ICT&S Center
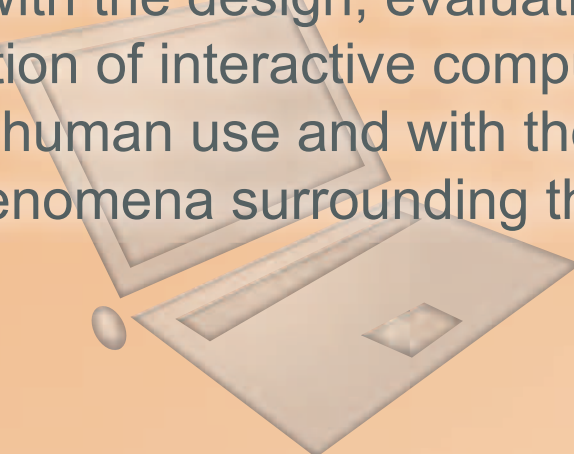
Towards a Unified Sy

Bernd Ploderer & W

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
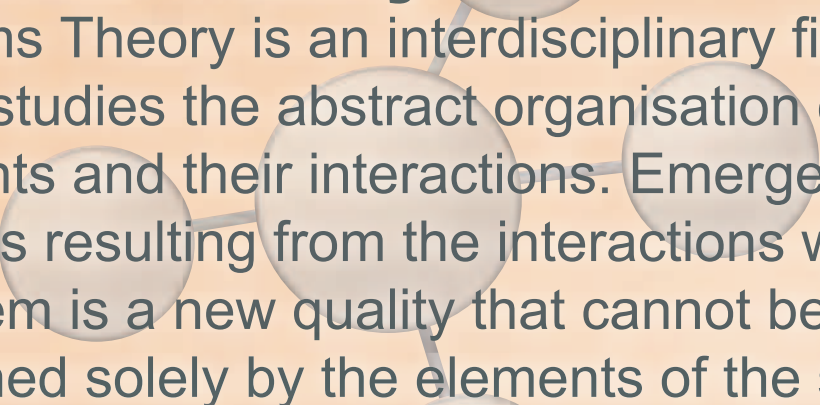of major phenomena surrounding them.

Systemic View o

UNIVERSITÄT SALZBURG

ystemic View of HCI

olfgang Reitberger

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.

of HCI

Systemic View o
- unified view of HCI the
- find common language
- emergent phenomena

Planned vs Situated Action
- two opposing paradigms
- context based decision vs. plans

resolve contra

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

formalise the

ories
e and preserve diversity
arising in interplay of theories

dictions

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

ories

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