



**CHALMERS**  
UNIVERSITY OF TECHNOLOGY



UNIVERSITY OF GOTHENBURG

# **Change Management in Software Development Organizations DIT035, 7.5 credits**

## **Lecture 6: Modes of Change**

Examiner: Agneta Nilsson

Course Assistant: Hamdy Michael Ayas

---



# Previous lectures and reading

- ⚙ Questions?
- ⚙ Examples from exercise to share and discuss?



# Agenda

- ⚙ Overall reflections A#2
- ⚙ Different perspectives
- ⚙ 4 Motors for action and process
- ⚙ Unit and Mode of Change
- ⚙ Punctuated Equilibrium
- ⚙ Tempo of Change





# Overall reflections from Assignment #2

- ✧ Several good examples of headings that create a synthesis
- ✧ Level of abstraction of the themes / headings
  - ✧ more general, easier to fit more concepts
  - ✧ more specific, more narrow to include concepts
  - ✧ make sure to include headings...
- ✧ Approaches
  - ✧ order by type/kind, aspects
  - ✧ order by time, phases
  - ✧ ...
- ✧ Avoid this in headings
  - ✧ a list of concepts
  - ✧ “.”
- ✧ Introduction and Conclusion are not required in the final report

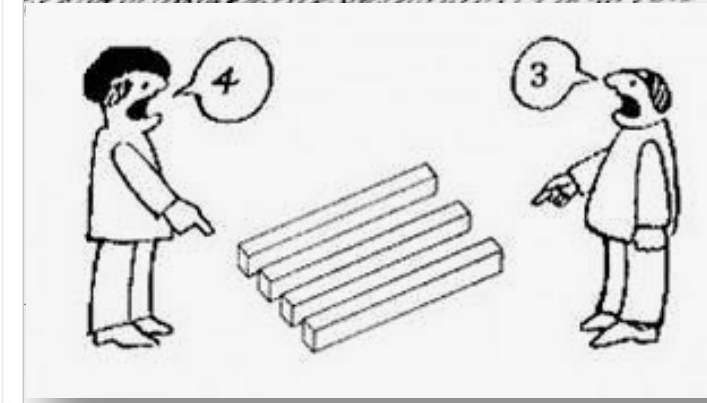
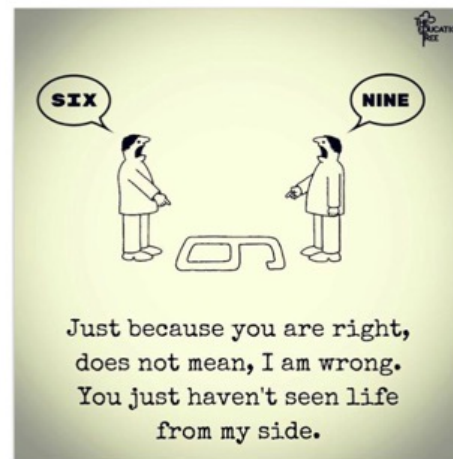
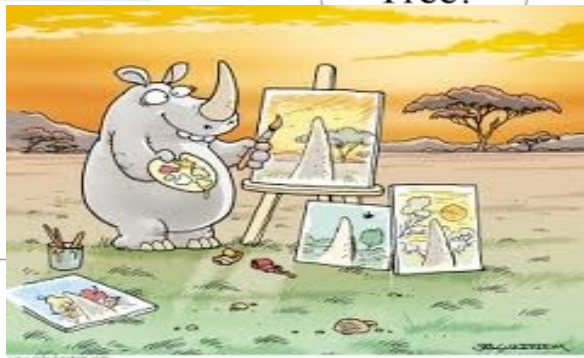
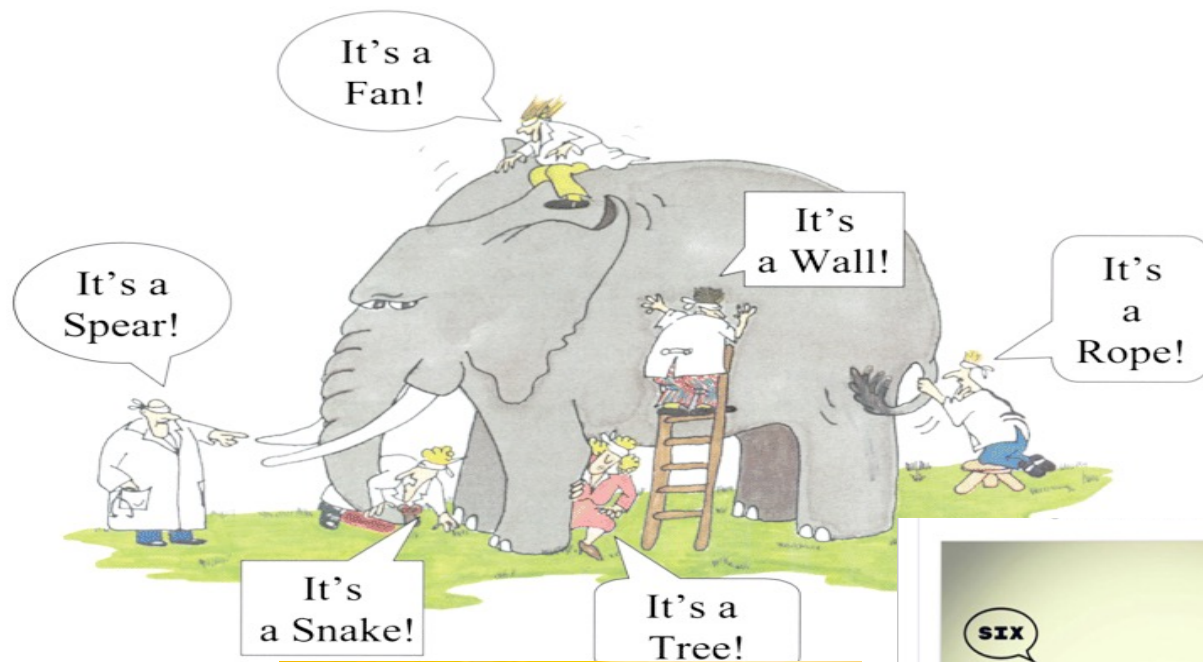


# Cont.

- ✧ Avoid sequential presentation of the concepts under the theme / heading
- ✧ Pay attention to details regarding your use of referencing technique
  - ✧ Do not use page number(s) when it is no direct quote
  - ✧ Remember to use page number(s) when it actually is a direct quote
  - ✧ Do not use incorrect name or year
  - ✧ Alphabetical order of list of references
  - ✧ Do not use bullets, index or other incorrect formatting in the reference list
  - ✧ Place the reference near the concept or statement that is connected to the reference - sometimes you need to separate the references and put one reference near one concept and the other reference near the other concept to get it right.
  - ✧ Refer only to sources that you have actually read (usually)



# Different perspectives - A way of seeing is a way of not seeing





# Explaining development and change in organizations (Van de Ven & Poole, 1995)





**CHALMERS**  
UNIVERSITY OF TECHNOLOGY



UNIVERSITY OF GOTHENBURG

# Framework explaining organizational change







# **4 Motors**

## **– basic types of process theories**

“Fundamentally different  
event sequences and generative mechanisms  
to explain how and why changes unfold”

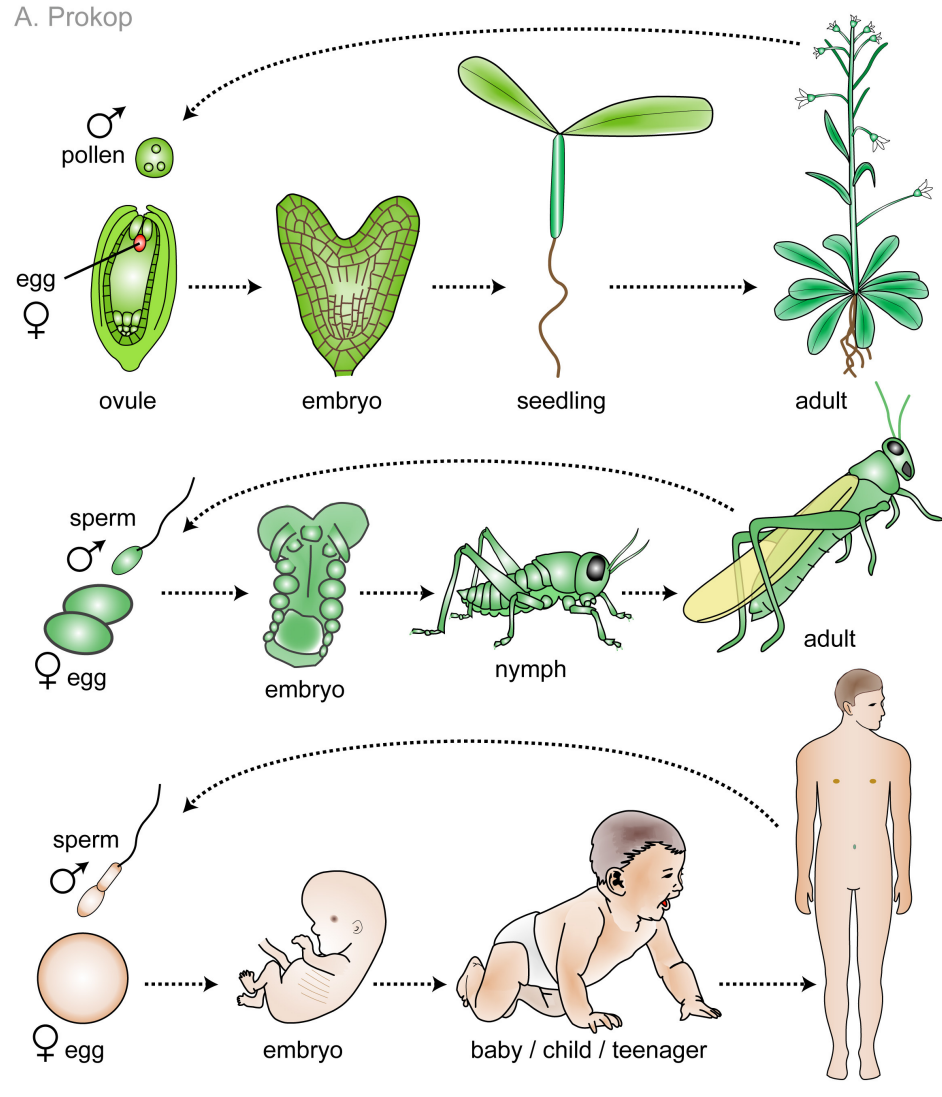
---



# Life Cycle

Key metaphor:  
Organic growth

A. Prokop



## LIFE CYCLE

Stage 4 (Terminate)

Stage 3  
(Harvest)

Stage 1  
(Start-up)

Stage 2  
(Grow)

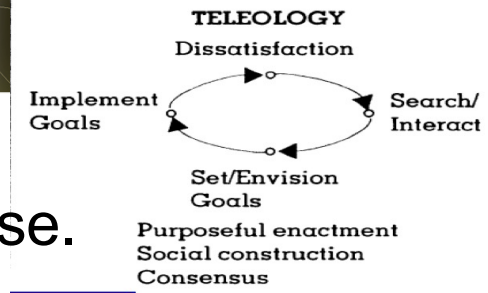
Immanent program  
Regulation  
Compliant adaptation



# Teleology

From Greek *telos*, meaning end or purpose.

Key metaphore: Purposeful cooperation





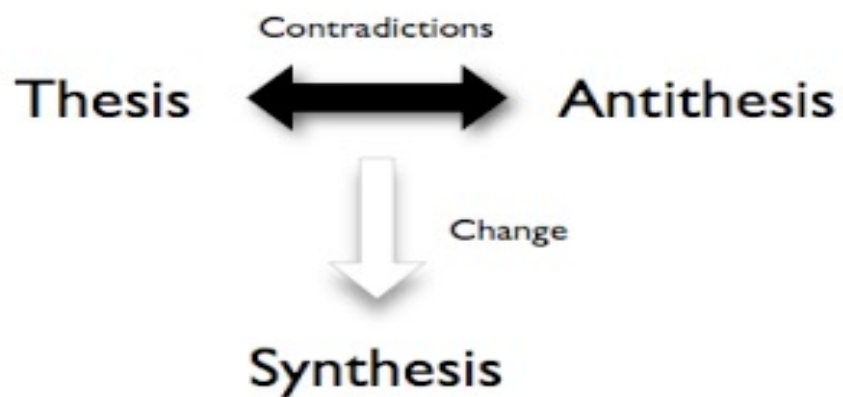
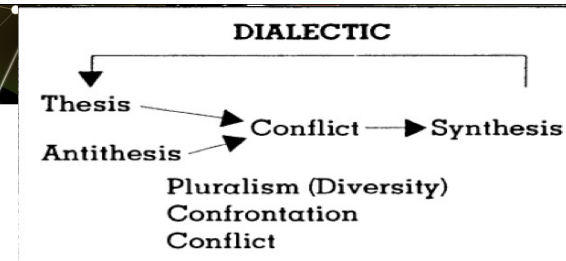
**CHALMERS**  
UNIVERSITY OF TECHNOLOGY



UNIVERSITY OF GOTHENBURG

# Dialectic

Key metaphore: Opposition, conflict







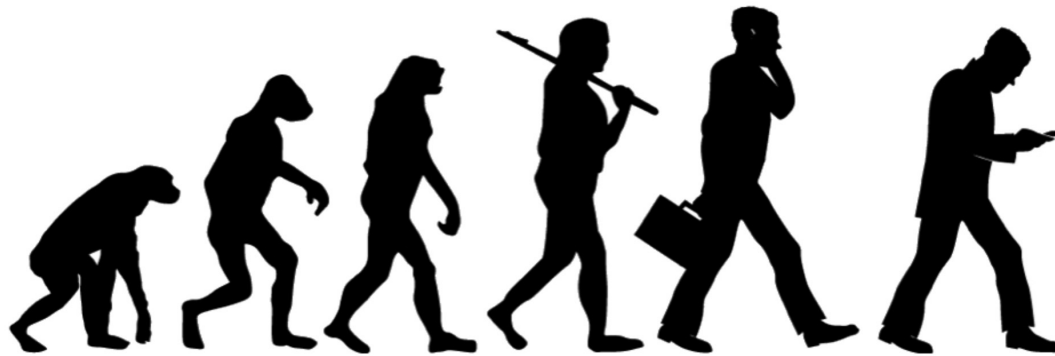
**CHALMERS**  
UNIVERSITY OF TECHNOLOGY



UNIVERSITY OF GOTHENBURG

# Evolution

Key metaphor: Competitive survival



## EVOLUTION

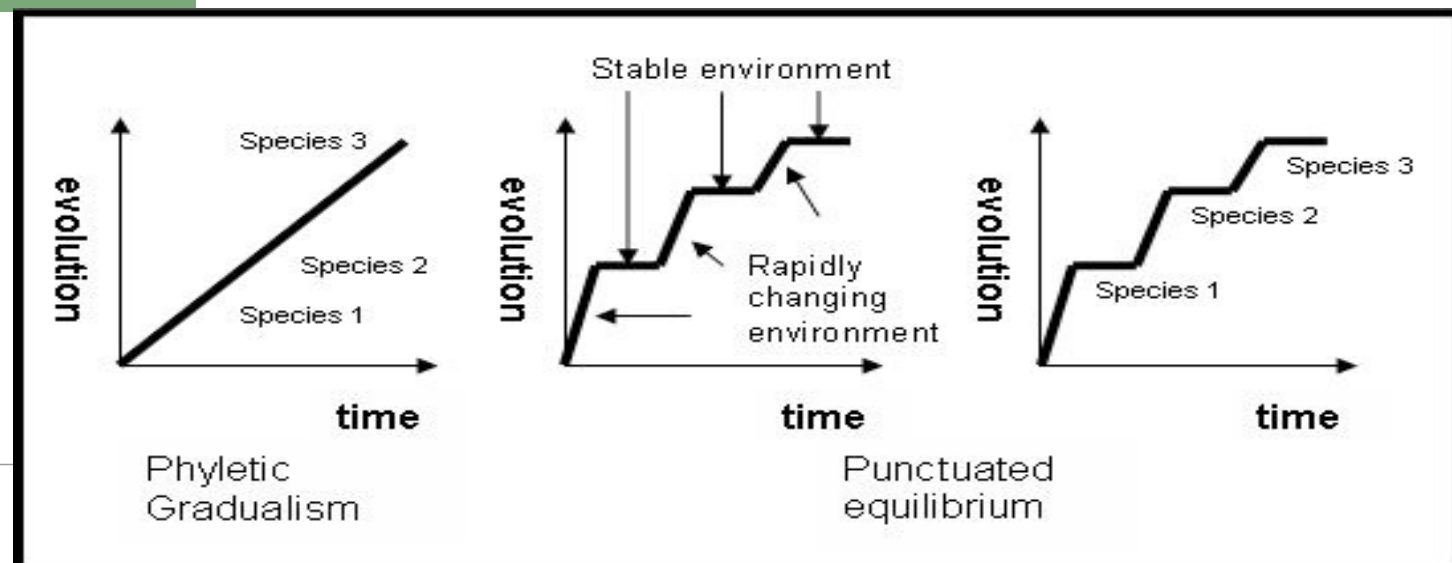
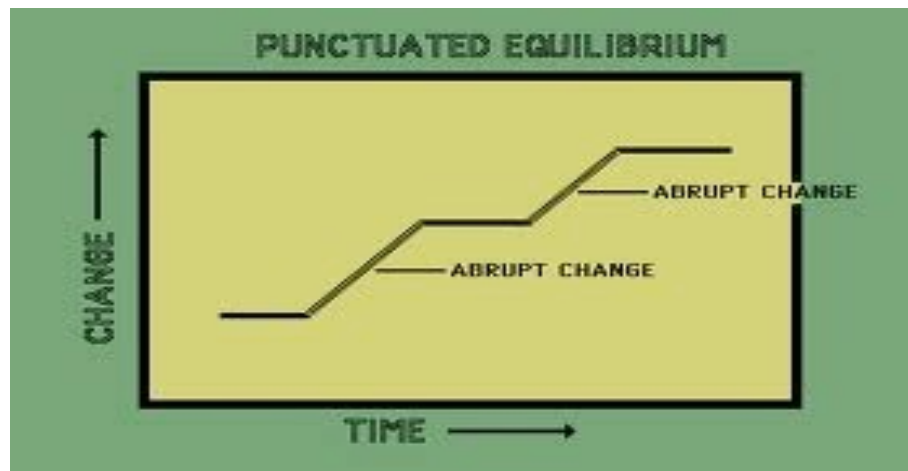
Variation → Selection → Retention



Population scarcity  
Environmental selection  
Competition



# Punctuated Equilibrium







Multiple  
Entities

Unit of  
Change

Single  
Entity

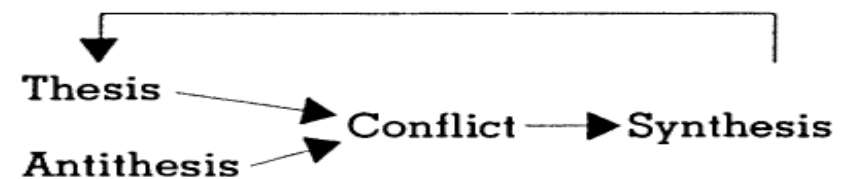
### EVOLUTION

Variation → Selection → Retention



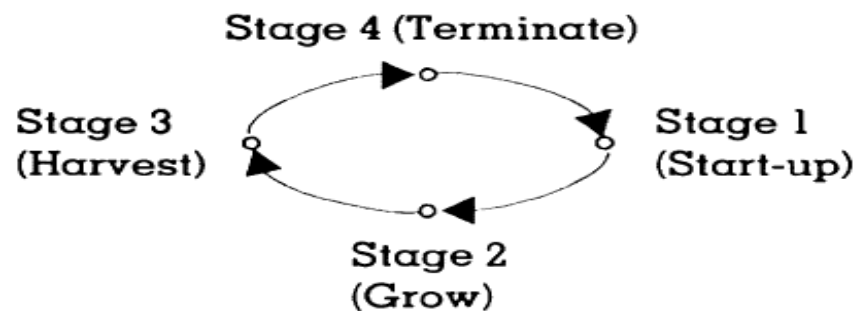
Population scarcity  
Environmental selection  
Competition

### DIALECTIC



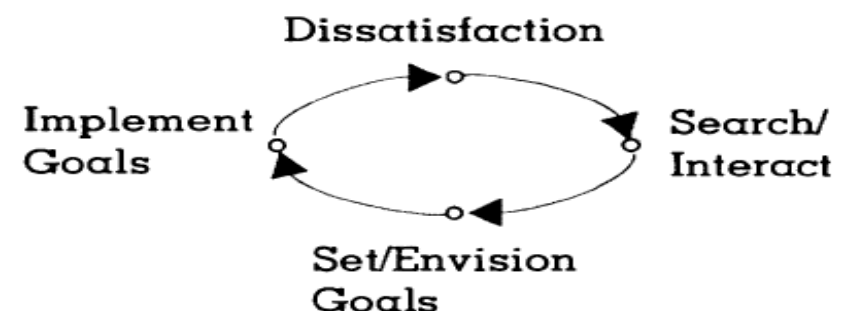
Pluralism (Diversity)  
Confrontation  
Conflict

### LIFE CYCLE



Immanent program  
Regulation  
Compliant adaptation

### TELEOLOGY



Purposeful enactment  
Social construction  
Consensus

Prescribed

Mode of Change

Constructive



# Ideal Type vs Hybrid theories

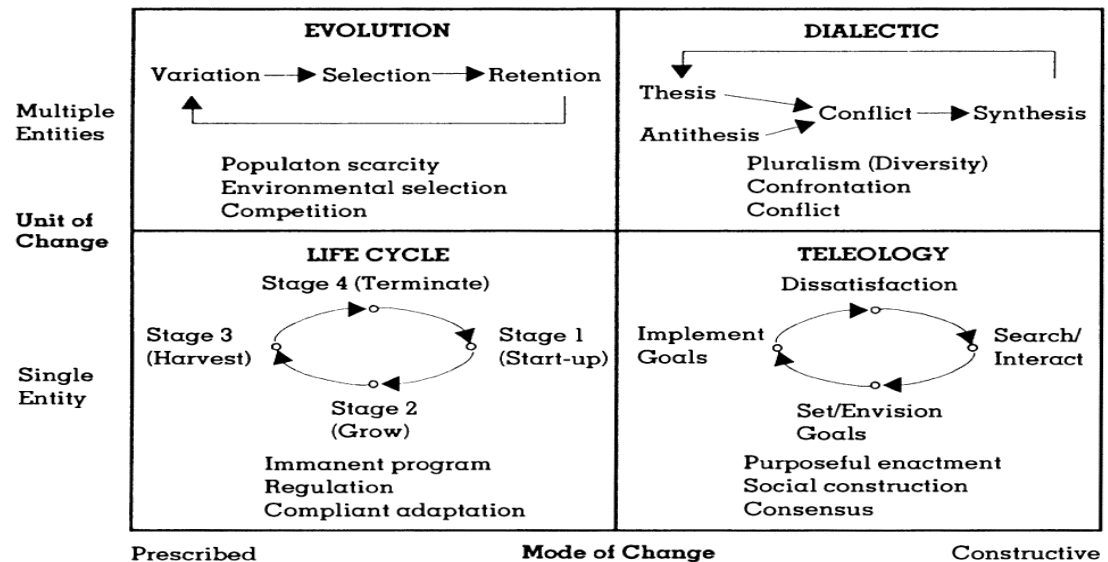
- ⚙ Single-motor theories
  - ⚙ Dual motor theories
  - ⚙ Tri-motor theories
  - ⚙ Quad-motor theories
-



# Discussion

- ❖ Can you give an example of a transition process in the IT world (in an organization, a company, or a phenomena...) for each of the 4 motors for action and process

Life cycle: Key metaphore: Organic growth  
 Evolution: Key metaphore: Competitive survival  
 Dialectic: Key metaphore: Opposition, conflict  
 Teleology: Key metaphore: Purposeful cooperation





# Organizational change and development (Weick & Quinn, 1999)



# Tempo of Change

- ⊗ “characteristic rate, rhythm, or pattern of work or activity”
  - ⊗ Building on and contributing to theory of the 4 motors
  - ⊗ Episodic change
  - ⊗ Continuous change
  - ⊗ ~~Applying 5 properties to compare~~
-



# 1: Metaphor of the nature of organization

## Episodic

- ⚙ Viewed as stable and inertial
- ⚙ Change is infrequent, discontinuous, intentional

## Continuous

- ⚙ Viewed as emergent and self-organizing
  - ⚙ Change is constant, evolving, cumulative
-





## 2: Analytic framework to understand the change process

### Episodic

- ⊗ Change is seen as an occasional interruption from the normal and equilibrium
- ⊗ Tends to be dramatic and driven externally (i.e. by management above or by management consultants)
- ⊗ Often triggered by some external event after some period of inertia

### Continuous

- ⊗ Change is a pattern of endless modifications in work processes and social practice
- ⊗ Driven by organizational instability and alert reactions to daily contingencies
- ⊗ Numerous small accommodations accumulate and amplify



## 3: Ideal organization – effectively functioning

### Episodic

- ⚙ Capable of continuous adaptation

### Continuous

- ⚙ Capable of continuous adaptation
-



## 4: Intervention theory - when, where, and how move to the ideal

### Episodic

- ⚙ Necessary change created by intention

Lewinian:

Unfreeze – Transition - Refreeze

### Continuous

- ⚙ Redirection of what is already under way

Freeze – Rebalance - Unfreeze

---



## 5: Role of change agents

### Episodic

- ⚙ Prime mover who creates change

### Continuous

- ⚙ Sense maker who redirects change





# Discussion

- ⚙ How does punctuated equilibrium relate to the IT world – can you give an example of this?
- ⚙ Can you give an example of a transition process in the IT world for each of the two tempo of changes
  - ⚙ Episodic
  - ⚙ Continuous



# Exercise

- ⚙ **Define and explain the key concepts in the theory of Van De Ven and Poole (1995).**
  - ⚙ **Define and explain the key concepts in the theory of Weick and Quinn (1999).**
  - ⚙ **Describe how the theories by Van de Ven and Poole (1995) and Weick and Quinn (1999) are related to each other.**
-