

Design Synthesis

Design Synthesis

Webster's definition of design: to conceive and plan out in the mind; to build, create, fashion, execute, or construct according to a plan

synthesis: the composition or combination of parts or elements so as to form a whole

Design Synthesis

Where do I go from here?

Design Synthesis

Where do I go from here?

How to start making something out
of nothing.

The Design Process Defined

The Design Process Defined

1. Obtain the design program (program definition)

The Design Process Defined

1. Obtain the design program (program definition)
2. Collect Data of relevant conditions (inventory)

The Design Process Defined

1. Obtain the design program (program definition)
2. Collect Data of relevant conditions (inventory)
3. Interpret the data of the conditions relative to the design program (analysis)

The Design Process Defined

1. Obtain the design program (program definition)
2. Collect Data of relevant conditions (inventory)
3. Interpret the data of the conditions relative to the design program (analysis)
4. Conceptualize the organization of spaces and circulation patterns (bubble diagram/concept)

The Design Process Defined

1. Obtain the design program (program definition)
2. Collect Data of relevant conditions (inventory)
3. Interpret the data of the conditions relative to the design program (analysis)
4. Conceptualize the organization of spaces and circulation patterns (bubble diagram/concept)
5. Conceptualize functional, aesthetic and environmental uses of plants (concept plan)

The Design Process Defined

1. Obtain the design program (program definition)
2. Collect Data of relevant conditions (inventory)
3. Interpret the data of the conditions relative to the design program (analysis)
4. Conceptualize the organization of spaces and circulation patterns (bubble diagram/concept)
5. Conceptualize functional, aesthetic and environmental uses of plants (concept plan)
6. Review and refine concept drawings to greater levels of precision (final concept, detailed plan)

The Design Process Defined

1. Obtain the design program (program definition)
2. Collect Data of relevant conditions (inventory)
3. Interpret the data of the conditions relative to the design program (analysis)
4. Conceptualize the organization of spaces and circulation patterns (bubble diagram/concept)
5. Conceptualize functional, aesthetic and environmental uses of plants (concept plan)
6. Review and refine concept drawings to greater levels of precision (final concept, detailed plan)
7. Assess/Evaluate whether problems addressed and program needs met

The Design Process Defined

1. Obtain the design program (program definition)
2. Collect Data of relevant conditions (inventory)
3. Interpret the data of the conditions relative to the design program (analysis)
4. Conceptualize the organization of spaces and circulation patterns (bubble diagram/concept)
5. Conceptualize functional, aesthetic and environmental uses of plants (concept plan)
6. Review and refine concept drawings to greater levels of precision (final concept, detailed plan)
7. Assess/Evaluate whether problems addressed and program needs met

Good process leads to good design!

Elements of the Design Process:

1. Obtain the design program (program definition)

For this project, it was given to you in the problem statement.

Elements of the Design Process:

2. Collect Data of relevant conditions (inventory) measure, locate existing stuff, experience the site, perceive WHAT IS.

Collect Site Data

Elements of the Design Process:

3. Analysis: Interpret the implications of WHAT IS. What does this stuff mean? Use your perceptions and intellect to draw conclusions. This analysis is what informs your design.

Websters' definition of analysis: to divide a complex whole into its parts or elements; separating or distinguishing the component parts of something (as a substance, a process, a situation) so as to discover its true nature or inner relationship

Elements of the Design Process:

4. Conceptualize the organization of spaces and circulation patterns (bubble diagram/concept).

Start brainstorming how to solve the problems presented by step 2 combined with addressing the program needs in step 1.

The Design Process is a Linear, Systematic Process:

- Must have a defined problem statement before you start proposing ideas
- Having an idea (a way to go) without a clearly defined problem statement (destination) is like having an airline ticket without a travel plan

Ideation

- How to start the “wheels turning” or the “juices flowing”
- Brainstorming: generating ideas
- Ask questions: “what are all the ways...”

The 4 Rules of Brainstorming

1. Quantity is wanted

From The Universal Traveler

The 4 Rules of Brainstorming

1. Quantity is wanted
2. Free-wheeling is necessary: nothing is silly

From The Universal Traveler

The 4 Rules of Brainstorming

1. Quantity is wanted
2. Free-wheeling is necessary: nothing is silly
3. Defer judgment, it gets in the way

From The Universal Traveler

The 4 Rules of Brainstorming

1. Quantity is wanted
2. Free-wheeling is necessary: nothing is silly
3. Defer judgment, it gets in the way
4. Tag-on: make more out of what you already have, combine and twist ideas together

The 4 Rules of Brainstorming

1. Quantity is wanted
2. Free-wheeling is necessary: nothing is silly
3. Defer judgment, it gets in the way
4. Tag-on: make more out of what you already have, combine and twist
5. Establish a time limit. Write the question. Start the timer. 5-10 minutes usually works. Make lists. Refine and rewrite your lists.

From The Universal Traveler

What are Landscape Aesthetics?

- Emotions and feelings drawn from experiencing spaces
- Organizational patterns and relationships between elements
- Creating Style and mood
- Beauty can transcend function and the environment

Possible Treatment of Space

Think About Arrangement of Space

- Symmetric
- Asymmetric
- Formal
- Informal
- Combination

Think About Visual Style

- Curvilinear/Organic
- Rectilinear/Inorganic
- Regular/Irregular

Historical Reference or Association

- Monastic/Cloister
- Islamic
- Asian
- Italianate/Renaissance
- Mannerist
- Baroque
- Cottage/Victorian
- Romantic
- Modern/Postmodern

Look in Books, Magazines

- Stay current, be literate in the media of your field
- Travel, take pictures
- Do not design in a vacuum
- Ask someone else, bring in a collaborator

Higher Level Design Concepts

- Mine other disciplines such as art, architecture, interior design, music
- Use metaphors
- Use abstraction

Metaphors

What is a design metaphor: a key idea from an apparently unrelated situation is transferred into a problem situation where it fuses with the needs to create a solution.

– Yoyo Ma's Toronto Music Garden: Bach

[Toronto Music Garden's Website](#)

– COPIA's wine garden

– Maya Lin's work

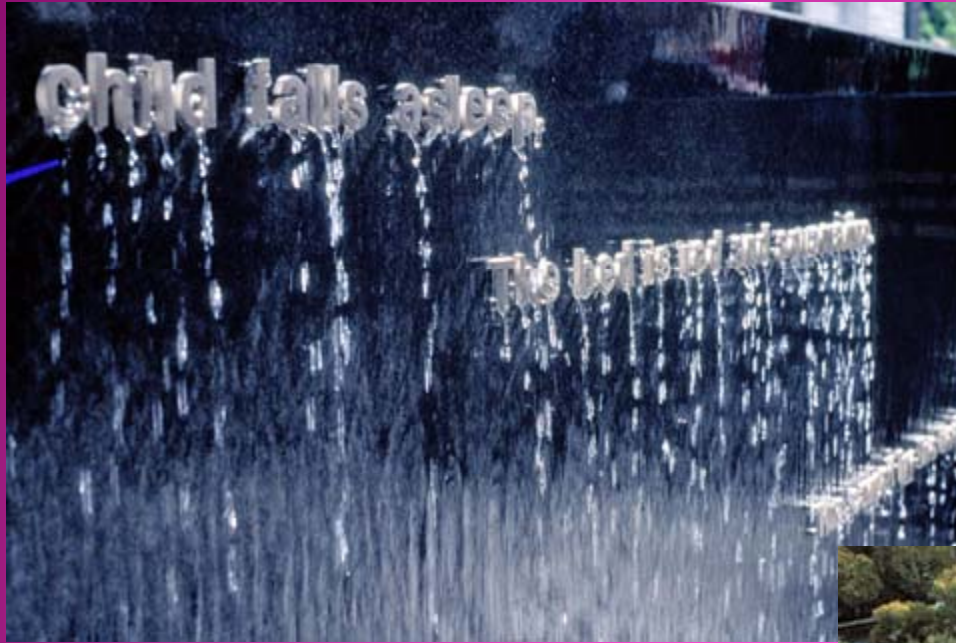
Maya Lin's use of metaphors in design



Civil Rights Memorial
Montgomery Alabama



Maya Lin's use of metaphors in design



Reading a Garden
Cleveland Public Library

Vietnam Veteran's memorial
Capitol Mall, Washington DC



Abstraction

- What is abstraction: representing a version of an object in art, applying a schematic version of an object to help organize, unite a space

Picasso's Guernica

Example: student project: kaleidoscope of colors: an abstracted pinwheel

Picasso's Guernica: an abstraction of war



Abstraction in the Landscape



Abstraction in the Landscape

- [Maya Lin NYTimes Video Clip](#)



Messervy/YoYo Ma Music Garden

- <http://video.google.com/videoplay?docid=-1634666650390306273#>

Design Synthesis

Where do I go from here?

How to start making something out
of nothing.

Just Start Drawing!

- Overcome 'designers block' by just putting pen to paper
- Use many layers of tissue paper
- Put permutations in to lists
- Try to do at least 3 concepts at a time
- Ideas will flow better with uninterrupted time, but giving a design time to gel has its benefits.

Idea Selection

- Consider many ideas before selecting the one that is best.
- Refer back to the problem statement and your interpretation of the site conditions.
- Consider the elements of art and design.
- Consider the functional, aesthetic and environmental uses of plants.

When in doubt, ask your Client!

Design Synthesis

Questions?