

JONATHAN ANTONIO EDELMAN, Ph.D. MFA

Curriculum Vitae

Royal College of Art

Kensington Gore

London SW7 2 EU

+44 7956 612070

jonathan.edelman@rca.ac.uk

EDUCATION

Ph.D., Mechanical Engineering, Design Theory and Methodology, Stanford University (2011)

Summer Institute for Entrepreneurship, Graduate School of Business, Stanford University (2009)

Master of Fine Arts, (Product Design), Stanford University (2006)

Screen Writing, American Film Institute (1997)

Bachelor of Arts, Mathematics and Philosophy, St. John's College, Annapolis (1983)

Performance and Composition, Boston University School of Music (1976-1977)

PROFESSIONAL APPOINTMENTS

2016 Head of Programme, Global Innovation Design, Royal College of Art,

London. Designing, teaching, and administrating joint, post graduate programme in Art and Engineering emphasizing creative and technical solutions to global problems and opportunities.

2015 Senior Tutor and Coordinator of Research Design Products, Royal College of Art,

London. Integrating research-based methods into professional design practice, designing new curricula, advising Doctoral candidates.

2015 Visiting Associate Professor, Stanford University, Department of Mechanical

Engineering. Facilitating inter-disciplinary and cross-institutional, international collaboration in practice and research.

2013 - 2015 Director of Interdisciplinary Design, Stanford University, Product Realization Lab.

Developing new curricula bringing humanities students to engineering practice and engineering students to design practice.

2012 - 2015 Visiting Professor, Politecnico di Milano, Dipartimento di Design, Milan, Italy.

Collaborating with faculty conducting research, teaching Masters students in research-driven transformative curriculum, teaching Design Theory and Methodology, and advising PhD candidates.

2012 - 2015 Leadership Team, Stanford University, Product Realization Lab.

Developing strategy, fund raising, program design, planning and implementation of new integrated design and manufacture degree program.

2012 - 2014 Consulting Assistant Professor, Stanford University, Department of Mechanical

Engineering. Teaching Masters students, advising undergraduates on honors projects, advising Masters students on thesis, and Doctoral students on research and dissertations.

2014 Faculty, Phillips Exeter Academy Stanford University Collaboration: The Process of

Creativity. Developing research-driven design, design thinking, and innovation program for high school students

2013 & 2014 Líder Académico de la Disciplina, Tecnológico de Monterrey, Departamento

Diseño Industrial, Campus Guadalajara, Mexico. Teaching advanced Design Thinking workshops to interdisciplinary faculty.

2013 Visiting Professor, Grenoble Institute of Technology, School of Industrial Engineering and Management, Grenoble, France. Giving research talks, advising PhD candidates on experiment and case design, research methodology, documentation and presentation.

2012 Lecturer, University of California Berkeley, Department of Mechanical Engineering. Taught capstone new product development course to undergraduates and masters students.

2007 - 2012 Lecturer, Stanford University, Department of Art and Art History. Taught foundation of design course to undergraduate and graduate students.

PUBLICATIONS

Doctoral Dissertation

2011

Understanding Radical Breaks: Media and Behavior in Small Teams Engaged in Redesign Scenarios

<http://purl.stanford.edu/ps394dy6131>

In this study, I have presented an empirically supported framework for understanding how and under what conditions small horizontally organized design teams perform radical redesigns. Observations based on case studies of small design teams in a redesign task, suggest three closely bound concepts as a mechanism for understanding how design process determines design outcomes: Dimensions of Engagement, Media Response and Interaction, and Path Determination.

Book Chapters

2013

Edelman, Jonathan, *Qualitative Methods and Metrics for Assessing Wayfinding and Navigation in Engineering Design* in Design Thinking Research: Measuring Performance in Context, Springer Berlin Heidelberg New York.

2012

Edelman, Jonathan, Avantika Agarwal, Cole Paterson, Sophia Mark, and Larry Leifer *Understanding Radical Breaks* in Design Thinking Research: Studying Co-Creation in Practice, Springer Berlin Heidelberg New York.

2011

Edelman, Jonathan, and Rebecca Currano, *Re-Representation: Affordances of Shared Models in Team-Based Design* in Design Thinking: Understand - Improve - Apply, Springer Berlin Heidelberg New York, 1st Edition.

Conference Proceedings

2010

Gabrysiak, G., Edelman, J., Giese, H. & Seibel, A. *How Tangible Can Virtual Prototypes Be?*, Proceedings of the 8th Design Thinking Research Symposium, pp. 163-174, Sydney, Australia. (Collaboration with Computer Science Doctoral Candidates from the Hasso Plattner Institute, Potsdam Germany)

Alexander Luebbe, Jonathan Edelman, Martin Steinert, Larry Leifer and Mathias Weske, *Design Thinking Implemented in Software Engineering Tools*, 8th Design Thinking Research Symposium (DTRS8), University of Technology, Sydney, Australia. (Collaboration with Computer Science Doctoral Candidates from the Hasso Plattner Institute, Potsdam Germany)

2009

Jonathan Edelman, Alexander Grosskopf, Mathias Weske. *Tangible Business Process Modeling:*

A New Approach, Proceedings of the 17th International Conference on Engineering Design (ICED), Stanford University, CA, USA. (Collaboration with Computer Science Doctoral Candidates from the Hasso Plattner Institute, Potsdam Germany)

Alexander Grosskopf, Jonathan Edelman, Mathias Weske. *Tangible Business Process Modeling - Methodology and Experiment*, Design Proceedings of the 1st International Workshop on Empirical Research in Business Process Management (ER-BPM '09), Ulm, Germany. (Collaboration with Computer Science Doctoral Candidates from the Hasso Plattner Institute, Potsdam Germany)

Edelman, Jonathan Antonio, Larry Leifer, Banny Banerjee, Neeraj Sonalkar, Malte Jung, Micah Lande. *Hidden in Plain Sight: Affordances of Shared Models in Team Based Design* Proceedings of the 17th International Conference on Engineering Design (ICED09), Stanford University, CA

Carter, Carissa Lark, Jonathan Antonio Edelman. *Emergent Design Methodologies and Implications*, Proceedings of the 17th International Conference on Engineering Design (ICED09), Stanford University, CA

Web-Based Publications

2008

Between C and K: Archaeological Practices of Mediation in Engineering Design, Archaeolog, Stanford University

(http://traumwerk.stanford.edu/archaeolog/2008/03/between_c_and_k_archaeological.html)

Other Publications

2007

Deep Lift Pump, PRL Case Studies, Product Realization Lab, Stanford University (Author, Photographer). Examination product development process of a small, interdisciplinary team of PhD and Masters students.

2006

Steame, PRL Case Studies, Product Realization Lab, Stanford University (Author, Photographer). Examination of Master student product development process.

2001

Introduction to Programming in Flash 5 for Artists and Designers (Course Developer/Author)

CURRENT RESEARCH

Design Invention, Multimedia publication (in process)

Examines and extends principles underlying product and service design. Through combining musical analysis, literary analysis, history of science and mathematics, philosophy, fashion, media studies, this work puts forward a unified theory and practice underlying all design and innovation.

Innovation by Design Journal paper (in collaboration with Politecnico di Milano).

Case-study based research, examining *design-driven* start-ups whose innovation strategies challenge dominant cultural habits and social paradigms. Unlike technology-driven start-ups, these generated-by-design start-ups treat technology as an asset that is “bent” and in service of design decisions directed to change user experience.

Doctoral Advising

Currently serving as primary advisor to two RCA PhD Candidates from Design Interactions. My work with them focuses on academic standards and methodological rigor in the context of creating and communicating design knowledge.

FUNDRAISING AND DEVELOPMENT

Hasso Plattner Foundation Grant

Secured and managed three-year \$450,000 Doctoral research grant.

Leadership Team, Product Realization Lab, Stanford University

Negotiating and securing grants ranging from one million dollars to five million dollars.

Currently engaged in raising 50 million dollars for major site improvements and implementation of new Graduate Program in Integrated Design and Manufacture.

Advisor, The Sustainable Urban Systems Program, Stanford University

Developing strategy and curricula for new Masters Program in Architecture

Advisor, Design Program and Curriculum Development, Phillips Exeter Academy

Developing strategy, curricula, and implementation for new design and innovation program at preparatory school.

SERVICE

CHI 2016, Course Selection Jury, Design Methods in Human Computer Interaction.

TEACHING EXPERIENCE

GRADUATE COURSES

Advanced Design Studies in Product Realization (Mechanical Engineering, 2014)

Advanced Seminar: Design Thinking, Theory and Practice (Interdisciplinary, 2014)

Product Service System Design Master Class (Mechanical Engineering, 2011 - 2014)

The Structure of Design Research (Mechanical Engineering, 2007)

Managing Fabrication and Construction (Civil Engineering, 2013)

Foundations of Design for Design Thinkers (Interdisciplinary, Stanford d.school, 2013)

GRADUATE AND UNDERGRADUATE COURSES

New Product Development (Mechanical Engineering, 2012)

Fundamentals of Visual Language (Art, 2006 - 2011)

UNDERGRADUATE COURSES

Introduction to Product Realization: Making Is Thinking (Mechanical Engineering, 2013 - 2014)

Arts Intensive Design Thinking and the Art of Innovation (Interdisciplinary, 2011 - 2012)

HIGH SCHOOL COURSES

Design and Design Thinking (Art, 2014)

PROFESSIONAL WORKSHOPS

Programming Actionscript for Macromedia Flash (Professional Development Workshop, Orange County Flash 2001)

MENTORSHIP

Schmidt MacArthur Fellowship Mentor, Ellen MacArthur Foundation (2014)

WORKSHOPS AND SYMPOSIA

2015

“Design Invention: A Phenomenological Approach to Designing with Media” The Media Lab, Massachusetts Institute of Technology.

“Design Intensive Startups” Royal College of Art, London.

“Food Innovation Workshop” Royal College of Art at the Borough Market, London.

2014

Early Stage Prototyping for Product Realization, Stanford University Professional Development Workshop.

Advanced Design Thinking: Theory and Practice, Tecnológico de Monterrey, Departamento Diseño Industrial, Campus Guadalajara, Faculty Training and Certification.

2013

Elop*6 Coach’s Workshop International Design Faculty Workshop, Stanford University

Advanced Design Thinking: Theory and Practice, Tecnológico de Monterrey, Departamento Diseño Industrial, Campus Guadalajara, Faculty Training and Certification.

Early Stage Prototyping for Product Realization, Stanford University Professional Development Workshop.

Design Thinking and Innovation, Grenoble Institute of Technology, School of Industrial Engineering and Management.

Typography for Children, Escondido School, Palo Alto Unified School District

2012

Early Stage Prototyping for Product Realization, Stanford University Professional Development Workshop.

INVITED TALKS

2016

“Ten Things about Design and Designing” Tsinghua University, Department of Industrial Design, Academy of Arts & Design, Beijing, China

“Ten Things about Design and Designing” University of Tokyo, i.school, Tokyo, Japan

“Ten Things about Design and Designing” Keio University, Tokyo, Japan

“The Dimensions of Engagement: A Systems Approach to Design Interventions” Pratt Institute, Brooklyn, New York

“Learning from Bach: Musical Rhetoric as Creative Paradigm” Pratt Institute, Brooklyn, New York

“On Design and Designing: An Introduction to Principles and Practice of Design Thinking” Saint Paul’s School, London UK

2015

“Learning From Bach: Principles and Practices of Design Thinking” Future Food Institute, Keynote Address on the Occasion of the First Graduating Class from the new Food Innovation Program, University of Modena and Reggio Emilia, Italy

“Understanding Behavioral Streams Through Video Interaction Analysis” Politecnico di Milano, Dipartimento di Design, Milan, Italy.

2014

“Designing Change” Phillips Exeter Academy, Exeter, New Hampshire

“Elements of Interdisciplinary Design Education” Keynote Address, The Fifth International Workshop on Innovative Engineering Education, Jeju Island, South Korea

“The Power of Prototyping” Innovation Leadership Board, Syngenta Agribusiness Leadership Plus, Stanford University, California

“12 Elements of Design Invention” Keynote Address, High School Congrese CCON, Tecnológico de Monterrey, Guadalajara, Mexico

2013

“On Design: Advanced Design Thinking: Theory and Practice” Royal College of Art, London
2012

“Understanding Radical Breaks” University of California, Berkeley, Berkeley Institute of Design (BID), Berkeley, California

2011

“Understanding Radical Breaks” Fourth Special Interest Group Design Theory Workshop of the Design Society, Paris, France

2010

“Media Strategies for Stakeholder Engagement” Meeting of the Vice Presidents of the Ivy Plus (Harvard, Yale, Princeton, Brown, Columbia, Dartmouth, Cornell, Duke, University of Pennsylvania, Chicago, and Stanford), Office of the Vice President, Stanford University, California

“Media Strategies for C-K and K-C Transits” Third Special Interest Group Design Theory Workshop of the Design Society, Paris, France

1996

“Lighting Design for Film and Television” The College of Santa Fe, New Mexico

DESIGN CONSULTANT

Creative Director, Pantograph Design Associates, Clients Include:

WyshMe (Start Up), Advisory Board, Design Strategy, Product Development

Bay Sensors (Start Up), Advisory Board, Design Strategy and Customer Interface

FlexTherapy, Product Design

Digital Film Tree, UI/UX Consultant

The Center for Design Research, Stanford University, Partner Education Workshops

The Product Realization Lab, Stanford University, Curricula Development, Outreach

The North Face, Retail Experience Design

E&J Gallo Winery, Label and Brand Creation

Retrevo, Web Presence and Customer Experience Redesign

Hasso Plattner Institute, Stanford University, The Nueva School Project

Panasonic San Jose Research Lab, LifeStory Project

Producer, *“Transformation”* short film (Product Realization Lab, 2013)

Producer, *“Connections”* short film (Product Realization Lab, 2014)

Creative Director, Five Palms Design, Web and Graphic Design, Interactive Programming

Chief Technical Officer, Digital Analogies, Educational Multimedia Design

Visual Consultant/Lighting Designer for Film and Television, Chief Lighting Technician (IATSE Local 728, NABET 15).

Feature Films: Natural Born Killers, The Babe, Ironweed, Solaris, Jackknife, Tank Girl, Crocodile Dundee II, Last Exit to Brooklyn, The Big Brass Ring, Dogtown, Chain Letters, Sleepwalk, Melvin Goes to Dinner, Speechless, The Woman Chaser, Kickboxer 4: The Aggressor, May, Forever Lulu, Hard Choices, Paper Hearts.

Short Films: Back to the Future...The Ride, David Parsons: Caught.

Television Series: Earth II, The Lazarus Man, Independent Focus, Law and Order, American Playhouse, Tales from the Darkside, The Caseys, Barbara

Walters Specials, Miss Ruby's Kitchen.

Documentaries: Busby Berkeley: Going Through the Roof, No Sense of Crime, Thank You and Good Night, Newport Jazz Festival.

Music Videos: Sledge Hammer (Peter Gabriel), Golden Ball and Chain (Jason and the Scorchers), Someone Like You (Sylvester), I Should've Known (Aimee Mann), Push Th' Little Daisies (Ween), Better Things to Do (Terry Clark).

Commercials: Physician's Formula, Nyquil, K-Mart, Budweiser, Burger King.

MEDIA COVERAGE

Understanding Radical Breaks, <http://blog.rwth-aachen.de/designthinking/2016/01/20/summary-understanding-radical-breaks-by-j-edelman/>

RCA Appoints Dr Jonathan Edelman, <http://www.rca.ac.uk/news-and-events/news/rca-appoints-jonathan-antonio-edelman-head-global-innovation-design/>

Creative Partnerships, https://www.exeter.edu/exeter_bulletin/12984_17248.aspx

The New Face of Design, Cover Story, Palo Alto Weekly, April 21, 2006
<http://www.paloaltoonline.com/print/edition/2006/04/21>

Rai Italia, News Program, March 14, 2014
<http://www.rai.tv/dl/RaiTV/programmi/media/ContentItem-360d978c-98e2-4f4e-ab44-d522cc9367ab.html#p=0>

The Paris Tech Review, <http://www.paristechreview.com/2010/11/02/power-prototyping/>
<http://www.paristechreview.com/2010/11/02/power-prototyping/>

GROUP SHOWS

"Teatro Ricardo", Great Small Works 9th International Toy Theatre Festival, New York (2010)
Stanford Student Design Exhibition (2006)
Stanford Student Design Exhibition May (2005)
Multimedia Works, St. John's College Art Exhibition, Annapolis, MD (1983)
Multimedia Works, Cornelia Street Cafe, New York, August (1980)

PROFESSIONAL DEVELOPMENT

Demonstration Chair, The Association for Computer Machinery's 9th International Conference on Tangible, Embedded and Embodied Interaction (TEI 2015 Stanford)

Bookbinding and Letterpress Printing, San Francisco Center for the Book (2011)

AWARDS and ACHIEVEMENTS

Design Thinking Research Program Fellow, Hasso Plattner Foundation (2008 – 2011)

GlaxoSmithKline Fellow, Stanford Graduate School of Business, Summer Institute for Entrepreneurship (2009)

Jonathan Antonio Edelman PhD MFA, Curriculum Vitae

Charles Saylor Award in Design (Stanford University, 2006)

Judo Instructor Certification, United States Judo Association (1993)

Member of the National Judo Team, Colorado Springs, Colorado (1993)

Shodan (Black Belt), National Judo Institute (1992)

Truman Scholarship Nominee, St. John's College, Annapolis (1982)

Gutman Award for Academic Achievement, St. John's College, Annapolis (1981)

Peterson Award for Academic Achievement, St. John's College, Annapolis (1980)

Young Artist, Tanglewood Institute (1976)

Greater Boston Youth Symphony, String Bass (1975)