

A6792 Preservation of Modern Architecture

Introduction

The buildings and sites of the recent past have become our cultural heritage. This presents architects and preservationists with unprecedented challenges of a scale and complexity not anticipated in the preservation principles and theories largely formulated in the 19th century and practices customary today. To achieve meaningful preservation solutions it is important to understand the philosophical, aesthetic and physical framework as well as the functional, practical and operational criteria in which the original structures were created. It is that knowledge that will guide preservation and continued use.

The challenges to be addressed in the course broadly fall into four general categories:

- 1) The sheer volume of building and the very scale of the buildings and complexes is unprecedented in history. For instance, it can be argued that on average three quarters or 75% of our current built environment is post WWII (it may vary a few percentage points from country to country). Selecting which ones are to be preserved and to what extent is an unprecedented challenge where rarity or uniqueness was often the sole argument.
- 2) The typological specificity that first developed during the Industrial Revolution has continued unabatedly into the 21st century and arguments like 'obsolescence' or 'functional inadequacy' are often used to argue major changes at best or demolition altogether. Economic obsolescence on the other hand – which often is an important consideration – is discussed less frequently.
- 3) The materiality of modern construction, its durability and attempts at experimentation are an equally frequent item of discussion. This combined with questions about authenticity and design intent present a still on-going debate against the landscape of 19th century theory.
- 4) With the on-going focus on sustainability modern architecture is frequently – erroneously – presented as problematic. Surprisingly enough the modern designers of the postwar decades were far more environmentally conscious than they are given credit for.

The semester has been divided into distinct sections. The first half of the semester will be dedicated to a general discussion of the issues, supplemented with case studies in both the US and abroad. The second half will focus on the issues around Paolo Soleri's Arcosanti, the utopian community focused on the sustainable city in the Sonoran desert in Arizona dating from the early 1970s. The project since the early 1980s is described as an 'urban laboratory'. Here the community, which ranges in size from 65 to 120 people, is faced with the challenge of how to continue after Soleri's death in 2013. While architecturally distinctive, it is also about an idea: a sustainable city of great density. To be faced now are how to preserve the sections already built (often with unskilled labor and thus sometimes with qualitative materiality problems), how to continue the expansion facing both a formal architectural challenge but also one of continued sustainability. One of the interesting issues to be faced is the fact that what once started as an informal community and construction in the desert now needs to meet current building and planning codes creating infrastructure as well as architectural issues.

The preservation of the built sections is to be placed in the context of the social and sustainability ideals of the on-going community as well as their desire to continue building Soleri's plan. The challenges and the discussions around it will need to address architectural, social, ideological and physical questions.

The members of the board of the Cosanti Foundation, the owner of Arcosanti, will be available for consultation and discussion either in person or via Skype and a field trip to the site will be considered if funding for travel can be found.

Course Schedule

The class meets on Wednesdays from 11:00am to 1:00pm in 300 Avery Hall. In addition some field trips or walking tours may be scheduled at appropriate and convenient times during the semester.

September 3, 2014

Session 1: Introduction

Outline of goals of the course and its assignments. History of the preservation of modern architecture in the US and abroad.

September 10, 2014

Session 2: Issues and Challenges

September 17, 2014

No class (Field trip to be arranged)

September 24, 2014

Session 3: Typologies and Ideologies

Discussion and presentations of Assignment 1

October 1, 2014

Session 4: Materialities and Authenticities

The (often perceived) lack of durability and performance of modern materials and assemblies is frequently the cause for demolition or wholesale replacement. When materials and/or assemblies are replaced questions of authenticity or design intent come to the forefront.

October 8, 2014

Session 5: Interiors, Furnishings and Color

While much of the focus has been on the architectural aspect of modern buildings, the original designs had important aspect not only of furniture and furnishings but also of color and color theory, which, thanks to prevailing black and white photography, is and was not fully appreciated. They play an important part in the preservation and conservation of modern architecture.

October 15, 2014

Session 6: Pedro Morais (Brazil): Modern Housing in Latin America

Presentations and Discussion

Midterm/Assignment 2

October 22, 2014

Session 7: Jeff Stein, President Cosanti Foundation: Arcosanti: Paolo Soleri's Vision

Introduction into the history and development of Arcosanti and Paolo Soleri's original vision.

October 29, 2014

Session 8: Tomiaki Tamura, Arcosanti: Arcosanti: Infrastructure and Codes

When originally conceived and started in the Sonoran desert, needs and regulatory oversight with regards to infrastructural needs and code compliance was limited. With development growing outward from the nearby urban areas, requirements have become stricter. Also with the envisioned continued growth of the community the existing infrastructure is no longer adequate or able to accommodate growth.

November 5, 2014

Session 9: Arcosanti: Sustainability (Then and Now)

Arcosanti was envisioned as a sustainable and energy conscious urban experiment. A look backwards as to what that meant in the postwar decades and in the 1970s after the first oil crisis may offer interesting insights, inspiration and direction for future efforts.

November 12, 2014

Session 10: Roger Tomalty, Director, Paolo Soleri Studios: Arcosanti: Materiality and Conservation

The buildings and structures were built mostly out of concrete and generally with unskilled labor using simple construction techniques and methodologies. After some 40 years of exposure and changed requirements repairs are necessary raising questions of authenticity and levels of intervention. A particular conservation problem is presented by the various decorative treatments and the original concrete surface treatment envisioned by Soleri.

November 19, 2014

Session 11: Arcosanti: Planning and designing for the future

While Soleri continued to develop and draw his vision for the architecture of urban communities including Arcosanti, his passing presents the question and related dilemma of how to continue the vision in spirit and physical reality. Various plans are being considered and developed by the members of the Cosanti foundation focusing on the intent and spirit rather than the formal architectural language.

Discussion and presentations of Assignment 3

November 26, 2014

Session 12: Other relevant examples

December 3, 2014

Session 13: Other relevant examples

December 10, 2014

Session 14: Final presentations and discussions/Assignment 4

Assignments

There will be four (4) assignments through the semester, which will involve both written documents and class presentations. The specific subjects and topics will be discussed in class and assigned accordingly.

Assignment 1:

Report on readings related to the preservation of modern architecture and its history.

Assignment 2:

Report and presentation on a particular issue related to the four major challenges identified.

Assignment 3:

Report and presentation about one of the challenges facing Arcosanti and how those may or may not be resolved.

Assignment 4:

Final assignment is to take a particular aspect of Arcosanti and discuss how it can be carried forward into the future. This may be a series of guidelines for preservation or new construction or a review of original concepts of sustainability and how they are to be included into new guidelines or how they are relevant today.

Fieldtrips

Two fieldtrips are anticipated:

- 1) Visit with the restoration architect Louis Kahn's Bathhouse in Ewing Township NJ and, if possible, Whig Hall by Michael Graves on the Princeton Campus.
- 2) Visit the Marcel Breuer buildings including Begrish Hall on the Bronx Community College Campus

Reading List

Theodore Prudon, *Preservation of Modern Architecture* (New York, NY: John Willey & Sons, 2008)

Additional Readings

Throughout the semester other relevant readings will be assigned for discussion in class.



Arcosanti, Decorative treatment on the underside of the large hall ceiling.