Technology, Time and Form
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University
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Approved:

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Blacksburg, Virginia
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This thesis is about designing a museum in Jordan. The building is to be a place of time, light and space. Its primary purpose is to introduce the people to the capital of Jordan, Amman.

This study will offer a conceptual approach, concentrating on composition, visual concepts, and influences that have shaped it over the past year.

My intention here is to present the visual aspect of exteriors and interiors. The design would be based on my awareness and acceptance of modern western aesthetic values and technology as part of an international culture and global economic systems.
I would like to thank my committee, Professors, Green, Rodriguez and Galloway for their contribution and help in producing this work.

To my family and my friends who had confidence in me when I needed it most.
“Of course patterns vary from place to place, from culture to culture, from age to age; they are all man made, they all depend on culture. But still in every age and every place the structure of the world is given to it, essentially by some collection of patterns which keeps on repeating over and over again. These patterns are not concrete elements, like bricks and doors, they are much deeper and more fluid and yet they are the solid substance underneath the surface, out of which a building or town is always made”

Christopher Alexander
As architects in our life we should acknowledge our problems and use them to create art. This study acknowledges a cultural and architectural crisis that exists today in most of the developing world as well as in Jordan. It is focused on three pertinent aspects, technology, time, and form, which have become diverse and contradictory in ways unprecedented in history. Technology by definition is a set of methods a society employs to satisfy its building requirements. In the past a state of harmony existed between incoming values and technology, because of the slow interaction which allowed the receiving culture sufficient time for adaptation. In such cultures with rich architectural tradition and heritage, the main reason for the gap between existing and incoming cultures is that they did not prepare to absorb western exported aesthetic values and technology. The main cause of this is during this century modern technology has become too advanced to be compatible with the capability of local building technology, and the local tradition no longer has the economic appeal it had before. The need for rapid and large scale advancement in the developing countries was made possible by modern technology, not just for its economic appeal but also for the prestige it carries with it. Nowadays, Jordan among other nations contains a cultural heritage, and an architectural legacy of great value that is suffering from imported architectural fashions. However, the problem is that it fails to distinguish aesthetic values of western architecture when implementing them into its culture. It was my intention throughout my studies to create a bridge between western architectural technology and traditional architectural forms and technology in Jordan.
It is commonly said that
“If a wall were built around Jordan it would be a museum.”
**Jerash:** The Greco-Roman city of Jerash is considered the largest and most well-preserved site of Roman architecture in the world outside Italy.

**Petra:** The treasury from the end of the Siq. This was the earliest of the classical rock-cut facades to be built at Petra, in the 1st century BC.

**Qasr Amra:** One of the most impressive desert castles is an early 8th century bath complex in a triple-vaulted building full of painted frescoes.
Amman

Jordan’s capital, a busy commercial and administrative metropolis built on seven hills, has a long and fascinating history.
The Site Significance

The location of this building is of great significance because it will be the last structure to be constructed on this street. The museum should likely be a projection into the future of our culture, technology and society. The material of the proposed building should respond to the existing buildings, but in a new way. The older buildings are constructed in stone.

Situated at the crossroads of the downtown and the new city of Amman, the site is a place of variety and contradiction.
The materials of the external skin include references to the surroundings, the content, and the architectonic orientation of the building. As explained in the urban design analysis facades are explicitly distinguished in their styles, structures, scales, materials, and construction.
Dealing with the Street
In the modern city, the street becomes simply a space for means of transport. This project deals with the street as a living space and the nucleus of the community as it was in the traditional city.
The Main Entrance
The first sketch: more than an idea
Standing on the podium between the two parts, an image of brightness and darkness instantly comes to the mind.
Each part has unique features that relate to their specific location on the site.
The Observation Tower

[Sketch of an observation tower with a landscape background]
You enter between two different worlds, one of modern architecture and one recalling ancient forms. You enter and advance towards the observation towers where you are able to read the history of the city through the different layers across time.
3D Geometrical studies
Site Plan
The First Floor

1 Courtyard
2 Main Entrance
3 Entrance Hall
4 Permanent Exhibition
5 Temporary Exhibition
6 Reception
7 Storage
8 Administration Offices
The Second Floor

1 Permanent Exhibition
2 Temporary Exhibition
3 Reception
4 Storage
5 Administration offices
The Fourth Floor

1 Permanent Exhibition
2 Temporary Exhibition
3 Reception
The separation of the two types (opaqueness and transparency) is necessary to respect their difference. The podium (the courtyard) connects both of them.
The towers will be constructed of reinforced concrete with stone infill.
The juxtaposition of old and new will create among people a new level of awareness about their surroundings.
A dialogue between old and new; where old and new each has its own right to exist.
The stone towers are strongly isolated; nearly all of the elevation surfaces are closed.
The vertical circulation is a major concern in the spaces. Alternatively, the stairs in the towers and the ramps facilitate the main vertical circulation.
VITA

SAMI K. AL-MASALHA

EDUCATION

- M. Arch. May, 1997
  GPA (3.91/4.0)
  VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, (Blacksburg, VA).
  (First professional degree, a five year program).
  Graduated first in my class.
  JORDAN UNIVERSITY OF SCIENCE AND TECHNOLOGY, (Irbid, Jordan).

WORK EXPERIENCE

- Teaching Assistant Aug., 1996 - May, 1997
  College of Architecture and Urban Studies, Virginia Polytechnic Institute and State University.
- Instructor Sep., 1994 - Aug., 1995
  College of Architecture, Jordan University of Science and Technology, (Irbid, Jordan).
  Taught various design studios including basic design, sketching, perspective drawing, architectural rendering, fourth year design studios, and undergraduate thesis studios.
- Designer May, 1994 - Sep., 1994
  Arab Engineers Corp., (Amman, Jordan).
  Contributed as a member of a team in the designing of an extension for the Jordan Engineers Association.
- Architectural Trainee May, 1993 - Sep., 1993
  Maoshor Architects, (Amman, Jordan).
  Worked on designing the interior of Philadelphia Bank, interior layout, furniture design and preparation of the project documents. Designed a residential project from early concept development up to the preparation of the working drawing.

AWARDS AND HONORS

- Member of Tau Sigma Delta National Honor Society for Architecture and Allied Arts, 1996.
- Virginia Polytechnic Institute and State University Scholarship for spring semester, 1995/1996.
- Honored for graduating first of class at Jordan University of Science and Technology, 1994.
- Won second prize as a member of team in the design of an extension for Jordan Engineers Association building, 1994.
- Jordan University of Science and Technology award for the distinguished student in architecture, 1993/1994.
- King Hussein Royal award for the distinguished student, 1993.

ACTIVITIES

- President of Tau Sigma Delta National Honor Society for Architecture and Allied Arts at Virginia Polytechnic and State University, 1996/1997.
- Member of Jordan Association for Architects since 1994.
- Member of Jordan University of Science and Technology basketball team, 1989/1994.
- Member of Abasi club basketball team, 1984/1994.

REGISTRATION