

The Next Environmental Revolution

Architecture: Boring Buildings

SARAH GOLDHAGEN DECEMBER 12, 2001

Now that the World Trade Center towers are gone, will Tony Soprano still glance at them in his side-view mirror as he drives home on the New Jersey Turnpike? Or will *The Sopranos'* producers have him looking back at the now denuded skyline of Manhattan--at the squat residential towers of Battery Park City, all dressed up in frills and pink veneer?

Not likely. The twin towers were that rare entity in the American architectural fabric: a good, perhaps even a great, work of architecture.

Environment

mountains

rivers

forests

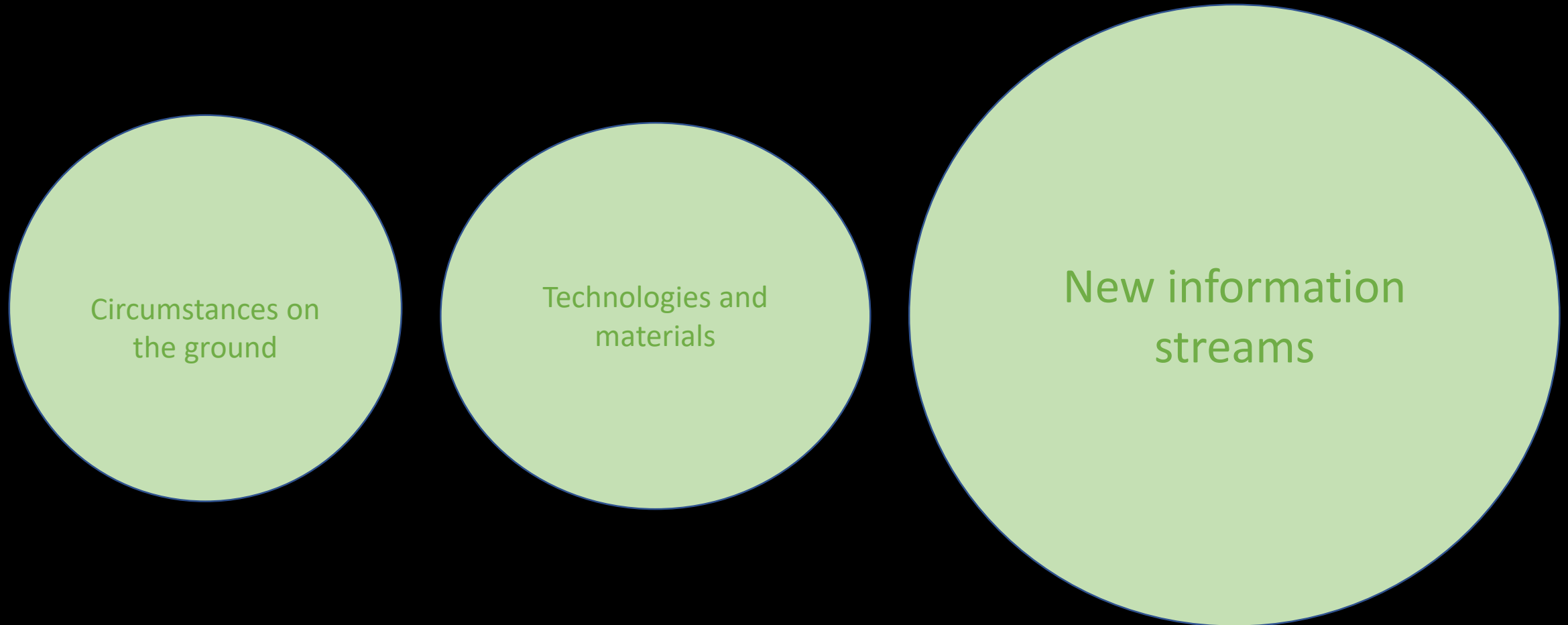
plains/
fields



2018

1960

Changes in Design Ideas for Built Environment



New Information Streams

Psychology
Environmental
Ecological
Evolutionary
Social
Occupational

Science and Medicine
Cognitive
neuroscience
Public Health

Studies in Cognition
Cognitive Linguistics
Philosophy of Mind/
Embodied Cognition

3/29/2019

A new paradigm: how environments shape human lives

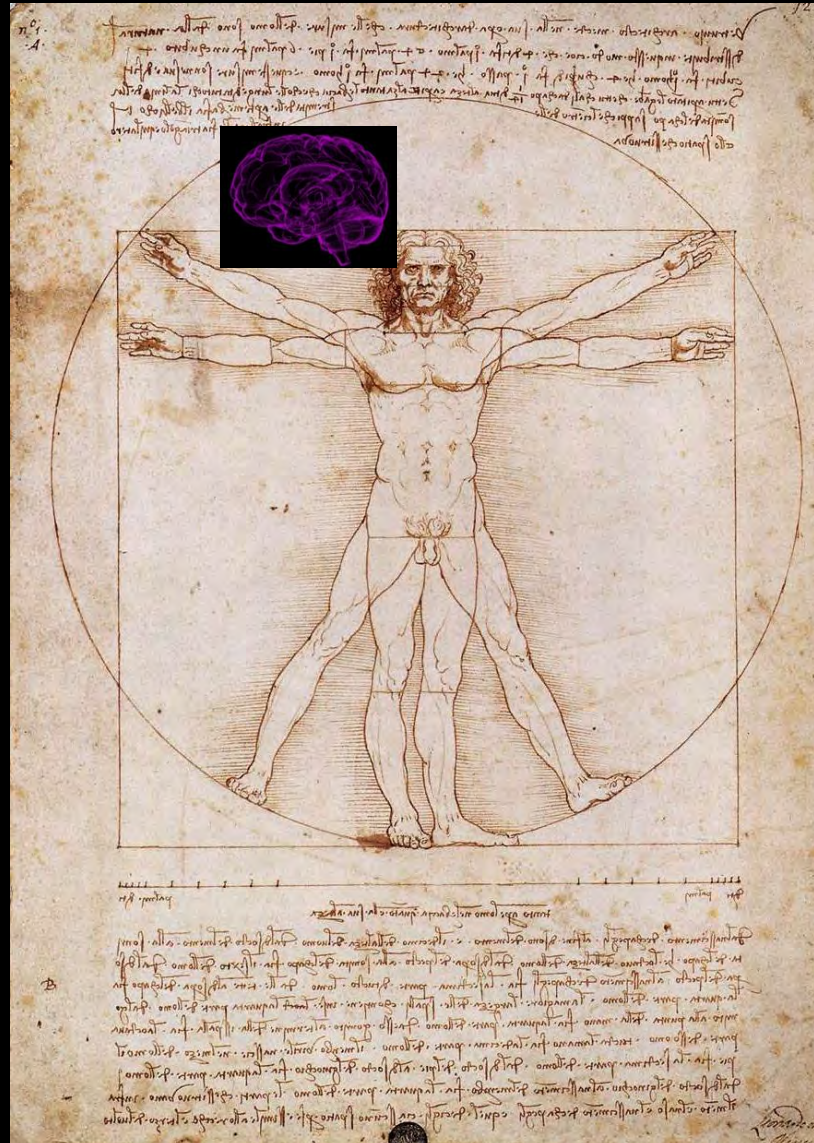


Human response to and experience in environments

physiological, cognitive, psychological



Mind-Body Connection



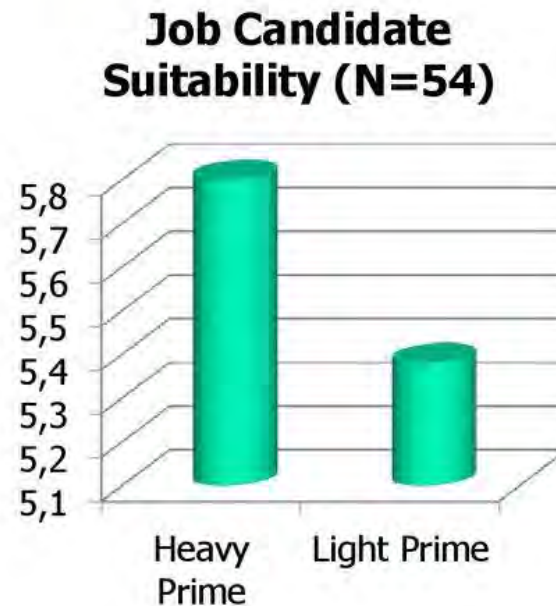


Humans experiencing environments

nonconscious

Ackerman, Nocera & Bargh (2010): Experiment 1

- Ps asked to evaluate job candidate applications – based on CV
- CV given on either a) heavy clipboard or b) light clipboard
- Those holding heavy clipboards rated applicants as more suitable
- Why?
 - Because 'heavy' implicitly associated with perceived seriousness of application
 - Suitability impression activated



Human experiencing environments

nonlogical/associative: embodied cognition



FlashReport

Shedding light on insight: Priming bright ideas

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Multisensory and Multimodal

canonical neurons → J.J. Gibson's notion of affordances
"Perception is perception for action"



3/29/2019



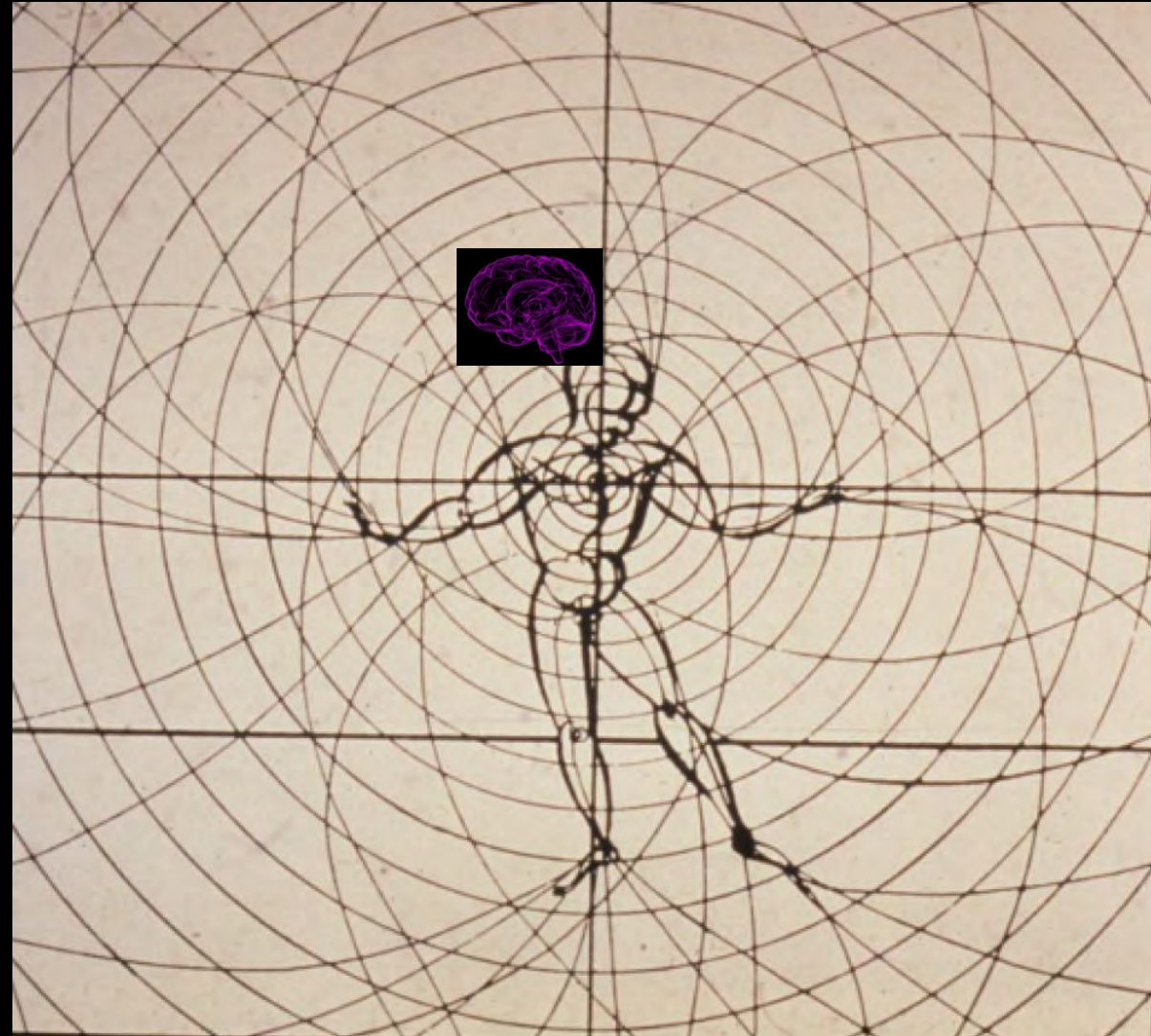
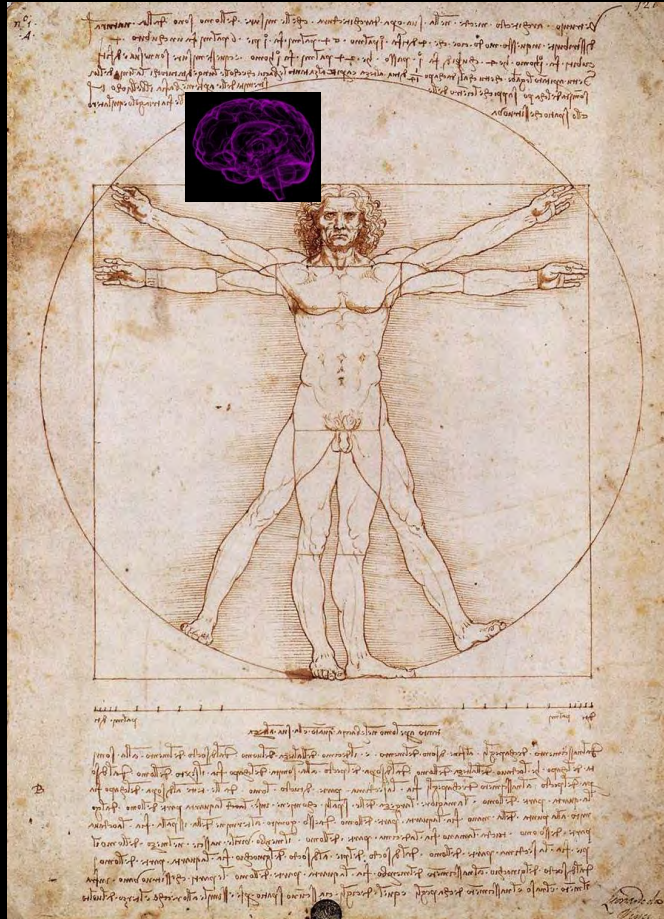
Nonconscious, Non-logical/Associative, Multisensory, Multimodal PRIMES



New paradigm of human-environment relationship

Mind-Body

Mind-Body-Environment



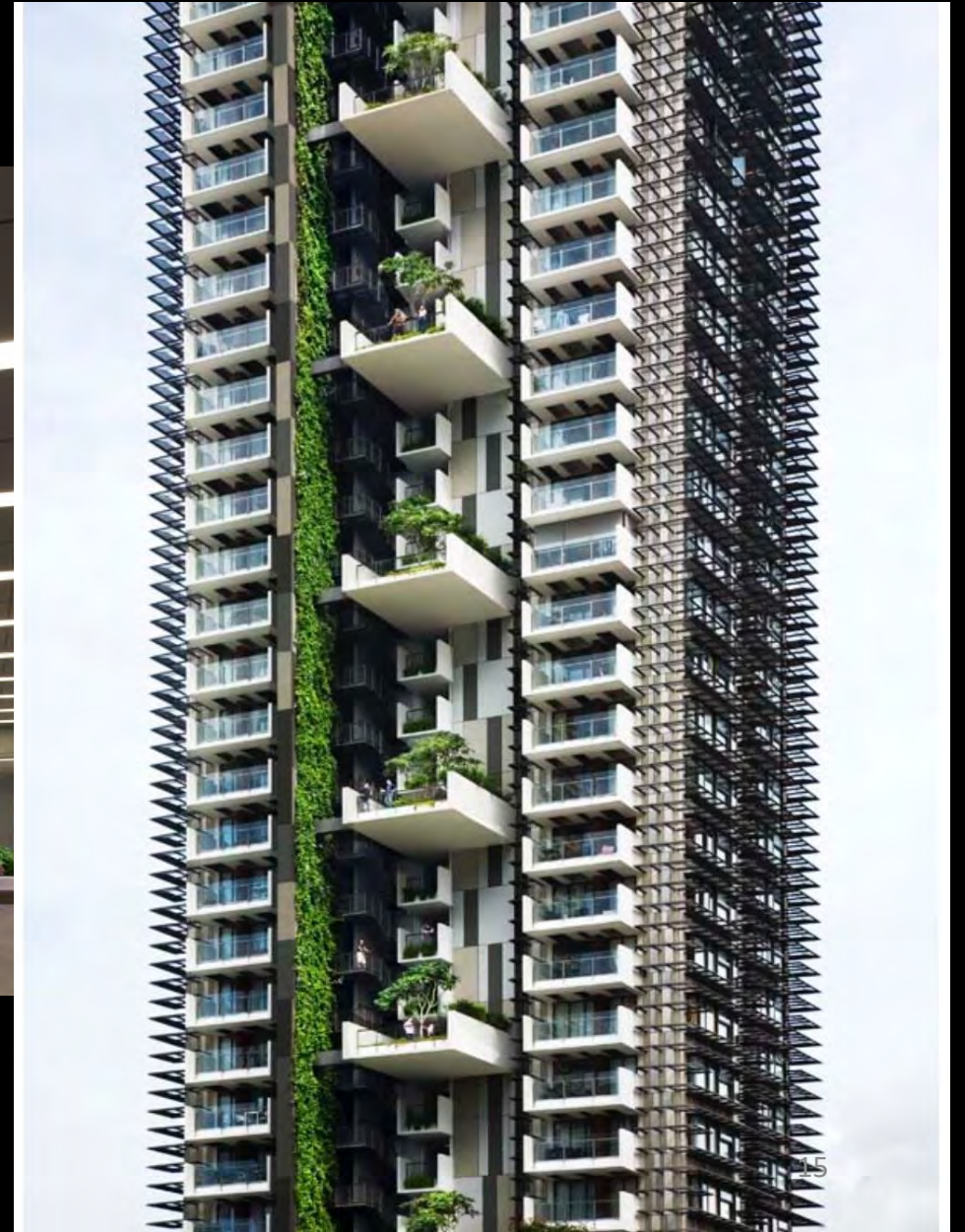
Critical factor in human response to environment is DESIGN:

Learning and cognitive development



Effects of human-centered design

Biophilia and biomimicry



LEED/WELL Building Standard

WELL Return on Investment

Employee retention:

1% reduction annual turnover

- *Worker productivity:*

16% increase in first year

- *Absenteeism:*

19% decrease

- *Presenteeism* (includes focus, attention):

16% increase

- *Employee communication:*

42% increase

- *Employee sharing of ideas and collaboration:*

44% increase

- *Promote health and well being*

Cornell University Department of Design and Environmental Analysis, ASID Research, Innovative Workplace Institute, Delos Institute

Building owners adopting human-centered WELL standard report:

73% positive impact on building leasing

62% positive impact on building value

79% positive impact on occupant satisfaction

Dodge Data Analytics, The Drive Toward Healthier Buildings (2016)



Human habitats

possibilities for development directly linked to environmental factors



Form

wayfinding, imageability, placemaking



Surfaces and materials



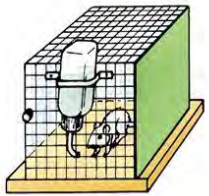
Construction details



Enriching Environments

Environmental Influence

- Experience affects brain development



Impoverished environment



Rat brain cell



Enriched environment



Rat brain cell



Poor design decisions lead to poor outcomes



No such thing as “neutral”



Patterned complexity and legibility



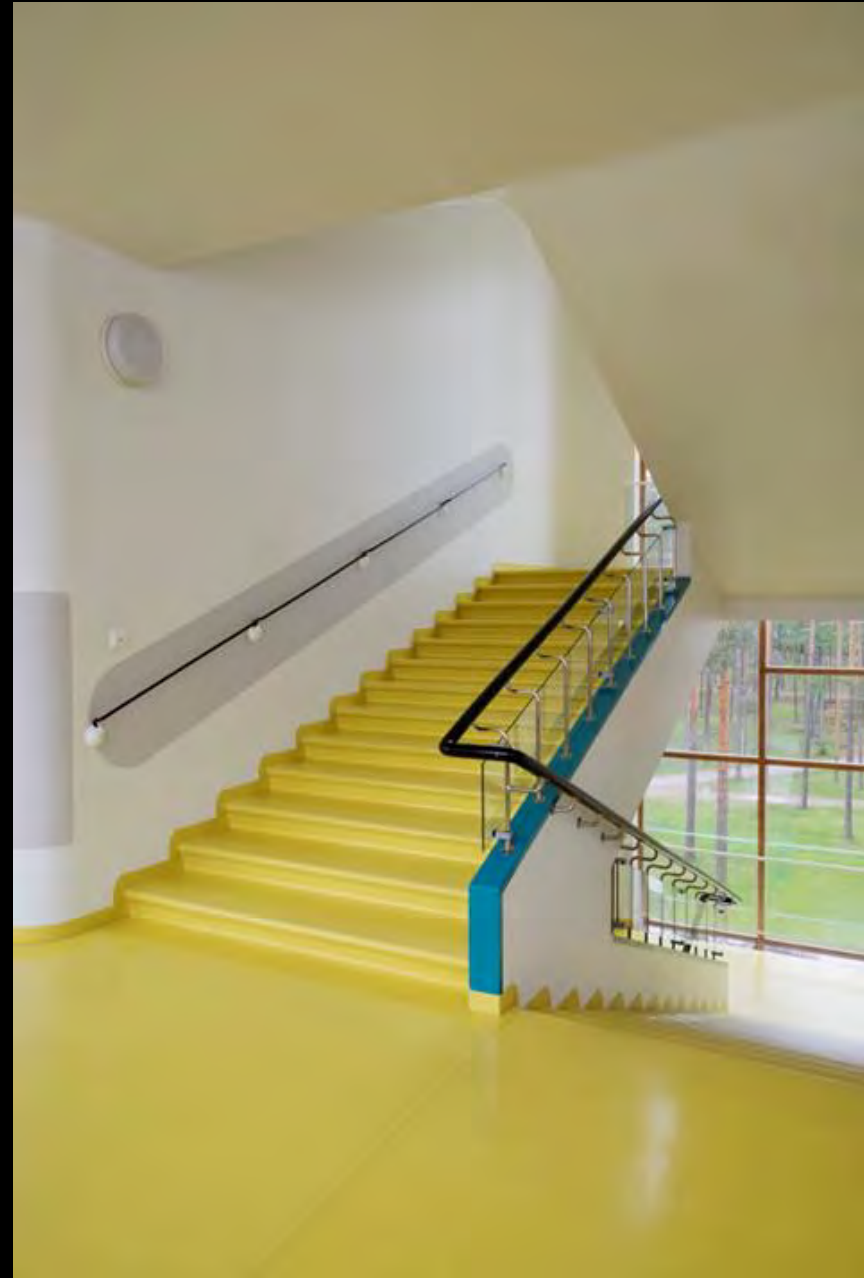
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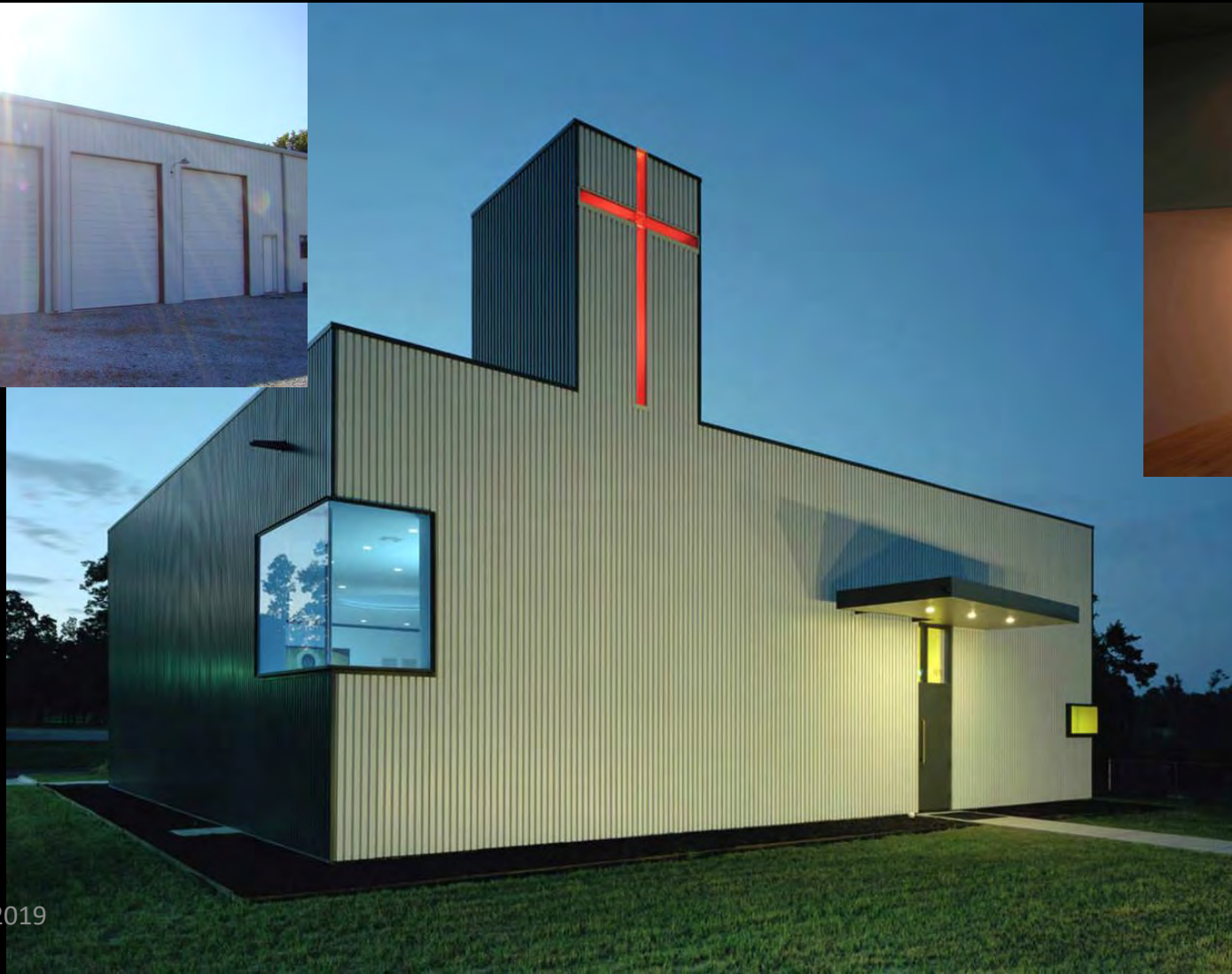
Changeability and placemaking



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Design is a public good:
the kind of art that everyone deserves



Social determinants of health



Environment

mountains

rivers

forests

plains/
fields



3/28/2019
1960

2018

Landscape
architecture

Urban
design

Infrastructure

Architecture

Interior
design

1990

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Built environment



2018

How can we create more
enriching, human-centered environments?
(X2 -- more of them, and more human-centered)

