**School of Architecture and Planning**
**The Catholic University of America**
**Graduate Design Studio 601**

# CULTURAL INTERVENTIONS IN ARCHITECTURE AND URBANISM: The Afghanistan Project

**Fall Semester, 2002**
**Studio Critic:** Professor Stanley Ira Hallet

It is the rather ambitious intent of the Cultural Interventions Studio to explore the variety of theoretical positions and architectural strategies that can be taken when we are obliged to intervene architecturally in arenas of great cultural context.

The dilemma of relating the exigencies of our "time" to the traditional forms and rituals of the past are only further complicated by a situation where once identifiable cultural groups have now been thrown into disjunction, discontinuity and disarray.

Thus, the often irreconcilable debate between "**natural state**" and **chaos**, between a **nostalgia** for the past and the "**crisis of modernity**", between **critical regionalism** and **international style**, become but a few of the issues the studio will attempt to examine.

Rather than a single site or program, the cultural intervention studio encourages a variety of venues, both cultural as well as physical, selected from a collection of proposed studio problems or from suggestions drawn from the experience of individual students.

Consequently, over the past several years, topics for study have increased in variety, scale and scope, involving studio projects as diverse as an urban settlement proposal for Afghan refugees to memorials to the removal of the Berlin Wall.

However, during the past years, the studio has pursued generic themes in an attempt to further focus the diversity of the projects involved and further bridge the challenging differences of view posited by geography and culture. For example, several years ago, the studio focused on the issues of **Settlement and Displacement**, in particular, the act of **habitation** and the problem of **displacement.** How have diverse cultural groups inhabited the land? How do they define their territories, edges, boundaries and layers of both social as well as sacred space?

More recently, we investigated the **Sacred Landscape**, examining theological concerns and studying their effects on community gathering and ritual, on artifact. One year the studio explored Native American Culture, visiting pow-wows, museums and anthropological sites.

Last year, the studio focused on the issues of the **Landscape**, broadly defined as the **Found**, the **Worked**, and the **Invented Landscapes,** exploring how these markings of the land were determined and in turn determined cultural texts.

In the past, the resulting student problems varied greatly in size, complexity, and place, however, a shared unfolding of the studio experience within a multi-staged format assured the studio a commonality of intent and discourse. Although, a wide range of studio topics or proposals were subject to a certain uniformity of questions, one underlying theme united the studio; **the emphasis on cultural/landscape relationships as a determinant or manipulator of architectural and urban form.**

This year, the greater cultural site will be focused on **Afghanistan**, a country in which your critic lived and worked from 1970-71 as Fulbright Lecturer in Architecture. During this period he studied Afghan Indigenous Architecture leading to many articles, lectures and the final publication of **The Traditional Architecture of Afghanistan**, co-authored with Rafi Samizay. Perhaps our investigations in studio could be of some use to a country in dire need of rebuilding. It is my intention seek external support for further stages of development during the studio semester, by inviting in experts as well as representatives from AID, World Bank, the Afghan Embassy and other possible support agencies.

Below is a brief outline of a proposal prepared by me for consultants and agencies that could form the basis for our own studio explorations. I expect adjustments and revisions as studio feedback occurs.

## Development of Prototypical Facilities for Rural Villages in Afghanistan

Project proposal by:

**Professor Stanley Ira Hallet, FAIA**
Fulbright Lecturer in Afghanistan 1970
Director of the Cultural Interventions Studio
School of Architecture and Planning at The Catholic University of America
Washington, DC, 20002

**Introduction:**

In response to recent events catalyzed by **September 11**, the devastated country of Afghanistan now finds itself at an opportune but critical crossroad. Led by an enlightened but temporary government and supported by a promise of huge infusions of financial and technical support, a special graduate architectural studio at the School of Architecture and Planning, called the **Cultural Intervention Studio**, will address the design of rural facilities critically needed by this devastated country. More specifically, **the Cultural Intervention Studio** will develop a variety of design and construction strategies centered on the rural clinic, the orphanage, the school and small traveler's hotel. The studio will present their proposals in the form of a series of large detailed models, enabling rural contractors to construct them without drawings.

The focus of the studio is supported by the author's own experiences in Afghanistan in 1970, as Fulbright Lecturer in Kabul, Afghanistan and the wealth of architectural and structural data collected when he worked along side of **Professor Rafi Samizay**, then Chairman of the Department of Architecture in Kabul University. These materials were assembled into the book, **The Traditional Architecture of Afghanistan**, co-authored by Rafi Samizay.

**Proposal in Brief:**

Utilizing the resources and experience of local Afghan and American Architects and Professors of Architecture who are knowledgeable of Afghan culture, methods of construction, materials of fabrication and modes of settlement (see appendix), the studio will divide up into teams of graduate students who will revisit three or four diverse geographies found in Afghanistan and their associated cultural groups and develop for each geographic area the following prototypical facilities:

**Medical clinic**
**Rural neighborhood school and library**
**Orphanage**
**Hotel/*serais***
**Mosque (optional)**
**Bazaar/food depot (optional)**

Each prototype could come in small, medium and large sizes to accommodate the differing needs required of varying village sizes and their associated market areas.

After extensive investigations of regional geography, climate, availability of materials, existing crafts and the construction methodologies local to the areas studied, the students will construct three-dimensional models of each of the prototypical facilities listed above in sufficient scale to enable craftsmen unable to read architectural construction drawings to construct them. Additional variations in size (small, medium and large) could be illustrated by three-dimensional drawings, developed on a computer, further defining the methods, materials and phases of construction associated with each prototype. Basic guidelines for variations in siting would also be included.

**In Detail:**

All the proposals will pursue the following goals and objectives:

1. They will be responsive to the social and cultural values of the inhabitants. They will be sized to accommodate the varying needs of each rural condition (small, medium and large) and be responsive to problems of security and privacy critical to an Islamic culture.

2. They will be principally constructed employing local materials, technologies and crafts to reduce to a minimum the need for imported goods while increasing opportunities to develop work for local craftsmen and laborers. In addition, an innovative use of such materials and processes of assembly will also be explored. Secondary systems for the assembly of furniture by local sources, built in or fabricated off-site, will also be proposed to further enhance existing local furniture craft industries.

3. Buildings will be sited following local needs and customs as determined by previous or adjacent settlements, but also responsive to local geological and climatic conditions.

4. They will make use of passive energy systems making good use of day lighting, ventilation and passive solar energy as well as the traditional systems of heating and ventilation well explored by generations of Afghan builders.

5. They will reintroduce the use of the indigenous landscape (most often destroyed) both within and adjacent to the proposed structures and will explore the use of garden for crops as well as retreat and reflection.

6. They will accomodate several stages of phased utility development, The first phase will include minimal water, septic and electrical power strategies such as roof collectors, cisterns, drainage field, small generators, and serpentine radiant floor heat systems now connected to below-ground ovens. A second phase will provide for eventual water hook ups and sewage when village infrastructure becomes available. A third phase will explore the use of more advanced technologies such as solar collectors, solar hot water heaters and wind powered electric generators.

7. Typical buildings will be constructed by following a series of realistically drawn two or three-dimensional drawings illustrating the various stages of constructions and pertinent details, employing a simple metric dimensional coordination system to be determined. Many of the existing Afghan infill window craft industries are based upon such a repetitive module. Large-scale models showing in detail the methods of assembly and materials of construction will supplement these drawings.

**Studio Format**

The studio semester is divided into six stages, each carefully prepared to support the exploratory stage that follows. Briefly, they are as follows:

**I.** **Cultural Venue**

The selection, documentation, and demonstration of an inhabited landscape set, this time a quadrant of rural Afghanistan, i.e., the north east (possibly surrounding Khunduz or Nuristan), the east (Logar valley), the south (surrounding Khandahar) and the west (surrounding Heart).
Each region selected, possesses a specific geography, microclimate and corresponding landscape set, consisting of a found, worked, or reworked landscape often related to the neighboring countries or Uzbekistan, Pakistan, India, Iran and Turkey.
Approximately **4 weeks** and weighted at **20% of final grade**.

**II.** **A Single Room and Garden**

A single room of approximately 20 square meters (multiply by 10 to get approximate equivalent square footage containing one of the following activities: eating, sleeping, prayer, study or medical care. The back wall should be secure and solidly constructed, while the opposite wall could explore transitions of light, shading, and passage to a possible garden. Exploration of materials, processes of construction and experimentation within the constraints of local conditions are encouraged. Each alternate proposal should address one of the possible uses.
Approximately **2** weeks and weighed at **10% of final grade**.

**III.** **Conceptual Model**

The presentation of the conceptual *parti* in bas-relief, consisting of at least two preliminary explorations and one final proposal, testing alternative sizes and types of program contained. The extent of such flexibility will be discussed and agreed upon by the studio.
Approximately **2 weeks** and weighted at **10% of final grade**.

**IV.** **Program and Design Development**

The specific program chosen presented as a list of programmatic spaces required and simple overlay plans showing their distribution. Again, the small, medium and large possibilities should be diagrammatically illustrated. Develop the proposal using rough models, plans and sections.
Approximately **2 weeks**. Grade deferred to Derivative Presentation.

**V**. **Derivative Section**

Clarification and presentation in model of one specifically defined section through the project fully exploring the structural conditions, materials and their assembly and any additional related issues of water collection, treatment and irrigation, passive energy systems, sewage treatment, furniture systems, modular coordination, and landscape.
Approximately **2 weeks** and weighted at **20% of final grade**.

**VI.** **Final Presentation**

Development of a final model, sections, elevations, details and sketches, and include all the materials presented for earlier review in stages I, II, III, and V.
Approx. **3 weeks** and combined with IV, and VI and weighted at **40% final grade**.

**Grading Policy:**
Stages, I, II, and III and V will be graded individually and weighted as 60% of the final grade for the studio. The remaining grades will be determined at the final jury and critic. Juried work will be graded by the Jury (50%) and Studio Critic (50%). **The studio critic will provide feedback to the student at ends of Stage III.** Students receiving below average performance should make an appointment for further consultation.

Work turned in late for preliminary stages will be downgraded **1/2 of one grade**. Work not prepared for final jury will be downgraded **one full grade**, except for medical or emergency reasons. Grades allowed are A+, A, A-, B+, B, and B-. The C grade will be considered marginally acceptable for graduate work when averaged by better grades in other course work. (see graduate grading policies)

## Course Outline in Detail

### I. Cultural Venue (aprox. 4 weeks)

Departing from the explorations of previous studios, The studio will divide up into four teams, each assigned to one major region of Afghanistan, i.e.; the north east (possibly Khunduz or Nuristan), the east (Logar valley), the south (surrounding Khandahar) or the west (surrounding Heart). Each region possesses its own unique geography, microclimate and corresponding landscape set, as well as distinct cultural groups, customs and even languages.

The teams will organize themselves, to collect, organize, and communicate the following information:

**Physiognomy:**
Pertinent materials describing the existing or historic landscape set, the physiognomy of the region, it's geology, climate, local ecosystems, land settlement patterns, a descriptive use of the land, it's marking, both agricultural, architectural and urban, and a further analysis of customs, rituals, and belief systems of those occupying or visiting the site.

**Settlement Patterns:**
The built environment, the fabric of open versus filled space, access and circulation systems, solar orientation, public versus private spaces, commercial versus residential structures, etc. Both supporting and conflicting relationships that occur between **the found** (natural), **worked** (agrarian), and **invented** (garden) landscapes and the human constraints of foraging, gathering, production, recreational, meditation, ritual, and prayer should be considered.

**Building Typologies:**
A description of local building types both in plan and section (or axonometric). Typical housing schemes, fortress *qalas*, mosques, bazaars, etc.

**Materials of Construction and Additional Subsystems:**
For each region, the materials available for construction and their methods of traditional assembly, on and off site. This could also include the construction of bazaar fabricated infill structures, furniture, and support systems such as water collection, toilets, heating, ovens, air-cooling, windmills and bird-towers, etc.

**Neighboring Precedent Studies:**
In addition, the members of the team should further subdivide their work to cover the following examples offered by neighboring countries that have long influenced or have been influenced by Afghanistan. For the region of Heart this would be Iran and Turkey (the Ottomans), for the region of Kandahar this would be Pakistan and the Pushtun tribes, For the region of Kabul this would be India (the Moghuls) and Pakistan and finally for the area of the North, north East, this could be Tajikistan and Uzbeckistan or in the case of

Nuristan, the neighboring region of Swat in Pakistan. Samarkand and the Timurids inform sacred space in almost all of Afghanistan.

**Related Issues and Types:**
To assure the studio develops a comprehensive study, the teams should select one of the following issues and present its findings to be shared with all members of the studio. The four issues drawn from any part of the Islamic world are:

The Mosque and Prayer Space
The Caravan Serais (both urban and rural)
The Madrassa or school
The Garden

All documentary materials should be presented in a consistent format agreed upon in advance by the studio. One member of the studio will also be assigned the role of graphic coordinator and given the scope of our investigations, coordinate all the graphic efforts of the four teams. We anticipate using the final collection of material as a preliminary information package that can be sent to Afghanistan for use by those in the field reconstructing the rural infrastructure. The collection will also be broken down in parcels to introduce the proposals that each student eventually makes.

All text, drawings, images and diagrams should be ultimately digitized for submission into the final product. In all cases proper attribution to authors is required. A CD-ROM of the final study will be submitted.

**Schedule**

| | |
|---|---|
| **Problem Given** | **Mon. August 26** |
| **Review** of all available collected materials | **Wed. September 4** |
| **Graphic Format and Storyboard Presentation** (including typical analytic drawings) | **Monday, September 9** |
| **Final Presentation** Round-robin jury by studio critics and members of studio | **Monday. September 23** |

## II. A Single Room and Garden (approx. 2 weeks)

Free from the tyranny of the constraints of a programmatic nature (at least for the moment), the purpose of this exercise is to quickly transform theoretical positions into architecture reality. Each students is asked to propose two alternate studies of a room and garden. The room should be approximately 20 to 30 square meters (multiply by 10 to get approximate equivalent square footage. One back wall should be secure and solidly constructed, while the opposite wall could explore transitions of light, passage and possible relationships to the garden or other supporting exterior spaces. Exploration of materials, processes of construction and experimentation within the constraints of local conditions are encouraged.
The use of the room should be different in each of the two alternate schemes explored. With the programmatic use of the room drawn from the following list of possible uses; sleeping for more then one person, group prayer, group study or group eating.

**The two alternative studies** in bas-relief or model should be mounted on boards preferably dimensionally and proportionally related to the system used in Part I. Your room and garden intervention could support, reinterpret, or challenge anew the conditions studied and found in Part I.

**Studio Reviews** **Monday, October 7th**
Continued as required

**note:** To be thoroughly critiqued by the full studio **over two studio periods**.

## III. The Conceptual Model (aprox. 2 weeks)

Based on the commentary developed in your research and the room and garden exploration, propose a *parti* or conceptual model for your eventual proposals. This *Parti*/ Model should form the embodiment of future design studies and reflect the morphological studies conducted earlier. It should also demonstrate how it could accommodate one or two related programs (see list) and adapt itself to three different sizes of program; small, medium and large.

This need to adapt to different topographies (flat and or slightly sloped, village urban versus farm/ rural) and different sizes of program must inform the conceptual foundations of the program. One could imagine that once one such project has been constructed, the builders would require minimum new information to build larger or smaller versions of a similar project constructed on additional sites.

The presentation should again be a bas-relief (3 dimensional model) study mounted on a single board preferably dimensionally and proportionally related to the system used in Part I. Relatively abstract in form, the *parti*/model should demonstrate the theoretical considerations or positions being considered with respect to a physical site, its ability to respond to variations in program, size and site and static verses dynamic conditions, etc. It should also respond to and suggest the basic programmatic needs required of the final program to be pursued, in term of it's basic organization and massing.

**Preliminary** three mini bas-relief models 5" X 8". **Fri. October 17th**
Informally reviewed at the end of the first week

**Final review** by students and faculty **Monday, October 21st**
**Include presentation boards part I and II**

## IV. The Program and Design Development (approx. 2 weeks)

Students should demonstrate a reasonable space/layout response to the envisioned program illustrating his/her theoretical position as well an ability to conform to at least two program types and three different sizes of program. Principle plans should be presented using overlays or exploded plan drawing techniques. Drawings may be free hand but should show all major spaces and their supporting infrastructures and be drawn to scale.

Progress models, plans, sections, elevations, details presented at desk as required.

**Studio review**
by small groups of students and studio critics **Mon. November 4th continued as required**
**Page eight: Cultural Interventions**

## V. Derivative Section (approx. 2 weeks)

Students are asked to present a detailed sectional as a derivative study of the *parti* or conceptual model. The purpose of this particular exercise is to investigate a more dimensional, detailed and tectonic approach to the *parti* involving materials of construction, problems of assembly, water, septic and heat or ventilation systems and even the a possible selection of landscape materials.

Again, the presentation should be mounted on a **single board** consistent with previous phases, combining drawing and model, and pursuing in the utmost detail possible, the potential structure, its assembly and definition of materials and its relationship to the landscape. Where appropriate sub-themes such as plant types and landscape materials, furniture design, lighting, structural or mechanical systems could be addressed in this mini-problem. Method of assembly could also be demonstrated through photographing the assembly of the model or sequential axonometric studies.

**Studio review** of all 4 stages by faculty and invited critics **Monday. November 18th to Wednesday. November 20th**

## VI. Final Presentation and a Final Model (3 weeks)

First most will be the construction of a single large-scale model addressing a medium size program. The final scale, agreed upon by the studio, will be selected to enable Afghan builders in the field who are unable to read construction drawings to build our proposals by multiplying by 50, 75 or 100 dimensions taken from the model. For example a model of one meter by one meter (aprox. 3 feet by 3 feet) at a scale of 1:100 would represent 300 feet by 300 feet. At 1:50 it would represent 150 feet by 150 feet, etc.

Again the final format and graphic techniques should be reviewed with the studio critic and coordinated with your colleagues for eventual publication as an additional section to the research report. Once again, your proposals should demonstrate varying contextual site plans, landscape and plant descriptions, principle plans, appropriate sections, and elevations at varying sizes of program and details and methods of assembly common to all the variations of size and site. The contextual analysis, early interventions, conceptual models and derivative studies previously presented should also be included in the final presentation to the jury.

**Final Jury** of invited critics **Mon. December 9th**
Parts I, II, III, IV to be included

**Materials to look for:** aerial views, detailed photographs and maps (current as well as historic), geological histories and existing descriptions, micro climate, plant descriptions and animal habitat, detailed and illustrated descriptions of working the land, of the siting, construction, and materials associated with settlement, mythological accounts, creation theories, and religious beliefs related to the land, customs and traditions that interface, intervene with the land.

**Where to look:** CUA Library, Library of Congress (area of maps and photography), Middle East Library (N Street), National Geographic Library (check film archives), AIA Library, UMD School of Architecture Library, Natural History Museum Library (access?), Dunbarton Oaks, ASLA Library (see Iris Miller)

**Suggestions:** **Be sure there is enough available material.**
Aerial photographs are critical to further studies.

Collect materials for analysis at a multitude of different scales:
from regional to local, from macro systems to micro systems,
including related historic as well as contemporary events,
charting geological and archeological time
gather, analyze (interpret or observe), and **edit** your materials

What are the major issues, stories, events? Communicate your findings using the architectural/visual language of your work.
Work in studio where you can also come to terms with your colleague's approach to the problem. This will help define your own thoughts.

Graphically lay/out your story for the uninitiated,
It will help clarify your own thoughts.

Make use of your first essays to challenge your own preconceived notions. Test out your ideas on your colleagues.
Keep asking yourself if the concepts and program proposals represented by your intervention are appropriate to issues raised by earlier studies.

Even if you have to rework earlier Parts, don't fall behind.
Critical Thesis Research and Construction Document assignments do have a way of intervening and disrupting your best-made studio plans. Give both the time deserved.
Please see me in my office if you need an additional crit.

**Good luck**...