

**Timon McPhearson, Connect the Dots**

Connect the Dots is an urban ecology and design project to innovate connections between fragmented, disconnected urban green spaces (dots). Ecological spaces in New York City, like most cities, struggle because of lack of corridors and connections between parks and smaller green spaces that can allow species and genetic material to move. Improving the mobility of urban species and building a networked ecological infrastructure will have benefits far beyond individual species, serving as a source for innovating ways to increase the amount of green space for the health and wellbeing of New Yorkers, especially in underserved areas of the city. Green spaces are fundamental to livability, equity, resilience and sustainability and corridors and green space connectivity is essential to a healthy urban ecology. Connect the Dots will develop ecologically based designed solutions for linking parks, street trees, green streets, green roofs and walls, and micro-urban spaces (dots) together in an ecological network to improve the lives of plant and animal species and the many benefits they provide for the city.

**Nicholas Brinen, Street Seats**

The Department of Transportation's (DOT) Street Seats program is a seasonal public space that reclaims portions of New York City's streets for much needed public space. These public spaces generally include seating and tables for a neighborhood to create an attractive setting for eating, reading, working, meeting a friend, and taking a rest. Parsons School of Constructed Environments (SCE) has teamed up with the DOT to create a proposal that evolves the standard design. A Parsons-based design-build "club" comprised of 8 SCE students designed a proposal that will provide thoughtful public space at the Northeast corner of 13th Street and 5th Ave. The 40ft x 6ft Design incorporates the necessary seating and tables, but goes further to incorporate vegetation, graphic identity, outdoor exhibition space, and solar illumination. These additional amenities are integrated into the form and construction of the installation, which will be fabricated in house and easily assembled on site. Expect this thoughtful public space to appear in early June until late October.

**Willi Semmler, Mitigation and Adaptation Policies against Climate Risk**

Recent IPCC research, international conferences on climate change and fund raising activities to combat global warming stress now that it is advisable to pursue both mitigation as well as adaptation policies. Together with co-authors I have advanced modeling and empirical studies in both areas. This planned project will employ a simple Nordhaus type Integrated Assessment Model (IAM), to be calibrated by empirical facts.

The implementation of climate stability, and the adaptation against the coming climate risk seems to pit today's against future generations in the trade-off of economic growth versus sustainability. We want to show that there is a better way to deal with this problem. We want to take into account intra-generational and inter-generational justice and fairness. Starting with a recent paper by Jeffrey Sachs (published in the Handbook of The Macroeconomics of Global Warming, edited by Lucas Bernard and Willi Semmler), a novel angle towards climate justice is introduced. We propose a behavioral economics solution to elicit future-oriented loss aversion.

In an IAM type model, we study climate change abatement and mitigation policies, which lead to a fairer solution across generations.

The current generation mitigates climate change and provides infrastructure against climate risk financed through climate bonds to be paid by future generations. Since for future generations the currently created externalities from economic activities – the effects of CO<sub>2</sub> emissions – are removed, this entails that the current generations remain financially as well off as without mitigation while improving environmental well-being of future generations. This way it can be shown that intergenerational tax-and-transfer policy turns climate change mitigation and adaptation policy into a welfare improving strategy.

### **Ivan Ramirez, Understanding Climate Change and Urban Health Using a Syndemic Modeling Approach**

Extreme weather events have increased in the United States and globally, causing disruption of social and economic activities and human health impacts. Hurricane Sandy, for example, cost the U.S. government an estimated \$ 79 million in aid, which does not include health costs (NRDC 2013). It is also anticipated that extreme weather events (e.g., hot extremes, heat waves, and heavy precipitation) will become more frequent in the near future because of rising global average temperatures, which have increased by 0.8 °C since 1880. Furthermore, it is expected that rising sea-levels will cause coastal cities, in particular, to experience increased vulnerability to flooding (IPCC 2013). Importantly, the brunt of extreme weather-related impacts will fall upon the most disadvantaged subpopulations, which concentrate in cities (Barata et al. 2011). Moreover, health effects occur within a context of existing social and health disparities. Understanding how climate change and weather extremes will impact urban areas in general, and minorities and poor subpopulations in particular is an important area of environmental health research that will contribute greatly to the public health of cities.

The aim of this project is to examine the synergistic effects of climate change and social deprivation on health vulnerability and resilience of urban areas. Specifically, the project will focus on two study areas in the U.S. and Peru. It builds upon current research that focuses on chronic disease persistence in New York City, U.S. and infectious disease emergence in Piura, Peru.

### **Ana Baptista, Climate Justice: Case Studies of Civil Society in Action**

Ana is using her award towards her research project, co-produced with Climate Justice Alliance (CJA). This project will consist of a series of case studies, and aims to explore the twin goals of poverty alleviation and climate resiliency and mitigation. As for CJA, they have an explicit aim to offer alternatives to the current fossil fuel based energy systems, implementing a transition that provides for more renewable and economically just economic activities. The efforts of this will be to support local communities, focusing on their ecologies, economies, as well as their culture and history to form solutions.

The case studies will be conducted in six pilot sites throughout the U.S., implementing “Our Power” Campaigns (grassroots groups poised to take on extreme energy interests, and lead

with real models of grassroots solutions for a just transition), in communities on the frontline of climate change, and efforts will be led by the community.

The case studies are taking place in:

- San Antonio, TX with the Southwest Workers Union and the Southwest Organizing Project (SWOP)
- Detroit, MI with the East Michigan Environmental Action Council (EMEAC),
- Eastern Kentucky, KY with Kentuckians for a Commonwealth,
- Jackson, MS with Cooperation Jackson
- Richmond, California with Asian Pacific Environmental Network (APEN) and Communities for a Better Environment (CBE)
- Black Mesa Water Coalition, and Black Mesa, Arizona with the Black Mesa Water Coalition.

### **Timo Rissanen, Designing Endurance**

Designing Endurance investigates the use of clothes, and in particular practices that can prolong the useful life of a garment, such as repair and customization. During the project five participants will wear shirts specifically made for them, and document the use practices in a supplied journal. The aim is to uncover motivations behind wearing an item among a choice of many, as well as decisions leading up to laundering and eventual disposal of the garment. In this research the emotions and memories associated with particular garments are crucial. For this reason I am collaborating with a team of performance artist-researchers (Mari Krappala, Leena Kela, Heini Aho and Sebastian Ziegler) with the specific aim of capturing and communicating knowledge that traditional design research methods may not capture. This is an experimental approach to such research, however the artists have extensive prior experience in research collaboration with 'traditional' scientists, for example a biologist and a cosmologist. While ethnography is the primary approach in this project, my hypothesis is that this collaboration with performance artists will enrich our understanding of garment use and decisions that prolong or shorten useful lives of garments. Given that an average American buys 68 garments per year, understanding these decision-making processes in a design context has significance.