PROJECT TEAM

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Planned Obsolescence, Circular Economies and Ecologies of Electronic Devices

Summary
In the last two decades, discarded electrical and electronic equipment (commonly known as e-waste) has grown greatly and become a powerful signifier of the detrimental environmental effects oof digital capitalism. This crisis of e-waste has drawn the attention of activist and environmental groups, policymakers, international news media, and academics (BAN 2007; UNEP 2017; The Guardian 2020). Although ignited by broader issues of planned obsolescence and overconsumption of digital technologies, the overwhelming majority of discussions has revolved around the proliferation of e-waste processing hubs in the Global South. The inner-city scrapyard, Agbogbloshie, in Ghana's capital Accra for instance, has been singled out by NGOs and international media coverage on e-waste. While this coverage and policy directions continue to be dominated by binary stories of e-waste originating in the Global North and polluting the Global South, academic research on the geographies of e-waste (see Lepawsky 2014; 2018, Davis et al. 2019; Akese 2019) has shown that the empirical picture is much more complex. First, e-waste flows are far from unilateral, as depicted in many widespread reports, with the majority of trade happening between countries of the Global South and within regional blocks such as the EU (Lepawsky 2014). Second, the majority of electronic devices arriving in African countries are functioning (Schluep et al. 2012). In Ghana, trade data shows that only 10% of second-hand goods imported by commercial sellers do not function (Ghana E-Waste Country Assessment, 2011, p. 25). Third, the majority of waste and emissions arising from electronic devices happen before consumption rather than after (Lepawsky 2018). These insights provide the main impetus for our project: rather than narrowly focusing on e-waste streams from Germany to Ghana, we study the various multi-directed mobilities and relationalities of electronic device – of design practices, material journeys of the devices, and their repair cultures in both countries.

Key Questions
What are the material journeys and transformations of electronics devices as they circulate both within and between Ghana and Germany? Discarded electronics have an afterlife or multiple afterlives(s). This multiplicity of e-wastes' materiality requires an openness to what these devices might become in specific geographies as they circulate.

What are the relational politics of electronic devices in Ghana and Germany? As e-waste circulates and is transformed in and across diverse geographies, this material annotates these geographies differently, bringing to the fore particular spatial politics for both humans and non-humans alike. We trace the assemblages of people, places, and electronic devices and how they intersect with – for example – unjust socio-ecological relations.

What are the evolving design and repair practices (and associated politics) of electronic devices in Ghana and Germany? Planned obsolescence of electronic devices render the design of devices into a process imbued with capital-politics. Yet, often questions of design interventions are absent in the discussions on e-waste mobilities and their uneven impacts.

How design and repair practices sit and can be reimagined within the larger infrastructure of e-waste's mobilities and transformations is crucial for this project.

Methods and Concepts
To answer the above questions, we employ a follow-the-thing/follow-the-practices methodology (Cook et al. 2004) to trace the circulations and associated transformation of discarded electronics across multiple sites in and between Ghana and Germany. Discard Studies scholars have theorized what it means to not only follow discards as "things," but crucially "practices" of discarding (Gregson et al. 2010; Lepawsky and Mather 2011; Balayannis 2020) Follow-the-thing methodology traced the trajectory of things and what their pathways reveal in the process of following. The "thingness" of what is followed is taken for granted and assumed to be stable. In following discards, however, scholars have demonstrated that things change and are transformed in their circulation (Gregson et al. 2010; Lepawsky and Mather 2011; Beisel and Schneider 2012). Moreover, discards are unruly (Balayannis 2020); the "thing" being followed may no longer be recognizable necessitating following practices in order to attend to the transformations that happen to things (Gregson et al. 2010) as well as the on-going-ness (Lepawsky and Mather 2011) of activities (be they economic or not) that move discards within multi-directed mobilities and relationalities. To follow practices of discarding is to move beyond following an ontologically stable thing – e-waste – existing out there to follow the practices of transformations, the geographies within which they take place and associated relations of power that shape their circulations. We use three key research methods: interviews,

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participant observation, and community-based business/asset mapping. In what is essentially a multi-sited ethnography of discarded electronics, we follow the material geographies of electronics by engaging with the people and organizations that work with discarded electronics in these two countries. This includes electronics exporters/importers, repair and reuses shops and businesses, recyclers, government agencies, development agencies, environmental NGOs, and advocacy groups.

Vision

The 'e-waste problem' revolving around its ever-growing volume globally, toxicity (and its associated uneven distributions of environmental and health risk), and resource value raise crucial and urgent questions about design, innovation, sustainability, ecological and economic justice. These questions raise challenges for the dominant policy framework – i.e. the Basel Convention – premised on restricting the flow of electronics between the Global North and the Global South. The vision of this project is to bring to the fore this entangled relations of how we deal with e-waste. Through empirically engaging with the multiple registers of mobility of electronic devices across and within multiple countries and their relations to design, waste/value, and the environment, we hope to create pathways for equitable actions around the digital technologies we discard.

Contribution or Relation to the Cluster's Aims & Goals

There is a dominant mode of relating The Global North and Africa and an accompanying imaginary regarding e-waste on the African continent. Namely, that e-waste is almost always about hazardous harm. This narrative is not only simplistic, but it also actively does harm by reducing African complex lifeworlds with discarded electronics into victims of e-waste dumping. It also sets the Global North's e-waste practices as exceptional and often unproblematic. At the core of the Clusters' aims is recognizing how Africans engage productively within a globalised world, which they are co-constitutive of, making Africa not only emergent in relations but also multiple. We place the Cluster's aim of reconfiguring African studies in this light at the forefront of this project. As such, we contest the simplistic narratives of Northern electronic consumers and African as a victim of e-waste harm and critically interrogate the multiple modes of relating e-waste to its users in an African context (Ghana), as well as relating African e-waste lifeworlds to European and North American e-waste practices in a mutually entangled digital world.

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