Curriculum Vitae – Tamir El-Khouly, PhD, MSc, BSc   June, 2022

1. Personal details

Name: Tamir El-Khouly
Assistant Professor of Architecture and Chartered Architect, licensed by the Syndicate of Egyptian Engineers
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  https://www.linkedin.com/in/tamir-el-khouly-ph-d-39a8491
  https://scholar.google.co.uk/citations?hl=en&user=fKZXNR8AAAAJ
  https://www.researchgate.net/profile/Tamir-El-Khouly
  https://aucegpy.academia.edu/TamirElKhouly
  https://eng.asu.edu.eg/profile/view/955

2. Education and degrees completed

2007-2015	PhD in the Built Environment (Architecture), Bartlett School of Architecture, UCL Faculty of Built Environment, University College London, UK; entitled: 'Creative Discovery in Architectural Design Processes: An empirical study of procedural and contextual components.': https://discovery.ucl.ac.uk/id/eprint/1467244/
2000-2005	MSc in Architecture Engineering, Department of Architecture, Faculty of Engineering, Ain Shams University (ASU), Cairo, Egypt.
1995-2000	BSc in Architecture Engineering (Honours), Department of Architecture, Faculty of Engineering, Ain Shams University (ASU), Cairo, Egypt (Distinction with Honours - Ranked 2nd over 174 Students).

3. Current position

07/2017 – Present:	Assistant Professor in Architecture (Digital Communication and Building Information Modelling), Department of Architecture, School of Sciences and Engineering, The American University in Cairo (AUC), Egypt.

4. Previous work experience

Academic

Jan - July 2017:	Research Associate in Design Studies, Dyson School of Design Engineering, Imperial College London, UK
May 2016 - Present:	Lecturer in Architecture, Department of Architecture, Faculty of Engineering, Ain Shams University, Cairo, Egypt.
April - Sept. 2015:	Research Associate, Bartlett School Environment, Energy & Resources BSEER, UCL Faculty of Built Environment, University College London UCL.
Sept. 2007 - April 2015:	Research Assistant in Design Studies, Space Syntax Laboratory, Bartlett School of Architecture (Formerly: Bartlett School of Graduate Studies), UCL Faculty of Built Environment, University College London UCL.
June 2005 - April 2016:	Assistant Lecturer, Department of Architecture, Faculty of Engineering, Ain Shams University, Cairo, Egypt.
Sept. 2000 - July 2005:	Teaching Assistant, Department of Architecture, Faculty of Engineering, Ain Shams University, Cairo, Egypt.

Professional

2016-2019:	Director & Principal Architect, TEK DESIGN LTD UK t$^{(ek)}$; a registered company in UK companies house (Company number 10359544) - Company status: Dissolved. Design Concept & Development, Technical CAD/BIM packages (RIBA Stages: A: E)
Aug - Nov 2016:	Consulting Architect - BIM Package Delivery, John Robertson Architects JRA, London, UK. RIBA Stage E
Jan - Aug 2016:	Consulting Architect - BIM Package Delivery, ADAM Architecture, Winchester, UK. RIBA Stages C: E.
2014 - 2015:	Consulting Architect - Strategic Planning Phase, Buro Happold Engineering, London, UK.
2008 - 2009:	Project Architect - Full CAD Package Delivery, Clifford Tee + Gale [CTG] London, UK. RIBA Stages D: E.

2007 - 2008:	Assistant Architect, Design Development, CAD Package, Catalyst Regeneration Ltd., Birmingham, UK. RIBA Stages B: C.
2004 - 2007:	Assistant Architect, Design Development, CAD Package, BARB Services Ltd., Birmingham, UK. RIBA Stages B: C.

5. Research funded grants

Principle Investigator

2021 – 2022: Faculty Research Support Grant, The American University in Cairo AUC (20000$), **'*On Sustainable Urbanism: Towards multi-criteria decision-making model for new cities' development in Egypt*'**.

2020 – 2021: Provost Honorary Grant, The American University in Cairo AUC (10000$), **'*Environmental Design Studies, Digital Design Studies and Design Tool Development*'**.

2018 – 2020: Faculty Research Support Grant, The American University in Cairo AUC (10000$), '*Design cognition and machine learning: Towards a simulation model to capture the thinking styles in architectural design processes*'.

2015: Research Associate; Bartlett School of Environment, Energy and Resources, University College London (BSEER, UCL), led by Professor Alexi Marmot, for Guangzhou City Construction and Development Co. LTM. (£100000), '*Research on Guidelines for Mixed-Use Development, Guangzhou, South China*'.

2012: Research Associate; Platform Grant, Space Syntax Centre, Bartlett School of Graduate Studies, University College London.

6. Leadership and supervision experience

2019 – Present:	Co-supervisor of PhD and MSc students at Department of Architecture, Ain Shams University, Egypt.
2011 – 2015:	**Co-supervisor** of MSc students at Space Syntax Laboratory, Bartlett School of Architecture, University College London UCL.

7. Teaching experience

2017 - Present:	Department of Architecture, The American University in Cairo, Egypt at Undergraduate BSc level on digital design and building information modelling.
2016 - 2017:	Department of Architecture, Ain Shams University, Egypt at Postgraduate and Undergraduate BSc levels on architectural design studio, technical drawings, theories of architecture, and senior project.
2011 - 2015:	Space Syntax Laboratory, Bartlett School of Architecture, University College London UCL at Postgraduate level on Space Syntax Theory and design studies.
2000 - 2006:	Department of Architecture, Ain Shams University, Egypt at Undergraduate BSc level on architectural design studio, technical drawings, theories of architecture, and senior project.

8. Experience in organising scientific events

Initiator, Track Chair, scientific committee

2021:	Co-member, Scientific Committee: International Conference of the Arab Society for Computer Aided Architectural Design 'ASCAAD 2021': *Architecture in the Age of Disruptive Technologies – Transformation and Challenges*. https://www.ascaad.org/conference/2021/conference.htm https://in.aucegypt.edu/news/announcements/ascaad-2021-international-conference-hosted-virtually-auc
2021:	Guest editor: Open House International Journal, Emerald Publishing (Netherlands) – Double Special issue on: *Architecture in the Age of Disruptive Technologies* https://www.emeraldgrouppublishing.com/journal/ohi/architecture-age-disruptive-technologies
2012:	'**Studying the Design Process: Qualitative and Quantitative Approaches**', *The Fifth International Conference on Design Computing and Cognition DCC'12* (Texas: June, 6th 2012). http://mason.gmu.edu/~jgero/conferences/dcc12/workshops/workshop-6.html
2010:	Chair: '**Mind & Drawing**'; Advanced Architectural Studies MSc programme, the Bartlett School of Graduate Studies, UCL (London: May 2010).

9. Awards and Honorary nominations

2017:	**"FINALIST"**: The Entrepreneurial Award, organised by Britain Embassy in Egypt and British Council, Hosted by His Excellence, HMA John Casson, Britain Ambassador in Egypt (2017): https://www.britishcouncil.org.eg/en/study-uk/alumni/awards/finalists
2016:	**"SHORTLISTED"** in the RIBA PRESIDENT'S AWARDS FOR RESEARCH, Organised by the ROYAL INSTITUTE OF BRITISH ARCHITECTS (October, 2016): RIBAPresidentsAwardsforResearch2016BookofAbstractspdf (See: page 55) https://www.architecture.com/-/media/gathercontent/presidents-awards-for-research-2016-book-of-abstracts/additional-documents/ribapresidentsawardsforresearch2016bookofabstractspdf.pdf
2006:	1st. and 2nd. Awards of the Ministry of Middle Class Housing Prototypes Design Competition (two prototypes), The Egyptian Ministry of Housing, Egypt.
2005:	Exemplar Assistant Lecturer Award, Ain Shams University, Egypt.
2004:	Exemplar Assistant Lecturer Award, Ain Shams University, Egypt.
2003:	Visionary Youth Award, The Egyptian Ministry of Culture, Egypt.
2002:	Future Architects Award, The Egyptian Society of Architects ESA, Egypt.
2001:	2nd. Honorary Award, 'IT architecture', Medina Magazine International Competition for Visionary Architects: Smart Village Cultural and Business Centre, Egypt, refereed by architects: Marcos Novak (USA), Andrew Gollifer (UK), & Tarek Naga (USA).
1998:	Exemplar Student Award, Ain Shams University, Egypt.

10. Presentations filmed

2019:	'A Macroscopic View of Water Management of the New Administrative Capital City of Egypt: Assessing the capability of the urban structure to face various states of flood risk', 12th Space Syntax symposium, Beijing Jiao Tong University, Beijing, China 2019.
2014:	'*Is Design 'Hierarchical' or 'Transformative' Process?*' The Bartlett PhD Conference, University College London 2014. https://www.youtube.com/watch?v=66gNvKA2eLI

11. Other key scientific, academic, or professional merits

Reviewer of journal papers

2021:	Open House International Journal (OHI), Emerald Publishing, Netherlands.
2020:	Archnet-Ijar: International Journal of Architectural Research, Emerald Publishing, Netherlands.
2018:	Sustainable Cities and Society, Elsevier, Netherlands.
2018:	Journals of *Sustainable Cities and Society SCS*, *Research in Engineering Design RIED*.

Invited Speaker

2015:	'Insights into what it means to think and design as a creative architect', *EU-Korea Conference on Science and Technology (Engineering & Technology),* (Strasbourg: July, 25th, 2015). http://ekcconference.org/?page_id=749
2014:	'**Is Design a Hierarchical or a Transformative Process?'** EU-Korea Conference on Science and Architecture, (Vienna: July, 25th, 2014). http://www.ekc2014.org/program/spinvited

12. Memberships and positions of trust in scientific societies

2021 - Present:	Chartered Architect, licensed by the Syndicate of Egyptian Engineers.
2012 - 2013:	Royal Institute of British Architects (RIBA) Student Membership, UK.
2000 - Present:	Member, The Egyptian Syndicate of Engineers ESE.
2000 - Present:	Member, The Egyptian Society of Architects ESA.

13. Scientific Impact

30+ publications of which H-index 5, i-10 index 2: 61 citations (Google Scholar).

Certificates and samples of portfolio are available upon request

Published:

Adly, B. and El-Khouly, T. (2022) Combining retrofitting techniques, renewable energy resources and regulations for residential buildings to achieve energy efficiency in gated communities, Ain Shams Engineering Journal, Volume 13, Issue 6, 2022, 101772, ISSN 2090-4479, https://doi.org/10.1016/j.asej.2022.101772.

Sary Eldin, N., Faggal, A., El-Khouly, T. (2022). 'EVALUATING INDOOR AIR QUALITY IAQ IN PRIMARY SCHOOLS IN DOWNTOWN CAIRO, EGYPT', Journal of Al-Azhar University Engineering Sector, 17(62), pp. 324-344. doi: 10.21608/auej.2022.216821

El-Khouly, T., Abdelmohsen, S., Riad, A., Abdelkhalek, J. and Abdelgawad, N. (2021), Heritage-inspiredInteractivity:TraditionalGeometricPatternsasan Inspiration for Interactive Architectural Prototypes, proceedings of the XXV Congreso de la Sociedad Iberoamericana de Grafica Digital (SIGraDi 2021), Ubiquitous Conference, pp. 617-628.

El-Khouly, T., Abdelmohsen, S. and Mallasi, Z. (2021), GuestEditorial, Open House International (OHI), Vol. 46, No. 3, 342-347. https://doi.org/10.1108/OHI-09-2021-191.

Abdelmohsen, S., El-Khouly, T., Mallasi, Z., Bemidji, A. (2021), Architecture in the Age of Disruptive Technologies: Transformation and Challenges, proceedings of the 9th International Conference of the Arab Society for Computer Aided Architectural Design (ASCAAD 2021), American University in Cairo, Cairo, Egypt, ISBN 978-1-907349-20-1. Published by Robert Gordon University, The Scott Sutherland School of Architecture and Built Environment, Garthdee House, Garthdee Road, Aberdeen, AB10 7QB, Scotland, UK.

Eldiasty, A., Sabry Hegazi, Y. and El-Khouly, T. (2021) Using space syntax and TOPSIS to evaluate the conservation of urban heritage sites for possible UNESCO listing the case study of the historic centre of Rosetta, Egypt. Ain Shams Engineering Journal, Volume 12, Issue 4, 2021, ISSN 2090-4479, https://doi.org/10.1016/j.asej.2021.04.017

Ibrahim, G.M.A., Saeed, T.A. and El-Khouly, T. (2021), "The transition of spatial organisation planning of pre and post-colonial housing in Khartoum", Archnet-IJAR, Vol. 15 No. 2, pp. 364-384. https://doi.org/10.1108/ARCH-04-2020-0075

Elrawy O.O., El-Khouly T., Abdallah O. (2020) Evaluating the Architectural Designs Using Machine Learning: The Case of Two Modes. In: Kamel S. et al. (eds) Architecture and Urbanism: A Smart Outlook. Springer, Cham. https://doi.org/10.1007/978-3-030-52584-2_5

Abdeldayem W.S., El-Khouly T. (2020) Investigating the Urban Structure of Newly Planned Cities in Egypt: The Case Study of New Cairo City. In: Kamel S. et al. (eds) Architecture and Urbanism: A Smart Outlook. Springer, Cham. https://doi.org/10.1007/978-3-030-52584-2_28

El-Rawy, O., El-Khouly, T., Abdallah, O. (2019c) Evaluating the architectural designs using Machine Learning (ML): The case of two modes. in Proceedings of the Third International Conference of Architecture and Urban Planning, "Architecture & Urbanism… A Smart Outlook", 98-1:10.

Abdeldayem W. and El-Khouly, T. (2019b) Investigating the urban structure of newly planned cities in Egypt: The case study of New Cairo City. in Proceedings of the Third International Conference of Architecture and Urban Planning, "Architecture & Urbanism… A Smart Outlook" ARUP, 108-1:7.

Abdeldayem W. and El-Khouly, T. (2019a) A macroscopic view of water management of the new Administrative capital city of Egypt: Assessing the capability of the urban structure to face various states of flood risk. In Proceedings of 12th Space Syntax Symposium, Beijing, (SSS12 2019), 439-1:18.

El-Khouly T. (2019) Demystifying the Creative Qualities of Evolving Actions in Design Reasoning Processes. In: Gero J. (eds) Design Computing and Cognition '18. DCC 2018. Springer, Cham. https://doi.org/10.1007/978-3-030-05363-5_7

El-Khouly, T. (2018) Demystifying the creative qualities of evolving actions in design reasoning processes. In Proceedings of the 8th International Conference on Design Computing and Cognition (DCC'12), Politecnico di Milano, Lecco Campus on Lake Como (near Milan), Italy, 2-4 July 2018

El-Khouly, T. (2015b) Insights into what it means to think and design as a creative architect. EU-Korea Conference On Science and Technology (Strasbourg: July, 25th, 2015)

El-Khouly, T (2015a) Creative Discovery in Architectural Design Processes: An empirical study of procedural and contextual components. Doctoral thesis, UCL (University College London).

El-Khouly, T. (2014b) Is Design a Hierarchical or a Transformative Process? EU-Korea Conference On Science and Technology (Vienna: July, 25th, 2014)

El-Khouly, T (2014a) Is Design 'Hierarchical' or 'Transformative' Process? The Bartlett PhD Conference 2014.

El-Khouly, T and Penn, A (2013) Directed Linkography and Syntactic Analysis: Comparing Synchronous and Diachronic Effects of Sudden Emergence of Creative Insights on the Structure of the Design Process. In Proceedings of 9th Space Syntax Symposium (SSS9 2013), Soul, Korea, 31 Oct ~ 3 Nov 2013.

El-Khouly, T (2013) The structure of reasoning and emergence of creative insights in architectural design process. In digital proceedings of the Fifth International Congress of International Association of Societies of Design Research (IASDR 2013), Tokyo, Japan, 26-30 August 2013.

El-Khouly, T and Penn, A (2012b) On An Integrated Analytical Approach to Describe Quality Design Process in Light of Deterministic Information Theory. In Proceedings of the 5th International Conference on Design Computing and Cognition (DCC'12), College Station – Texas, 5-9 June, 2012.

El-Khouly, T and Penn, A (2012a) Order, Structure and Disorder in Space Syntax and Linkography: Intelligibility, Entropy, and Complexity Measures. In Proceedings of 8th Space Syntax Symposium, Santiago De Chile, (SSS8 2012), pp. 8242:1 – 22.

El-Khouly, T. (2012) Studying the Design Process: Qualitative and Quantitative Approaches. The Fifth International Conference on Design Computing and Cognition DCC'12 (Texas: June, 6th 2012)

El-Khouly, T and Dalton, R C (2010) Mind & Drawing: The Mutual Effect of Internal & External Cognitive Structures on Architecture Problem Solving Process. A Poster in the 4th Conference of Design Computing and Cognition, (DCC 2010), Stuttgart.

Abdelmohsen, S & El-Khouly, T (2009) Representing Reflective Practice in a Remote Design Collaboration Process. In digital proceedings of the International Association of Societies of Design Research (IASDR 2009), COEX, Seoul, Korea, pp. 1317 – 1326.

El-Khouly, T (2009) Examining the Effect of Reflective Practice On the Ability to Overcome Fixation Effects in a Remotely-Located Collaborative Design Process. Un-published Pilot Study, Bartlett School of Graduate Studies, UCL.

El-Khouly, T. (2008) Algorithmic Architecture of the SON-O-House by NOX. Un-published Pilot Study, Bartlett School of Graduate Studies, University College London UCL.

El-Khouly, T. (2008) Embodiment to form a model of Human Computer Interaction. Un-published Pilot Study, Bartlett School of Graduate Studies, University College London UCL.

El-Khouly, T. (2008) Physical Interactivity as a Design Process in order to consider Human Behaviour in a particular Space. Un-published Pilot Study, Bartlett School of Graduate Studies, University College London UCL.

El-Khouly, T. (2005) Image's Significance in The Architecture of Contemporary Mosque. Un-published MSc Thesis, Ain Shams University, Cairo, Egypt.

In Progress:

Shehab, N. and El-Khouly, T. (2021) Digital Interoperability for architecture engineering construction building information modelling.

El-Gendy, M. and El-Khouly, T. (2021) Form syntax as a generator to sustainable design.

El-Kaddah, M. and El-Khouly, T. (2021) Digital management for building information modelling process.

Abdullah, M., Elrawy, O. and El-Khouly, T. (2021) Machine-Learning for generative design.

Sent for publication:

Mokbl, T. and El-Khouly, T. (2022) How Algorithmic Design is reshaping the way novice architects think while designing?. Manuscript #: ARCH-03-2022-0086. Archnet-IJAR, *Vol. ? No. ?, pp. xxx-xxx.*

El-Khouly, T., Eldiasty, A. and Kamel, B. (2022) On Sustainable Urbanism and Urban Vitality: Analysis of urban growth in new cities in Egypt. Manuscript #: LUP-D-22-00690, Land Use Policy, Vol. ? No. ?, pp. xxx-xxx.