Actors & Networks Analysis

EPA 1121
Advanced Policy Analysis

Philippe Ker Rault

p.a.kerrault@tudelft.nl

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Technische Universiteit Delft

Today's learning objectives

1. To know what an actor analysis is, when and why you would use it.

2. To be able to perform a (fairly simple) actor analysis.

- Literature **BERT CAN YOU CHECK???:**
    - Chapter 2-3 and 4 EPA1121.
    - *Bryson: What to do when stakeholders matter*
    - *Hermans & Cunningham: Actor models for policy analysis* BE1
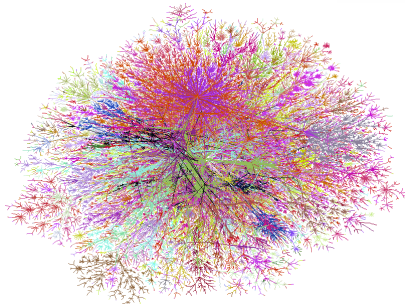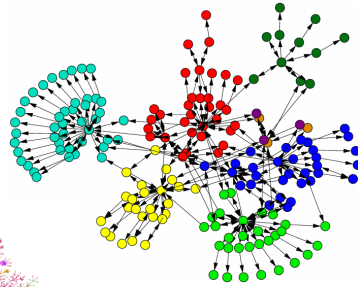
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BE1

teh red ones are "recommended reading? Then you should upload the hermans& cunn article on Blackboard?

Bert Enserink, 2009/3/31
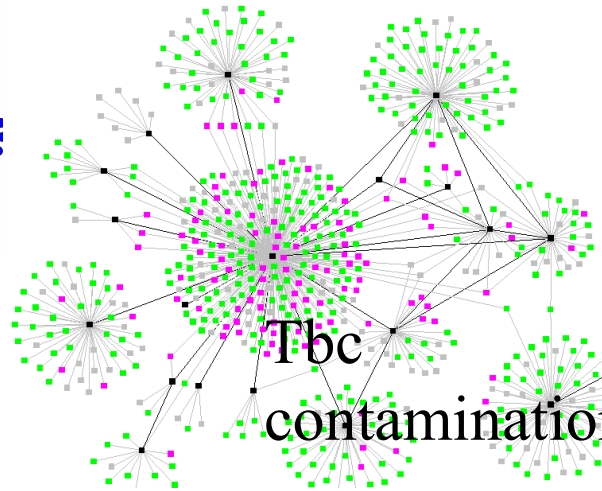
Structure of this lecture on actor analysis

1. Why actor analysis?
2. What *is* actor analysis?
3. How to do an actor analysis?

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website

internet

Tbc
contamination

Sexual
relations

Agent-based
Models

Mathematical
Ecology

Statistical Physics

Structure of RNA
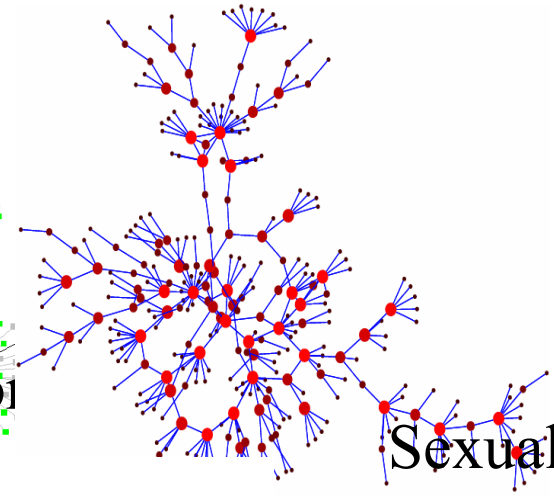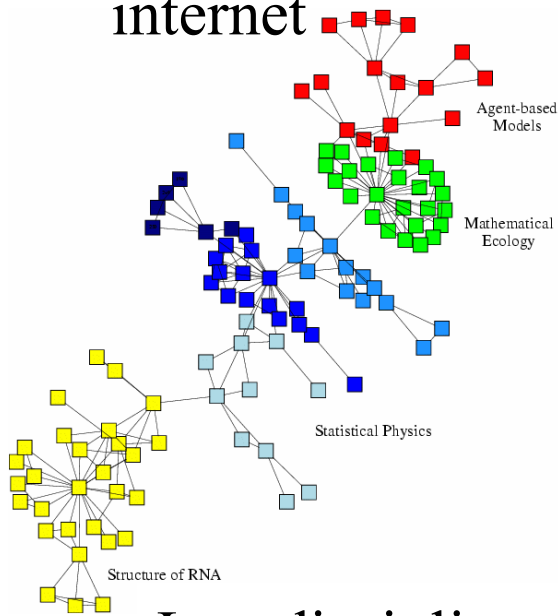
Interdisciplinary
cooperation
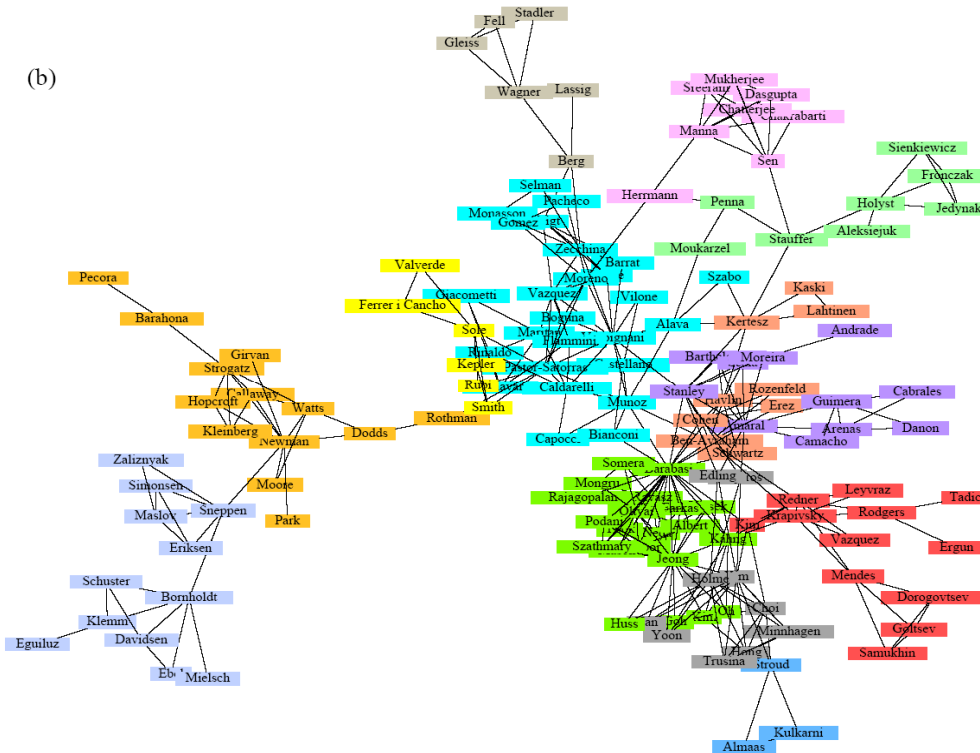
Literature referencing

(b)

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A-4 Midden Delfland Highway

25 October 2008
'Christian Union': Also investigate possibilities of 'tunnel'-alternative

'Christian Democrats': No! We have debated and waited for 40 years, now the asphalt machines should get working!

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2007: "EC in Brussels gives warning to the Netherlands"

BN De Stem, 27 September 2008
"Harbours held hostage by rules and regulations"
(Prime-minister of Flanders)

- Nijpels (NRC, 22 October 2008):

    - Least expensive option, Belgium pays

    - Simple: Scheldt-treaty need not be renegotiated

    - Simple: Only one owner of the land

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Some definitions

- **Actor**: a social entity, person or organization, able to act or exert influence on a decision

- **Stakeholder**: (group of) actor(s) that has an interest or stake in a decision, but relatively little means to influence the decision making process or system

- **Network**: more or less stable patterns of social relations between interdependent actors, which take shape around policy problems

- **Perception**: image of the actor of the world around them, both of the other actors and networks and of the substantive characteristics of a policy problem

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Problem formulation in a multi-actor context

- Different parties (actors), each with its own role and position

- Different actors: different ideas as to what the 'actual problem' is

- Problem formulation influences possible solutions, and vice versa (wicked problem Rittle & Webber 1973))

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Leading thread

Context

actors
and
factors

Problem

uncertainty

alternatives

Plan of action

research-plan

Model specification

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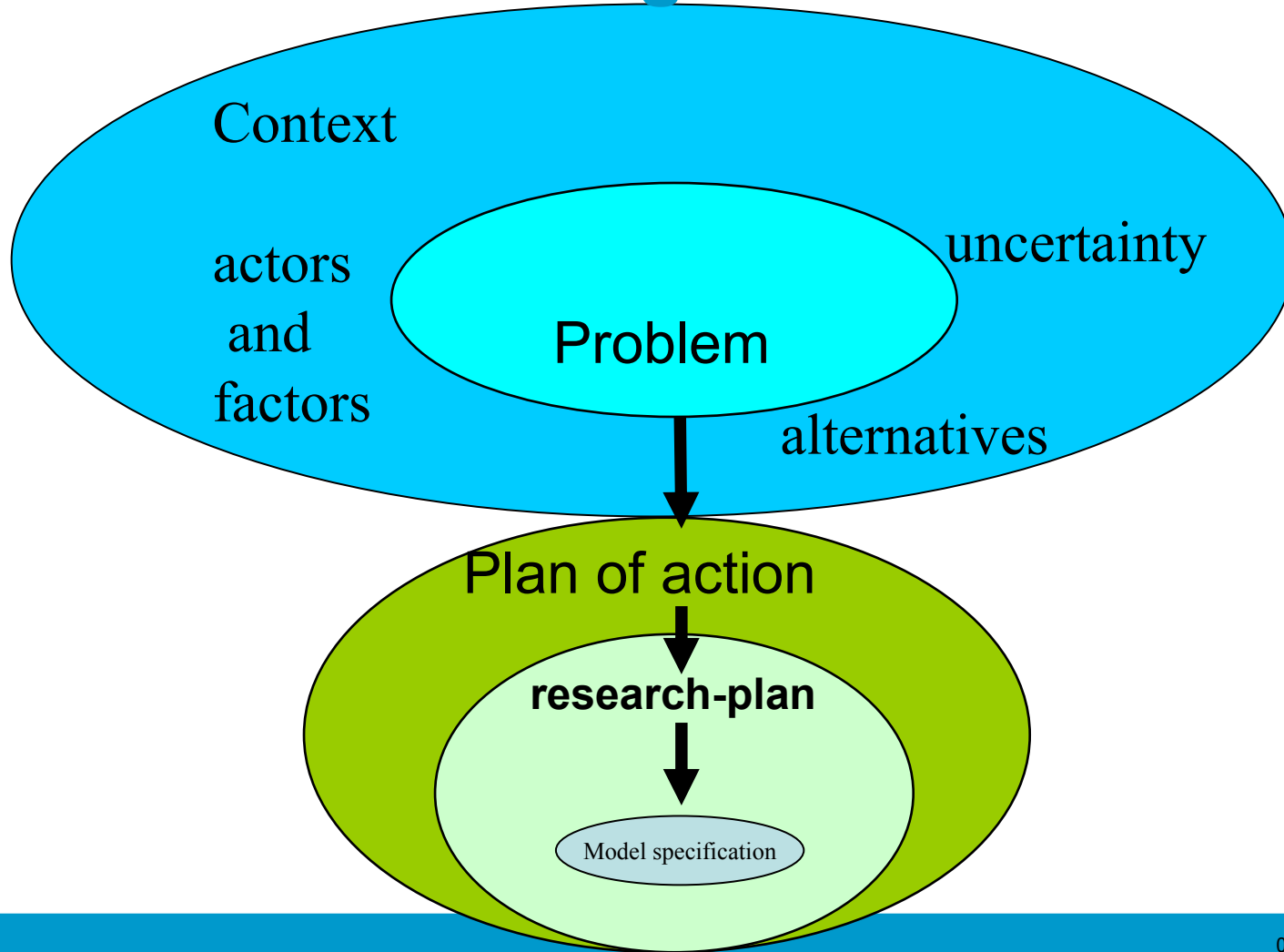
So: why actor analysis?

Brent Spar – Shell

Source: http://weblogs.hollanddoc.nl/bridgingthegap/files/2009/10/greenpeace-stopped-the-dumping.thumbnail.jpg

Mekjarvik quay

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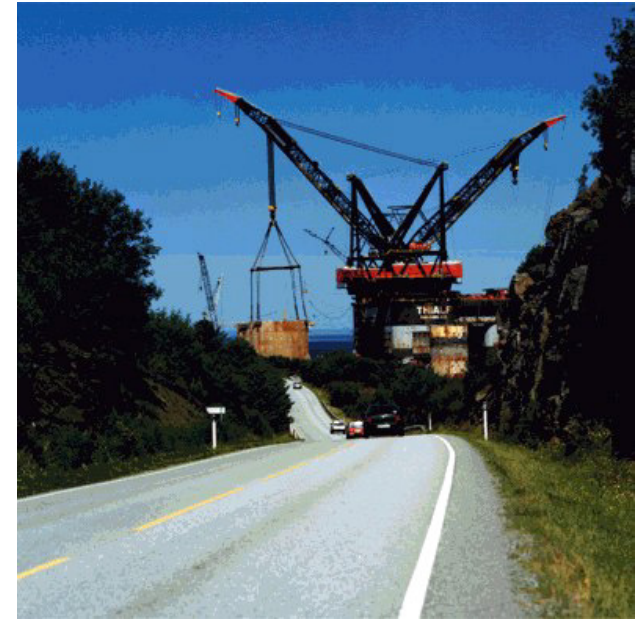
Actor Analysis: Why?

- **Improves insight into the field of forces (perceptions, interests, means, etc.) and contributes to a better approach to a solution**

- **Reduces the chance that important values or risks are forgotten (due to systematic character)**

- **Increases the chance that different stakeholders are willing to lend their co-operation to solving the problem.**

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History of actor analysis

- Historical roots: stakeholder analysis (and others)
- Gained popularity in public administration especially for its use in relation to project management
- Prepare the implementation of (controversial) projects:
    - Supporters and opponents?
    - How to keep everyone informed and involved?
    - Prevent delays, litigation, other problems
    - Galvanize support
- In this tradition (among others): article Bryson (2004)

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Actor and Network analysis, WHY?
(arguments for public participation and/or Stakeholder involvement)

- Improve quality of solutions – knowledge and ideas

- Opportunities/threats

- Democratic concerns

- Support

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Our main Questions

- What are the potential elements of a stakeholder/multi-actor analysis in the case of analyzing a technical complex project in a multi-actor setting?

- In other words: what do you want to know about the actors?

- Who are they? when to involve them for what?

- What is the history, context, existing dialogues, lack of

- How are they organised, their network and potential influence, formal and informal power…

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Actor analysis for policy analysts

Policy analysis activity	Actor analysis can help to…
Research and analyze	Mobilize knowledge and information from a broad actor base, which is likely to improve the quality of the problem analysis
Advice strategically	Assess the feasibility and implementability of policy options, by mapping the positions, interests, resources, and relations of actors
Mediation	Map conflicts, identify (potential) coalitions of actors, propose an agenda for a negotiation process, and participants in various stages of discussion.
Clarify values and arguments	Include the full range of values and arguments in a problem analysis, which aids acceptance by different parties, offering a better basis for agreement and cooperation concerning policy options

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What do we want to know/ understand

Actor analysis:
- Characteristics
- Objectives and goals
- Perceptions, Means and Strategies

Game analysis:
- Arena's
- Issues/argumentations/conflicts

Network analysis:
- Relations
- Structure (formal relations; laws and rules)
- Culture

And the analyst's understanding is biased by his/her own values, background mandate…interpretation of interpretations

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Actors in 'our' system diagram

disposes

Problem owner

defines

Measures

M₁ M₂ M₃

objectives

Lead to

contextual-factors

wind

tide

rain

safety

cost

environment

criteria

Co-define

system

stakeholders

"system boundary"

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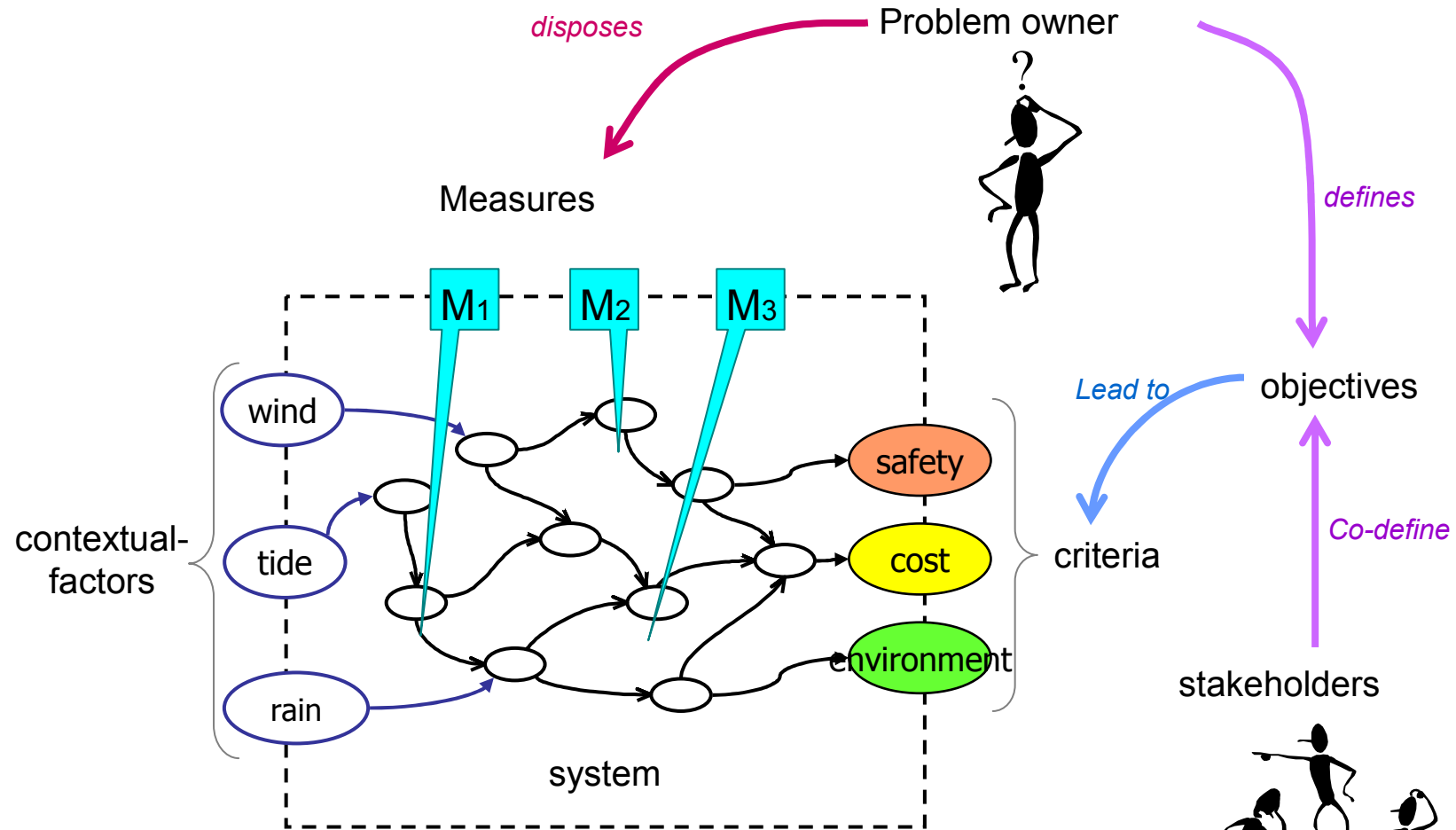
BE2

Please use new figure from reader!
Bert Enserink, 2009/3/31

Where can we find information about actors?

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Where can we find information about actors?

- **written documents, annual reports/folders, websites**
- **interviews of the main stakeholders, experts about their understanding of the problem (scoping interviews)**
- **interviews of stakeholders about each other's positions**

- **Sometimes: estimation of positions based on existing knowledge (experience)**

- **Attention: positions of actors may not have crystallized out, and may change over time! Dynamic thinking – dynamic approach**

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Structure of this lecture on actor analysis

1. Why actor analysis?
2. What is actor analysis?
3. How to do an actor analysis?

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What *is* actor analysis?
What does it analyze?

- **Actors:**

    - Have a certain interest in the system, and/or

    - Have some ability to influence that system

- Actors are often groups and organizations, but also (important) individuals can be considered as actors

- **Network:**

    - more or less stable patterns of social relations between actors

    - Networks take shape around policy problems or programmes

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Actor and network analysis

- ■ 'Rational' actor perspective, actions influenced by:
    - Objectives, interests and underlying values
    - Perceptions ('how the world operates')
    - Means, resources and instruments (e.g. formal authority, money, expertise, etc.)
- ■ Actions in networks are further influenced by:
    - Structure of the network and the position of the actor (many/few actors, hierarchical structure or not, centrality of actors, density of networks,…)
    - Rules in the network (formal and informal)
    - Note: actors influence networks and vice versa!

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Action arena

(arrows in arena depict actions by actors)

Rules

Actor
- perceptions
- resources
- objectives

Actor
- perceptions
- resources
- objectives

Actor
- perceptions
- resources
- objectives

Actor
- perceptions
- resources
- objectives

Actor
- perceptions
- resources
- objectives

Actor
- perceptions
- resources
- objectives

Unilateral action

Unilateral action

Policies
(actions by actors, decided collectively)

Unilateral action

External forces

System domain for policies

Outcomes of interest

- It is generally a good idea to start with a quick and dirty exploration of the multi-actor context

- And sometimes this is also sufficient

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Structure of this lecture on actor analysis

1. Why actor analysis?
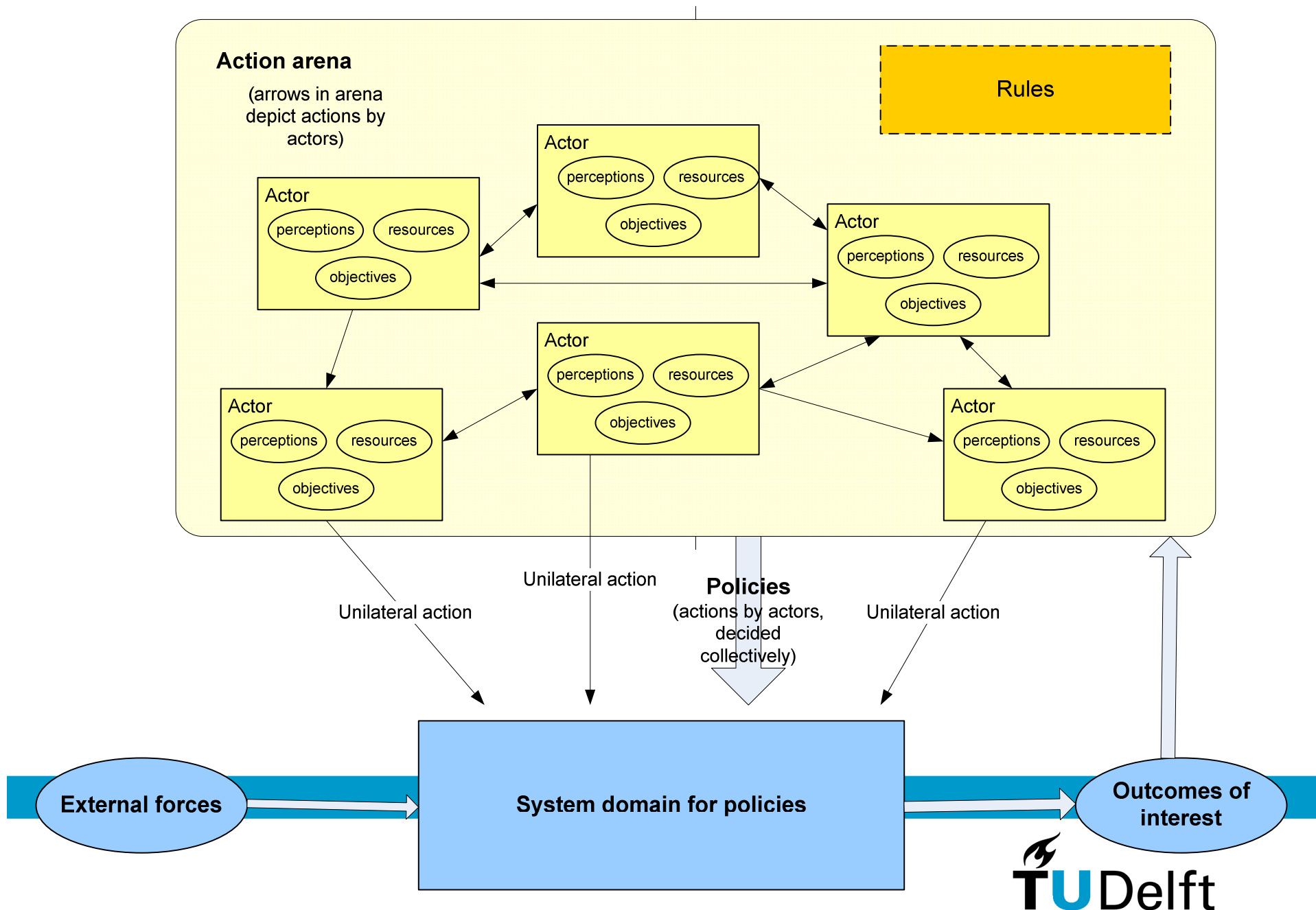2. What is actor analysis?
3. How to do an actor analysis?

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Steps for actor analysis
(Course book, chapter 4)

1. **Problem formulation as point of departure**
2. Inventory of the actors involved
3. Mapping formal relations
4. Inventory of interests, objectives and perceptions
5. Interdependencies: resources and salience
6. Implications for problem formulation and client

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Policy problem (Last week's lecture)

The gap between an existing or expected situation and a norm

The difference between what is considered desirable
(by the problem owner) and the present or
expected future situation

There is the expectation that something can be done
– but what, when, how and by who?

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Step 1: problem formulation

- For your problem owner / client:

- **Gap:**
- Objective (desired situation)
- Current situation (or the expected future situation)
- Identify the possible solutions and instruments to influence the policy system in the desired direction

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Water Framework Directive & diffused pollution

Problem owner:

- Priority planning for policy makers

- Advice on process support activities

- Which regional actors Should be involved at what moment in what way?

Analysts:

- Social-political environment (the network)

- Tensions in policy field because of internal and external characteristics of problem and organisation of policy process.

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Steps 2: Inventory of the actors

1. Problem formulation as point of departure
2. **Inventory of the actors involved**
3. Mapping formal relations
4. Inventory of interests, objectives and perceptions
5. Interdependencies: resources and salience
6. Implications for problem formulation and client

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Step 2: Inventory of the actors
Actor identification techniques

- **Influence**: Use causale analysis and system diagram to see who can influence important factors
- **Interest ('imperative')**: Who has an interest in the problem and/or in possible solutions?

- Position (formal positions, see also step 3)
- Reputation (snowballing and 'focal organization')
- Social participation
- Opinion leadership
- Demografic characteristics

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Step 2: Inventory of the actors
Characterising Actors

	Values	Perceptions	Resources	Networks
Actor 1				
Actor 2				
Actor...n				

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Step 2: Inventory of actors
Possible Complications

- Dealing with composed actors

- Setting network boundaries

- Structuring the list of actors

- …

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Step 2: Dealing with composed actors

- If different departments of a composed actor clearly have a distinctive interest or position in the policy problem at hand, then you should include each of them as a separate actor

- Select the highest possible organizational level, without losing relevant information (see above), or including irrelevant goals

    - NB: No 'Government' of 'private sector'!

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Step 2: Some general advice on actor identification

- Start with a longlist of actors, shorten afterwards:
  - Match with chosen level of analysis: systems diagram
  - Balance different interests and positions
  - Pragmatic: ten to twenty actors on the list…
  - Iterative: adding or deleting actors later on…

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Inventory of actor in the implementation of the WFD

- Authorities
- Private bodies
- Industries
- Farmers
- Social organisation-
- Political parties
- Non-organised interest: residents users citizens

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Step 3: Mapping formal relations

1. Problem formulation as point of departure
2. Inventory of the actors involved
3. **Mapping formal relations**
4. Inventory of interests, objectives and perceptions
5. Interdependencies: resources and salience
6. Implications for problem formulation and client

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Step 3: Mapping formal relations

- Desribe the formal positions and responsibilities of actors
- Describe the laws, regulations and official procedures
- Formal relations diagram

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Step 3: the formal chart. Example: Venice

US Environmental Protection Agency

US Department of Agriculture

Safe Drinking Water Act

Federal agricultural laws

New York State government

NYS Dep of Health

NYS Dep of Environmental Conservation

NYS Dep of Agriculture and Markets

Approval of watershed regulations

Permits, Pollution Standards

Agricult protection plans

NY City Dep of Environmental Protection

Health interest groups NY City

Watershed regulations

Catskill Watershed Corporation

Watershed Agricultural Council

Delaware County government

Dep of Planning and Economic Development

Soil & Water Conservation District

Cornell Cooperative Extension

Discharge permits

County regulations

Waste water treatment plant operators

Farmers

Operation contracts

Businesses

Town regulations

Towns / villages

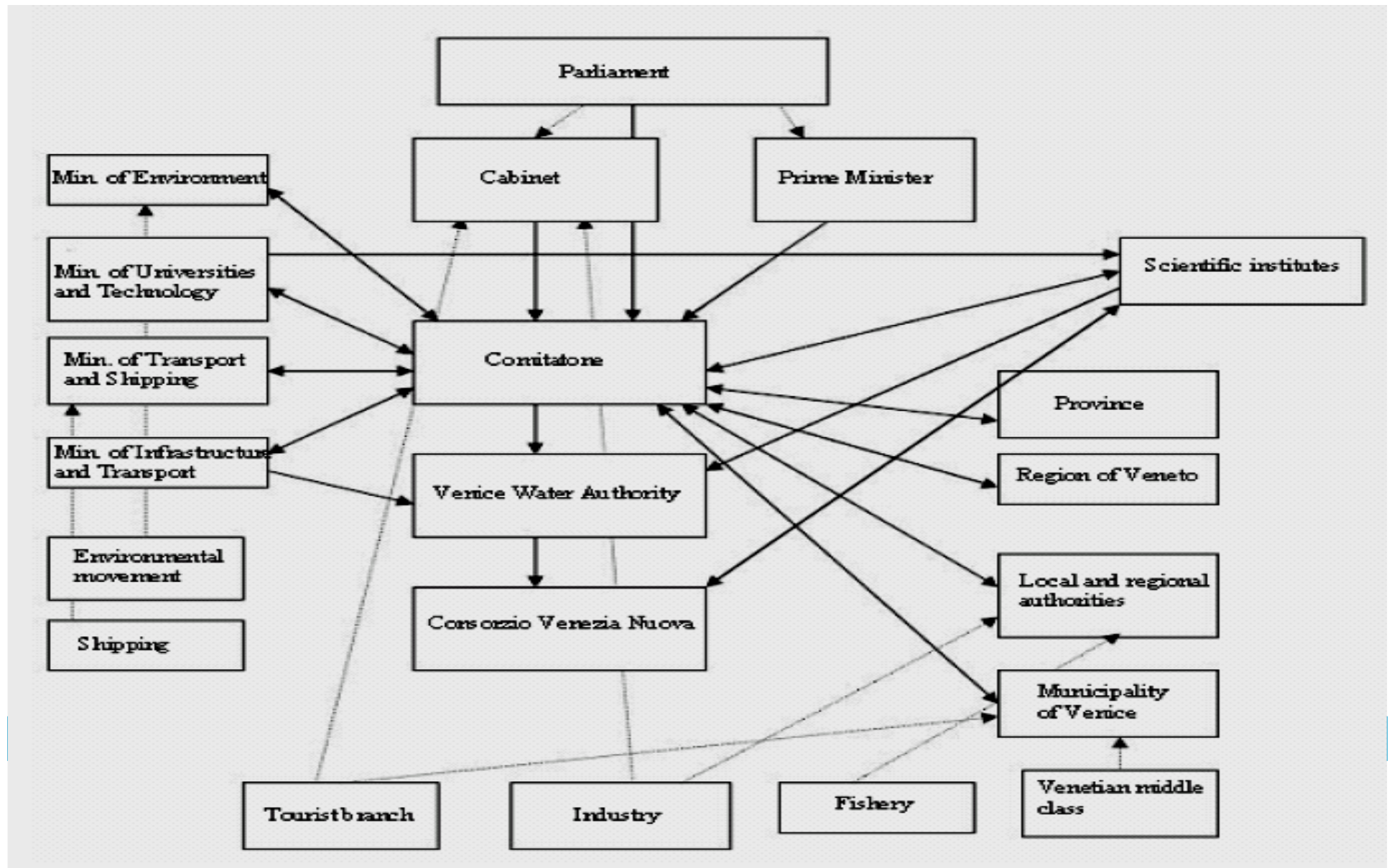Delaware County Chamber of Commerce

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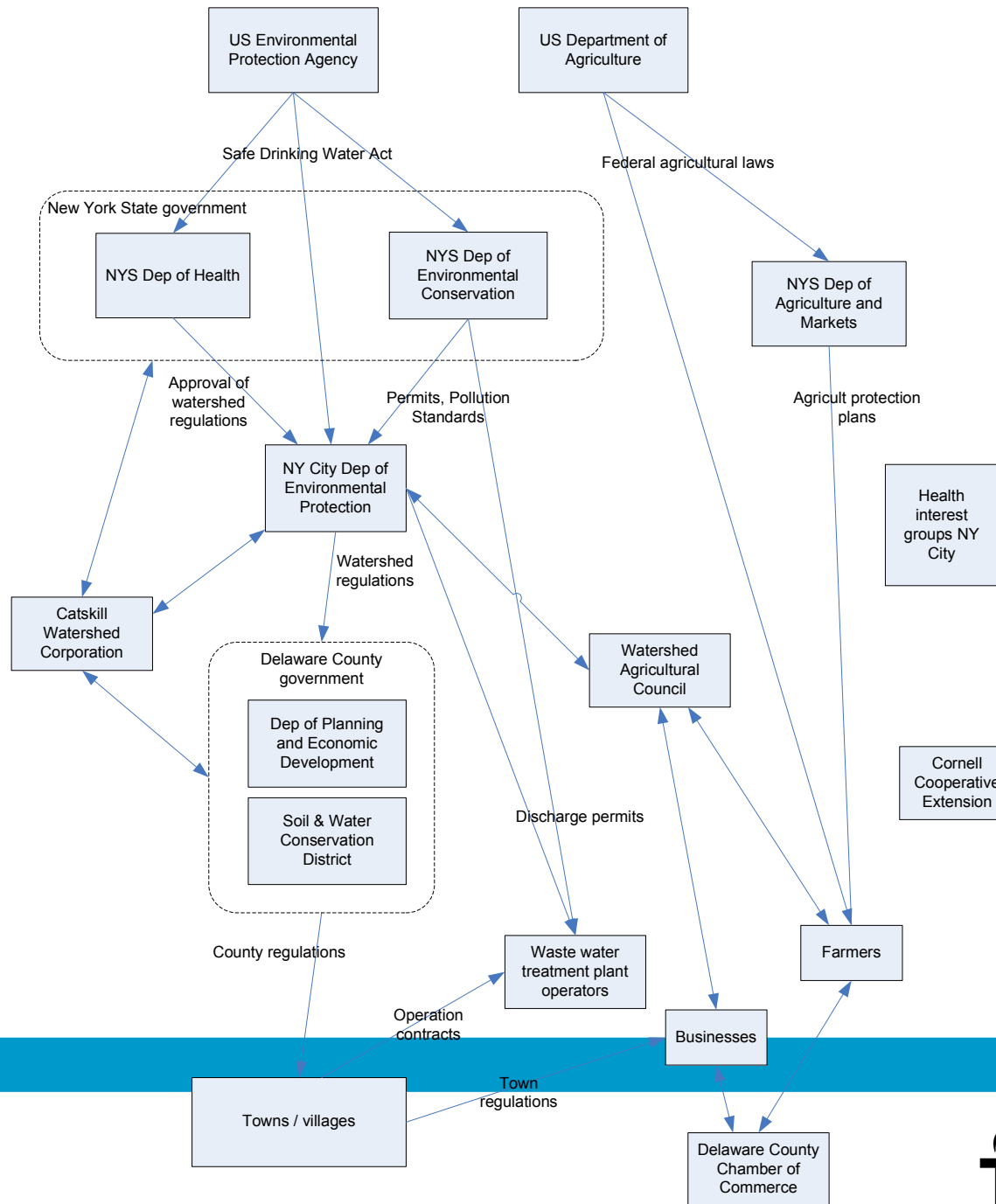
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Step 4: Interests, objectives and perceptions

1. Problem formulation as point of departure
2. Inventory of the actors involved
3. Mapping formal relations
4. **Inventory of interests, objectives and perceptions**
5. Interdependencies: resources and salience
6. Implications for problem formulation and client

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Step 4: Interests, objectives and perceptions

Objectives:

- what do actors want to achieve / change?
- Perception of existing or expected situation
- Definition and causes of the gap

Interests:

- why do actors want to achieve these things?
- Why do they care?
- Possibilities of perspetive/values change (influence)

Problems ARE NOT objective but a social construct

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Step 4: Interests, objectives and perceptions

Fundamental objectives: based on values (in Dutch: belangen): the reason why they wan to reach their objective

- Norms and objectives not directly connected to a specific issue or situation
- Mostly relative abstract, relatively stable in time

Objectives (in Dutch: doelen) what they want to acheive

- actual and concrete
- Imply a value judgement
- Objectives fit a specific problem

Methods

- make objectives tree, objectives-means diagram

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Step 4: Interests, objectives and perceptions
Overview table of problem perceptions

Actors	Interests	Desired situation/ objectives	Existing situation and gap	Causes	Possible solutions
Actor 1					
Actor 2					
Actor N					

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Step 5: Interdependencies

1. Problem formulation as point of departure
2. Inventory of the actors involved
3. Mapping formal relations
4. Inventory of interests, objectives and perceptions
5. **Interdependencies: resources and salience**
6. Implications for problem formulation and client

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Step 5. Interdependencies (a)

- Make an inventory of the resources of actors
  - Who are the critical actors?

- Determine the dedication of actors (salience)
  - Who are the dedicated actors?

- Determine agreement and conflict with interests and objectives of problem owner

- Map interdependencies in overview table or map

- What does this mean for your problem owner?

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Step 5. Interdependencies (b)
Resources

- information

- knowledge (and skills)

- manpower

- money

- authority / formal power

- position in the network: access to other actors

- Legitimacy (and moral authority)

- organization (ability to mobilize and use resources effectively and efficiently)

- others, such as… …

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Step 5. Interdependencies (c)
Resource dependency

	Limited importance	Great importance
Limited replaceability	Medium level of dependency	High dependency
Great replaceability	Low dependency	Medium dependency

Step 5. Interdepencies (d)
Table for the identification of critical actors

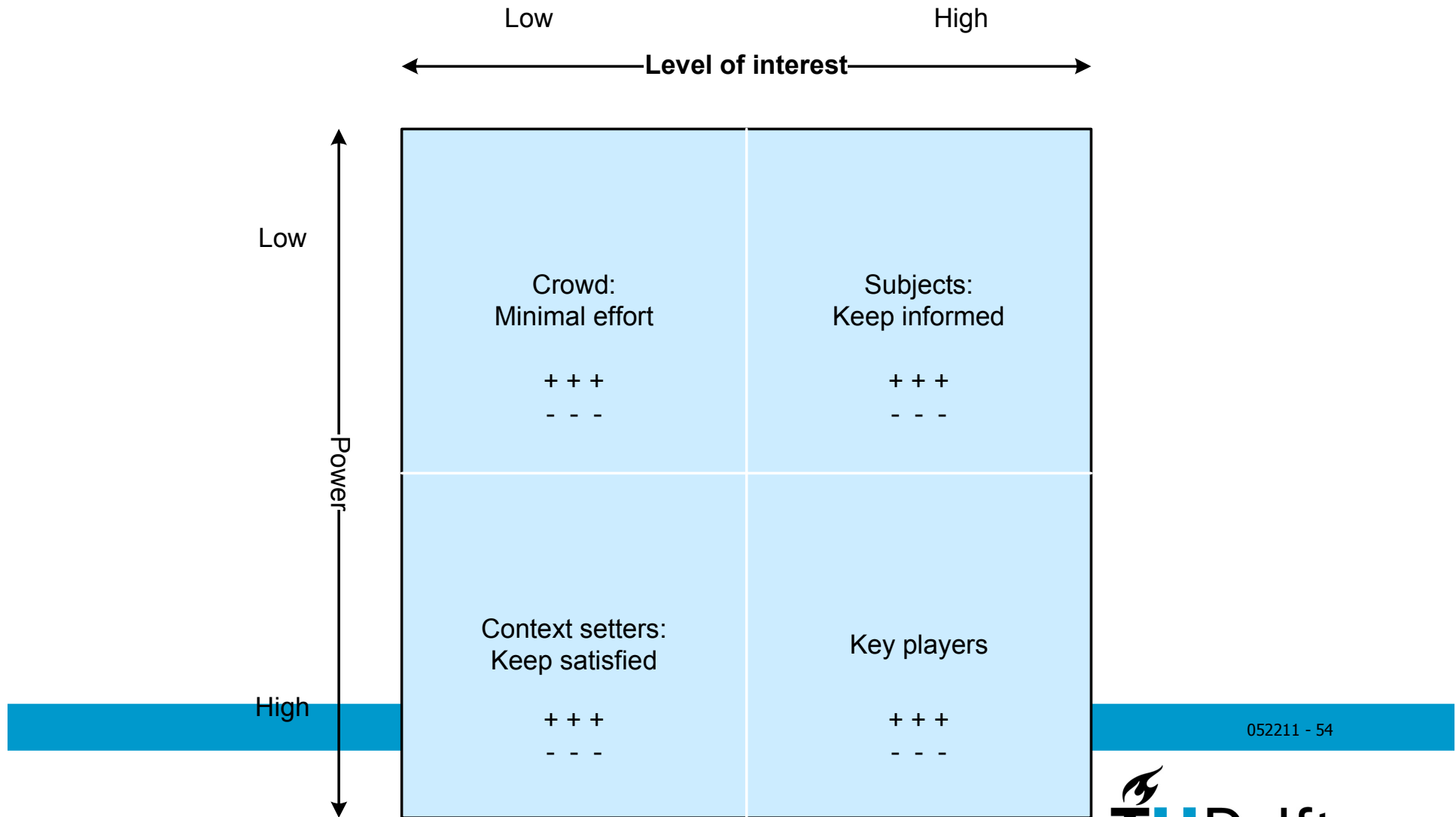| Actors	Important resources	Degree of replaceability	Dependency	Critical actor?
Actor 1				
Actor 2				
Actor N				

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Stap 5. Interdepencies (e)
Overview table interdepencies

	Dedicated actors		Non-dedicated actors	
	Critical	Non-critical	Critical	Non-critical
Similar / supportive interests and objective	Strong allies	Weak allies	Indispensable allies that are hard to active	Actor that do not have to be involved (initially)
Conflicting interests and objectives	Strong opponents (biting dogs)	Potential critics (barking dogs)	Potential strong opponents (sleeping dogs)	Actors that need little attention (initially)

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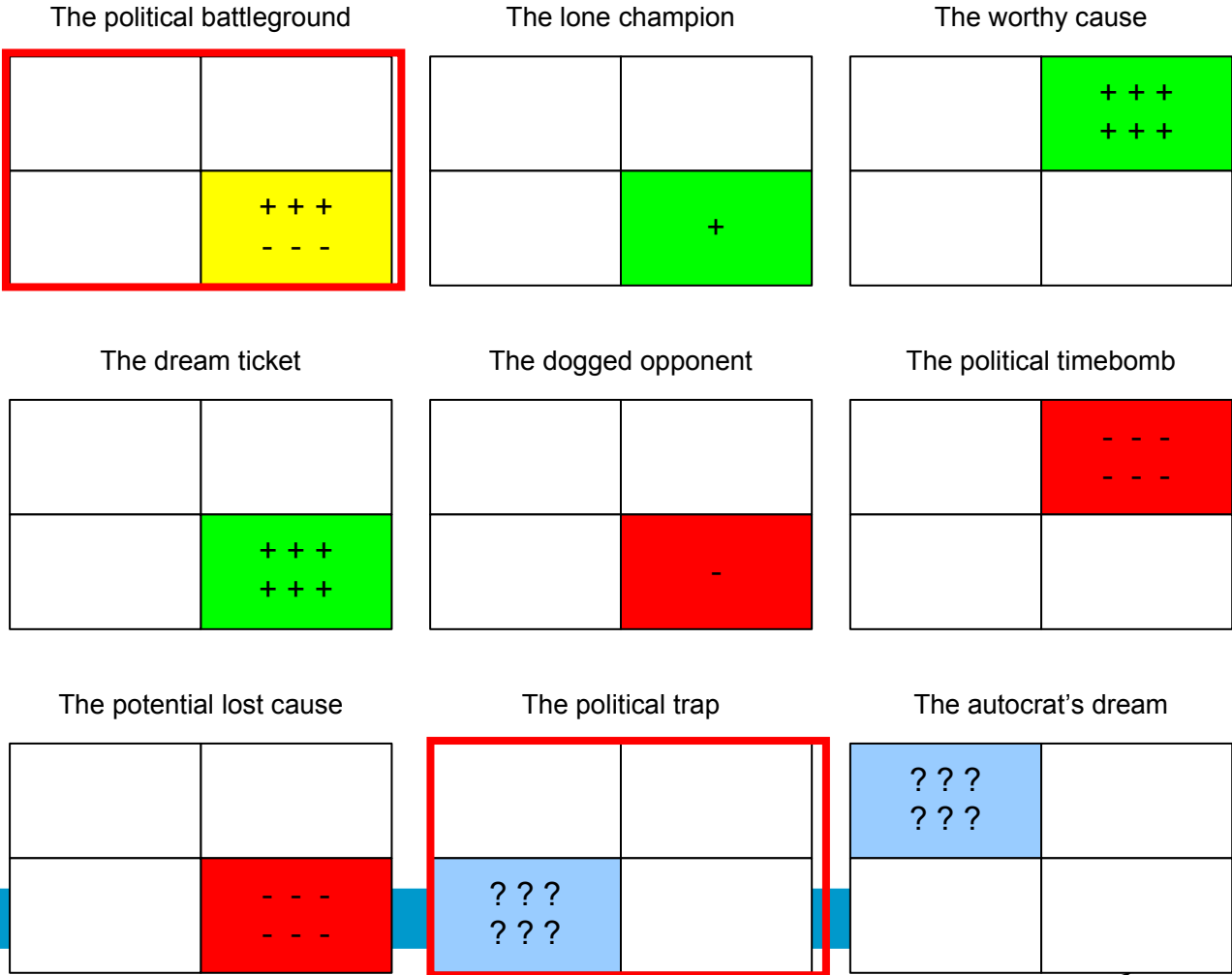# Step 5. Interdepencies (f)
Stakeholder map / Power-interest grid

Low   High

◄————Level of interest————►

Low

Power

High

	Crowd: Minimal effort + + + - - -	Subjects: Keep informed + + + - - -
	Context setters: Keep satisfied + + + - - -	Key players + + + - - -

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Step 6: Implications

1. Problem formulation as point of departure
2. Inventory of the actors involved
3. Mapping formal relations
4. Inventory of interests, objectives and perceptions
5. Interdependencies: resources and salience
6. **Implications for problem formulation and client**

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Step 6. Implications (a)
'stakeholder maps'

The political battleground

The lone champion

The worthy cause

The dream ticket

The dogged opponent

The political timebomb

The potential lost cause

The political trap

The autocrat's dream

Source: K. Scholes, 'Stakeholder mapping', Chapter 10 in V. Ambrosini et al. (ed.) *Exploring Techniques of Analysis and Evaluation in Strategic Management*. Prentice Hall Europe, 1998

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Step 6. Implications (b)
Especially for the 'critical' actors!

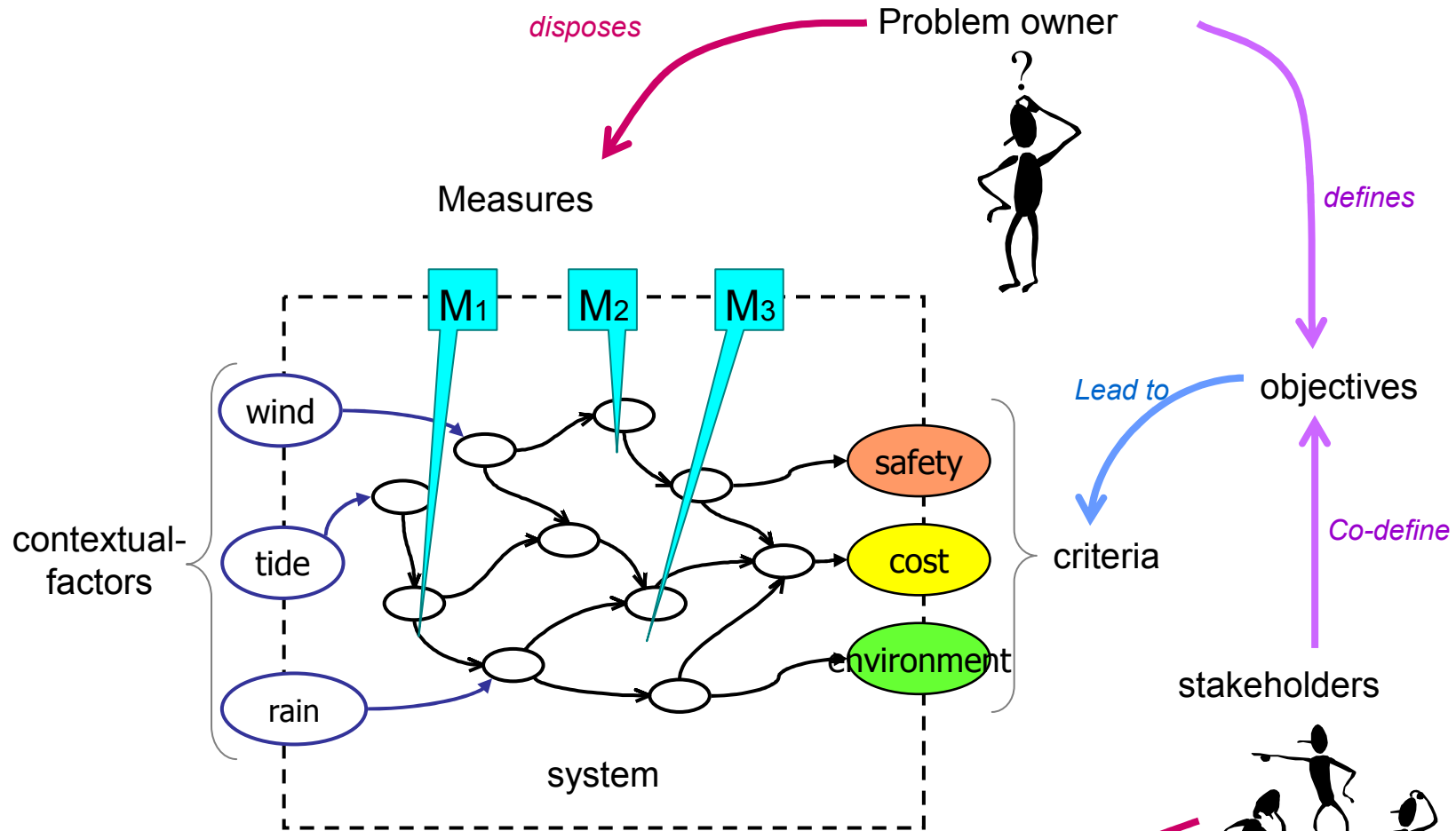|	Dedicated actors		Non-dedicated actors	
	Critical	Non-critical	Critical	Non-critical
Similar / supportive interests and objective	Strong allies	Weak allies	Indispen-sable allies that are hard to activate	Actor that do not have to be involved (initially)
Conflicting interests and objectives	Strong opponents (biting dogs)	Potential critics (barking dogs)	Potential strong opponents (sleeping dogs)	Actors that need little attention (stray dogs)

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Step 6. Implications (c)
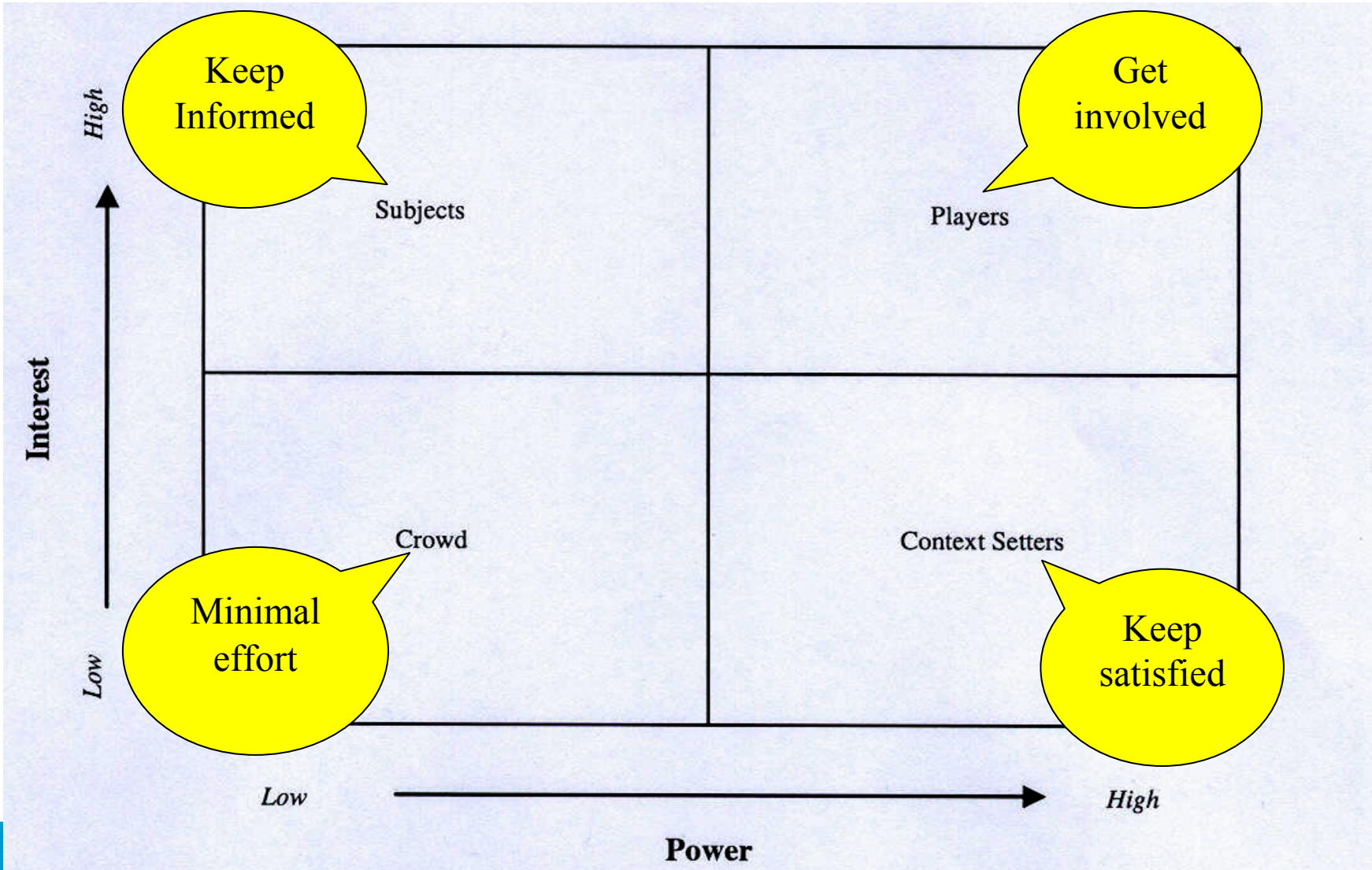
Figure 3 **Power versus interest grid**
Source: Eden and Ackermann (1998: 122).

Step 6. Implications (d)
Problem analysis

disposes

Problem owner

Measures

defines

M₁   M₂   M₃

contextual-factors

wind

tide

rain

safety

cost

environment

Lead to

objectives

criteria

Co-define

stakeholders

system

Dispose of

"system boundary"

Measures – influence on system or its context

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BE3

Please use the new figure!

Step 6. Implications (f)
Three types

- Consequences for:

  1. Problem formulation (content)
  2. Interaction with actors (see previous slides)
  3. Research questions and activities

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Step 6. Implications (g) Structural and cultural aspects of the network

- Qualitative analysis of informal relations

  - What coalitions?

  - What competition/cooperation?

  - What conflicts?

- How to manage actor and context uncertainty? Anticipate/ model future network dynamic.

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Limitations of actor analysis

- **Data collection**
    - Documents – rare to find
    - Interviews with actors – time and access?
    - Key-informants – well-informed and reliable?
    - Sometimes: simply indicate that information is lacking
    - 'Hidden agendas'
- **What if actors haven't taken a clear position yet, or if they are internally divided?**
- **Dynamics: actor analysis provides a snapshot**

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Limitations of actor analysis (contd.)

- Final tables and graphs are 'polarizing'; points to differences and conflicts, not how to bridge them

- Risk of 'self-fulfilling prophecy', especially with classification of opponents

- Ethical considerations may be lost with strategic focus on 'critical' actors with important resources

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Today's learning objectives

- To know what an actor analysis is and when and why you would use it

- To be able to perform a (fairly simple) actor analysis

- (To understand (im)possible uses of actor for own research domain)

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Finally

- Your problem owner depends on other actors – for various reasons

- These actors have ideas of their own

- This will affect the formulation and implementation of policies

- Hence: analyzing actors and their networks

- Next lecture: Scenarios and Dealing with Uncertainies

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