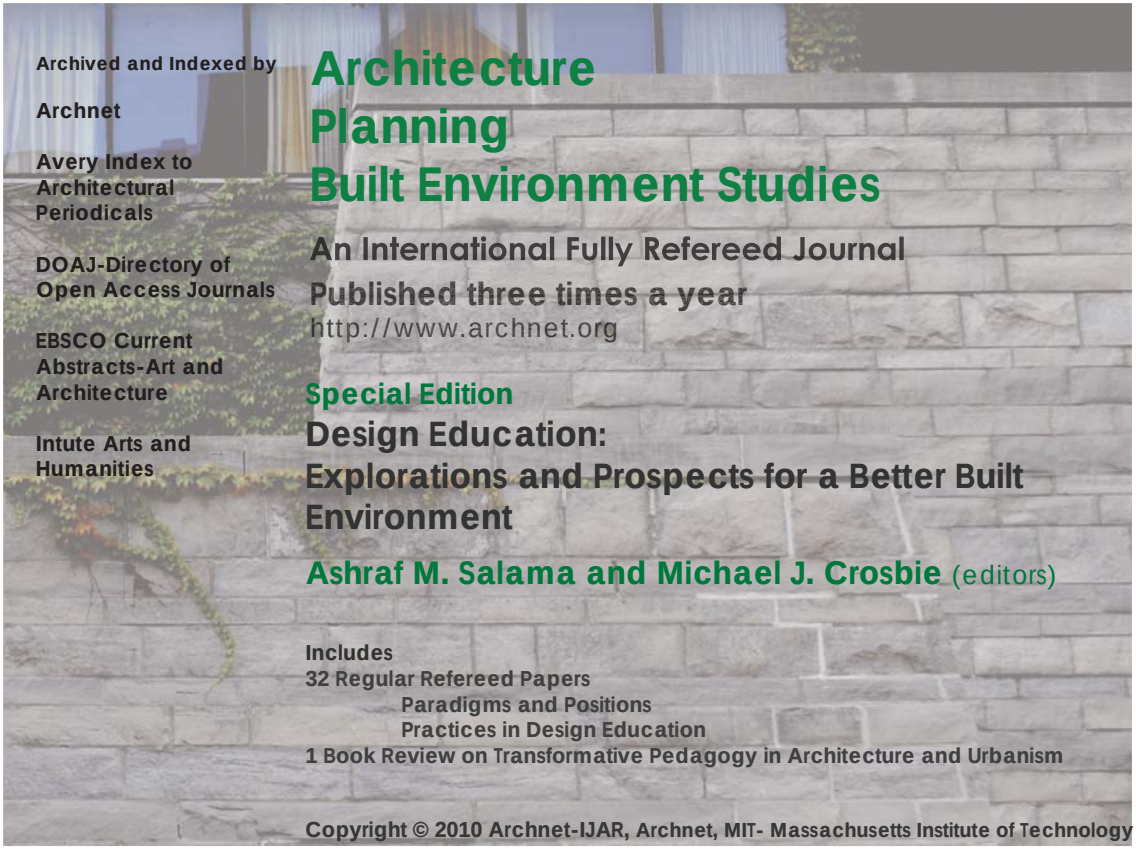
ISSN - International (Online) 1994-6961
ISSN - United States (Online) 1938-7806

OCLC & World Cat # 145980807
Library of Congress Catalogue # 2007212183

International Journal of Architectural Research

Volume (4) - Issues (2-3) - July-November, 2010



Archived and Indexed by

Archnet

Avery Index to Architectural Periodicals

DOAJ-Directory of Open Access Journals

EBSCO Current Abstracts-Art and Architecture

Intute Arts and Humanities

Architecture
Planning
Built Environment Studies

An International Fully Refereed Journal

Published three times a year

http://www.archnet.org

Special Edition

Design Education: Explorations and Prospects for a Better Built Environment

Ashraf M. Salama and Michael J. Crosbie (editors)

Includes
32 Regular Refereed Papers
Paradigms and Positions
Practices in Design Education
1 Book Review on Transformative Pedagogy in Architecture and Urbanism

Copyright © 2010 Archnet-IJAR, Archnet, MIT- Massachusetts Institute of Technology

Image taken from Queen's University, Kingston, Canada, 2010

Archnet-IJAR is published and archived by ARCHNET, the most comprehensive online community for architects, planners, urban designers, interior designers, landscape architects, and scholars working in these fields, developed at the MIT School of Architecture and Planning in close cooperation with, and with the full support of The Aga Khan Trust for Culture, an agency of the Aga Khan Development Network.

ISSN - International (Online) 1994-6961
ISSN - Unites States (Online) 1938-7806

OCLC & World Cat # 145980807
Library of Congress Catalogue # 2007212183

International Journal of Architectural Research

Archived and Indexed by

Archnet

Avery Index to Architectural Periodicals

DOAJ-Directory of Open Access Journals

EBSCO Current Abstracts-Art and Architecture

Intute Arts and Humanities

Copyright Permission

Attribution Non-Commercial No Derivatives (CC-BY-NC-ND)

Users are free to copy, distribute, or display the work for non-commercial purposes only, but must credit the copyright holder (author, photographer, etc.). Derivatives are not permitted.

Architecture
Planning
Built Environment Studies

An International Fully Refereed Journal
Published three times a year

Volume (4) - Issues (2-3) - July-November, 2010

Copyright © 2010 Archnet-IJAR, MIT- Massachusetts Institute of Technology

All contributors granted Massachusetts Institute of Technology ("MIT") worldwide rights and permission to reproduce, distribute, publicly display, and publicly perform the following Work in electronic format on the ArchNet Internet web site at URL *http://archnet.org*.

Views, opinions, and research results are the responsibility of the contributors. Images and figures are provided by the contributors.

Special Edition

Design Education: Explorations and Prospects for a Better Built Environment

Ashraf M. Salama and Michael J. Crosbie (editors)

Archnet-IJAR is edited by Ashraf M. Salama and is published and archived by ARCHNET, the most comprehensive online community for architects, planners, urban designers, interior designers, landscape architects, and scholars working in these fields, developed at the MIT School of Architecture and Planning in close cooperation with, and with the full support of The Aga Khan Trust for Culture, an agency of the Aga Khan Development Network.

ISSN - International (Online) 1994-6961
ISSN - Unites States (Online) 1938-7806

OCLC & World Cat # 145980807
Library of Congress Catalogue # 2007212183

International Journal of Architectural Research

Architecture
Planning
Built Environment Studies

An International Fully Refereed Journal
Published three times a year

Volume (4) - Issues (2-3) - July-November, 2010

Chief Editor
Ashraf M. Salama

Advisory Board
Attilio Petruccioli, Besim S. Hakim, Hashim Sarkis, Henry Sanoff, Jamel Akbar, Michael J. Crosbie, Mohamad Al-Asad, Nasser Rabbat, Nicholas Wilkinson, Nikos A. Salingaros, Peter Rowe, Suha Ozkan.

Editorial Board
Ahmed Elseragy, Akhtar Chauhan, Aleya Abel-Hadi, Ali Cengizkan, Amer Moustafa, Amira Elnokaly, Anne Beamish, Budi Sukada, Dalila Al-Kerdani, Donatella Mazzoleni, Ebru Cubukcu, Eman El-Nachar, Fuad Mallick, Hisham Elkadi, Hulya Turgut, Ihab Elzeyadi, M. Alaa Mandour, Malika Bose, Magda Sibley, Mashary Al-Naim, Mirjana Lozanovska, Nada Al Nafea, Peter Kellett, Rabee Reffat, Sonja Nebel, Yasser El-Shehstawy, Yasser Mahgoub.

International Journal of Architectural Research

Archnet- IJAR

ArchNet International Journal of Architectural Research – Archnet-IJAR is the first of its kind; an interdisciplinary comprehensive scholarly journal of architecture, planning, and built environment studies, that is blind reviewed and published on the World Wide Web three times a year.

Objectives

Archnet-IJAR objective is to establish a bridge between theory and practice in the fields of architectural and design research, and urban planning and built environment studies. It reports on the latest research findings and innovative approaches for creating responsive environments, with special focus on architecture and planning in developing countries.

Archnet-IJAR is truly international and aims at strengthening ties between scholars from different parts of the world with contributors and readers reaching across geography, boundaries, and cultures.

Archnet-IJAR articles come from architects, interior designers, planners, and landscape architects, and from those working in these fields in academic institutions, universities, research centers, government agencies, and private practice.

Reader

Archnet-IJAR addresses academics, practitioners, and students of archi-tecture, planning and interior design. It addresses those who are interested in developing their understanding and enhancing their knowledge about how environments are designed, created, and used in physical, social, cultural, economic, and aesthetic terms. Archnet-IJAR content keeps readers up-to-date on the latest ideas, designs, and developments in built environment related fields.

Archnet-JAR publishes research studies, criticisms and evaluation studies, and critical analyses about the creation, use, and evaluation of different types of environments at the macro and micro scales. The journal includes original empirical research papers, analytical case studies, and high quality position papers. Three major areas are covered by Archnet-IJAR:

Architectural and Design Research:

Topics include –but not limited to: architectural pedagogy and design studio teaching practices; architectural technology and sustainable design; design methods and architectural theories; design and project programming; environment-behavior studies; information technology; Islamic architecture; computer applications and virtual environments; post occupancy and facility performance evaluation; and social and cultural factors in design.

Urban and Built Environment Studies:

Topics include --but not limited to: administrative and political factors contributing to the shaping of communities, cities and urban regions, community planning; sustainable urban conservation; environmental planning and eco

Copyright © 2010 Archnet-IJAR, MIT- Massachusetts Institute of Technology

development; housing policy, planning, and design; new urbanism; sustainable development; space syntax and GIS applications; and way-finding and signage systems.

Critical Essays on Architectural and Planning Projects:

Essays that cover the above topics; critically discussing projects in use; after they have been designed, built and occupied. Articles are preferred to utilize the case study approach as a critical method in built environment research.

Advisory and Editorial Boards

The Chief Editor is in charge of developing journal issues, seeking out resources and articles, establishing publishing strategies, coordinating the review process, and posting each issue and its articles online. Archnet-IJAR has two boards; advisory and editorial. The range of expertise of the boards that include the panel of referees –academics and professionals-- ensures high quality scholarly papers and allows for a comprehensive academic review of contributions that span wide spectrum of issues, methods, theoretical approaches, and professional practice.

Submission Process

Unlike other printed Journals where contributors wait for periods that reach two or three years for their work to get published, the value of Archnet-IJAR as an online journal is that it eliminates the large lead time needed for publication. However, submission, referee, and publishing processes are strict and adhere to the following procedures:

Interested contributors contact the chief editor expressing interest, and submitting a summary of their paper. One page will do.

The chief editor consults with the advisory and editorial board members according to their relevant expertise.

Soon after receiving feedback from the referees, author(s) are contacted to submit their full papers.

When full papers are received, they will be forwarded to two editorial board members for blind review, according to the referee form.

The chief editor contacts the author(s) with the referee form filled by the reviewers. While papers will be blind reviewed, in exceptional cases author(s) will be asked to communicate directly with the reviewers.

Author(s) revise their papers as noted by the reviewers and re-submit their work to the chief editor.

Author(s) should make sure that their submissions should be free of jargon, clear, simple and to the point.

Papers will be published in the next issue according to the following schedule:

March 30th (publishing date): December 15th (deadline to receive papers after reviews)
July 30th (publishing date): April 15th (deadline to receive papers after reviews)
November 30th (publishing date): August 15th (deadline to receive papers after reviews)

Interested reviewers and members of the advisory board may submit their work for publication in Archnet-IJAR. Their work will go

Copyright © 2010 Archnet-IJAR, MIT- Massachusetts Institute of Technology

through the same blind review process and will follow the preceding procedures.

Notes to Contributors

1. Submission of Manuscripts

The language of the journal is English. All submissions will be online. One copy of the manuscript (in word document format) together with original figures and tables must be submitted to the editor: Ashraf Salama ijar@mit.edu

The name, mailing address, position, affiliation, telephone, fax, and email of each author must be supplied in a cover letter attached to an email. All papers will be blind reviewed and assessed by at least two referees.

2. Preparation of Manuscripts

Layout

Manuscripts should be typed in double spacing on one side of A4 (21x29.7 cm) paper with reasonable margins (2.5 cm). All pages should be numbered consecutively.

Title page (page 1)

The first page of the manuscript must contain a concise and informative title; names, affiliations and addresses (including e-mail) of all authors, and identify the corresponding author (who will be responsible for correspondence and reviewing proofs). An abbreviated title of less than 50 characters (including letters and spaces) should also be suggested.

Title of paper, abstract and keywords (page 2)

Title of the paper should be witten at the top of abstract without authors' name. A concise and informative abstract must not exceed 300 words in length, should summarize the objective, methods and major findings of the paper. Keywords must be carefully selected to facilitate the readers' search on Archnet Website, and should not exceed 5 key words.

Articles

Articles should not exceed 6000 words, including references.

Notes

Avoid the use of footnotes and endnotes, if unavoidable, label as (1), (2) and list all together at the end of the paper.

References

References in the text should give the surname of the author and the year of publication in brackets, for example, Rowe (1985) or (Rowe, 1985), followed by a, b,...when two or more references to work by one author are given for the same year. Page numbers should be given for quotes (Mitchell, 2003:33). At the end of the text the references should be listed in alphabetical order of authors' names and in chronological order for each author. Initial and final page numbers of articles and papers should be given. The names of books and periodicals should be given in full, and the publisher and the city of publication should be given for books, conference proceedings, etc. Details of availability should be given for unpublished conference papers. Full references should also be given for legal judgments, bylaws and regulations, and government publications, etc. Examples of reference citation are given below.

Dutton, T.A. (Ed.). (1991). Voices in Architectural Education: Cultural Politics and Pedagogy, Bergin & Garvey, New York, NY, USA.

Hegvold, L. (1999). "Seeking an Effective Cross-Cultural Design Pedagogy." In William O'Reilly (Ed.), Architectural Knowledge and Cultural Diversity,

Copyright © 2010 Archnet-IJAR, MIT- Massachusetts Institute of Technology

Comportments, Lausanne, Switzerland, pp. 93-100.

Salama, A. (1998). "Integrating Environment-Behavior Studies into Architectural Education Teaching Practices," In J. Teklenburg, J. Van Andel, J. Smeets, & A. Seidel (Eds.), Shifting Balances: Changing Roles in Policy, Research, and Design, EIRSS Publishers, Eindhoven, Netherlands, pp.128-139.

Salama, A. (2006). "Learning from the Environment: Evaluation Research and Experience Based Architectural Pedagogy," Transactions, CEBE-Center for Education in the Built Environment, Cardiff, UK, 3 (1), pp. 64-83.

Salama, A., O'Reilly, W. & Nochis, K. (Eds.). (2002). Architectural Education Today: Cross Cultural Perspectives, Comportments, Lausanne, Switzerland.

Sanoff, H. (1992). Integrating Programming, Evaluation, and Participation in Design, Avery, London, UK.

Tables

Each table must be typed, and con-secutively numbered. They should have a brief informative title placed as a heading. Tables should be understand-able without reference to the text, but they should be referred to in the text. Explanatory captions should be brief and placed beneath the table.

Figures

Figures should be numbered consecuti-
- vely throughout the paper and identified with the authors' name and the figure number outside the reproduction area. Figures should be referred to in the text and should be placed within the body of the paper. However, all figures should be supplied in separate files as JPEG file format. Figure dimensions should not exceed 21x30 cm. Photographs should be used with restraint and must be of high quality. Explanatory captions should be brief, placed beneath the figure.

3. Submission Process, Copyright, and Originality of Work

Proofs will be sent to the corresponding author for checking. Proofs should be returned within one week of receipt. Authors should correct typesetting errors only; they should not add any new material to the paper at proof stage.

Please read the submission process and procedures, and copyright notes under the general outline of the ARCHNET-IJAR.

All correspondence should be addressed to the chief editor.

Professor Ashraf M. Salama
IJAR@MIT.EDU

Copyright © 2010 Archnet-IJAR, MIT- Massachusetts Institute of Technology

International Journal of Architectural Research

Archnet- IJAR

Volume (4) - Issues (2-3) - July-November 2010

Contents

Editorial--Design Education: Explorations and Prospects for a Better Environment (10/18)
Ashraf M. Salama and Michael J. Crosbie

Section 1: Paradigms and Positions on Design Education

Teaching Design at the Limits of Architecture (19/31)
Nikos A. Salingaros and Kenneth G. Masden II

Mission as a Pedagogical Roadmap: One Architecture Program's Use of "Mission" to Help Direct and Focus Learning (32/43)
Michael J. Crosbie

Greening the Architectural Curriculum in all the Malaysian Institutes of Higher Learning- it is not an option (44/53)
Abdul Malik Abdul Rahman

Rethinking Housing Education in Architecture Schools (54/60)
Avi Friedman

Bubble Up: Alternative Approaches to Research in the Academic Architecture Studio (61/75)
Gregory Marinic

The Design Process—Making it Relevant for Students (76/89)
Keith McAllister

Process-Based Learning: Towards Theoretical and Lecture-Based Coursework in Studio Style (90/106)
Hatem Ezzat Nabih

Copyright © 2010 Archnet-IJAR, MIT- Massachusetts Institute of Technology

International Journal of Architectural Research
Archnet- IJAR
Volume (4) - Issues (2-3) - July-November 2010

Design Pedagogy--A Tested Path (107/115)
Ujwala Chakradeo

A Bio-experiential Model for Learning Creative Design Practices that Supports Transformative Development in Beginning Design Students (116/138)
Steven Temple

When Growth is No Longer the Norm: Teaching Urban Design in a Time of Transformation (139/157)
Sujata Shetty and Andreas Luescher

How Spike and the Slumdweller Find Reality in Design Studio Handouts: An Exploration of Reality in the Design Studio (158/173)
Beatriz C. Maturana

Student Perceptions of the Architectural Design Jury (174/200)
Ashraf M. Salama and M. Sherif T. El-Attar

Integrating Multi-grade Collaborative Learning Pedagogy into Design Studios (201/215)
Ayman Mohamed Ismail and Mona Hassan Soliman

Open and Cell-Type Design Studios: Their Impact on Architectural Education (216/224)
Elmira Gur

FORM and LANGUAGE: the landscape of the architectural (225/236)
Anna Hooper

IN-BETWEEN THE OTHER AND THE THING: Embedding Architectural Education in an Ethical Disposition (237/251)
Iris Aravot

Copyright © 2010 Archnet-IJAR, MIT- Massachusetts Institute of Technology

International Journal of Architectural Research
Archnet- IJAR
Volume (4) - Issues (2-3) - July-November 2010

Towards Total Integration in Design Studio (252/261)
S. A. Deshpande and Asif R. Khan

Section 2: Practices in Design Education

Learning Styles and Students' Performance in Design Problem Solving (262/277)
Elçin Tezel and Hernan Casakin

Delivering Theory Courses in Architecture: Inquiry Based, Active, and Experiential Learning Integrated (278/295)
Ashraf M. Salama

Stimulating Student Interest in Design History Classes (296/309)
Tasoulla Hadjiyanni and Stephanie Watson Zollinger

How do Architects Think? Learning Styles and Architectural Education (310/317)
Magda Mostafa and Hoda Mostafa

An Approach to Teaching Aesthetics: Linking Mental and Manual Skills (318/335)
Nabeel Elhady and Raghad Mofeed

Vernacular Architecture: An Introductory Course to Learn Architecture in India (336/345)
Miki Desai

Visualization Skills for the New Architectural Forms (346/358)
Khaled Nassar, Magda Mostafa, and Amr Rifki

Design with the Senses and for the Senses: An Alternative Teaching Model for Design Studio (259/375)
May al-Ibrashy and Tammy Gaber

International Journal of Architectural Research
Archnet- IJAR
Volume (4) - Issues (2-3) - July-November 2010

When Role Playing is Not Enough: Improved Universal Design Education (376/390)
Núbia Bernardi and Doris C.C.K. Kowaltowski

Wayfinding and Accessibility in the San Antonio RiverWalk: A Model for Urban Design Education (321/406)
Azza Kamal, Sedef Doganer, Judith Ruvuna, Jennifer Flores, Eduardo Hernandez, and Taeg Nishimoto

Hybrid Ways of Doing: A Model for Teaching Public Space (407/418)
Gabrielle Bendiner-Viani and Elliott Maltby

Design Education for Adaptive Reuse (419/428)
Özen Eyüce and Ahmet Eyüce

Biomimetically Correct (429/442)
Buthayna Eilouti

The Role of International Exchange Programs in Design Education: A Case Study of an Architectural Design Course in Japan (443/457)
Murat Dundar and Sinem Kultur

Systematic Designing in Architectural Education: An Experience of Hospital Design (458/466)
Dicle Aydin and Mehmet Uysal

Review of Ashraf Salama's Book: Transformative Pedagogy in Architecture and Urbanism (467/470)
Amira Elnokaly

International Journal of Architectural Research
Archnet- IJAR
Volume (4) - Issues (2-3) - July-November 2010

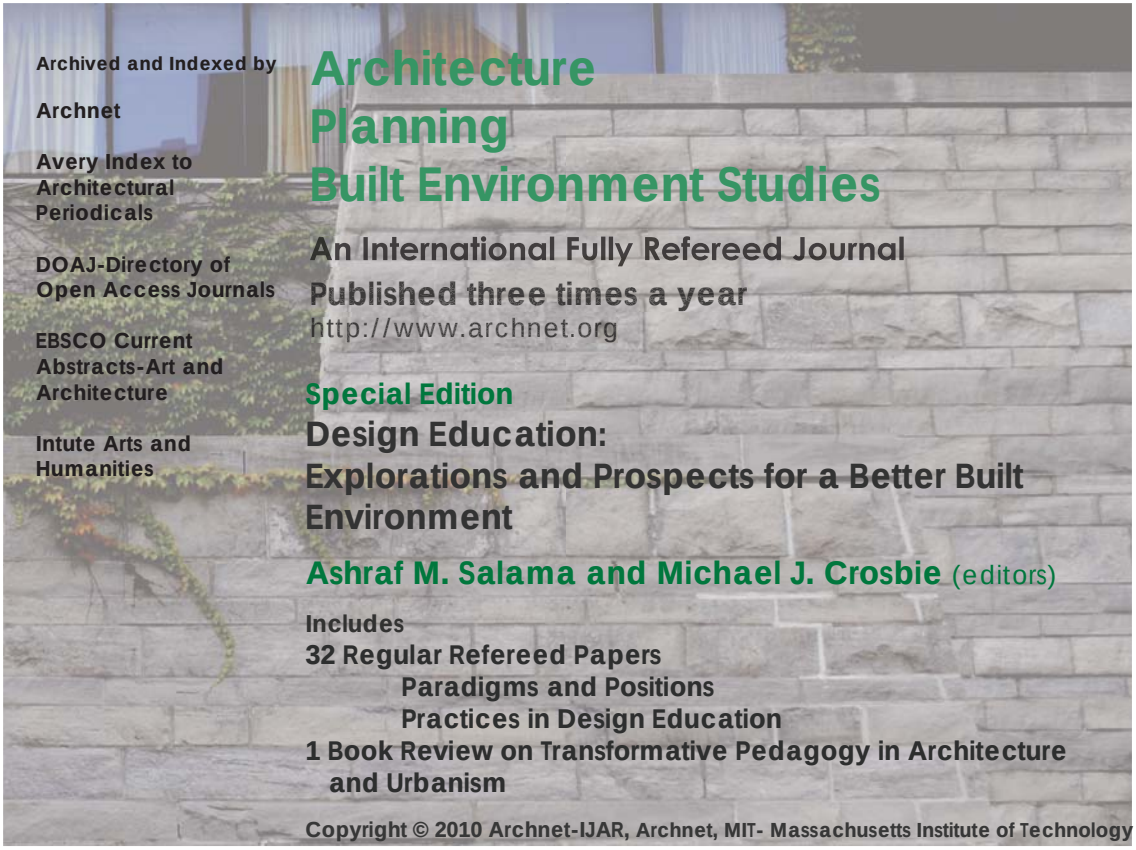


Image taken from Queen's University, Kingston, Canada, 2010