

Future Exploration 2

Main steps

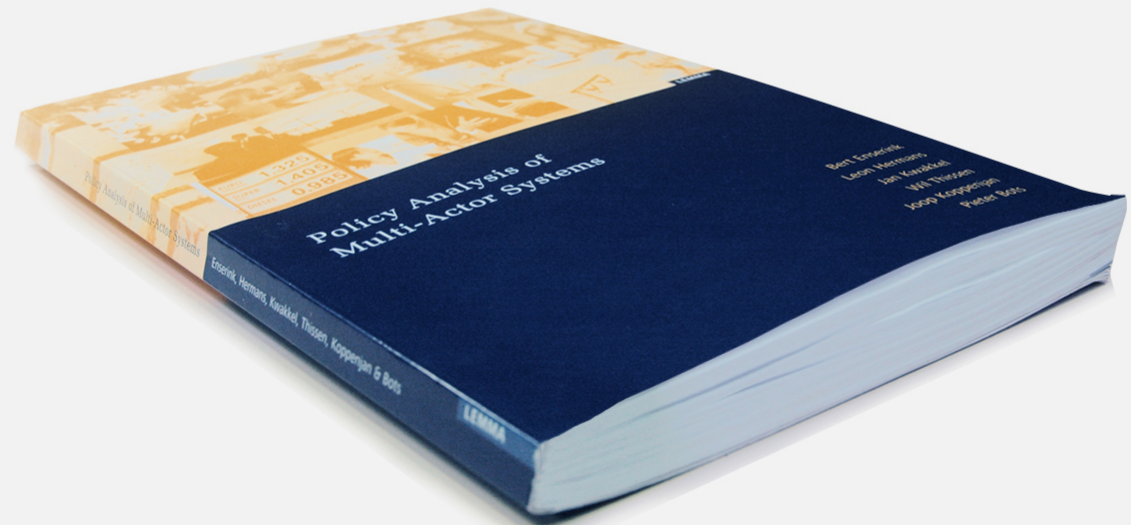
Exploring the future: Scenario Analysis

Tineke Ruijgh

- Why and where to?
- **Main steps**
- Example
- Checks and interpretation
- Application in issue-paper
- Additional sources

Chapter 5 – Exploring the future

- Methods and examples



Many methods

Formal methods for forecasting

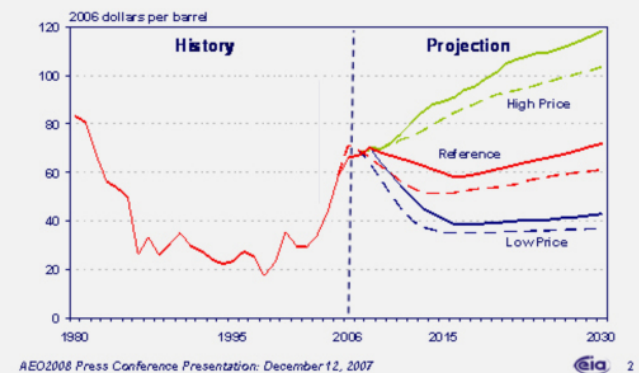
- Trends
- Trend Impact

Methods for consultation of experts

- Innovation
- Trend breaks

Scenario analysis

Oil Price forecasts



What is a scenario?

- A scenario is a story about one of many futures
 - hypothetical configurations of events
- A scenario must be credible, thereto internally consistent.
 - causal relations
 - plausible and possible events
 - wide range of factors

Scenario analysis: Step-by-step

- Table 5.2
- 8 steps

The sequence of steps is described in short in Table 5.2, and explained.

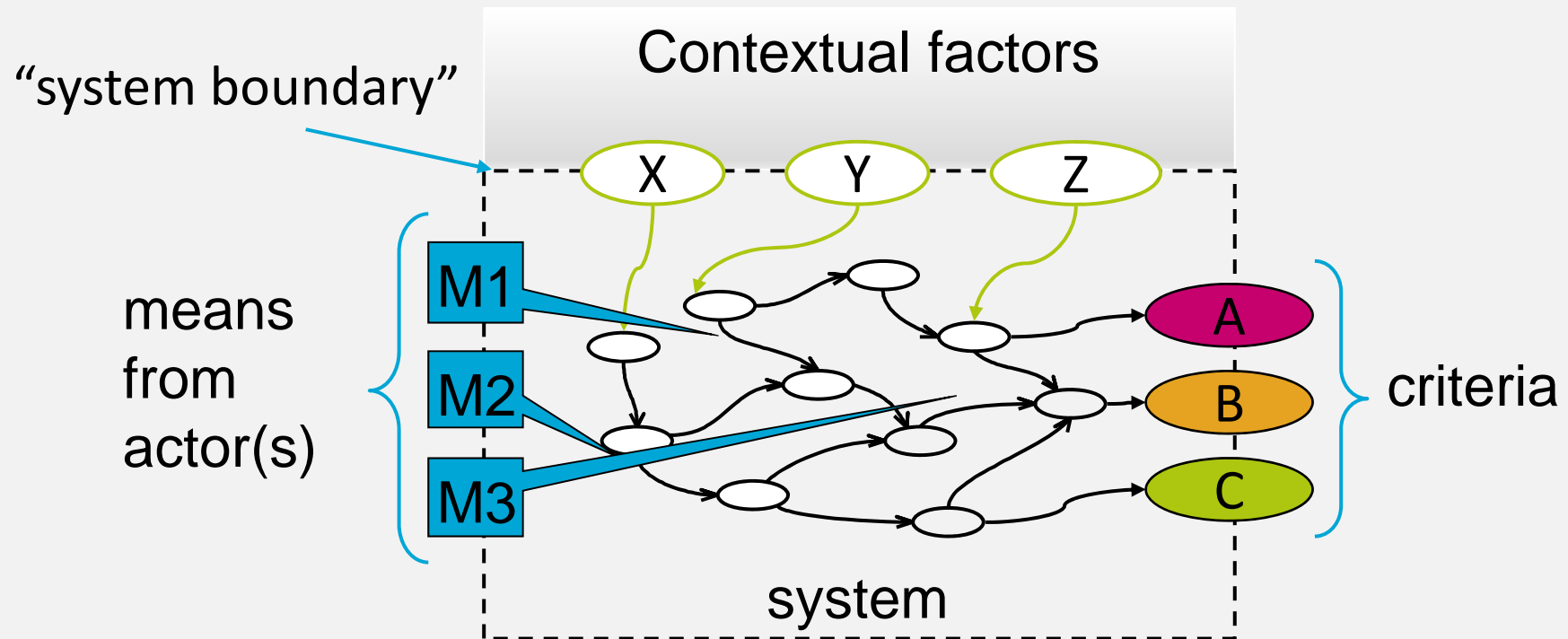
Table 5.2 Sequence of steps for the design of contextual s

Step 1	Determine the key question	Formulate the question, proposed policy.
Step 2	Determine the factors or crucial powers in the environment of the policy field	Indicate which contextual factors success or failure of measure policy field.
Step 3	Determine the driving forces or megatrends behind these factors	Indicate which forces cannot be policy, influence the already di
Step 4	Arrange the factors and forces according to importance and uncertainty	Select the most important and forces.
Step 5	Design the scenario logic	Use the selected forces as axis for scenario skeleton that spans the (scenario logic).
Step 6	Detail the scenarios	Elaborate on three or more scenarios attention to all forces and factors.
Step 7	Evaluate the key question	How does the key question look in How do you evaluate the effects of tives in different scenarios? Is the d
Step 8	Monitor the developments	Which vulnerable points

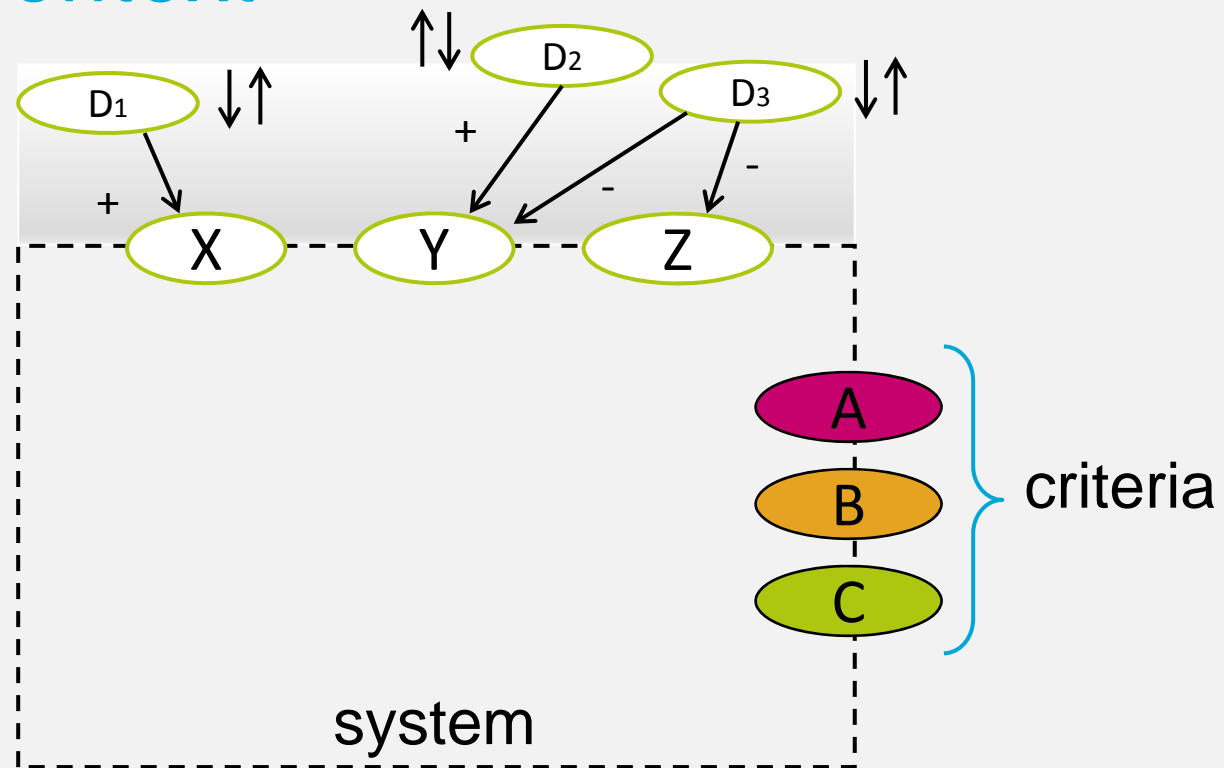
Scenario analysis: structured, methodical

- Identify contextual factors and driving forces
 - step 1-3
- Design a scenario logic with 2-3 driving forces
 - step 4-5
- Write out each scenario
 - step 6
- Understand the impacts of each scenario
 - step 7-8

System context is dynamic



Driving forces cause dynamics in system context

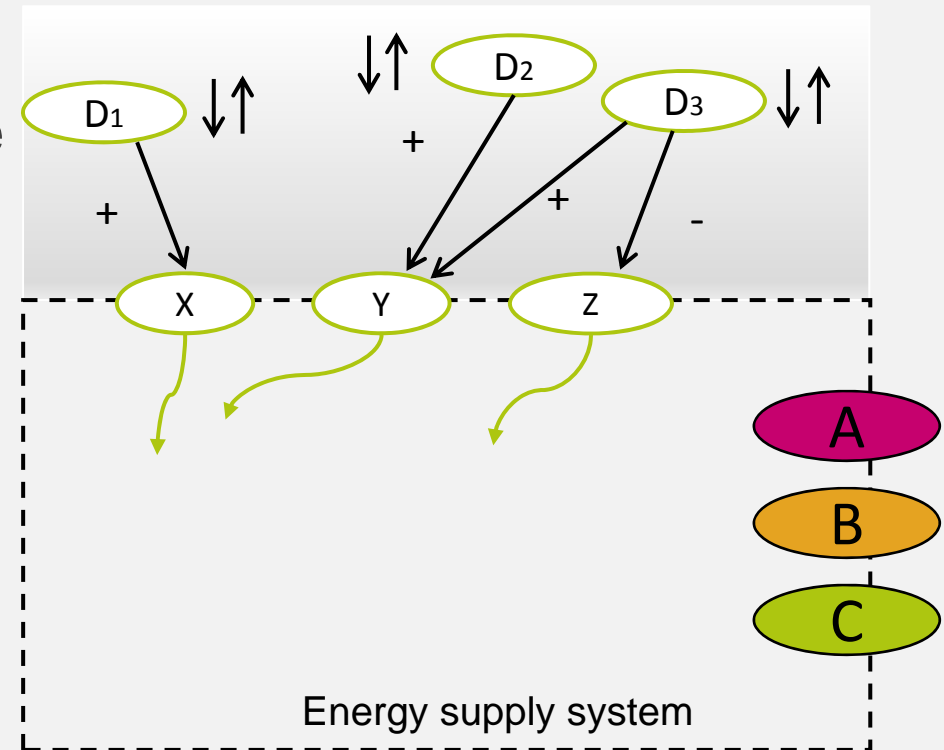


Example of driving forces D1, D2, D3

D1: Innovation energy storage

D2: Power of EU Commission

D3: Global economy



Driving forces stem from S.T.E.E.P.

Society

Technology

Economy

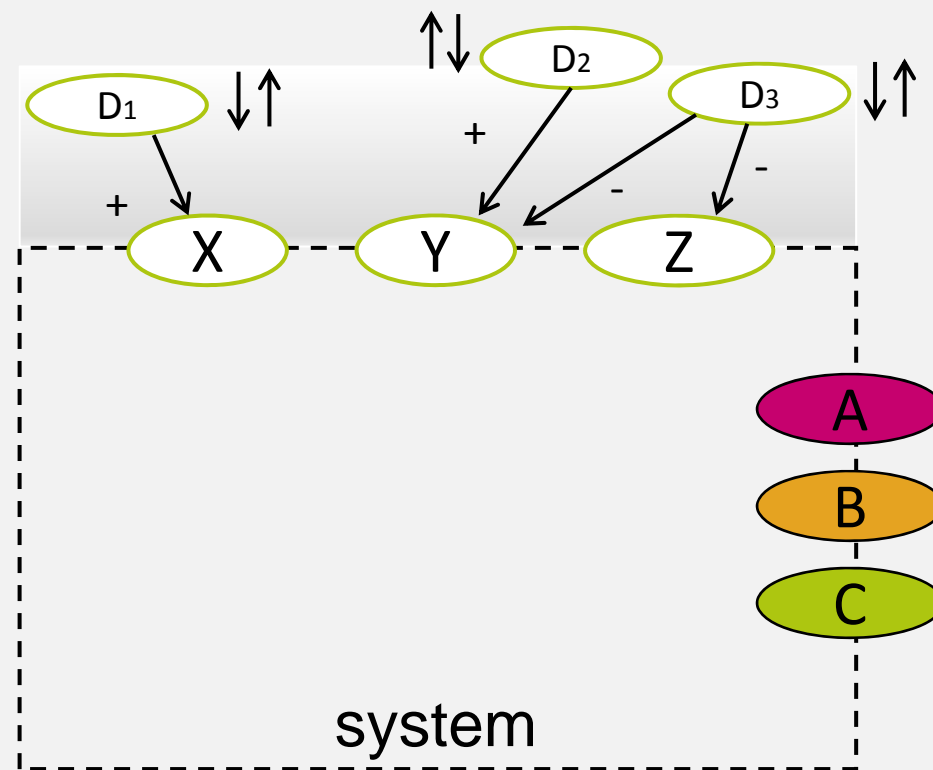
Environment

Politics



Driving forces are uncertain

- Trend may change ↓↑
- Impact known?
 - High
 - Low



Classification of driving forces

		Uncertain	
		Low	High
Impact	Low		
	High		



For example.....

D3: Global Economy
Growing / Shrinking

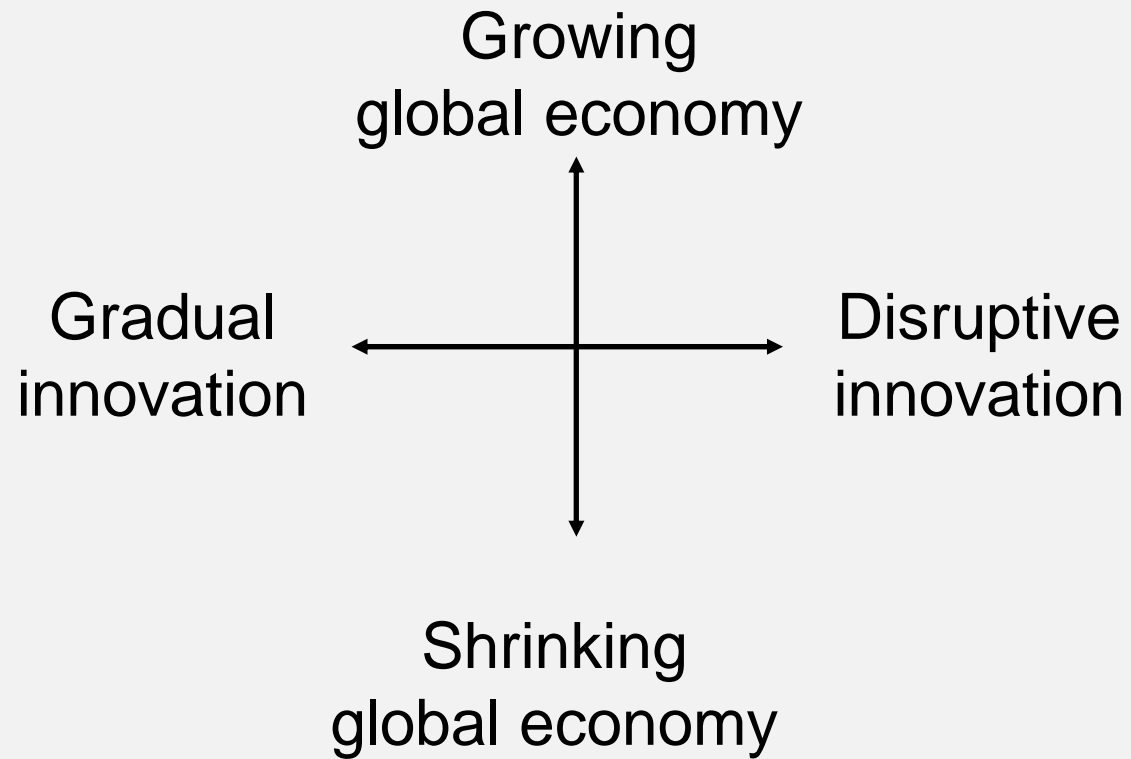
D2: Power of EU Commission
Low/ High

D1: Innovation
Gradual / Disruptive

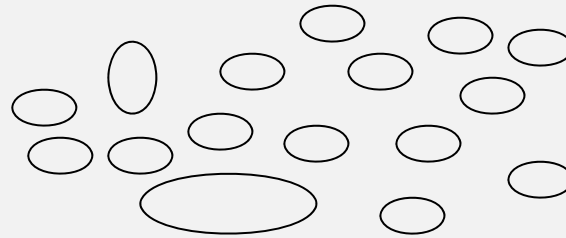
For example.....

		Uncertain	
		Low	High
Impact	Low	D2	D7
	High	D5 D6?	D1 D3

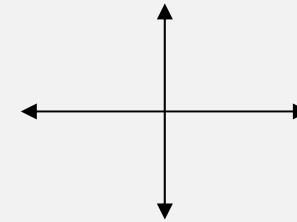
Scenario Logic



Research
Interviews
Consultation

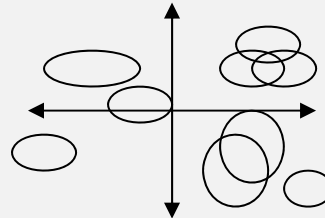


Information on system context,
from different perspectives

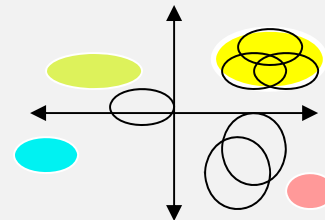


Scenario logic

Structuring of data
Analysis

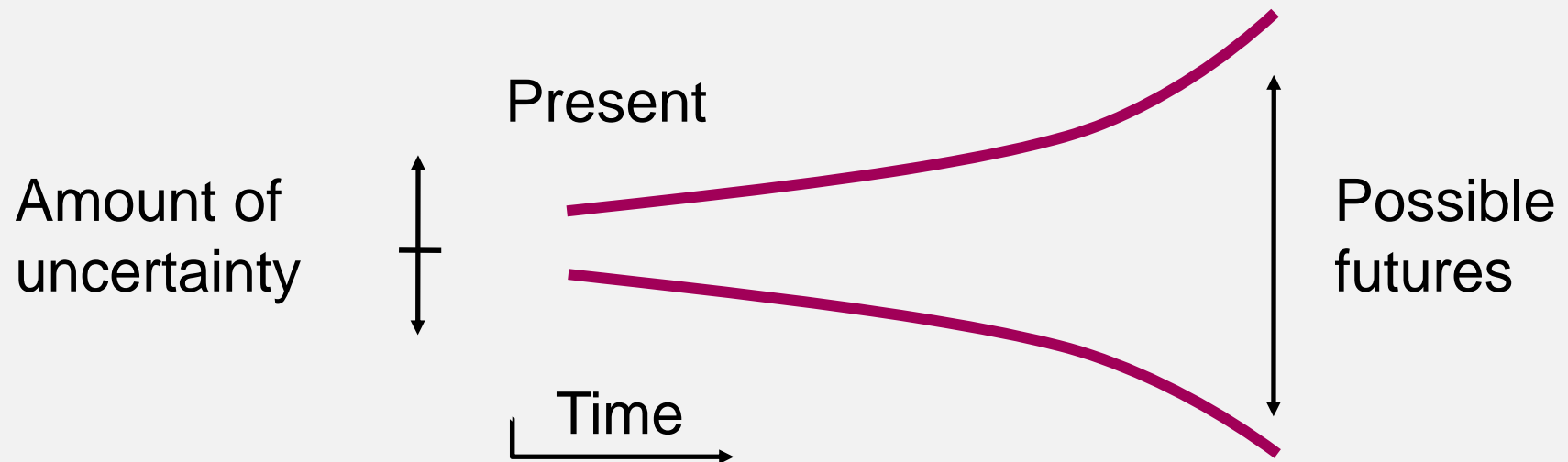


Issue paper
Debate
Impact assessment



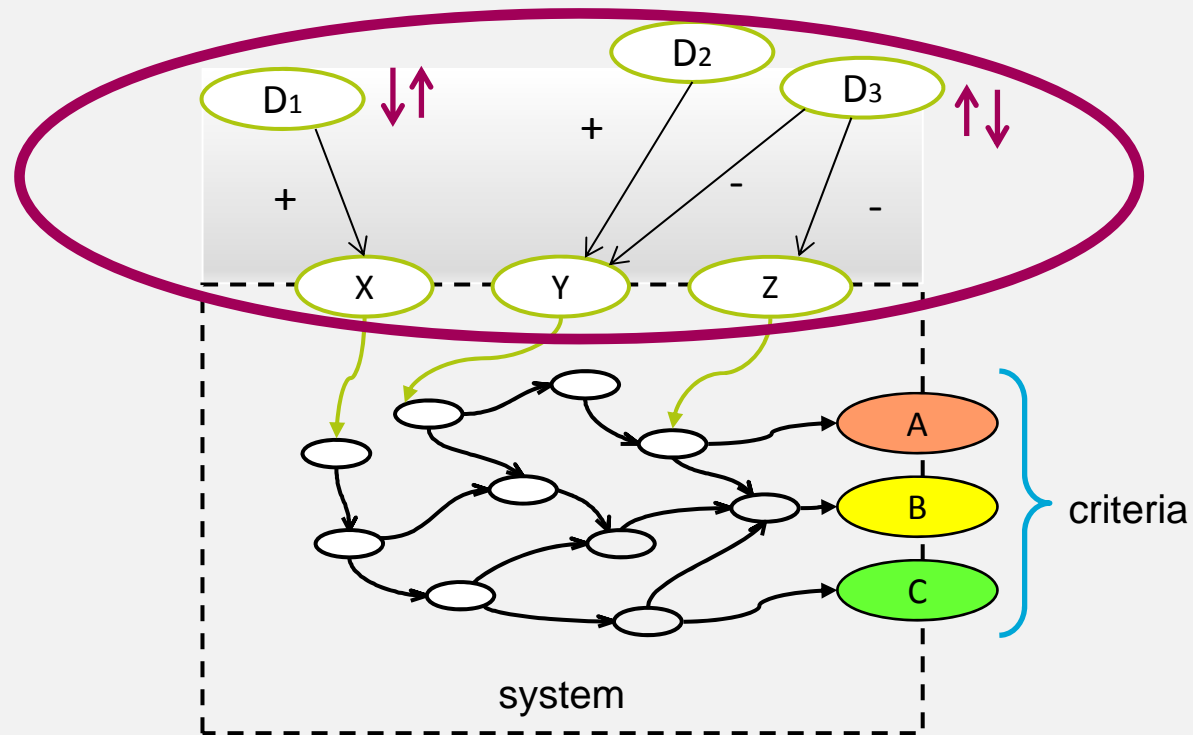
3 to 4 final scenarios

Many futures may unfold!



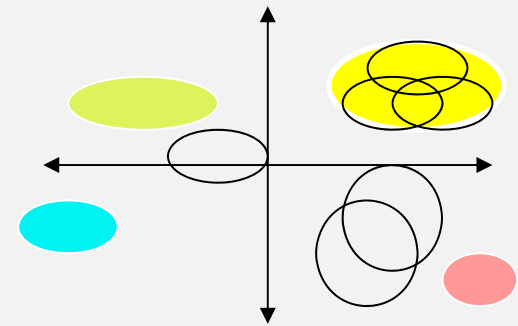
Trumpet of uncertainty (Rosenhead, 1989)

More than 3 context scenario's!



Select scenarios. Narrate each story.

- Scenario's span the space of uncertainty.
- Tell each story: narrative method
- Give it a name
- Find an image to represent the story



Shell scenario analysis



<http://www.shell.com/global/future-energy/scenarios.html>

Scenario analysis

Chapter 5, Table 5.2

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Step 8	Monitor the developments	



What's next.....?

Proceed with making your own scenario analysis or...

Proceed with the next video-clip;
it gives an example of a scenario analysis.

But FIRST: read the assignment!

Thank you for your attention!