How can people make empowering environments?

Lecture 09.1 Empowering Citizens to Build

I Culture & Empowerment

2. Informal Settlements: Chalco Design BY Citizens/

3 Four Approaches to Participatory Design
   Anticipatory Design
   Self-Build
   Open Bouwen/ Open Building
   Citizen Engagement

Squatter Housing in Mexico City (photo by JWR, 1991)
1. A system of beliefs, perceptions, values, norms, customs:

2. Reproduced in behaviors (daily practices, rituals, stories)

3. Shared among a group of people in a consensual way (INTERPRETIVE COMMUNITY)

4. Passed on from one generation to the next

5. Reproduced in artifacts, technologies, environments
Environmental Design is a Cultural Process

What is the role of design as a cultural process?

Design can be used to

- Reaffirm existing culture
- Resist existing culture
- Transform existing culture

Tract housing built around 1910 related to the streetcar, Somerville, Massachusetts
Power to Make Change
Housing/ Urban Design by/with Citizens (mostly without designers)
Mexico City: Chalco today

“One of the largest shantytowns in the world, Neza-Chalco-Itza, ...estimated population of 4 million.”

Downtown Chalco,
Mexico City, Chaico: Squatter Settlement:

Chalco- first stages of settlement 1991
Mexico City, Chalco: Squatter Settlement: Territoriality

Mexico City: Squatter Settlement
Chalco- first stages of settlement, 1991
Mexico City, Chalco: Squatter Settlement: Self-Built House

Mexico City: Squatter Settlement
Chalco- first stages of settlement, 1991
Mexico City: Squatter Settlement: Chimalhuacan - after 10 years

Urban infrastructure
Commercial Enterprises
Mexico City: Squatter Settlement: Chimalhuacan- transition

Chimalhuacan- transition from farming
Garden plots- still farming-growing own food
Animal power, agriculture/market
Mexico City: Squatter Settlement: Netzahualcoyotl-20 years old

Netzahualcoyotl

Completed urban infrastructure
Continuity of urban pattern
Mexico City: Chalco today

Downtown Chalco,
ENGAGING WITH CITIZENS
Engaging with ordinary people
Citizen engagement
Why important to involve citizens?
Why important to involve citizens?

- Better understanding of environmental use
- Engaging users creates investment in building success
- Responding to diverse values
What are the constraints to ordinary people participating?
What are the constraints to ordinary people participating?

Some Constraints

- Designers’ vision of client as incapable of making wise decisions
- Ego of designer
- Impatience with slow process
- Need to educate client/user
- Challenge of working through long process
- Design process not oriented to reception of architecture but to design
  (designers’ tendency to stress appearance over use and durability opposite to users’ tendencies)
Misconceptions about Participatory Design

Design will be ugly
Users won’t accept challenging ideas
Process is costly
Designer’s contribution is diminished
4 Approaches to Participatory Design
(designers & citizens together)

Anticipatory Design
Self-Build
Open Bouwen/ Open Building
Citizen Engagement
ANTICIPATORY DESIGN
ANTICIPATORY DESIGN

Research to develop designs

John Zeisel with Korobkin-Johan, Architect
Captain Clarence Eldridge Congregate House
Importance of Hypothesis - Test Approach
ANTICIPATORY DESIGN

Sensitive observation
Discussion with client

Herman Hertzberger
Apollolaan School, 1980-83
Amsterdam, Netherlands
ANTICIPATORY DESIGN

Herman Hertzberger
Apollolaan School, 1980-83
Amsterdam, Netherlands
ANTICIPATORY DESIGN

Herman Hertzberger
Apollolaan School, 1980-83
Amsterdam, Netherlands
ANTICIPATORY DESIGN

Herman Hertzberger
Apollolaan School, 1980-83
Amsterdam, Netherlands
Designer creates parameters for lay people to apply

Walter Segal System Designer
Lewisham, London, 1970s
SELF-BUILD

People create own designs with materials provided

Jon Broome

Walter Segal

Walter’s Way / Segal Close
Lewisham, London
Meeting and training room built by residents of a hostel in Cambridge, UK. with Segal timber framed construction methods, c 2010?

(Constructed with assistance from Radical Changes. The project is by the Community Self Build Agency, with Graham of English Churches Housing Group enabling the project. Forever Green are the architects.)
SELF-BUILD
Self Build as Job Training

Claude Hendrickson & the Frontline Group
Ravenscar Mount
Chapeltown, Leeds
UK, 1993-4
Trained and experienced construction workers get jobs in their city
OPEN BUILDING
(OPEN BOUWEN)
Principles of Open Building/ Open Bouwen (John Habraken)

Theory of Relative Permanence and Control

Scales of Permanence:

FROM MORE COLLECTIVE TO MORE INDIVIDUAL

Scales of Permanence: Building

Street / Block / Lot / Infrastructure / Dwelling / Room
'We should not try to forecast what will happen, but try to make provisions for the unforeseen'
(JOHN HABRAKEN, 1961)
Hermann Hertzberger,
Diagoon Housing,
Netherlands c1975

PLAN VARIATION

OPEN BOUWEN/ OPEN BUILDING
OPEN BOUWEN/OPEN BUILDING

Hermann Hertzberger, Diagoon Housing, Netherlands c1975

PLANNING FOR FUTURE GROWTH & PERSONALIZATION
OPEN BOUWEN/ OPEN BUILDING

Hermann Hertzberger,
Diagoon Housing,
Netherlands c1975
Eckhart Hahn, Ecohouse
Berlin circa 1990

OPEN BOUWEN/ OPEN BUILDING
Next 21, Osaka, Japan, 1994
Yoskitka UTIDA
Shu-Koh-Sha Architectural and Urban Design Studio
18 dwellings by 13 different architects

- Structure and systems shared
- Architects insert units
- Inhabitants create interiors
Structural system allows for various component systems

Main structure, external walls & window options established

Individual inserts walls, floors, ceilings, environmental systems, leaves outdoor space

Next 21, Osaka, Japan, 1994
Yoskitka UTIDA & Shu-Koh-Sha Architectural and Urban Design Studio
18 dwellings by 13 different architects
OPEN BOUWEN/ OPEN BUILDING

Principles

Efficient use of resources
Variety of units
Include vegetation & wildlife
Waste treatment onsite
Minimizing building energy footprint
Use of fuel cells for energy conservation
Helsingin Tilia
Neo-Loft Apartments
Pilot Project, 2008-2010
Arabianranta, Helsinki, Finland
Talli Architecture & Design
Pia Ilonen, project architect
39 apartments

http://www.joostdevree.nl/shtmls/open_bouwen.shtml

Open Construction
Basic unit includes 1000 ft2 with 2 bathrooms
Many electrical and plumbing connections
Resident determines interior arrangement
Arrangement can be changed
Design allows for a loft area

Difficulty with financing when design not final
Helsingen Tilia
Neo-Loft Apartments, Pilot Project
Arabianranta, Helsinki, Finland
Talli Architecture & Design
Pia Ilonen, project architect

http://www.joostdevree.nl/shtmls/open_bouwen.shtml
CITIZEN ENGAGEMENT
CITIZEN ENGAGEMENT

Inken and Heinrich Baller
Housing on Frankenthuelrstrasse
Berlin, Germany 1979-84
Inken and Heinrich Baller
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Frankenthulerstrasse
Berlin, Germany 1979-84
CITIZEN ENGAGEMENT

Inken and Heinrich Baller
Housing on
Frankenthulerstrasse
Berlin, Germany 1979-84
CITIZEN ENGAGEMENT

Hein de Haan
CASA
Vrijburcht Cooperative
Housing
IJburg, Amsterdam

Project constructed as a Green project with Participatory Design
Vrijburcht
Ijburg, Amsterdam
Project constructed as a Green project with Participatory Design

CASA Architects
Hein de Haan Project Architect

- Identifying a site for developing
- Working with a housing corporation/developer
- Advertising for people interested in coop
- Developing understanding of resident needs
- Visiting site with residents
- Developing design & getting feedback
IJBURG
Vrijburcht (Free Citadel)
Project constructed as a Green project with Participatory Design

CASA Architects
Hein de Haan Architect

Shared courtyard with rain garden
CITIZEN ENGAGEMENT

Community areas on second floor

CASA Architects
Hein de Haan Architect
Not just housing, a community center

Vrijburcht
CASA Architects
Hein de Haan Architect

49 dwelling units
  10 live-work
  39 market rate (maisonettes, apartments, light-filled houses)

Group Home for 7 residents with schizophrenia
4 offices
Café
Theater
Child Care Center
Community Meeting Space
Teen area
CITIZEN ENGAGEMENT

Seabird Island School
Vancouver, Canada
Patkau Architects

290 students, K-10
A school to promote the culture, Language and way of life of the Salish Indian Community

Coastal Salish Indians: Four months of meetings with staff, students & community

Basic instruction plus Salish language & culture

The band constructed the school

Seabird Island School
Vancouver, Canada
Patkau Architects

290 students, K-10
Sited with other buildings to create an open "village green"

Building serves as a windbreak with no windows on the North side.
Inside the entry is the commons that divides elementary from middle school.
Hester’s 12-Step Process to Working with Citizens
12 STEP MASTER PLAN PROCESS
SHOWING EXPECTED CITIZEN ATTITUDE CHANGE TOWARDS THE LANDSCAPE

LISTENING
1
Place Knowing
Self Recognition
Community Awareness

SETTING GOALS
2
Place Knowing
Security
Community Building

MAPPING & INVENTORY
3
Place Understanding
Response
Community Building

INTRODUCING THE COMMUNITY TO ITSELF
4
Place Understanding
New Experience
Community Awareness

GETTING A GESTALT
5
Place Caring
New Experience
Community Building

DRAWING ANTICIPATED ACTIVITY SETTINGS
6
Place Understanding
New Experience
Community Awareness
IDIOSYNCRACIES INSPIRE FORM
Place Understanding
New Experience
Community Building

DEVELOPING A CONCEPTUAL YARDSTICK
Place Understanding
Security
Community Awareness

SPECTRUM OF PLANS
Place Caring
Response
Community Stewardship

EVALUATING COSTS & BENEFITS
Place Caring
Response
Community Stewardship

TRANSFERRING RESPONSIBILITY
Place Caring
New Experience
Community Stewardship

EVALUATION AFTER CONSTRUCTION
Place Understanding
Response
Community Awareness
LECTURE 14.

ENGAGING THE USER / PARTICIPATORY DESIGN

Sources

Sanoff, H. "Introduction" & Ch.1. "Planning Outdoor Play" in Designing with Community Participation