The exhibition ‘Climactic Post Normal Design’ challenges the weak logic of design thinking and aims to shift design debate from thinking about progressive design objects to reflecting critically on the design processes that exclude most of the world’s population from the debate.

We question how mainstream speculative critical design practice distinguishes itself from design’s racist, sexist and classist foundations. Relevant to the majority of world populations who are marginalized in current design practices.

“alternative models for design that broaden human capacity to understand and intervene in social and environmental crises.”
Design has failed to create a coherent practice that can tackle the nature of complex, global, and rapidly shifting futures. It is structured uncritically around the logics of coloniality at the foundations of the modern world-system.

“In operating in different spheres: cultural, economic, and geopolitical” it asks questions of our present capacity to develop and proliferate forms of design thinking that accommodate disparity, divergence and conflict, when these challenges are confronted on a global scale. “We establish that this way of seeing futures as concrete things must shift from understanding the present as static, when the reality is the very opposite: the present changes continuously.”

“contemporary design alternatives that frame the future as unknowable from a present seen as unfixed and possibly unfixable”

The Exhibition and Workshops
4 November to 11 December 2016
Miller Gallery at Carnegie Mellon University

ancient traditions and celebrate make-do culture”
“ecologies and environments that are neither totally natural, nor totally technological”

“What alternatives to traditional ways of thinking about sustainability and survival, what strategies for coping and dealing with the rapidly shifting landscapes and ecosystems of a changing planet, have designers proposed in recent years?”

“alarming statistics of global pollution”
“imagined and lived alternatives”
CLIMACTIC: POST NORMAL DESIGN

4 November - 11 December 2016

Miller Gallery
Carnegie Mellon University
5000 Forbes Ave
Pittsburgh, PA 15213
United States

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Edited by Ahmed Ansari, Deepa Butoliya, Katherine Moline.

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The exhibition, Climactic: Post Normal Design, focuses on design and political activism surrounding issues of coloniality, crises around culture and race, and climate change in both the Global South and North. The curatorial premise of the exhibition is to engage audiences in thinking about the precarity of the age we currently live in, a precarity not in some small part due to the contemporary practices of design. Our exhibition, workshops and panel discussions present alternative models for design that broaden human capacity to understand and intervene in social and environmental crises. Climactic: Post Normal Design is co-organized by the CMU School of Design and Miller Gallery. It is the fourth iteration of a series of exhibitions and symposia initiated by Feral Experimental: New Design Thinking, shown at University of New Wales Galleries, Sydney, Australia, in 2014.

Three themes draw together the works in the exhibition: Climactic Change, Speculative Anything and The Anthropocene. Under the banner of Climatic Change, defined here as transformation that is the culmination of a number of divergent trajectories at the same time, the exhibition and symposium posit that design has failed to create a cognizant practice that can tackle the nature of complex, global, and rapidly shifting futures. Often structured uncritically around the logics of coloniality at the foundations of the modern world-system, the design disciplines exist to uphold hierarchical structures that maintain the status quo of racist, sexist and class distinctions. In contrast, this exhibition and symposium bring together tacit and explicit design engagements with contemporary global challenges that are not only complex and multilayered, but are recognized as operating in different spheres: cultural, economic, and geopolitical. We see these spheres as connected to the social imaginary described by Cornelius Castorlans and Seja Appadurai, among others. When the social imaginary is defined by Appadurai as ‘central to all forms of agency’ and ‘the key component’ in globalization where the imagination is understood as a ‘social practice’ that is ‘no longer static, when the reality is the very opposite: the present changes as concrete things must shift from understanding the present as connected. In the context of recent crime reports in the media the work suggests that surveillance technologies, such as CCTV, is an infrastructure and a technology with which to create new narratives of inclusion at urban intersections. A second group of works brought together in ‘Climactic: Post Normal Design’ address the notion of Speculative Anything. These are designs that challenge the canons and lexicons of design thinking that are largely dominated by white, middle-class men – and therefore dismiss or trivialize the discourses that engage design in issues of race, gender, and class. We see little genuine collaboration with other disciplines and professions on an equal footing with design and we question how mainstream speculative critical design practice distinguishes itself from design’s racist, sexist and classist foundations. In response to the homogeneity of contemporary design discourse, especially in response to the challenges and critiques posed by critical and speculative design practices in recent years, we propose that alternative ways of thinking, such as the idea of ‘pluraliversal studies’ described by Andrea Exobar, open up futural alternatives that are relevant to the majority of world populations who are marginalized in current design practices.

Looking pluriversally entails rethinking practices of design that take in ways of understanding the world that are inclusive of the voices of those who have been marginalized within discourses of contemporary practice. According to Exobar, what this global pluriversality also entails is developing models of sustainability and discourses for transition that are not only embedded in ‘inter-connectedness and interdependencies of ecology’ but also ‘advocate for a diverse economy that has a strong base in communities.’ The curatorial team has assembled a wide range of works from around the world with the aim to include pluriverses that draw on science fiction, ancient traditions and celebrate make-do culture. Works such as Night School on Anarres by Onkar Kular and Noam Toran with Nestor Pestana (2016) explore the Utopian proposal of twentieth-century anarchism in Ursula K Le Guin’s novel The Dispossessed (1974). As an experimental workshop commissioned by Kings College, London, Night School on Anarres imagines how language can create a way of life that doesn’t employ notions of possession and ownership. Instead of the proprietary norms of capitalism, the workshop speculate on anarchic principles free of political parties and government. Because ownership has been eradicated with the erasure of money, and the allocation of work is governed by a computer, residents of Anares represent the subtitle of Le Guin’s novel: ‘an ambiguous utopia.’ Horizon, Open Fires by Liliana Ovaille / Colectivo 2010, (2013) presents the reality of a female family of ceramicists in Mexico upholding ancient traditions in ceramics production where decoration is produced with the black traces of smoke and coal, a permanent imprint of the fire they are exposed to. Mangala For All by Superflex (2013) is a project that brought to the surface assumptions in Western media about the right of a nation such as India, led by pioneering women in science, to work around the costs of the space race. Auto Raja: A sustainable community driven Rickshaw Service by Shash Lab (2011) proposes an entrepreneurial platform for Auto Raja drivers whose average wage is a few hundred rupees (less than fifty US dollars) a week. New Channel: Wishing Game by Tie Ji and Human University (2013) looks like from Indigenous perspectives, and how it might be activated as an event in process across a university. The cognitive map reflects commonalities-in-difference between a Canadian First Peoples Knowledge, Australian Indigenous Knowledge, and a Western perception of transformative knowledge. In this way, the map becomes a mediating object for future intercultural conversations. The Possibility of Islands by Cairo based designer and architect Manar Moursi (2015) considers islands from a number of perspectives to create a survival prototype in the event of a tsunami engulfing the city of Tokyo, Japan. Rather than attempt to maintain a hard boundary between land and sea, repurposed plastic-crate islands accommodate both, and do so with the excess of plastic that may have contributed to global warming in the first place. Myths of the Near Future: CCTV by Katherine Moline (2016) explores how surveillance technologies, such as CCTV, is an infrastructure and a technology with which to create new narratives of inclusion at urban intersections.

The works assembled in the exhibition both tacitly and explicitly demonstrate some of these dimensions of rapidly shifting futurescapes of social upheaval and climactic change. For example, Design in Times of Crisis: Onira by Luiza Prado & Pedro Oliveira (2016) and Design in Times of Crisis: Agerinha Vive by Luiza Prado, Pedro Oliveira & Rafael Arrivabene (2016) question the idea of design fictions by drawing inspiration from interviews and media reports. People from the fringes of the modern world-system, and involve disenfranchised populations that, while often the subject of dystopian futural fictions, have their experiences and views rarely represented in those very fictions. Drawing Together Indigenous Futures by Tristan Schultz (2015) maps what cultural competency
draws communities together to celebrate traditions that are disappearing as younger populations relocate to urban centers for employment. Jugaad and Jau Kali tactics that refute conceptions of design as status-enhancing ever-new objects, are explored in Eyyewear by Cyrus Kabiru (2016). In a number of works, students of Speculative Critical Design at Carnegie Mellon University (2016) suggest that Post-Critical Design pushes the envelope of critical design practice by incorporating the theme of the pluriverse and thus challenge how Critical Design is practiced by North American universities.

The Critical Jugaad mark by Deepa Butidia (2016) taps into the potential of criticality practiced as a part of everyday make-do culture and frames jugaad as a tool for political resistance. The future aspects of everyday ingenuity are projected through these seeds of resistance mobilized by design that is by everyone, and for everyone. The alternate futures are an extrapolation of alternate presents, and suggest the future most likely: one where everyday ingenuity replaces corporate systems. (Ansari and Mehwish Zara Zaidi (2016) takes a long term view and documents a conversation between two design scholars, one in the US and one in Pakistan, about the changing global nature of design practice and education. Likewise, Mapping Transition by Terry Irwin and Laurene Vaughan (2016) presents a workshop finale envisioned by Terry Irwin for Carnegie Mellon University.)

In deep considerations of design in the era of The Anthropocene, we take stock of different practices that have developed in response to situations where the nature of changing artificial/biological systems has become increasingly uncertain and the stakes high. Taking seriously the evidence for climate change in both the Global South and North, and of the increasing complexity of ecologies and environments that are neither totally natural, nor totally artificial, we ask what new design practices might emerge to reverse and correct the rate, scale, and depth of ecological change? What alternatives to traditional ways of thinking about the ideal room temperature with which to engage producers of climate control in Denmark. The Free Universal Construction Kit by Golan Levin and Shawn Sims (2014) extends the value of toys from childhood to teenage years by providing two-way adapters that connect to popular construction kits, such as Lego, Fischertechnik and Tinkertoys and encourage new connections between otherwise closed systems. Similarly, BIOdress by Sara Adlitya, Beck Davis, Zoe Mahony, Raune Frankjaer and Tricia Flanagan (2014) links humans to plants by a dress and provides a heightened understanding of the environment’s quantitative state. In this the collaborators develop a broader exploration of interspecies communication and an approach to sustainable design that moves beyond the Anthropocene.

The exhibition ‘Climactic: Post Normal Design’ challenges the weak logic of design thinking and aims to shift design debate from thinking about progressive design objects to reflecting critically on the design processes that exclude most of the world’s population from the debate. In sum, we hope that exhibiting this collection of works, and the discussions we hope to generate around them, expose design discourse to critical self-reflection, and seed the grounds for more radical discourses from the margins of design practice. Our aim is to challenge the design mainstream towards creating more diverse, equal, and better alternatives to the kinds of futures we have open to us today.
### LIST OF WORKS

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<td>Vinyl print, 20 x 36”</td>
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<td>Cyrus Kahrur, courtesy of Smac Gallery, Capetown</td>
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<td>Two examples of Eyewear, found objects, one at 8.3 x 3”, one at 7 x 3.25”</td>
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<td>Artfact, mixed media, 17 x 15.25” Print, 25 x 15.25”</td>
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<td>Seven Print posters, each 11 x 16.7”</td>
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<td>ECD/ Energy Bubble, 8.5 x 7”</td>
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<td>12 Prints, each 8.35 x 5.5” Video, 36” monitor</td>
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<td>Interactive prototype, plastic, 75 x 75 x 3” Four Prints, each 11.5 x 7”</td>
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<td>Video projection, 90 x 40”</td>
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Collaborating under the nom de plume A Parede, Luiza Prado and Pedro Oliveira create projects in the series Design in Times of Crisis that discuss, through a series of experiments, the current realities of people living in Brazil. The project, conceived in response to the country’s turbulent general elections of 2014, means to interrogate the social and political tensions that Brazil would face twenty-something years in the future, should a highly conservative and neoliberal coalition step into power. In June 2016, together with other researchers with ties to the Global South, Prado and Oliveira launched Decolonising Design, a platform that interrogates the ways in which design practice and design studies act within the framework of coloniality, and this work continue their longstanding interrogation of the absence of debate about ‘issues of race, class and gender privilege’ in Speculative and Critical Design.

In a scenario where there laws have been implemented, new contraceptive technologies would need to be developed and released; starting from this premise, Prado and Oliveira explore the ways in which the public perception of birth control, sexuality, and gender could possibly shift, and what kinds of resistance strategies would emerge as a result.

A written narrative portrays the scenario, and describes a product, Oniria, developed to enforce this anti-birth control bill. The product’s marketing strategy focused on gaining the public’s acceptance by associating its use with responsibility, beauty, respectability and patriotism, this was achieved, for instance, by introducing Oniria in influential cultural artefacts - such as telenovelas - and distributing it to media personalities. The subsequent success of the product led to the emergence of make-up trends in which people highlighted the creases left by Oniria on the skin – as an act of defiance, submission, or resignation. Participants in the project were encouraged to take selfies depicting how they envisioned these make-up trends. Gallery visitors to Climactic: Post Normal Design are invited to respond to the Oniria story by uploading selfies on Instagram that represent their interpretation of the narrative through make-up (lipsticks, pencils, etc) with the hashtag #Oniriaclimactic.

2. Pedro Oliveira, 2014, Cheat Sheet for a Non- (or Less-) Colonialist Speculative Design. Medium. Available at https://medium.com/a-parede/cheat-sheet-for-a-non-or-less-colonialist-speculative-design-90689140d9c7-49d1541d2e9
Algerinha Vive tells the story of a semi-fictional occupation in Brazil, whose population encounters various forms of violence. The story is expressed through a variety of outlets, including an investigation around a children's game which supposedly retells the history of the settlement's tragic demise, an audio tape containing a collection of soundscapes created by a local artist, and a timeline of the history of the Algerinha occupation. This design fiction piece was inspired by Brazil's current political tensions, as well as by a series of conversations with designers, musicians, and activists. The project focuses on the reality of those who exist on the fringes of the modern world-system, disenfranchised populations that while often the subject of dystopian futural fictions, have their experiences and views rarely represented in those very fictions. Thus, Algerinha Vive presents a visual and aural narrative adjacent to the political conflicts of everyday life in Brazil's peripheries. At the same time, by focusing on the possible outcomes of such an estranged reality, the project does not intend to speak for the disenfranchised. Instead, it presents this encapsulation of political struggles as the starting point for a more profound engagement with the urgent issues it portrays.

Prado and Oliveira have collaboratively published several critiques of speculative critical design, and called attention to how issues of gender, race, and class are approached within the field. They contend that SCD is dominated by the concerns of the 'Northern-European and/or US-American intellectual middle classes,' and has failed to honor the political ambitions with which it initiated debate. With the objective to transform SCD 'into a strong political agent', via a program that challenges the premises of SCD so they can be 'tested, spread out, modified, re-appropriated, bastardized'. Their projects focus on the realities of colonial and gendered violence to 'question the hierarchies of privilege', of which this project is an example.

Surrounded by the ocean, Japan as an island has always honored the blessing of the sea. The ocean is the bearer of bounties, but the sea is also the generator of catastrophes. In recent years, with rising sea levels, the ocean has betrayed the Japanese with tsunamis that have swallowed entire towns. Although the ocean has often played a catastrophic role, looking back, one finds an almost continuous thread of artificial island projects. From Edo times to today, each tells a different story of the city’s relationship with the sea.

The Possibility of Islands: A scenario for post-tsunami Tokyo visualizes archipelagos of plastic-crate islands in the flooded post-Tsunami city of Tokyo. The proposed islands are projected to be nomadic, mobile and responsive and are the result of imagining a competitive system of flexible DIY networks of mini-islands structured and governed according to agreements among their inhabitants as proposed by the Seasteading Institute. The proposal examines the ubiquitous plastic crate in particular as a readily available material that can be configured to create inexpensive floating modular habitats and reefs. Here, Tokyo is imagined to extend into the water and the water to enter into the city. Instead of proposing a solution to ‘build faster and harder to keep the water out’, this design proposition seeks to merge Tokyo with the water, transforming the hard boundary into a continuum. The new floating neighborhoods accommodate housing and reef. The proposed archipelagos of artificial islands could reduce the impact of storm-induced wave energy therefore improving the ecology of estuarine environments.

1. Manar Moursi (2015), The Sea We Would Like to See, in Tokyo Totem, Edwin Gardner and Christiana Frumenx (eds), Flick Studio, Japan. Available at http://www.studiomeem.me/index.php/the-sea-we-would-like-to-see/
Myths of the Near Future: CCTV tests co-design methodologies for exploring the social imaginary of technologies such as CCTV surveillance, and the role that digital recording devices play in reframing the city as a public space where diverse communities are both monitored and connected. Theories of the social imaginary proposed by philosopher Cornelius Castoriadis, anthropologist Arjun Appadurai, art historian Helmut Draxler, and cultural theorist Nikos Papastergiadis provide a number of competing definitions. For Castoriadis, it is the ‘social imaginary’ (communicated in images, practices and institutions) rather than ideology or technology that makes up a society. In his words, ‘Each society is a construction, a constitution, a creation of a world, of its own world.’ The social imaginary is defined by Appadurai as key to human agency in globalization where the imagination is understood as a ‘social practice’ that is ‘no longer mere fantasy’, but in fact ‘a form of work’, that arbitrates individual agency and the possibilities defined by the global context. Appadurai thus extends Castoriadis’s proposal that the social imaginary establishes institutions that provide meaning to human experience, and surmises that the social imaginary, where imagination is seen as the cultural practice that shapes communities, is fundamental to understanding everyday experiences. Draxler concurs with these analyses, and proposes that exploring the norms and conventions of practices, such as art and design, reveal the interrelationship of public and private, and, in his words, the ‘participation of the public in the institution’. Cultural theorist Papastergiadis attends to how institutional restrictions circumscribe autonomy as well as create opportunities to ‘engage with strangers’, and develop connections between cultures. Based on the theoretical framework of the social imaginary, the themes that are explored in Myths of the Near Future: CCTV include surveillance and safety, anonymity and publicity, closed-circuit television as a creative medium, and the social imaginary of CCTV in urban locations and ecotones that are characterised by diverse communities.

The Free Universal Construction Kit is a set of two-way adapters for complete interoperability between 10 popular construction toys (Lego, Duplo, Fischertechnik, Gears! Gears! Gears!, K'Nex, Krinkles (Bristle Blocks), Lincoln Logs, Tinkertoys, Zome, and Zoob), conceived and developed by the F.A.T. (Free Art and Technology) Lab in collaboration with Sy-Lab. By allowing different toy systems to work together, the Free Universal Construction Kit extends the value of these systems across the life of a child. Thus, with the Kit’s adapters, playsets like Krinkles (often enjoyed by toddlers) can still retain their use-value for older children using Lego, and for even older tweens using Zome. By allowing any piece to join to any other, the Kit encourages totally new connections between otherwise closed systems—enabling radically hybrid constructive play, the creation of previously impossible designs, and ultimately, more creative opportunities for kids. As with other grassroots interoperability remedies, the Free Universal Construction Kit implements proprietary protocols in order to provide a public service unmet—or unmeetable—by corporate interests, and the 3D models are freely available to download online.

Night school on Anarres is an educational experiment examining the Utopian proposals of twentieth-century anarchism. Drawing from Ursula K. Le Guin's seminal sci-fi novel The Dispossessed, and focusing on her construction of the fictional anarchist planet Anarres and its language Pravic, children and members of the public were transported to an alien school to participate in language and social studies classes. Part sci-fi set, part classroom, part roundhouse theatre, the Night School on Anarres installation is a site where utopic ambitions can be collectively imagined, performed and discussed. Through novel pedagogic approaches, the installation invites travelers young and old to wander around the space and attend classes to learn about the planet's language, customs and behaviors. In so doing, the project encourages visitors to reflect upon current socio-political models with the hope of collectively imagining alternatives.


Credits
Night School on Anarres was commissioned by Kings College London as part of Utopia 2016, a year-long program celebrating the 500th anniversary of the publication of Thomas More’s Utopia. It ran from 1st July to 14th August 2016 at Inigo Rooms, Somerset House, East Wing Strand, London, and was developed in collaboration with Dr. Simon Coffey and Dr. Martin Edwards from the Linguistics Department of King’s College London.
Drawing Together Indigenous Futures maps out knowledge patterns emerging from yarning sessions with a group of Australia’s leading Aboriginal & Torres Strait Islander academics, held at GNIBI (College of Indigenous Australian Peoples), Southern Cross University, Lismore, in 2013. Participants discussed what cultural competency looks like from Indigenous perspectives, and how it might be activated as an event in process across a university. The cognitive map overlays commonalities-in-difference between a Canadian First Peoples knowledge, Australian Indigenous Knowledge, and a Western conception of transformative knowledge. In this, the map becomes a mediating object for future inter-cultural conversations. Four kinds of drawing together are shown: drawing together with the hand; drawing together assemblages; drawing together mess; and performing drawing ‘together’. The culturally sensitive parts of the information mapped have been concealed for public exhibition. This concealment is itself a commentary on which actors and networks are deliberately left out of maps, whose history is entangled with colonial histories and agendas. This project corrects the selective cartography of colonialism and revives what was destroyed in that process, re-inscribing what has been omitted and excluded, and critiquing assumptions about the neutrality of information design.

- Tristan Schultz
Open Fires features the latest explorations by Liliana Ovalle and Colectivo 1050° around the firing process used in vernacular ceramics in Oaxaca, Mexico. The project comprises a variety of exercises where clay pieces are fired in particular geometric setups created with sand, dung and agave leaves. Each composition acquires black traces of smoke and coal, a permanent imprint of the fire they were exposed to. The clay pieces were formed by the artisans Mujeres del Barro Rojo, a family of female ceramists in Tlapazola who inherited ancestral local techniques for utilitarian red clay pottery, a craft that is nowadays struggling to endure. All the ceramics are shaped by hand using a combined technique of coils that are stretched into shape with a corncob. The pieces subsequently go through two different firing processes. An initial open fire, traditionally used in the region, hardens the pieces and makes them stable. In the second stage Ovalle worked closely with the artisans creating different setups for individual contained fires to imprint a black smoked finishing. All the materials used in the clay and the firing process are sourced locally by the artisans.

There were three sets of artifacts created over the course of the exercises. The vases were designed with flat extensions that are used to place dung and other combustible materials to create a small contained fire. The imprinted black traces remain as an indication of the intensity and direction of the flames. The plates, based on the traditional cooking plate comal, were partially masked with sand. The remaining area was covered with dung and agave leaves that combusted into an open fire. The resulting pieces display a contrast between intense black smoked tones and bare red clay. In a similar process to the plates, the cylinders were partially dug into a pile of sand in vertical and horizontal position. The final pieces were then marked with a defined line along the interior and exterior of the shapes, depending on the position they were set up for the fire.

Mujeres del Barro Rojo is formed by Angelina Mateo, Amalia Cruz, Alberta Mateo, Doreotea Mateo, Elia Mateo, Macrina Mateo and María Gutiérrez.
Mangalyaan, or the Mars Orbiter Mission (MOM), is an Indian spacecraft orbiting Mars since 24 September 2014. To coincide with the launch of Mangalyaan, or the Mars Orbiter Mission (MOM), Superflux launched Mangala For All, a reflexive ethnographic performance in the streets of Ahmedabad, India, where they offered participants a Mangalyaan Miniature in exchange for insights into what Mangalyaan and the Indian Space Program means to the people of Ahmedabad.

Stories of jugaad, scientific innovation, resourcefulness and creativity in Mangalyaan’s success were entangled with assumptions about its impact on people’s hopes and aspirations, as well as the subtexts of nationhood, geopolitics and the space race. Superflux asked whether Mangalyaan was an act of nation building, or a symbol of progress and development? Was it the Indian elite’s delusional quest for superpower status, as economist-activist Jean Dreze has commented, or a way ‘to dislodge the perception of India as a developing nation, by showcasing spectacular technology’?

Superflux endorses the interpretation of the Mangalyaan mission as India’s most audacious and successful example of jugaad so far, as it was completed in 14 months and at low cost ($75 million), prompting the question of whether cost and time saving are the sole characteristics of design in precarity. In the context of current debates about the value of speculative design and racism, Superflux’s documentation of the reception and commentary following the launch reveal conflicting interpretations of the right to engage on a global social imaginary of space exploration. While The New York Times published a racist cartoon subtitled ‘India’s Budget Mission to Mars’, the BBC published a widely shared photograph of women scientists celebrating the launch, offering questions about the right to imagine futures that differ dramatically from the present still dominate and filter design discourse.

Indian cities are likely to house almost 40% of the total Indian population by 2030. This will mean almost 590 million people across a large spectrum of socio economics and culture living, who share resources. Auto rickshaws are a part of the Intermediate Public Transport system that tries to bridge the gap between the public transport systems and privately owned vehicles. Efficient mass transport, as much as it offers numerous advantages does not address the unique demands that Indian cities pose. A key issue of most Indian cities is narrow impregnable roads which pose a huge accessibility challenge for public vehicles. The Indian Auto Rickshaw has been able to meet the needs of the Indian commuter which are unique due to infrastructure challenges, affordability, and absence of adequate special needs vehicles. However, the socio-economic sustainability of the auto rickshaws is threatened because of numerous problems that the drivers face. Limited access to knowledge and holistic solutions for solving the existing problems have increased the dependency of Auto Rickshaw drivers on socio-economic stability. Srishti Labs is working with the auto driver community, NGOs and technology partners on a community driven solution that will operate in a community driven business model that aims to empower the auto drivers socioeconomically in a self-regulating system. This will in turn make this much needed mode of transport viable, secure and sustainable.

The AutoRaja envisions a strengthened autonomy and entrepreneurial independence for the service provider, the auto driver. Srishti Labs believe that this is key to creating a safe, viable and sustainable mode of transport in urban communities. The service concept is based on the Srishti Labs framework for Smart Communities, that embraces new means of working and living by adopting innovative and sustainable ways of communication, knowledge access sharing, and technology adoption. Inspired by permaculture principles it has three pillars of ethics: care for the people, care for the local context, and fair share. The design is based on community participation, people-to-people communication, access to local and community knowledge, shared resources, and self-regulation.

The emergence of Yang Drama can be traced back to the Nuo Drama which appeared in Shang Dynasty or even earlier. In rural areas of Youyang County, by playing Yang Drama, village residents make a wish for the things that they cannot achieve in real life temporarily. They believe that Guan Yu will help them beyond the physical world. Yang Drama is not only one of the few public entertainments, but also a kind of spiritual sustenance for them. Actors wear different masks to represent different roles, such as red mask, black mask, cow mask and horse mask. The biggest challenge for Yang Drama is the shortage of actors. The old masters are passing away, while the young people are migrating to big cities for their livelihood. The actors of a troupe can only be together in the New Year to put on a complete play.

Binding local material and cultural resources, the designers cooperated with residents and co-designed the art works. In order to enhance the interaction between people and Yang Drama, WISHING, an interactive video game was designed for people to participate in. When people approach the screen and make a wish by folding hands and bowing, local residents wearing casual clothes in the video begin performing in costumes. An interactive medium was adopted to reflect the cultural essence of traditional opera, enhance the cultural experience, and facilitate audiences to experience local culture in Youyang County. In 2016 more than ten thousand people around the world have participated in the game, and have attracted the attention of the national government to give support to Youyang culture.

Credits
Wishing, New Channel Design and Social Innovation Project has been awarded: 2011 China's top ten enterprise-led projects for public good, awarded by Global Charity at the China Soong Ching Ling Foundation; 2012 Good Design Award (G-MARK) for community development and planning, the first domestic honor in this category; the first prize of “China Universities Industrial Design Competition” (CUIDC) by Chinese Ministry of Education; and in 2013, Best Producer Award, awarded by “Yue” Foundation. The project has been exhibited in Milan Design Triennial, Beijing Design Week, Asian Design Week of Green Design, Bi-City Biennale of Urbanism/Architecture (UABB), Business of Design Week (BODW), and French Youth Film Festival.
Cyrus Kabiru refashions junk, recycled materials, and other found items from the streets of Nairobi, Kenya, into a variety of wearable forms. The ‘C-Stunner’ series of eyewear act as a post-colonial critique of development in Kenya. Constructed from mostly found materials, Kabiru’s sculptures use and question the local practice of jua kali, which is a Swahili term that translates to ‘under the hot sun’ and is used as a general category for products and activities with which vernacular designs are made. That is, a jua kali oven or ladles and woks from the jua kali shop, or the workshops where the products are made are all referred to as jua Kali. This applies to kitchen utensils, chicken feeders, machinery and appliances as well as the actual making of the items themselves. In sum jua kali refers both to the practice of making such artifacts and the artifacts themselves.
Critical Jugaad is about analyzing and situating jugaad (Hindi for “making do with what one has at hand”) in the framework of post-critical design. The third year of Butoliya’s doctoral research is rooted in the exploration of global post-critical design practice and the various modes of its representation and discourse. She is particularly focused on the ways that jugaad-like practices play out at the intersection of the global south and critical design.

Critical Jugaad asks critically vital questions including: What is the future of critical design practice? How do we move beyond a western logic of criticality in design? And how do we punctuate critical design and change its representation and discourse to take into account non-western and subaltern perspectives? If the post-critical turn in literature and art was meant to expand global perspectives, it did not quite achieve its goals. As Hal Foster succinctly points out, “The post-critical condition is supposed to release us from our straitjackets (historical, theoretical, and political), yet, for the most part, it has abetted a relativism that has little to do with pluralism.” Butoliya challenges this condition by resituating critical design through a new post-critical perspective. She sees this approach as not about changing the practice of critical design, but as focusing on renegotiating values embodied in design for the pluriverse we inhabit.

How do people use ingenious making practices like Jugaad as a tool for existence, subversion and criticality against colonial powers of oppression? Jugaad-like practices form cultural binders and empower people to find a collective force to fight oppression while practicing creative self-expression. This practice is a nonviolent critique that provokes and questions the techno-utopian imaginaries. In such practices, critique and criticism of the social, cultural, economic and political issues engulfing a state, is explored through ingenious socio-material practices. This research inquiry taps into the potential of such socio-material practices and the epistemology of the critical practices that question preconceived assumptions.

Speculative Critical Design (SCD) helps us question the role objects and systems play in everyday life. A contemporary criticism of SCD is that it fails to take into account what everyday life means for people in different cultural and socioeconomic conditions. The objects and systems shown in such speculations are often narrowly defined in their outreach and result in speculations that are overly focused on narratives of a privileged western world. They fail to capture the disparities of the human condition prevalent in large parts of the world. In this regard, SCD limits perception of design by the general public rather than pushing boundaries of the field.

Rachel Chang: Drone Ice Cream Truck

As part of an increasingly militarized police force in civilian communities, drones are becoming a regular presence in America’s airspace. Originally an object of invisibility, this design proposes to repurpose drones to double as ice cream trucks, thus making drones into objects of hyper visibility that drop sweet treats and sedate the general public while keeping tabs on our activities.

Linna Griffin: Home ReSource

Sustainability has always been the keystone of Tesla Motor’s mission statement. Recently the company changed its statement to encompass sustainable energy as well as the realm of transportation. This shift has led to the release of new products such as the ‘Power Wall’ and the new ‘Solar Roof’, which signifies a move by Tesla into the market of home goods, with a focus on home owners. However, despite the emphasis that Tesla places on sustainable practices, their cars are not completely sustainable by virtue of the precious metals that are used to create them. The aluminum body of a Tesla vehicle itself generates roughly six times its own weight in red mud, a waste byproduct of aluminum mining.

To expand on sustainable mining practices, Home ReSource is a line of designer home furnishings made from the waste by-products of aluminum, copper, and lithium. By recycling this waste into a form of consumer goods, Tesla cars would leave less of an ecological footprint and allow the company to further their reach into the home goods market. While the products are fictional, Home ReSource is a speculative future of the company’s development through a critical view of ‘sustainable’ vehicles.

Justin Finkenaur: Mining the Digital

The purpose of this piece is to illustrate the relationship between mining and our digital devices. My hope as the designer is to shed light on the exploitation of people from around the world in the manufacture of smartphones. Viewers of this poster are encouraged to follow the link at the bottom to learn more about how mining is connected to manufacturing smartphone technology.
expensive technologies. Privileged elites who can afford them, this future scenario responds to the constant self-monitoring leads to an obsession with closely monitoring their health via daily measurement of their physical condition. The urban population lives in a frackalypse, an apocalypse created by the aftermaths of fracking. On a daily basis, urban residents deal with the environmental hazards of fracking, including: a methane filled atmosphere, contaminated water, absence of sunlight and limited vegetation growth. In order to survive in a frackalypic climate, every individual needs to carefully plan daily activities to minimize exposure to environmental hazards. Due to extreme weather conditions, the majority of the year is dedicated to preparing for and recovering from extreme seasons. Individuals closely monitor their health via daily measurement of their physical condition. The constant self-monitoring leads to an obsession with planning for survival. At the same time, organized groups continue to fight the fracking industry and address the problem rather than the symptoms. Yet, in general terms the majority of the population have adjusted to the new lifestyle, which revolves around avoiding problems of the frackalypic environment.

Verena Fienjan Vredenburg : BIZAR catalogue 2050

BIZAR catalogue 2050 releases the newest fashion trends with which to survive a nuclear winter through genetic manipulation of the body and via DIY design trends that reduce human vulnerability. Such future technologies will transform our bodies, and partially eliminate our familiar and trusted organs, in order to survive Earth’s changed atmosphere and prepare our bodies for space travel. Recognizing that these options will be accessible only for privileged elites who can afford them, this future scenario responds to the optimistic view regarding genetic modification but questions the ethical implications of reinforcing social divisions through such expensive technologies.

Ji Soo Hwang : The Frackalypse

The urban population lives in a frackalypse, an apocalypse created by the aftermaths of fracking. On a daily basis, urban residents deal with the environmental hazards of fracking, including: a methane filled atmosphere, contaminated water, absence of sunlight and limited vegetation growth. In order to survive in a frackalypic climate, every individual needs to carefully plan daily activities to minimize exposure to environmental hazards. Due to extreme weather conditions, the majority of the year is dedicated to preparing for and recovering from extreme seasons. Individuals closely monitor their health via daily measurement of their physical condition. The constant self-monitoring leads to an obsession with planning for survival. At the same time, organized groups continue to fight the fracking industry and address the problem rather than the symptoms. Yet, in general terms the majority of the population have adjusted to the new lifestyle, which revolves around avoiding problems of the frackalypic environment.

Charles Van De Zande : New Cake Flavors

New Cake Flavors is an advertisement set in the year 2043— not too far away. The earth has warmed quite a bit, and plants from the tropical zone no longer survive naturally. Because of nutrient-rich soil, and incredible bio-diversity, tropical plants have intricate flavor profiles. As the climate changes, many enjoyable experiences will no longer commonly exist, such as tasting tropical fruits. As new experiences become limited, what behaviors and tastes will develop? If new experiences do not come often, will perception of time change? New Cake Flavors asks the audience to bid now for slices of special flavored cake so mundane experiences do not soon become uncommon.

Kaleb Crawford : Pocket Guide to Micro Eco Terrorism

The Pocket Guide to Micro Eco Terrorism is an ode to the eco-punk subculture that never was. Designed to challenge the branding of contemporary environmentalism as a ‘green movement’ based on the tenets of self-righteousness, unity, and love of the planet, the zine proposes an alternate lens that frames sustainability as a DIY, disruptive, demonstration. Drawing its name in reference to the FBI classification of historically violent eco-activist groups including ELF (Earth Liberation Front) as ‘Eco-Terrorism’, Micro Eco Terrorism proposes feasible everyday interventions that allow an individual to easily weaponize their surroundings, taking ecological protection on the offensive.
The word ‘guftugu’ means ‘conversation’ or ‘dialogue’ in Urdu and Hindi, with the connotations of being something casual and engaged. A sit-down between colleagues or friends to discuss common matters of interest over a cup of tea. Guftugu is a project connecting design scholars from the US and Pakistan. Colleagues united in overlapping craft and interests over a conversation across space and time through the mediation of an ephemeral artifact, a paper toy often crafted by South Asian children in forms of play. Guftugu explores how older forms of asynchronous communication from childhoods that belonged to a world where Skype and other instantaneous communication platforms have not collapsed and flattened space and time can still act as mnemonic devices. The folded paper toys hold links to audio recordings of conversations about the changing global nature of design practice and education between two design scholars, Dan Lockton (US), and Zohaib Zuby (Pakistan). Continuing exchanges will run over the course of the exhibition.

Each of these exchanges have been recorded in a specific manner – both scholars initially crafted questions they’d like to ask the other person, and these questions were then sent, and a day taken for each person to listen to the other’s question, and craft an answer in response. After listening to each other’s responses they then sent another question, and so on. The nature of the conversation slowly unfurling with time to reflect on each answer and craft a reply. This process melds the art of letter writing with the immediacy of oral traditions, and invokes a sense of what shape and form writing traditions in Pakistan, belonging to a largely proto-literate culture, with a heavy emphasis on the speakers voice and their tone as a storyteller, are like.
Mapping Transition 2016
- Terry Irwin and Laurene Vaughan

Mapping Transition is an initial exploration of how the Transition Design framework developed by Terry Irwin, Gideon Kossoff and Cameron Tonkinwise can provide an architecture for exploring the complexities of forced migration and the social and cultural dimensions of this. In particular, it embraces the temporal nature of displacement and the deep cultural and social aspects of identity and the experience and manifestation of place. Realized in the gallery, Mapping Transition is a live exploration of theory and a design proposition that will seek to envision the temporal nature of forced migration, and how vernacular cultural heritage, practices and traditions from the past (home) can provide a framework for transitioning into unknown lands, comprised of new and unfamiliar ways. This is not a new phenomenon, throughout history millions of people across the globe have been forced to leave home, to seek safety in unfamiliar lands and cultures; and it continues as an outcome of power struggles and climate change.
**Gandi Engine Commission 2015**
- The Tentative Collective

The Gandi Engine Commission is an experimental, site-specific workshop that navigates through the Ravi river in Pakistan to explore themes of development, destruction, waste and toxicity. Drawing on the Persian meaning of the word ‘ravi’ as ‘narrator’, and taking its name from a decommissioned sewage treatment plant, the project, recreated in the exhibition ‘Climactic: Post Normal Design’, was designed as a workshop and a walk to reflect on the waste and refuse that cities produce and dump into the river. The commission was structured around the following issues: colonialism and conquest, pastoralism and productivity, detritus and development, living with discarded things, and a soundwalk. The walk culminated in a site specific video projection in a park near the plant, and brings attention to the local and global circulation of waste in the service of neoliberal capitalism, and its relation to the continued suffering of the people who live on the banks of these flows of refuse. The recreation of the work in this exhibition includes photographs taken from the Ravi Waste Inventory and an audio recording of the workshop held in Lahore.

The Gandi Engine commission workshop was recorded for A Thousand Channels, a series of radio episodes that traced the journey of the traveling public programme Ancestors (South Asia, 2015), curated by Natasha Ginwala. These episodes aurally attend to the Indian subcontinent through conversations, oral histories and field recordings, and also incorporate performative work, film excerpts, internet rips and other sonic elements. This site is an evolving archive of a project that tries to chart shared histories and common horizons in the region.
ECDC is a speculative design project developed as a collaboration between the departments of sociology and design at Goldsmiths, University of London. Funded by the Research Councils UK (RCUK) Energy Program, ECDC is one of several projects that explore how the UK can reduce its energy consumption by 80 percent before 2050. ECDC’s design process combines a number of methodologies, including fieldtrips, workshops, and the distribution of cultural probe packs in communities such as Whitehill Bordon Eco Town and Low Carbon Living Ladock. The workshops explore questions, such as ‘How is people’s engagement with technology affected by who they trust?’ In 2014, ECDC distributed Energy Babble devices to thirty homes. The Energy Babble is a domestic appliance that broadcasts comments and sounds sent from a network of Babbles. The ECDC team describes the Energy Babble as ‘familiar, playful, [and] ambiguous’ and designed to provoke debate within communities. With the Babble network device, ECDC explores the imaginative and emotional dimension of energy usage and what they call the ‘potential’ of people’s imaginative application of technologies.1

2. ECDC, “Process: Energy and Co-Designing Communities,” www.ecdc.ac.uk/#.

Credits
DESIGN-ANTROPOLOGISK INNOVATIONS MODEL / THE DESIGN ANTHROPOLOGICAL INNOVATION MODEL (DAIM) 2008-2010

- Joachim Halse, Eva Brandt, Brendon Clark and Thomas Binder

The Design-Anthropological Innovation Model (DAIM) is a large-scale co-design research project developed in the Scandinavian model of participatory design. It investigated user-driven innovation in waste disposal and recycling services in Herlev, Høje Taastrup and Brøndby, three suburbs of Copenhagen. Subtitled “Rehearsing the Future”, DAIM was informed by anthropological field studies. These included documenting observations about waste practices by garbage collectors in their daily work and by community residents who use domestic waste management. DAIM developed the User-Driven Innovation Box with which Vestforbrænding and other utility companies can reflect on and renew recycling processes and customer communication. DAIM was funded by the Danish Government’s program for user-driven innovation and was selected by INDEX AWARD (2009) as an example of Danish design that aims to improve life.1


Credits
DAIM is the result of interdisciplinary collaboration by the Danish Design School, SPIRE at the University of Southern Denmark, the waste incineration company Vestforbrænding, Danish design studios including 1508, 3PART and Arkitema, and international partnerships with MakeTools, SWECO FFNS and Ergonomidesign.
The Sensitive Aunt Provotype was designed as part of Indoor Climate and Quality of Life, a three-year research study of participatory design and user-driven innovation resulting from collaboration between two universities and five industry partners. Indoor Climate endeavoured to understand inhabitants’ experiences of comfort in domestic, business, and institutional environments. It involved a literature review on the meaning of comfort, an ethnographic study of a range of indoor climates and environments, a provotyping process designed to provoke debate and engage participants in discussions about future possibilities, and a final phase on the development of new product opportunities. Laurens Boer, Jared Donovan, and Jacob Buur describe “provocative prototyping” as that which engages a range of stakeholders and helps participants understand what they call the “tensions at the fuzzy front end of new product development.” The tensions to which they refer involve the different conceptions of a new product or service from the perspectives of manufacturers and design users. The Sensitive aunt emits coloured light in relation to the temperature and air quality of the environment in which it is placed. In addition, when the buttons on the top of the device are pressed, it displays suggestions for ways to improve the temperature, light intensity, and air quality on an LED screen. The provotype was distributed and tested in a range of contexts by each industry partner involved in the project.

1. The Indoor Climate and Quality of Life research project was conducted between 2007 and 2010.
4. The authors note that provotyping is a design approach developed in systems design in the early 1990s.

Credits
The designers acknowledge the support of The Sønderborg Participatory Innovation Research Centre (SPIRE) at the University of Southern Denmark, the International Centre for Indoor Environment and Energy (ICIEE) at the Technical University of Denmark (DTU), window and skylight manufacturer Velux; indoor climate designers WindowMaster, Nilan; engineering consultancy Grontmij; and insulation company Saint-Gobain Isover.
ACCAN (Allegheny County Clean Air Now) reports that the energy company DTE Shenango Coke exceeds permitted emissions limits every 1 of 7 days, based on information it had gathered on health impacts, video and analysis of measured emissions, which were published on the website Shenango Channel. As recently as June 11, DTE Shenango lost power again, triggering emergency venting and flaring for 53 minutes. This was despite promises to install power backup equipment. Avalon, Bellevue, the North Side, Lawrenceville, O’Hara and Fox Chapel were downwind and bore the brunt of the toxic and carcinogenic emissions – for example, a resident of Avalon, Leah Andrascik, complained that her two young children ‘could smell the noxious odors filling the air’ and interpreted them, as have many others in the community, as marking exposure to raw coke oven gas and other unprocessed emissions.

The Shenango Channel has recorded and broadcast video of these multi-colored emissions since January 2015, proof that toxic organics condense into various colors when battery is allowed to vent directly to the air. These heavy organics are carcinogenic at minute levels, and include high levels of PAHs, which recent studies associate with autism. Black smoke can come from burning raw coke oven gas, and other black and grey emissions can be escaping coal or coke. All are toxic when inhaled. The Shenango Channel allows residents to compare days each week for air quality on a synchronized calendar that allows viewers to move to specific days of the year. Speck takes readings every minute and graphs them to allow residents to understand the data the measuring of air quality, while a map shows wind direction and strength to show the neighborhoods affected. The site also has a crowd-sourced citizen science engagement component, allowing visitors to share and discuss information they find on social media.

1. http://shenangochannel.org/
Biodress: A Body-Worn Environmental Interface 2014
- Sara Adhitya, Beck Davis, Zoe Mahony, Raune Frankjaer and Tricia Flanagan

Biodress allows the natural environment to communicate with humans and provides a precursor of how design might be approached from an environmental perspective. By linking the human wearer of the dress to a selected element of their natural environment, Biodress provides a heightened understanding of the environment's quantitative state. The wearer is linked to a specific plant, which is able to sense the quality of its surrounding environment on subtler levels, such as changes in air quality. This piece is the first representation by this group of a broader exploration of interspecies communication and the development of an approach to sustainable design that moves beyond the Anthropocene. It creates a mode of expression for silent, non-human elements, such as plants, which are often forgotten due to their inability to compete against the human voice.

This workshop explores allyship with regards to race and culture in contemporary society, particularly in a climate of social unrest. While working to become aware of the politics of their privilege, participants will engage in alternative frameworks and will identify scenarios relating to actions, speech and practice that address the social and cultural implications of allyship in times of social unrest. It begins and ends with a conversation with Teju Cole, author of Known and Strange Things and Open City.

**Thursday, November 10, 12:00-2:00pm**
**Where's Mr. Debate? Panel Discussion**
Panelists: Bruce Tharp, Maria Lamadrid, Marti Louw.
Moderator: Anne Burdick

**Tuesday, November 15, 12:00-2:00pm**
**Bodies in Motion, Workshop**
Stephen Neely

In the Bodies in Motion workshop, we invite participants to explore bodies-in-action as a medium of design, in an effort to broaden conceptions of and possibilities for design practice. Interaction designers have demonstrated growing interest in the performative body as a major variable in designed systems, aspiring to whole-body interaction, defined as “interfaces that are in some way physically embodied” (Hurrecker, 2016), and the development of systems that “more fully engage people’s bodies” (Zimmerman & Forlizzi, 2014). However, most design-led research on human bodies has been concerned with how bodies interact with the forms and products of design—artifacts, spaces, interfaces, communications and services. By considering bodies as a medium for design, we hope to contribute new ways of thinking about the body in design, particularly the design of bodies-in-action. We invite anyone from any background to attend. The only requirement is that attendees be willing to participate in hands-on, collaborative, and body-based movement exercises. Participants should be interested in considering design as a ubiquitous practice, which may require de-prioritizing, for now, concerns about professionalized design and expertise.

**Thursday, November 17, 12:00-2:00pm**
**Speculating Jugaad Futures, Workshop**
Deepa Butoliya

The Speculating Jugaad Futures workshop invites participants to engage in speculating and imagining futures through making in an indigenous hacking system called Jugaad in India. Jugaad is a Hindi term which means making do with what you have at hand and implies creativity in face of adversity within limited resources. We will explore the future aspect of Jugaad by simulating the absence of resources while creating future scenarios. The goal of this workshop is to engage in alternative and plural imaginaries of the future.

**Friday, November 18, 12:00-2:00pm**
**Myths of the Near Future: CCTV, Workshop**
Katherine Moline

CCTVs have a powerful and ongoing daily role in structuring and disciplining our lives through the biopolitics of surveillance. The Myths of the Near Future: CCTV workshop looks at the social practices shaped by technologies of observation and inspection to look anew at the way in which we use technology to shape the stories we tell about ourselves and others.

**Thursday, December 1 - 12:00-2:00pm**
**Design, Science Fiction and Worldling**
Ahmed Ansari

The philosopher Vilem Flusser in his famous essay “About the Word ‘Design’”, traces a genealogy of the word and connects it to the Latin ‘ars’ or ‘artefex’, both of which have connotations of cunning and deception. In a key sentence of the essay, Flusser points out that the design disciplines were to make possible a culture that was “aware of the fact that it was deceptive.” Telling lies with Design Fictions takes this literally as the starting point for our workshop, where we attempt to uncover the logics of lying at the heart of design imaginaries about the present. We will do this through questioning the logics at the heart of current beliefs about the present and future in American culture today and designing new fictions for others we will probably never encounter in life.

**Saturday, December 3, 12:00-2:00pm**
**Interplay, Workshop**
Laverne Baker Hotep and Sheila Collins

InterPlay is a global social movement dedicated to ease, connection, human sustainability and play. The Interplay workshop invites participants to unlock the wisdom of your body! With the creative, easy tools of InterPlay, participants increase their understanding of experiences related to race and racism explore meaningful questions deepening insight into how gravely racism impacts our humanity.
1. Design in Times of Crisis: Oniria

Luiza Prado and Pedro Oliveira are Brazilian design researchers and PhD Candidates at the University of the Arts, Berlin. Luiza's research (funded by the Brazilian Council for Research and Development - CNPq) is provisionally titled “Technocologies of Birth Control” and investigates how various designed devices, systems, and techniques used to manage fertility produce new topologies of bodies and genders in the world. Their work has been performed and exhibited in São Paulo, Brazil; Bremen, Germany; Rotterdam, Netherlands; and Limerick, Ireland; and Belgrado, Serbia. Pedro’s research (funded by the Brazilian Council for Research and Development - CNPq - and the German Academic Exchange Service - DAAD), is currently titled “The Apparatus of Auditory Governance,” explores the design of listening devices and how practices of listening shape, configure, and perpetuate power struggles and violences with and through sound.

2. The Possibility of Islands: A scenario for post-tsunami Tokyo

Manar Moursi’s work spans the fields of architecture, urbanism, design and art. A graduate from the University of Virginia, Manar obtained a fellowship to complete a dual Masters degree in Architecture and Urban Policy from Princeton University in 2008. In 2011 Manar founded Studio Meem an interdisciplinary design studio based in Cairo. The studio’s mission is to experiment with constructive systems that involve sustainable use of natural, social and economic resources. Studio Meem’s first constructed architectural project was the architectural design of a disaster relief center in Istanbul with architect Omar Rabie. It was among the top eight projects shortlisted for the ThyssenKrupp Elevator relief center in Istanbul with architect Omar Rabie. It was among the top eight projects shortlisted for the ThyssenKrupp Elevator relief center in Istanbul with architect Omar Rabie.

3. UNSW Art & Design: Katherine explores the cross-overs between avant-gardism in visual art and the social pacts of contemporary experimental design. Since co-convening the symposium “Videokunst” in 2004, she curated the exhibition “Connections: Experimental Design (2007) and introduced international leaders in experimental and speculative critical design to Australian audiences. More recent exhibitions she has curated since completing a PhD in Art History include Feral Experimental at UNSW Galleries (2014), Experimental Practice: Provocations in and Out of Design at RMIT Design Hub (2015), and Experimental Thinking: Design Practices at Griffith University Gallery (2015). Katherine’s art practice investigates how design processes and technologies can be diverted to the production of experiential and conceptual interactions. Current research projects include a critical review of research methodologies in art and design, a series of experimental workshops on social practices with mobile telephones and CCTV, and a number of ongoing systems artworks. Katherine was awarded the Dean’s Award for Outstanding Research Supervision, College of Fine Arts, UNSW in 2009.

4. The Free Universal Construction Kit

Golan Levin is Associate Professor of Computation Arts at Carnegie Mellon University, where he also holds Courtesy Appointments in the School of Computer Science, the School of Design, and the Entertainment Technology Center. Since 2009, Levin has also served as Director of CMU’s Frank-Batchy STUDIO for Creative Inquiry, a laboratory for atypical and anti-disciplinary research across the arts, science, technology and culture. A two-time TED speaker and recipient of undergraduate and graduate degrees from the MIT Media Laboratory, Levin was named one of “50 Designers Shaping the Future” by Fast Company magazine in October 2012. He has exhibited widely in Europe, America and Asia, including the Whitney Biennial, the New Museum of Contemporary Art, the Kitchen, and the Neuberger Museum, all in New York; the Ars Electronica Center in Linz, Austria; The Museum of Contemporary Art in Taipei, Taiwan; the NTT InterCommunication Center (ICC) in Tokyo; Japan; and the Zentrum für Kunst und Medientechnologie (ZKM) in Karlsruhe, Germany. Levin received undergraduate and graduate degrees from the MIT Media Laboratory, where he studied in the Aesthetics and Computation Group. Between degrees, he worked for four years as an interaction designer and research scientist at Interval Research Corporation, Palo Alto.

5. The Free Universal Construction Kit

Shawn Sims is the founder and director of Synaptic Lab that is developing new technology applications in the area of rehabilitation. A graduate of the Pratt Institute School of Architecture and Carnegie Mellon University’s Computational Design Lab, he is currently working in robotics and advanced digital design & production methods. He won a 2012 Award of Distinction in the Prix Ars Electronica’s Hybrid Art category.

6. Night School on Debris – Imaginings of an anarchist Utopia

Onkar Kalhar’s research investigates how contemporary design practice, its processes, methodologies and outputs, can be used as a medium to engage with social and cultural issues. Using a range of different media to include objects, films, events, performances and installations his research is disseminated internationally through exhibitions, workshops, lectures, film festivals and publications. His work is in the collection of the CNAP, France and he has also guest curated the exhibitions Crafting Narrative for the Crafts Council UK and The Citizens Archive of Pakistan for the British Council at the Royal Festival Hall. Onkar Kalhar was the 2014 Stanley Picker Design Fellow at Kingston University, and is currently a Professor in Design Interventions at HDK, Gothenburg University.

7. Drawing Together Indigenous Futures

Tristan Schultz is an interdisciplinary designer and lecturer in visual communication design at Queensland College of Art, Griffith University. His research interests are related to the connections between Design and Colonialism, with a particular focus on new openings combining Design Futures and Australian Aboriginal cultural production. Previously, Tristan was a research collaborator with Southern Cross University as part of the Indigenous Musical Journeys project and with GNIBE Council of Indigenous Australian Peoples as part of the Indigenous Futures project. Tristan is a panel member of the Australian Council for the Arts (the council’s Australian Government) as an Aboriginal and Torres Strait Islander Arts Strategy Panel Member.

8. Horizon, Open Fires

Liliana Ovalle is a London-based designer from Mexico who graduated from the Royal College of Art in 2006. Her work includes commissions and production pieces for Hudson Gallery, Snobs, and Anfora among others. Liliana designs objects where the functional and the aesthetic components are accompanied by a reflection on some contemporary life aspects. She pays special attention to inquiring themes such as the “incomplete” and the “unhearsaid” observed in the urban context. In 2006 she received the Talent Award by the British Council and in 2018 the Mexican Clara Porset Special Award. Her designs have been selected for multiple exhibitions including Design Miami, Gallery Libby Lelly, Sellers and Shunon Poldi Pezzoli. Since 2011 Liliana is researcher at the Interaction Research Studio, Goldsmiths University of London. In April 2012 she joined the collective Okay Studio based in North London. Her project Siddhalea Vessels, the first collaboration with Colectivo 1050º, is part of the permanent collection at Museum of Arts and Design in New York.

Colectivo 1050º is a platform where designers and artisans work together to make high-quality functional ceramics in Oaxaca, Mexico. In their projects, they challenge old conventions and set up new paradigms about new possibilities for traditional processes. Colectivo 1050º is the commercial branch of Innovando la Tradición AC, a multidisciplinary non-profit and a sustainable-design project.
that offers services to poeple to support their activity, to preserve
the local vernacular techniques and upgrade their cultural value.
Their work has been recognized in Mexico, United States, Japan
as one of the most outstanding examples in the field of Crafts
and Design. Their latest exhibition, Clay and Fire: The Art of Traditional
Pottery in Oaxaca, Mexico, is now in Europe, at The Musée in
Belgium as part of Mucin Triennial of Contemporary Art, and
will be next exhibited at The Arabia Design Museum Gallery in
Helsinki, Finland. Mujeres del Barro Rojo, is part of Collectivo 1079.
The group of ceramists is formed by Angéline Mateo, Amalia Cruz,
Alberta Mateo, Doreotea Mateo, Elia Mateo, Macrina Mateo and
María Gutiérrez.

9. Mangala For All
Superflux is an Anglo-Indian design practice: based in London,
but with roots and contacts in the Gujarat city of Ahmedabad. As
a collaborative design practice, Superflux work at the intersection
of emerging technologies and everyday life for design to work in a
flux.

Anah Jain is a Professor of Industrial Design at the University of
Applied Arts Vienna. Her undergraduate degree was awarded
by the National Institute of Design (NID), India, and her MA in
Interaction Design by the Royal College of Art. As a TED Fellow,
Jain is the recipient of several awards, including the Award of
Excellence ISID and Apply Computers, Innovation Award, Chicago
International Film Festival and the UNESCO Digital Arts Award.
Anah’s work has been exhibited at MOMA, New York, Tate Modern,
Science Gallery Dublin, V&A Museum, London, National Museum of
China and the London Design Festival. She serves on the Advisory
Boards of London School of Economics’ Media and Communication
department, McTek, and Broadband Cinema and Media Centre, and
is a guest lecturer at IEAD Geneva, Royal College of Art, VCU Qatar,
Goldsmiths and CIID.

Jon Ardernd holds an MA in Design Interactions from the Royal
College of Art and his work has been exhibited at the MOMA, New
York, and the V&A Museum, London. Jon has been awarded prizes
from UNESCO and the Social Design Network, New York. He has
lectured at the Architectural Association London, MAD Faculty
Genk, Belgium and Kitchen Budapest Hungary. He has been the
lead technologist for a series of European wide projects for Snibbe
Interactive and has worked for a wide range of open source projects
and startups, including the now-famous citizen journalism site
Demotix.

10. Arno Raja: A sustainable community driven Rickshaw Service
Srishti Labs was conceived in 2009 as a bird, bridge organization
that blends the creative energy of students with the disciplined
expertise of industry professionals in working towards innovating
for India. Its mission is to explore solutions for big challenges
in Indian society, provide a platform to nurture collaborative
approach for innovation & vision of the future, and to provide
its clients with a creative playground to develop out-of-the-box
ideas that have business relevance. As an overall theme for design
research and innovation at Srishti look at contemporary Indian life
through the lens of Being Mobile, a broadening of perspective about
the ways people encounter, engage and solve everyday problems in
transition. Srishti Labs advances human centered innovation, user
experience and interaction design to make critical contributions
to society. We are driven by our long-term vision of creating and
sustaining an environment to envision, explore, craft and express
innovative solutions that are desirable, feasible, responsible and
sustainable.

11. Wishing, New Channel Design and Social Innovation Project
Professor Tie Ji is Deputy Dean at the School of Design, Hunan
University. He leads the Communication Lab at Hunan University.
His research and practice mostly focus upon social innovations
and design in rural China, including founding the “New Channel”
program in 2009, initiating the “Lotus Prize” Design and Innovation
Competition for social engagement, and curating the 2012 Sino-
Italian Design Exhibition, and more recently the “Xiang” Culture
Maker Joint Exhibition at the 2015 Milan Expo Gate. He is General
Secretary of the Teaching Instruction Commission of Industrial
Design in the China Ministry of Education.

12. Eyewear
Cyrus Kahrin has actively been pushing the boundaries of
conventional craftsmanship, sculpture, fashion, design, art and
photography since 2011. Cyrus Kahrin was born in 1984 in Nairobi,
Kenya, where he still lives and works. His first solo exhibition was
in 2012 at theWasawini Workshop in Kenya and he has subsequently
exhibited in England, the USA, Sweden, Holland, Italy, Turkey, South
Africa and in his home country. His work has been collected by Zeitra
MOCAA, Cape Town, South Africa; Studio Museum, Harlem, New
York, USA; Lesmatt Collection, Paris, France; Han Nelsen H-F
Collection, Netherlands; Helena Fernandina & Emilie Pi Collection,
Madrid, Spain; Kauno Trust - (patronage of Robert Deveroux),
Nairobi Kenya; Schertyn Art Fund, Cape Town, South Africa; and
Saatchi & Ahel Collection, Cape Town, South Africa.

13. Critical Jugaad
Deepa Butotiya is a PhD student in Design Studies at Carnegie
Mellon University with a background in Architecture and Industrial
Design. She worked for several architectural firms in India before
transitioning to Industrial Design and working with Jindal
Architecture Ltd., MIT development lab and Havells Sylvania India
Ltd. Deepa has also received MFA from University of Illinois, Chicago
and has taught Industrial Design undergraduate classes at the
School of Design, University of Illinois, Chicago. She is interested in
Speculative and Critical Design and plans to explore further her
own theories and tools for research in this domain.

14. Post Critical Design
Rachel Chang is currently pursuing a degree in Communication
Design at Carnegie Mellon University. She is interested in exploring
how design constructs and abstracts meaning.

Linna Griffin is a Senior Industrial Design Student from New Jersey.
Since coming to Carnegie Mellon to study design, she has focused
on creating sustainable design solutions for the betterment of the
planet. One day she hopes to work for Tesla.

Verena Fienjan Vredevelde is an Industrial Design student at the
Technical University of Eindhoven. She is studying Product
Design at Carnegie Mellon University’s School of Design for the
Fall 2016 semester. She has always been interested in how people
differentiate themselves through their clothing because fashion
is such an effective communicator of personal expression. She is
exploring how we can can alter our bodies to take self-expression
to the next level by means of genetic modification.

Ji Soo Ihwang is an Industrial Design student in Carnegie Mellon
University. With a focus on product design and design research, she
continues to expand her study to develop her design process. Lately,
she has been working on several speculative critical design projects.

Justin Finkenaur is interested in designing products that help
people navigate complex systems and environments. He believes
a well-designed user experience requires not just designers, but
also experts in areas such as business and engineering. Justin
enjoys team projects, and strongly supports multidisciplinary
collaboration. He is currently studying product design at Carnegie
Mellon University as well as pursuing courses in Interaction Design.

Charles Van De Zande is a screen printer from Raleigh North
Carolina, and is a third-year in the Environments Design track.
CMU. His interests include craft industries, and the use of technology
to enhance expression and interest among others. He is concerned
about the limitations of human experience that may occur in the
near future.

Kaleb Crawford is a senior Communication Design major who likes
the idea of having a succulent garden, but doesn’t actually own any
succulents. Whenever he uses a public computer, he changes the
wallpaper to an image of a forest. He’s passionate about preserving
the environment, but sees much of modern environmentalism as
a capitalist commodification of nature. He believes it strips away
much of what makes it actually worth saving, reducing it to leaf
logs, outstretched hands, and the color green. Kaleb wonders what
else environmentalism might look like when it caters to different
cultures and subcultures, and how we can use design to cultivate
a more genuine appreciation of the planet.

15. Offcuts
The Mediators
Ahmed Ansari taught courses in interaction and game design, in
the philosophy of technology, and in cultural and media theory
at several academic institutions in Karachi before coming to
Pittsburgh to pursue his PhD in Design Studies at Carnegie Mellon
University. Right now, he is involved in studying and thinking
about techno-social relationality and different ways of conceiving
technical space, especially in relation to ideas of immunology
and excess. He is also interested in how artifacts and systems are
appropriated, reinterpreted, subverted and circumvented in urban
contexts back home, giving rise to new political and social forms
of life in the South Asian city. A Fulbright scholar, he has an MDes in
Interaction Design from CMU, and a BDes in Communication
Design from IVSAA, Karachi.

Melwsh Zara Zaidi is an Assistant Professor in the School of
Media & Communication Studies at SZABIST, Karachi. A graphic
designer by background specializing in information design, she
teaches classes in graphic design, media design, copywriting,
and concepts and theories of information visualization. She has a MDes
in Communication Design from IVSAA, Karachi and an MDes in
Communication Design from the University of Malaysia, Sarawak. Along
with her design work, she has dabbled in short fiction and
documentary filmmaking, focusing on subjects like healthcare and
feminist activism in Pakistan.

The Convivialists

Zohaib Zuby is a Senior Lecturer at Indus Valley School of Art and Architecture (IVSAA), teaching courses in the history of architecture, 20th-21st century architectural theory, and philosophical inquiry. He has a Bachelors in Architecture from IVSAA and a Masters in Muslim Cultures from the Aga Khan University. Zohaib has been involved in various forms of social activism in Karachi, and practices architecture using a human-centered approach in both commercial and social projects. His academic interests include local historiography, ethics, the philosophy of language, and postcolonial studies.

Dan Lockton is an Assistant Professor in design at Carnegie Mellon University. His research and teaching focuses on links between design, understanding, and human behavior. In relation to society, sustainability and futures, and draws on influences from a range of fields. Before joining Carnegie Mellon, Dan was a researcher and tutor at the Royal College of Art, London, at the Helen Hamlyn Centre for Design and in the Innovation Design Engineering program. He is currently writing a book for O’Reilly, “Design with Intent,” to be published in 2017. Dan has an MPhil in Technology Policy from the University of Cambridge and a PhD in Design from Brunel University, London.

16. Mapping Transition

Terry Irwin has been a designer for over 40 years and has taught design at the University level since 1976. She was a founding partner and creative director of the transdisciplinary design firm Metal/Design with offices in San Francisco, Berlin, London, and Zurich. She directed projects for clients such as Apple Computer, Nissan Motors, Berlin Transport Authority, Audi, Ernst & Young, Sony and Samsung among others. In 2004 Terry joined the faculty at Schumacher College and taught design thinking. In 2009 she moved to Pittsburgh to become Head of the School of Design and tutor at the Royal College of Art, London, at the Helen Hamlyn Centre for Design and in the Innovation Design Engineering program. He is currently writing a book for O’Reilly, “Design with Intent,” to be published in 2017. Dan has an MPhil in Technology Policy from the University of Cambridge and a PhD in Design from Brunel University, London.

17. Gandi Engine Commission

The Tentative Collective, led by Yamini Chaudhri, Fazal Rizvi, Shahana Rajani, Zahira Malikani, and Hajra Haidar is a gathering of artists, curators, teachers, architects and others, collaborators from completely different backgrounds including fishermen, housewives and domestic workers. It was established in 2011 and is based in Karachi, Pakistan. While they work site specific in response to the city, they are also interested in engaging with its peculiar co-opting of global modernity in the rapidly transforming landscapes of the global south; in particular, the precarious urban geographies of the city and the voids it opens for groups like ours to inhabit. Navigating through these precarious urban geographies, they hope to create poetic and ephemeral moments in conversation with the city’s infrastructures, while making connections to its complex ecological and geological histories.

18. Energy and Co-Designing Communities (ECDC)

Professor William (Bill) Gaver leads the Interaction Research Studio at Goldsmiths, University of London. His research on design-led methodologies and innovative technologies for everyday life led him to develop an internationally renowned studio bringing the skills of designers together with expertise in ubiquitous computing and sociology. With the studio, he has developed approaches to design ranging from cultural probes to the use of documentary film to help assess peoples’ experience with designs. He has pursued conceptual work on topics such as ambiguity and interpretation, as well as actively engaged in helping other colleges and universities to integrate Transition Design into courses and curricula. Terry holds an MFA in Design from the Allgemeine Kunstgewerbeschule in Basel, Switzerland and an MSc in histidic science from Plymouth University-Schumacher College, England.

Dr Laurene Vaughan is Professor of Design at EMIT University. She is an artist, writer and designer who is fascinated by the ways that people design and make place. Her practice spans a spectrum of embodied domains of making and performance, from walking interventions to the design of collaborative digital performances. She is a founding member of the Arts and Cartography Commission in the International Cartographic Association. Her recent projects include The Storm Rises Project, a curatorial exploration of vernacular practices, immigration, modes of dwelling and the crafting of landscape in the making of place. This included an associated book Designing Place (Melbourne Books, 2010).

Matthew Plummer-Fernandez is a British/Cuban artist and designer who makes work that critically and playfully examines new sociocultural entanglements with emerging technologies. His current interests span bots, algorithms, automation, copyright and filesharing. Based in New Cross, London, he is also a research associate at the Interaction Research Studio at Goldsmiths College, University of London.

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Prior to joining the Department of Sociology at Goldsmiths, University of London, Dr Jennifer Galbraith was Senior Lecturer and Convenor of the MA in Design and Environment in the Department of Design at Goldsmiths, University of London. Her research investigates environments, material processes and communication technologies through theoretical and practice-based work. Projects within this area include a recently published book, Digital Rubbish: A Natural History of Electronics (University of Michigan Press, 2011), which examines the materialities of electronic waste; and a written script currently underway on citizen sensing and environmental practice, titled Program Earth: Environment as Experiment in Sensing Technology. Galbraith is currently Principal Investigator on the European Research Council starting grant, Citizen Sensing and Environmental Practice: Assessing Participatory Engagements with Environments through Sensor Technologies.
Professor Thomas Binder leads The Codegn Research Centre (CODRE) at the School of Design, The Royal Danish Academy of Fine Arts. Her focus is on exploring collaborative practices and projects. His research interests lie at the intersection of anthropology for organisational negotiations at the front end of design research emerging field of design anthropology and developed a framework is the studio director and a senior researcher at the Brendon Clark ‘rehearsing the future’. She co-edited the book Rehearsing the in nature. They belong in the category that is often referred to as dialogue oriented and usually playful, experimental and explorative design approaches, methods, and tools that she develops are other disciplines such as anthropology, ethnology or the world of theatre and other artistic disciplines. Brandt’s work mainly involves interdisciplinary projects that involve a wide range of stakeholders such as researchers, designers, technicians and end-users. The design approaches, methods, and tools that she develops are dialogue oriented and usually playful, experimental and explorative in nature. They belong in the category that is often referred to as co-design and are essentially about developing various ways of ‘rehearsing the future’.She co-edited the book Rehearsing the Future, which is an outcome of the DAIM project.

Brendon Clark is the studio director and a senior researcher at the Interactive Institute Stockholm. He completed his PhD exploring the emerging field of design anthropology and developed a framework for organisational negotiations at the front end of design research projects. His research interests lie at the intersection of anthropology and design (Participatory Design) with a nod toward business and innovation. He focuses on exploring collaborative practices and full-bodied interactions that seek to re-think linear processes of research, analysis, design, intervention, and evaluation—exploring the implications for knowledge generation and knowledge transfer in praxis settings. Brendon worked on the DAIM project while completing post-doctoral research in design anthropology at SPBRE at the University of Southern Denmark’s Mads Clausen Institute for Product Innovation (MCI). He teaches PhD and MA-level courses in Scandinavia (e.g., Umeå Institute of Design, University of Southern Denmark, Chalmers & Göteborg University) and he is a project leader for projects such as Lead User Innovation Lab, Language as Participation, and Språkkas.

Professor Thomas Binder leads The Codegn Research Centre (CODRE) at the School of Design, The Royal Danish Academy of Fine Arts. His research is about understanding how design processes generate new knowledge, and how an emphasis on knowledge building and learning can connect the designer’s classic design skills with more open design processes based on dialogue with users, for example in the fields of service design, strategic development and change processes. Binder has worked with design laboratories, where designers and non-designers collaborate on ‘rehearsing the future’ at the intersection between the known and the unknown. Through workshops and other activities where designers and stakeholders co-create future oriented experiments, a learning zone is established in which the possible comes within reach. For this learning zone, Binder has developed methods and approaches for collaborative inquiries such as a documentary video that serves as design material, design games, and scenario and prototyping methods based on improvisation. These design laboratories were used in the DAIM project.

Dr Laurens Boer is Assistant Professor at IT University, Copenhagen. His research interest is in the areas of speculative design and experience design. He studied Industrial Design at the Eindhoven University of Technology, the Netherlands. In 2012, he completed his PhD at the SPBRE Centre with a dissertation titled ‘How Prototypes Challenge Stakeholder Conceptions in Innovation Projects’. Boer has worked with prototypes as ethnographically based and technically robust artefacts that deliberately challenge stakeholders. By building provocative prototypes and deploying them at family homes and industrial organisations, he aims to bring together practices of critical design, design ethnography, and organisational change.

Dr Jared Donovan is a Lecturer and researcher in Interaction Design in the Creative Industries Faculty at QUT, Brisbane. His research is in finding better ways to interact with computer technologies with the goal of making computing technologies easier to use, more enjoyable and more respecting of people’s abilities for skilled physical movement. In particular, he has investigated the use of gesture as a way for people to interact with computer interfaces without the need for computers and mice. Donovan is also keenly interested in Participatory Design approaches and finding better ways to involve stakeholders in the design process. Before joining QUT, he worked for four years at the SPBRE centre for Participatory Innovation at the University of Southern Denmark where he researched the use of ‘provotypes’ (provocative prototypes) to spark discussion and debate. Donovan co-edited Design and Anthropology with Wendy Gunn (Surrey: Ashgate, 2012).

Dr Tricia Flanagan began her career as a fashion and costume designer, but has been working as a practicing artist and academic since 1996. Since completing a Master’s degree in Public Art and New Artistic Strategies in 2003, her practice has focused on the public sphere through the mediums of site-specific sculpture, social sculpture, sound sculpture, sculptural installation, wearables and performance installation. She established the Wearables Lab at the Academy of Visual Arts at Hong Kong Baptist University in December 2014. With collective experience that spans fashion, art, sculpture, textiles, technology, product design and urban design, the group began their collaboration through a common interest in sustainability, the environment, and the role technology plays in envisioning alternative futures. The group’s collaborations focus on developing wearables beyond the Anthropocene, and through their exploration of public activism via data democratisation. Between them, the artists have exhibited works in Germany, Australia, Ireland, Italy, China, Hong Kong, the UK, and the UK.

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of blending digital technology with traditional craft practices and organic materials. Deeply vested into the pursuit of a more sustainable and livable world for all of us (humans and nonhumans alike), she sees the role of design and designers in imagining new and better solutions to what things are, what they could be and how they can be done. Raune hold a masters degree in new media design and is currently a PhD student in Design Studies at Aarhus University, Denmark.

Zoe Mahony has been a fashion designer, business CEO and educator. Her current research explores aesthetics, technology and identity through the multidisciplinary field of computational and responsive clothing. Mahony has extensive Australian and European experience in RTW markets with roles in design, production, ethical supply chains, and marketing. She is a seasoned educator, teaching design thinking, communication, and new technologies. Recipient of the Churchill Fellowship, Mahony has written on design studio and emerging artists/designers.

Deepa Butoliya is a PhD student in Design Studies at Carnegie Mellon University with a background in Architecture and Industrial Design. She worked for several architectural firms in India before transitioning to Industrial Design and working with Jindal Architecture Ltd., MIT development lab and Havells Sylvania India Ltd. Deepa has also received MFA from University of Illinois, Chicago and has taught Industrial Design undergraduate classes at UIC's School of Design. She is interested in Speculative and Critical Design and wants to explore further her own theories and tools for research in this domain.

Ahmed Ansari is a PhD student in Design Studies at Carnegie Mellon University. His research intersects at the junction between design, cultural & media studies, and the philosophy of technology. He focuses on how subjects express and individuate themselves and create techno-cultural environments through making aided by technological artifacts. Philosophies about excess and desire as positive (creative) rather than as negative (consumptive) frame his work, analyzing particular categories of how excess manifests, as in the form of the gift, the sacred, and as creative output (art, hacking, maker culture etc.), and his research also examines spatiality and emergence, especially where there are gaps in sociotechnical assemblages. He draws from actor-network theory and social practice theory, from philosophies of space, and second order cybernetics. Prior to Pittsburgh Ahmed was an Assistant Professor teaching interaction design, game design, and media studies in the School of Media & Social Sciences at the Shaheed Zulfiqar Ali Bhutto Institute of Science & Technology, in Karachi, Pakistan.

Dr Katherine Moline is a Senior Lecturer in research practices at UNSW Art & Design. Katherine explores the cross-overs between avant-gardism in visual art and the social pact of contemporary experimental design. Since co-convening the symposium sds2k4: Experimental and Cross-Cultural Design (2004), she curated the exhibition Connections: Experimental Design (2007) and introduced international leaders in experimental and speculative design to Australian audiences. More recent exhibitions she has curated since completing a PhD in Art History include Feral Experimental at UNSW Galleries, Sydney (2014), Experimental Practice: Provocations in and Out of Design at RMIT Design Hub, Melbourne (2011), and Experimental Thinking: Design Practices at Griffith University Gallery, Brisbane (2009). Katherine’s art practice investigates how design processes and technologies can be diverted to the production of experiential and conceptual interactions. Current research projects include a critical review of research methodologies in art and design, a series of experimental workshops on social practices with mobile telephones and CCTV, and a number of ongoing systems artworks. Katherine was awarded the Dean’s Award for Outstanding Research Supervision, College of Fine Arts, UNSW in 2009.

Cameron Tonkinwise is the Director of Design Studies at the School of Design at Carnegie Mellon University. He has a background in philosophy; his dissertation concerned the educational philosophies of Martin Heidegger. Cameron's research focuses on what designers can learn from philosophies of making, material culture studies and sociologies of technology and the interdisciplinary challenges of 21st century societies. Prior to joining CMU Cameron was the Associate Dean of the Sustainability School of Design at Parsons at The New School for Design, New York. Before that Cameron served as Co-Chair of the Tishman Environment and Design Center and the Chair of Design Thinking and Sustainability in the School of Design Strategies at Parsons. Before moving to USA, Cameron was Director of Design Studies at the University of Technology, Sydney, and executive Director of Change Design, formerly known as the EcoDesign Foundation Cameron's primary area of research is sustainable design. In particular, he focuses on the design of systems that lower societal materials intensity, primarily by decoupling use and ownership - in other words, systems of shared use. Cameron has published a range of articles on the role of design, and in particular, service design, in the promotion of the sharing economy and collaborative consumption.
Beck Davis is the acting Program Director of Design at the Queensland College of Art, Griffith University. Beck holds a PhD (Industrial Design) in the analysis of gestural interactions between design teams — as well as the use of metaphors and analogies during the creative process. She maintains a particular interest in the philosophy of technology and sustainable design and is currently researching Mediated Interactions: how technologies shape experiences and creative collaborations. In 2016 she co-founded The Walter Collective a transdisciplinary collective that explore and critique wearables, embodied media, human-non-human interactions and inter-species communication. Recent exhibitions she has curated include Wear Next at artisan Gallery, Brisbane (2015); Academy of Visual Arts, Hong Kong (2016), and Experimental Thinking: Design Practices at Griffith University Art Gallery, Brisbane (2015).

Peter Hall is the Graphic Communication Design Program; Course Leader, BA Graphic Design at Central St Martins, University of the Arts, London. He is a design writer whose research focuses on critical visualization and mapping as a design process. He joined the College from Griffith University Queensland College of Art where he was the program director of the Design and Design Futures program. He teaches design history and methods and has written and lectured widely on mapping as a metaphor for a spatial approach to design criticism and history, including a TEDx appearance, lectures and seminars at Parsons The New School and a video in RMIT’s Design Futures 10 x 10 symposium. His current research includes his involvement in the visualization work package of the European TREsPASS project, where he is looking into the genealogy and limitations of dominant visualization tropes such as tree diagrams and the potentials of participatory mapping: Before moving to Griffith, Peter was senior lecturer in design at the University of Texas at Austin. He also taught at Yale University School of Art and worked at the University of Minnesota Design Institute, where he wrote and co-edited with Janet Abrams the book Else/Where: Mapping - New Cartographies of Networks and Territories. He is one of the founders and a board member of DesignInquiry, a non-profit educational organization based in Maine, USA. He has been a contributing writer for Metropolis magazine and has written about design for publications including Design and Culture, Design Philosophy Papers, Print, I.D. Magazine, The New York Times, and The Guardian. His books include Tibor Kalman: Perverse Optimist and Sagmeister: Made You Look.

Laurene Vaughan is Professor of Design at RMIT University. She is an artist, writer, curator, and designer who is fascinated by the ways that people design and make place. Her practice spans a spectrum of embodied domains of making and performance, from walking interventions to the design of collaborative digital platforms. She is a founding member of the Arts and Cartography Commission in the International Cartographic Association. Her recent projects include The Stony Rises Project, a curatorial exploration of vernacular practices, immigration, modes of dwelling and the crafting of landscape in the making of place. This included an associated book Designing Place (Melbourne Books, 2010).

Brad Haylock is a designer, publisher and academic, who is unwaveringly interested in the politics of things. He is an Associate Professor of Design in the School of Media and Communication at RMIT University, Melbourne, where he manages the Master of Communication Design program and jointly leads (with Professor Laurene Vaughan) the Design Futures Lab research group. He is founding editor of Surplus, an independent publisher of printed matter (mostly books) pertaining to critical and speculative practices across art, design, and theory.

ACKNOWLEDGEMENTS

The curatorium gratefully acknowledge the contributions of exhibitors, workshop leaders and panel presenters to Climactic: Post Normal Design. In particular, we thank Margaret Cox, Assistant Director, Miller Gallery, Carnegie Mellon University; Kara Skylling, Exhibitions and Facilities Manager, Miller Gallery, Carnegie Mellon University; and Manjari Sahu, Catalogue Designer, Carnegie Mellon University and the School of Design, Carnegie Mellon University.
The exhibition 'Climactic Post Normal Design' challenges the weak logic of design thinking and aims to shift design debate from thinking about progressive design objects to reflecting critically on the design processes that exclude most of the world's population from the debate.

The Exhibition and Symposium
4 November to 11 December 2016
Miller Gallery at Carnegie Mellon University

alternative models for design that broaden human capacity to understand and intervene in social and environmental crises

"design has failed to create a cogent practice that can tackle the nature of complex, global, and rapidly shifting futures"

"structured uncritically around the logics of coloniality at the foundations of the modern world-system"

"operating in different spheres: cultural, economic, and geopolitical"

"asks questions of our present capacity to develop and proliferate forms of design thinking that accommodate disparity, divergence and conflict, when these challenges are confronted on a global scale"

"We establish that this way of seeing futures as concrete things must shift from understanding the present as static, when the reality is the very opposite: the present changes continuously."

"contemporary design alternatives that frame the future as unknowable from a present seen as unfixed and possibly unfixable"

"we question how mainstream speculative critical design practice distinguishes itself from design's racist, sexist and classist foundations"

"relevant to the majority of world populations who are marginalized in current design practices"

"pluriverses that draw on science fiction, ancient traditions and celebrate make-do culture"

"ecologies and environments that are neither totally natural, nor totally technological"

"What alternatives to traditional ways of thinking about sustainability and survival, what strategies for coping and dealing with the rapidly shifting landscapes and ecosystems of a changing planet, have designers proposed in recent years?"

"alarming statistics of global pollution"

"imagined and lived alternatives"