

DR MAXWELL J ROBERTS

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USER RESEARCH | INFORMATION DESIGN | LECTURER

[Underground Maps Unravelled] "Max has created what can only be described as a masterpiece of design and beauty. He equally has created some truly vile monsters just to illustrate, good and bad, and what can be achieved but remaining within the rules. There is enough here to make your jaw drop and your eyes burst."

Douglas Rose, former Managing Director of FWT Studios, now independent consultant

International thought leader and authority on schematic map design who drives innovation and creativity via a clear framework and evidence-based methodologies. Multidisciplinary researcher, designer, lecturer, author and public speaker, combining psychology with user-research, information design, computer science and art.

- **Over thirty years of experience at research methodology**, including statistical analysis and technical report writing, with fifteen years specifically investigating usability testing and user evaluation of design.
- **Validates theories of design via laboratory and online studies**. Creates original maps optimised for visual information configuration, resulting in reduced cognitive load and improved wayfinding.
- **Pioneers alternative design principles and achieves real world impact**; demonstrable evidence of designs, methods and principles being adopted or considered in Europe, Asia and the USA.
- **Undertakes client-driven consultancy** to advise on psychological principles of design, evaluate prototypes and create bespoke maps and infographics in a variety of domains, working to remit, budget and deadlines.
- **Spearheads education of design principles**; integrates framework and research outcomes into course modules and content for undergraduate and postgraduate students. Lectures future designers internationally.
- **Raises awareness of usability-driven design**; delivers engaging presentations to international academic, industry and public audiences, produces peer-reviewed articles, books, newsletters, exhibitions and workshops.
- **Recently expanded skill set**: completed (2023) a University accredited course on UX design.

AREAS OF EXPERTISE

Research Methods & Protocols	User Research & Usability Testing	UX Research & Design
Statistical Data Analysis	Technical Report Writing	Schematic Map Design
Visual information Communication	Human Reasoning/Problem Solving	Human Intelligence
Lectures & Presentations	Training & Workshops	Book Design & Editing

EMPLOYMENT

INFO DESIGN CENTRAL: INFOGRAPHIC DESIGNER

2020 – PRESENT

Established *Info Design Central* as a joint venture with TradePeers Ltd. combining research and design to create infographics that illuminate complex economic, social and political issues.

TUBE MAP CENTRAL: MAP DESIGNER | RESEARCHER

2007 – PRESENT

Established *Tube Map Central* as an online conduit to promote consultancy services in transit map design, research and training, publicise alternative concepts and highlight real-world applications.

UNIVERSITY OF ESSEX: LECTURER IN COGNITIVE PSYCHOLOGY

1993 – PRESENT

Teaches at undergraduate and postgraduate level. Known for attention to detail and consistency of procedural application. Leads multidisciplinary approaches to transit map design, usability testing and user evaluation.

PROFESSIONAL EXPERIENCE HIGHLIGHTS

RESEARCH

- User Research: Effects of Map Design on Usability. Champions evidence-based design to evaluate map effectiveness. Designs usability tests, conducts statistical analysis and writes technical reports and papers.
- User Research: Evaluating Docklands Light Railway Prototype Diagrams. Contracted via FWT Studios to design and implement a large-scale usability study of prototype route diagrams for Transport for London.
- UX Design: Professional Diploma. Completed 20 credit course with assessments to diversify skill set beyond map research and into more general evaluation of design.

DESIGN

- Information Design: Transit Map Exploration. Personally created 200+ maps. Devised a framework for effective design to facilitate generation of prototypes. Advocates systematic exploration methodology.
- Information Design: Brexit Maps. Collaborated with TradePeers Ltd. to create a set of twelve regional *Brexit Maps* using the transit map metaphor to highlight issues in a clear engaging way for business to plan ahead.
- Information Design: Lifetimes of Personal Finance. Contracted by Aberfield on behalf of *first direct* bank. Designed the research and created four maps showing the financial events of different generations.
- Web site design and Implementation: Tube Map Central. Designed, programmed and maintained the Tube Map Central web site, with a major revamp taking place in 2017. All pages are hand-coded in HTML and CSS.
- Book Design and Publication. *Underground Maps Unravelled* was self-published using Adobe Indesign, litho print-ready, including all page layouts and illustration work.

TEACHING

- University Modules. Lectures core/elective topics to students, including statistics, research methods, human/animal/machine intelligence, and transit maps, emphasising recurring themes and cross-disciplinary issues.
- Public Engagement. Gives presentations on effective design to the general public and professionals.

DEGREES | TRAINING | AWARDS | MEMBERSHIPS

Training: Professional Diploma in UX Design, UX Design Institute, 2023

Award: Best International Research Impact, University of Essex, 2022

Nomination: Edward Stanford Travel Writing Award, *Airline Maps: A Century of Art & Design*, 2020

Member of the Design Research Society, 2018 – present

Award: NACIS Atlas of Design, Chicago El network inspired by Frank Lloyd Wright, 2018

Training: Information Design Summer School, Simplification Centre, 2015

PhD, Psychology, University of Nottingham, 1992

Training: BPS Level A Psychometric Test Administration, Saville & Holdsworth Ltd., 1989

BSc, Psychology (First Class Hons), University of Nottingham, 1988

LINKEDIN PROFILE [here](#), PERSONAL WEBSITE [here](#)

RECOMMENDED PRESENTATIONS AND WRITING

PRESENTATIONS

- [Round in circles and back again: simplicity, coherence, and the need for evidence-based design](#), Typo Berlin, Berlin, May 2016.
- [Underground Maps Unravelled](#), TEDx University of Sussex, March 2013.

SHORT PAPERS

- [Us versus them: Ensuring practical and psychological utility of measurements of schematic map usability](#), Schematic Mapping Workshop, TU Wien, April 2019.
- [What's your theory of effective schematic map design?](#) Schematic Mapping Workshop, University of Essex, April 2014.

BOOKS

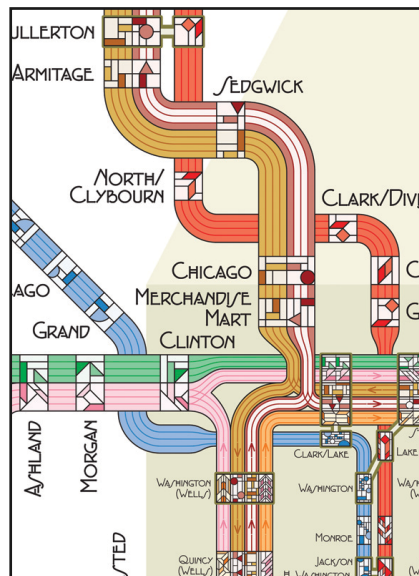
- [Airline Maps: A Century of Art and Design](#) (with Mark Ovenden), Penguin Books, 2019.
- [Underground Maps Unravelled: Explorations in Information Design](#), Published by the author, 2012.

EXAMPLES OF NOTABLE DESIGNS

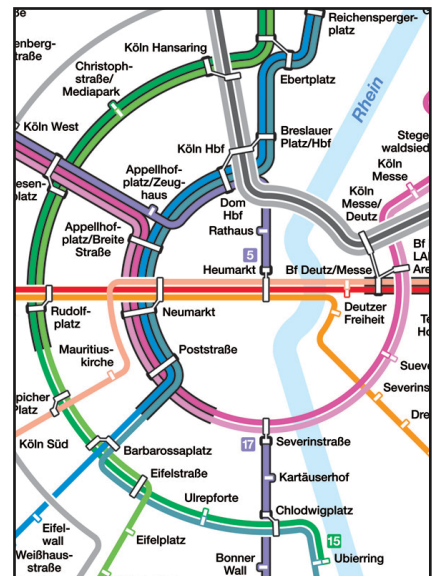
PARIS CURVILINEAR: EASIER TO USE THAN OFFICIAL VERSION



CHICAGO EL INSPIRED BY FRANK LLOYD WRIGHT (ART MAP): AWARD WINNING



COLOGNE CIRCLES: OFFICIAL KVB MAP BASED ON THIS DESIGN



FULL CV [here](#), ACADEMIC CV [here](#)
