Aging in The American Dream: Suburban Design Typologies for Tomorrow’s Healthy Homes

Spring 2017: ARCH 572 - Lynne M. Dearborn, Ph.D. AIA

Studio Description:
This studio asks you to critique contemporary US housing development and by extension its globally exported suburban model. Through investigation, documentation, evidence-based analysis and design you will be asked to respond to converging demographic, social, and economic trends, public health concerns, and the pervasive typologies of US residential development that motivate this evidence-based studio’s design explorations. The studio, working with Professor Wendy Rogers (AHS & Engineering), will explore the role smart technology might play in contemporary healthy homes. Using Champaign, Illinois’ housing subdivisions as the basis for historical analysis and design context, students will develop all-inclusive proposals for a 2-family dwelling and site. Upon completion, students will submit to ACSA’s competition, A House for the Twenty First Century*.

As a global population, where we live is making us unhealthy and unhappy!

In 2016, the Pew Research Center identified 5 US trends that demand attention through better housing design.

1) The American family is changing and now little resembles the nuclear-family households idealized in 1950s & 1960s sit-coms.

2) One-in-six American kids now live in a blended family.

3) Women are the sole or primary breadwinners in a record 40% of all US households with children.

4) Many Millennials are struggling with student debt and find themselves back in their parents’ homes. They should be buying their first homes but are unable/unwilling to shoulder debt associated with a housing mortgage.

5) The US population is aging. Between 2010 and 2050 population profiles are expected to tip strongly to the oldest age groups (65+). In the US, this demographic will double from 46 million today to over 98 million by 2060.

What role do we have as designers in responding to these trends?

Forming the premise of this studio’s semester-long housing design focus, these trends, coupled with contemporary housing misfits, will prompt the innovative responses of studio participants. While responsibly addressing the needs of occupants, context, climate, culture and ecology, final proposals will respond to the increasing desire of many to age-in-place rather than move to retirement communities, and to several accelerating environment-linked public health epidemics. Student will fully integrate spatial, technical, and material considerations while respecting diverse demographic sectors served by speculative suburban housing development.

The studio will be organized in 5 phases:

Phase 1 - Team C-U Region Mapping and Analysis + Life-span Housing Research (2 Weeks)
Phase 2 - Team Healthy Housing Case Studies + Site Identification (1 Week)
Phase 3 - Individual Human-scale Design Interventions as Research Application (2 Weeks)
Phase 4 - Individual (or Team) Site and Building-scale Concept Development (4 Weeks)
Phase 5 - Individual (or Team) Final Site and Building-scale Competition Entry Development (5 Weeks)

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Design explorations in this studio will be motivated by converging demographic, social, and economic trends, public health concerns, and the pervasive (and now globally exported) typology of US residential development that no longer fits the needs of an aging and diversifying demographic.

ARCH 572, Spring 2017,
Lynne M. Dearborn, Ph.D. AIA
Trends  Healthy Housing Design Must Address

Older but Sicker

Baby boomers are expected to live longer than their parents but also have higher rates of chronic disease.

40% 4 in 10 boomers 55 to 64 were obese during 2009-2012
20% About 2 in 10 boomers 55 to 64 had diabetes during 2009-2012
>50% In a 2013 study, more than half of boomers reported no regular physical activity

Growing % of women as sole or primary breadwinners

Share of Population Age 65 And Over
Selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>2014</th>
<th>2050</th>
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</thead>
<tbody>
<tr>
<td>Japan</td>
<td>21.1</td>
<td>30.1</td>
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<tr>
<td>Germany</td>
<td>14.3</td>
<td>25.8</td>
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<tr>
<td>France</td>
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<td>23.6</td>
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<tr>
<td>U.K.</td>
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<td>26.3</td>
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<tr>
<td>Canada</td>
<td>15</td>
<td>31.7</td>
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<tr>
<td>Poland</td>
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<td>U.S.</td>
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<td>Russia</td>
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<td>China</td>
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<tr>
<td>Brazil</td>
<td>5.6</td>
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Aging population in the US and globally

Increasing levels of obesity and associated chronic disease

Source: Centers for Disease Control and Prevention; Journal of the American Medical Association
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The Studio will Engage in Evidence-based Critique....

Mapping & Analysis

Healthy Housing Studies

Life-span Housing Research

An Older America

The number of people 65 and older is projected to explode in the coming decades.

Year 2015

48 Million

Year 2025

65 Million

Year 2030

73 Million

Year 2035

77 Million

Source: U.S. Census Bureau
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Our Innovative Solutions = Tomorrow’s Healthy Homes

Addressing:
- an aging demographic,
- changing family structure,
- economic life conditions of Millennials and Generation Z,
- context, climate, culture, ecology, wellness, health
Healthy Homes that respond to occupants’ desires to age in place and current public health epidemics:
- Obesity
- Type 2 Diabetes
- Chronic Respiratory Disease
- Stress-induced mental & physical illness

Using Champaign, Illinois’ housing subdivisions as the design context, students will develop all-inclusive proposals for a contemporary healthy 2-family dwelling and site.

Final proposals will be submitted to ACSA’s 2016-17 Competition