



Ideas on Intergenerational Living: A Studio Perspective

Susanne Siepl-Coates, Professor Dipl. Ing.
Kansas State University

Architectural Design Studio VII/VIII

Creating Models for Sustainable Inter-Generational Living



Pioneer Square Neighborhood
Seattle, Washington



Healing and Place are Inseparable.

Wilbert M. Gesler, *Healing Places*, 2003

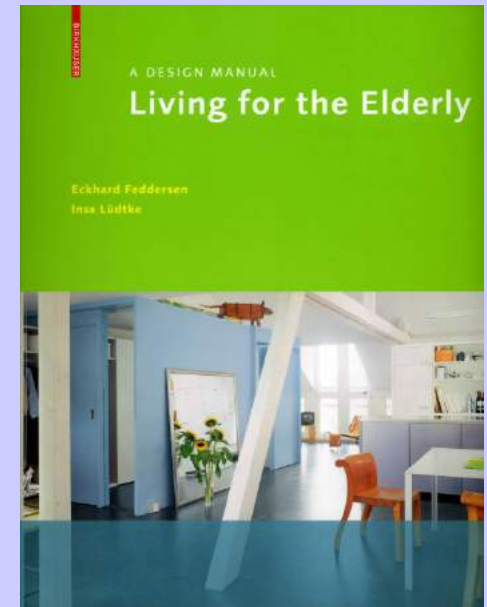
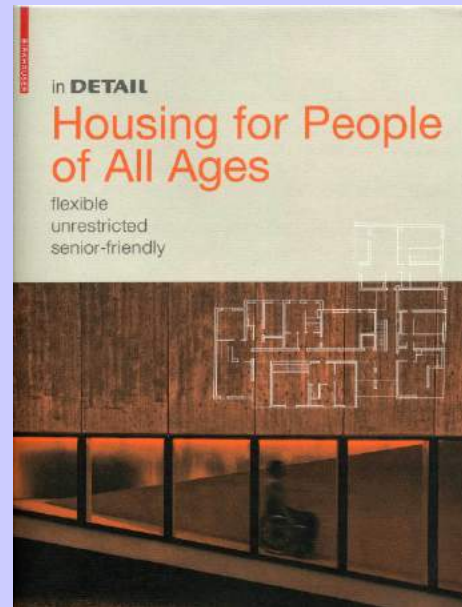
Academic Goals

- _to contribute to professional knowledge by discovering design characteristics for a new building type
- _to explore relationships between architecture and human health/well being



Precedent Study - Design Guidelines

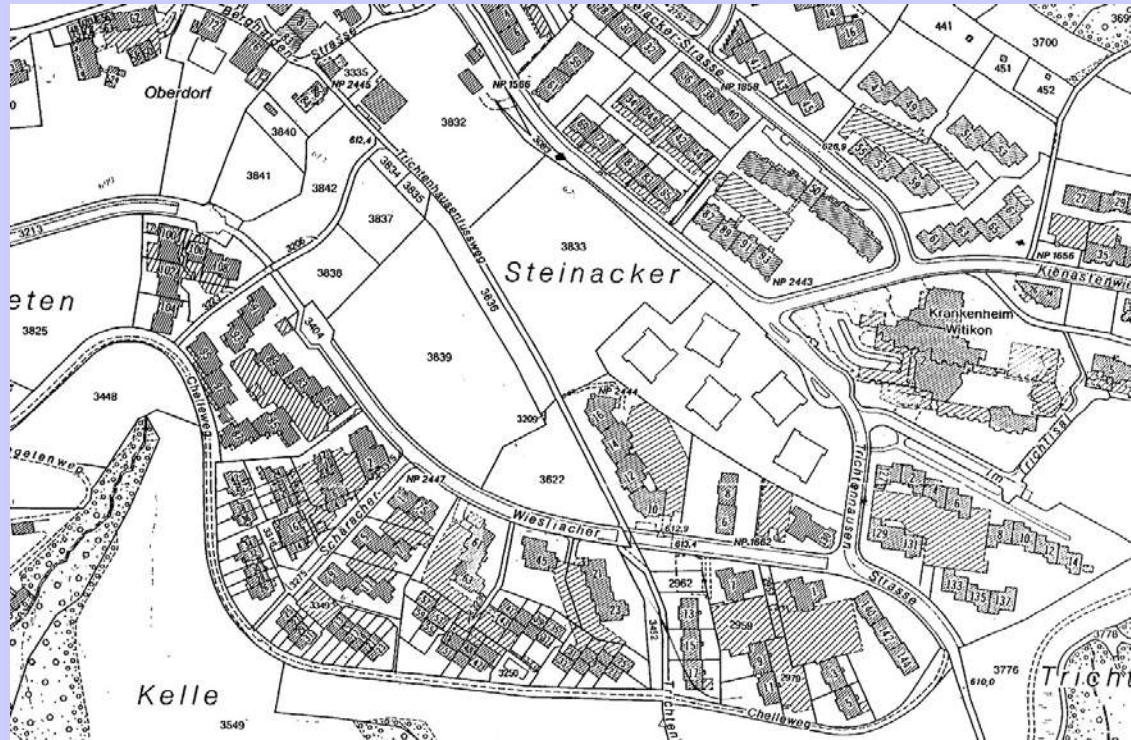
- _ universal design
- _ bringing the world into the building (Stadler)
- _ realms to linger along circulation paths
- _ social spaces 'at the center'
- _ adaptable living units
- _ third places
- _ community at various scales
- _ circular path within unit
- _ daylight from two sides
- _ access to nature



Steinacker Residential Complex
Zurich, Switzerland
Hasler Schlatter Partner Architekten
2005 Age Award, Swiss Age Foundation

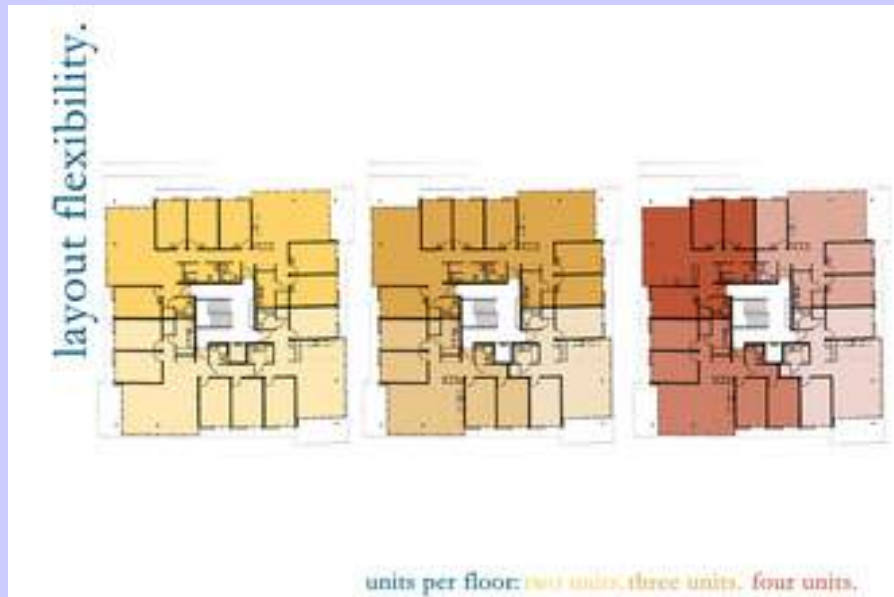


daylight from two sides access to nature

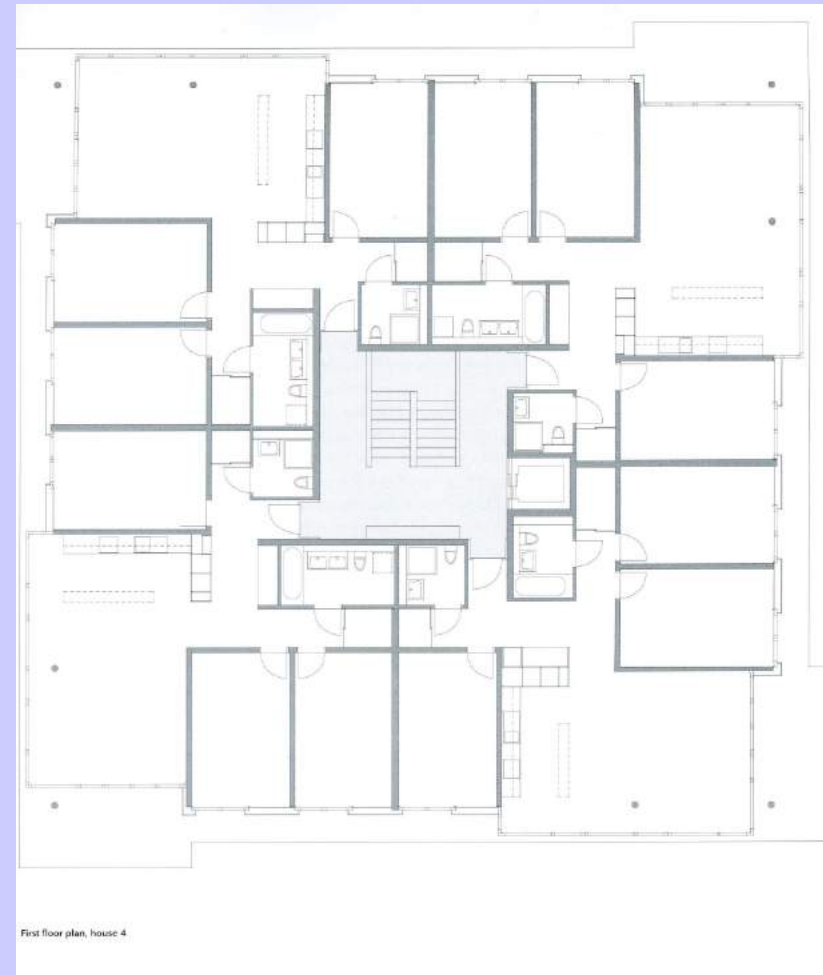


- _ completed 2004
- _ five free-standing 'urban villas'
- _ 75 units
- _ a kindergarten
- _ an apartment for six persons with dementia

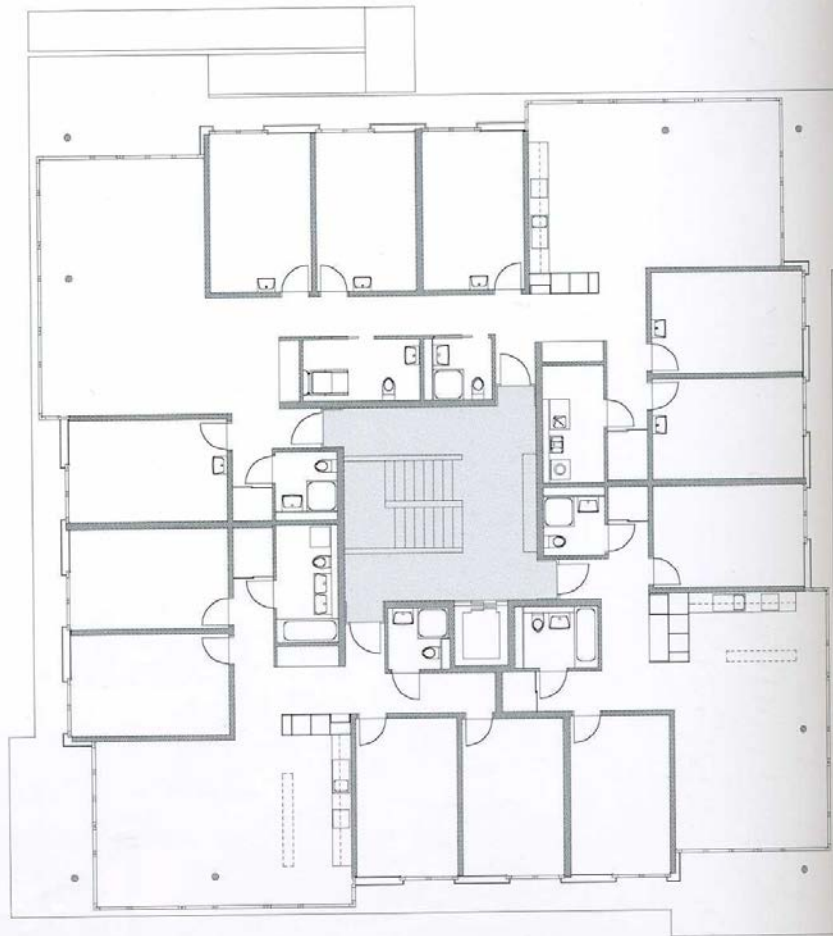
adaptable units within the building



- _simple load-bearing structure allows for flexible apartment layout
- _spatially generous living/dining/kitchen areas
- _non-hierarchical bedrooms (multi-use options)
- _access to balcony from all rooms
- _varying orientations for living rooms



community at various scales

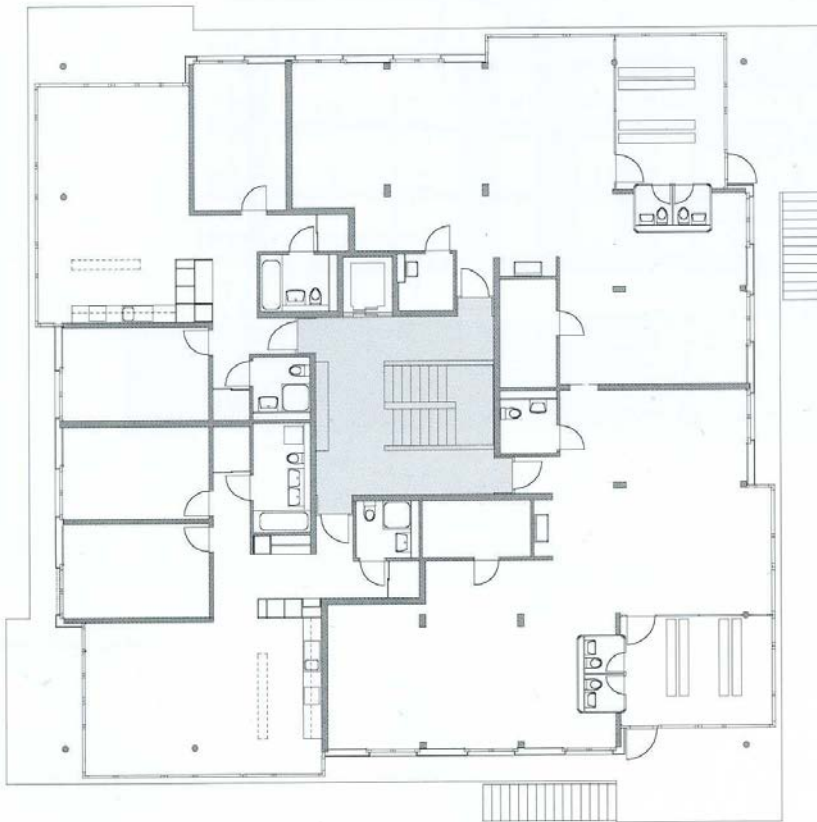


First floor plan, house 2 with residential care group



_grouped apartment entrances
_dementia unit plus two apartments

**bringing the world
into the building**



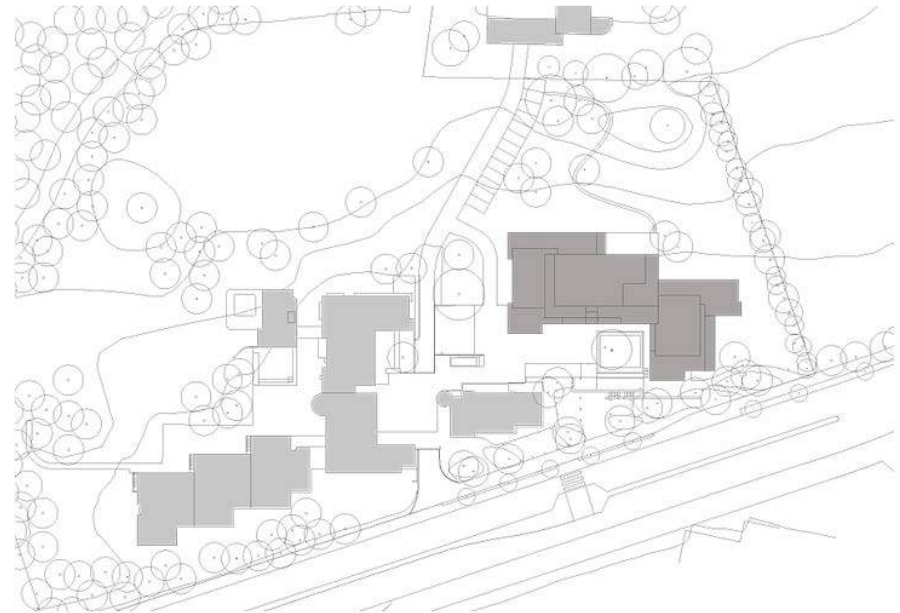
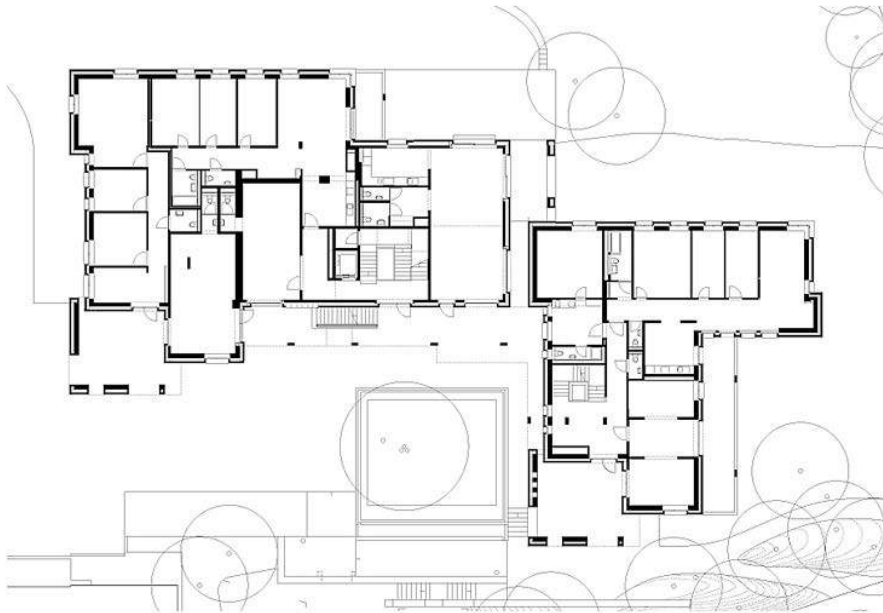
First floor plan, house 1 with children's nursery

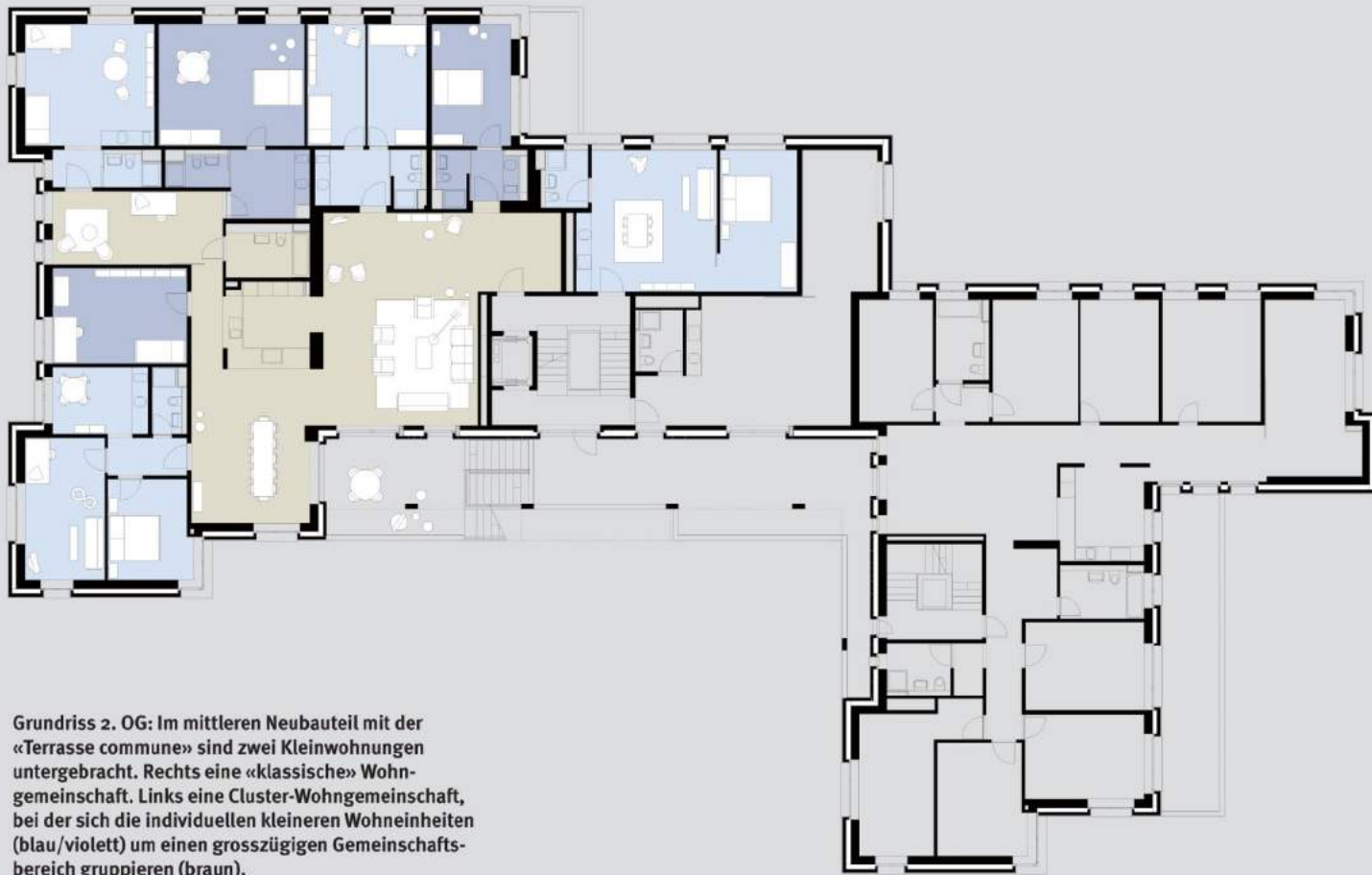


_kindergarten for two groups of children

Kraftwerk 2
Zurich, Switzerland
Adrian Streich Architekten

- _completed 2011
- _adaptive reuse
- _mix of housing options
- _offices, studios, communal rooms

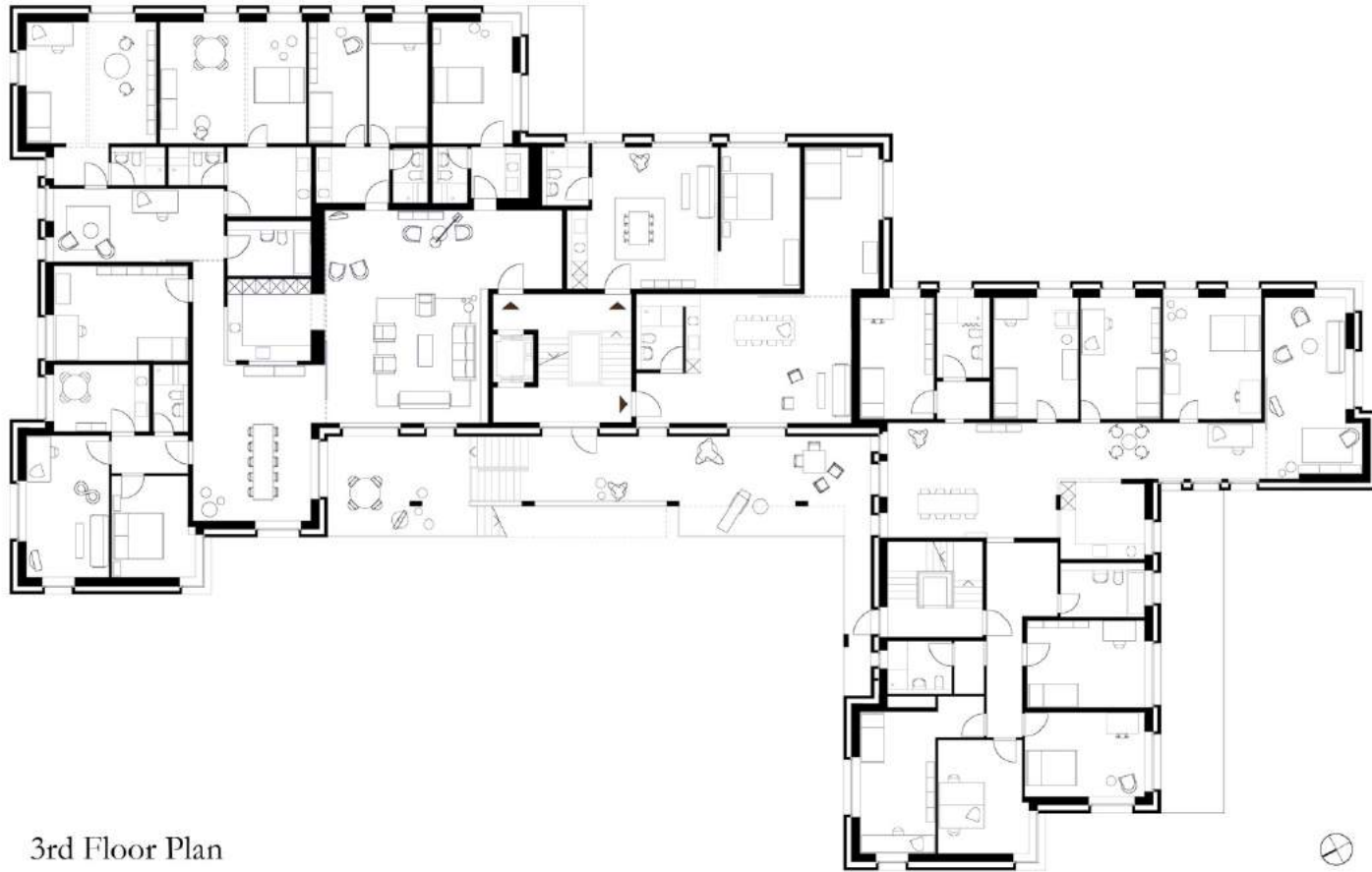




Grundriss 2. OG: Im mittleren Neubauteil mit der «Terrasse commune» sind zwei Kleinwohnungen untergebracht. Rechts eine «klassische» Wohn-gemeinschaft. Links eine Cluster-Wohn-gemeinschaft, bei der sich die individuellen kleineren Wohneinheiten (blau/violett) um einen grosszügigen Gemeinschaftsbereich gruppieren (braun).

community at various scales: cluster living

- _6 mini suites with small kitchens and bathrooms
- _spacious shared spaces for living, dining, cooking; a large bathroom; and a terrace



3rd Floor Plan

social spaces 'at the center'
_exterior terraces and stairs benefit all units

access to nature



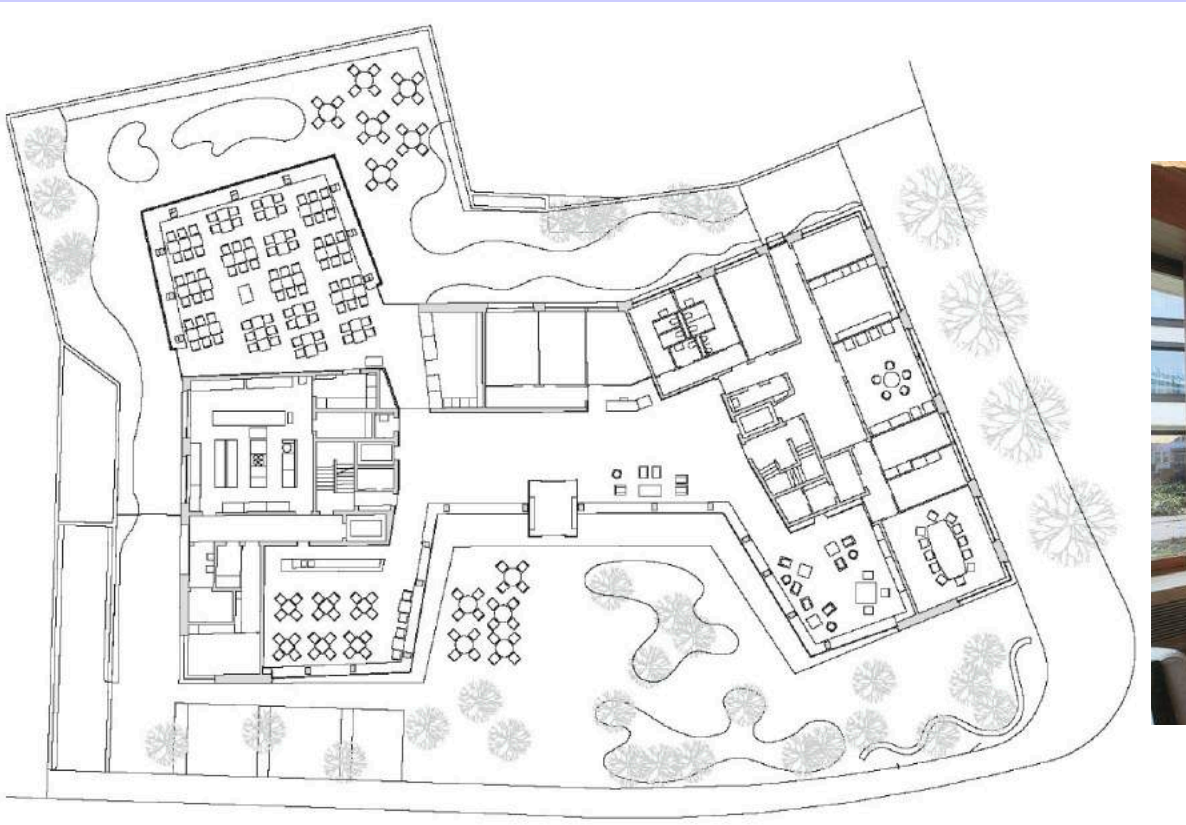
**Spirgarten Senior Living
Zurich, Switzerland
Miller & Maranta, Basel**



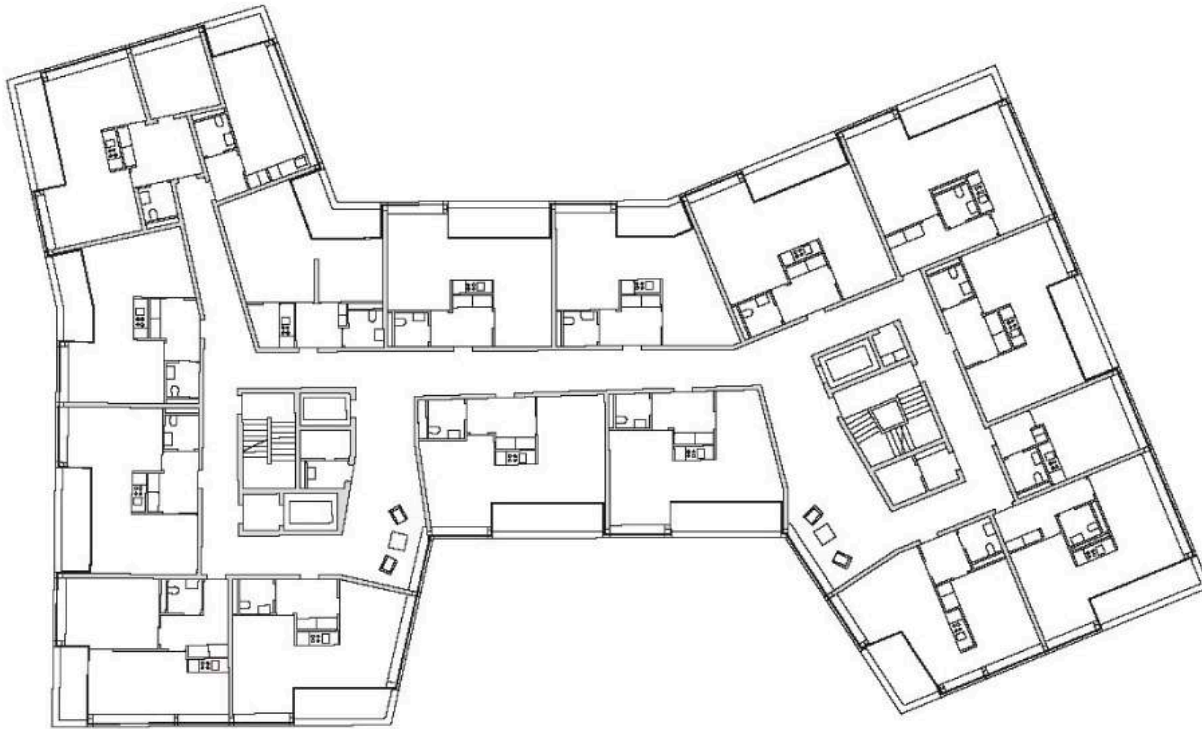
- _ completed 2006
- _ 60 apartments, 1-3 rooms
- _ eldercare, 18 individual rooms



bringing the world into the building third places



ground floor: café, restaurant, fireplace room, garden

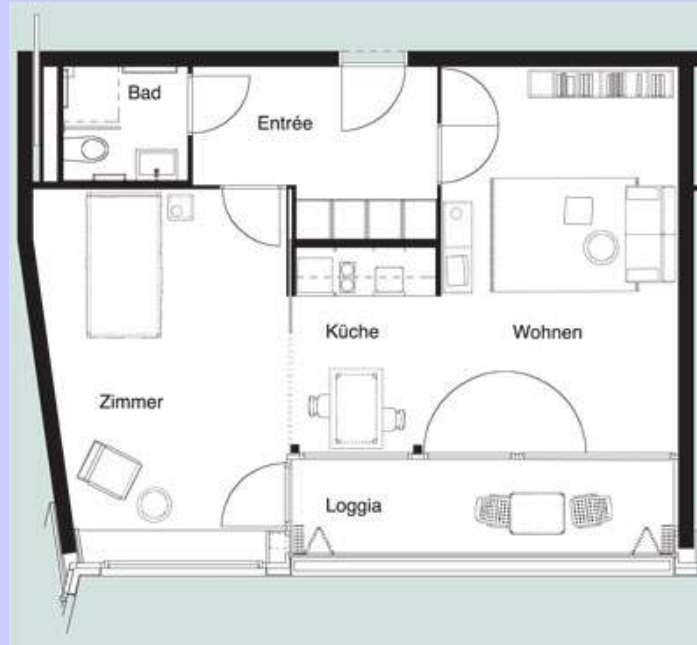
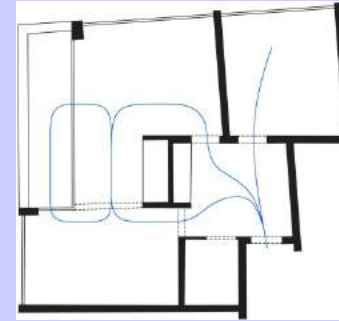
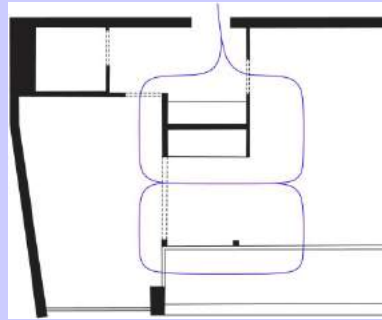


typical residential floor

**circular path on the floor
realms to linger along circulation paths**



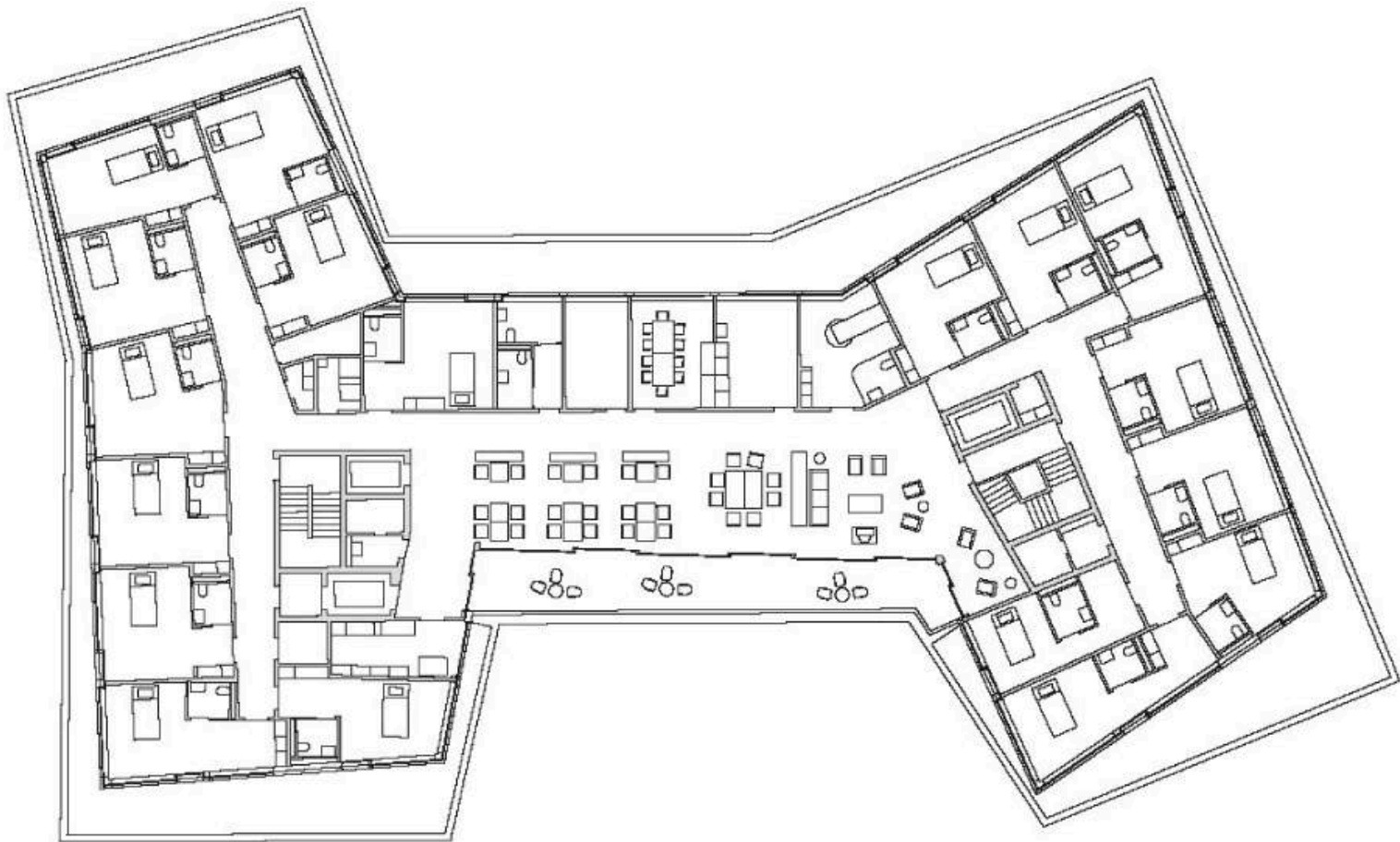
**circular path within the unit
access to nature**



one room apartment

two room apartment

three room apartment



top floor: elder care

**realms to linger along circulation paths
social space at the center**

Community House 50
Winterthur, Switzerland
Haerle Hubacher Architekten

_completed 2010
_16 loft-like units



social spaces 'at the center'

realms to linger along
circulation paths

second floor: library



ground floor: guest apartment
and community space with kitchen





fourth floor: computer desk and small kitchen



third floor: fitness and music





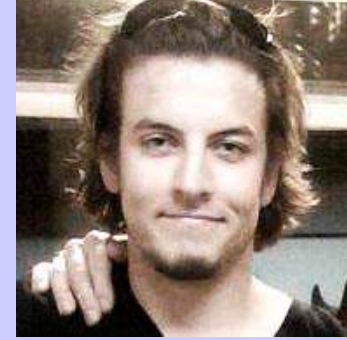
Jordan Albers



Adam Froelich



Sara Hartman



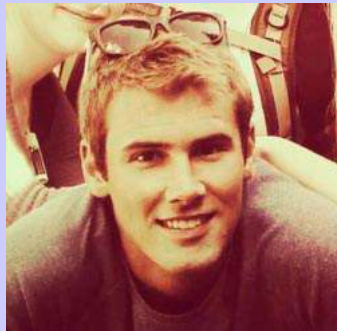
Landon Hubbard



Ian Kilpatrick



Wilson Meeks



Devin Murphy



Katie Nightingale



Kirby Thomas



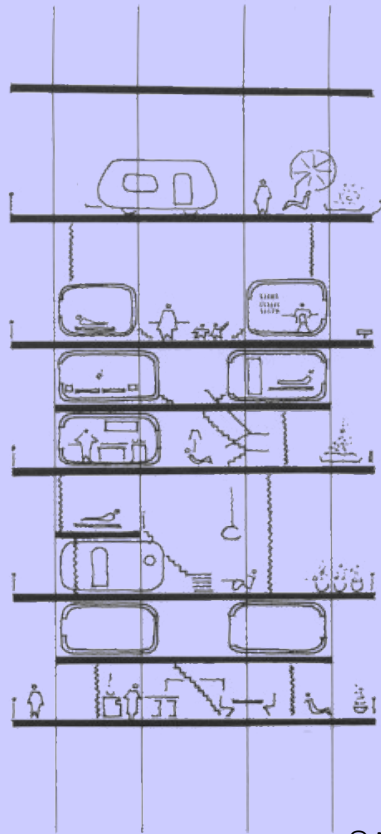
Dana Williamson



Yuankun Yu

Healing is facilitated by integrating the physical, mental, spiritual, emotional, and social components of the human being.

Wilbert M. Gesler, *Healing Places*, 2003



© N. John Habraken, 1981

Open Building: Adaptable Inter-Generational Living

Ian Kilpatrick

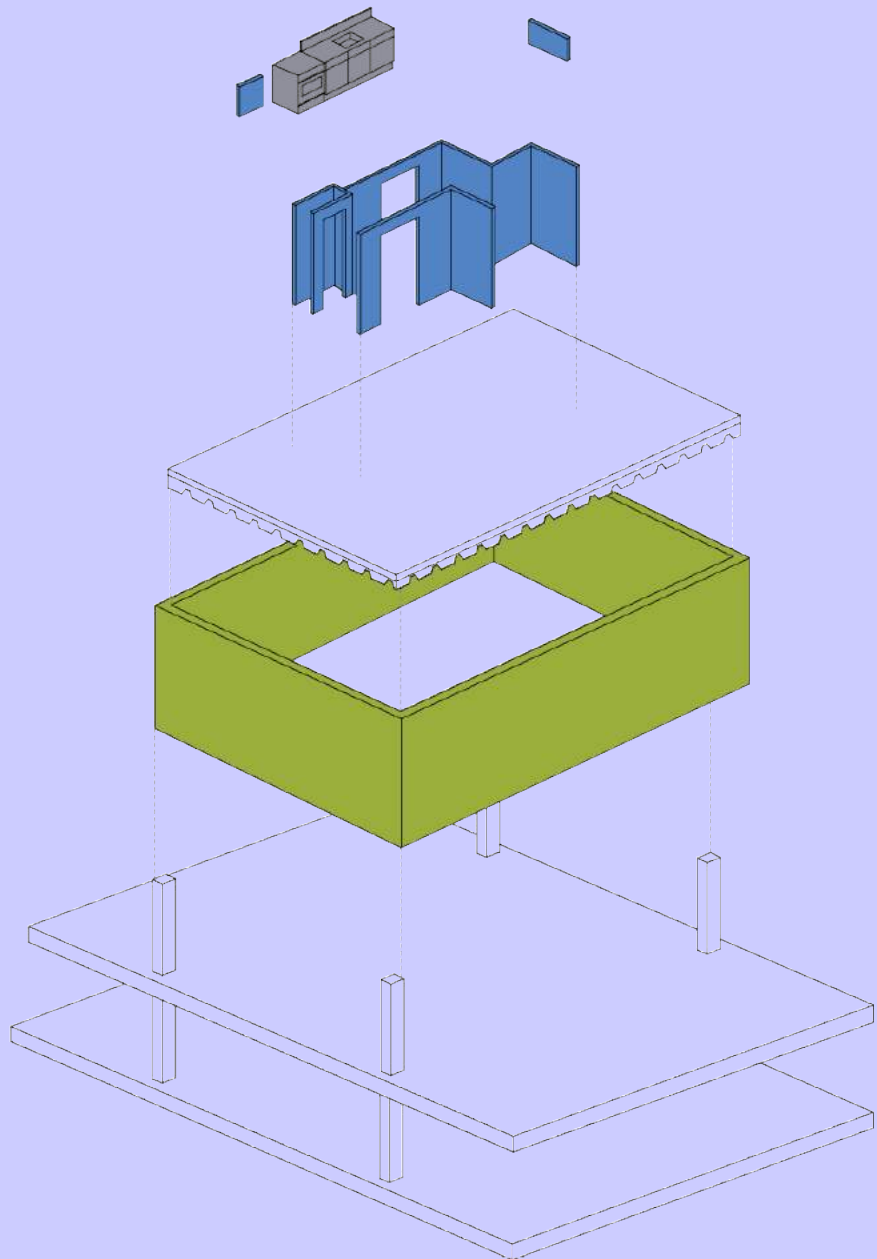
What is Healing Space?



- People carry an inherent emotional attachment to the physical environments, specifically “home”
- Home is different for everyone
- Unconscious decisions influence liking to physical environments
- Home should be where we’re wholly ourselves

The needs of one will rarely, if ever, be the same as others.

Claire Cooper Marcus, 2006



(50-100 years)

UNCHANGABLE

- _site development
- _supporting structure
- _building envelope

(15-50 years)

ADJUSTABLE

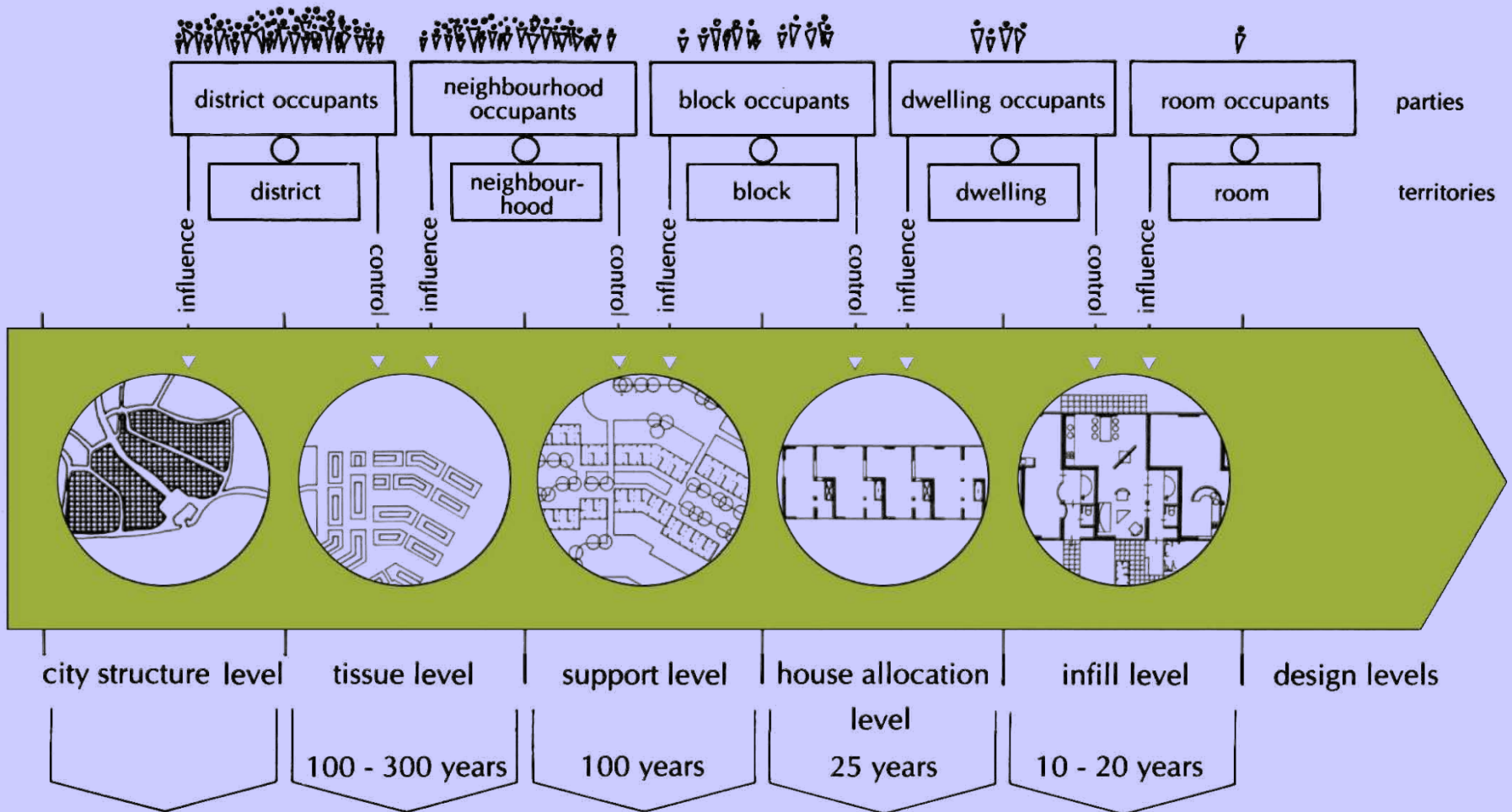
- _indoor walls
- _ceilings & floors
- _fixed installations

(5-15 years)

CHANGEABLE

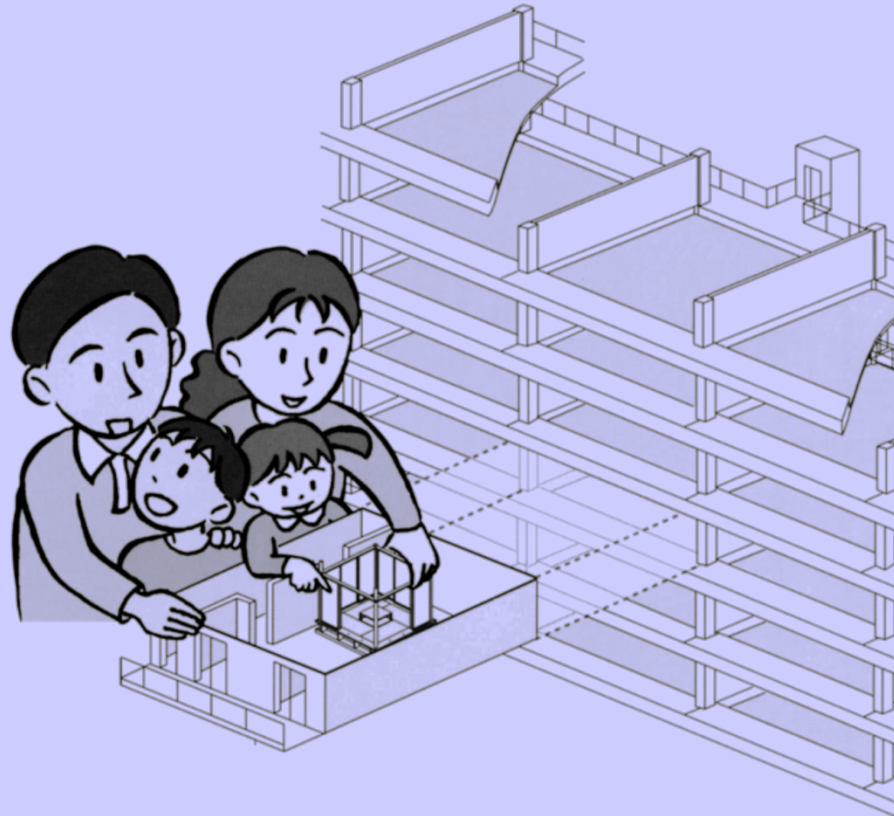
- _devices
- _equipment
- _furnishings

© Stephen Kendall, 2008



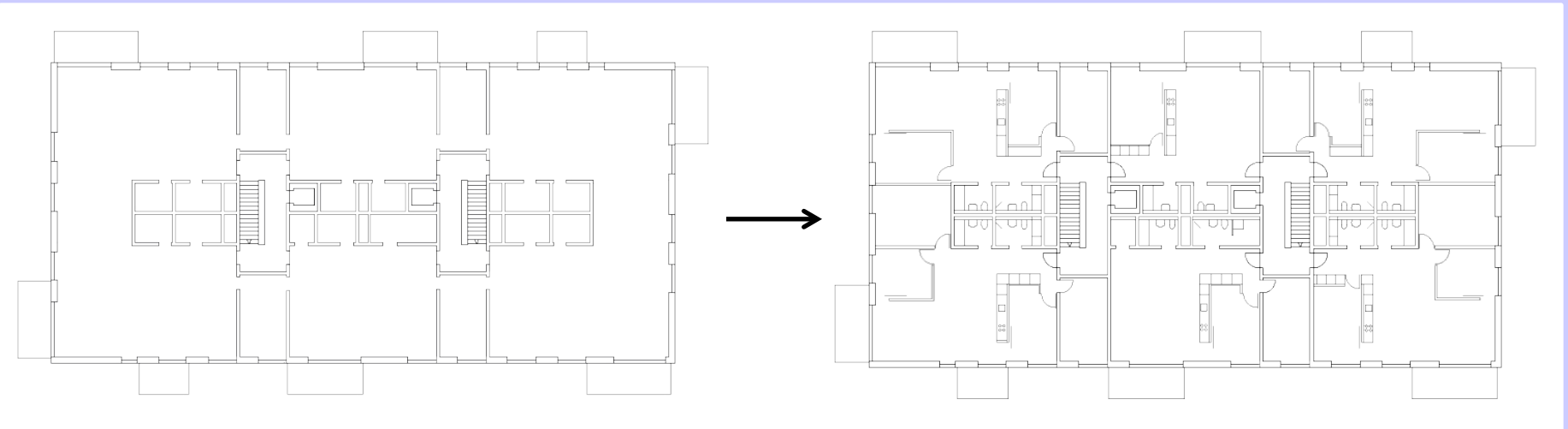
© Stephen Kendall, 2013

How do we (as designers) create housing that changes as people change, allowing them to remain in a singular environment?



© N. John Habraken, 1999

Eichgutstrasse, Winterthur (Winterthur, Switzerland)

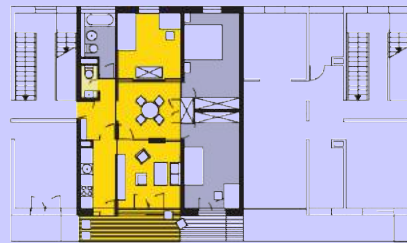


© Vera Gloor, 2008

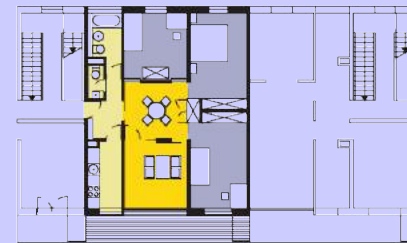
Wohngebiet Sauerland (Wiesbaden, Germany)



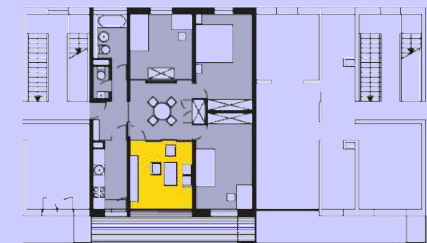
Open plan; living space occupying center



Portion of living area closed off for play room



Play room no longer necessary; becomes living space again



Necessity for guest bedroom; living space becomes added bedroom

© Dietz Joppien, 2001

“How do we design the built environment to support both stability - in respect to long term community interests- and change - in respect to individual preferences?”

-Stephen Kendall

Inter-generationally, how can this idea further a sense of community and promote aging in place?



Sustainable Intergenerational Living: Well-Being For All Ages Through Color & Light

Dana Williamson

Rachofsky House
Richard Meier
Dallas, Texas



Using Color & Light to Create Healing Environments

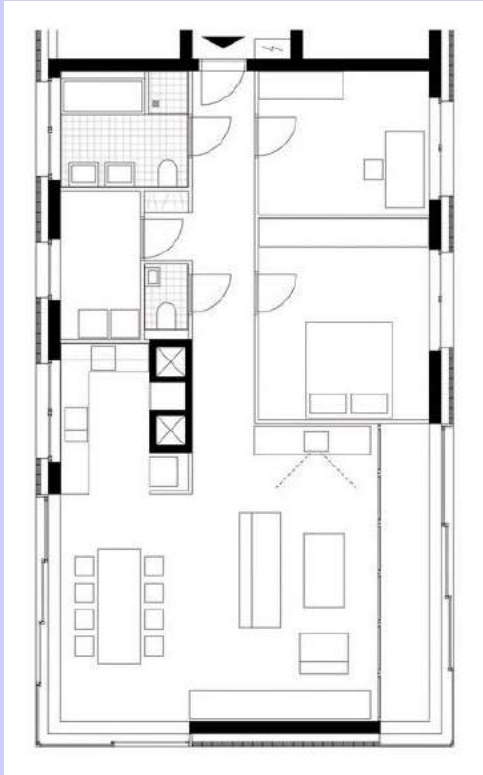
- Reduced risk of depression
- Improved mobility
- Improved wayfinding
- Prevention of disease
- Physical healing
 - Hydrotherapy

Chapel of St. Ignatius
Steven Holl
Seattle, Washington



Bad Ems Thermal Baths
4a Architekten
Bad Ems, Germany

Intergenerational Living Design Guidelines: Color & Light



Palladiumflat
Johannes Kappler
Groningen, Netherlands



Atrium House
MESH Architectures
Brooklyn, New York

- narrow plan
- daylight from two sides
- light from above and/or below
- transparency
- light shelf
- light washing a wall
- hidden light source
- floor-to ceiling windows
- exterior operable shading
- double-height space



Intergenerational Living Design Guidelines: Color & Light



Palomar College Multidisciplinary Building
LPA Architects
San Marcos, California

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Palladiumflat
Johannes Kappler
Groningen, Netherlands

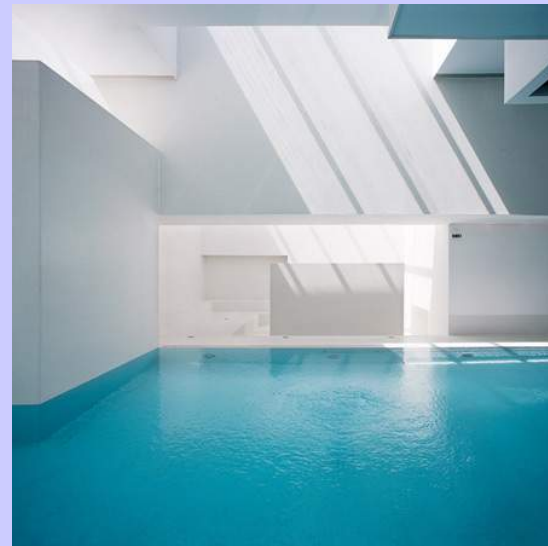
Intergenerational Living Design Guidelines: Color & Light



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Rachofsky House
Richard Meier
Dallas, Texas



Les Bains des Docks
Jean Nouvel
Le Havre, France

Intergenerational Living Design Guidelines: Color & Light



Nelson Atkins Museum of Art
Steven Holl
Kansas City, Missouri

- narrow plan
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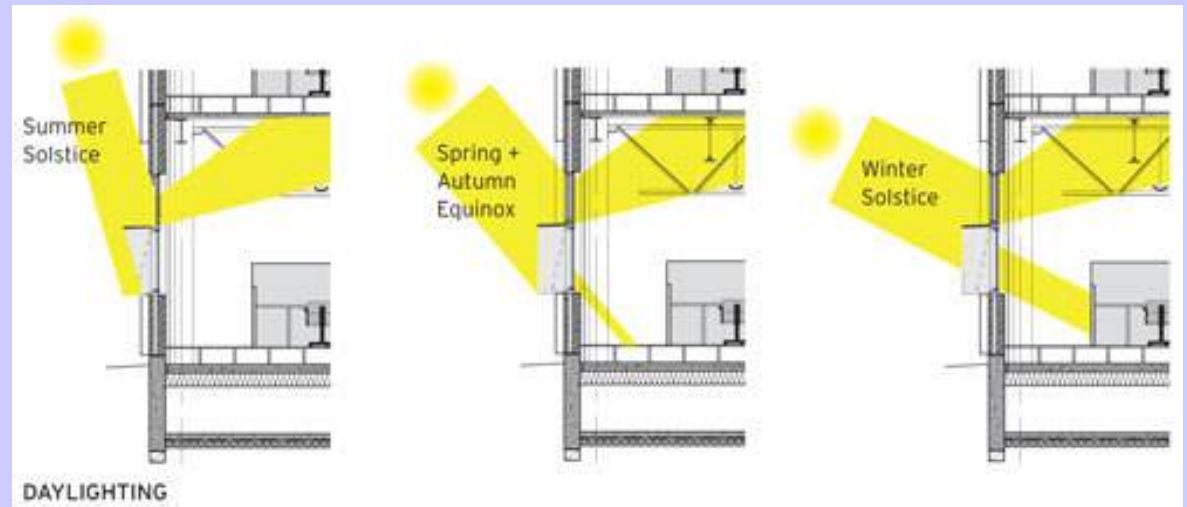
Skodsborg Spa & Fitness
Henning Larsen Architects
Skodsborg, Denmark

Intergenerational Living Design Guidelines: Color & Light



Jacqueline Crist Gallery
Trout Architects
Boise, Idaho

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Intergenerational Living Design Guidelines: Color & Light



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Therme Vals
Peter Zumthor
Vals, Switzerland

Intergenerational Living Design Guidelines: Color & Light



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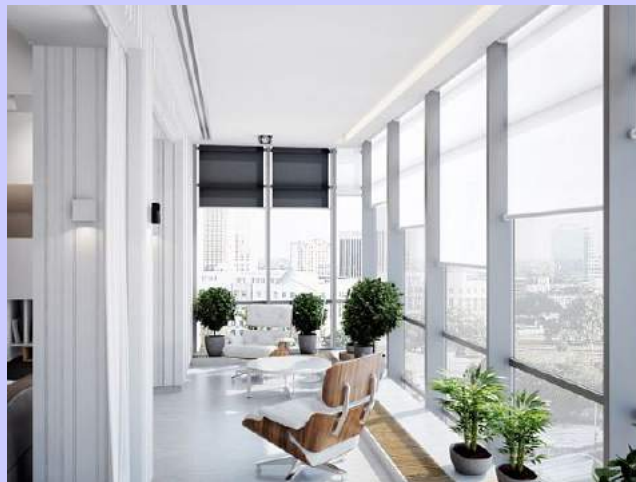
Tschuggen Bergoase Spa
Mario Botta
Tschuggen, Switzerland

Intergenerational Living Design Guidelines: Color & Light



Scandinave Les Bains Vieux
Saucier + Perrotte
Montreal, Quebec, Canada

- narrow plan
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Intergenerational Living Design Guidelines: Color & Light



Petting Farm
70F Architecture
Almere, Netherlands

- narrow plan
- daylight from two sides
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Intergenerational Living Design Guidelines: Color & Light



Agnes Lofts
Weinstein A|U
Seattle, Washington

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Physical Activity

Adam Froelich



Balance



Flexibility



Cardio Endurance



Strength Training

Exercises



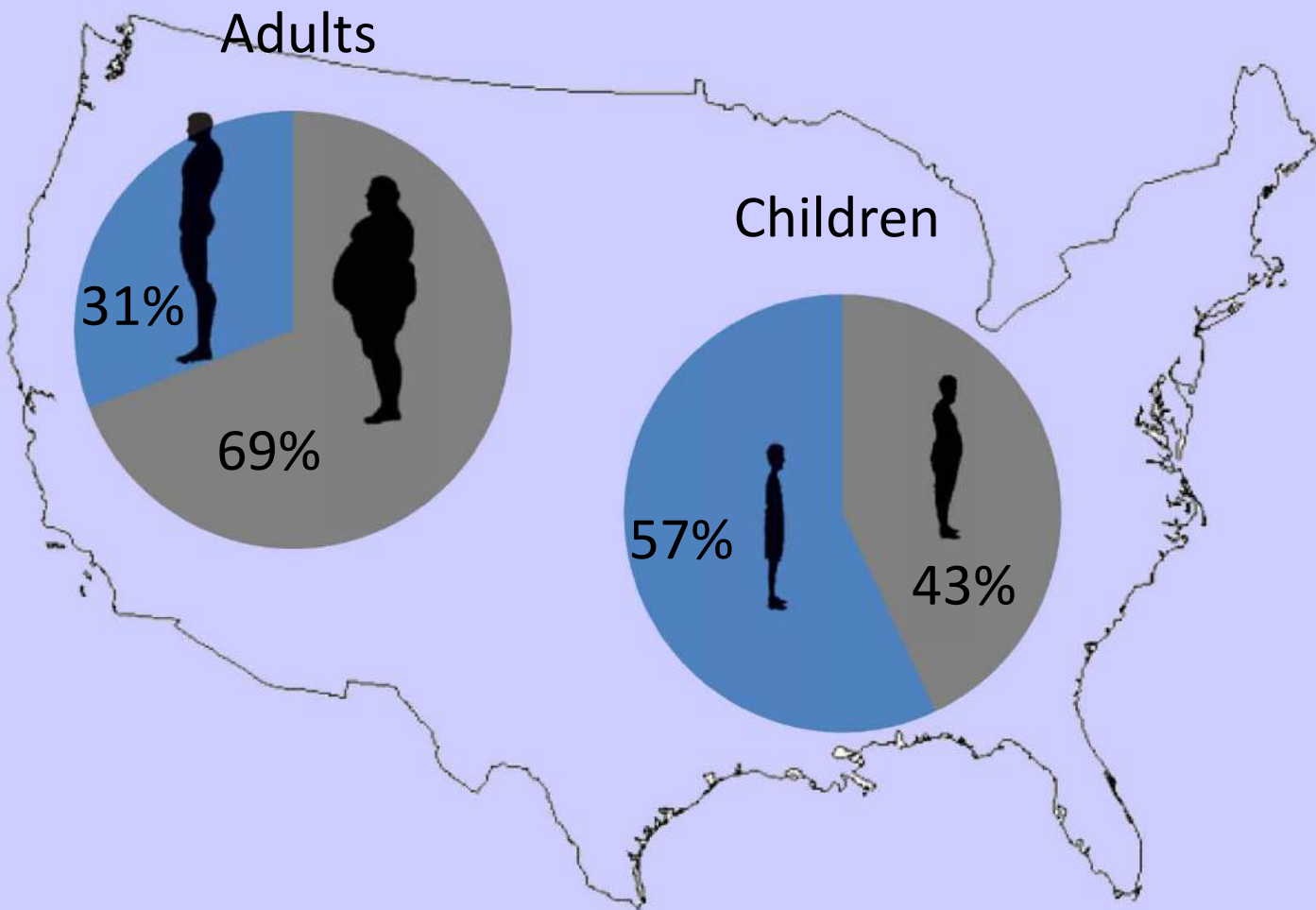
Body

- Helps with independence by improving and maintaining physical strength
- Increases energy levels
- Improves sense of balance
- Improves social life
- Keeps weight under control

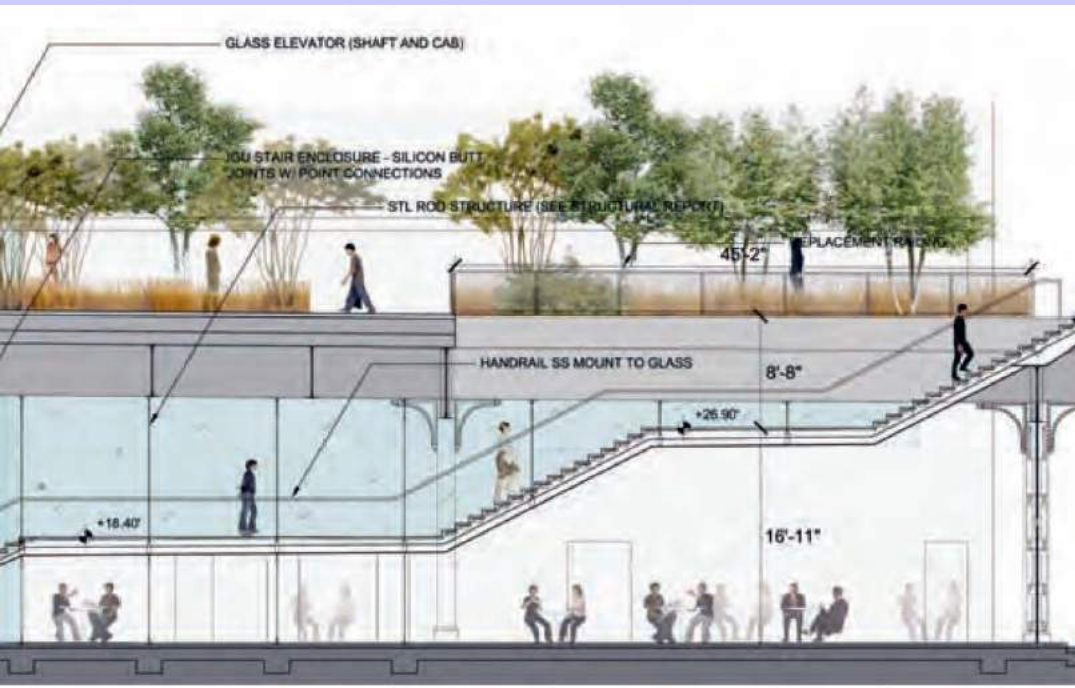
Brain

- Increases production of neurochemicals that promote brain cell repair
- Improves memory
- Lengthens attention span
- Boosts decision making skills
- Decreases depression
- Improves multi-tasking and planning

Results of Exercise



Overweight Percentages

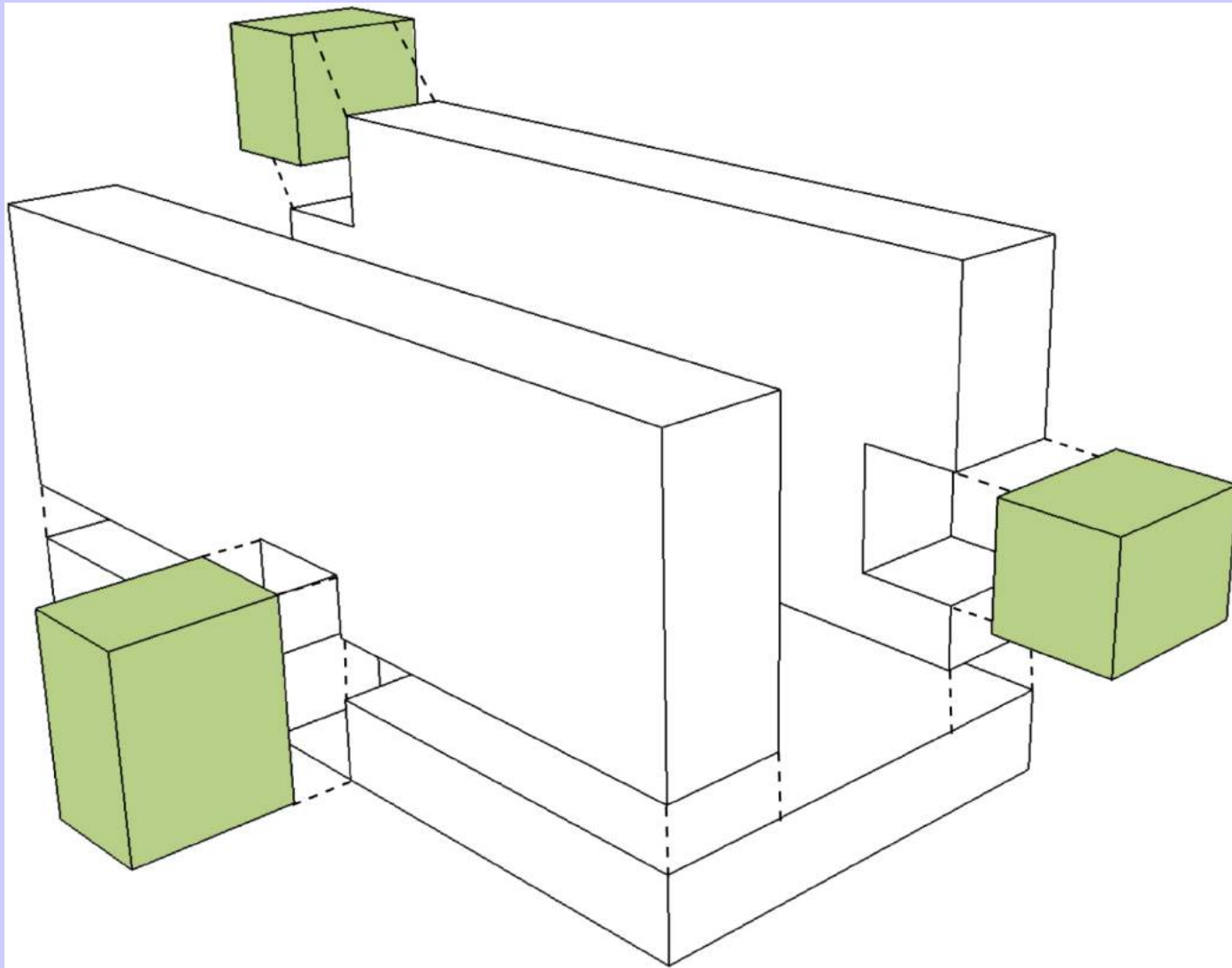


Diller Scofidio + Renfro



Precedent

Design Scheme



Separate Building Elements



Desirable Circulation



Attractive Exercise Spaces



THE FARMSTEAD

growing, preparing, and consuming are three aspects of food that can contribute to the quality of life for people of all ages

Kirby Thomas

Health Issues

The Social Aspect

- isolation is a health risk factor
- social engagement and meaningful relationships are critical to quality of life

The Nutritional Aspect

- poor diet and physical inactivity are major contributors to disabilities that result from diabetes, osteoporosis, obesity, and stroke
- 75% of Americans do not eat enough fruit, more than half do not eat enough vegetables

The Physical Aspect

- the number of overweight adults is increasing each year
- sedentary lifestyles contribute to 23% of chronic disease-related deaths in the United States

Why Food?

Because the consumption of food is an everyday and repeated occurrence, it is heavily associated with various meanings and aspects.

The Social Aspect

- individuals come together and confirm their mutual relationships during meals
- cooking together promotes greater understanding and respect between generations

The Nutritional Aspect

- healthy food choices prevent disease, strengthen the immune system, and increase life expectancy

The Physical Aspect

- improves physical and psycho-social health outcomes through the actions of growing and preparing food

Growing Food



Preparing Food

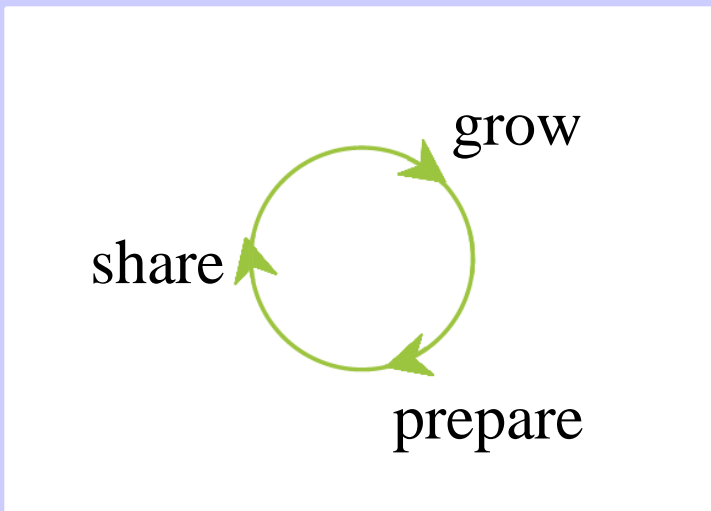


Sharing Food



Concept

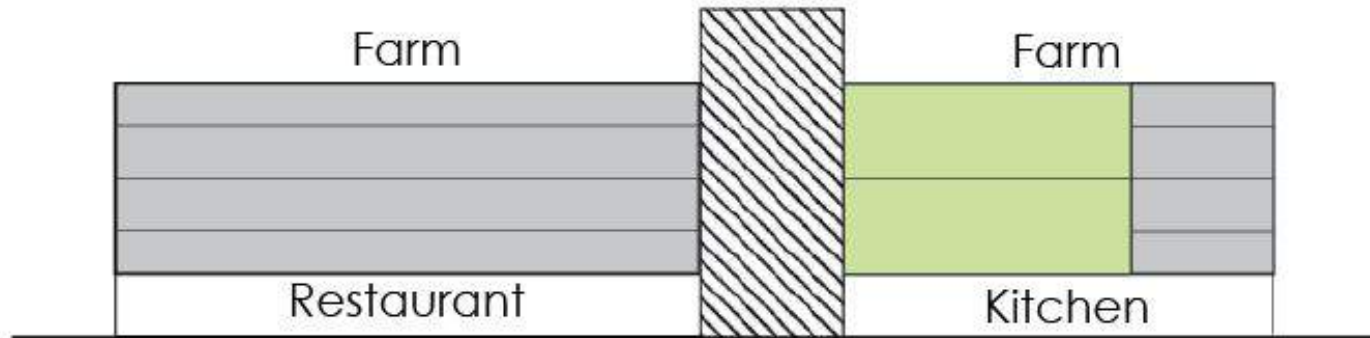
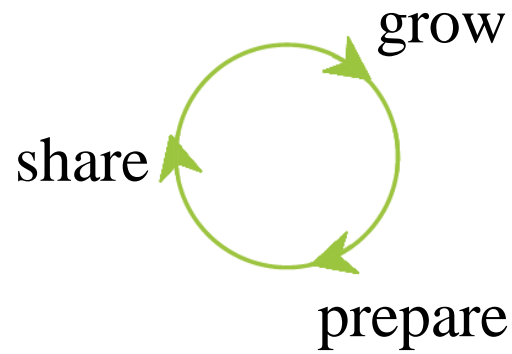
Edible School Yard



“Experiences in the kitchen and garden foster a better understanding of how the natural world sustains us, and promote the environmental and social well being of our [...] community”

Alice Waters, Owner, Chez Panisse Restaurant, Berkeley

THE FARMSTEAD





Outdoor Space + Inter-Generational Living

Jordan Albers
Devin Murphy

RESEARCH

- “Garden settings are important for children because they live through their senses.”

Robin C. Moore

- “Gardens can be important and effective in fostering social contact and that the social contacts occurring in healthcare gardens include emotionally supportive interactions of the type known to mitigate stress and improve medical outcomes.”

Roger Ulrich

- It is the multifaceted resource of the outdoors with the mystic and beauty of nature that we seek to attain in our efforts to provide better places for older adults.

Susan Rodiek

- Both the aging population and members of younger generations have shown to benefit from social interactions fostered by the addition of outdoor space to living environments.

Claire C. Marcus

DESIGN PRINCIPLES

CHILDREN

- Types of play spaces:
 - Gardening
 - Sandbox
 - Sound Making Equipment
 - Quiet Play
- Design Considerations:
 - Real life materials for dramatic play
 - Adjacencies to toilets
 - Child proof exits
 - Varieties of play surfaces



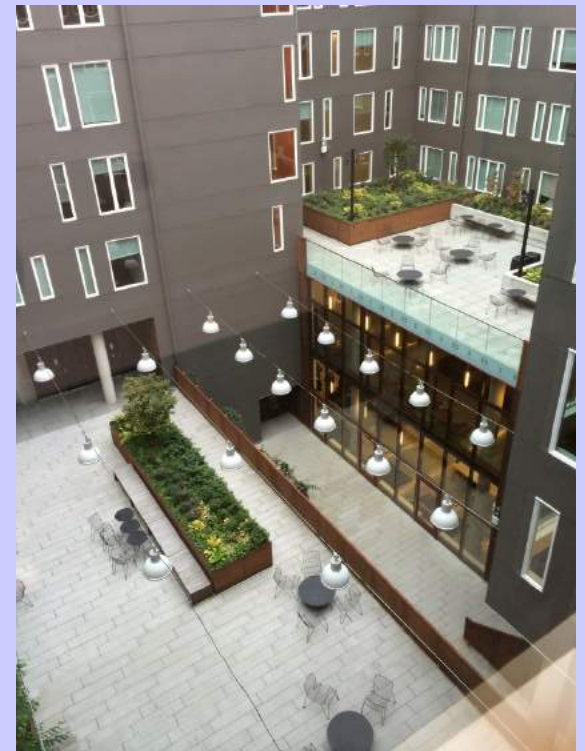
ELDERLY

- Outdoor Spaces in Elder Residential Settings
 - Seating/Activity areas placed near circulation paths
 - Provide views into the neighborhood
 - Provide for fixed and moveable seating

DESIGN SCHEMES

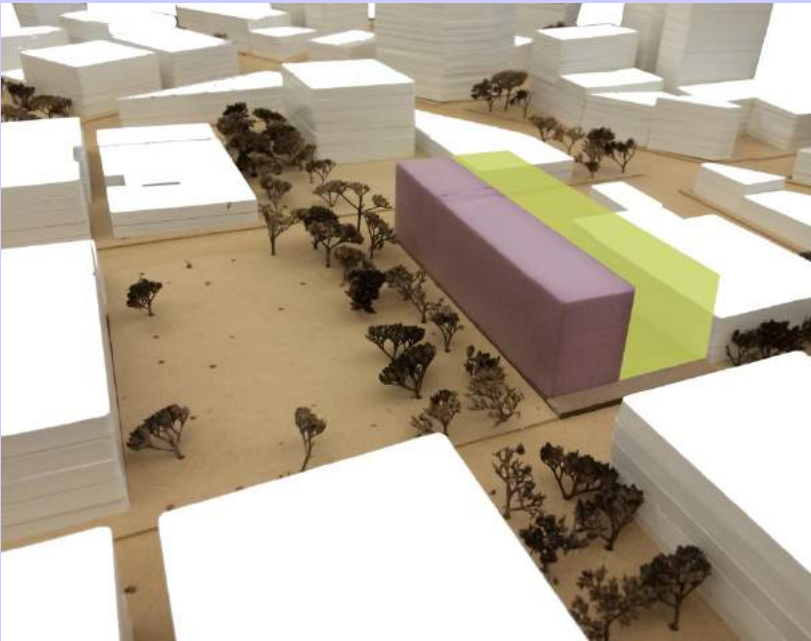


PRECEDENT



Dormitory, University of Washington, Seattle
Mahlum Architects

DESIGN SCHEMES



PRECEDENT



MFO Park, Zurich, Switzerland



Wohnfabrik Solinsieme, St. Gallen, Switzerland

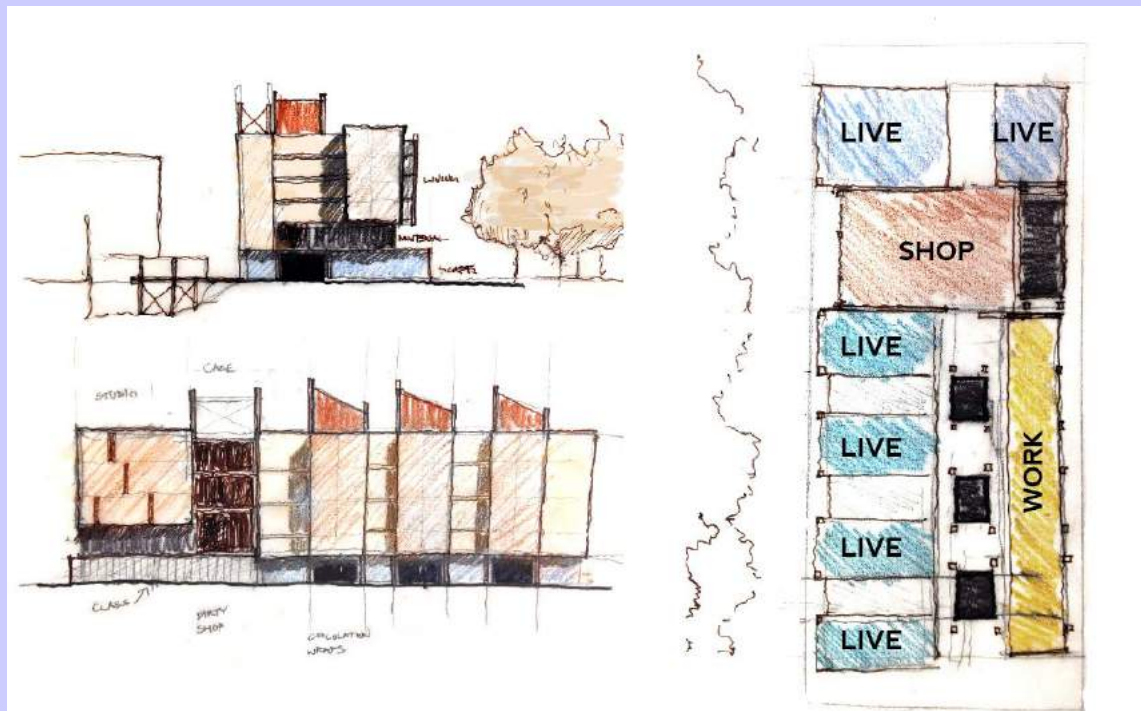




Landon Hubbard

Vision

An intergenerational housing community where craftspeople, artisans, makers, inventors tradespeople, retirees, and students of all ages can nurture mutual understanding, share ideas and distribute knowledge through the physical experience of making things.



MAKERHAUS

The project will examine the ways in which **thinking** and **making** by means of a service based learning model might contribute to a healthy lifestyle across multiple generations.



- *How can the act of making contribute to a cohesive/healthy living environment across multiple generations?*
- *How can the architectural proposal reinforce the idea that living + making = a purposeful life?*

A Co-Mentoring Project: An Intergenerational Service-Learning Experience

- **(IG) service learning between college students and older adults**
 - A co-mentoring project between older adult volunteers and students enrolled in and undergraduate lifespan developmental psychology course
 - Conducted comprehensive evaluation of the projects' impact on students. (Pre and Post)
- **Results:**
 - Students were more knowledgeable about older adults after the service-learning experience
 - Reported Intrapersonal development
 - Established a deeper relationship with their partners

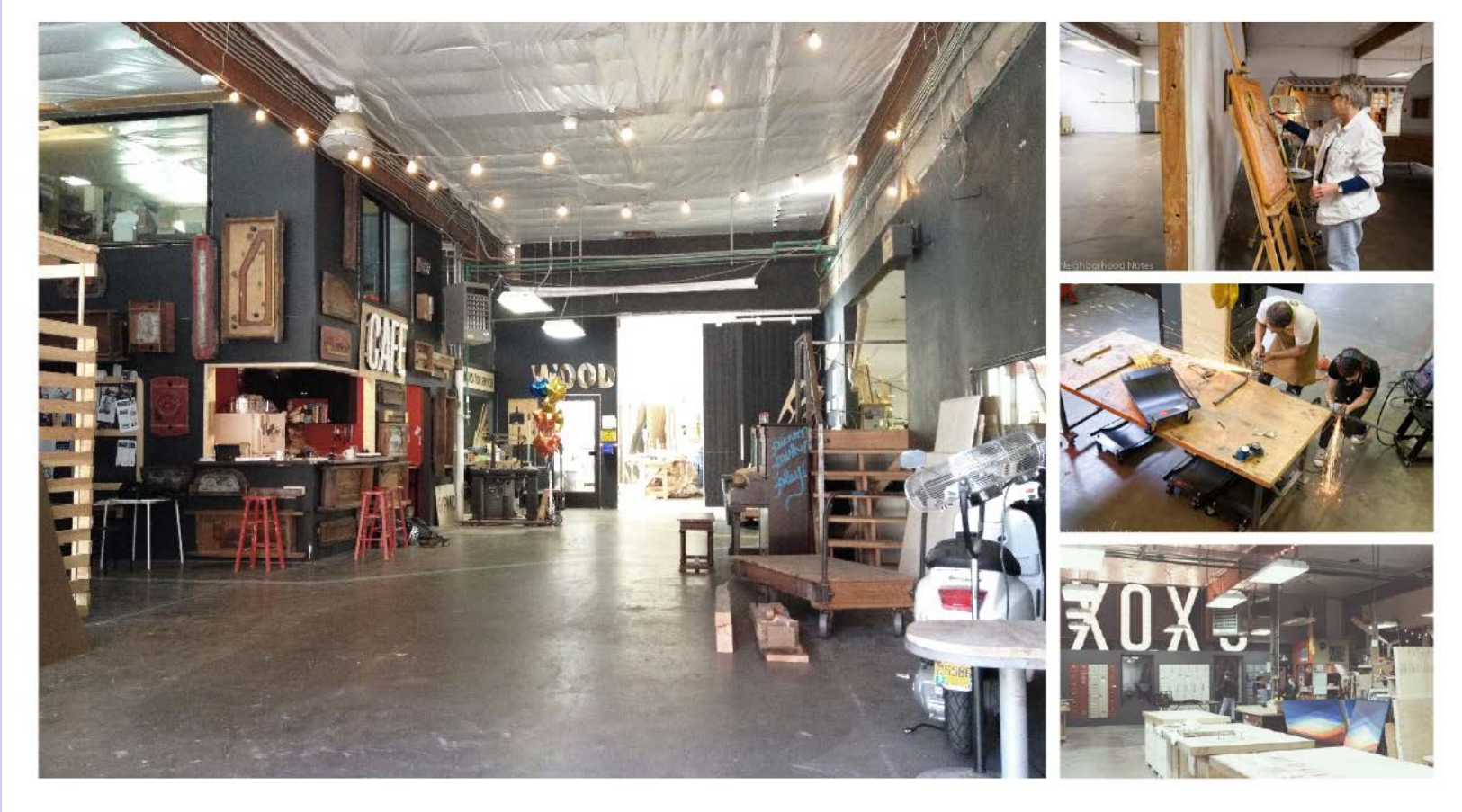
Zuccherro, R. A. (2011). A Co-mentoring Project: An Intergenerational Service-Learning Experience. *Educational Gerontology*, 37(8), 687-7

Shop Class as Soulcraft: an inquiry into the value of work

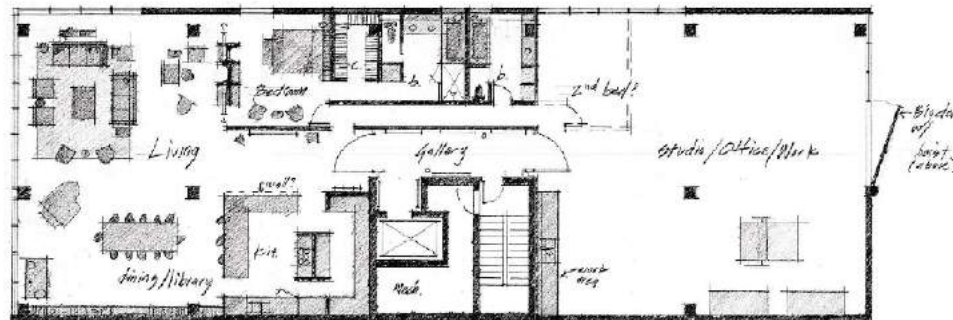
- A powerful case for the special value of skilled work that requires the use of one's hands.
- Informative text about human excellence and the way it is undervalued in contemporary America
- Makes a persuasive case that knowing how to build and fix things is often far more rewarding than becoming another 'knowledge worker' with no practical skills

Crawford, M. B. . *Shop class as Soulcraft: an inquiry into the value of work*. Penguin Group USA, print.

ADX Portland



Art Stable: Olson Kundig Architects





Thank You

<http://sieplcoatesstudio.weebly.com/>