# Dan Lockton PhD FRSA

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#### **Education**

Brunel University, Uxbridge, London, UK

PhD in Design, 2007-13

Thesis: Design with Intent: A design pattern toolkit for environmental and social behaviour change. Supervisors: Professor David Harrison (Brunel), Professor Neville Stanton (University of Southampton). Hamilton Prize for Best PhD Thesis in Engineering & Design.

University of Cambridge Downing College, Cambridge, UK

MPhil in Technology Policy, 2004-5

Judge Institute of Management / Cambridge-MIT Institute. Dissertation: Architectures of Control in Consumer Product Design. Supervisor: Dr David Reiner. Examiners' Letter of Commendation.

Brunel University, Runnymede, Surrey, UK

BSc (Hons) in Industrial Design Engineering, 2000-4

First Class. Major project: Wheelchair Drive. Motion Drives & Controls Award for Best Project.

# Academic appointments

Carnegie Mellon University, Pittsburgh, PA, USA

#### Assistant Professor, School of Design, August 2016-

- —Founder of Imaginaries Lab (2017–), a new research initiative; supervising graduate research assistants in the development of research projects; carrying out research; preparing funding applications; preparing publications.
- —Chair of Design Studies (2017–), leading and co-ordinating curriculum development for core undergraduate courses.
- —Teaching BDes, MDes, and PhD students, as well as guest teaching on a variety of other courses, and teaching an elective taken by graduate and undergraduate students from Master of Integrated Innovation for Products & Services, Master of Tangible Interaction Design, the School of Art, and Chatham University.
- —Advising and committee membership for PhD and MDes students and undergraduate and graduate independent study projects
- —Member of Environments Track Committee (2016–)
- —Member of Doctoral Program and Admissions Committees (2016–)

- —Portfolio reviews for undergraduate applicants (2016–)
- —Master's thesis reviews (2016–)
- —Faculty Affiliate, Scott Institute for Energy Innovation (2017–)

## Royal College of Art, London, UK.

## Research Tutor, Innovation Design Engineering, February 2015-

- 'Visiting Tutor' position, equivalent to US Adjunct Professor. From July 2016 onwards position involves remote supervision of PhD candidates.
- —Developing departmental research, teaching and supervising practice-based MPhil and PhD researchers in design for sustainable behavior, the Internet of Things and second-order cybernetics, synaesthesia, medical visualisation, and animation processes. Managing research section of department website. Interviewing MRes and MPhil/PhD applicants. Organizing seminars and invited guests.
- —Continuing personal research in design for behavior change, understanding understanding, and new forms of experiential interface for energy use.
- —Lead UK academic (2016) for collaboration with Laboratorio para la Ciudad (Mexico City), Future Cities Catapult, Superflux and UNAM around making policy and agency tangible in urban space, funded by British Council.
- —Project manager (2015) for setting up public engagement work package of GATEWAY: Greenwich Automated Transport Environment (autonomous vehicles), funded by Innovate UK (with RCA Vehicle Design).
- —Academic advisor (2015–16) for NHS Citizen Localnets project around community participation in healthcare decision-making (with RCA Information Experience Design / The Creative Exchange), funded by AHRC.

## Royal College of Art, London, UK.

### Senior Research Associate, Helen Hamlyn Centre for Design, March 2013-March 2015

- —Member of Work & City and Age & Ability Labs.
- —Quantified Self Development Grant (Sustainable Society Network+, Principal Investigator)
- —Creating Sustainable Innovation through Design for Behaviour Change: http://behaviourchange.eu (AHRC, Co-Investigator; consortium led by Professor Kristina Niedderer, University of Wolverhampton)
- —SusLabnwe: international infrastructure for the design and evaluation of technologies supporting sustainable practices, consortium led by Professor David Keyson, TU Delft: http://suslab.eu (Interreg IVB / ERDF, postdoc researcher)
- —Media, Community and the Creative Citizen: http://creativecitizens.co.uk
  How digital technology can support and add value to community-led design projects (AHRC / EPSRC, postdoctoral researcher)
- —Researcher, project manager and executive education facilitator for commercial collaborations with Qatar Foundation, Chalmers TH, NASA Johnson Space Center, Stannah and London Creative & Digital Fusion
- —Management of interns (RCA Service Design), researchers and freelance designers working on SusLabnwe and Creative Citizens projects; contribution to Centre's exhibitions and knowledge exchange including photography for Design That Makes A Difference, 2013

#### University of Warwick, Coventry, UK

#### Research Fellow, Experiential Engineering, WMG, October 2011-September 2012

- —EMPOWER: Empowering Empathic Energy Efficiency design: http://research.carbonculture.net/decc-report-2012 (TSB / EPSRC, researcher)
- —Executive education facilitator for collaboration with Jaguar Land Rover and local enterprises

Brunel University, Uxbridge, London, UK

# Research Assistant, Centre for Design Research / Cleaner Electronics Research Group, October 2010–October 2012

—EMPOWER: Empowering Empathic Energy Efficiency design: http://research.carbonculture.net/decc-report-2012 (TSB / EPSRC, researcher, 2010–12)

# Commercial design practice

Doixt, Santiago, Chile. Associate consultant / advisory board member, 2018–

Requisite Variety (Freelance), Windsor, Berkshire / Twickenham, Middlesex, UK, 2011–16 Workshops, consultancy, research and writing for clients including Autodesk, Unilever, Frog Design, Philips Research and West Sussex County Council

**Dan Lockton Research, Design & Engineering** (Freelance), Datchet, Berkshire, UK, 2004–7 Design, R&D and writing for clients including **Sinclair Research**, **Tangerine** and **Mayhem UK** 

**Daka Research Ltd / Sinclair Research Ltd**, Industrial design engineer, Coulsdon, Surrey, UK, 2002–3

Lightweight transport design, working on A-Bike folding bicycle, Sinclair wheelchair drive unit, SeaDoo Sea Scooter, and other products

# **Teaching**

Carnegie Mellon University, Pittsburgh, PA, 2016–

Undergraduate

51-401 Senior Design Lab: Play Lab, Fall 2016, http://www.cmuplaylab.com

Seniors in Industrial Design and Communication Design creatively explore ambiguity in design and futures through identifying and extrapolating 'micro-futures' in the present. Projects represent visions which question the complexity, side-effects and everyday frictions of possible futures, changes in human behavior, and design's role in them. I developed this final iteration of the course.

**51-360 Environments Studio IV**, Spring 2017 and Spring 2018, http://environments.imaginari.es

Under the subtitles 'The Invisible' (2017) and 'Intelligence(s) in Environments' (2018), juniors explore design, behavior, and people's understanding, in physical, digital, and hybrid environments, through practical projects and workshops focused on investigating, understanding, and materializing phenomena and relationships, through new forms of probe, display, and interface. We collaborate with external organisations as fit the topics covered (in 2017, a 'virtual exchange' with the University of Karachi; in 2018, working with Data & Society and the K&L Gates Endowment at CMU). I developed this course.

# 51-372 Persuasion, Spring 2017 and Spring 2018, http://persuasion.imaginari.es

Persuasion is an important skill for designers to have—the ability to put across your message, and to get other people to agree with you and to value your work, can be central to your career. Equally, understanding what persuades you and others—how we are influenced by people, by media, by our environment, by design—is a crucial reflective skill to develop in better understanding society. In this required course for all juniors, students explore persuasion from a range of perspectives, both in design specifically, and applying insights from other disciplines, together with interpersonal skills and persuasion in a professional context. Course developed and taught with Michael Arnold Mages (2017), Francis Carter (2018), and Stephen Neely (2017 & 2018).

## 51-208 Research Methods, Spring 2018, http://researchmethods.imaginari.es

This mini, required for all sophomores, is about research in design, and mostly about research through design—how to use the methods and skills you're learning as a designer, to investigate questions in the world, and generate and evaluate ideas. Much of this will be introducing you to how research with people, and contexts, is an important part of the design process, for physical and digital products, communications, services, experiences, and environments. But we'll also be looking at how to bring knowledge and ideas from outside design, into design. This iteration of course developed and taught with Silvia Mata-Marin.

As **Chair of Design Studies**, I am responsible for overseeing core courses—Placing, Systems, Cultures, Research Methods, Futures, How People Work, and Persuasion—and developing the future structure of this part of the curriculum.

#### Master's

# **51-825 Seminar III: Advanced Interaction and Service Design Concepts**, Fall 2017, https://medium.com/advanced-interaction-service-design-concepts

A required course for second-year MDes students, Seminar III aims to help students develop an informed, rounded and reflective stance on theory, models, themes, and new approaches in interaction and service design, giving strategic strength and confidence in professional practice. We examine the characteristics of designers' power—its scope to influence the ways people live, but also the constraints of the sociotechnical systems within which designers work—and the wisdom to deal with this responsibly, and aim to give students you a set of theories and approaches which they can use practically to structure and communicate their thinking and research. This iteration developed and taught with Ahmed Ansari.

# **51-675 Experimenting With Design: Methods for Research Innovation**, Fall 2017, http://imaginari.es/ewd

An elective aiming to give students (from outside School of Design) interested in expanding their repertoire of research methods a chance to explore, learn and develop a variety of tools and frameworks to use in conducting innovative forms of design research. The course

focuses on deploying, evolving and designing new and experimental research methods for doing research through design, investigating human behavior across space (in both physical and digital environments) and time (carrying out temporal and process based studies), and research by design, including exploring methods in sensory ethnography, narrative form, idea generation, and making physical prototypes and provotypes. Developed and taught with Ahmed Ansari.

#### Doctoral

51-920 Researching By Designing, Spring 2017

This seminar, required for first-year PhD students, examines approaches to conducting research through the practice of designing. The aim is to help students develop an informed articulation of how they will be doing this in their dissertation work, including the methods used and contributions to knowledge students aim to make. The seminar intends to enable students to situate their research interests and approach within the international academic design discourse and intersecting disciplines, and to be confident in articulating their position. I developed this iteration of the course building on previous versions by Cameron Tonkinwise.

Other teaching at CMU (guest seminars, workshops, and crits)

**School of Design:** *MDes/MPS* Seminar I, Interaction & Service Design Concepts; *MDes/MPS/MA* Seminar II: Transition Design; *MDes/MPS/MA* Colloquium; *MA* Studio: Visual Communication Fundamentals; *BDes* Placing; *BDes* Systems; *BDes* How People Work; *BDes* Speculative (Post-)Critical Design. Fall 2016, Spring 2017, Fall 2017, Spring 2018

Heinz College of Information Systems & Public Policy: *Master's* Foundations of Social Innovation and Enterprise, Fall 2017.

Swartz Center for Entrepreneurship: CONNECTS seminar on Design Thinking, Fall 2017.

**IDeATE:** Guest crit for Responsive Mobile Environments, Spring 2018 and Learning Media Design MakerEd design challenge, Fall 2016.

**dSHARP Digital Humanities Network:** Guest lecture, 'Imaginaries, Mental Imagery, New Metaphors, and Design', Spring 2018.

Recurring teaching elsewhere, and prior to CMU

Universidad del Desarrollo, Santiago and Concepción, Chile, 2017–

Lectures and workshops (in person and via video) for AREA IX / Faculty of Design on Qualitative Interfaces, Imaginaries and Design with Intent.

London College of Communication, University of the Arts London, 2016; 2018

Guest lecturer for Speculative and Critical Design Summer School, 2016, and video lecture for MA Interaction Design Communication, 2018

## Copenhagen Institute of Interaction Design, 2010, 2016

Guest lecturer (2010); OPEN Lecture (2016)

#### Royal College of Art, London, 2013–16

Research methods seminars for PhD researchers, Innovation Design Engineering (2015–16), Design Interactions, Design Products, Service Design and Vehicle Design (2016); visiting tutor for Information Experience Design PhD research seminars and Systems Research Group seminar (2016); workshop facilitation for Textiles (2016); college-wide Research Culture Action

seminars (2015); organising visiting speakers; visiting tutor for MA Design Products (2014) and MA Service Design (2013–14); running two AcrossRCA cross-college week-long programmes (2013 and 2015), and college-wide tutorials on design and behaviour research (2014–16); Panellist for RCA Architecture / Interior Futures programme Connected City debate (2016).

## Rice University, Houston / Copenhagen, 2015; 2016

Lecturer (2015) / course leader (2016), Urban Sustainability & Livability European undergraduate summer program, commissioned

## Kingston University, Kingston, Surrey, UK, 2014; 2015

Lecturer, MA Creative Industries and Creative Economy, Kingston Business School. Running Start-Up weekends, 2-day practical workshops

## Hamad bin Khalifa University, Doha, Qatar, 2014

Facilitator, Social Innovation Bootcamp, with Helen Hamlyn Centre for Design

#### Imperial College, London, 2013–14

Guest lecturer / project brief for Design-led Innovation & New Venture Creation (MEng)

#### University of Cambridge, 2011; 2012

Visiting instructor for Seminars in Technology Policy, MPhil Technology Policy, Judge Business School

**Central Saint Martins College of Art & Design**, University of the Arts, London, 2010–2012 Visiting practitioner for Graphic Design and Service Design short courses

#### Brunel University, Uxbridge, London, 2007–12

Lecturer, Environmentally Sensitive Design (BA/BSc), Sustainable Design (MSc); Teaching assistant, Analogue Electronics (BA/BSc). Guest lecturer / workshop facilitator, undergraduate HCI module, School of Information Systems, Computing and Mathematics

One-off guest teaching and academic presentations

#### University of Pittsburgh, Pittsburgh, PA, 2018

TEDxUniversityofPittsburgh talk (invited), 'Design and the Importance of Imaginaries'

**Auckland University of Technology** and **University of Auckland**, Auckland, NZ, 2017 Presentations to Design for Health & Wellbeing Lab, Auckland City Hospital, and Auckland Bioengineering Institute, as part of **Fulbright New Zealand** Design exchange workshop

#### Victoria University of Wellington, Wellington, NZ, 2017

Presentation to Faculty of Architecture and Design, as part of **Fulbright New Zealand** Design exchange workshop

#### Cornell University, Ithaca, NY, 2017

Hillier Lecture: 'Why Imaginaries Matter for Sustainability', College of Human Ecology, Design + Environmental Analysis

### PhD by Design Precarity Pilot, Brighton, 2016

Invited discussant

## Schumacher College / Carnegie Mellon, Dartington, Devon, 2016

Invited panellist for Transition Design Symposium

## Carnegie Mellon University, Pittsburgh, 2015

Visiting speaker/workshop for Design MA/MDes/MPS and Robert L. Preger Intelligent Workplace, School of Architecture

#### Victoria & Albert Museum, London, 2015

Chair, Design Culture Salon, 'Is designing for behaviour change 'creepy'?

#### Goldsmiths, University of London, 2015

Guest speaker, 'The Power to Act: Exploring agency, design and participation in cities' curated by Gyorgyi Galik, This Happened

## Hans Sauer Foundation, Munich, 2015

Visiting tutor and speaker for Social Design Elevation Days, with Dr Nynke Tromp (**TU Delft**)

#### University College London, guest speaker, 2014

UCL Centre for Behaviour Change

#### ETSAV, UPC Barcelona, 2014

Visiting lecturer, Sustainability Summer School, presentation (with Flora Bowden), 'Revealing Complexity: People, Systems, and Design'

### TU Delft, guest speaker, 2014

'Human in the Loop' industry / academia event, IDE

#### Chalmers TH, Gothenburg, 2014

Facilitator, sustainability hackathon

#### Open University, Milton Keynes, UK, 2014

Guest lecturer, Faculty of Maths, Computing & Technology

#### University College London, 2011

Guest speaker, The Bartlett, Behaviour Change month

#### Parsons The New School for Design, New York, 2011

Guest speaker, MFA Transdisciplinary Design

### University of Oxford, 2011

Guest speaker, Saïd Business School, Designing Better Futures (Saïd MBA + **London College of Communication** MDes)

## NTNU, Norwegian University of Science & Technology, Trondheim, 2011

Guest lecturer, Sustainable Product Design

#### University of Twente, Enschede, 2010

Guest speaker and workshop facilitator, 3TU Design for Usability project, with Dr Nynke Tromp, **TU Delft** 

# **Advising and supervision**

#### PhD supervision/advising

Completions

**Nazlı Gökçe Terzioğlu**, Royal College of Art, Innovation Design Engineering, completed 2017

— 'Do-Fix: Creating Deeper Relationships Between Users and Products Through Visible Repair'. Supervisors: Dan Lockton, Clare Brass. Examiners: Conny Bakker, Jonathan Chapman.

**Delfina Fantini van Ditmar**, Royal College of Art, Innovation Design Engineering, completed 2016

—'IdIoT: Second-order cybernetics in the 'smart' home'. Supervisors: Ranulph Glanville†, Ashley Hall, Dan Lockton, Paul Pangaro (external). Examiners: Chris Speed, Craig Bremner.

Current PhD students

**Kakee Scott**, Carnegie Mellon University, Design. Intended completion 2018.

— 'Co-Creating Alternative Economic Practices'. Committee: Dan Lockton, Ramia Mazé, Cameron Tonkinwise

**Chang Hee Lee**, Royal College of Art, Innovation Design Engineering. Intended completion 2018.

— 'Synaesthesia Materialisation: Approaches to Applying Synaesthesia as a Provocation for Generating Creative Ideas within the Context of Design'. Supervisors: Ranulph Glanville†, John Stevens, Dan Lockton.

Dave Pao, Royal College of Art, Innovation Design Engineering. Intended completion 2019.

— 'Electronic Medical Records for the Information Age'. Supervisors: Ranulph Glanville†, John Stevens, Dan Lockton.

**Silvia Mata-Marin**, Carnegie Mellon University, Design. Intended completion 2020.

—'(B)ordering Labor: The in/materiality of informality'. Committee: Dan Lockton, others TBC

Francis Carter, Carnegie Mellon University, Design. Intended completion 2020.

— 'Everything Designed Goes On Designing'. Committee: Dan Lockton, others твс *PhD committee member* 

Michael Arnold Mages, Carnegie Mellon University, Design. Examination due May 2018.

— 'Designing Civic Conversations: Things and Facilitation in High-Stakes and Difficult Conversations'. Committee: Jonathan Chapman, Dan Lockton, Cameron Tonkinwise.

Deepa Butoliya, Carnegie Mellon University, Design. Intended completion 2018.

— 'Critical Jugaad: A post normal design framework for designerly marginal practices'. Committee: Molly Wright Steenson, Katherine Moline, Stuart Candy, Dan Lockton.

**Stephen Neely**, Carnegie Mellon University, Design. Intended completion 2019.

— 'Soma-Deep as the Marker for Idealized Experience'. Committee: Jonathan Chapman, Dan Lockton, Cameron Tonkinwise.

Temporary PhD supervision / advising

**Hugo Glover**, 'Stereoscopic Spatiality: A Practice-based Investigation into the Use of Stereoscopic 3D-Depth Technologies in Physical and Digital Space'. Temporarily supervised, RCA Innovation Design Engineering, 2015–16

**Weiyi Li**, 'Function as Narrative'. Temporarily supervised, RCA Innovation Design Engineering, 2016

**Veronica Ranner**, 'Knowledge Exchange in Biodigital Space'. Temporary advisor, RCA Information Experience Design, 2016

In 2014–15 I undertook the University of the Arts London's 'Supervising Research Degrees' course at the London College of Fashion, run by the Centre for Learning and Teaching in Art & Design, achieving an A grade.

#### MDes thesis advising

Completions

**Shruti Aditya Chowdhury**, 'Designing Fitness: Probes for Motivation'. Carnegie Mellon University, Design. Advisors: Dan Lockton, Molly Wright Steenson. Completed 2017

**Sarah Foley**, 'Service Fictions as a Method in Problem-Finding Research in the Field of Sleep'. Carnegie Mellon University, Design. Advisors: Dan Lockton, Cameron Tonkinwise. Completed 2017

**Dixon Lo**, 'Experiential Augmentation: Representing Invisible Digital Processes with Intuitive Physical Properties'. Carnegie Mellon University, Design. Advisors: Stacie Rohrbach, Dan Lockton. Completed 2017

Current MDes students

**MacKenzie Cherban**, 'Designing with Deaf Users'. Carnegie Mellon University, Design. Advisor: Dan Lockton. Intended completion 2018.

**Meriç Dağlı**, 'Designing "Trustworthy" Interactions for Opening the Black Box of Autonomous Intelligent Agents'. Carnegie Mellon University, Design. Advisors: Dan Lockton, Daragh Byrne. Intended completion 2018.

**Katie Herzog**. Carnegie Mellon University, Design. Advisors: Molly Wright Steenson, Dan Lockton. Intended completion 2019.

**Gray Crawford**. Carnegie Mellon University, Design. Advisor: Dan Lockton. Intended completion 2019.

#### Independent Study and Fellowship advising

MDes/MPS Independent Study advising

Hannah Rosenfeld, Leah Jiang, Monique Smith, Meriç Dağlı. 'Future Voices', Carnegie Mellon University, Design, Spring 2017

Sarah Foley, 'Sleep Jacket', Carnegie Mellon University, Design, Spring 2017

**Hajira Qazi**, 'Participatory Design and NGOs', Carnegie Mellon University, Design, Spring 2018 (with Jonathan Chapman)

Undergraduate Independent Study advising

Rachel Chang, Carnegie Mellon University, Design, Spring 2017

Courtney Pozzi, Carnegie Mellon University, Design, Spring 2017

Rae Headrick and Julia Wong, Carnegie Mellon University, Design, Spring 2017

Helen Wu, Carnegie Mellon University, Design, Fall 2017

Soonho Kwon, Carnegie Mellon University, Design, Spring 2018

Undergraduate Research Fellowship advising (CMU Undergraduate Research Office SURF grant)

Ty Van de Zande, 'Printerface'. Carnegie Mellon University, Design, Summer 2017

Undergraduate Research Fellowship advising (CMU Undergraduate Research Office SURG grant)

**Cameron Burgess** and **Conner Harden**, 'Mirror Pair: Tangible Communicable Hybrid (physical/digital) State-Mirroring Objects'. Carnegie Mellon University, Design, Spring–Fall 2018 (proposed)

#### PhD admissions and examining

PhD admissions committee member, Carnegie Mellon School of Design, 2018–

PhD/MPhil admissions interviewer and panel member, **Royal College of Art**, School of Design, 2015–16.

External PhD admission reviewer for **Fond National de la Recherche** (Luxembourg), 2014 Internal examiner (including exam chair) for interim and MPhil–PhD transfer exams, **Royal College of Art**, 2015–16.

External PhD Examiner, Monash University, Melbourne, Australia:

**Gemma Read**, 'Extension and application of Cognitive Work Analysis to improve pedestrian safety at level crossings', 2015.

# Grants, awards, and competitions

**Sketch Model at Olin College** Summer workshop (**Mellon Foundation**) selected participant, June 2018 (forthcoming)

**Kynamatrix Research Network** Innovation through Collaboration Grant for MDes advisee **Meriç Dağlı**, January 2018

**Maker Faire Pittsburgh**, Maker of Merit awards (×2) for Electric Acoustic project (with Devika Singh and Shengzhi Wu), October 2017

Berlin Writing Prize, longlist, 'Voice of the Soil', August 2017

Principal Investigator, 'Electric Acoustic', experiential energy sonification, Carnegie Mellon College of Fine Arts Research & Creativity Fund, April 2017

Travel Award, Carnegie Mellon School of Design, March 2017, for CHI 2017

UK academic Investigator, 'Legible Policy', UK–Mexico Institutional Links collaboration, Laboratorio para la Ciudad, Future Cities Catapult, Superflux, UNAM, **British Council Newton Fund**, December 2015

Academic advisor, Creative Exchange 'NHS Citizen Localnets' grant, funded by **Arts & Humanities Research Council**, November 2015

Principal Investigator, 'Understanding Human Connectivity and the Quantified Self' (with Dr Kathryn Buchanan, Psychology, University of Essex), **RCUK Sustainable Society Network+** Development Grant, January 2015

AT Kearney Global Policy Council scholarship, Oxford Futures Forum, 2014

Co-Investigator, 'Creating Sustainable Innovation through Design for Behaviour Change' (PI: Professor Kristina Niedderer, University of Wolverhampton), **Arts & Humanities Research Council** research grant AH/Lo13525/1, March 2014

British Computer Society, Best Short Paper Award, HCI 2013

Hamilton Prize for best PhD thesis in Engineering & Design, Brunel University, 2013

Lead researcher (from sandpit participation), 'EMPOWER: Empowering Energy Efficiency through Empathic Design', **Technology Strategy Board** Low Impact Buildings Innovation Platform (PIs: Professor David Harrison, Brunel University; Dr Rebecca Cain, University of Warwick), 2010

International Travel Grant, Royal Academy of Engineering, 2009

PhD studentships, **Thomas Gerald Gray Charitable Trust** and **Ormsby Trust**, Brunel University, 2007–13

Fellow (invited) of the Royal Society for the encouragement of Arts, Manufactures and Commerce (FRSA), 2008–

Oxford Creativity Assistive Technology/TRIZ Competition, prize-winner, 2007

Bosch Technology Horizons Award, essay competition, runner-up, 2006

Isambard Kingdom Brunel Award for Incluminate backup lighting system, 2006

**Judge Institute of Management, University of Cambridge**, Examiners' Letter of Commendation for MPhil thesis, 2005

Cambridge University Entrepreneurs Award, winner for Wheelchair Drive project, 2005

Motion Drives & Controls Award, winner for Wheelchair Drive project, 2004

CIMA / Procter & Gamble UK Business Management Competition, 1st place team, 2000 Institute of Directors / Young Enterprise SW Region Award for Entrepreneurship team award, 1999

Arkwright Trust Design & Technology Scholarship, 1998–2000

## **Academic service**

Within Carnegie Mellon School of Design:

- —Chair of Design Studies (2017–), leading and co-ordinating curriculum development for core undergraduate courses.
- —Advising and committee membership for PhD and MDes students and undergraduate and graduate independent study projects
- —Member of Environments Track Committee (2016–)
- —Member of Doctoral Program Committee (2016–)
- —Member of Doctoral Admissions Committee (2018–)
- —Portfolio reviews for undergraduate applicants (2016–)
- —Master's thesis and poster / presentation reviews (2016–)
- —Presenter in Colloquium, research talks for new Master's students (2016–)
- —Represented the School of Design at **Fulbright New Zealand** Design exchange workshops at **Victoria University of Wellington** and **Auckland University of Technology**, 2017

#### Elsewhere at CMU:

- —Faculty Affiliate, Scott Institute for Energy Innovation (2017–)
- —Member of discussion group for K&L Gates Endowment for Ethics and Computational Technologies (2018–)
- —Guest teaching for Heinz College of Information Systems & Public Policy: *Master's* Foundations of Social Innovation and Enterprise, Fall 2017.
- —Guest teaching for Swartz Center for Entrepreneurship: CONNECTS seminar on Design Thinking, Fall 2017.
- —Guest crits for IDeATE's Responsive Mobile Environments, Spring 2018 and Learning Media Design MakerEd design challenge, Fall 2016.
- Guest lecture for dsharp Digital Humanities Network: 'Imaginaries, Mental Imagery, New Metaphors, and Design', Spring 2018.

External professional service, and work prior to CMU:

#### Grant reviewer/evaluator for:

- —EU Horizon 2020 Future & Emerging Technologies Programme (pan-European), 2017—
- -Engineering and Physical Sciences Research Council (UK), 2016-
- —RCUK Sustainable Society Network+ (UK), 2014
- —Fond National de la Recherche (Luxembourg), 2014

#### Committee work and professional organisations:

- —ACM CHI 2018 Montreal, Design subcommittee, Associate Chair, 2017–18. Session chair for 'Design & Design Research 1'.
- —Invited participant, **Summit for Design Research**, 11T Institute of Design, Chicago, 2017 (initiated **DARIA**). Working group member for DARIA's task on research support with Liz Sanders and Tad Hirsch, 2017—
- —**Design Research Society DRS 2018**, Limerick, Track chair for 'Designing for Transitions' track. Review panel member for 'Conversations' track.
- —Design Research Society DRS 2016, Brighton, Conference experience co-chair.
- —Design Research Society DRS 2014, Umeå, Session chair for three sessions.
- —Scientific/program(me) committee member for Persuasive 2015, Chicago; EcoDesign 2015, Tokyo; DRS 2016, Brighton; Research Through Design 2017, Edinburgh.
- —Invited participant, Engineering and Physical Sciences Research Council TEDDINET Energy Social Scientists in a Multidisciplinary Setting: Opportunities and Challenges project, University of Bath, 2015
- —Invited participant, Economic and Social Sciences Research Council, Tackling Antimicrobial Resistance workshop on 'Behaviour and antimicrobial resistance', 2015
- —**Founding committee member** for Design Research Society Sustainability Special Interest Group, 2014
- —Project representative, **EPSRC Connected Communities Festival**, Cardiff, 2014

- —Invited member of working group, Royal Academy of Engineering / Royal Institute of British Architects / Economic & Social Sciences Research Council / Arup 'Built for Living' project, 2013–15.
- —Fellow (invited) of the **Royal Society for the encouragement of Arts, Manufactures and Commerce** (FRSA), 2008–
- —Graduate student representative for Technology Policy, **Judge Institute of Management, University of Cambridge**, 2004–5
- —Student representative for BSc finalists, **Brunel University** Department of Design & Systems Engineering, 2003-4
- —Student representative on **Institution of Engineering Designers** course accreditation panel, Brunel University, 2002

#### Peer review:

- —**Peer review for journals:** ACM Transactions on Computer-Human Interaction, Frontiers Psychology, Energy Research and Social Science, Energy Efficiency, Journal of Futures Studies, Communication Design, Applied Ergonomics, Ergonomics, Computers in Human Behavior, International Journal of Design, Journal of Design Research, The Design Journal, International Journal of Sustainable Engineering, Sustainability, Philosophy & Technology, Scan: Journal of Media Arts Culture, Journal of Economic Surveys, Review of Behavioural Economics.
- —Peer review for conferences: CHI 2013, CHI 2014, CHI 2017, CHI 2018, RTD 2017; Ubicomp 2014, DRS 2014, DRS 2016, DRS 2018, NORDES 2015, NORDES 2017, IASDR 2015, Include 2013, EPIC 2013 and Hawai'i International Conference on System Sciences 2009.
- —**Book proposal review for:** Ashgate; Earthscan.

#### Mentoring, advising, judging, and supporting:

- —Mentor for School of Communication Arts 2.0, London, 2015
- —Judge for Sustain RCA Awards 2015, Royal College of Art
- —Mentor for **Clearleft**, Brighton, internships 2015
- —Advisory Panel, Smart Energy GB, 2015–
- —Interviewer (off-screen) for **Zero Spaces**, a film exploring the ideas of Ranulph Glanville through talking to his students, Royal College of Art, directed by Delmar Mavignier, 2015
- —Mentor for **IxDA Student Challenge**, 2012, Dun Laoghaire Institute of Art, Design & Technology
- —Mentor for Global Service Jam, London, 2012
- —Judge for **Core77 / Autodesk / iFixit** Design For (Your) Product Lifetime Student Challenge, 2012
- —Judge for **Chelsea College of Art & Design**, MA Designing Interactions Student Design Challenge, 2012
- —Judge for Forum for the Future / BUPA Spark! Competition, 2012

# Industry, public, and non-academic knowledge exchange

**IxDA Interaction Latin America**, Rio de Janeiro, 2018 (forthcoming), keynote 'Design and Imaginaries'

**UX Lisbon** conference, Portugal, 2018 (forthcoming), workshop 'New Metaphors' and presentation 'Design and The Importance of Imaginaries'

**TEDx University of Pittsburgh**, 2018, presentation 'Design and The Importance of Imaginaries'

IxDA Interaction 18 conference, Lyon, France, 2018. Workshop: 'New Metaphors'.

**Maker Faire Pittsburgh**, 2017. Booth for Electric Acoustic project, with Devika Singh and Shengzhi Wu

Google SPAN Pittsburgh, 2017, workshop 'New Metaphors and Qualitative Interfaces'

Policy Horizons Canada, 2016, expert interviewee for foresight study on sustainability

Yamaha Design Studio 2016, Sound with Creative Intention workshop, with RCA

**Laboratorio para la Ciudad**, Mexico City, 2016, Diseño para la Ciudad, presentation 'Design and Behaviour in the City' and roundtable Sobremesa discussion on design education

Behavior Design Amsterdam 2016, presentation 'Design, understanding, and agency'

**London SusLabNWE Living Lab**, 2015, presentation at opening event (with Flora Bowden), 'Including People in the Process'

Future Cities Catapult, London, 2015, presentation, 'Introducing the RCA'

Future London Academy, 2015, presentation, 'Design and behaviour change'

Hans Sauer Foundation, Munich, 2015, presentation, 'Social Design for Behaviour Change'

Guardian Tech Weekly podcast, 2015, guest on dark patterns

Lost My Name, London, presentation, 2015

**Design for Action**, Washington, DC, 2015, presentation, 'Design, Behavior, and Understanding'

**Microsoft Research**, Cambridge, 2015, presentation, 'Connected Design, Behaviour, and Understanding'

**Policy Lab, Cabinet Office**, London, 2015, invited participant in community energy Local Supply Working Group design event

**Product Tank London**, 2015, presentation, 'Understanding Understanding in Design for Behaviour Change'

**Keep Britain Tidy Centre for Social Innovation**, launch event, 2015, presentation, 'Design for behaviour change: Two research-based approaches for how to do it better'

**Green Sky Thinking**, Max Fordham, 2015, presentation, 'Understanding Understanding in Design for Behaviour Change'

**This Happened London**, Goldsmiths, 2015, presentation, 'Connected Understanding: An Emerging Family of Projects'

**V&A Digital Design Weekend**, London, 2014, two-day exhibition and activities, 'Drawing Energy and Powerchord'

**London Behavioural Economics Network**, 2014, presentation, 'Nuance Not Nudge: Designing with people and reframing behaviour change'

Wellcome Trust / Giraffe Innovation Food & Drink Initiative, London, 2014, invited workshop participant

IxDA London, 2014, presentation, 'Powerchord and Drawing Energy'

**EPSRC / AHRC Connected Communities Festival**, Cardiff, 2014, exhibition, 'Creative Citizens'

**OgilvyChange 'Nudgestock 2'** 2014, presentation, 'Designing with people in behaviour change'

**International Energy Agency** 'Task 24: Closing the Loop—Behaviour Change in DSM: From theory to practice' workshop, Environmental Change Institute, University of Oxford, 2014, invited participant

**V&A Digital Futures**, 2014, presentation (with Flora Bowden), 'People, Energy, and Everyday Life'

**UK Art Science Prize**, 2014, project inspirer; presentation (with Flora Bowden), 'People, Energy, and Everyday Life'

Chalmers TH / NASA Johnson Space Center Hackathon organiser, Gothenburg, Sweden 2014

**Stannah** (with Helen Hamlyn Centre), Andover, 2013, residential 'Stannah Innovation Camp' workshop facilitation & presentation, 'Design and Behaviour'

**Transparency International** Ambient Accountability workshop, Berlin, 2013, invited participant

**Hans-Bredow-Institut für Medienforschung**, Hamburg, 2013, 'Submit: Code as Control' workshop, invited participant.

Unilever, Lifebuoy behaviour change workshop participant, 2013

Spice Innovations, London, presentation, 2013

**Ripple PRD** for **West Sussex County Council** and **Crawley Borough Council**, workshops, 2012–13

SusLabNWE Project, Royal Festival Hall, London, presentation, 2012

**IxDA Interaction 12** conference in Dublin, workshop, 2012

**ESPRU** 'Household Energy Consumption, Technology and Efficiency' event, University of Birmingham, 2012, presentation 'Behaviour Change at Work'

**R/GA**, London, presentation, 2012

**Ubisoft**, Paris, presentation, 2012

**Dyson**, Malmesbury, presentation, 2012

Mini Maker Faire Brighton, booth for Making Instructions project with Rob Phillips, 2012

Jaguar Land Rover (with WMG), workshop & presentation, 2012

Her Majesty's Revenue & Customs, London, presentation, 2012

Arup Foresight 'Campus of the Future' workshop, London, invited participant, 2011

Philips Research (with NTNU), Eindhoven, workshop & presentation, 2011

Technology Strategy Board at Innovate '11, presentation, 2011

Modern Built Environment Knowledge Transfer Network, workshop facilitation, 2011

dConstruct 2011, workshop

RCA / Johnson Controls 'Sustainable For All' project, 2011, invited workshop participant

More Associates at the Department of Energy & Climate Change, London, workshop, 2011

**UX People** 2011, London (Zebra People), workshop

Foviance, London, presentation, 2010

Brighton & Sussex University Hospitals NHS Trust at the Design Council, London, workshop, 2010

UX London 2010, two workshops

**Good for Nothing**, London, 2010, project volunteer developing social media for **Global Generation**, an urban agriculture charity

**IDEO London**, with RSA and National Policing Improvement Agency, workshop facilitation & presentation, 2009

Radar Arts, Loughborough, Architectures of Control Symposium, 2009

EMC Consulting, London, presentation, 2009

QinetiQ, Sevenoaks, presentation, 2009

Design Council, London, presentation, 2009

Marks & Spencer, London, presentation, 2008

Engine Service Design, London, presentation, 2008

**UFI Learndirect**, Sheffield, presentation, 2008

# **Publications and media**

#### Academic & practitioner journal articles

**Lockton**, D. and Candy, S. (forthcoming) 'A Vocabulary for Visions in Designing for Transition'. *Cuadernos del Centro de Estudios de Diseño y Comunicación*.

Pao, D., Stevens, J., **Lockton**, D. (2017) 'Together in electric screams: the frustrations of GUM electronic patient records'. *Sexually Transmitted Infections 93* (Suppl 1), Po53. doi:10.1136/sextrans-2017-053232.99

Niedderer, K., Ludden, G., Clune, S. J., **Lockton**, D., Mackrill, J., Morris, A., Cain, R., Gardiner, E., Evans, M., Gutteridge, R., Hekkert, P. P. (2016). 'Design for behaviour change as a driver for sustainable innovation: Challenges and opportunities for implementation in the private and public sectors'. *International Journal of Design*, Vol. 10 No. 2, pp. 67-85.

Fantini van Ditmar, D. and **Lockton**, D. (2015) 'Taking the code for a walk'. *Interactions* Vol.23 No.1, pp. 68-71. doi:10.1145/2855958

**Lockton**, D., Nicholson, L., Cain, R., Harrison, D. (2014) 'Persuasive Technology for Sustainable Workplaces'. *Interactions* Vol.21 No.1, pp. 58-61. doi:10.1145/2544170

**Lockton**, D., Harrison, D., Stanton, N.A. (2013) 'Exploring design patterns for sustainable behaviour'. *The Design Journal* Vol.16 No. 4, pp. 431-459, 2013. doi:10.2752/17563061 3X13746645186124

Gorzanelli, C., Ramster, G., Outten, A., **Lockton**, D. (2013) 'Cittadini e nuovi media per un'intelligenza creativa' [Citizens and new media for a creative intelligence]. *Urbanistica Tre* Vol. 1 No. 3, pp. 75-84, 2013

Phillips, R., **Lockton**, D., Baurley, S., Silve, S. (2013) 'Making instructions for others: exploring mental models through a simple exercise'. *Interactions* Vol.20 No.5, pp. 74-79, Sept-Oct 2013. doi:10.1145/2505290

**Lockton**, D., Harrison, D., Cain, R., Stanton, N.A., Jennings, P. (2013) 'Exploring problem-framing through behavioural heuristics'. *International Journal of Design* Vol.7 No.1, April 2013

**Lockton**, D., Harrison, D., Stanton, N.A. (2012) 'Models of the user: designers' perspectives on influencing sustainable behaviour'. *Journal of Design Research* Vol.10 No.1/2, pp.7-27, 2012 doi:10.1504/JDR.2012.046137

**Lockton**, D., Harrison, D., Stanton, N.A. (2010) 'The Design with Intent Method: a design tool for influencing user behaviour'. *Applied Ergonomics* Vol.41 No.3, pp. 382-392, May 2010 doi:10.1016/j.apergo.2009.091

Bisset, F. and **Lockton**, D. (2010) 'Designing Motivation or Motivating Design? Exploring service design, motivation and behavioural change'. *Touchpoint: The Journal of the Service Design Network* Vol.2 No.1, April/May 2010

Marsh, N. and **Lockton**, D. (2010) 'Research in practice: Bringing behaviour change from lab to studio'. *Touchpoint: The Journal of the Service Design Network* Vol.2 No.1, April/May 2010

**Lockton**, D. (2009) 'Design for sustainable behaviour: influencing users to improve efficiency of product use'. *Interfaces* 78, British Computer Society Interaction Group, Spring 2009

**Lockton**, D., Harrison, D., Stanton, N.A. (2008) 'Making the user more efficient: Design for sustainable behaviour'. *International Journal of Sustainable Engineering* Vol.1 No. 1, pp. 3-8, March 2008. doi:10.1080/19397030802131068

**Lockton**, D. (2006) 'Architectures of Control in product design'. *Engineering Designer: The Journal of the Institution of Engineering Designers*, March/April 2006

## Conference papers and extended abstracts

Pao, D., Stevens., J., **Lockton**, D., Weinstein, N. (2018). 'Electronic Medical Record Provotype: visualisation maximises clinical usability'. EVA London 2018: Electronic Visualisation & the Arts, 10–12 July 2018, London.

Foley, S.M. and **Lockton**, D. (2018). 'Service Fictions through Actant Switching'. DRS 2018: Design Research Society, 25–28 June 2018, Limerick.

**Lockton**, D. and Candy, S. (2018). 'A Vocabulary for Visions in Designing for Transitions'. DRS 2018: Design Research Society, 25–28 June 2018, Limerick.

Lee, C.H. and **Lockton**, D. (2018). 'Exploring Cognitive Playfulness Through Zero Interactions'. DIS 2018: ACM Conference on Designing Interactive Systems, 9–13 June 2018, Hong Kong.

Lo, D., **Lockton**, D., Rohrbach, S. (2018). 'Experiential Augmentation: Uncovering The Meaning Of Qualitative Visualizations When Applied To Augmented Objects'. CHI 2018: ACM Conference on Human Factors in Computing Systems, April 21–26 2018, Montreal.

Carter, F., Mata-Marin, S., Onafuwa, D., Ansari, A., **Lockton**, D. (2017). 'Changing behavior of the systems we're in: Designing for transitions in Environment, Economy, and Democracy'. RSD6: Relating Systems Thinking and Design 6 Symposium, 18-20 October 2017, Oslo.

Van de Zande, T. and **Lockton**, D. (2017). 'Printerface: Screen Printed Electroluminescent Touch Interface'. ISS '17: 2017 ACM International Conference on Interactive Surfaces and Spaces, 17-20 October 2017, Brighton, UK.

- Mata-Marin, S. and **Lockton**, D. (2017). 'Technologies of Division: Everyday Bordering'. NORDES 2017: 7th Nordic Design Research Conference, 15-17 June 2017, Oslo.
- Pao, D., Stevens, J., **Lockton**, D., Weinstein, N. (2017). 'Together in Electric Screams: A Survey of EPR Usability and Clinician Wellbeing'. BASHH-SSSTDI Annual Conference, 18-20 June 2017, Belfast.
- **Lockton**, D., Ricketts, D., Aditya Chowdhury, S., Lee, C.H. (2017). 'Exploring Qualitative Displays and Interfaces'. CHI EA '17: ACM CHI Conference on Human Factors in Computing Systems, Denver, Colorado, 6-11 May 2017. Extended Abstracts, pp. 1844-1852. doi:10.1145/3027063.3053165
- Terzioğlu, N., Brass, C., **Lockton**, D. (2016). '3D Printing for Repair: A Paradigm Shift in Fixing Our Relationships with Things'. Sustainable Innovation 2016: Circular Economy Innovation & Design, 7-8 November 2016, Epsom, UK.
- **Lockton**, D. (2016). 'Transition Lenses: Perspectives on futures, models and agency'. Transition Design Symposium: Can Design Catalyse the Great Transition? 17-19 June 2016, Dartington, UK.
- Terzioğlu, N., Brass, C. & **Lockton**, D. (2015) 'Understanding User Motivations And Drawbacks Related To Product Repair'. Sustainable Innovation 2015, 9-10 November 2015, Epsom, UK.
- Choi, Y., **Lockton**, D., Brass, C., & Stevens, J. (2015) 'Opportunities for sustainable packaging design: Learning from pregnancy as a metaphor'. Sustainable Innovation 2015, 9-10 November 2015, Epsom, UK.
- Ranner, V. & **Lockton**, D. (2015) 'Reflective Silk—Behaviour Change through Better Self-Knowledge'. DRHA 2015: Digital Research in Arts and Humanities, 1-3 September 2015, Dublin (abstract)
- **Lockton**, D., Bowden, F., Brass, C. & Gheerawo, R. (2014) 'Powerchord: Towards ambient appliance-level electricity use feedback through real-time sonification'. UCAMI 2014: 8th International Conference on Ubiquitous Computing & Ambient Intelligence, 2-5 December 2014, Belfast
- **Lockton**, D., Bowden, F., Brass, C. & Gheerawo, R. (2014) 'Bird-wattching: exploring sonification of home electricity use with birdsong'. Sonihed Conference on Sonification of Health and Environmental Data, 12 September 2014, York
- **Lockton**, D., Renström, S., Bowden, F., Rahe, U., Brass, C. & Gheerawo, R. (2014) 'Energy storytelling through annotating everyday life'. Behave 2014: 3rd European Conference on Behaviour and Energy Efficiency, 3-4 September 2014, Oxford
- Niedderer, K., MacKrill, J., Clune, S., Evans, M., **Lockton**, D., Ludden, G., Morris, A., Gutteridge, R., Gardiner, E., Cain, R. & Hekkert, P. (2014) 'Joining Forces: Investigating the influence of design for behaviour change on sustainable innovation'. NordDesign 2014: 10th biannual conference on design and development, 27-29 August 2014, Aalto University, Espoo, Finland
- Baedeker, C., Greiff, K., Grinewitschus, V., Hasselkuß, M., Keirstead, J., Keyson, D., Knutsson, J., Liedtke, C., **Lockton**, D., Lovric, T., Morrison, G., van Rijn, M., Rohn, H., Silvester, S., van Harinxma, W. & Virdee, L. (2014) 'Transition through sustainable Product and Service Innovations in Sustainable Living Labs: application of user-centred research methodology within four Living Labs in Northern Europe'. IST 2014: 5th International conference on Sustainability Transitions, 27-29 August 2014, Utrecht

- Greene, C., Sobers, S., Zamenopoulos, T., Ramster, G. & **Lockton**, D. (2014) 'Reflections on co-production the community perspective'. Royal Geographical Society 2014 Annual International Conference, 26-29 August 2014, London (abstract).
- **Lockton**, D., Renström, S., Bowden, F., Rahe, U., Brass, C. & Gheerawo, R. (2014) 'Narrating energy through annotating everyday life'. Royal Geographical Society 2014 Annual International Conference, 26-29 August 2014, London (abstract).
- Bowden, F., **Lockton**, D., Brass, C. & Gheerawo, R. (2014) 'Drawing Energy: Exploring the Aesthetics of the Invisible'. IAEA Congress 2014: Congress of the International Association of Empirical Aesthetics, 22-24 August 2014, New York
- **Lockton**, D., Bowden, F., Greene, C., Brass, C. & Gheerawo, R. (2013) 'SusLabnwe: Integrating qualitative and quantitative data to understand people's everyday energy behavior'. BECC 2013: Behavior, Energy & Climate Change, 18-20 November 2013, Sacramento, CA, University of California eScholarship repository
- **Lockton**, D., Bowden, F., Greene, C., Brass, C. & Gheerawo, R. (2013) 'People and energy: A design-led approach to understanding everyday energy use behaviour'. EPIC 2013: Ethnographic Praxis in Industry Conference, 15-18 September 2013, Royal Institution, London. doi: 10.1111/j.1559-8918.2013.00029.x
- **Lockton**, D., Cain, R., Harrison, D., Nicholson, L. (2013) 'CarbonCulture at DECC: Digital Engagement for Sustainability at Work'. HCI 2013: 27th International British Computer Society Human Computer Interaction Conference: The Internet of things, London, 9-13 September, 2013.
- **Lockton**, D., Cain, R., Harrison, D., Giudice, S., Nicholson, L. & Jennings, P. (2011) 'Behaviour Change at Work: empowering energy efficiency in the workplace through user-centred design'. BECC 2011: Behavior, Energy & Climate Change, Washington, DC, November 30-December 2, 2011, University of California eScholarship repository
- **Lockton**, D., Harrison, D. & Stanton, N. A. (2010) 'Modelling the User: How design for sustainable behaviour can reveal different stakeholder perspectives on human nature'. In ERSCP-EMSU 2010, Delft, Netherlands, October 25-29, 2010, Proceedings, TU Delft
- **Lockton**, D., Harrison, D., & Stanton, N. A. (2010) 'Concept Generation for Persuasive Design'. In Persuasive Technology: Fifth International Conference, Persuasive 2010, Copenhagen, Denmark, June 7-9, 2010, poster proceedings, University of Oulu Department of Information Processing Science
- **Lockton**, D., Harrison, D. & Stanton, N. A. (2009) 'Design for Sustainable Behaviour: investigating design methods for influencing user behaviour'. In Sustainable Innovation 09: Towards Sustainable Product Design 14, Farnham, UK, 26-27 October 2009, Proceedings, Centre for Sustainable Design, Farnham
- **Lockton**, D., Harrison, D. & Stanton, N.A. (2009) 'Choice Architecture and Design with Intent'. In Wong, W & Stanton, N.A. (eds.), NDM9 9th Bi-annual International Conference on Naturalistic Decision Making, June 23-26, 2009, London, UK, Doctoral Consortium Proceedings, British Computer Society, Swindon
- **Lockton**, D., Harrison, D., Holley, T., & Stanton, N. A. (2009) 'Influencing Interaction: Development of the Design with Intent Method'. In Persuasive Technology: Fourth International Conference, Persuasive 2009, Claremont, California, April 27-29, 2009, Proceedings, ACM Digital Library, New York. doi:10.1145/1541948.1541956
- **Lockton**, D., Harrison, D., & Stanton, N.A. (2008) 'Design with Intent: Persuasive Technology in a Wider Context'. In H. Oinas-Kukkonen, P. Hasle, M. Harjumaa, K.

Segerstahl, & P. Ohrstrom (Eds.), Persuasive Technology: Third International Conference, Persuasive 2008, Oulu, Finland, June 4-6, 2008, Proceedings (p. 274—278), Lecture Notes in Computer Science vol. 5033, Springer, Berlin. doi:10.1007/978-3-540-68504-3\_30

#### Books authored & edited

Keyson, D.V., Guerra-Santin, O., **Lockton**, D. (2016) *Living Labs: Design and Assessment of Sustainable Living.* Berlin: Springer. ISBN 978-3-319-33526-1. doi:10.1007/978-3-319-33527-8

Bowden, F., **Lockton**, D., Gheerawo, R. & Brass, C. (2015) *Drawing Energy: Exploring Perceptions of the Invisible*. London: Royal College of Art. ISBN 978-1-910642-10-8

**Lockton**, D., Greene, C., Casey, A., Raby, E., & Vickress, A. (Eds.) (2014) *Creative Citizens' Variety Pack: Inspiring digital ideas from community projects*, London: Royal College of Art, September 2014. ISBN 978-1-907342-97-4.

Nodder, C. (2013) *Evil by Design: interaction design to lead us into temptation*, 2013, New York: Wiley [Technical editor: **Lockton**, D.]. ISBN 978-1-11842214-4.

**Lockton**, D., Harrison, D.J., Stanton, N.A. (2010) *Design with Intent: 101 Patterns for Influencing Behaviour Through Design v.1.0*, Windsor: Equifine 2010 (ISBN 978-0-9565421-0-6 print; 978-0-9565421-1-3 eBook

Weightman, C., **Lockton**, D., Hanson, J.E. et al (Eds.) (2004) *Good Thinking: Brunel Design* 04, Runnymede: Brunel University Press 2004. ISBN 1-902316-41-X

**Lockton**, D. (2003) *Rebel Without Applause: The Reliant Company from Inception to Zenith*, Minster Lovell: Bookmarque 2003. ISBN 978-1-8705196-4-9

### **Book chapters**

Clune, S.J. and **Lockton**, D. (2017). 'Design for Behaviour Change and Sustainability'. In: Niedderer, K., Clune, S.J., Ludden, G. (Eds.), *Design for Behaviour Change: Theories and practices of designing for change.* London: Routledge.

**Lockton**, D. (2017). 'Design, Behaviour Change, and the Design with Intent Toolkit'. In: Niedderer, K., Clune, S.J., Ludden, G. (Eds.), *Design for Behaviour Change: Theories and practices of designing for change*. London: Routledge.

**Lockton**, D. and Ranner, V. (2017). 'Plans and speculated actions: Design, behaviour and complexity in sustainable futures'. In: Chapman, J. (ed.), *The Routledge Handbook of Sustainable Product Design*. London: Routledge, pp. 487-501.

**Lockton**, D. (2016) 'Frustrated Models'. In: Borland, R., Scarff, L., Brunswick, I. (eds.), *Design and Violence Zine* #2, pp. 12-15, Science Gallery Dublin / MoMA.

**Lockton**, D., Bowden F., Matthews, C. (2016) 'Powerchord: Exploring ambient audio feedback on energy use'. In: Keyson, D.V., Guerra-Santin, O., **Lockton**, D. (eds.), *Living Labs: Design and Assessment of Sustainable Living*. Berlin: Springer, pp. 297-308.

Folta, K., **Lockton**, D., Bowden F. (2016) 'Recruitment of participants for insight research and prototyping'. In: Keyson, D.V., Guerra-Santin, O., **Lockton**, D. (eds.), *Living Labs: Design and Assessment of Sustainable Living*. Berlin: Springer, pp. 241-245.

Bowden, F., **Lockton**, D., Gheerawo, R., Brass, C. (2016). 'Participatory Drawing in Ethnographic Research'. In: Keyson, D.V., Guerra-Santin, O., **Lockton**, D. (eds.), *Living Labs: Design and Assessment of Sustainable Living*. Berlin: Springer, pp. 179-190.

**Lockton**, D. (2016). 'Design with Intent and the field of design for sustainable behaviour'. In: Keyson, D.V., Guerra-Santin, O., **Lockton**, D. (eds.), *Living Labs: Design and Assessment of Sustainable Living*. Berlin: Springer, pp. 75-88.

**Lockton**, D. (2016). 'Designing Agency in the City'. In: Pipkin, L. (ed.), *The Pursuit of Legible Policy: Agency and Participation in the Complex Systems of the Contemporary Megalopolis*. Buró-Buró, Mexico City, pp. 53–61.

Turner, J., **Lockton**, D., Dovey, J. (2016) 'Technology and the creative citizen'. In: Hargreaves, I. and Hartley, J. (eds), *The Creative Citizen Unbound: How social media and DIY culture contribute to democracy, communities and the creative economy*. Bristol: Policy Press, pp. 231-254.

**Lockton**, D. and Bowden, F. (2015). 'People, Energy and Everyday Life: Uncovering behavioural design opportunities behind energy use patterns'. In Watson, J., Clegg, C., Cowell, C., Davies, F., Hughes, C., McCarthy, N., Westbury, P. (eds.), *Built for Living: Understanding behaviour and the built environment through engineering and design*. London: Royal Academy of Engineering. ISBN: 978-1-909327-17-7

**Lockton**, D., Greene, C., Ramster, G., Outten, A., & Raby, E. (2014) 'The Story Machine' in **Lockton**, D., Greene, C., Casey, A., Raby, E., & Vickress, A. (Eds.) *Creative Citizens' Variety Pack: Inspiring digital ideas from community projects*, London: Royal College of Art, September 2014.

**Lockton**, D. (2013) 'Williams, Tom Lawrence [Laurie] (1890–1964)', Oxford Dictionary of National Biography, May 2013 update, Oxford: Oxford University Press. doi:10.1093/ref:odnb/103411

**Lockton**, D. (2013) 'Interview with Dan **Lockton**' in Savić, S. and Savičić, G. (eds.), *Unpleasant Design*, Belgrade: GLORIA

**Lockton**, D., Harrison, D.J., Stanton, N.A. (2010) 'Design for Behaviour Change' in A.M. Columbus (Ed.): *Advances in Psychology Research 67/69*, Hauppauge: Nova Science Publishers 2010

**Lockton**, D. (2010) 'Design with Intent: Influencing people's behaviour through products & services' in B. Davey et al (Eds.), *250 Innovative Ideas: Made in Brunel 2010*, Papadakis, London 2010

#### Workshops, seminars, salons, and sessions

**Lockton**, D., Boehnert, J. & Mulder, I. (2018) 'Designing for Transitions': editorial for conference track at DRS 2018: Catalyst, 25–28 June 2018, Limerick, Ireland.

**Lockton**, D., Some Cracks In The Paving, Water Trapped In The Window Of A British Rail Class 450 Train Carriage (2018) 'Apophenia As Method—Or, Everything Is Either A Metaphor Or An Analogue Computer'. Disruptive Improvisation: Making Use of Non-Deterministic Art Practices, workshop at CHI 2018: ACM Conference on Human Factors in Computing Systems, 21–26 April 2018, Montreal

Ranner, V., **Lockton**, D., Steenson, M.W., Galik, G. & Kerridge, T. (2016) 'Plans and Speculated Actions'. Conversation at DRS 2016: Design + Research + Society: Future-Focused Thinking, 27-30 June 2016, Brighton, UK

**Lockton**, D. (2015) 'Is designing for behaviour change 'creepy'?'. V&A Design Culture Salon, 20 November 2015, Victoria & Albert Museum, London.

Dutson, C., Fantini van Ditmar, D. & **Lockton**, D. (2015) 'The Performance of Nonhuman Behaviour'. Workshop at NORDES 2015: Design Ecologies: Challenging anthropocentrism in the design of sustainable futures, 7-10 June 2015, Stockholm, Sweden

Greene, C., **Lockton**, D., Alexiou, K., Alevizou, G. & Zamenopoulos, T. (2014) 'Community Led Design'. Workshop at Creative Citizens: The Conference, 18-19 September 2014, Royal College of Art, London.

**Lockton**, D., Bowden, F., Renström, S., Selvefors, A., Hagbert, P., Baedeker, C. & Ameli, N. (2014) 'Designing with people in sustainability and behaviour change research'. Workshop at DRS 2014: Design Research Society International Conference, 15-19 June 2014, Umeå, Sweden

**Lockton**, D. (2014) 'Model(led) Citizens: Scenarios and design in the era of 'behaviour change'. Oxford Futures Forum 2014, 30-31 May 2014, Oxford (abstract).

**Lockton**, D. (2014) 'Determinism, Cybernetics and Co-Design: Smart Cities and even smarter citizens'. Behaviour Change and Psychological Governance: Changing spaces, urban planning and neuroarchitecture, ESRC seminar series, 24 March 2014, University of Bristol. (abstract).

**Lockton**, D. (2012) 'Behaviour change at work: The CarbonCulture project'. ADMIER/ ESPRU Household Energy Consumption, Technology and Efficiency seminar, University of Birmingham School of Geography, Earth and Environmental Sciences, 7 June 2012 (abstract)

**Lockton**, D. (2010). 'Design with Intent: Using design patterns to develop new persuasive technology applications'. Workshop at Persuasive Technology: Fifth International Conference, Persuasive 2010, Copenhagen, Denmark, June 7-9, 2010, organised in conjunction with Stanford Persuasive Technology Lab.

**Lockton**, D. (2008) 'Design with Intent: behaviour-shaping through design'. New Sciences of Protection: Designing Safe Living, Institute for Advanced Studies, Lancaster University, July 2008 (abstract)

#### Reports commissioned for clients, partners & projects

Niedderer, K., Cain, R., Clune, S., **Lockton**, D., Ludden, G., Mackrill, J., Morris. A., Evans, M., Gardiner, E., Gutteridge, R. and Hekkert. P. (2014) *Creating Sustainable Innovation through Design for Behaviour Change: Summary Report*. University of Wolverhampton, September 2014. ISBN 978-0-9560204-7-5

Niedderer, K., Cain, R., Clune, S., **Lockton**, D., Ludden, G., Mackrill, J., Morris. A., Evans, M., Gardiner, E., Gutteridge, R. and Hekkert. P. (2014) *Creating Sustainable Innovation through Design for Behaviour Change: Full Report*. University of Wolverhampton, September 2014. ISBN 978-0-9560204-9-9

Alexiou, K., Alevizou, G., Zamenopoulos, T., Greene, C. and **Lockton**, D. (2014) 'Community Led Design', in Hargreaves, I. (ed.), *Creative Citizens: First Findings.* Helen Hamlyn Centre for Design, Royal College of Art, September 2014.

CarbonCulture Team and DECC (2012) 'CarbonCulture at DECC Summary Report: Can user engagement save energy and carbon at work? An exploration of behavioural economics at the Department of Energy and Climate Change'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), September 2012.

CarbonCulture Team and DECC (2012) 'How can user engagement save energy and carbon at work? An Exploration of Behavioural Economics at the Department of Energy and Climate Change'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), September 2012.

**Lockton**, D. (2011) 'Report on 'Energy use and you' ethnography sessions at Brunel University'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), April 2011.

**Lockton**, D. (2011) 'Energy use and behaviour change at Brunel University'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), March 2011.

**Lockton**, D. (2011) 'Report on 'Mental models of HVAC systems' ethnography sessions at DECC'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), January 2011.

**Lockton**, D. (2010) 'EMPOWER workshop report on Product Impact Symposium, University of Twente'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), December 2010.

**Lockton**, D. (2010) 'Comfort, energy & behaviour in the workplace: A review'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), November 2010.

**Lockton**, D. (2010) 'Design for behaviour change: A review'. For the CarbonCulture / EMPOWER project (More Associates, Brunel University, University of Warwick), November 2010.

**Lockton**, D. (2010) 'Behaviour Change: State-of-Art Review'. For More Associates, London, March 2010.

#### Theses and dissertations

**Lockton**, D. (2013) Design with Intent: A design pattern toolkit for environmental & social behaviour change. PhD thesis, Brunel University, School of Engineering & Design.

**Lockton**, D. (2005) *Architectures of Control in Consumer Product Design*. MPhil dissertation, University of Cambridge, Judge Institute of Management.

**Lockton**, D. (2004) *Wheelchair Drive*. BSc project report, Brunel University, Department of Design & Systems Engineering.

# Working papers, drafts, and long-form blogs

**Lockton**, D. (2016) 'Play Lab: Exploring Ambiguity'. Published on Medium, December 2016 **Lockton**, D. (2015) 'Let's See What We Can Do: Designing Agency'. Published on Medium, December 2015

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