4S 2018 abstracts relating to African STS

The visual culture of Nigeria's politics of infrastructure
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More than anything else, the experience of technology in Nigeria is more about paucity and the resultant public agitation. The frustration is historically expressed through visual modes such as cartoons, film, and photojournalism. While these are too canonical, a new form of visual culture has emerged with the digital infrastructure of mobile phone technology and the Internet. It involves the production, circulation and interaction around photographs on online platforms. Despite the inefficiency of the digital technology in Nigeria, the new visual culture manages to thrive with a massive dissemination of photographs on websites such as Facebook (Nigeria's most widely used sites). Since 2012, I have been following the online practice as a virtual participant observer on Facebook, downloading photos and their comments. In this paper, I analyse the materials to argue that infrastructure is a site of politics in Nigeria. The conversations around the photographs reveal the agitations of Nigerians regarding infrastructural paucity and their understanding of the situation as living behind time. We also get a sense of the broader political questions such as corruption and power tussle that come into focus through the critique. Then I show how the political elites are drawn into the online interactions, their responses, and what the question of infrastructure reveals about the tensions of democracy in Nigeria. I draw on the anthropology of infrastructure and bring it into dialogue with the theorization of photography as a political tool. The paper disrupts the progressive story of transformation of Africa by digital technology

Modelling modernity and how it plays in the market: Commercialising ICTs in Nairobi
Michel Wahome, University of Edinburgh; Matthew Harsh, Concordia University; G. Pascal Zachary, Arizona State University

Digital technologies were expected by their advocates to flatten global asymmetries of knowledge, information and economic development. ICTs can be re-engineered, repaired, designed and used by a diversity of actors who hold a variety of knowledges and skill sets, derived from formal and informal sources. This attribute provides a broad opportunity for locales to generate situated modalities of use and innovation. Despite this potential, the persistent framing of some places as non-modern and their aspiration to modernity means that in Nairobi, and elsewhere, the language of the digital economy is best spoken by 'cosmopolitans' well-versed in supposedly 'universal', but mostly Western modalities. The identities, narratives, practices, institutions that replicate the 'tech start up' imaginary thus reproduce age-old asymmetries. Local arenas however, resist mischaracterisation, represented in outcomes such as 'low uptake', 'no markets' and other indicators that technologies are not locally apt. This paper analyses how actors reinforce the validity of 'tech start-up ecosystem' tropes through the

knowledges and practices to which they attribute success, versus those that they need to commercialise technologies locally. This contributes to STS scholarship interested in analysing African technoscience in situ, "between…locally generated and inbound ideas, instruments, and practices." (Mavhunga, 2017: 9).

Short-term transnational mobility, gender and research careers in East Africa: The case of women in computer science
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Transnational mobility of academics and researchers is an increasingly common global phenomenon, providing access to research positions and shaping the trajectory of research careers. Academic mobility is also a gendered process. Gendered roles, family ties, traditional values, national context and labor market conditions are some of the factors that determine access to opportunities as well as the decision to move. While long term mobility and migration leading to a "brain drain" is a serious concern for S&T systems in the Global South, short term transnational academic mobility in pursuance of a doctoral degree has been a key factor in developing computer science research capacity in East Africa. This process is mediated by donor agencies that provide funding for programs with the goal that participants return to their home country after earning their degrees to work as researchers. In this paper, we focus on women's career aspirations and experiences of pursuing doctoral degrees abroad to build their research careers. Our data is drawn from a long term ethnographical study of computer science researchers in East Africa. We examine how women experience this short-term transnational mobility and how it shapes their research careers. Our analysis considers both structural factors such as institutional environments, donor strategies, and university policies, and individual factors such as life events, family commitments, and career aspirations; as well as women's agency in managing their research careers. We find that donor mandates to provide women equal access to these opportunities have resulted in women being equally represented amongst the PhDs trained through many of these programs. While mobility has played an important role in building their research careers, women have had a mixed experience, shaped by traditional gender roles and expectations.

Eating Ariel Cake: DOHaD and other Matter/ Space/Time Sensibilities in South Africa
Catherina Suzanne Truyts, Sol Plaatje University

This paper explores the landscape of norms that categorise time, place, person and substance in Kylemore, a small town in the Cape Winelands of South Africa. Biomedical and public health discourses and social norms identify appropriate brackets of time and place in which women should/should not do certain things so as to secure the best life for their infants, and also – particularly in terms of mothering – constitute themselves as morally good persons. This paper moves between two ethnographic vignettes. In the first, 'icing sugar,' a mother wants to leave the hospital badly, and applies icing from a cake to her newborn baby's lips in order to raise his

blood sugar level. In the second, an expensive cake with a print of Ariel, Disney's little mermaid, is presented (but not eaten) at a baptism. From these illustrations we think about personhood, networks, and non-nutritional forms of care that fall outside of both biomedical and social norms. In response to public health discourse that prescribes the 'right' time and place to ingest certain matter, cake compels us to enquire after other, further, methods of nourishment. These transgress conventional brackets of belonging. From this I develop a way of thinking about how ingestion edits life

Epigenetics, gender and population futures: reading 'the first thousand days' from South Africa
Michelle Pentecost, Kings College London; Fiona Ross, University of Cape Town

As of 2013, nutrition policy in the Western Cape Province in South Africa explicitly focuses on 'the first thousand days of life' measured from conception to two years of age. We show how within this focus, 'the maternal' has been cast as a key frame for interventions intended to produce ameliorated health outcomes for individuals (i.e. life-course based) and for future generations. This builds on longstanding discourses of maternal responsibility, indelibly shaped by histories of racial segregation, racism, structural violence, and the HIV epidemic. In contemporary discourse about risk and potential, the maternal figure is (again) materialized as the site of responsibility and intervention, linked with a moral discourse that extends care of the individual to care of the future and the population, and in the South African case, the 'future nation'. We demonstrate how policy 'foregrounds' certain categories of person and argue that attention to this process is important in understanding how policy settles in the tracks of earlier interventions. We conclude that the renewed focus on 'the maternal' is a 'knowledge effect' - the product of a specific way of asking and answering questions and anticipating knowledge horizons.

Time and the use of bio-contraceptive technologies among young women in South Africa
Nolwazi Mkhwanazi, University of the Witwatersrand

In South Africa, the majority of young women who give birth during their teenage years are strongly encouraged, some forced, to adopt a contraceptive regime. For many young, often poor, black, women the only choice they have which is readily provided at the clinics is the hormonal injection (depo provera). This bio-contraceptive technology was banned in many countries because it was considered to be unsafe and possibly carcinogenic. The popularity of the hormonal injection for service providers is that it is long lasting and poses less of a risk to pregnancy than the contraceptive pill which has to be taken within a particular window of time everyday. However changes in the timing of both can affect the effectiveness of the biocontraceptive. In this paper, I consider young women's experiences of bio contraceptive technologies and time. My focus is less on how time is central to the successful use of biocontraceptive technologies but rather on how time is a factor that results in the discontinued use of bio-contraceptive technologies, often resulting in a second pregnancy.

Traditional Birth Attendants and the State: the mediating effect of Evidence Informed Policy Making (EIPM) on maternal health policy in Uganda
Emmanueil Benon Turinawe, Makerere University, College of Humanities and Social Sciences

The arrival and rise to dominance of allopathic care in the colonies entailed the denigration of indigenous healing systems, branding them as ineffective and anachronistic. Conversely, many rural and remote areas remained outside the structures and reach of formal healthcare systems. During the postcolonial era, collaborative partnerships with indigenous healers were sought in order to reach remote rural peoples. By the 1950s, the World Health Organization (WHO) together with national governments had set up collaborations with a group of healers, who became universally categorised as 'traditional birth attendants (TBAs)' assisting in the delivery of maternity care. By the 1990s – coinciding with the rise of the evidence-based medicine and policymaking (EIPM for short), there was growing concern that the integration of TBAs was not achieving the desired outcomes in reducing maternal mortality rates. This led to the promotion of a new category, 'skilled birth attendants (SBA)' – defined to exclude TBAs. With this shift, TBA services were discouraged, banned and even criminalised. Yet despite the issuance of threats of arrest, our ethnography in Luwero, Uganda, observed the syncretic, and yet secretive utilisation of both TBAs and formal care amongst the community. TBAs were always an artificial category created to service biomedical interventions; designated practitioners did not identify with it, nor did they legitimate their practices through it. Consequently, TBAs remain a statistical anomaly that is difficult to organise, account for and govern - they do not map onto the processes of EIPM. However, their persistent use by communities brings to light the uneven and ambiguous relationship between global health science and policymaking and the health care needs and practices of targeted communities.

Representing African Women: A Case for Maternal Survival Narratives
Adeola Oni-Orisan, UC San Francisco/UC Berkeley

The high risk of maternal death in Africa has cast a shadow over experiences and representations of pregnancy and childbirth. In the 1980s, amidst new awareness of disparities in maternal mortality rates between high and low-income countries, tragic anecdotes of women dying during childbirth emerged as a tool to garner political and economic support for global health interventions aimed at women. While successfully raising public concern and billions of dollars in aid, given that these stories are some of the few stories of African women so widely circulated, it is important to ask what else does the genre of maternal death narrative do. What possibilities are foreclosed? How might discursive practices around childbirth structure the care offered to African women? And what power relations are revealed in this form of knowledge production and promotion? In this paper, I first examine how maternal death narratives function and structure potential solutions to the problem of maternal mortality. As these narratives tend to overlook the plethora of ways that women have survived, I use my fieldwork with pregnant and birthing women in southwest Nigeria to explore the ways that women piece together different sources of care in an effort to ensure successful deliveries amidst considerable uncertainty. I argue that we have at least as much to gain from maternal survival narratives as

we do from the often-told maternal death narratives. In focusing on the pathways to death, women's bodies are foregrounded as sites of knowledge production over their experiences.

Technology and the teaching hospital: objects, concepts and curricula in Ghanaian medical education, c. 1923-2018
John Nott, Maastricht University

Established in 1996 in order to address the dearth of medical education in Ghana's northern savannah, the University of Development Studies (UDS) hosts an innovative medical school curriculum developed in conjunction with Maastricht University. Such international collaborations must, however, be considered in view of the history of European involvement in African medical education. By offering a broadly defined and historically informed ethnography of teaching technologies at UDS this research will provide insight into the assumptions of universality which underpin the internationalized medical education – itself an under-investigated medical technology – as well as its specific translation into an African context. Drawing on historical and ethnographic study at UDS, this paper explores how pedagogical technologies – both material and conceptual – have travelled to northern Ghana. Rarely produced with a mind to students in the Global South, material technologies found in African medical schools are imbued with assumptions relating to the presentation of disease, to cultural preconceptions of health, to environment and to infrastructure. However, STS scholars have shown that a technology's inscription does not equate to its use (e.g. Akrich 1992; de Laet & Mol 2000). The process of technological translation is further complicated by abstract technologies of ethnicity and language which collude to skew medical knowledge toward national and international standards. We use the tension between inscription and translation to trace the "ir/relevance" (M'Charek 2005) of (neo)colonialism in medical education, while also thinking conceptually about the technologies of medical education which might contribute to a more considered postcolonial STS.

'$100 Is Not Much To You': Open Data and the accessibility of online resources in African laboratories
Louise Bezuidenhout, Institute for Science Innovation and Society

The Open Data movement promises nothing less than a revolution in the availability of scientific knowledge around the globe. Unrestricted access to research data for re-use not only has powerful epistemic, but also ethical and political consequences. Indeed, it is posited that data sharing online is key to increased research just resource distribution and capacity building. These benefits of the Open Data movement are often discussed in connection with African science, and the availability of research data online is pointed to as a means by which scientists working in low-resourced laboratories can overcome financial and technological shortages. This paper presents empirical material from fieldwork undertaken in (bio)chemistry laboratories in Kenya and South Africa to examine the extent to which these ideals can be realized in a sub-Saharan context. To analyse the challenges that African researchers face in making use of freely available data, I draw from Amartya Sen's Capabilities Approach. His theorisations of

'conversion factors' helps to understand how seemingly minor economic and social contingencies can hamper the production and (re-)use of online data. Through this analysis I highlight that the current assumptions of "uninhibited access" to online data undermine efficient capacity building in African laboratories. Many African scientists continue to struggle to effectively re-use available data, due to small physical, technical and financial challenges within their research environment. Thus, they continue to operate at a "data deficit", despite the growing plethora of open data resources. I suggest the need to facilitate a more egalitarian engagement with online data resources.

An overview of the regulatory landscape for medical devices in Africa
Tania Douglas, University of Cape Town; Trust Saidi, University of Cape Town

Although regulations for medical devices are important in promoting access to high quality, safe and effective medical devices, and in restricting the availability of products that put lives at risk, many African countries lack comprehensive regulatory frameworks. A review of ten African countries, namely Kenya, Nigeria, Egypt, Sudan, Morocco, Angola, Algeria, Tanzania, Ethiopia and South Africa, reveals that the existing regulations are fragmented and focus mainly on imports, as there are few local companies which manufacture products for the domestic and export markets. Controls are not yet well established to prevent the importation or use of sub-standard devices. This poses the risk of allowing sub-standard and poor quality medical devices to penetrate the market. None of the ten African countries reviewed have specific regulations or regulatory bodies dedicated to medical devices. Instead, the regulations pertaining to medical devices are presented within broader frameworks covering medicines, foodstuffs, cosmetics, and related substances. This is due to a lack of resources and of a critical mass of skilled personnel to focus solely on the regulation of medical devices. This approach may overwhelm regulatory bodies, resulting in cumbersome and inefficient regulatory approval processes. Medical devices are adversely affected by regulatory delays as some have a short life cycle before they become obsolete. African countries could strengthen the regulation of medical devices at regional level by working towards harmonisation and convergence with the aim of sharing best practices between national regulatory systems.

Geographical Advantage, Local Disadvantage? Astronomy in South Africa
Jarita Holbrook, University of the Western Cape

South Africa is home to a growing astrophysics community. International multimillion dollar projects such as the Southern Africa Large Telescope and the Square Kilometre Array radio telescope (SKA), contributed to the existing astronomy community and allowed for its continued growth. The Astronomy Geographical Advantage Act (2007) established a section of the Karoo Desert as a 'preserve' for astronomy. This Act puts limitations on certain activities and technologies within the region, around the preservation of the dark skies and radio quiet region needed for astronomical observations. In 2014-15, I interviewed inhabitants in the region in the town of Carnarvon, the town closest to the core of the Square Kilometre Array. What emerged was a complicated picture of benefits, disadvantages, and disappointments associated with

being 'the Home of the SKA'. A repeated benefit was that knowledge of Carnarvon was elevated within South Africa and the rest of the world because of the SKA. However, benefits beyond that were not so unanimous. Disappointments were connected to local infrastructure, workforce development, and commerce. I conclude that despite the clear language of the Astronomy Geographical Advantage Act, peoples' expectations were not in alignment with the reality of living near an astronomy observatory

Building a modern city: urbanisation and social inequality in Nigeria
Babajide Olusoji Ololajulo, University of Ibadan, Nigeria

In the post millennium era series of land reclamation and sand filling projects have been implemented across littoral states in Nigeria. Particularly noteworthy was the recent reclaimed land and the site of Eko Atlantic City otherwise known as Nigeria International Commerce City, Lagos. In other examples, swamps and urban slums are sand filled to host Free Trade Zones, Deep Sea Ports, and modern housing schemes. Official commentaries on these projects emphasised the aspects of urbanisation, social development and the capacity to stimulate economic growth. Interestingly, the literature of land reclamation, while dwelling on its positive outcomes, also take cognizance of the dire ecological and environmental implications of rampant encroachment on the ocean. Meanwhile, in the domain of the "unofficial" sand filling and land reclamation projects are popularly interpreted as deceptive dislodgment of indigenous people, especially poor fishermen from their homes in the waterfront. In this paper, I engage with the local narratives of sand filling and land reclamation as a form of socio-economic development in Nigeria, focusing on the manner in which such narratives embed the discourses of urbanisation and social inequality.

The 'Infrastructure of Infrastructure': Tracing Urban Public Finance Configurations in Kisumu, Kenya
Liza Rose Cirolia, African Centre for Cities

Over the past two decades, social and humanities scholars have taken a keen interest in infrastructure (Star 1999, Graham 2010). This work has tended to be critical, using particular infrastructures as 'lens' through which to refine social and political theorizations. This paper draws on a small(er) group of infrastructure scholars who utilize relational modes of inquiry derived from the STS modality, and are distinctly concerned with urban infrastructure and thus contribute to critical urban theory (Coutard and Guy 2007, Coutard and Rutherford 2016, Jaglin 2016, Amin and Thrift 2017). In this vein, this paper makes the case for public finance as an urban infrastructure; I draw inspiration from Peck and Whiteside (2016) who refer to finance as 'the infrastructure of infrastructure'. By doing this, I open the possibility of deploying analytical tools developed to study urban infrastructure (such as water, ICT, or power), to study public finance. Core to this deployment is the concept of 'configurations'. In this paper, I use detailed empirical research on property taxation in Kisumu (Kenya) as the empirical entry points to hinge this tracing of urban public finance configurations. Property tax, as a configuration, reflects

practices, equations, materials, artifacts, imaginations, and regulations, arranged with sufficient fixity and regularity to produce a discernible 'logic' (Amin and Thrift, 2017). The property taxation configuration sheds light on both the city as a place and the City as an institution (C/city). In particular, it shows how urban public finance in Kisumu is pieced together, extended, and maintained by the regular practices of low-low level bureaucrats, technocrats, and administrators. These actors – their perspectives and the relationships they build with artifacts, such as the property valuation roll or the electronic financial management system- are critical to the operations of the C/city, shaping flows of urban revenue in fundamental ways.

Capturing Research on Film
Jarita Holbrook, University of the Western Cape

Since 2006, I have been engaged with science documentary filmmaking. After creating films to inspire and to encourage STEM diversity, I undertook a three-year project studying the relationship between a small town and a large telescope in South Africa. I proposed that the research output be a film to be shared with the communities involved. The switch from inspirational documentaries to presenting complex social issues on film (in two languages) was challenging. The communities involved embraced my efforts, however other audiences have been not as enthusiastic. I invite discussion around issues of research integrity, popularization, STS audiences, and the life cycle of documentaries.

Anticipating Catastrophe: Health Systems Strengthening Refashioned as Innovative Pandemic Preparedness
Marlee Tichenor, University of California, Berkeley

In the wake of the West African Ebola Virus Epidemic, a diverse array of global health funders has invested in health systems strengthening and cross-border, collaborative development projects in both case-present and case-absent West African countries. One illustrative example of this new investment is the series of Regional Disease Surveillance Systems Enhancement (REDISSE) projects, the first of which was approved by the World Bank in June 2016. The recipients of this first International Development Agency loan were Sierra Leone, Senegal, Guinea, and the West African Health Organization. REDISSE is a long-term umbrella project with the goal of including all 15 Economic Community of West African States (ECOWAS) and extending well beyond the spectre of Ebola. Senegal, which effectively managed and treated the one case of Ebola within its borders during the epidemic, was chosen for the first round of funding because of the country "has shown regional leadership in developing effective disease detection and research capacity." Within the context of this project and a hoped-for "Emerging Senegal," how are imagined scientific futures configured by anticipated health catastrophes? How are health systems, a flexible term, refashioned as protectors from a disastrous future and visions of promoted human well-being deprioritized? As a plan for cross-border scientific solidarity and care, how is REDISSE designed to take on this work?

PM2.5: Emissions of abandonment vs those of liveability
Andre Goodrich, North West University, South Africa

Particulate air pollution causes 10 million deaths per year worldwide. The villain is PM2.5 – particle below 2.5 micrometers in diameter. South Africa uses coal for 97% of its energy and 7.4% of all deaths result from ambient particle pollution. Although the 2004 Air Quality Act regulates such pollution, 35 operations in the oil, power, mining and cement industries received compliance postponements in 2015. These stemmed from the cost of retrofitting plants into compliance. This cost cannot be separated from the apartheid era political economy wherein such legislation was lacking. One company cited the US$18.6 billion cost, arguing it was not justified by the benefits of compliance. Key to this argument was the question: Which particles from where affect whom? This question generalizes morbidity beyond industrial emission. Industry's cost can be reduced by the scientific search for PM2.5 more immediately linkable to morbidity and more cheaply and efficiently addressable. This search is lead by environmental scientists who place expensive particle counting machines in search of the particles most urgently unhealthy. Unsurprisingly, these are found indoors, emitted by the work of unfolding family lives and aspirations in economies of abandonment again linked to the apartheid era political economy. We are left weighing the cost of reducing the emissions of abandonment against those of the struggle to generate livability amid that abandonment. How might ethnographic research with scientists protect projects of liveability from a desperate industry's need to reduce PM2.5 at any cost?

Behind the GM Ban: Exploring the Politics of Biotechnology for Development in Kenya
Caspar Roelofs, Science & Society Group, University of Groningen

In the Kenyan development strategy, science, technology and innovation – and biotechnology in particular – play a central role in the country's aim to become a competitive technological economy. With the implementation of a biosafety regulatory framework and establishment of a national biosafety authority (NBA), and progress made in the development of various GM crops, Kenya is often considered a leader in advancing biotechnology for African development. However, in 2012 the cabinet unexpectedly ordered a ban on importation and commercialization of GMOs. This leaves the country in a regulatory stalemate around e.g. insect-resistant maize and cotton – two applications that the NBA has recently approved to move towards the final regulatory stage before commercialization. In this case study, we aim to gain an understanding of how contesting domestic and international interests among political and non-political actors can explain this stalemate. For this purpose, we draw on both international relations theory on international politics and domestic innovation (Weiss 2005; Gilpin 1981; Taylor 2012), and STS theory on dynamics of innovation and political culture (Jasanoff 2005). During the first phase of fieldwork in 2017, we conducted 25 interviews with policymakers, regulators, scientists, and civil society actors, and identified diverging drivers, expectations, and power relations around the GM ban. Currently, we are in the second phase of fieldwork, where we conduct further interviews and group discussions with a broader set of respondents to unravel the emergence

and persistence of the ban, but also how the ban can be further understood in the broader Kenyan political culture.

Human and non-human "undesirables" in hydrological framing of Cape Town's Kuils River
Nikiwe Solomon, University of Cape Town

Using the Kuils River as a case study, this paper reflects on the human-river relationship in the history of the Cape Town metropole. Drawn from ethnographic research, the paper explores the ways of relating between the various actors and how they have enacted the Kuils River in relation to the city's history. The paper demonstrates that in South Africa, the history of the discourse around water management is often highly anthropocentric, centered on logics of science authority and technical efficiency, assuming a singular viewpoint from which to develop and implement solutions. However, even hydrological approaches to water are not free of socio-cultural values and the Kuils River case study demonstrates this. The threat of the poor water quality, poor service delivery and tensions arising from inherited colonial spatial planning and development agendas have generated conflicts between nature, science, technoefficiency, legal instruments and politics. Through looking specifically at the river course, in recent history and now -- through aerial photos, early maps as well as oral narratives, the paper traces the river's entanglements with the city. The paper looks at the history of the ecologies of practice along the Kuils, the role of power, becoming, belonging, subsistence and livelihoods on the urban periphery, with a particular focus on the "undesirables" (both human and non-human) and waste streams in the socio-technical and hydrological understanding of the river. It explores the efforts to manage and control the expansion of these "undesirables" beyond allocated spaces of the Cape Town metropole.

Windscapes and Socio-technical imaginaries of the Tsitsikamma Community Wind Farm, South Africa
Michelle Pressend, University of Cape Town

South Africa, a country highly dependent on coal for its electricity generation and that has significant coal reserves initiated a large-scale renewable energy programme. The Renewable Energy Independent Power Producer Procurement Programme (REI4P) implemented in 2011 assumes that by including some criteria for local economic development and social economic development, enterprise development and local ownership that should be met from contributions from the project's revenue, local well-being will be improved together with climate mitigation. This study explores the sociotechnical imagination of "community benefit" in the Tsitsikamma Community Wind Farm, considered to a 'model' project under REI4P.

Conservation and Expulsion: The Sikumi Forest Reserve in Zimbabwe
Tafadzwa Mushonga, University of Cape Town; Frank Matose, University of Cape Town

It is an overstatement to say there is a war for conservation or that conservation-scapes are deadly landscapes in the Zimbabwean forestry context. Undeniable, however, is a case of post independence resource-based or green violence against society which follows a tradition of violent expulsions since the forest reservation era. Today's violence is a product of structural effects of colonial forest regulations and policies, and scientific discourses on sustainable yield forest management inherited with minor changes by the post independence Forestry Commission. Using the case of Sikumi Forest Reserve in Zimbabwe, we explore how communities living adjacent the forest continue to be denied resource access on the basis of scientific conservation and how violence is unfolding. We discuss emerging forms of green violence and whether conservation in this context necessarily requires the expulsion of people. The question arises as to what forms a decolonial conservation science might take.

Protecting a "pristine biodiversity" on Mount Mabu: Constructing Divides and Marginalizing Local Worlds
Anselmo Matusse, University of Cape Town

Mount Mabu became popular when in 2009 a group of scientists from the Kew Botanical Gardens first noticed it using Google Earth. It has since then been considered a "lost Eden on Earth" and "untouched by Man". This has attracted a number of national and international scientists and NGOs who are interested in turning Mount Mabu into a conservation area. Currently, two NGOs, namely RADEZA – a local NGO and Justica Ambiental – Friends of Earth Mozambique are struggling to turn Mount Mabu into a conservation area, the first as a National Park and the latter as a Community Conservation Area. Both NGOs, Scientists and State officials frame the Mountain and the forest around it as a being separate from humans, a resource out there that needs to be protected. While these actors focus on the nature side, which is inherent to Western environmentalism, they fail to notice the wealth of relationships that cross the nature-culture divide which characterize the daily lives of local communities. Based on 11- months (and counting) worth of ethnographic data, during which interviews with state officials, NGOs, local leaders and community members as well as direct observations were carried out, this work will dwell on these different worlds that were put side by side by the power of capital and science and their possible repercussions on the future of the Mountain and the communities living with it.

Digital Matatus: the discursive and material effects of data science in Africa
Kerry Holden, Queen Mary, University of London; Matthew Harsh, Concordia University

One of the ways to get around a city like Nairobi, Kenya, is by catching a matatu. These are privately owned mini-buses that serve the city as a major source of public transportation. They will be recognisable to many because of their brightly painted exteriors, some featuring slogans, ironic comic strips and cartoons. The matatus (or taxis depending where on the continent you

are) are regularly held up as symbolic of the chaos of African cities and the shortcomings of state provision. They do not operate in a centrally regulated transportation system and they harbour a murky criminal element with known gangs operating many routes. Since 2012, the matatus of Nairobi have served as an ideal experimental subject for exploring the uses of data science in mapping and ultimately improving the inefficiencies of semi-formal and informal urban transit. The Digital Matatus Project (DMP) brings together scholars from US and Kenyan universities to develop an online, digital map of Nairobi's matatus, including routes, directions and timetables. The completion of the map, which mimics the London underground map, marks the launch of a worldwide mission to use data science to bring order to the chaos of para-transit in cities across the world. Strikingly, the most problematic cities are located in the Global South. We present a critical reading of the DMP that focusses on its politics and poetics. Maps and statistics represent attempts to manage territory, populations and resources. Read in this way, the DMP can be understood as an exercise in governing urban space. However, ethnographic research reveals that the way the map was made is incongruent with the final product and the mission statement of project leaders. The map's availability open access quickly renders it unrepresentative in a commercially competitive system, but then, the map also appears to have very little use-value among Nairobi's residents, who continue to move around the city in much the same way as they always did. In light of these concerns, our question turns on what the digital map is for, if the political purchase and material effects are negligible?

Pluralizing the Relationships of Public Trust in Science
Heidi Grasswick, Middlebury College

When commentators lament the apparent lack of public trust in science, they often do so in exactly those very general terms, referring to "the" public and to "science" in the singular, as though there is a single attitude of trust across the board that is considered desirable. Yet one of the fundamental contributions of feminist epistemologies has been to investigate epistemic issues situationally. Feminists have argued that all knowing is perspectival and limited by one's social location (Haraway, 1988; Harding, 1991). If there are normative demands that inquirers should live up to, including whether and when they should trust communities of experts to know for them, those demands must take account of what is reasonable and available for knowers in their particular situations (Scheman, 2001). Such a situational approach underwrites and motivates my pluralist analysis of relations of trust between variously situated lay persons and communities of experts. I adapt feminist work on interpersonal trust (Baier, 1986; Jones, 1996), to the case of laypersons' epistemic trust with knowledge-generating institutions and communities, arguing that both a "sincerity-care" condition and a broadly understood "competency" condition must be satisfied. Finally, I complicate relations of scientific trust by noting the array of institutions (government, the media, industry and education) involved in networks of trust relevant to scientific knowledge. I suggest that the most serious concern is not individual incidents of trust failures, but rather the tendency of both trust and distrust to "travel" across relationships and communities.

White people's shit: incremental development and excremental politics
Adia Benton

Recent studies of 'compassionate consumerism' have highlighted a growing trend in commercial -- as opposed to philanthropic -- development aid (Richey and Ponte 2011). These studies highlight generally criticize how such initiatives gloss global and regional inequalities and reproduce the mechanisms driving them, while also eliding some of the racial, economic, and sociotechnical processes involved in inequalities' reproduction. In this paper, I present a case in which a US toilet company donates an 'innovative' hygienic toilet pan to developing world households for each of their 'efficient' toilets they sell in the US. Specifically, I look at nodes in this process -- US marketing strategies, communication about the toilet pan technology, and distribution mechanisms for the hygienic toilet pans to sites like Nigeria and Uganda -- to interrogate the relationships among international development, branding, innovation, waste and excess. Specifically, I question the moral and political grammar structuring the presumed transformative potential of "white people's" waste, of its capacity to mediate hierarchies of value and exchange, abundance and excess in the name of conscious consumerism and international development.