The Ideal Landscape: Aesthetic Versus Maintenance Perceptions

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Why Maintenance and Aesthetics?

- Landscape aesthetics (curb appeal) is the most important landscape trait to homeowners
- Aesthetic concerns
  - Need to align with neighborhood standards
  - Subjective/individual preferences

(Goddard et al., 2013; Hayden et al., 2015; Larson et al., 2016; Nassauer et al., 2009; Van Heezik et al., 2012; Visscher et al., 2016)
Why Maintenance and Aesthetics?

• Maintenance is the second most important landscape attribute (after aesthetics) to homeowners

• Maintenance issues
  – Lack of time
  – Lack of knowledge
  – Need to align with neighborhood standards

(Conway, 2015; Conway, 2016; Larson et al., 2016)
## Age Cohort Characteristics

<table>
<thead>
<tr>
<th>Age Cohort</th>
<th>Characteristics</th>
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</thead>
</table>
| **Boomers +** | • Born before 1964  
• Retirees, fixed income  
• Smaller households  
• Possibly downsizing  
• Core purchaser of ornamental plants |
| **Gen X**    | • Born between 1965 - 1980  
• Families with older children  
• Mid career, family and mortgage |
| **Millenials** | • Born after 1980  
• New to workforce  
• Starting families  
• First time home owners  
• Starting to show interest in gardening |

(National Gardening Survey, 2013; Pew Research Center, 2017)
METHODOLOGY
Experimental Procedure – Florida Residents

Lab Experiment (n=126)
- Calibrate Eye-tracker
- 8 Choice Experiments
- 8 Aesthetic Questions
- 8 Maintenance Questions
- Attitudinal & Demographic Questions

Consent & Instructions

Online Survey (n=2000)
- 8 Choice Experiments
- 8 Aesthetic Questions
- 8 Maintenance Questions
- Attitudinal & Demographic Questions

Or
Stationary Eye-Tracking Equipment

- Consumer Behavior & Insights Lab (CBI)
- Visual Attention Metrics
  - Fixation Count
- Allows researchers to explore the relationship between visual attention and perceptions.
Landscape Image Designs – House 1

Original-House 1

75% Turf : 25% Plants

50% Turf : 50% Plants

25% Turf : 75% Plants

0% Turf : 100% Plants
Landscape Image Designs – House 2

- Original-House 2
- Minimum Turf Design
- Maintained Design
- Natural Design
- Maximum Non-turf Design
Example:

Please rate the above image on how much maintenance you believe it requires. (1= minimal maintenance; 7 = a lot of maintenance)

<table>
<thead>
<tr>
<th>Minimal maintenance</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Image 1</td>
<td></td>
<td></td>
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</tbody>
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RESULTS
### Demographics

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td><strong>Sample size</strong></td>
<td>80 (63%)</td>
<td>25 (20%)</td>
<td>21 (17%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>62 years</td>
<td>43 years</td>
<td>29 years</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>68% female</td>
<td>72% female</td>
<td>54% female</td>
</tr>
<tr>
<td><strong>2015 Household Income</strong></td>
<td>$60,000 - $79,999</td>
<td>$60,000 - $79,999</td>
<td>$60,000 - $79,999</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>2-4 year college degree</td>
<td>2-4 year college degree</td>
<td>2-4 year college degree</td>
</tr>
<tr>
<td><strong>Household size</strong></td>
<td>2.2</td>
<td>3.3</td>
<td>3.0</td>
</tr>
</tbody>
</table>
Aesthetic Perceptions

House 1 Designs, by Age

Note: ***, **, * indicate significance with p-values <0.001, <0.050, and 0.100.
Aesthetic Perceptions

House 2 Designs, by Age

Note: ***, **, * indicate significance with p-values <0.001, <0.050, and 0.100.
Maintenance Perceptions

House 1 Designs, by Age

Perceived Maintenance Requirements (higher value = more maintenance)

Note: ***, **, * indicate significance with p-values <0.001, <0.050, and 0.100.
**Maintenance Perceptions**

House 2 Designs, by Age

Note: ***, **, * indicate significance with p-values <0.001, <0.050, and 0.100.
Conclusion

Homeowner Perceptions:
1. More plants = more maintenance
2. More turfgrass = less maintenance
3. 100% plants or turfgrass = not visually appealing
Conclusions – Age Cohort Differences

• Millennials
  – H1: Preference tipping point at 50% split; more plants = more maintenance
  – H2: “Natural” look preferred over “maintained” look
  – Fixations on turf increase maintenance perceptions

• Gen X
  – H1: Preference tipping point at 50% split; more plants = more maintenance
  – H2: “Natural” look preferred over “maintained” look
  – Fixations on turf decreased aesthetic perceptions

• Boomers+
  – H1: No strict preference tipping point, up to 75% split; more plants = more maintenance
  – H2: “Natural” look preferred over “maintained” look
  – Fixations on turf decreased aesthetic perceptions
  – Fixations on turf decreased maintenance perceptions
Thank you!

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Questions?

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