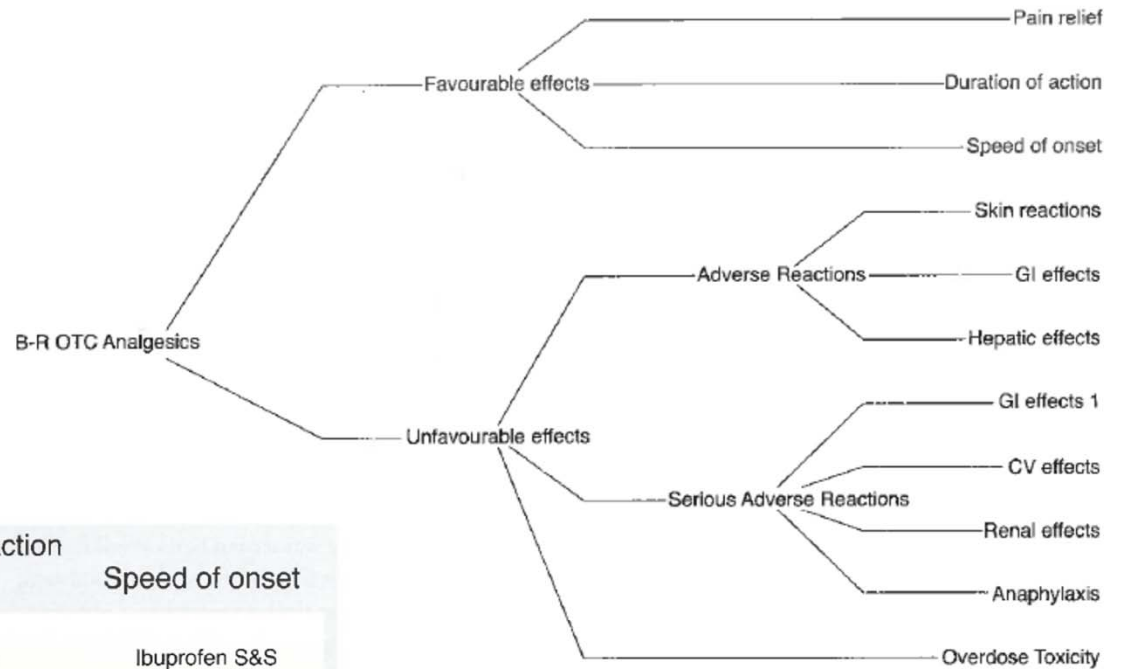# Methods for supporting group decision making
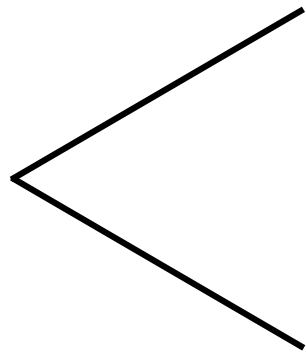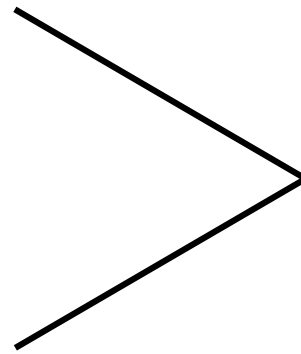
Divergence   Convergence   Prioritising

Methods for supporting group decision making
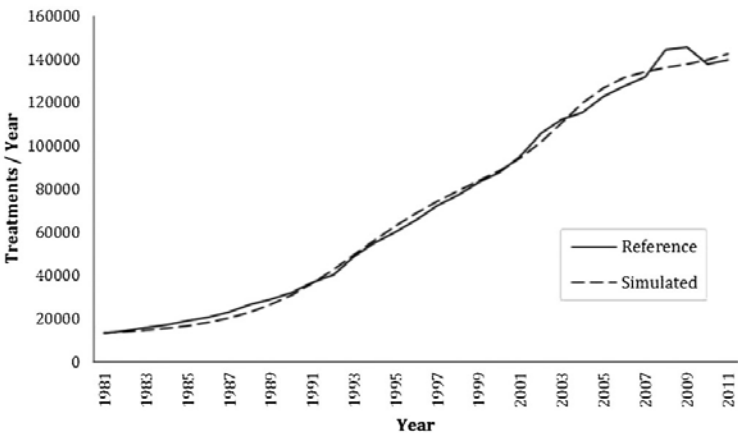
Cf. Van Nistelrooij et al., 2015

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Methods for supporting group decision making

Cf. Phillips, 2018

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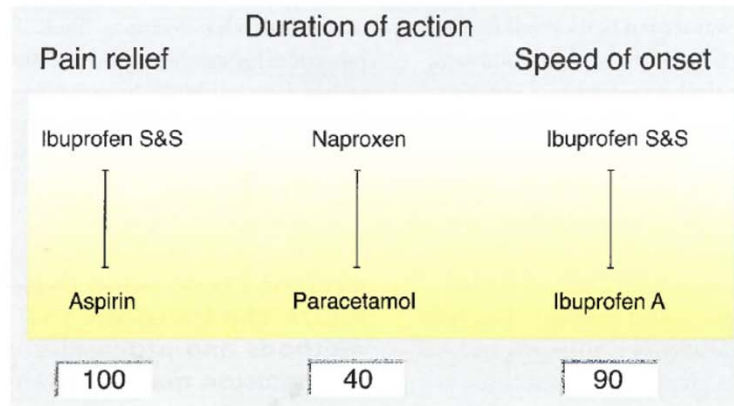
Thank you for your attention!

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