

Michael Mandiberg
Application for Art + Technology Lab at LACMA 2016

Name of Project

Mechanical Tramp

Three words that describe this proposal

Remixing digital factories

One sentence description of the work

I will re-create the 1936 Charlie Chaplin film *Modern Times* shot-by-shot through the lens of digital workers contracted on Amazon Mechanical Turk.

Full description of the proposed project

Having recently completed *Print Wikipedia*, a major work that took me six years to complete, I am developing a new ambitious video and installation work: *Mechanical Tramp*. This work is made up of videos, photographs and objects commissioned from digital laborers.

For *Mechanical Tramp*, I will contract anonymous, independent workers from the Amazon Mechanical Turk crowdsourcing marketplace to re-create the 1936 Charlie Chaplin film *Modern Times* shot-by-shot. Chaplin's film is an explicitly political portrait of a dystopian world where workers struggle with unemployment, poverty and hunger in an industrialized society gutted by fiscal crises. I will write code to cut the film into clips, upload the clips for re-enactment, and retrieve them to be compiled into the final film. Characters will retain one key visual element (the Tramp's toothbrush mustache, the Boss' suit) but will be played by different Turkers in each clip. I have no control over the location and language of production; the absence of dialogue in *Modern Times* allows for linguistic interchangeability. The film will offer a picture of the Turkers' lives through the traces left in their clips. *Mechanical Tramp* will represent the story of the Tramp today, the colonial overtones of Mechanical Turk, and the importance of visualizing the cloud.

As an installation, *Mechanical Tramp* will present new and old imagery alongside each other – digital and analog visions of life in a dystopian overworked society. The Turkers who create these scenes will also be represented through the exhibition of objects they use as props (which I will request to be shipped to me via return receipt). A larger consideration of the context in which they are working or filming their scenes will be provided through a projection of images shot by Turkers accompanied by audio they have recorded themselves - consisting of 8 hours of audio and 480 crowdsourced photographs. Building off of the film, this installation of 8 hours (one working day) of mundane, yet surprisingly poetic one minute long descriptions of the Turkers' work rooms, paired with photographs of the view out their windows.

Mechanical Tramp will be a multimedia installation made of several separate parts which come

together to paint a portrait of the state of digital labor today, how we imagine our own identity as laborers, and the socio-political situation of digital labor on a global scale.

Artistic or creative merit of the proposed project

Mechanical Tramp is a conceptually sophisticated work, with a clear aesthetic. The work will retain the soundtrack, inter-titles, and occasional original clips in order to retain an armature to support the wildly different bitrates, image sizes, and production qualities. The work will be messy and fragmented, like the digital labor that produced it; it will continually fall apart, and re-cohere again and again. The short 1 minute clip included in the work samples demonstrates aesthetic and conceptual power.

This work synthesizes the analog and the digital and is influenced by the practices of artists and filmmakers who engage with both. *Mechanical Tramp* is not about technology itself, rather technology is the tool I use to visualize and comment upon digital labor. My work is informed by Tiziana Terranova's conceptualizations of digital labor, Lawrence Lessig's theories of code as law, Critical Art Ensemble's strategies and tactics for collaboration, and Walter Benjamin's considerations of art production in modern society. More broadly, this work engages with works such as Allan Sekula's representations of globalization with *Fish Story* and Christian Marclay's montage of appropriated film clips in *Clock*. It foregrounds the transactional nature of seemingly utopic works like Miranda July and Harrel Fletcher's *Learning to Love You More*, or the Perry Bard's Vertov remake: *Man with a Movie Camera: The Global Remake*.

Why do you consider this project to be a meaningful exploration of emerging technology?

While technically sophisticated, this work eschews the novelty of new technology. Rather, it uses new technology alongside an older aesthetic form (cinema) in order to retell the story of how new technology impacts our lives. By using the means of digital labor in order to explore digital labor itself, I am making visible the human participants in the exploitative, anonymous systems of production and communication that we share and labor in. By seeing these digital laborers perform old-fashioned labor, their new labor is rendered legible, allowing for a new historical context through which to understand this modern labor. Technology here is used as a medium for elevating and representing online work and communication, by presenting a creative platform that viewers can access to consider the multi-layered dimensions of contemporary labor.

In what ways does your project inspire dialogue about the issues at hand, including the relationship between technology and culture?

Mechanical Tramp is both a product of digital labor and a poetic visualization of its process. Digital labor is something we all engage in today. From writing emails to posting to Facebook to writing code, the majority of the work we do exists within the digital realm. *Mechanical Tramp* challenges the definition of labor by juxtaposing old and new representations. I am intervening in a shared digital space in order to critique the systems that dominate the way we work today. Through the film's production and its final result, I am challenging all digital laborers, from the

Turkers to the 1.4 Billion Facebook users to consider the social, political and interpersonal implications of online work. Audiences and participants will be prompted to question what it means to perform labor and to confront the power dynamics that command the digital marketplace.

Please describe your proposed plan for public engagement. What opportunities do you foresee to share prototypes, demonstrations and process with the public?

Pedagogy is central to my practice and I will be excited to work with LACMA Art+Technology Lab to facilitate workshops and public discussions that speak to and expand the existing audience. I have done many similar workshops at MoMA, Eyebeam, and elsewhere. Through workshops and public presentations, I will be able to share my process writing the code and address my work developing this project as something entirely open source. In addition, I will be able to contribute to public discussions around the thematic of my project, including topics like digital labor and appropriation.

What data will your project produce that may be of interest to other artists, technologists, or arts organizations?

In its finished form, all code will be open source published on Github, and all of the material will be licensed under Creative Commons Attribution-ShareAlike licenses. I have a history of free culture activism, and a lifelong commitment to creating work dedicated to building a digital commons. From organizing worldwide Wikipedia Edit-a-thons, to creating perfect copies of copies of artwork available for free online, to making carbon footprint calculations accessible through plug-ins on e-commerce sites, I am constantly seeking ways to share my work with the broadest audience possible. In this trajectory, Mechanical Tramp will not “end” once the film is edited and presented. It's structure, and the code I used to produce it, will be available to someone else, prompting further considerations of how artwork, or any other material, is re-purposed and re-created online. As I myself create works that are appropriations, my ultimate goal is to share these creations in order to enable further remixing.

Please list any other sources of funding for this project, including in-kind support, and, if applicable, any conditions related to that funding or support:

Studio Space, provided in-kind [REDACTED]
Denny Gallery will provide documentation in-kind [REDACTED]
PSC-CUNY grant [REDACTED]

Detailed project budget (please include direct costs, including materials, software licenses, etc. and any artist fees as well as fees for any other contributors to the project):

Artist fee

[REDACTED]

Materials / Digital Labor

Turker costs for film: [REDACTED]

Turker costs for audio recordings: [REDACTED]

Turker costs for photographs: [REDACTED]

Subtotal: [REDACTED]

Project Administration and Assistance

Studio space: [REDACTED]/month x 12 months, includes Internet & utilities)

Programming Research Assistant: [REDACTED]/hr @ 200 hours)

VPS Web hosting: [REDACTED] for one year

Return receipt postage for Turkers' props for exhibition: [REDACTED] (see *** below for details)

Subtotal: [REDACTED]

Subtotal less other sources: [REDACTED]

Documentation and PR

Freelance Publicist: [REDACTED]

Social media consulting: [REDACTED]

Photo and video documentation, web archiving: [REDACTED]

Subtotal: [REDACTED]

Subtotal less other sources: [REDACTED]

Total amount requested: [REDACTED]

* This is the CUNY designated amount required to relieve me of my teaching for the year, and allow me to dedicate myself to realizing this work. This will be a labor intensive project that will require writing extensive code to automate the upload process to Amazon Mechanical Turk. The MTurk API is fairly well documented, but the functional specifications of this use case are different enough from most that it will require substantial labor on my part in order to write code to request and collect the clips. Additionally, I will have to edit the full 87 minute film. This cost is actually on par with contracting the work to others: contractor labor costs for programming, editing, and web design would be roughly [REDACTED], plus the [REDACTED] opportunity cost of me having to project manage them.

** As documented in the proposal, the core of this project involves contracting digital labor on Amazon Mechanical Turk to re-create the 557 clips in the 1936 Charlie Chaplin film *Modern Times* shot-by-shot. This project is impossible without these independent contractor fees. Based off of my experiments this fall, I have determined that each clip costs about [REDACTED] per character per clip: a clip with one character costs [REDACTED], two characters costs [REDACTED], etc. The median clip has two characters, and thus will cost [REDACTED] to recreate. There are 557 clips in the film. I assume that that roughly 10% of the clips will require reshooting: $557 \text{ clip} \times [REDACTED] \text{ per clip} \times 1.1 \text{ reshooting factor} = [REDACTED]$.

*** I plan on incorporating props made by Turkers into the final installation. When props are produced as part of the job request, funds will be needed to cover shipping costs. I anticipate that maybe 10% of all workers will ship these to me, and that they will cost [REDACTED] for US shipping via UPS account, and [REDACTED] for international shipping, via DHL account. 50 shipments x [REDACTED] average cost per shipment = [REDACTED]

Please provide an implementation plan delineated in a chart

KEY MILESTONES	START DATE	FUNDS NEEDED
(Major steps in the project development)	(Estimated date for each project step)	(Amount of funds that will be needed)
Write code to divide Modern Times film into individual scenes	October, 2015	█
Proof of concept: initiate communication (manually – without the custom code) with Turkers in order to test one scene by commissioning Turkers to film	November, 2015	█ (already spent)
Evaluate communication, results of commissioned films	December, 2016	█
Pause (CUNY funding period for research assistant begins June 1. June 1 st is a hypothetical start date for LACMA grant)	June, 2016	█
Onboard programming/research assistant	June, 2016	█ – CUNY funding █ – Artist fee (living expenses) █ – Studio (in kind)
Setup server for executing project	June, 2016	█
Write code (with programming assistant) to post and receive clips to Amazon Mechanical Turk via API	July -August, 2016	█ – CUNY funding █ – Artist fee (living expenses) █ – Studio (in kind)
Establish strategy for dealing with clips versus scenes, and establishing character roles via props (e.g a round black hat and moustache)	August, 2016	█ – Artist fee (living expenses) █ – Studio (in kind)
Establish job description for MTurk	August, 2016	█
Send out first scene (via software upload) for shooting, and Edit	September, 2016	█ (turker fees) █ – Artist fee (living expenses) █ – Studio (in kind)

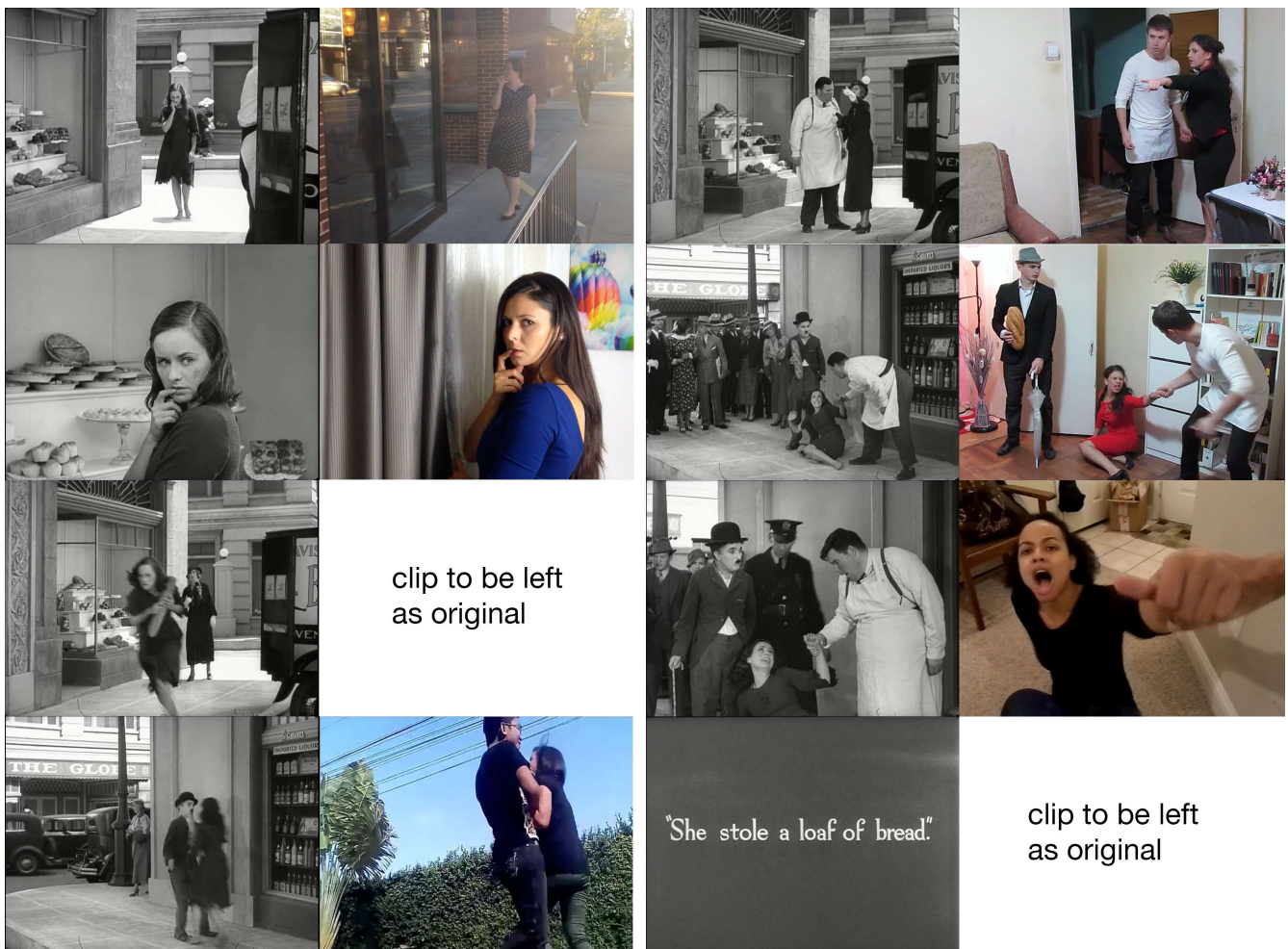
Assess clips and revise instructions/process. Then send out next four scenes	October, 2016	██████ – Artist fee (living expenses) ██████ – Studio (in kind)
Send out the next 20 scenes to be shot on MTurk	November - December, 2016	██████ (turker fees) ██████ – Artist fee (living expenses) ██████ – Studio (in kind)
Commission Turkers' images and recordings of the views outside of their window	December-January, 2016	██████ (turker fees) ██████ – Artist fee (living expenses) ██████ – Studio (in kind)
Send out all 20 remaining scenes to be shot on MTurk	January-February, 2016	██████ (turker fees) ██████ – Artist fee (living expenses) ██████ – Studio (in kind)
Edit full film	January –March, 2016	██████ – Artist fee (living expenses) ██████ – Studio (in kind)
All Turker props returned and in hand	Feb, 2017	██████
Work with Gallery publicist on media strategy and outreach for website and project launch	Feb, 2017	██████ (in kind)
Edit Turker audio recordings	March –April, 2016	██████ – Artist fee (living expenses) ██████ – Studio (in kind)
Finalize installation plan	March, 2017	██████
Design + build project website	March + April, 2017	██████ – Artist fee (living expenses) ██████ – Studio (in kind)
Project launch / Social media	May, 2017	██████ (in kind) ██████ – Artist fee (living expenses) ██████ – Studio (in kind)
Project documentation, media coverage documentation, web archiving	June 1, 2017	██████ (in kind)

Work Samples

Video: Sketch for *Mechanical Tramp*, in progress, crowdsourced video.

[REDACTED], password is: turk

This short section is a test of the concept: each clip was produced by a different worker. It is intentionally fragmented, reflecting the conditions of digital labor itself. I will retain the intertitles, audio and some of the original clips so as to suture the work back into the original source.



Stills from sketch for: *Mechanical Tramp*, in progress, crowdsourced video.

These are stills from the proof of concept video sketch included in the link above. The clips on the right were shot by Turkers. This is a scene where the Gamin steals a loaf of bread and the

Tramp tries to take the blame to go back to jail.

Exmple of a test/sketch for the still image component of the project.

These are two images from a batch of test images produced by Turkers all over the world in response to the request to take a photograph out of the window their room. Some images retain traces of their site of origin, while others blend together in a visual representation of the built environment of globalization.





Education

- 2003 MFA Photography and Media Art, California Institute of the Arts
2000 BA English (with Honors) & Visual Arts, Magna Cum Laude, Brown University
1998-2000 Photography Studies including Degree Project, Rhode Island School of Design
1998 Fine Arts Studies, San Francisco Art Institute, Semester Exchange

Selected Work

- 2015 Print Wikipedia, <http://PrintWikipedia.com>
2014 – present, Art+Feminism Wikipedia Edit-a-thon, lead co-organizer, MoMA and other locations (Public Project)
2012 – present, New York Arts Practicum (Public Project)
2010 *Under the Floorboards* (Video, 5:00)
2009 – present, *FDIC Insured* (Installation)
2009 *Burned Books* (Sculptures)
2007 *Real Costs*, <http://TheRealCosts.com>
2006 *Oil Standard*, <http://turbulence.org/Works/oilstandard>
2005 *IN Network*, with Julia Steinmetz, <http://turbulence.org/Works/innetwork>
2005 *All Haiku, All the Time* (Video, 3:30)
2003 *First Person* (Interactive DVD)
2003 *How did we go a whole year without this?* (Two Channel Video, 6:15)
2002 *As Amy: April 20-30 2002* (for The Exchange Program) (Video, 21:30)
2002 *The Essential Guide to Performing Michael Mandiberg* <http://turbulence.org/Works/guide>
2002 *The Exchange Program*, <http://ExchangeProgram.org/>
2001 *AfterSherrieLevine.com*, <http://www.AfterSherrieLevine.com>
2001 *Shop Mandiberg*, <http://www.Mandiberg.com/shop>

Selected Exhibitions

- 2016 *In the Stacks: Print Wikipedia*, Arizona State University Art Museum + Library, (Solo)
2015 *A to 12*, Hopkins Hall Gallery, Ohio State University
New Text, Goldcorp Centre for the Arts, Simon Fraser University, Vancouver, BC
From Aaaaa! to ZZZap!, Denny Gallery, New York City (Solo)
2014 *Share This!: Appropriation After Cynicism*, Denny Gallery, New York, NY
2013 *DECENTER: An Exhibition on the Centenary of the 1913 Armory Show*, Abrons Arts Center, New York City
Curitiba International Biennial, curated by Teixeira Coelho and Ticio Escobar, Curitiba, Brasil
2012 *Fake It! (Limited Edition)*, at Fabrica de Pensule, Cluj Romania
Art, Environment, Action! at Sheila C. Johnson Design Center, New York City
2011 *The Oil Show*, Hartware MedienKunstVerein (HMKV), Dortmund, Germany
Identités précaires, L'espace virtuel du Jeu de Paume, Paris

- 2010 *The Great Recession*, Walter Feldman Gallery, Pacific Northwest College of Art, Portland (Solo)
- 2009 *Summer Reading*, Jen Bekman Gallery, New York City
The End of Oil, Exit Art, New York City
Histoires à l'ère numérique, Plug.In, Basel, Switzerland
the future is not what it used to be, Postmasters, New York
- 2008 *Ours: Democracy in the Age of Branding*, Parsons, New York
Feedback: Beyond Light Bulbs, Eyebeam, New York
- 2006 *When Artists Say We*, Artists Space, New York
- 2005 *Rhizome ArtBase 101*, New Museum of Contemporary Art, New York
Just Do It, Lentos Kunstmuseum, Linz Austria
- 2003 *Tirana Biennale 03*, National Gallery of the Arts, Tirana, Albania
onscreen_4: Echo Sparks, Ars Electronica, Linz, Austria
- 2002 *Go Public!*, Transmediale Media Art Festival, Berlin
- 2001 *Multiple Personalities*, Haines Gallery, San Francisco
Shop Mandiberg at Zentrum für Kunst und Medientechnologie (ZKM)

Selected Reviews

Print Wikipedia: 8 selected reviews out of over 150

- 2015 Jennifer W. Leung, "Michael Mandiberg," *Artforum*, October, 2015, p 325-326.
 Jennifer Schuessler, "Print Wikipedia Reaches Final Entry," *New York Times*, July 13.
 Hannah Ghorashi, "FROM AAAAA! TO ZZZAP!" *ARTnews*, June 24.
 Dan Damon, "Why print copies of Wikipedia?," June 19, 2015, *BBC World Service*.
 "Un artiste américain imprime la version anglaise de Wikipedia," *Libération*, June 19.
 Will Greenberg, "Ever Wonder what a \$500,000 Version of Wikipedia Would Look Like?," *Washington Post*, June 18.
 Nicole Walsh, "Meet the Man Printing Wikipedia as a Book," *Vice Creator's Project*, June 18.
 Jennifer Schuessler, "Moving Wikipedia from Computer to Many, Many Bookshelves" *New York Times*, June 17.

Art+Feminism 2015: 5 selected reviews out of over 60

- 2015 Sarah Cowan, "Art-Minded Feminists Become Wikipedians for a Weekend," *Hyperallergic*, March 12.
 Anna Russell, "'Edit-a-Thon' Volunteers Revamp Female Artists' Wikipedia Profiles," *The Wall Street Journal*, March 9.
 Jennifer Schuessler, "MoMA to Host Wikipedia Editing Marathon" *The New York Times*, March 6.
 Issie Lapowsky, "Meet the Editors Fighting Racism and Sexism on Wikipedia," *Wired*, March 3, 2015,
 "The Agenda: This Week in New York," *Art in America*, March 3.

Art+Feminism 2014: 6 selected reviews out of over 40

- 2014 Avishay Artsy, "Edit-a-thons aim to erase Wikipedia's gender gap," *KCRW Radio*, Los Angeles, February 12.
 Kat Stoeffel, "Closing Wikipedia's Gender Gap – Reluctantly," *New York Magazine*, February 11.
 Robin Cembalest, "101 Women Who Got Wikipedia Pages This Week," *ARTNews*, February 6.

Catherine Wagley, "Wikipedia Becomes a Battleground for Art Activism," *LA Weekly*, February 6.
 Erica Butler, "Fixing Wikipedia's gender bias, one edit at a time," *PRX – Public Radio Exchange*, February 1.
 Sarah Mirk, "An Epic Feminist Edit-a-Thon Takes Aim at Wikipedia's Gender Gap," *Bitch Magazine*, January 24.

Other Reviews

- 2014 Steven Winn, "Art is constantly reinvented for new times," *SF Gate*, November 6.
- 2013 Edward A. Shanken, *Inventar el Futuro: arte electricidad nuevos medios*, Fiction Department.
 Kyle Petreycik, "In Search of an Alternative Art Education #AltEdu," *Hyperallergic*, May 10.
 Juliet Helmske, "Eco-Visualization, Aesthetics for Sustainability," *Urban Omnibus*, April 10.
- 2012 Linda Weintraub, *To Life! Eco Art in Pursuit of a Sustainable Planet*, University of California Press.
 Alessandro Ludovico, "The Social Media Reader," *Neural*, November 27.
 Edward A. Shanken, "Investigatory art: Real-time systems and network culture," *NECSUS European Journal of Media Studies*, November 22.
 An Xiao, New Book Explores Social Media From Many Angles, *Hyperallergic*, March 6.
- 2011 Josephine Bosma, *Nettitudes: Let's Talk Net Art*, Institute of Network Cultures/NAi Publishers.
- 2010 Dominic Smith, Open Source Practices, interview in *A Brief History of Working with New Media Art*, eds Cook, Graham, Gfader, and Lapp, The Green Box Press, pp 181-188.
 Meike Laaf, "Von null auf Buch in 120 Stunden," *Die Tageszeitung*, February 8.
 Macy Halford, "1,000 Words: OMG LOL," *New Yorker*, January 12.
- 2009 Edward A. Shanken, *Art and Electronic Media*, Phaidon Themes and Movements Series.
 Susanne Anker, "Prime Objects and Body Doubles," *Art Journal*, Volume 64, Number 4, Winter.
- 2006 Reena Jana and Mark Tribe, *NewMedia Art*, Taschen/Basic Art, pp. 13-14.
 Joline Blais and Jon Ippolito *At the Edge of Art*, Thames and Hudson, pp. 116-117.
 Olav Velthuis, *Imaginary Economics: Contemporary Artists And The World Of Big Money*, NAI.
 Dan Mitchell, "What's Online", *New York Times*, March 25th, p. C5, Review of Oil Standard
 February 5, The Arts, p. E2.
- 2003 Rachel Greene, *World of Art Series: Internet Art*, Thames and Hudson, pp. 184-185, 191.
 Miles Orvell, *American Photography*, Oxford University Press, pp. 202-203.
- 2001 2001, Reena Jana, "Is it Art or Memorex?", *Wired*, May 21th.
 Achy Obejas, "Identity for Sale", *Chicago Tribune*, February 6, Section 5, p. 1, 3.
 Tilman Baumgartel, "Der Ausverkauf des Selbsts", *Berliner Zeitung*, February 5, p. 16.
 Matthew Mirapaul, "A Market for Flotsam and Jetsam as Performance Art", *New York Times*.

Books + Dossiers

- 2014 The Social Life of Artistic Property, co-editor, Publication Studio
- 2013 Experiments In Extra-Institutional Education, editor, Social Text
- 2012 The Social Media Reader, editor, NYU Press
- 2010 Collaborative Futures, co-author with Adam Hyde, Mike Linksvayer, Marta Peirano, Mushon Zer-Aviv, Alan Toner, et al, FLOSSmanuals Press, First and Revised Second Edition

- 2008 Digital Foundations: Introduction to Media Design with the Adobe Creative Suite, with xtine burrough, New Riders/AIGA Design Press, Print and online book.

Grants and Awards

- 2015 Wikimedia Foundation Grant: Art+Feminism 2016
- 2014 Wikimedia Foundation Grant: Art+Feminism Training and Network Expansion
100 Leading Global Thinkers, Foreign Policy Magazine
- 2013 Co-Production Residency, The Banff Centre
City University of New York, PSC-CUNY Grant, for Print Wikipedia
- 2011 Wikipedia Teaching Fellow, Wikimedia Foundation
Mellon Fellowship, Center for the Humanities, CUNY Graduate Center
- 2008-2010, Senior Fellow, Eyebeam Center for Art and Technology, New York
- 2008 Senior Artist Residency, Interactive Screen 0.8: Sustain, Banff Center for the Arts, August 24th-29th
- 2007-2008, Research Fellow, Eyebeam Center for Art and Technology, New York
- 2006 Eyebeam Artist Residency, for Real Costs
Rhizome.org Commission, Jury's Choice & Community Selection, for Real Costs
Turbulence Project Commission, for Oil Standard, with funds from NYC Department of Cultural Affairs
- 2005 Turbulence Project Commission, for IN Network, with funds from the Jerome Foundation
- 2002 Turbulence Project Commission, for The Essential Guide to Performing Michael Mandiberg

Teaching

- 2011-present, Associate Professor, College of Staten Island/CUNY
- 2011-present, Doctoral Faculty, CUNY Graduate Center
- 2004-2011, Assistant Professor, College of Staten Island/CUNY