



# **Towards a Unified Systemic View of HCI**

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### **Human-Computer Interaction (HCI)**

Human-Computer Interaction is a discipline concerned with the design, evaluation and implementation of interactive computing systems for human use and with the study of major phenomena surrounding them.

#### **Systems Theory**

Systems Theory is an interdisciplinary field which studies the abstract organisation of elements and their interactions. Emergence, which is resulting from the interactions within a system is a new quality that cannot be explained solely by the elements of the system.

## **Systemic View of HCI**

- unified view of HCI theories
- find common language and preserve diversity
- emergent phenomena arising in interplay of theories

#### **Planned vs Situated Action**

- two opposing paradigms
- context based decision vs. plans

resolve contradictions

#### **Grasped Action**

- dialectic view of human action
- users develop plans and redevelop and advance them, after they grasp a given situation

#### **Distributed Cognition**

- cognitive processes take place in sociotechnical systems
- includes phenomena that emerge in social interactions

formalise theories

#### **Cognition of Systems**

- self-organising systems as primary unit for cognition
- systems relate their order to external disturbances