



Stephanie Dinkins, Conversations with Bina48: Fragment 11, Fourth Mirror, 2018 (still). 2 min 45 sec. Courtesy of the artist.

Algorithmic Bias

Opening 30th September 2021, 6 - 9pm

1st - 10th October 2021, 1:30 - 6:00 pm, Thursday - Sunday

[Senne], Rue de la Senne 19, 1000 Brussels, Belgium

[Senne] is thrilled to present Algorithmic Bias, a group exhibition featuring new and previous works from 13 international artists, including Zach Blas, Joy Buolamwini, Bob Bicknell-Knight, Jacob Ciocci, Ami Clarke, Heather Dewey-Hagborg, Stephanie Dinkins, Ben Grosser, Joel Holmberg, Esther Hovers, Claire Jervert, JODI and Lynn Hershman Leeson.

Curated by Bob Bicknell-Knight

Algorithmic Bias is an exhibition concerned with the systems and structures embedded within the internet of things, many of which were and continue to be created with an in-built bias. Algorithms have become a common tool used in the framework of social media platforms, created by unknown coders, reinforcing social biases of race, gender, sexuality, and ethnicity. The works in the exhibition explore and critique the procedurally generated invisible rules that control our online and offline lives.

-/-

In a newly built city, glittering in the early morning light of a dying sun, I weave in between crowds of tourists. Every day more of them appear, transfixed by the appearance of the citadel, an incredibly tall and thin building that stretches high into the sky.

The citadel was built over the course of a year, alongside the city that surrounded it. Its creation was swift, primarily made from concrete and, in doing so, quickly depleted the world's supply of sand.

Small, incredibly conspicuous, permanent surveillance towers had been built on every street. By some, they were seen as overt forms of hostile architecture, restricting any and all acts of rebellion. Others, who lived and worked in the citadel, believed in the towers and their embedded technologies, helping the city's civilians to live a happier, healthier lifestyle.

You see, each tower was equipped with high tech CCTV equipment, connected to a complex algorithm that detects abnormal behaviour within an observed environment. These vision-based surveillance techniques detect and classify intrusion, loitering, and violence, among other, more militant, behaviour.

I used to wonder what those terms actually meant, in the world of the real, detached from their original spawn points; overtly clinical board rooms and glass office spaces. I guess, a more important question might be who, then, is tasked with allocating examples of such behaviour? Examples that will train the algorithm to detect these occurrences quickly and swiftly on a regular basis, continuing to keep the city safe.

Algorithms, and the process of machine learning in particular, require a huge amount of data, labelled and tagged. To identify certain intrusive or violent behaviour, machines need to have their vision refined, being fed massive quantities of manually annotated imagery to efficiently identify patterns. For some time, low paid human beings have been used, crowdsourced through companies who employ a global workforce to annotate endless datasets. These growing collections of data are then used by companies in different platforms and programmes around the world.

Some of these temporary employees live on the outskirts of the city, housed in vast, hive like structures, buried beneath the ground. They, like you and I, live and work every day of their lives, toiling under the weight of the world whilst dreaming of avarice and the pure potentiality of what might have been.

Who then, can be trusted to teach the machines, when human beings are both born with, and taught to have, an in-built bias? We are intricate creatures, living highly charged, emotional lives. These workers are merely one layer of an increasingly complicated stack, filled with interlocking grids, connecting digital and physical beings to create a cohesive, evolving, cybernetic organism.

Generally, I keep my head down when near the citadel, afraid of what worlds reside within this fortress like apparition. It is, as they say, better to be a toad hidden under a stone than a butterfly crushed beneath it.

Unlike citizens of the city, tourists are permitted to come and go as they please, unobstructed by a complex social credit system that prevents many from leaving this concrete abyss. As a citizen everything you do is tracked and recorded, from the purchases you make to being reprimanded at work. The local government works with public and private companies to maintain a constantly shifting database. Residents are ranked on a varied scale, determining whether they're able to eat at certain restaurants, socialise in public, or travel outside of the city.

There have been times in the past where I've been flagged by the system, mistaken for someone else of similar age, stature, or race. It has affected my overall ranking, but if I continue to work hard, and prove that I'm a happy cog, I'll be able to up my score and escape this city.

-/-

Zach Blas (b. 1981, US) is an artist, filmmaker, and writer whose practice spans moving image, computation, theory, performance, and science fiction. He is a Lecturer in the Department of Visual Cultures at Goldsmiths, University of London. Blas has exhibited, lectured, and held screenings internationally, recently at the de Young Museum, Tate Modern, Walker Art Center, 2018 Gwangju Biennale, the 68th Berlin International Film Festival, Matadero Madrid, Los Angeles County Museum of Art, Art in General, Gasworks, Van Abbemuseum, Institute of Contemporary Arts Singapore, e-flux, Whitechapel Gallery, ZKM Center for Art and Media, and Museo Universitario Arte Contemporáneo. Recent works have addressed fantasies of artificial intelligence, policing as mysticism, the crystals balls of Silicon Valley, time travel, and dildos. His practice has been supported by a Creative Capital award in Emerging Fields, the Arts Council England, and Edith-Russ-Haus für Medienkunst. Blas's writings can be found in the collections *You Are Here: Art After the Internet*, *Documentary Across Disciplines*, *Queer: Documents of Contemporary Art*, and *e-flux journal*. His work has been written about and featured in *Artforum*, *Frieze*, *ArtReview*, *BBC*, *The Guardian*, and *The New York Times*. Blas is a 2018-2020 UK Arts and Humanities Research Council Leadership Fellow.

Joy Buolamwini (b. 1989, CA) is a computer scientist, and digital activist who uses art and research to illuminate the shortcomings of artificial intelligence. She founded the Algorithmic Justice League to create a world with more equitable and accountable technology. Her TED Featured Talk on algorithmic bias has over 1 million views. Her MIT thesis methodology uncovered large racial and gender bias in AI services from companies like Microsoft, IBM, and Amazon. In addition to advising elected officials during US congressional hearings, she serves on the Global Tech Panel to advise world leaders and executives on reducing AI harms.

Buolamwini has written op-eds on the impact of AI for publications like *TIME Magazine* and *New York Times*. Her spoken word visual audit "AI, Ain't I A Woman?" which shows AI failures on the faces of iconic women like Serena Williams, Oprah Winfrey, and Michelle Obama has been part of exhibitions ranging from *Ars Electronica* to the Barbican Centre, UK. A Rhodes Scholar and Fulbright Fellow, Joy has been named to notable lists including the *Bloomberg50*, *Forbes Top 50 Women in Tech* (youngest), and *Fortune Magazine* (40under40) named her "the conscience of the AI revolution". She holds graduate degrees from Oxford University and MIT; and a bachelor's from the Georgia Institute of Technology. As a former pole vaulter, she still holds Olympic aspirations if not realities.

Bob Bicknell-Knight (b. 1996, Suffolk, UK) is an artist, curator and writer, working in painting, sculpture, video, installation and digital media. His work is influenced by surveillance capitalism and responds to the hyper consumerism of the internet, exploring ideas surrounding the automation of work and global power structures, as well as critically examining contemporary technologies. Bicknell-Knight is also the founder and director of *isthisit?*, a platform for contemporary art, exhibiting over 800 artists since its creation in May 2016.

Selected solo and duo exhibitions include *Eat The Rich* at Galerie Sono, Paris (Upcoming, 2021), *Pickers* at INDUSTRA, Brno, Czech Republic (Upcoming, 2021), *It's Always Day One* at Office Impart, Berlin (2021), *Bit Rot* at Broadway Gallery, Letchworth (2020), *The Big Four*, duo show with Rosa-Maria Nuutinen at Harlesden High Street, London (2019), *Wellness, Ltd.*, duo show with Erin Mitchell at Galerie Manque, New York (2019), *State of Affairs* at Salon 75, Copenhagen (2019), *CACOTOPIA 02* at Annka Kultys Gallery, London (2018) and *Sunrise Prelude* at Dollspace, London (2017). Bicknell-Knight has spoken on panel discussions and given artist talks at *panke.gallery*, Berlin (2021), *Contemporary Calgary*, Canada (2020), *Tate*

Modern, London (2019), University of Cambridge, Cambridge (2019), Camberwell College of Arts, London (2019) and Goldsmiths, University of London, London (2018).

Jacob Ciocci (b. 1977, US) is a multimedia artist and musician. Ciocci is a founding member of the influential art collective Paper Rad whose work in the field of net.art – one of contemporary arts' recent movements of the true avant-garde – helped ignite the genre, and is considered formative to a generation of younger artists whose works deals with the digital. He is also a co-founder of the long running electronic music and performance group, Extreme Animals (see Spotify!). Ciocci has had solo exhibitions with Foxy Productions, New York; Interstate Projects, New York; Anthology Film Archives, New York; Cooper Cole Gallery, Toronto; and And/Or Gallery, Los Angeles. He has exhibited and performed at a range of venues, including MOMA, the New Museum, and the Tate Britain.

Ami Clarke is an artist, writer, and educator, working within the emergent behaviours that come of the complex protocols of platform capitalism in everyday assemblages, with a focus on the inter-dependencies between code and language in hyper-networked culture. My research focus' on algorithmic governance and performative modes of production from a feminist post-human position. I utilise various digital media, often distributed, with aspects of live programming, to produce video/sound and spoken word performance. My work is conceptually framed in ways that means critique is articulated through its production, drawing out the new (old) behaviours emerging from human engagement with technology through performative modes.

She is also founder of Banner Repeater; a reading room with a public Archive of Artists' Publishing and project space, opening up an experimental space for others, on a working train station platform at Hackney Downs station, London. Ideas that come of publishing, distribution, and dissemination, that lead to a critical analysis of post-digital art production, are shared in her practice as an artist and inform the working remit of Banner Repeater.

Dr. Heather Dewey-Hagborg (b. 1982, US) is a transdisciplinary artist and educator who is interested in art as research and critical practice. Her controversial biopolitical art practice includes the project Stranger Visions in which she created portrait sculptures from analyses of genetic material (hair, cigarette butts, chewed up gum) collected in public places.

Heather has shown work internationally at events and venues including the World Economic Forum, the Daejeon Biennale, the Guangzhou Triennial, and the Shenzhen Urbanism and Architecture Biennale, the Van Abbemuseum, Transmediale and PS1 MOMA. Her work is held in public collections of the Centre Pompidou, the Victoria and Albert Museum, and the New York Historical Society, among others, and has been widely discussed in the media, from the New York Times and the BBC to Art Forum and Wired.

Heather has a PhD in Electronic Arts from Rensselaer Polytechnic Institute. She is an artist fellow at AI Now, an Artist-in-Residence at the Exploratorium, as well as Science Center, and is an affiliate of Data & Society.

She is also a co-founder and co-curator of REFRESH, an inclusive and politically engaged collaborative platform at the intersection of Art, Science, and Technology.

Stephanie Dinkins (b. 1964, US) is a transmedia artist who creates platforms for dialog about artificial intelligence (AI) as it intersects race, gender, aging, and our future histories. She is particularly driven to work with communities of color to co-create more inclusive, fair and ethical artificial intelligent ecosystems. Dinkins' art practice employs lens-based practices,

emerging technologies and community engagement to confront questions of bias in AI, consciousness, data sovereignty and social equity. Investigations into the contradictory histories, traditions, knowledge bases and philosophies that form/in-form society at large underpin her thought and art production.

Dinkins earned an MFA from the Maryland Institute College of Art in 1997 and is an alumna of the Whitney Independent Studies Program. She exhibits and publicly advocates for inclusive AI internationally at a broad spectrum of community, private and institutional venues – by design. Dinkins is a 2019 Creative Capital Grantee as well as a 2018/19 Soros Equality Fellow, Data and Society Research Institute Fellow and 2018 Sundance New Frontiers Story Lab Fellow. Past residencies include Eyebeam, Pioneer Works Tech Lab, NEW INC, Blue Mountain Center; The Laundromat Project; Santa Fe Art Institute and Art/Omi. The New York Times recently featured Dinkins in its pages as an AI influencer. Apple Inc recognized Dinkins' research and community-centered efforts by featuring her as a local hero in their "Behind the Mac" ad campaign (Brooklyn, NY edition). Wired, Art In America, Artsy, Art21, Hyperallergic, the BBC, Wilson Quarterly and a host of popular podcasts have recently highlighted Dinkins' art and ideas.

Ben Grosser focuses on the cultural, social, and political effects of software. What does it mean for human creativity when a computational system can paint its own artworks? How is an interface that foregrounds our friend count changing our conceptions of friendship? Who benefits when a software system can intuit how we feel? To examine questions like these, he constructs interactive experiences, machines, and systems that make the familiar unfamiliar, revealing the ways that software prescribes our behavior and thus, how it changes who we are.

Grosser's works have been exhibited at major international venues, exhibitions, and festivals, including Eyebeam in New York, Somerset House and the Barbican Centre in London, Museu das Comunicações in Lisbon, Museum Kesselhaus in Berlin, FILE in São Paulo, Digital Arts Festival in Athens, Píksel in Bergen, Japan Media Arts Festival in Tokyo, WRO Media Art Biennale in Wrocław, Science Gallery in Dublin / London / Detroit, Museum Ludwig in Cologne, Kunsthau Langenthal in Switzerland, IMPAKT in Utrecht, and Galerie Charlot in Paris. His work is currently on view as part of AI: More than Human at the World Museum in Liverpool, and Send Me To Endless Happy Warning at Galerie TIC in Brno. Upcoming exhibitions include AI: More than Human at the Fernán Gómez Centro Cultural in Madrid ('22), Hooked at Science Gallery Atlanta ('22), UP CLOSE at MOD in Adelaide, Deep Truth at Rijksmuseum Twenthe in Rotterdam ('21), Artifacts at Casa Hoffmann in Bogotá, and a solo exhibition titled Software for Less at arebyte Gallery in London.

Joel Holmberg (b. 1982, US) is trained as a sculptor but works in a variety of formats, including analog and digital media. He approaches the Internet with an artist's sensitivity and a hyperawareness of the ironies, absurdities, and paradoxes it often fosters. Though his tongue-in-cheek works often have an air of merry prankster-ism about them, they also seem to stem from an underlying sincerity, a quest to capture and highlight the human aspects of (as he terms it) "corporatized" digital mediums. He is a member of the web-based collective Nasty Nets.

Holmberg received his BFA from Virginia Commonwealth University (2005) and his MFA from Yale University (2013). He has had solo exhibitions at American Contemporary, New York (2014 and 2013), Harmony Murphy Gallery, Los Angeles (2014), Cleopatra's, Brooklyn (2014), NADA, Miami Beach (2013), Outpost, Norwich, England (2012), and PMgalerie, Berlin (2011). He has participated in group exhibitions at Foxy Production, New York (2014), American

Contemporary, New York (2014 and 2013), Ullens Center for Contemporary Art, Beijing (2014), So What Space, Brooklyn (2013), Kettle's Yard, Cambridge, England (2013), the Museum of the Moving Image, New York (2012), the 9th Shanghai Biennale (2012), W139, Amsterdam (2011), the New Museum, New York (2010), Detour, Vienna (2010), Townhouse Gallery, Cairo (2010), Art Dubai (2010), Espace multimédia gantner, Belfort, France (2010), Nederlands Instituut voor Mediakunst, Amsterdam (2009), 3rd Fotofestival, Mannheim, Germany (2009), Sculpture Park, Atelierhof Kreuzberg, Berlin (2009), the Sundance Film Festival, Park City, Utah (2009), the New York Underground Film Festival (2008), Rhizome.org, New York (2007), and Eyebeam, New York (2005).

Esther Hovers (b. 1991, NL) investigates how power, politics and control are exercised through urban planning and the use of public space. She was trained as a photographer but creates installations in which photographs, drawings, text and film play an equal part. She is interested in finding poetic translations for power structures and technological developments.

Esther Hovers has exhibited at Aperture Foundation in New York City; Lianzhou Photo Festival in China; and Foam Photography Museum of Amsterdam, et al. Her work has been published in *The New York Times*; *The Washington Post*; *M – Le Magazine du Monde* and *Wired*, among other publications. In 2019 Hovers was an artist-in-residence at NARS Foundation (The New York Art Residency and Studios) in Brooklyn, New York.

Claire Jervert is a multi-disciplinary artist whose work examines the impact of new technologies, such as AI, VR and androids. Her work has been exhibited in museums and galleries throughout the United States and internationally, including: *Duty Free*, Chelsea College of Art, London, UK curated by Bob Bicknell-Knight; *A View from the Cloud*, co-produced by Streaming Museum and World Council of Peoples for the United Nations, New York, NY; *Android Portrait Project*, exhibition and artist talk, International Symposium of Electronic Art, Hong Kong; *Belong. Here. Now.*, Art Basel/Miami Design, Miami, FL; *MTV Momentum Technology Videos Film Festival*, Institute of Women and Art, Rutgers University, NJ; *AR (Augmented Reality) Intervention*, Thin Air Gallery, Bushwick, NY; and *Sirve Verse*, La Paternal Project Space, Buenos Aires, AR.

She is a former member of the Stevens Institute of Technology Advisory Committee on Art and Technology who has received awards from the Mid-Atlantic Arts Foundation, Atlantic Center for the Arts, and Bronx Museum. Reviews include the *New York Times*, *The New Yorker*, and *Frieze*, among others.

JODI - the art collective consisting of Joan Heemskerk (NL, 1968) and Dirk Paesmans (BE, 1965) - pioneered web-based art in the mid-1990s. Their work uses the widest possible variety of media and techniques, from installations, software and websites to performances and exhibitions. In a medium-specific way, they (de)construct and analyze the languages of new media: from visual aesthetics to interface elements, from codes and features to errors and viruses. They challenge the relationship between technology and users by subverting our expectations about the functionalities and conventions of the systems that we depend upon every day. Paesmans and Heemskerk have a background in video art and photography respectively. Both attended CADRE, the electronic arts laboratory at San Jose State University in California; Dirk Paesmans also studied with Nam June Paik at the Kunstakademie in Dusseldorf. The duo works together since 1995.

JODI's work is featured in most art historical volumes about electronic and media art, and has been exhibited widely at venues such as Documenta X, Kassel; Stedelijk Museum, Amsterdam; ZKM, Center for Art and Media, Karlsruhe; Bonner Kunstverein and Artothek, Bonn;

InterCommunication Center, Tokyo; Centre Pompidou, Paris; Center for Contemporary Arts, Glasgow; Guggenheim Museum, New York; Eyebeam, New York; and Museum of the Moving Image, New York, among many others. They received a 1999 Webby Award in the category Net Art. In 2014, JODI was awarded the inaugural Prix Net Art Award by Rhizome, a leading art organization dedicated to born-digital art and culture affiliated with the New Museum in New York.

Lynn Hershman Leeson has been internationally acclaimed for her art and films over the last five decades. Cited as one of the most influential media artists, Hershman Leeson is widely recognized for her innovative work investigating issues that are now recognized as key to the workings of society: the relationship between humans and technology, identity, surveillance, and the use of media as a tool of empowerment against censorship and political repression. Over the last fifty years she has made pioneering contributions to the fields of photography, video, film, performance, artificial intelligence, bio art, installation and interactive as well as net-based media art. ZKM | Center for Art and Media Karlsruhe, Germany, mounted the first comprehensive retrospective of her work titled Civic Radar. A substantial publication, which Holland Cotter named in The New York Times “one of the indispensable art books of 2016.”

Lynn Hershman Leeson is a recipient of a Siggraph Lifetime Achievement Award, Prix Ars Electronica Golden Nica, and a John Simon Guggenheim Memorial Foundation Fellowship. In 2017 she received a USA Artist Fellowship, the San Francisco Film Society’s “Persistence of Vision” Award and will receive the College Art Association’s Lifetime Achievement Award.

Her five feature films – Strange Culture, Teknolust, Conceiving Ada, !Women Art Revolution: A Secret History, and Tania Libre are all in worldwide distribution and have screened at the Sundance Film Festival, Toronto Film Festival and The Berlin International Film Festival, among others. She was awarded the Alfred P. Sloan Foundation Prize for writing and directing Teknolust. !Women Art Revolution received the Grand Prize Festival of Films on Art.

Artwork by Lynn Hershman Leeson is featured in the public collections of the Museum of Modern Art, The San Francisco Museum of Modern Art, The Zentrum fur Kunst und Medientechnologie, the Los Angeles County Museum of Art, The Tate Modern, The National Gallery of Canada, and the Walker Art Center in addition to many celebrated private collections.