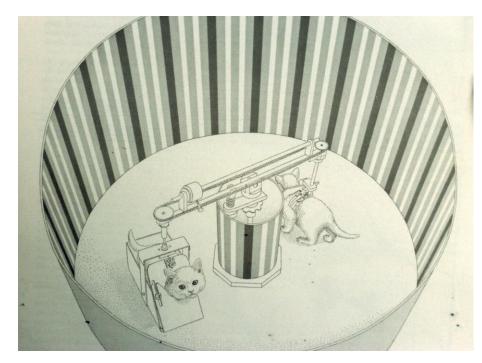
# HUMAN – ENVIRONMENT RELATIONS (HER) PROCESSES



## **HOME:** Environmental Stimulation

#### **Definition**

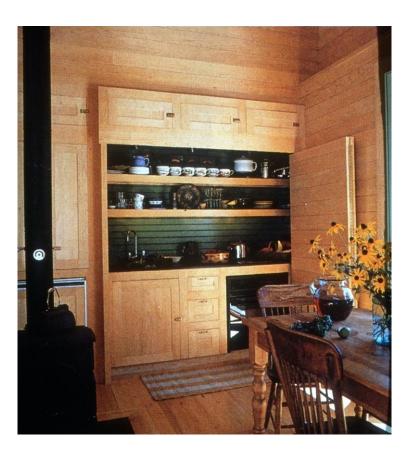
Quantity and quality of stimulation can influence physical development and behavior.



## **HOME:** Homeyness

#### **Definition**

A latent function of a residence or other space that leads to feelings of comfort, connection, personal as opposed to institutional identity or ambiance.



## **HOME:** Personal Space

#### **Definition**

Interpersonal distance or the zone (bubble) around of bodies that we maintain when interacting with another person.



## **HOME:** Territoriality

#### **Definition**

Spaces that we control or regulate use by others. Personal, group, and public territories operate for human beings. Place attachment and identification are additional aspects of human territoriality.

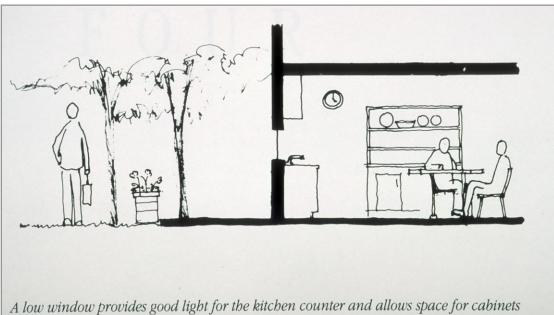


# **HOME**: Privacy

#### **Definition**

A dynamic, optimization process regulating the balance between achieved and desired interpersonal interaction.

#### <u>Example</u>

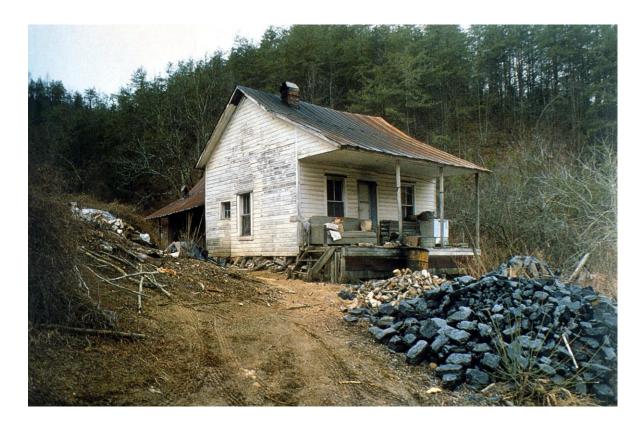


A low window provides good light for the kitchen counter and allows space for cabinets above. People sitting at the kitchen table can see out, but people walking by cannot see in.

# **HOME**: Housing quality

#### **Definition**

Structural soundness, hazards, clutter, height and scale plus other physical amenities of residential spaces.



## **HOME:** Defensible space

#### **Definition**

Design of settings in relation to crime. Crime does not happen randomly in space.

#### <u>Example</u>

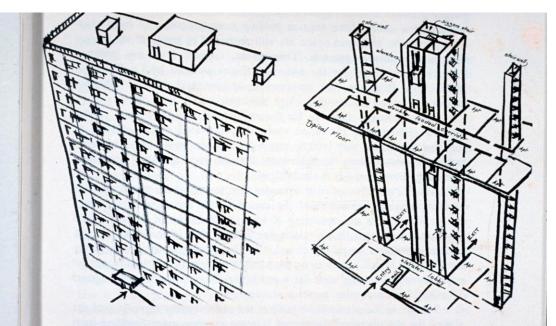


FIG. 14. Typical Double-Loaded Corridor Apartment Building. The view at left is of an apartment building as it is typically seen. At right the building is seen in an x-ray view to illustrate how the horizontal and vertical circulation elements are disposed.



# **CITY:** Behavioral toxicology

#### **Definition**

Interdisciplinary field on borders of medicine, environmental science, public health, and psychology. Study of effects of toxic substances on behavior.



# **CITY:** Crowding

#### **Definition**

Too much, unwanted social interaction. Linked to high density, particularly people/room.



## **CITY**: Noise

#### **Definition**

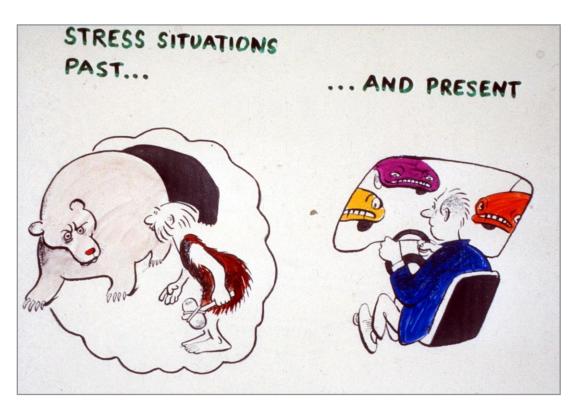
Unwanted sound related to noise intensity (decibels)



## **CITY:** Environmental stress

#### **Definition**

Produced by environmental demands that exceed or tax personal coping resources. Linked to mastery/control [learned helplessness], costs and paradox of human adaptability.



# **CITY:** Environmental perception

#### **Definition**

Active, constructive process of acquiring sensory information from the world around us.



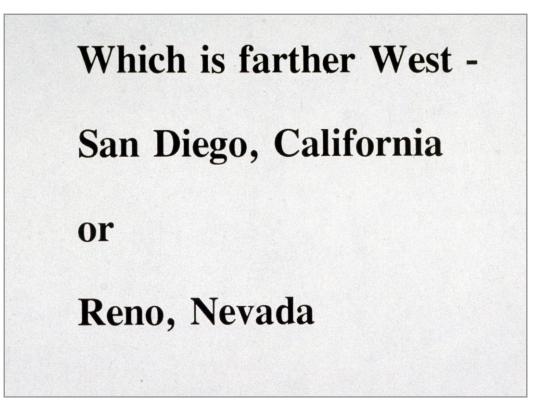


- Americans and Japanese shown 20 second videos of "underwater scenes", and asked to describe what they saw
- American and Japanese made equal number of references to the largest "focal fish"
- Japanese make significantly more references to background materials such as the frog, snail, plants, etc.

# **CITY:** Environmental cognition

#### **Definition**

Processes involved in the representation of information about geographic information in the brain.

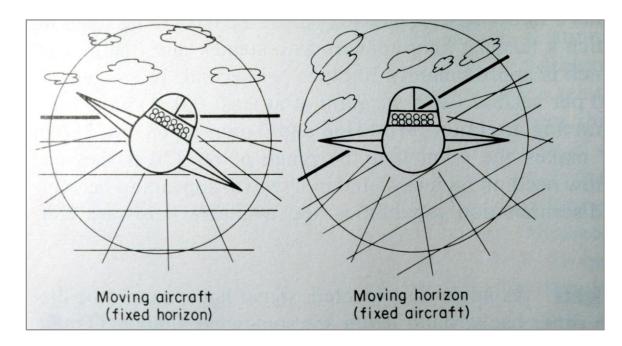




# **WORK:** Cognitive ergonomics

#### **Definition**

Processes used to understand how things work. Evaluation of the fit between cognitive capacity and skills and utilization of the physical environment including technology.



## **WORK:** Anthropometrics/Biomechanics

#### **Definition**

Two HER processes combined for purposes of this introductory course. Anthropometrics refers to the measure/capacity of the human body. Biomechanics is how the body functions when interacting with the physical environment with a particular interest in strain or injury when the body-environment interface is at the limits or beyond physical capabilities (e.g. repetitive strain).

#### **Example**



# **WORK:** Indoor air quality

#### **Definition**

Exposures to toxins including pollutants and allergens generated inside of buildings.

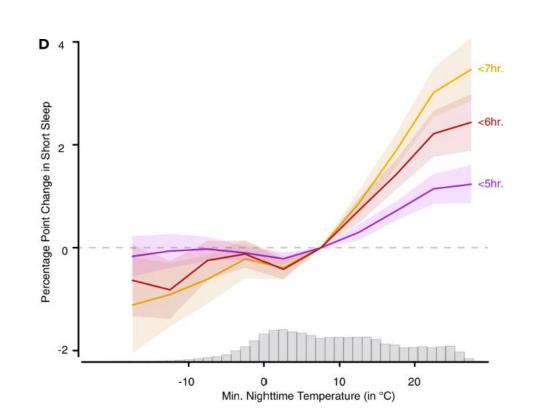


## **WORK:** Thermal

#### **Definition**

Temperature and humidity (primary focus in this class is on high temperatures.

#### Example



# WORK: Light

#### **Definition**

Visual effects of illumination, principally brightness. Nonvisual impacts of illumination via the retinohypothalamic tract (e.g. Circadian rhythm).



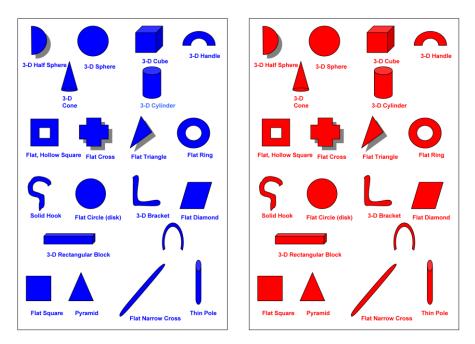
## **WORK:** Color

#### **Definition**

# Influence of wave length of light (hue) on preference and performance.

#### **Example**

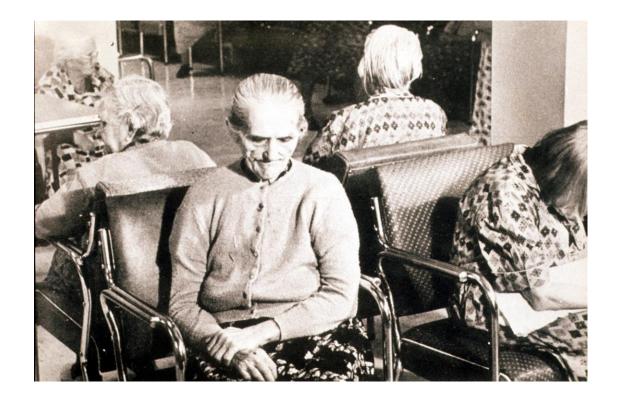
Fig. S1: Blue vs. red parts sheets presented to participants (Study 4)



# WORK: Small group ecology

#### **Definition**

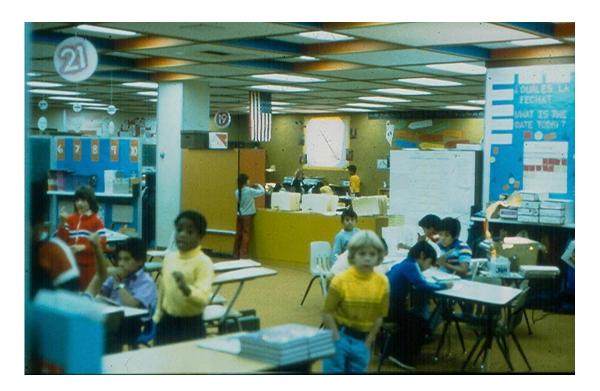
# Semi-fixed feature space (e.g. furniture) and human interaction.



## **WORK:** Enclosure

#### **Definition**

The degree of permeability, openness of spaces. Extent of floor to ceiling barriers.



## **WORK:** Layout

#### **Definition**

The arrangement of spatial interiors such as proximity, corridors, functional distance.





## **EARTH:** Restoration

#### **Definition**

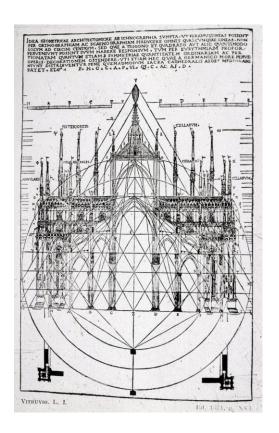
Recovery from cognitive fatigue and stress reduction. The concept of Biophilia is linked to restoration as wellhuman affinity for natural elements because of evolutionary history.



## **EARTH:** Aesthetics

#### **Definition**

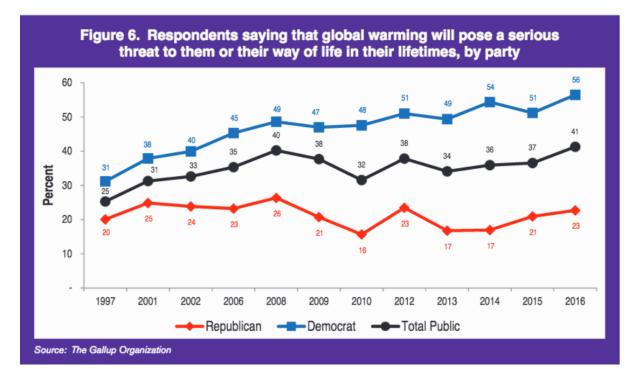
Constructs and theories to explain human preferences for beauty.



## **EARTH:** Environmental attitudes

#### **Definition**

Feelings and beliefs about environmental issues (how green). Two fundamental core attitudes are Dominant Social Paradigm and the New Ecological Paradigm.



## **EARTH: Ecological behavior**

#### **Definition**

Decisions and actions that affect environmental quality.

