New Emergency Management in a Resilience Era Facing Health, Climate and Energy Challenges

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Creating Winds of Change

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Inter-organizational exercises

Exercises that involve participants from two or more
organizations, or in some cases only one organization while
other actors are simulated

Reasons used for inter-organizational exercises (selection)

Train inter-organizational cooperative processes

Develop inter-organizational cooperative structures

Test the crisis management system

The Government says we should

Exercises that involve participants from two or more organizations, or in some cases only one organization while other actors are simulated

It is a good thing to do
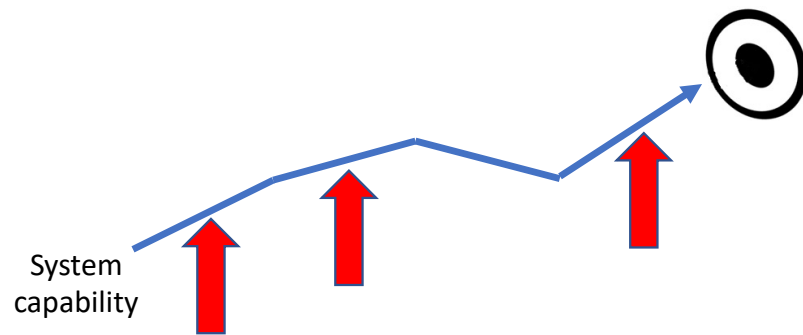
Show that we are able

Train our new recruits

Test our internal procedures
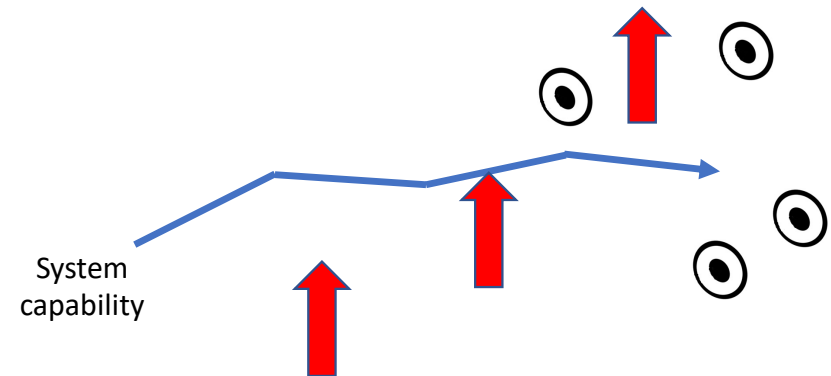
Explore how to communicate

Inter-organizational exercises – what do they achieve?

What we think they do

What they actually do (?)

System capability

System capability

Inter-organizational exercises – what do they achieve?

What we want them to do

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Inter-organizational exercises – the dilemma

- Inter-organizational exercises cost time, money, and other resources. A lot of it!
- The effects in the form of coordinated and concerted changes of the crisis management capabilities are not well established.
- At the same time, crises are rare and potentially disastrous to our societies. Exercises may be the only way to prepare our capabilities.

- Objective of this paper
  - To discuss how inter-organizational exercises can contribute to a coherent and systematic development of crisis management capabilities.
- Method
  - Combining the idea of a cyclic approach (Beerens, 2021) to exercises with a previously developed model for understanding how heterogeneous system-of-systems, and more specifically crisis management systems, learn in order to adapt and transform in-between crises (Eriksson and Hallberg, 2021).

Crisis management as a system-of-system and an organization

- The crisis management capabilities form a system-of-systems (or actually two similar but not identical ones: the planning system and the response systems).
- The system configuration can be regarded as
    - System elements (i.e. subsystems/actors) and their relationships
    - Roles, mandates, goals/objectives
    - Culture
    - Organization, procedures and rules

- An organization is also a system, so the theories of organizational learning can be applied
- An organization's *theory-in-use* is the body of knowledge that direct its actions
    - Documents
    - Organizational culture
    - Physical objects
    - *How things are done here*
    - Etc.

A system-of-systems that learns in order to adapt or transform

- Equate the system configuration with the *theory-in-use*
- Single-loop learning (i.e. change within the current theory-in-use) = adaptations in the system configuration
- Double-loop learning (i.e. change in the current theory-in-use) = transformation of the system configuration

- Allows us to link change to organizational learning

- Sub-performance can be identified in response operations, training, or evaluative exercises, and trigger an inquiry for new knowledge
- The inquiry for new knowledge can be carried out in the form of studies, research, explorative exercises, etc.
- The new knowledge can be implemented, through training, education, implementing exercises, etc.
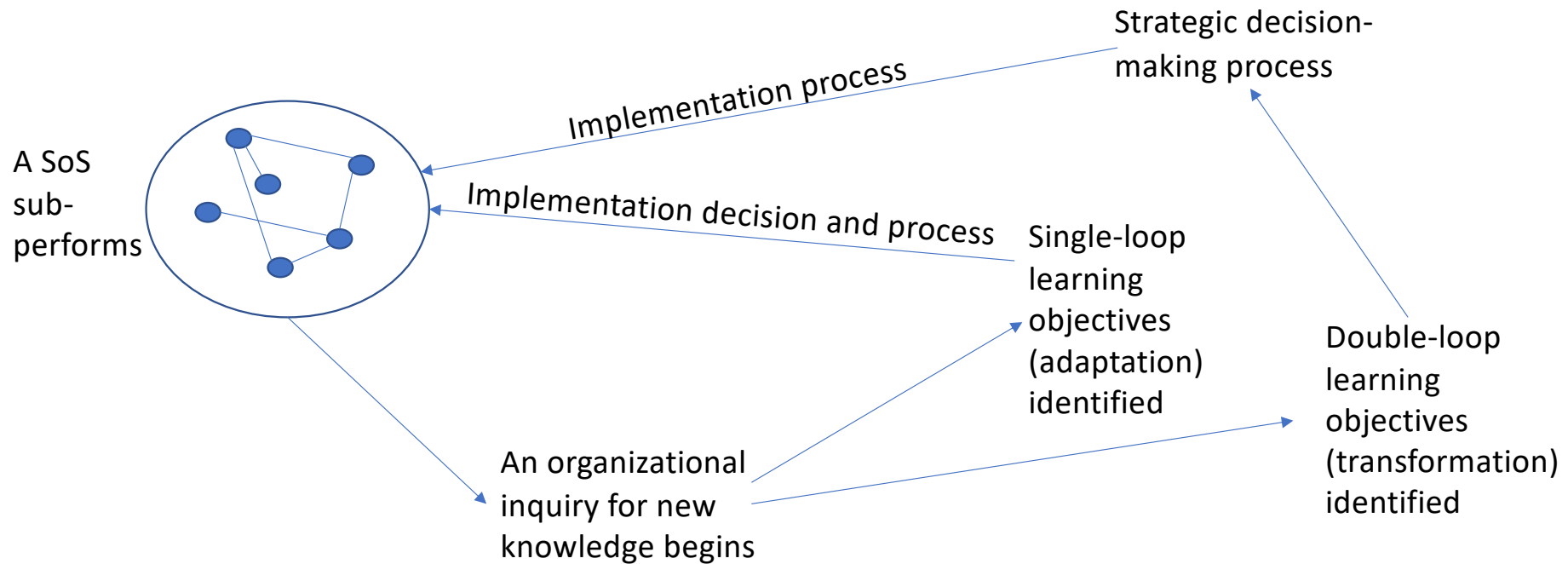
system configuration = theory-in-use

Learning in order to adapt or transform

Three phases
Id. sub-performance
Quest for knowledge
Implementation

A system-of-systems that learns in order to adapt or transform

A SoS sub-performs

Implementation process

Strategic decision-making process

Implementation decision and process

Single-loop learning objectives (adaptation) identified

Double-loop learning objectives (transformation) identified

An organizational inquiry for new knowledge begins

Challenges when developing the crisis management system (1)

- Effectivity – the extent to which a sub-system solves its tasks – is a potentially subjective measurement of performance
  - What one actor regards as effective (from the standpoint of its mandate and roles) may be found inadequate by others

- It is suggested to instead use efficacy – the extent to which a sub-system contributes to the efforts of the overall system – as the preferred measurement of performance
 - Less prone to subjectivity and sensitivities

Challenges when developing the crisis management system (2)

- The crisis management system is heterogeneous and the sub-systems all have their own, separate theories-in-use
- In spite of this, to achieve coordinated change the sub-systems need to agree on
  - what acceptable performance is
  - instances of sub-performance
  - interpretation of new knowledge
- In addition, exercise results are context-dependent

- This calls for a joint analysis in all phases to validate, and agree on, the (exercise) results as well as their implications in terms of the need for new knowledge, learning and change

Using inter-organizational exercises to create winds of change
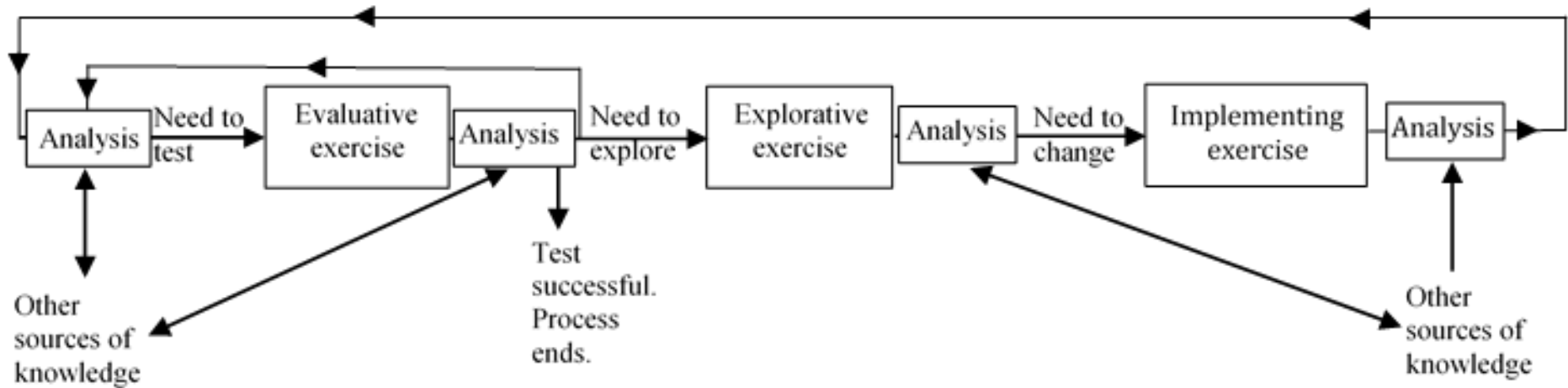
Conclusions

- Inter-organizational exercises may play several roles in a structured and concerted development of the heterogeneous crisis management system
- These roles are the evaluation of capabilities, the exploration of new knowledge, and the implementation of new knowledge (as well as old but not yet fully implemented knowledge)
- Demands
  - an understanding of how complex systems learn in order to adapt or transform
  - a defined and delimited crisis management system
  - a cyclic approach where exercises build on each other (and on other sources of knowledge) in a structured manner
  - joint analysis of the results from exercises (as well as other sources of knowledge) in order to agree on current capabilities, sub-performance, and the need for change
  - conscious choices (from the standpoint of learning and change) regarding the purpose and design of single exercises

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