

Mukul N. Patel

*23.05.71, UK citizen

t: +44 7976 798397

e: mukul@emergence.is

w: <http://mukul.works>

<http://emergence.is>

<http://ambientTV.net>

Current projects

My current political concerns revolve around the possibility of autonomy in algorithmically managed spaces, and a humanist critique of the technological utopias centred on 'singularity' and 'artificial general intelligence'. In particular, I am developing a series of books on AI and ethics aimed at various age groups from primary schoolchildren to adults. The series seeks to reframe the debate in terms of the perspectives of individual and collective users, rather than those of corporations or the state. Also in development: a participatory intermedia platform and installation with IWM Institut für Wissenschaften vom Menschen, Vienna and the Albert Hirschman Centre on Democracy, Geneva investigating all aspects of sound and democracy.

Consultancy and development

I lead emergence, a combined think-tank, creative lab and production studio. Recent work in collaboration with Billings Jackson Design, who specialise in human-centred urban infrastructure, includes developing the sound infrastructure for what will be the tallest building in the world (DCH Tower, Dubai by Santiago Calatrava) and conducting a preliminary ethical audit for a proposed smart wayfinding system in the city of Bristol.

Research and writing

Texts range from critical perspectives on social and technological infrastructures to film scripts voiced by Tilda Swinton, an acclaimed children's book on mathematics, and contributions to encyclopaedias on topics including abstract algebra, bioethics, GPS technology, and the politics of urban wireless networks. Through my writing, I articulate and make vivid difficult, contested or technical concepts, using novel imagery and analogies to animate ideas and demystify jargon.

Art and music

Over the last 20 years I have composed extensively for contemporary dance and experimental film and developed a critical intermedia arts practice. I play with diverse media to explore relationships between rule-bound forms (both classical and novel) and chance, between technology and tradition, and between signal/data/music and noise. An interest in the grammars of different media has naturally led to collaborations and exploration of hybrid media. Formally, my work is informed by the music of North India, OuLiPo, and 1960s conceptual practice. Together with Manu Luksch, I direct London-based Ambient Information Systems, a studio for the development of investigative tools, responsive environments and participatory processes, since 2001.

Education

2016 MSci Mathematics, Imperial College London

Final year paper: *Quantum Computers and Public-Key Cryptosystems*

Shared 2012 Winton Capital Prize for the paper *Functional Equations from Gamma to Zeta* (with E. Fenati, S. F. Lam, and R. Picciotto)

2001 Berkeley Fellowship University of California

1992 BA Natural Sciences / Social & Political Sciences, King's College, Cambridge

Publications (Technology, Ethics, Art)

'To be connected: perspectives on autonomy and risk from the Electric Age'
(with Manu Luksch) in A. Chapman, N. Hume, & C. Newland, eds. *Coding and Representation from the Nineteenth Century to the Present: Scrambled Messages*.
London: Routledge, forthcoming 2020

'Prediction'
(with Manu Luksch) in D. Agostinho, C. D'Ignazio, A. Ring, N. Thylstrup, & K. Veel, eds.
Uncertain Archives. Cambridge: MIT Press, forthcoming 2020

3,159 Tweets
(coeditor with Manu Luksch) English/Arabic A0-size poster/booklet about human
rights defender Ahmed Mansoor, currently incarcerated in the UAE, 2019

'A Brief History of Real Time'
in W. Sützl, ed. *Creating Insecurity*. Plymouth: Ply. Univ. Press / Autonomedia, 2009

Ambient Information Systems
(contributing editor, with Manu Luksch). London: AIS, 2009

ambient.vista 2008
Catalogue: artists residencies of Wolfgang Staehle, Tuomas Toivonen, Fahim Amir,
Shiho Fukuhara. London: AIS, 2008

'Chasing the data shadow. A filmmaker's close-up encounter with the Data Protection
Act' (with Manu Luksch) in G. Stocker & C. Schöpf, eds. *Ars Electronica: Goodbye Privacy*.
Berlin: Hatje Cantz Verlag, 2007

'Wearable Computing and Wireless Networks'
(with Manu Luksch) in E. Salmi & J. Lantto, eds. *Cumulus Working Papers: Tallinn*.
Helsinki: University of Art & Design, 2003

Publications (Mathematics, Popular Science)

The Physics Book. London: Dorling Kindersley, 2020
Contributor

The Maths Book. London: Dorling Kindersley, 2019
Contributor

We've Got Your Number. London: Kingfisher, 2013
Author

*Shortlisted: Royal Society Young People's Book Prize 2014

*Longlisted: School Library Association Information Book Award 2014

Scientific American's How Things Work Today. London: Marshall, 2000
Consultant Editor

Selected work for film

Contagious Whisper dir. Scott Killdal & Manu Luksch, 2020)
Cowriter, composer, visual FX

Algo-Rhythm dir. Manu Luksch, 2019
Cowriter, composer, software programmer
*ZONTA Award, 65th Kurzfilmfest Oberhausen
*2nd place, Globalen Perspektiven Filmpreis 2020

Third Quarterly Report (Manu Luksch, 2019)
Quadraphonic sound design and mix

Kairos dir. Russell Maliphant, Warren Du Preez, Nick Thornton Jones, 2016
Composer

Dreams Rewired dir. Manu Luksch, Martin Reinhart, Thomas Tode, 2015
Cowriter, sound designer
*Transcript in the Core Collection, Margaret Herrick Library,
Academy of Motion Picture Arts & Sciences

Ten Thousand Waves / Better Life dir. Isaac Julien, 2010
Composer, sound designer, mix consultant

Faceless dir. Manu Luksch, 2007
Cowriter, composer
*Collection Centre Georges Pompidou
*BFI National Archive

Unknown White Male dir. Rupert Murray, 2005
Composer

Virtual Borders dir. Manu Luksch, 2003
Sound design, mix and mastering

Intermedia art

Documented at <http://mukul.works> and <http://ambientTV.net>

Selected music and sound works for performance

- 2019 *Spiral Pass* (orchestral version) - Le Ballet de l'Opéra de Lyon / chor. Maliphant
- 2016 *Lightspace* - installation with Michael Hulls for *No Body*, Sadler's Wells, London
- 2015 *Piece 43* - Russell Maliphant Company / Sadler's Wells, London
- 2015 *Kama Sutra* - BalletBoyz et al, dance for film, Sky Arts
- 2015 *both, and* - chor. Russell Maliphant / Sadler's Wells, London
- 2014 *Still/Current* - Russell Maliphant Company / Sadler's Wells, London
- 2014 *Spiral Pass* - Bayerisches Staatsballet, Munich chor. R. Maliphant
- 2011 *Clinic* - BalletBoyz, dance on film for *Random Acts*, Channel 4
- 2008 *Electric Counterpoint* chor. Christopher Wheeldon / Royal Opera House, London
- 2007 *Outside In* - Saju Hari, trio, Royal Opera House, London
- 2006 *Transmission* - Russell Maliphant Company, Sadler's Wells London
- 2004 *twelvetwentyone* - Le Ballet de l'Opéra de Lyon, chor. R. Maliphant
- 2004 *England Expects* for seven ghettoblaster & megaphone - Danish Ghattoblaster Ensemble, Trafalgar Square
- 2003 *Armadillo for your Show* - Oleg Kulik in the Turbine Hall, Tate Modern
- 2003 *Choice* - Russell Maliphant Company quintet, South Bank Centre London
- 2003 *Critics Choice****** - BalletBoyz chor. Akram Khan, South Bank, London
- 2002 *The House* - Multiroom sound installations for Athina Vahla / Master Shipwright's Palace, London

Testimonials

Upon request