Engaging Involuntary Attention through Planting Design of American Botanic Gardens

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TYPES OF ATTENTION

Today, we lack rich, embodied knowledge of the world around us (Pallasmaa 2011). Urban forester Gustavsson describes our situation as a “culture of headlines instead of an honest belonging to knowledge” (Gustavsson 2005).

In order to understand how to physically design to cultivate deep understanding, it is essential to understand how physical environments capture attention.

DIRECTED
cognitive awareness, usually offering a limited range of possibilities for responsive action
(Berman, Jones, Kaplan 2008, 1207; Kaplan & Kaplan 1995)

INVOLUNTARY
nondirected multisensual awareness, offering a wide range of possibilities for responsive action
(Berman, Jones, Kaplan 2008, 1207; Kaplan & Kaplan 1995)
centers of knowledge
mediating relationships between
humans and plants 
(Monem & Craig 2007, Hohn 2008, 
Rakow & Lee 2011). 
Their functions include 
acquiring preserving 
researching interpreting 
collections of living plants in designated places (Hohn 2008). 
These places provide experiences that: 

BOTANIC GARDENS

IMPART KNOWLEDGE

PROVIDE PLEASURE
CONDITIONAL BETRAYAL

BOTANIC GARDENS HAVE ATTEMPTED TO IMPART KNOWLEDGE BY CAPTURING DIRECTED ATTENTION

SUCH ATTEMPTS FAIL WITHOUT ENGAGING INVOLUNTARY ATTENTION
How can the planting design of a botanic garden instigate involuntary attention, creating conditions for affective experiences?
METHODS FOR UNDERSTANDING

PRECEDENT STUDY

LITERATURE REVIEW

FRAMEWORK DEVELOPMENT

APPLICATION TO DESIGN

CHAPMAN BOTANICAL GARDEN
APALACHICOLA, FL

THE MEADOW
KANSAS STATE UNIVERSITY
MANHATTAN, KS
By focusing on the lowest common denominators of landscape experience, the study hopes to achieve a resulting framework that allows for wide applicability to gardens that will realize a wide variety of concepts and appeal to a wide variety of audiences.

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DEFINE CONDITIONS THROUGH LITERATURE REVIEW
Contemporary planting design fights for attention in a technologically-saturated society. Planting design’s value has often been minimized, causing current practitioners to seek new ways to capture the visitor’s attention.

### EXTRACTING PHYSICAL DESIGN STRATEGIES

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*INFORMED BY PRECEDENT STUDY*
OVERVIEW OF CONTEMPORARY NATURALISTIC PLANTING

ADAPTED FROM NOEL KINGSBURY’S MODEL OF CONTEMPORARY NATURALISTIC PLANTING DESIGN

FORMALISM

CHARLES JENCKS
Garden of Cosmic Circulation
Dumfries, Scotland

MASS PLANTING

GILLES CLEMENT
Serial Gardens
Parc Andre Citroen
Paris, France

INFORMAL PLANTING

PIET OUDOLF
Lurie Garden
Millennium Park
Chicago, Illinois


OVERVIEW OF CONTEMPORARY NATURALISTIC PLANTING
ADAPTED FROM NOEL KINGSBURY’S MODEL OF CONTEMPORARY NATURALISTIC PLANTING DESIGN

STYLIZED NATURE

OEHME VAN SWEDEN
Native Plant Garden
New York Botanical Garden
New York City, New York

BIOTOPE PLANTING

HITCHMOUGH, DUNNET & PRICE
2012 London Olympic Park Plantings
London, England

HABITAT RESTORATION

DARRELL MORRISON
Native Flora Garden
Brooklyn Botannic Garden
Brooklyn, New York

Critical drawing offers the possibility of getting to know the proposed design at both a cognitive and kinesthetic level (Dutoit 2008, Treib 2008, Dee 2012).

Critical drawings for each project will consist of a plan and three sections.
FRAMEWORK FOR DESIGN

POTENTIAL APPLICATIONS:

• INFORMING NEW PLANTING DESIGN
• OFFERING INCREMENTAL DEVELOPMENT STRATEGIES
• EVALUATION OF EXISTING SITES

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REDESIGN: CHAPMAN BOTANICAL GARDEN

APALACHICOLA, FLORIDA

Chapman Botanical Garden is intended to memorialize a Florida botanist, Dr Alvin Wentworth Chapman (Cox 2010). Today, however, the site (approximately 10 acres) is barely a fitting tribute. It fails to support pleasurable human experience. The process for inquiry through design of Chapman Botanical Garden will involve contextual and site research, compilation of base maps, programming, and planting design development.
Western Florida is home to many National Forests and other sensitive natural habitats, many of these strictly limit public access. Chapman Botanical Garden offers the potential to trigger mindful human involvement with landscape in an area that has deep ecological and social needs. Chapman Botanical Garden could be a highly utilized resource for both residents of the Apalachicola region and tourists who come to enjoy the beauty of the west Florida coast.
THE MEADOW

EVALUATING EXISTING PLANTING & INFORMING INCREMENTAL DESIGN
• PARTICIPATE IN ADDITIONAL PLANT SELECTION AND PLANT PLACEMENT
• CREATE GRAPHICS FOR A TOUCHTABLE INSIDE BEACH MUSEUM TO AUGMENT MUSEUM EXPERIENCE
• CREATE INTERPRETIVE SIGNAGE TO AUGMENT INVOLUNTARY ATTENTION WITH DIRECTED ATTENTION
How can the planting design of a botanic garden instigate involuntary attention, creating conditions for affective experiences?
THANKS!
LANDSCAPE AFFORDANCES NETWORK MAJOR
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