

Ruth Conroy Dalton
Professor
Architecture and Built Environment
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Research interests

Architecture, Space Syntax, Spatial Cognition, Architectural Cognition, Architectural Experience, Architectural Useability, Wayfinding, Navigation, Pedestrian Movement, Virtual Reality, Design Thinking and Creativity, Architecture of Visitor Centres

Qualifications

Education (other/general), PGCert, Online and Distance Education, Open University Milton Keynes
Award Date: 31 Dec 2010

Education (other/general), PGCert, Learning and Teaching in Higher Education, University College London
Award Date: 1 Nov 2007

Architecture, PhD
1 Jan 1997 → 31 Dec 2000
Award Date: 1 Mar 2001

Architecture, PGCert, Professional Practice and Management in Architecture, University College London
Award Date: 1 Dec 2000

Architecture, Other Qualification, ARB/RIBA Part 2 of the RIBA Examination in Architecture
Award Date: 6 Nov 1998

Architecture, MSc, Advanced Architectural Studies (Distinction), University College London
Award Date: 1 Nov 1996

Architecture, BSc (Hons), Architecture, Planning, Building and Environmental Studies, University College London
Award Date: 1 Aug 1991

1 Sept 2022 → ... Information not provided, Royal Institute of British Architects (RIBA)

Architect, Architects Registration Board (ARB)

Chartered Member, Royal Institute of British Architects (RIBA)

Fellow of the Higher Education Academy (FHEA), FHEA

Activities

Living in Houses: A Personal History of English Domestic Architecture

Ruth Conroy Dalton (Invited speaker)
7 Feb 2024

Podcast: Season 1, Ep. 11. Professor Ruth Dalton measuring joy and the Reva G-Wiz

Ruth Conroy Dalton (Speaker)
2 Feb 2024

Space Syntax, Sea Hero Quest and Big Data

Ruth Conroy Dalton (Keynote speaker)
28 Oct 2023

Thomas Heatherwick: Humanise

Ruth Conroy Dalton (Speaker)
19 Oct 2023

Building Soul - with Thomas Heatherwick

Ruth Conroy Dalton (Participant)
3 Oct 2023 → 17 Oct 2023

Wayfinding as a Social Activity

Ruth Conroy Dalton (Invited speaker)
21 Sept 2023

NeuroCognition for Human-Centered Architectural Design

Michal Gath Morad (Keynote speaker), Panos Mavros (Keynote speaker), Christoph Holscher (Keynote speaker) & Ruth Conroy Dalton (Keynote speaker)
16 Sept 2023

Beyond Disciplinary Boundaries: Pioneering Collaborations in Cognitive Science, Architecture, and Digital Technologies

Ruth Conroy Dalton (Keynote speaker)
7 Jul 2023

Living in Houses: A Personal History of English Domestic Architecture

Ruth Conroy Dalton (Invited speaker)
9 May 2023

University of Cambridge

Ruth Conroy Dalton (Visiting researcher) & Michal Gath Morad (Visiting researcher)
28 Mar 2023 → 31 Mar 2023

PhD Examination

Ruth Conroy Dalton (Examiner)
27 Mar 2023

Emotion as a function in design of buildings and cities

Ruth Conroy Dalton (Invited speaker)
24 Mar 2023

Humanise Lunch Talk: Brains & Buildings! (and the neuroscience of architecture)

Ruth Conroy Dalton (Invited speaker), Christoph Hölscher (Invited speaker) & Panos Mavros (Invited speaker)
22 Mar 2023

Living in Houses

Ruth Conroy Dalton (Invited speaker)
24 Nov 2022

Human-centred evidence-based design: linking architectural design and cognitive science

Ruth Conroy Dalton (Speaker) & Christoph Hölscher (Speaker)
4 Nov 2022

Sea Hero Quest: Population Level Wayfinding Experiments

Ruth Conroy Dalton (Keynote speaker)
5 Sept 2022

A Tribute to Bill Hillier: Keynote

Ruth Conroy Dalton (Invited speaker)
20 Jun 2022

Prizes**2017 Creative Circle Awards: Gold Awards (x2)**

Conroy Dalton, Ruth (Recipient), 23 May 2017

2017 Creative Circle Award: Silver Awards (x2)
Conroy Dalton, Ruth (Recipient), 23 May 2017

22nd Annual Webby Award Winner: Games - Social Impact Category

Scott-Slade, Maxwell (Recipient), Scott-Slade, Hugo (Recipient), Hyde, Matthew (Recipient), Spiers, Hugo (Recipient), Hornberger, Michael (Recipient), Conroy Dalton, Ruth (Recipient), Wiener, Jan (Recipient), Hoelscher, Christoph (Recipient) & Bohbot, Veronique (Recipient), 15 May 2018

BAFTA - British Academy Games Awards: Game Beyond Entertainment

Conroy Dalton, Ruth (Recipient), 12 Apr 2018

Best Paper

Conroy Dalton, Ruth (Recipient), 5 Sept 1998

Birmingham Jewellery Quarter Architectural Competition - 2nd prize of £3,000

Conroy Dalton, Ruth (Recipient) & Dalton, Sheep (Recipient), 10 May 2001

Bronze Lion Entertainment: Innovation in Branded Games

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Bronze Lion Mobile: App Games

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Bronze Lion Mobile: Social Gaming & Competition

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Gold Lion Promo & Activation: Use of Mobile

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Google Play Awards: Best Social Impact

Conroy Dalton, Ruth (Recipient), 26 Apr 2017

Julius-Posener-Prize

Hoidn, Barbara (Recipient), Conroy Dalton, Ruth (Recipient), Hoelscher, Christoph (Recipient) & Arisona, Stefan Müller (Recipient), 9 Sept 2017

M&M Global Awards 2016: Best Creative Use of Technology

Spiers, Hugo (Recipient), Hornberger, Michael (Recipient), Scott-Slade, Hugo (Recipient), Scott-Slade, Maxwell (Recipient), Hyde, Matthew (Recipient), Conroy Dalton, Ruth (Recipient), Wiener, Jan (Recipient) & Hölscher, Christoph (Recipient), 8 Sept 2016

MEFFYS 2016: Innovation in mHealth

Spiers, Hugo (Recipient), Hornberger, Michael (Recipient), Scott-Slade, Hugo (Recipient), Scott-Slade, Maxwell (Recipient), Hyde, Matthew (Recipient), Wiener, Jan (Recipient), Hölscher, Christoph (Recipient) & Conroy Dalton, Ruth (Recipient), 1 Dec 2016

Silver Lion Cyber: Innovative Use of Social & Community

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Silver Lion Direct: Use of Data

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Silver Lion Health: Education & Services

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Silver Lion Pharma: HCP Devices & Diagnostic

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

Silver Lion Promo & Activation: Commercial Public Services

Conroy Dalton, Ruth (Recipient), 18 Jun 2016

The ADCE Awards: Gold Award | Interactive and Mobile, Mobile Apps

Spiers, Hugo (Recipient), Hornberger, Michael (Recipient), Scott-Slade, Hugo (Recipient), Scott-Slade, Maxwell (Recipient), Hyde, Matthew (Recipient), Conroy Dalton, Ruth (Recipient), Wiener, Jan (Recipient) & Hölscher, Christoph (Recipient), 13 Oct 2016

The ADCE Awards: Silver Award | Integration & Innovation, Best use of Technology

Spiers, Hugo (Recipient), Hornberger, Michael (Recipient), Scott-Slade, Hugo (Recipient), Scott-Slade, Maxwell (Recipient), Hyde, Matthew (Recipient), Conroy Dalton, Ruth (Recipient), Wiener, Jan (Recipient) & Hölscher, Christoph (Recipient), 12 Oct 2016

The ADCE Awards: Silver Award | Integration & Innovation, Creative Strategy

Conroy Dalton, Ruth (Recipient), 12 Oct 2016

Research outputs**Comparing the homogeneity and genotypes of large and small-scale coliving buildings in the modern Western world**

Alyedreessy, E. & Dalton, R., 15 Jan 2024, (E-pub ahead of print) In: International Journal of Architectural Research: ArchNet-IJAR. 19 p.

Future Homes: trends, innovations and disruptors in housing design

Moreno-Rangel, A. (ed.) & Conroy Dalton, R. (ed.), 22 Dec 2023, 1st ed. London: Routledge. 188 p.

Unlocking the Emotional Power of Architecture

Dalton, R., 19 Oct 2023, 8 p. London : Heatherwick Studio Limited.

No link between handedness and spatial navigation: evidence from over 400 000 participants in 41 countries

Fernandez-Velasco, P., Coutrot, A., Oloye, H., Wiener, J. M., Conroy Dalton, R., Holscher, C., Manley, E., Hornberger, M. & Spiers, H. J., 11 Oct 2023, In: Proceedings of the Royal Society B: Biological Sciences. 290, 2008, 11 p., 20231514.

Cultural determinants of the gap between self-estimated navigation ability and wayfinding performance: evidence from 46 countries

Walkowiak, S., Coutrot, A., Hegarty, M., Fernández Velasco, P., Wiener, J., Dalton, R., Hölscher, C., Hornberger, M., Spiers, H. & Manley, E., 5 Jul 2023, In: Scientific Reports. 13, 1, 13 p., 10844.

Entropy and a sub-group of geometric measures of paths predict the navigability of an environment

Yesiltepe, D., Fernández Velasco, P., Coutrot, A., Ozbil Torun, A., Wiener, J., Holscher, C., Hornberger, M., Conroy Dalton, R. & Spiers, H., 1 Jul 2023, In: Cognition. 236, 12 p., 105443.

Upper bound projection and Stochastic isovists: a solution to the comparison of Visibility Graph Analysis systems

Dalton, N., Dalton, R., McElhinney, S. & Mavros, P., 8 Apr 2023, In: The Journal of Urban Design. 5, 043, p. 56-71

从等视域波动来识别可理解性的跳跃—通过点连接绘制潜在的惊喜时刻位置

McElhinney, S., Dalton, R., Dalton, N. & Mavros, P., 8 Apr 2023, In: The Journal of Urban Design. 5, 043, p. 42-55 14 p.

The Science behind our Emotional Connection to Architecture

Dalton, R., 1 Mar 2023, a+u magazine.

Isovist in a Grid: Benefits and Limitations

Dalton, R., Dalton, N., McElhinney, S. & Mavros, P., 22 Feb 2023, In: The Journal of Urban Design. 4, 042, p. 46-59

Motivational Factors for Participating in Citizen Science Games

Dalton, R., Wiener, J., Yesiltepe, D., Adams, A., Dalton, N., Spiers, H. & Hornberger, M., 9 Feb 2023, (Submitted) Center for Open Science.

科学、建築との感情的なつながりの背後にあるもの

Dalton, R. C., 2023, Northern Logger and Timber Processor, 630, p. 90-97 8 p.

Reported sleep duration reveals segmentation of the adult life-course into three phases

Coutrot, A., Lazar, A. S., Richards, M., Manley, E., Wiener, J., Dalton, R., Hornberger, M. & Spiers, H., 13 Dec 2022, In: Nature Communications. 13, 1, 9 p., 7697.

Selected Papers by Bill Hillier

Vaughan, L., Dalton, R. & Peponis, J., 1 Dec 2022, (Accepted/In press) UCL Press.

Living in Houses: A Personal History of English Domestic Architecture

Dalton, R., 3 Oct 2022, 1st ed. London: Lund Humphries. 240 p.

A Tribute to Bill Hillier: Keynote

Greene, M., Yang, T., Netto, V., Dalton, R., Psarra, S. & Holanda, F., 12 Aug 2022, *Proceedings: 13th International Space Syntax Symposium, 2022 (13SSS)*. van Nes, A. & de Koning, R. E. (eds.). 13th ed. Western Norway University of Applied Sciences (HVL), p. 1-26 26 p.

Detection of Intelligibility leaps using Isovist-waves: joining the dots to map potential 'aha moment' locations

McElhinney, S., Dalton, R., Dalton, N. S. & Mavros, P., 12 Aug 2022, *Proceedings 13th International Space Syntax Symposium*. van Nes, A. & de Koning, R. E. (eds.). Bergen: Western Norway University of Applied Sciences (HVL), p. 1-15 15 p. 553

Upper bound projection and Stochastic isovists: a solution to the comparison of Visibility Graph Analysis systems

Dalton, N. S., Dalton, R., McElhinney, S. & Mavros, P., 12 Aug 2022, *Proceedings 13th International Space Syntax Symposium*. van Nes, A. & de Koning, R. E. (eds.). 13th ed. Bergen, Norway: Western Norway University of Applied Sciences, p. 1-19 19 p. 553

A Study of Co-Presence in a University Architectural Studio using Bluetooth Contact Tracing

Alydreessy, E., Dalton, R. C. & Bourlikas, L., 20 Jun 2022, *Proceedings 13th International Space Syntax Symposium, SSS 2022*. van Nes, A. & de Koning, R. E. (eds.). Western Norway University of Applied Sciences (HVL), 386. (Proceedings 13th International Space Syntax Symposium, SSS 2022).

Creating and connecting new development areas an emphasis on cyclists and pedestrians: An examination of Bailrigg Garden village

Yesiltepe, D. & Dalton, R. C., 20 Jun 2022, *Proceedings 13th International Space Syntax Symposium, SSS 2022*. van Nes, A. & de Koning, R. E. (eds.). Western Norway University of Applied Sciences (HVL), 390. (Proceedings 13th International Space Syntax Symposium, SSS 2022).

Creating and connecting new development areas considering cyclists and pedestrians: an examination of Bailrigg Garden village

Yesiltepe, D. & Dalton, R., 20 Jun 2022, *Proceedings 13th international Space Syntax Symposium*. van Nes, A. & de Koning, R. (eds.). 390

Detection of Intelligibility Leaps with Isovist-Waves, a Method To Identify 'Aha Moment' Locations: joining the dots to map the 'aha moment'

McElhinney, S., Dalton, R., Dalton, N. & Mavros, P., 20 Jun 2022, *Proceedings of the 13th Space Syntax Symposium*. van Nes, A. & de Koning, R. (eds.). 553

Isovist in a Grid Benefits and limitations

Dalton, R., Dalton, N. S., Elhinney, S. M. C. & Mavros, P., 20 Jun 2022, *Proceedings 13th International Space Syntax Symposium, SSS 2022*. van Nes, A. & de Koning, R. E. (eds.). Western Norway University of Applied Sciences (HVL), 551. (Proceedings 13th International Space Syntax Symposium, SSS 2022).

Isovisits in a Grid: Benefits and limitations

Dalton, R., Dalton, N., McElhinney, S. & Mavros, P., 20 Jun 2022, *Proceedings of the 13th Space Syntax Symposium*. van Nes, A. & de Koning, R. (eds.). 551

What makes a route safer for cyclists? A study on cycling collisions in Lancaster

Dalton, R. & Yesiltepe, D., 20 Jun 2022, *Proceedings 13th international Space Syntax Symposium*. van Nes, A. & de Koning, R. (eds.).

Entropy of city street networks linked to future spatial navigation ability

Coutrot, A., Manley, E., Goodroe, S., Gahnstrom, C., Filomena, G., Yesiltepe, D., Dalton, R. C., Wiener, J. M., Hölscher, C., Hornberger, M. & Spiers, H. J., 7 Apr 2022, In: *Nature*. 604, 7904, p. 104-110 7 p.

Architectural cognition cards: a card-based method for introducing spatial cognition research and user-centred thinking into the design process

Mavros, P., Conroy Dalton, R., Kuliga, S., Gath Morad, M., Robson, S. & Hölscher, C., 4 Mar 2022, In: *Architectural Science Review*. 65, 2, p. 120-137 18 p.

Beyond the shortest-path: Towards cognitive occupancy modeling in BIM

Gath Morad, M., Aguilar, L., Conroy Dalton, R. & Hoelscher, C., 1 Mar 2022, In: *Automation in Construction*. 135, 104131.

The Optimized Social Distance Lab: A Methodology for Automated Building Layout Redesign for Social Distancing

Fagan, D. & Dalton, R. C., 2 Feb 2022, *Machine Learning, Optimization, and Data Science: 7th International Conference, LOD 2021, Grasmere, UK, October 4–8, 2021, Revised Selected Papers, Part II*. Nicosia, G., Ojha, V., La Malfa, E., La Malfa, G., Jansen, G., Pardalos, P. M., Giuffrida, G. & Umeton, R. (eds.). 1st ed. Cham, Switzerland: Springer, Vol. 13164 . p. 496-501 6 p. (Lecture Notes in Computer Science; vol. 13164).

Exploring the relationship between children's physical activity levels and their obesity status in urban and rural areas: a review of the existing literature

Dalton, R. & Yesiltepe, D., 1 Dec 2021, *Environments by Design: Health Wellbeing and Place*.

Navigating the Pandemic: Wayfinding, Social Distancing and Crowds in a Complex Shopping Mall

Jazuk, K., Dalton, R. & Hölscher, C., 5 Oct 2021, *International Conference on Environmental Psychology (ICEP 2021)*.

From repeating routes to planning novel routes: the impact of landmarks and ageing on route integration and cognitive mapping

Grzeschik, R., Hilton, C., Dalton, R. C., Konovalova, I., Cotterill, E., Innes, A. & Wiener, J. M., Sept 2021, In: *Psychological Research*. 85, 6, p. 2164-2176 13 p.

Landmarks in wayfinding: a review of the existing literature

Yesiltepe, D., Conroy Dalton, R. & Ozbil Torun, A., 1 Aug 2021, In: *Cognitive Processing*. 22, 3, p. 369-410 42 p.

A smart system approach for urban engineering

Cavada, M., Rogers, C. & Dalton, R., 28 Jun 2021, *AMPS Proceedings Series 25 Urban Assemblage: The City as Architecture, Media, AI and Big Data*. London: AMPS - Architecture_Media_Politics_Society

Design of Socio Spatial Networks and Practices for Hybrid Cities

Bourikas, L., Moreno-Rangel, A. & Dalton, R., 2 Mar 2021.

Computer models of saliency alone fail to predict subjective visual attention to landmarks during observed navigation

Yesiltepe, D., Ozbil Torun, A., Coutrot, A., Hornberger, M., Spiers, H. & Conroy Dalton, R., 2 Jan 2021, In: *Spatial Cognition and Computation*. 21, 1, p. 39-66 28 p.

A Study on Visual and Structural Characteristics of Landmarks and Experts' and Non-experts' Evaluations

Yesiltepe, D., Dalton, R., Ozbil Torun, A., Coutrot, A., Hornberger, M. & Spiers, H., 25 Aug 2020, *German Conference on Spatial Cognition: Spatial Cognition 2020: Spatial Cognition XII*. Skilters, J., Newcombe, N. S. & Uttal, D. (eds.). Springer, p. 95-107 13 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 12162 LNAI).

Context and Knowledge for Functional Buildings from the Industrial Revolution using Heritage Railway Signal Boxes in Great Britain as an Exemplar

Reeves, C., Dalton, R. & Pesce, G., 2 Jul 2020, In: *Historic Environment: Policy and Practice*. 11, 2-3, p. 232-257 26 p.

Analysing and Understanding a Game Environment Designed for Spatial Navigation

Yesiltepe, D., Ozbil Torun, A., Coutrot, A., Dalton, R., Hornberger, M. & Spiers, H., 2 Jun 2020, (Submitted) In: *PLoS One*.

cogARCH: Simulating Wayfinding by Architecture in Multilevel Buildings

Gath-Morad, M., Aguilar, L., Dalton, R. C. & Hölscher, C., 25 May 2020, *SimAUD 2020: Proceedings of the 11th Annual Symposium on Simulation for Architecture and Urban Design*. ACM

CogARCH: A Cognitive Agent Framework to Simulate Wayfinding by Architecture in Future Buildings

Gath Morad, M., Aguilar, L., Dalton, R. & Hölscher, C., 25 May 2020, *SimAUD 2020 proceedings: 11th Annual Symposium on Simulation for Architecture & Urban Design (SimAUD 2020)*. San Diego, CA, United States: Society for Computer Simulation International, p. 27-34 8 p.

HabiTech: Inhabiting buildings, data & technology

Dalton, R., Dalton, N., Hoelscher, C., Veddeler, C., Krukar, J. & Wiberg, M., 25 Apr 2020, *CHI EA 2020 - Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*. New York, NY, United States: ACM, 3375179. (Conference on Human Factors in Computing Systems - Proceedings).

View Point: Professor Ruth Dalton

Dalton, R., 11 Mar 2020, ADF (Architects Data File).

How the Visitors' Cognitive Engagement Is Driven (but Not Dictated) by the Visibility and Co-visibility of Art Exhibits

Krukar, J. & Dalton, R. C., 3 Mar 2020, In: *Frontiers in Psychology*. 11, 14 p., 350.

Linking building-circulation typology and wayfinding: design, spatial analysis, and anticipated wayfinding difficulty of circulation types

Natapov, A., Kuliga, S., Conroy Dalton, R. & Holscher, C., 2 Jan 2020, In: *Architectural Science Review*. 63, 1, p. 34-46 14 p.

A. D. Ekstrom, H. J. Spiers, V. Bohbot and R. S. Rosenbaum (2018) Human spatial navigation

Dalton, R., 1 Jan 2020, In: *Urban Morphology*. 24, 1, p. 116-118 2 p.

Local Wayfinding Decisions in a Complex Real-World Building

Jazuk, K., Gubler, G. L., Mavros, P., Dalton, R. C. & Hoelscher, C., 1 Jan 2020, *Spatial Cognition XII: 12th International Conference, Spatial Cognition 2020, Riga, Latvia, August 26–28, 2020, Proceedings*. Skilters, J., Newcombe, N. S. & Uttal, D. (eds.). 1 ed. Cham, Switzerland: Springer, p. 122-125 4 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 12162 LNAI).

Redefining Global and Local Landmarks: When Does a Landmark Stop Being Local and Become a Global One?

Yesiltepe, D., Dalton, R. C., Torun, A. O., Noble, S., Dalton, N., Hornberger, M. & Spiers, H., 1 Jan 2020, *Spatial Cognition XII: 12th International Conference, Spatial Cognition 2020, Riga, Latvia, August 26–28, 2020, Proceedings*. Skilters, J., Newcombe, N. S. & Uttal, D. (eds.). 1 ed. Cham, Switzerland: Springer, p. 111-121 11 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 12162 LNAI).

Understanding Cognitive Saliency by Using an Online Game

Yesiltepe, D., Dalton, R., Ozbil Torun, A., Hornberger, M. & Spiers, H., 1 Jan 2020, *Spatial Cognition XII: 12th International Conference, Spatial Cognition 2020, Riga, Latvia, August 26–28, 2020, Proceedings*. Skilters, J., Newcombe, N. S. & Uttal, D. (eds.). 1 ed. Cham, Switzerland: Springer, p. 76-87 12 p. (Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics); vol. 12162 LNAI).

The Language of Architectural Diagrams

Tenbrink, T., Dalton, R. & Williams, A. J., 12 Sept 2019, p. 17:1-17:14. 14 p.

Testing the navigation skills of 3.7 million participants with a video game

Coutrot, A., Silva, R., Manley, E., de Cothi, W., Sami, S., Bohbot, V., Wiener, J., Hölscher, C., Dalton, R., Hornberger, M. & Spiers, H., 25 Aug 2019.

A Wayfinding Research in Virtual Environments: The effect of spatial structure and different conditions on movement

Yesiltepe, D., Dalton, R., Ozbil Torun, A., Dalton, N., Noble, S., Hornberger, M. & Spiers, H., 8 Jul 2019. 10 p.

Syntactic Stitching II: Testing the rationalisation of the urban fabric as an intervention method in Cairo, Egypt

Zied Abozied, E., Vialard, A. & Dalton, R., 8 Jul 2019. 20 p.

Usage of Landmarks in Virtual Environments for Wayfinding: Research on the influence of global landmarks

Yesiltepe, D., Dalton, R., Ozbil Torun, A., Dalton, N., Noble, S., Hornberger, M., Coutrot, A. & Spiers, H., 8 Jul 2019. 10 p.

Exploring Individual Differences and Building Complexity in Wayfinding: The Case of the Seattle Central Library

Kuliga, S., Nelligan, B., Dalton, R., Marchette, S., Shelton, A., Carlson, L. & Hölscher, C., 1 Jun 2019, In: *Environment and Behavior*. 51, 5, p. 622-665 44 p.

The Contribution of Visual Attention and Declining Verbal Memory Abilities to Age-related Route Learning Deficits

Grzeschik, R., Dalton, R., Innes, A., Shanker, S. & Wiener, J., 1 Jun 2019, In: *Cognition*. 187, p. 50-61 12 p.

Virtual navigation tested on a mobile app is predictive of real-world wayfinding navigation performance

Coutrot, A., Schmidt, S., Coutrot, L., Pittman, J., Hong, L., Wiener, J., Hölscher, C., Dalton, R., Hornberger, M. & Spiers, H., 18 Mar 2019, In: *PLoS One*. 14, 3, e0213272.

Making cities more walkable by understanding how other people influence our journeys

Dalton, R., 18 Feb 2019, *The Conversation*.

Wayfinding as a Social Activity

Dalton, R., Hölscher, C. & Montello, D., 4 Feb 2019, In: *Frontiers in Psychology*. 10, 142.

Cities have a negative impact navigation ability: Evidence from mass online assessment via Sea Hero Quest

Coutrot, A., Patai, E. Z., Silva, R., Manley, E., Dalton, R., Hoelscher, C., Hornberger, M. & Spiers, H., 1 Nov 2018, *Society for Neuroscience*.

Global determinants of navigation ability

Coutrot, A., Silva, R., Manley, E., de Cothi, W., Sami, S., Bohbot, V., Wiener, J., Hoelscher, C., Dalton, R., Hornberger, M. & Spiers, H., 10 Sept 2018, In: *Current Biology*. 28, 17, p. 2861-2866

Effects of Cognitive Ageing on Finding and Selecting Reliable Landmarks

Grzeschik, R., Dalton, R., Innes, A. & Wiener, J., 23 Aug 2018, (E-pub ahead of print) p. S32. 1 p.

Exploring Self-Generated Block Consolidation to Accommodate Amenity-Based Functional Interventions

Zied Abozied, E., Vialard, A. & Dalton, R., 5 Jul 2018, p. 196.

Understanding the Effect of Global and Local Landmarks through the Use of Mobile Technology/a Mobile-based game

Yesiltepe, D., Dalton, R. & Ozbil Torun, A., 5 Jul 2018, p. 115.

Architectural Cognition and Behavior

Dalton, R., Krukar, J. & Hölscher, C., 27 Apr 2018, *Handbook of Behavioral and Cognitive Geography*. Montello, D. R. (ed.). Edward Elgar, p. 337-356 20 p.

Idea of North: A Fictional Visit to the Unbuilt Tyne Deck

Dalton, R., 17 Apr 2018, (In preparation)

Foreword

Dalton, R. C., 19 Mar 2018, *The Syntax of City Space: American Urban Grids*. Major, M. D. (ed.). Taylor & Francis, p. viii-xi

Designing for Heritage: Contemporary Visitor Centres

Dalton, R., 29 Nov 2017, London: Lund Humphries. 216 p.

Population-level Spatial Navigation Ability to Detect and Predict Alzheimer's Disease

Spiers, H., Manley, E., Silva, R., Dalton, R., Wiener, J., Hoelscher, C., Bohbot, V. & Hornberger, M., 1 Jul 2017, In: *Alzheimer's and Dementia*. 13, 7, p. 1404 1 p.

Syntactic Stitching: Towards a Better Integration of Cairo's Urban Fabric

Zied, E., Vialard, A. & Dalton, R., Jul 2017, *Proceedings of the 11th International Space Syntax Symposium*. Heitor, T., Serra, M., Pinelo Silva, J., Bacharel, M. & Cannas da Silva, L. (eds.). Lisbon: Instituto Superior Técnico - Universidade de Lisboa, 2908 p.

Indoor Wayfinding: Interview with Christoph Hölscher and Ruth Conroy Dalton

Krukar, J., Hoelscher, C. & Dalton, R., 1 May 2017, In: *Künstliche Intelligenz*. 31, 2, p. 185–191 7 p.

Measuring the Impact of Future Visions through Card Sorting: From User Experience to Participatory Planning (a Pilot Study)

Henriques, D., Dalton, R. & Greenhalgh, P., Apr 2017, *Urban Living Labs for Public Space - A New Generation of Planning?*. Katholieke Universiteit Leuven, p. 121-128 8 p.

Using Serious Games to Establish a Dialogue Between Designers and Citizens in Participatory Design: The Architectural Portal of People's Narratives

Di Mascio, D. & Dalton, R., 4 Mar 2017, (E-pub ahead of print) *Serious Games and Edutainment Applications*. Ma, M. & Oikonomou, A. (eds.). Springer, Vol. II. p. 433-454 22 p.

How to escape a maze – according to maths

Dalton, R. & Dalton, N., 26 Jan 2017, *The Conversation*.

Introduction

Dalton, R. C. & Hölscher, C., 5 Dec 2016, *Take One Building: Interdisciplinary Research Perspectives of the Seattle Central Library*. Taylor & Francis, p. 1-8 8 p.

OMA's Conception of the Users of Seattle Central Library

Dalton, R., 5 Dec 2016, *Take One Building: Interdisciplinary Research Perspectives of the Seattle Central Library*. Dalton, R. & Holscher, C. (eds.). London: Taylor & Francis, p. 38-50 (Design Research in Architecture).

Take One Building: Interdisciplinary Research Perspectives of the Seattle Central Library

Dalton, R. & Holscher, C., 5 Dec 2016, London: Taylor & Francis. 240 p. (Design Research in Architecture)

Using social media to gather users' feedback of the Seattle central library

Dalton, R. & Kuliga, S., 5 Dec 2016, *Take One Building: Interdisciplinary Research Perspectives of the Seattle Central Library*. Dalton, R. & Holscher, C. (eds.). Taylor & Francis, p. 167-187 230 p.

Applying HCI Methods and Concepts to Architectural Design (Or Why Architects Could Use HCI Even If They Don't Know It)

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