



Architectural Engineering Department Faculty of Engineering British University in Egypt (BUE) Shorouq, Egypt **Phone:** 00966-50-1821054

002-010-1402567 **E-mail:** husam.bakr@bue.edu.eg

husamb@link.net

Husam M. B. Khalil, Ph. D.

Personal Information

Marital status: Married, have three kids

Nationality: *Egyptian/ British*Date of birth: 28 June 1961

• Place of Birth: *London*

Academic Qualifications

Bachelor of Architecture (B. Sc), June, 1983 Faculty of Engineering, Department of Architecture Assiut University, Assiut, Egypt.



Master of Architecture /Urban Design (Ms. C), 1989 Faculty of Graduate Studies, Jordan University, Amman, Jordan



Thesis title: User participation in evaluating an urban open space: Jordan University housing scheme.

Doctorate of Architecture/Urban design (Ph. D), 1998
Degree awarded by Helwan University under a joint supervision program between the Faculty of Engineering at Mataria, Cairo, Egypt; and Georgia Institute of Technology, Atlanta, Georgia, USA.



Thesis title: Studying the effect of layout configuration on social interaction in residential environments: A study of three low and middle-income residential areas in Cairo.

Employ	ment	History
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1983 - 1986	<i>Demonstrator</i> , Faculty of Engineering, Assiut University, Assiut, Egypt
1986 - 1990	<i>Demonstrator</i> , Faculty of Engineering, Helwan University, Cairo, Egypt
1990 - 1998	Assistant lecturer, Faculty of Engineering, Helwan University, Cairo, Egypt
1998 - 2004	Assistant Professor, Faculty of Engineering, Helwan University, Cairo, Egypt
2004 – 2005	Assistant Professor, Faculty of Environmental Design, King Abdul-Aziz University, Jeddah, Saudi Arabia.
2004 to date	Associate Professor, Faculty of Engineering, Helwan University, Cairo, Egypt
2005 to 2011	Associate Professor, Faculty of Environmental Design, King

Abdul-Aziz University, Jeddah, Saudi Arabia.

2011-to 2013 *Professor*, Faculty of Engineering, Helwan University, Cairo,

Egypt

2011-to 2013 *Professor*, Faculty of Environmental Design, King Abdul-

Aziz University, Jeddah, Saudi Arabia.

2013 to date *Professor*, Faculty of Engineering, British University in

Egypt (BUE).

Teaching Experience

Engaged in teaching activities since 1984 at several academic institutions including:



• Assiut University, Egypt



• Helwan University, Egypt



• Jordan University, Jordan



Military Technical College, Egypt



• 10th of Ramadan Institute of Technology, Egypt



Misr University for Science and Technology, Egypt



• King Abdul-Aziz University. Saudi Arabia



• British University in Egypt (BUE).

Teaching Experience:

Undergraduate Level:

- Architectural presentation.
- Building Construction (levels 1 & 2).
- Working Drawings (levels 1 & 2).
- Architectural Design (all levels).
- Graduation Project.
- Computer Applications in Architecture 1, 2 (AutoCAD 2D & 3D).
- Built Environment & Behavior.
- Visual Design.
- Freehand drawing.
- 3D Max.
- Web site design (front page).
- Multimedia (Adobe director, flash).
- Descriptive Geometry.
- Sciagraphy & Perspective.
- Sustainable building design using Autodesk EcoTect Analysis.
- Research Dissertation

Graduate Level:

- Behavioral Aspects in Architecture. (Ph. D level).
- Computer Applications in Architecture (Ph. D level).

- Scientific Research Methods in Architecture (M. Sc. & Ph. D level).
- Eco Architecture (M. Sc. Level).
- Advanced Architectural design.

Training:

• Instructor for several AutoCAD training workshops.

Academic Activities

Grants:

- *Teaching Assistantship Grant* from 1987-1989, Faculty of Graduate Studies, Jordan University.
- 2 year *Peace Fellowship* from 1993-1995 to get research training at Georgia Institute of Technology. US aid program.
- 21 month *Joint Supervision Grant* between Helwan University and Georgia Institute of Technology from 1996-1997. Egyptian government.

Research Interests:

- Space Syntax, spatial analysis (architecture and urban levels).
- Built environment & Behavior.
- Built environment aesthetics.
- *Post occupancy evaluation (POE).*
- Architectural education.
- Sustainable architecture.
- Urban conservation.

Administrative and Academic Responsibilities:

- *Committee for equipments specifications*, Faculty of engineering at Mataria, Helwan University, 2000 to 2003.
- *Committee for lab equipments specifications*, Faculty of Environmental Design (FED), King Abdul Aziz University (KAU), 2007 to date.
- Committee for colleges' internet management. FED, KAU. 2005
- A member of the *organizing committee for King Abdul Aziz University's 2nd workshop* on development of educational programs in city planning and environmental design.
- Design studios jury member.
- Committee for graduate program curriculum, FED, KAU.
- Committee for academic affairs, FED, KAU, 2008 to date.
- Academic Advisor, dept. of Architecture, FED, KAU, 2007-2013.
- Vice director. Center of Sustainability and Future Studies (CSFS), British University in Egypt (from March until June 2014).

Lectures and Presentations:

- Space syntax applications in urban space planning and design. Presentation for acquiring the Associate professor position. The committee for promoting faculty members, the higher board of Egyptian universities.
- Space syntax applications in urban space planning and design. Presentation, King Abdul Aziz University's 2nd workshop on development of educational programs in city planning and environmental design.
- Space syntax applications in urban design. Jeddah municipality.
- Space syntax and its applications in Architectural and Urban design. Lecture, King Faisal University, Al-Khobar, 2008.
- *The effect of urban design on crime*. Presentation, Second affordable housing symposium in Saudi Arabia, Al-Khobar, 2008.
- *The effect of urban design on crime*. Lecture, Eastern Zone Police officers. Al-Khobar, 2008.

Publications:

- Khalil, Husam & Zimring Craig (1997): *Can street layout predict social interaction?* The 28th annual conference of the environmental design research association (EDRA), Montreal, Canada.
- Khalil, Husam & Nour, Emad (2000): *Architectural education in Egypt. Are we ready for the third millennium?* Al-Azhar Engineering 6th international conference (AEIC 2000), Cairo, Egypt.
- Khalil, Husam & Nour Emad (2002): *Effectiveness of the Non-Governmental organizations in the development and improvement of housing areas.* Engineering research Magazine, faculty of Engineering at Mataria, June, 2002.
- Ahmed, Hamdy; Ahmed, Mamdouh, and Khalil, Husam (2002): *The relation between urban form and wayfinding.* The 4th international conference of Civil Engineering and Architecture, The Military Technical College, May 2002.
- Ahmed, Mamdouh, and Khalil, Husam (2002): The interrelationship of function and aesthetic values: Proposing a method for measurement. The 4th international conference of Civil Engineering and Architecture, The Military Technical College, May 2002.
- Khalil, Husam (2003): *Post Occupancy Evaluation & Architectural Education*. Architectural Education for the New Millennium: Issues, Innovations and Traditions. International UIA Conference at Bibliotheca Alexadrina, Alexandria, Egypt, March 2003.
- Khalil, Husam (2003): *Aesthetic Preferences: A Comparative Analysis Between Architects and Students*. Al-Azhar Engineering 7th International Conference, April, 2003.
- Attia, Maged, Khalil, Husam, and Nour Eldin, Emad, (2004): *The role of joint projects in urban development in Egypt*. Engineering research Magazine, faculty of Engineering at Mataria, June, 2004.
- Attia, Maged and Khalil, Husam (2006): *Jury as a process for evaluating students' projects*. Faculty of environmental design, King Abdul Aziz University as a case study. Engineering research Magazine, faculty of Engineering at Mataria, June, 2006.
- Ismail, Ayman & Khalil, Husam (2007): *Planning & Design Factors Associated With Coastal Alterations*. National Conference for Environment Protection & Pollution. Qassaim University, March 2007.
- Ismail, Ayman & Khalil, Husam (2008): *Non-Defensible Cities: A Space Syntax-GIS Approach*. The Third National GIS symposium in Saudi Arabia.

www.saudigis.org/FCKFiles/File/23_E_HussamKhalil KSA.pdf.

- Ismail, Ayman & Khalil, Husam (2009): Coastal Alteration Risk Prediction of Tourist Resorts. SUE-MoT Conference 2009 Second International Conference on Whole Life Urban Sustainability and its Assessment 22–24 April 2009 Loughborough, UK. http://sue-mot.org/conference/downloads/: Republished at Management of Environmental quality, An international Journal. Vol. 21. No. 1, Pp: 108-121, 2010 (ISI).
- Khalil, Husam & Nassif, Alaa (2009): Security in Affordable Housing Project in Saudi Arabia. Proceedings of the 7th International Space Syntax Symposium. Edited by Daniel Koch, Lars Marcus and Jesper Steen, Stockholm: KTH, 2009. http://www.sss7.org/Proceedings_08.html
- Khalil, Husam (2009): *Architecture of Hassan Fathy's Houses. An Analytical Study Utilizing Space Syntax*. Engineering research Magazine, faculty of Engineering at Mataria, June, 2006.
- Khalil, Husam (2009): *Evaluating Building Sustainability Assessment Tools*. Engineering research Magazine, faculty of Engineering at Mataria, June, 2009.
- Khalil, Husam; Nour, Mohamed; Mortada, Hesham (2009): Post
 Occupancy Evaluation of High-rise housing in Saudi Society.
 The Rush Housing Project in Jeddah Case Study. Engineering
 research Magazine, faculty of Engineering at Mataria, June, 2009.
- Ismail, Ayman & Khalil, Husam (2010): Urban Design Factors
 Associated With Coastal Alterations. The 2010 International
 Conference on Environmental Engineering and Applications
 (ICEEA 2010), Singapore 2010.
 http://www.ieee.org/conferences_events/conferences/conferenced_etails/index.html?Conf_ID=17868.
- Khalil, Husam (2011): *Utilizing space syntax in urban conservation: The case of Historic Harar (Jugol), Ethiopia.* Engineering research Magazine, faculty of Engineering at Mataria, March, 2011.
- Khalil, Husam & Bileha, Emad (2011): *Intervention into informal settlements using space syntax: the case of Baghdadi, Jeddah.* Engineering research Magazine, faculty of Engineering at Mataria, June, 2011.
- Khalil, Husam; Helal, Ahmed and Dahlan, Ammar (2012): Studying privacy in contemporary Saudi apartment in holy Mekka area using space syntax. Accepted for publication in Engineering research Magazine, faculty of Engineering at Mataria.
- Khalil, Husam, Ismail, Ayman, & Anas, Salma (2013): *Methodology for prioritizing slums using coexistent urbanism*. Coordinates, Volume 9, Issue 6, June 2013.
- Khalil, Husam, Ismail, Ayman, & Anas, Salma (2014): Multicase
 Algorithm for Road Realignment of Informal Settlements: An
 Application using Axwoman TM on GIS. 9th National GIS
 Symposium, Dammam, KSA April 28-30th 2014.

Conferences and Symposiums:

- The 28th annual conference of the Environmental Design Research Association (EDRA), Montreal, Canada.
- Al-Azhar Engineering 6th international conference (AEIC 2000), Cairo, Egypt.
- The 4th international conference of Civil Engineering and Architecture, The Military Technical College, May 2002.
- *International Conference on Architectural Education*, Bibliotheca Alexadrina, Alexandria, Egypt, March 2003.
- Al-Azhar Engineering 7th International Conference, April, 2003.
- King Abdul Aziz University's 2nd workshop on development of educational programs in city planning and environmental design.
- Faculty of environmental design strategic planning for the future workshop, 2004.
- Jeddah strategic planning framework workshop, 2007.
- National Conference for Environment Protection & Pollution. Qassaim University, March 2007.
- 5th workshop on evaluating the urban strategy of city center, old airport site. Jeddah, KSA, 2008.
- The Third National GIS symposium in Saudi Arabia, Khobar, 2008.
- Second affordable housing symposium in Saudi Arabia, Khobar, 2008.
- SUE-MoT 2nd International Conference on Whole Life Urban Sustainability and its Assessment. 22–24 April 2009 Loughborough, UK.
- 7th International Space Syntax Symposium. Stockholm, June 2009.
- The 2010 International Conference on Environmental Engineering and Applications (ICEEA 2010). Singapore.
- The 9th National GIS Symposium, Dammam, KSA April 28-30th 2014.
- Trends in Heritage focused Building Information Modelling and Collaboration for Sustainability [HBIM]- March, 13-15, 2015.

Funded Research Projects:

- A member of the "Archie" research project team conducting post occupancy evaluation (POE) for courthouse facilities, and libraries. Georgia Institute of Technology, Atlanta, GA, USA. 1993 1996.
- A member of a research team studying "Design and planning of housing settlements for graduates in the Nubaria region". Academy of scientific research, Cairo, Egypt (2001).
- A member of a research team: "Development guidelines for a number of villages at Al-Behera Governorate". Authority of Urban Planning, Ministry of Housing, infrastructure and Urban Settlements (2002-2003).
- Consultant for the research project "Measuring students' satisfaction of King Abdul-Aziz educational facilities", Deanship of scientific research, King Abdul Aziz University (2006).
- Consultant for the research project (2006): "Upgrading Al-Sahaifa informal settlement, Jeddah". Deanship of scientific research, King Abdul Aziz University.

- Supervisor for field study of "Pedestrian movement in central Jeddah:", Jeddah Municipality.
- Researcher. "Practical Urban Design Guidelines for Enhancing Safety and Security of Saudi Affordable Housing Projects Utilizing Space Syntax". Funded by Al-Saedan Chair on Affordable Housing (2008).
- Researcher: "Functional suitability of high rise buildings in housing the low income groups in the Saudi Society Rush housing case study, Jeddah". Funded by the Deanship of scientific research, King Abdul Aziz University (2008).
- Researcher: "The role of Urban Design in the provision of Safety and Security in Housing Projects, Prince Fawaz Housing scheme, Jeddah". Funded by the Deanship of scientific research, KAU (2009).
- Researcher: "Conserving Architectural and Urban Islamic Heritage of the city of Harar". Funded by Deanship of scientific research, King Abdul Aziz University (2010)
- Researcher: "Utilizing Techniques of Spatial Analysis in Developing Informal Settlements". Funded by Deanship of scientific research, King Abdul Aziz University (2011).
- Researcher: "Stimulation of sustainable housing in Saudi Arabia". Funded by Deanship of scientific research, King Abdul Aziz University.
- Researcher: "Privacy in Contemporary Saudi Architecture: The Holy Mecca Governorate". Funded by Deanship of scientific research, King Abdul Aziz University (2012).
- A research team member in a joint research project with Vienna University "*Documenting the Architectural heritage of the Saudi Arabia*". Funded by King Abdul Aziz University (Ongoing).

Supervision of Theses and Dissertations:

- Mahmoud, Ahmed: *The relationship between function and aesthetics in architecture*. Master thesis defended 2001.
- El-Ansary, Abeer: *Man-environment interrelationship: Urban form and its relation to perception and way finding*. Master thesis defended 2001.
- Awad, Hosainey: The effect of school environment on the environmental attitudes of the basic educational stage students. Master thesis defended 2001.
- Morsy, Sahar: *Meaning in the contemporary architecture of Egypt.* Ph.D dissertation, defended 2003.
- Soliman, Hanan: Architectural trends in the 20th century and its impact on Exhibition facilities architecture. Master thesis, defended 2003.

- Farouk, Heba: The role of Architectural criticism in developing the creative processes of architectural education in Egypt. Defended,
- Ibrahim, Hend: *Human Aspects in Designing Urban Public Spaces*. Master degree candidate.
- Adeeb, Hala: *Symbolism in Architecture*. Ph. D dissertation, Defended.
- Anas, Salma: Coexistent Urbanism: An Environmental Planning Approach to the Development of Informal Areas. Master degree candidate (in progress).

Peer review:

Peer reviewer for:

- Engineering research Magazine, faculty of Engineering at Mataria.
- King Abdul-Aziz University Journal for environmental design.
- **Journal of Engineering Sciences.** Faculty of Engineering, Assuit University.
- Symposium on Affordable Housing, Riyadh, Saudi Arabia.
- The 4th eServices Symposium of the Eastern Province, Dammam, Saudi Arabia.
- A jury member for evaluating the bids for establishing "Jeddah Urban observatory", Jeddah municipality.

Workshops Attended:

- *Design of a web site for a course curriculum*, (2004).
- *Effective Management of Meetings*, (2006).
- Quality Control in Higher Education, (2007).
- *Professional Ethics*, (2009).
- Effective Presentation Skills, (2009).

Workshops offered:

Architecture and Human Behavior workshop.
 At the Royal Commission at Yanbu.
 From 26 – 30 April 2015.

Computer Skills

Uses computer since 1988. Software used frequently include:

Graphics: AutoCAD 2D & 3D.

3D Max.

Adobe Photoshop and Illustrator.

Statistical Analysis: SPSS (statistical package).

Spatial Analysis: Depthmap.

Axwoman. Syntax 2D.

Microsoft Office: Word.

PowerPoint.

Excell.

Microsoft Front Page.

Multimedia: Adobe Director.

Macromedia Flash.

Environmental Simulation:

Green Building Studio (Autodesk).

Ecotect (Autodesk).

As well as various general and Internet applications.

Hobbies & Skills

- Photography.
- Watercolor painting.
- Freehand sketching.
- Music Playing.

Professional memberships

- Syndicate of Egyptian Engineers
- Society of Egyptian Architects
- Environmental Design Research Association (EDRA) (formerly).

Community Services

 Media Officer, Egyptian Student Association in North America (ESANA), 1993-1994.

Professional practice: •

- Design and construction supervision of a number of *private villas* and *apartment buildings* at Ismailia, Ahmed Orabi, New Cairo, Obour, Shorouq, Port-Said, Jeddah, and Cairo.
- Design and construction supervision of three *commercial buildings* at Al-Zaytoun, and downtown Cairo.
- Coordinator, working drawings preparation for the *University of Tanta Hospital* (1000 bed).
- Preparation of construction documents for a *villa prototype*, swimming pool prototype in Dream Land, and fence for Dr. Bahgat's villa (1.6 km length) Dream Land, 6th of October.
- Design of *residential community* of "Sonbul Village" including village layout, villas prototypes, including construction documents. Cairo-Alexandria Desert Highway.
- Design, construction documents preparation, and supervision of a
 ¹/₄ Olympic swimming pool facility and utilities for Al-Dhaher
 club. Cairo.
- Knowledge Park design competition, King Abdul Aziz University, KSA.
- Landscape working drawings for King Abdullah University residences.
- *Increasing Mataf capacity competition*, Almasjid Alharam, Holy Mecca. Ministry of Higher education. KSA.
- Design of Academic Buildings No. 2100, 2300, 2400. Academic Square. King Abdul Aziz University.
- Design and working drawings for the Preparatory year complex at King Abdul Aziz University (8 buildings).

