SIDE BY SIDE: TECH COLLABO-RATIONS IN SHENZHEN

Ingrid Fischer-Schreiber (left) and Kamal Yakub (right) speaking in the offices of Shenzhen Sinovoip, producer of Banana Pi. Banana Pi is a low cost computer board inspired by the Raspberry Pi.

Transnational collaborations between technology entrepreneurs yield situated technologies, yet it is easy to forget that even the most successful tech companies rely on outside collaborators to make their products real. I study the transnational practices and discourses around innovation and the making of digital technologies. I've done this primarily by closely following how tech entrepreneurship is practiced in Africa, China, and Silicon Valley, and the implications for identity, labor, and futures. My work emphasizes how essential such collaborations are and what it takes to sustain the work of being a tech entrepreneur, particularly for those designing and making new techs for populations largely left out of dominant tech discourses.

Over the years, I've followed a number of Ghanaian tech entrepreneurs, from when they first established their startups to now, observing their highs and lows, from raising capital, establishing markets, making prototypes and traveling all over the world to accomplish this. I check in with them frequently when I'm not doing fieldwork, not just to update the research but also because I maintain a commitment to raising African voices in academia and in public discourse. Academic research has long been extractive in Africa (and elsewhere in the global south) and the collaborative ethos of my research works towards changing that and uplifting minority perspectives.

The photos here are from a trip to Shenzhen, China, in 2018 as part of this long-term research. Kamal Yakub was kind enough to allow me and my collaborator, Silvia Lindtner, an Associate Professor of Information at the University of Michigan and author of Prototype Nation, to join him on his business rounds and meetings with existing and potential partners.
Kamal, who has two agritech startups, Farmable and Trotro Tractor, was following up on a number of IOT designs his teams had designed in Accra and prototyped in Shenzhen. We were fortunate to also have Ingrid Fischer-Schreiber, a veteran translator with us. Her multilingual skills allowed an easy flow of conversation in ways the automated translators I had used on my previous trip were unable to.

Kamal came to Shenzhen after participating in the 2050 programme at the Alibaba headquarters in Hangzhou, and with us, he met with the CEO and a few staff of ThinkRace Technologies, an IoT device maker, about their partnership for Kamal's two companies. As part of the collaborative ethos I mentioned earlier, Kamal also joined in on our interviews, for instance, with the makers of Banana Pi. The highly collaborative nature of this trip as it unfolded with Ingrid and Kamal, as well as others we met, opened up conversations about what 'outside influence' might mean not just for the practice of making technologies but also for academic work and scholarly thinking.
Specifically for technology design and manufacturing, it's important to understand that both the Ghanaian and Chinese companies need each other to develop products that work in different markets. The ecosystem in Shenzhen allows certain technologies to be made quickly and affordably for millions of people that Silicon Valley does not design for; yet, without clients like Kamal who have expertise in these markets, those technologies would be limited in both scope and reach.

Kamal speaking to Silvia Lindtner.

Research team (me on the left) with Kamal and Mary, a Thinkrace employee.

Kamal in Huaqiangbei market in the Futian District of Shenzhen. Huaqiangbei is one of the largest electronic markets in the world '.