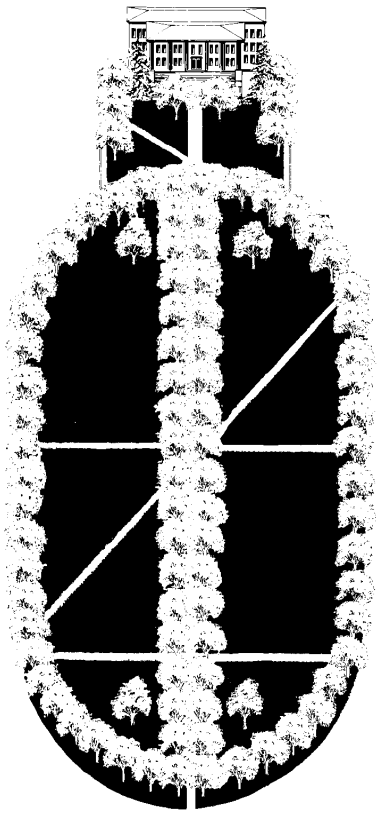
DESIGN METHODS SUMMARIES (Charrette and Long-form Processes)

Keywords … Client narratives . Figure grounds . Precedent reflections . Ideation diagrams . Place-making . 3-d thinking . Hand-built models . Digital models . Perspectives . Sections . Elevations . Axonometrics



Purpose: Creation of beautiful, functional, and sustainable built, natural, and social environments.

It is important for a design student to understand that landscape architecture is a creative field; there are no pre-determined correct answers to problems. Infinite variations in individual interpretation and application are possible. However, all problems are similar in that a successful solution(s) is/are desired -- a solution(s) that is/are creative (divergent thinking), original, imaginative, fresh, or unusual, and also functional. The study of successfully completed landscape works will uncover valuable principles and theories. These are useful as knowledge that will usually assist at some level in the creation of successful concepts. Practicing professionals have these floating around in their heads, however a student of design is encouraged to do the professionally relevant research to find out these things.

The successful solution to a landscape/environmental problem is due, of course, to a good idea. "How do I get an idea?" The relevant questions are:

- What can I do consciously to stimulate a creative process and thus have some assurance that a good idea will come along?

- What sort of activities can promote the likelihood that a solution to a problem will present itself?

The usual approach is to follow a known procedure (a design method) that provides a set of navigational tools that will assist the designer and assure some efficiency in an otherwise convoluted creative process.

Drawing (Tangible speculation) vs. Verbal Speculation

Educational backgrounds are becoming increasingly verbal, as such, the new student of design often has many questions to which he or she expects the instructor, as an "Authority," to provide appropriate and "correct" verbal answers. Contrast this behavior, as a commentary on our educational system, with that of preschool children as they plunge gleefully, directly, and quite non-verbally into the joyous art of painting/designing -- with no questions asked and little if any quarter either given or considered.

But the older student does have verbal questions, and time and time again this person will discover -- sometimes early, sometimes late -- that in design most of the questions asked *verbally* of an instructor can best be answered *visually* by the student, if only he or she will *draw* up, on the board (or build a clay/foam core/ or digital model), the changes about which the student has doubts, and will simply *look* at the new form or arrangement with attentive eyes. Sooner or later the student comes to see, for instance, that what for her or him is the "right" relationship can best be determined by *drawing* and *visualizing*; that no amount of talking about the relationship will be as helpful in achieving the "rightness" he or she is seeking. That is why students must learn to manipulate the visual tools and to rely upon them -- upon relationships of form and line and color and light and shade and so on -- using them whenever possible to study problems, reaching design judgments by visual means instead of lapsing into habitual, but far less useful, verbalizations.

Only in the programming/site analysis and construction phases, where the designer is dealing principally with non-designers, is the spoken language ever likely to be the more useful medium.

A basic ingredient in design is sound evaluation -- a capacity for reacting appropriately to situations, existing and proposed, with a pleasant balance between what we call "feeling" and what we call "thinking." This is best learned through repetitive experiences in actual design attempts. The following processes, or methods if you will, provide a framework for achieving that balance.

General Process – Research > Design Analysis and Place Analysis > Synthesis

Specific Charrette Process (cycle back and forth between these steps)

Client narrative (the place and intent) > precedent figure grounds > place analysis > ideation drawings > 3-d model (hand-built or digital or both) > perspectives > sections > elevations > axons > plans

Long-form Process

In landscape architecture, as in all of environmental design, a fusion of art and science brings forth a beautiful, functional, and sustainable place. In the case of landscape architecture, the forms created result in landscape spaces available for human occupation and use. The origination of these forms by a designer is a complex and time consuming process that may easily exceed the economies of a project. It is therefore necessary to become accurate and efficient as possible at the process of conceiving and specifying landscape space. The process described here comprises a useful tool aimed at achieving these objectives. The major process steps include Programming and Analysis, Design, and Design Implementation.

Usually, "boards" are composed as self-guided tours through a project and its creative process. One may think of steps within the process as chapters in a book, where pauses (white spaces) and graphical symbols and highlights signify movement through the topics of a subject.

Programming and Analysis

It is at this stage of the project that a mutually beneficial "partnership" is formed between the designer and the client (also contractually defined as the Owner). Issues inform the client and designer as to their respective perceptions and intentions for the project. Brainstorming is conducted as a method for identifying current and future issues.

At some point in the flow of the project, one might develop programming and analysis boards which would contain Issues, Precedents, Goals and Objectives, Program, Inventory, and Analysis.

Issues are items that initially define and inform the project and are developed as "problems" and "needs." These fall into two categories -- quantitative, and qualitative. Quantitative problems and/or needs such as 'vehicular and pedestrian conflict' and/or 'need for seating for 19 people' are only half of the issue. Qualitative problems and/or needs such as 'lack or absence of human interaction with the landscape' and/or 'need for light and shadow in a visual sense or need for sun and shade in a comfort sense,' bring to the project the form-generating issues critical to the sensory perception of the landscape and the success of a project. Issues help the designer to identify and explore precedents (not precedence) appropriate to the project.

Following identification of issues, precedent research into previously implemented projects addressing similar issues occurs where comparable programs and prior formal solutions are explored to further define the current project. Metaphorical images of potential forms and meanings are also explored.

Precedents are labeled with at least two pieces of information as follows: (1) name and location (what it is); and (2) a sentence discussing its relevance to this project (why it is a precedent for this project). This second item is extremely useful toward developing and writing goals and objectives.

Goals and objectives are designer's prose for 'what is desired (goal) and how it will be accomplished (objective).' Goals and objectives are established in response to issues and, with good precedents, are often 'lifted' from the previous item: 'why it is a precedent for this project.' It is an extraordinary project that would have less than two or more than four goals (they are typically very broad in design philosophy), for example:
Goal 1: To establish, through effective design, a sensorial interface between humans and the physical environment.

Each goal may have many objectives. Objectives typically are very direct interpretations of the metaphors and/or places identified in the precedent landscapes and images. Goals, objectives and precedents combine to inform and establish the project program. For example, some objectives:
Objective A. Incorporate regional landscape vocabulary and pattern.
Objective B. Incorporate specific visual, auditory, and tactile elements of moving water.
Objective C. Incorporate specific visual and tactile elements of native grasses and forbs.
Objective D. Incorporate indigenous geologic strata.
Objective E. Incorporate grid pattern of the immediate cultural landscape.

The project program comprises activities, settings, quantities, and materials. The 'activities' item defines the *purpose* and *use* of the landscape entity ("sitting" is an incomplete activity). Activities are typically described in a phrase, for example, "ceremonial landscape" or "pleasure landscape" or "educational landscape." The 'settings' item, typically discussed in complete sentences and paragraphs, or communicated visually by way of a picture, describes the form, style, and character of the landscape encompassing that particular activity. Settings often evolve directly from the precedents and goals and objectives. Settings may accommodate more than one activity. The 'quantity' item provides an estimate of general quantifiable items for each setting. This item is useful as an indicator of project costs. The 'materials' item, useful in predicting cost and typical materials, indicates landscape elements.

Inventory identifies "what is there." Inventory includes on-site and off-site items with regard to natural and cultural landscape systems, infrastructure, and design by way of form explorations made via a figure/ground drawing. In most projects, consulting scientists would be employed by the landscape architect or the client to identify soils, vegetation, and hydrology of the site, and be available to interpret (analyze) their significance to future use of the site. Civil or geotechnical engineers together with traffic engineers might be similarly employed to advise the project team regarding existing utilities, soil structural conditions, and site access concerns.

Analysis identifies 'what difference the inventory makes to your program' and vice versa. The recommendations of the consultants retained for inventory would concern the proposed use of the site, and would consist of a part of the site analysis. Analysis drawings are often made clearer with establishment of homogenous units corresponding to characteristics of the landscape. Such units are then analyzed individually for ability and appropriateness to accommodate quantities and qualities proposed in the program (settings). Labels and annotations are useful.

Design

Design is the essential act of giving new form to an existing landscape. To be successful, design is at once functional and beautiful. It may be metaphorical, or an expression of meaning beyond service to its intended function. Hence, both science and art are important in the creation and communication of the design.

Theme is *written* in descriptive, philosophical prose about the form, meaning, and expression of landscape. Design expression, including monumental and/or intimate form and meaning are described with landscape terminology.

The concept is *drawn* in descriptive, philosophical visual imagery about the form, meaning, and expression of landscape. It is typically a monolithic, three-dimensional, symbolic drawing.

Functional diagrams consist of bubbles, arrows, and symbols exploring, analyzing, describing, and portraying the relationship of programmed activities and/or settings to each other and to the overall landscape. Relationships are described by symbols that portray visual relationships and sensual (of the senses) relationships. The relationship of program settings is ordered only by a north arrow (no scale or site specific locations). These are very "loose" sketchy drawings intended mainly to communicate with yourself about the acceptability of the basic relationships of the program and the site. Labels and annotations will be added when the diagram is presented to a client to help justify the proposed design.

A schematic is a more detailed sketch, drawn to scale, exploring, analyzing, describing, and portraying the proposed landscape form and pattern in terms of its basic masses and voids. These sketches, of which there may be many alternatives, are also very loose with many labels and annotations suitable for helping explain the evolving design. Due to some differences in backgrounds of many involved in environmental design, the schematic plan is sometimes called a conceptual plan. Either way, the reference is toward a form that is evolving, not yet complete, or necessarily acceptable.

A master site plan shows the actual site, drawn as if seen from overhead, portraying the proposed landscape. It includes shade and shadows, and expresses the plan view final character of the design. It has enough labels and annotations to thoroughly communicate the design. Sometimes a master site plan is called an illustrative plan. When a true master plan is prepared, it includes phasing, budgets, policies, and other supportive material that causes it to be like a strategic plan for changing (developing) a site or a landscape through time. It is usually tied to the immediate mission of the organization for which it is created.

Sketches, sections, and elevation drawings are multi-dimensional views exploring, analyzing, describing, and portraying the landscape as it would be viewed from other than overhead. These carefully constructed drawings, frequently using the computer, show the human scale qualities of the proposed landscape. Labels and annotations are highly important to convey the full quality of the site, and its experience by a visitor.

Implementation

Implementation for a site design project usually means the project becomes constructed. The people who perform the construction *Work* (as opposed to *Services* , which is what landscape architects provide) are known in the building industry as Contractors. Some are General Contractors, who are in first position in the construction contract. Others are specialty or Sub-contractors, who form sub-agreements between the general contractor and themselves for trade-by-trade elements of the work.

Contract documents include the Drawings: Layout Plan, Demolition Plan, Grading Plan, Planting Plan, Irrigation Plan, Electrical Plan, and Details, that specify the location, quantity, physical forms and relationships of all constructed elements, together with the Technical Specifications, which specify the quality of materials and finish of the Work. Contract Documents also include all the contractual forms, agreements, and definitions that provide the legal basis for the construction Contract between the Owner and the Contractor.

The landscape architect who designed the project usually provides Services to the owner to observe construction and advise the owner of apparent discrepancies between the Work of the Contractor and the Contract Documents. This relationship has been well tested in court and is time-honored as a valuable and ethical division of interests between the Owner, the Contractor, and the landscape architect (Specifier).

A small minority of contractors known in the building industry as Design-Build contractors offer both design services and construction work to the Owner as a package. The downfall of this approach to an Owner is that there is no ethical break between the act of specifying the construction and performing the actual construction work. This has a high potential of leading to abuses in the Contract that may cost the owner dearly, not only in the quality or quantity of the constructed work, but the quality of design and potential expenses to the project over its useful life. Landscape architects who participate in these types of arrangements by either performing actual construction work, or by performing design services to the contractor rather than the owner, are looked upon skeptically by the profession of landscape architecture. Practicing landscape architects who are serious about the work and image of the profession actively avoid these types of arrangements.