

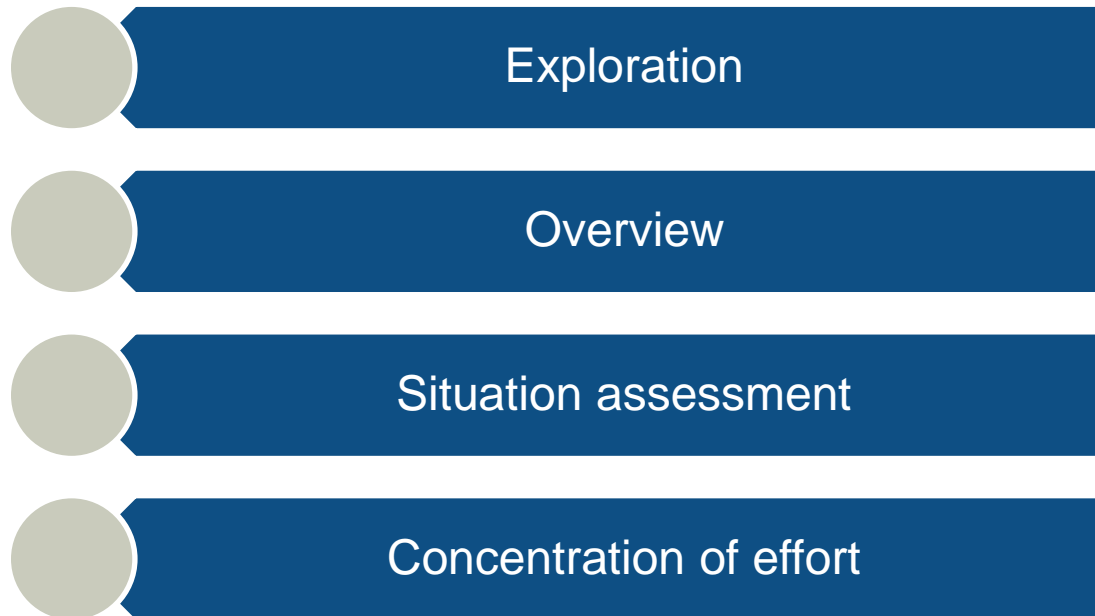


Methodical Hints for the Studio Work Rail&City Development in Isfahan

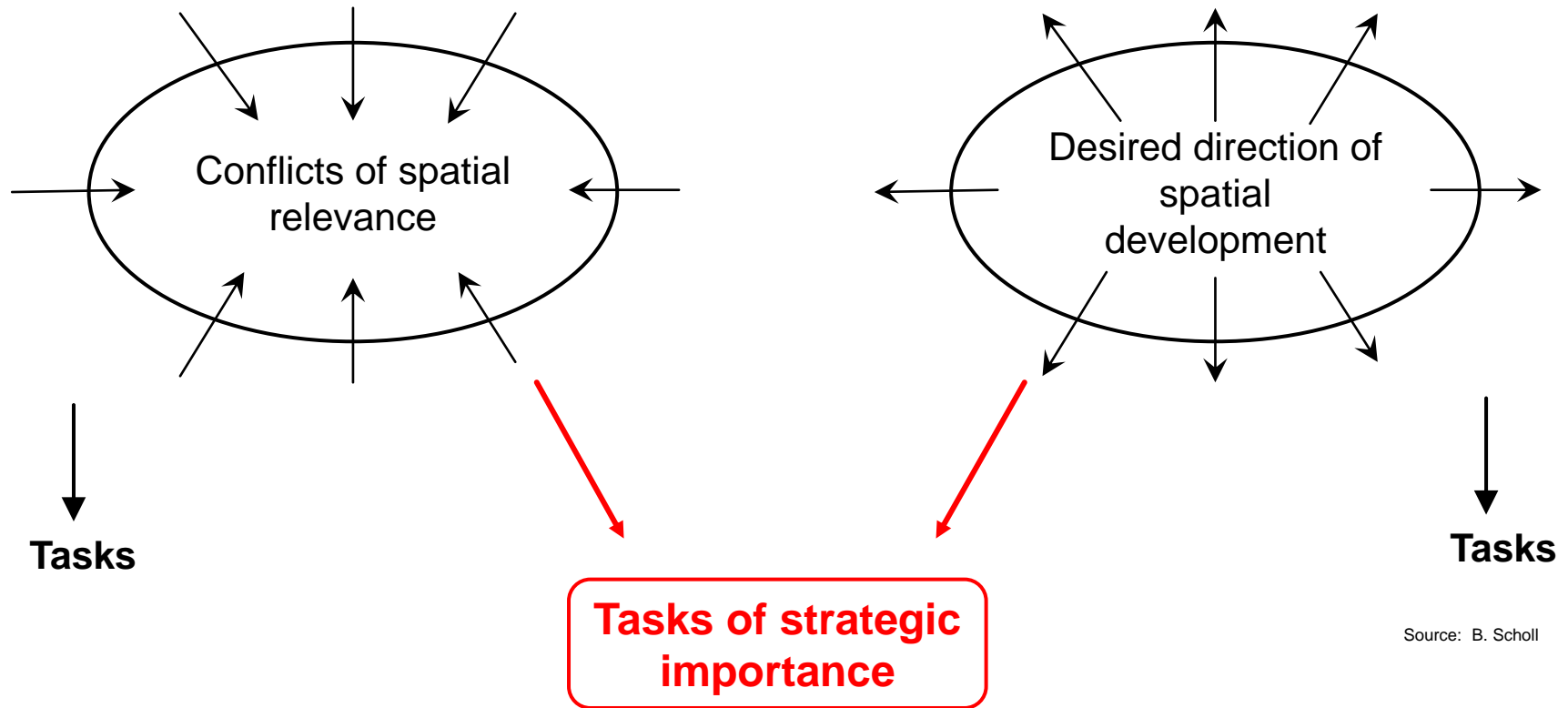
Designing and Arguing in the Context of Spatial Planning

Prof. em. Dr. Bernd Scholl, Isfahan Joint Seminar Week, April 2019

What we have done... and still have to do!



Spatial planning designs are especially important with tasks of strategic importance



Source: B. Scholl

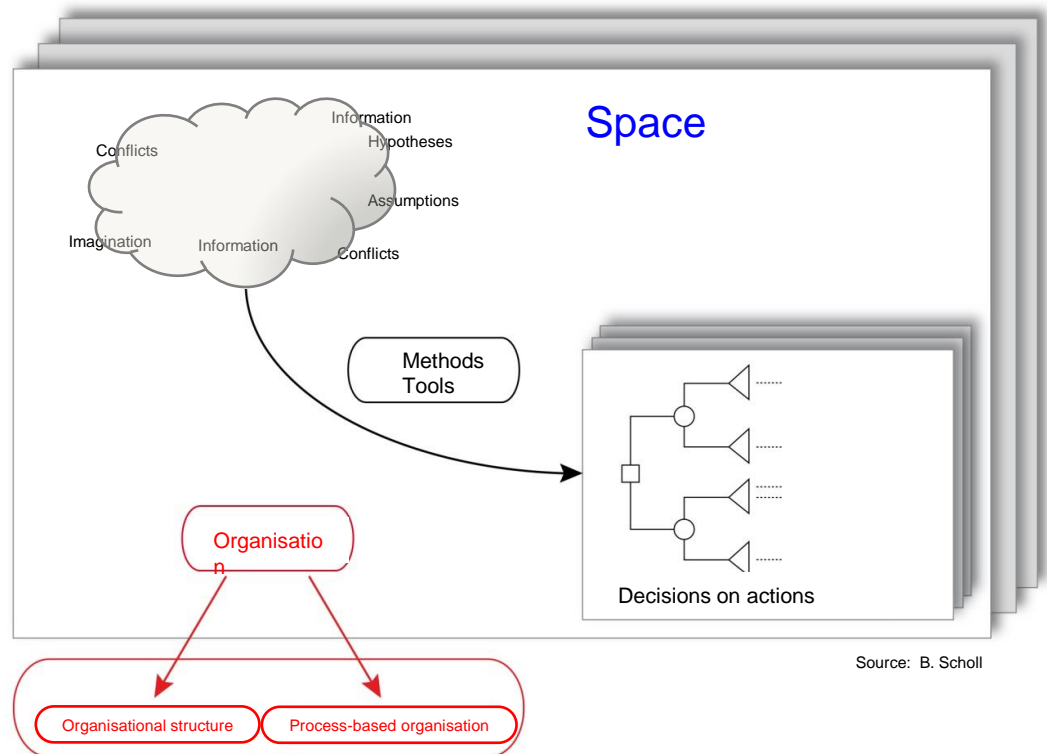
If the solution of a problem resolves conflicts as well as helps implementing desired solution directions in a planning sense, then it is a task of strategic importance (action-orientated planning according to B. Scholl).

Resolutions on actions (Decisions)

In order to manage the recognised tasks, it comes down to decision problems having to be solved: **Who** should do **what** with **which means** in what **time frame**?

When dealing with difficult tasks of spatial importance many actors – public or private – have to contribute **jointly** to the process of searching for solutions, the themselves solutions and the decision preparations.

→ The decision is made by the political decision maker



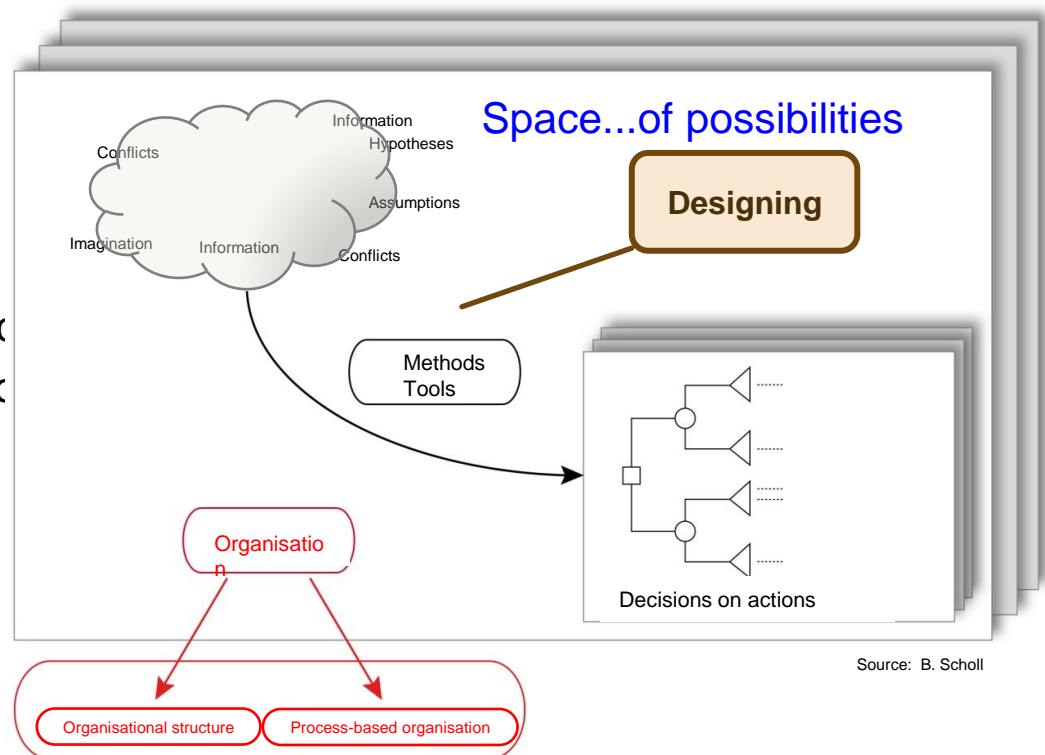
Source: B. Scholl

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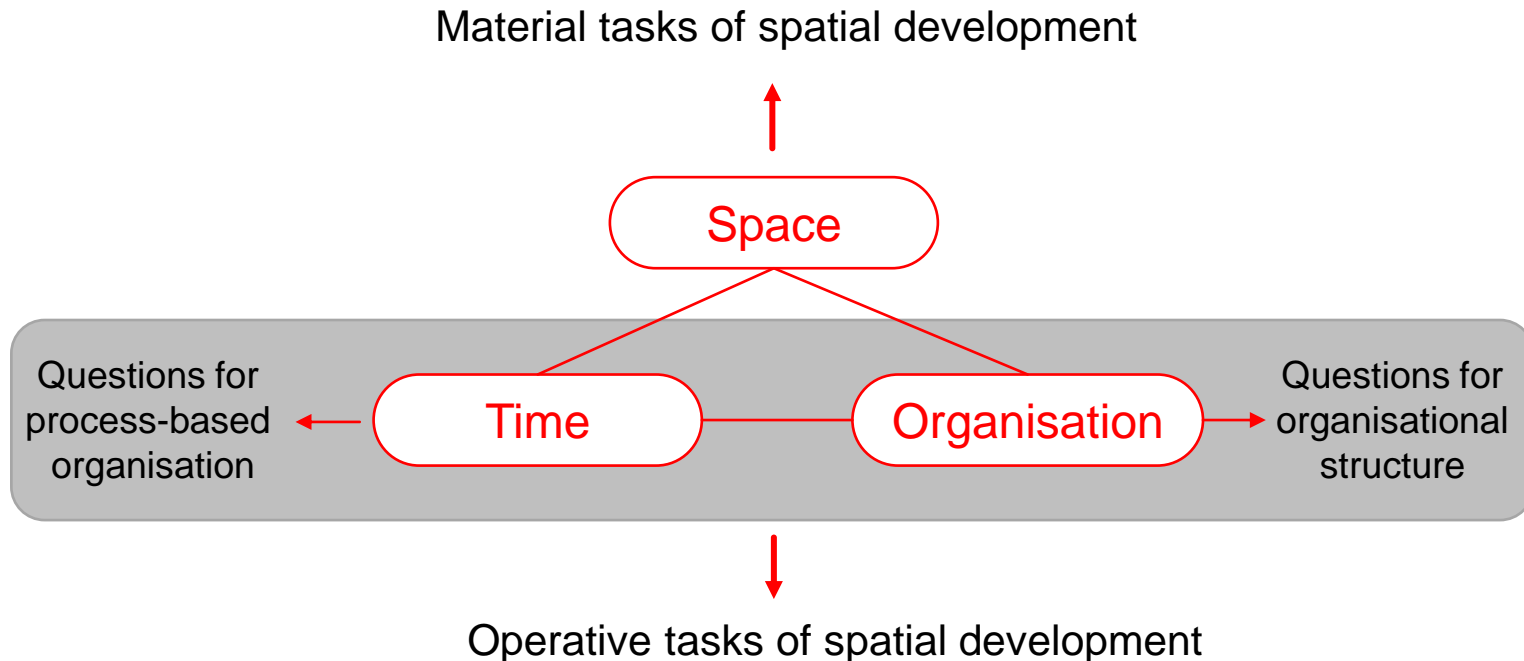
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→ The decision is made by the sovereign!



Space-Time-Organisation

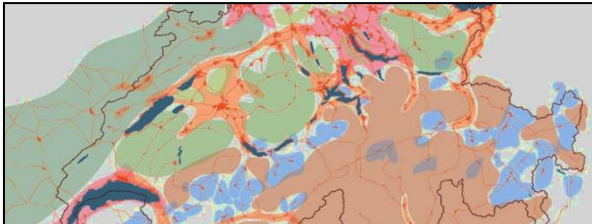
Reminder: Space, time and organisation have to be thought of simultaneously!



Source: B. Scholl

Rules for designing in spatial planning

Simultaneous editing of Space – Time – Organisation:

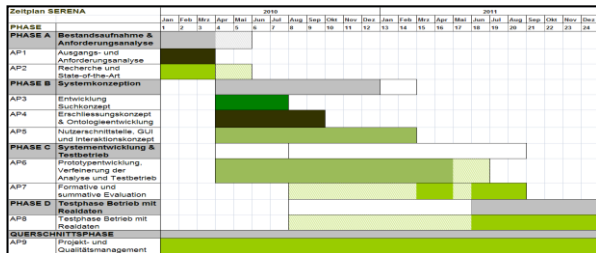


Source: ETH Studio Basel

Space

Designing spatial structures

Design and visualisation of possible solutions

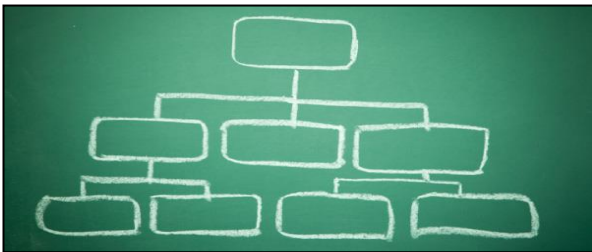


Source: <http://serena.informationswissenschaft.ch/projekt/zeitplan/>

Time

Designing time structures

Succession of the proposed actions and decisions



Source: www.gdv.de

Organisation

Design of organisational structures

Propositions on processes, actors to be involved and their organisational structure

Rules for designing in spatial planning

Orderly process

Interdisciplinary cooperation / integrated editing

Simultaneous editing of Space – Time - Organisation

Competition

Role differentiation

Three level rule / rule of the three passes

Encoding in Word – Image - Number

Rules for designing in spatial planning

The rule of the three passes

= 3 runthroughs with increasing depth

- This ensures controlling and discarding solutions
- The task can be looked at from a superordinate to a detailed point of view quickly

Rules for designing in spatial planning

Three Level Rule (*Regel der drei Massstabsebenen*)

= jointly editing the super- and subordinate level

- Recognise relationships and dependencies
- Test and check the effects of a planning action on the area of interest of a concept.

Designing – Discarding

Discarding – an important part of designing in spatial planning

When designing in spatial planning, the discarded solution approaches are as important as the pursued solution!

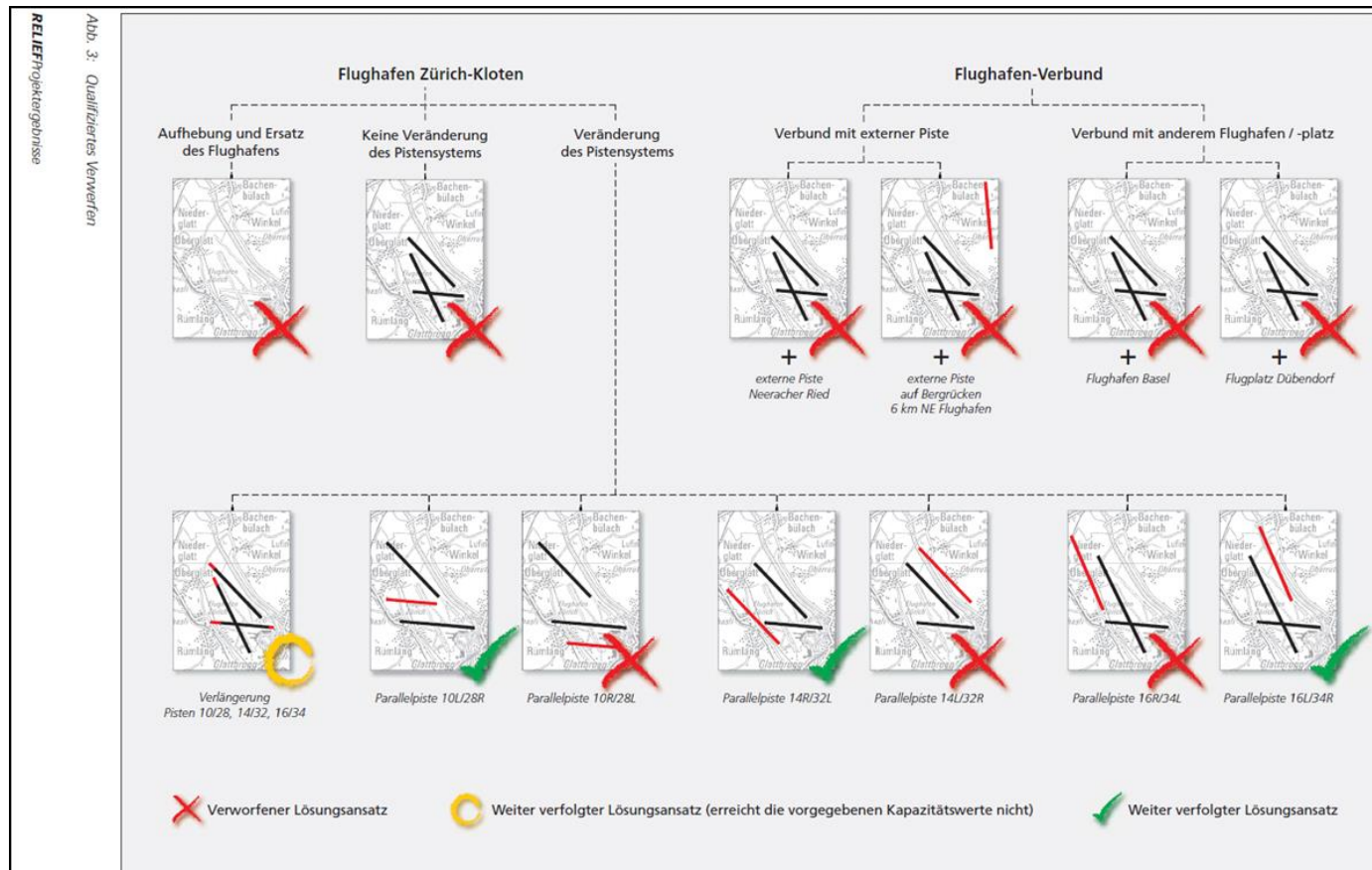
... **why is discarding important?**

→ Discarded solutions show, what shouldn't be done

→ The discussion process continues: There is a danger that discarded solutions are forgotten and „newly invented“ in a later stage

➔ **Qualified discarding** (conclusive justification)

Example: Test planning procedure for the future development of Zurich Airport



Source: Amt für Raumordnung und Vermessung des Kt. ZH (7.Juli 2004): Bericht zur Erschliessung der Projektergebnisse. RELIEF. Raumentwicklungskonzept für die Flughafenregion und langfristige Infrastrukturentwicklung des Flughafens.

pdf download: http://www.fluglaerm-ost.ch/flop/relief/bericht_20040707.pdf, Zugriff 03.12.2012

Robust solutions, robust designs

Checklist of a robust solution, therefore also for a robust design:

☑ **Modular structure**

= a concept should consist of independently realisable solution elements – no „all-or nothing solutions“. Be aware of big exploits (*“Grosser Wurf”*)!

☑ **Step-by-step implementation**

= manageable solution elements should be realisable after each other– too large investments at a certain point in time are at risk of failing and can lead to „all or nothing“ types of decisions.

☑ **Upwards compatibility of solutions**

= a solution cannot block future developments – do not create any closed solutions. However upwards compatibility of solutions should not predetermine further steps.

☑ **Did you forget anything important?**

= often a reason for the failure of solutions!

Requirements of a design



SoDa-Brücke Euskirchen 2004, Source: Eddi Meier, Fotograf <http://www.edmundmeier.de/archiv/archiv.php>, 12.11.2010

Designing – Representation and communication

A design is also a mean of communication

- The result of designing – the design – mostly consists of plans.
- Plans should be self-explanatory.
- However, the whole background or a conclusive justification is rarely transmitted thereby.
- The choice of the means of communication to represent and justify a spatial planning design is a factor that has to be considered.
- This is why when planning in spatial planning, always consider the argumentation.

Arguing

Argument (lat. «means of evidence, proof»)

= Statement or a series of statements that is used to justify or disprove a thesis.
Arguments are related to each other.

Consideration

= Arguments are reviewed for and against a thesis and weighed against each other.

Argumentation

= Coherent and conclusive explanation and connection of results.

Proof

= A thesis is derived from true prerequisites (premises) by valid logical deductions.

→ *An argumentation does not necessarily lead to a proof, but to a justification*

Basics of arguing

Initial point of a planning argumentation:

Why?	<i>Argumentation</i>
What?	<i>Space</i>
Where?	
When?	<i>Time</i>
Who?	<i>Organisation</i>
How?	<i>Tests</i>

- The initial position of a planning argumentation is often a decision problem.
- A decision always has to be justifiable.
- Exploring and finding these arguments is part of planning.

Which collection of arguments are indispensable to deciding:

- 1: Reasons that speak for a choice
- 2: Reasons that speak against a choice
- 3: Reasons that have been checked but are irrelevant to a decision



Basics of arguing

A concluding quote

„Differentiate the usual scientific argumentation from the planning argumentation.

- The planning argumentation aims to recognize the essential problems for certain areas of influence and for a certain time and to justify decisions based on a minimum of information, which can be as indefinite as possible. It is inductive reasoning, focused on making decisions. It is normative.
- The usual scientific argumentation aims to create common knowledge which can be used for deductions. It is descriptive and explanatory.
- Planning propositions are not deduced from descriptions and explanations. These are only more or less useful inductive evidence. “

Source: Jakob Maurer, Maximen für Planer (translated)

Conclusion

Conclusion

- The **three types of encoding (Language, Image and Number)** are used as a supporting measure with different characteristics in designing and arguing. They should supplement and complement each other.
- A **schematic sketch** is an important graphical depiction. It simplifies facts and displays them comprehensively.
- **Uncertainties** are a core part of planning tasks, which is why handling them is also important when designing and arguing – only if the arguments are **robust** they can also be a solution.
- **Planners do not decide by themselves**, but they design decision proposals or are at least involved in this task. A convincing, conclusive argumentation is a precondition for goal-orientated decisions.