Wisdom is not the product of schooling but the lifelong attempt to acquire it.
- Albert Einstein

Session 14

Seeking Parallels for Putting People Ahead:
“The Behavior-Environment and the Human-Computer Interactions”

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Assignment:

1. Read “Part I” and “On the Nature of the Environment” by Barker in Proshansky et al. (eds.) Environmental Psychology: People and Their Physical Settings. Be prepared to discuss.


3. Visit the site: http://www.hotelpuntaislita.com/

Class exercise

• “cognitive mapping of virtual environments” based on the Web site for the assignment
Slides Presentation – Environment-Behavior Relationship

Initial Discussion from readings

- $E \quad B = H \quad C$?
- If not what is/are the differences?

*Note*: while we may not be able to get to draw or discuss all these relationships, please try to think about them.
Behavior

Behavior
- Fundamental processes
  1. Perception
  2. Cognition / Affect
  3. Expressed Behavior (spatial, verbal)
- Direction and purpose – Transportation study in Bogota
- Nesting and continuity – Circuits and boundaries

Contingent nature of behavior
- Motivation
  1. Human needs – the driver (A. Malow’s 1958)
- Competency
  1. Various kinds
  2. Change and evolution (growth and decline)
- Experience
  1. Learning, knowledge constructions, values and attitudes
  2. Time and change
Environment

Environment – defining it

• “That which surrounds the system under analysis”:
  1. **Behavioral components** – individual, group (institutions, organizations)
  2. **Physical components** – natural and designed/built systems
  3. Interrelationships and time (change evolution)

Environments in planning theory:

• Settings
  1. “Fit” – “Is” “should”
  2. Objective and subjective (crime rates and perceptions of safety)
  3. User satisfaction – relative problem
• Processes – Behavior
  1. Decision making
  2. Participation
  3. Design and Learning
• Outcomes
  1. Adoption and adaptation by the individual
  2. Adaptation of the individual
  3. Relocation of the individual
Environment Cont’d.

Environment – relative notions

- Types: Potential vs. Effective
  1. A designed artifact is a potential environment – the light post in West Philadelphia
  2. An artifact in a culture is an effective environment – the basketball court in West Philadelphia
  3. Effective environments are both - adopted and adapted by users

- Determinism vs. affordances

- Environmental Press - environmental “fit”
  1. Competency vs. press
Ecological Psychology – Barker and others

Environmental Psychology
- Problem focused scientific endeavor – interdisciplinary
- Nature of the Problems
  1. Individual’s use and adaptation to physical environment (vice-versa)
  2. Conceptualization of the human physical setting
  3. Problem is on-going and change is intrinsic (co-evolution)

Behavior Setting
- Activity pattern - behavior
- Milieu - environment
- Synomorphic relationship – one structure
- Penetration – from leader to observer:
  1. a continuum of participatory behavior (designer consumer)

Ecological environment
- Order of the perceptual environment
  1. Not one but many systems
  2. Boundaries and interconnections to be discovered
  3. Nesting assemblies
- Direction and purpose of the perceptual environment
  1. Behavior of comprising entities is not purposeless
- Incommensurability in the perceptual environment
  1. not in nature’s units, only in science notions of microsimulation
Behavior-Environment & Human-Computer Parallels?

Environment – discussion of readings
• Think about systems such as the ones we have discussed: EDC, Virtual Reality, Ubiquitous Computing, the Web (e-Commerce), SimCity
  • Effective computational environment?
  • Potential computational environment?
  • Determinism vs. affordances in computational systems?

Behavior and valid theoretical structures in HCI
• Conceptualization – human virtual settings as human behavior settings
  1. Do virtual settings both, determine and emerge as outcomes of behavior and experience?
  2. Does rate of change alters nature, meaning and relevance of virtual settings?

Discuss its relationships with concepts discussed in our course such as:
• Design
• informed participation
• collaborative learning
• consumer vs. designer argument
• games and simulations
• the books that you are reading
Other Seminal References of Interest:


3. Proshansky et al. (eds.) (1970) *Environmental Psychology: People and Their Physical Settings*


5. Altman, I. (1975) *Environment and Social Behavior*


