

”The Role of Complexity in Preparing for Municipal Decision-Making”

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1. The starting point for the Paper

-the rational view of the decision-making is one of the most striking behavioral feature of the political-administrative organization because

1) of rational decision procedure is a good way of representing conflict

and because

2) of conflicting interests, there are a need for choice prior to the individual action, and rational decision procedure is convenient and often the only way to make decisions

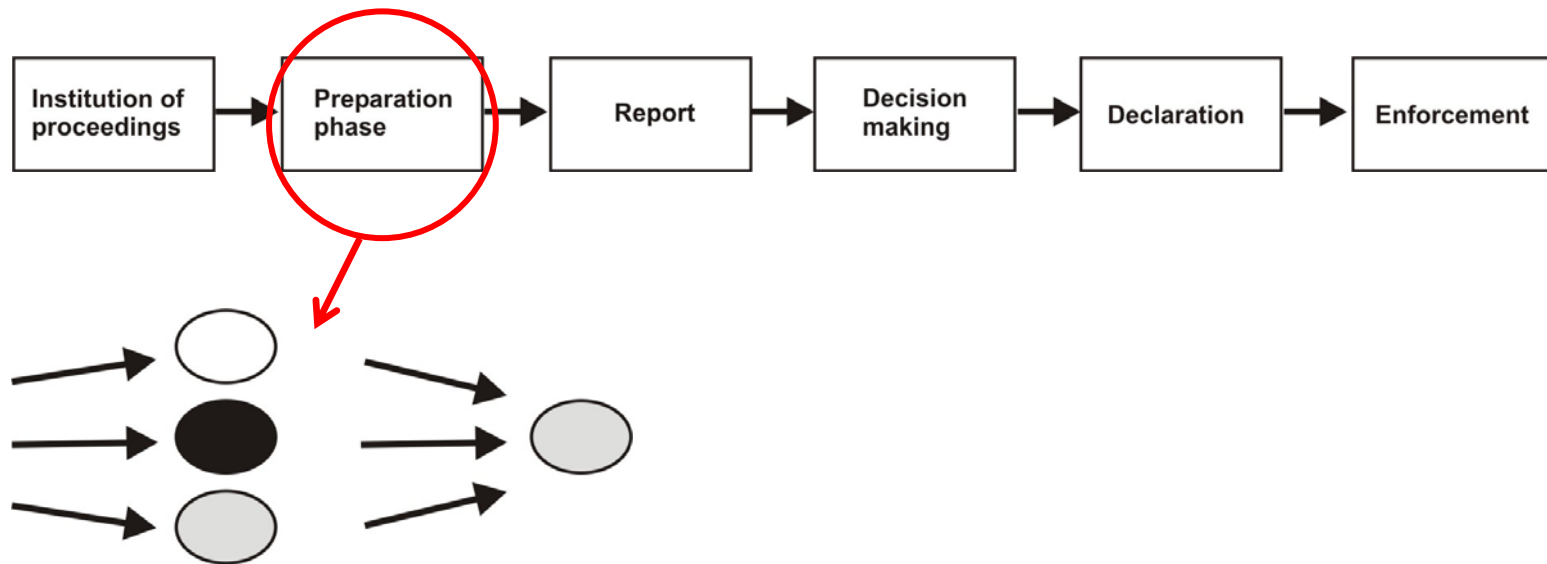
-but is it an adequate point of view?

-the operational environment of the local government is increasingly complex, turbulent and dynamically changing

→ traditional models of the rational political decision-making need to be revised

2. The aim of the Paper

Paper focuses on the reconciliation of the values of democracy and effectiveness with creativity in the context of the **preparation for municipal decision-making**.



Divergence / Convergence

(Maula 2006, originally Arthur Andersen 1999)

3. The theoretical background of the Paper

The ideas and notions presented in this paper are drawn on the **complexity theory**, which has increased its popularity during the past decade and which deals with concepts such as

- * **self-organization** and **emergence**
- * **interaction** and **feedback**
- * **dynamics** and **non-linearity**
- * **connectivity** and **interdependence**
- * **co-evolution**
- * **diversity**

4. A tentative framework for managing complexity in the context of the preparation for municipal decision-making

A paradigm shift which emphasizes **GOVERNANCE** in place of government

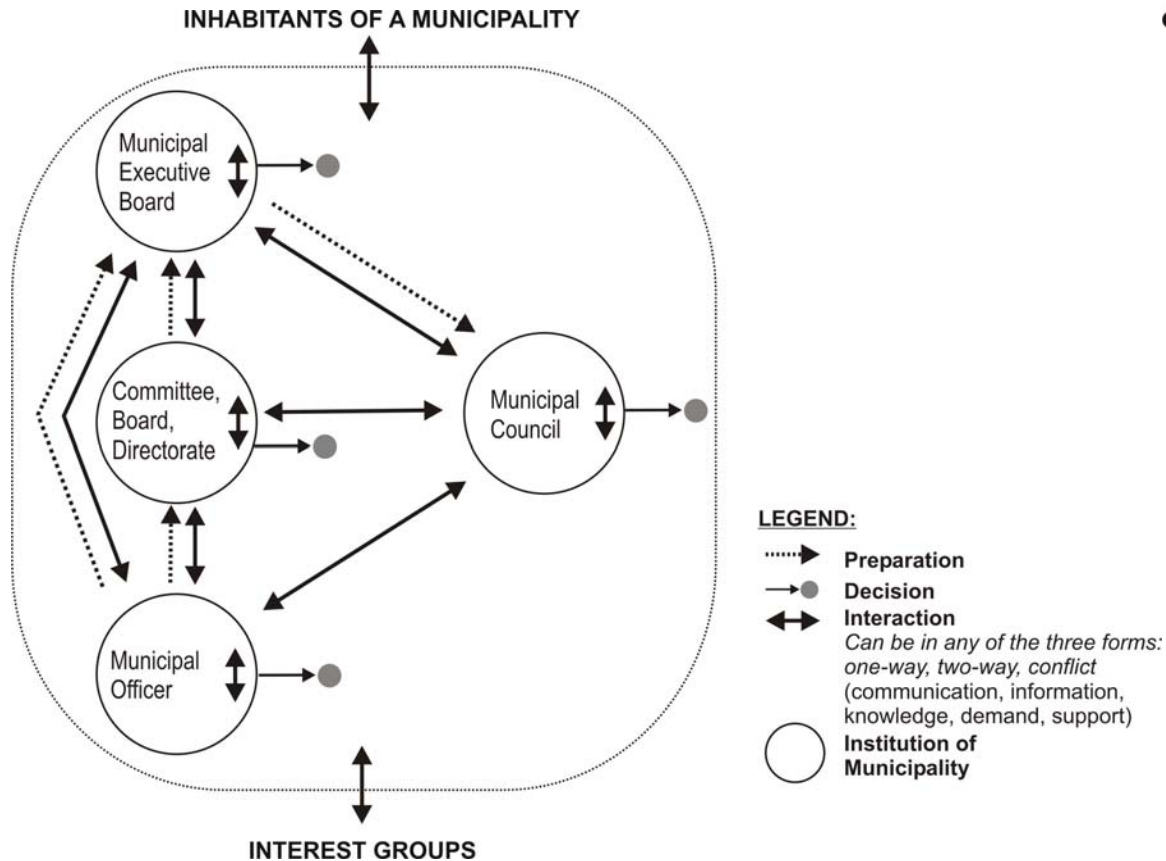
It has been suggested that public organizations are faced with many **wicked problems**.

- no definitive formulation
- no clear stopping rule
- no immediate test of a solution
- essentially unique problem
- often a symptom of the other problem
- they refuse to be bound by administrative limits.

In this respect, governance implies that the challenges of **dynamics, complexity** and **diversity** should be taken seriously, because these characteristics are not just nasty side effects, but **inherent features of postmodern world**.

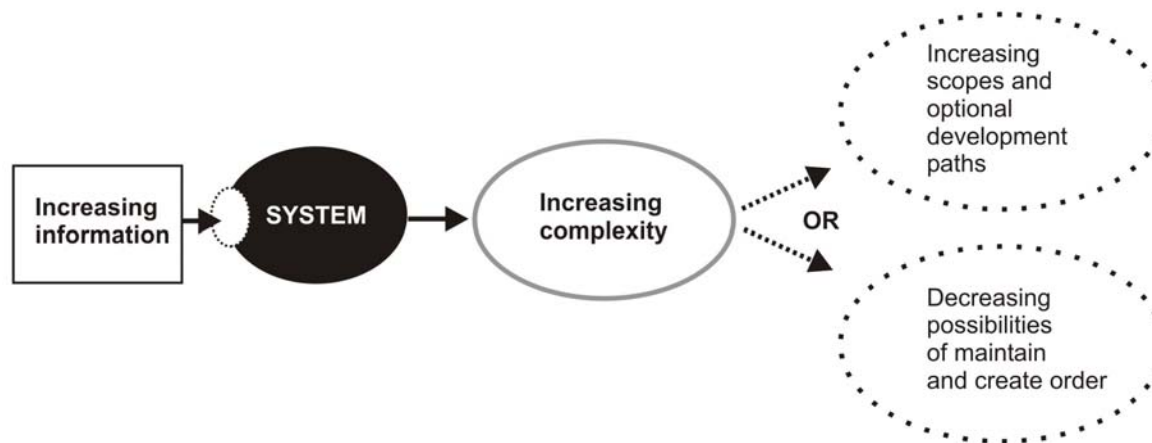
But, what does it mean, when we say, that something is dynamics, complex and diverse, and particularly what should be the elements of that kind decision-making procedure in the local government level?

a) Interaction, communication and information in preparation for municipal decision-making



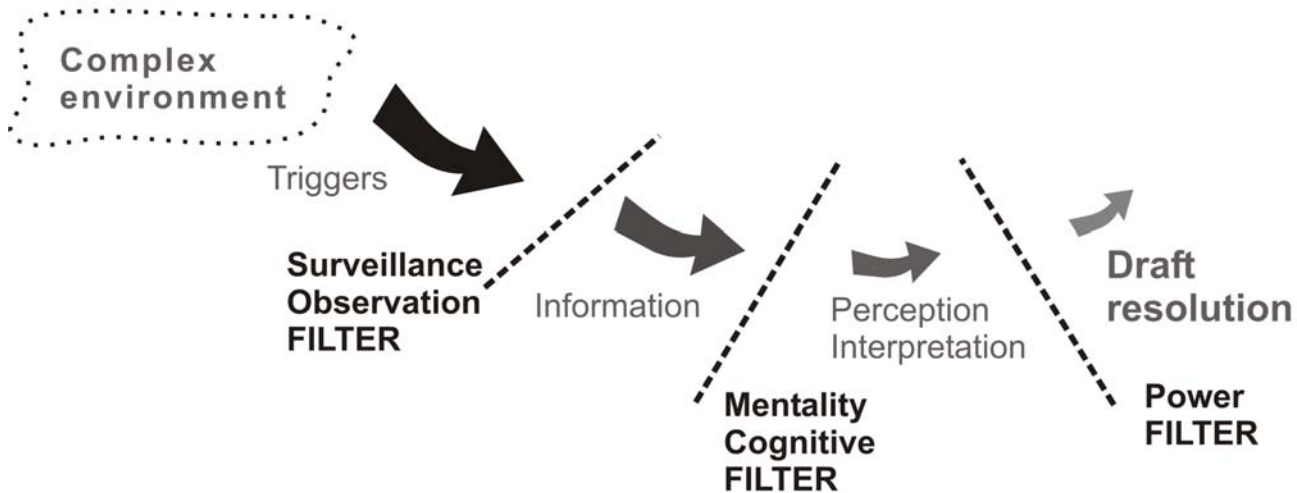
The Finnish municipal preparation and decision-making process

b) Information and knowledge in the preparation work



Consequences of increasing information and complexity (based on Keskinen 2001)

c) Information filters in the preparation work

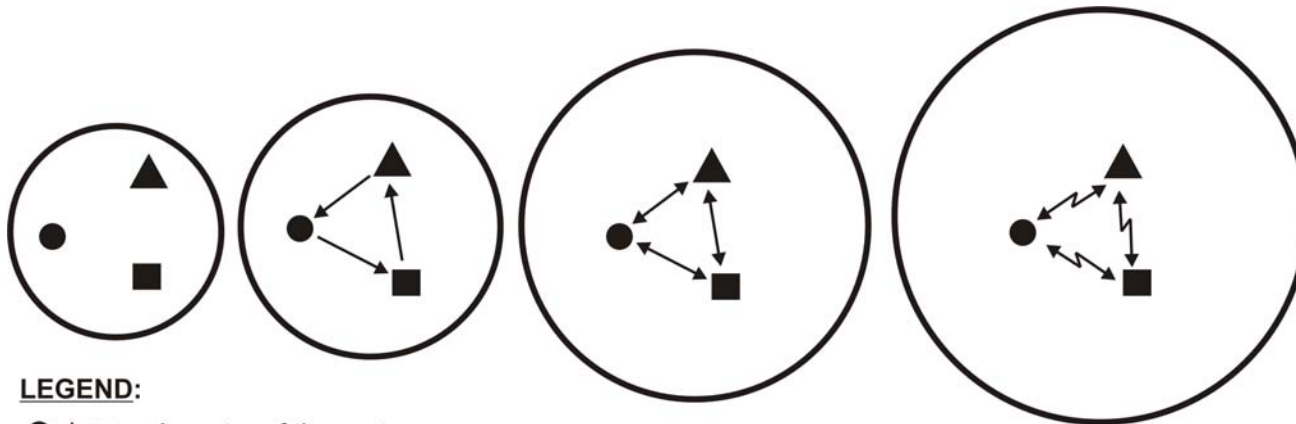


Filters of information (based on Ansoff 1984).



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d) Diversity increases the ability to observe

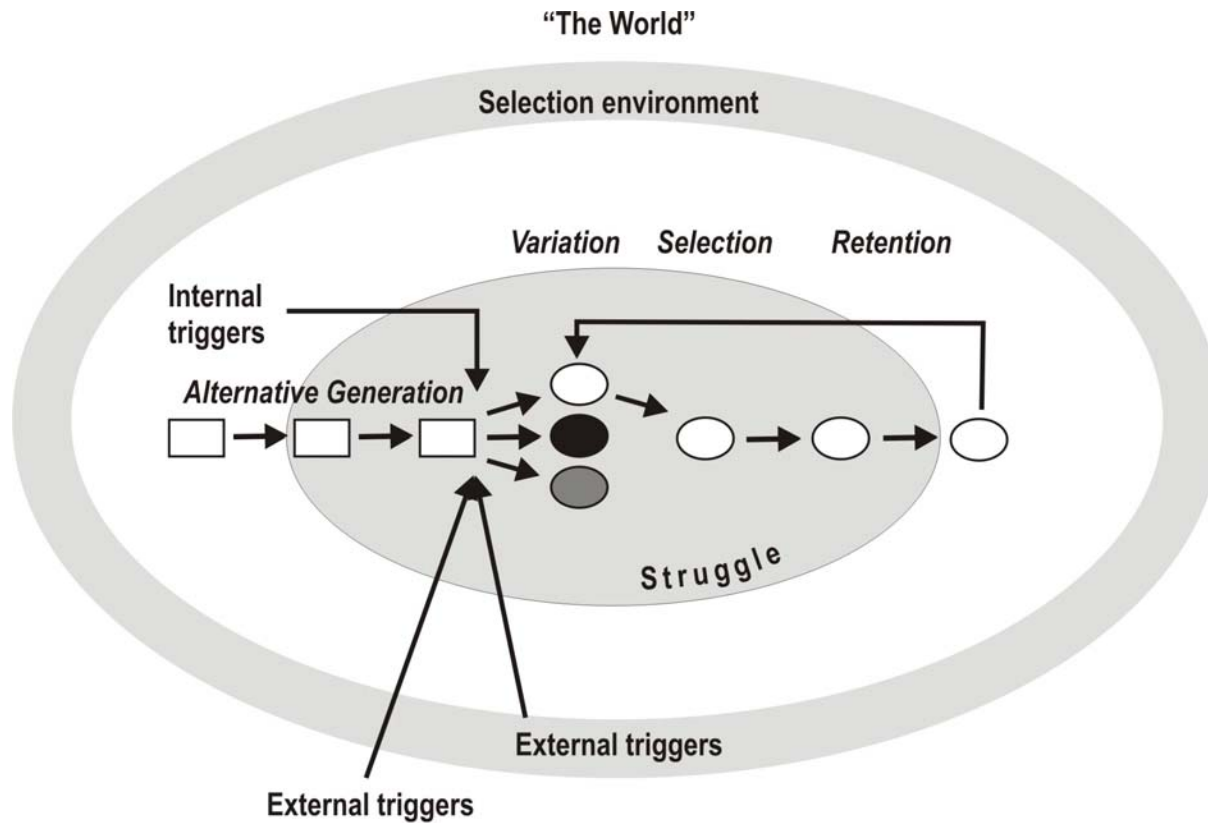


LEGEND:

- ▲ ■ An actor of the system
- One-way interaction
- ↔ Two-way interaction
- ↔ Conflict interaction
- "World" that the system can observe

Diversity means more observation capabilities.

e) Facilitating creativity



The creativity process from evolutionary perspective (adapted from Sotarauta & Srinivas 2006).

f) The role of information technology for preparation work

Information technology is seen as an **emergent phenomenon** which increases the connectivity and interdependencies of the preparation process. Interactive systems, like computer-based communication, are also **feedback systems**, and hence they can generate surprises even while showing identifiable patterns.

Information technology has the potential to '**repluralise**' democratic policy.

From the point of view of information technology, the big question will be how information technology facilitates not just rational decision-making but, in addition, information gathering (observe filter), information evaluation (cognitive filter) and information analysis (power filter) at early stages of the local government decision-making process, i.e., the preparation phase.

5. Conclusions

Conclusion no 1.

The paper suggests that the **preparation of municipal decision-making may benefit from diversity, connectivity, the exchange of information, flexibility, and the utilization of emerging information as an input.** Moreover, the paper proposes that in order to be creative, the local government decision-making system **should have the capacity to evaluate uncertain and conflicting information.**

The paper also outlines one proposed solution to the dilemma of *effectiveness* and *creativity* in local government decision-making: this is **conflicting information** and **diversity** should not be damned as the barrier of the effective working. Instead, they **should be seen as a trigger which activates interactions within the preparation process.**

5. Conclusions

Conclusion No 2.

It can be claimed that the more dynamic environment, the more there is ***need for communication within the preparation process and between the process and its environment.***

Finding a balance between **convergence** (negative feedback) and the **divergence** (positive feedback), the local government decision-making is one step closer to reconciliation of the values of effectiveness and creativity.

5. Conclusions

Conclusion No 3.

Information technology amplifies the complexity and connectivity of the preparation process. The resulting ‘messiness’ should be regarded not only as natural but **crucial for the success of the preparation process**.

It means that **information technology should increase the observation capability of preparation process** by ensuring the diversity of the information-gathering process.

The paper proposes that the real value of information technology is in its ability to **support collaborative understanding of complex problems**, and the **development of alternative solutions** for them.