Making the Internet: Emergent Cuban Media

By

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Acknowledgements

I am now writing and finishing large portions of this dissertation several years after this fieldwork was formally completed, multiple years into a global pandemic. My own networked relationship(s) and relationships to network(s) have drifted in varied ways since. The relevant contemporary academic literature, my Cuban friends and partners, the discipline of cultural anthropology… all shifting in time.

It is not lost on me that many important social relationships maintained: teaching remotely for 2 years, "visiting" with family/friends via video-call, working through multiple tele-medicine mediated miscarriages, the recent birth of my daughter and the means by which we experience her… continue to steer my understandings and interpretations ongoing. I was and remain cynical about the means by which the global ubiquity of the internet arrives - often hand-in-glove with forces of dominion and control. "Cynical" by way of the late George Carlin, who I once heard remark, in defense of his own disposition: "*Scratch any cynic and you will find a disappointed idealist"* in that it simply does not need to be this way, and we are right to say so. Recently, Mckenzie Wark questioned[1] the function of writing and thinking through theory during such a time when:

> *"If one is not suffering from COVID-19, one is suffering from life in this world, in this situation, in general…Are we to endure all this just to put the old order back on its feet again? Particularly since we know that the old order is implicated in not only the pandemic, but the multiplying signs of the unsustainability of this world as currently configured?"*

This dissertation is dedicated to those spending their time, their labor, and their bodies to utilize technology - against that old order of things - as a means to enrich the lives of those around them. Deep appreciation is felt for the hundreds I've met in Cuba over the last decade, taking time to speak candidly to a researcher from the United States, whose intent many were understandably suspect. Countless conversations were had around a dinner table, a street corner, sitting on the Malecon wall, on a city bus - that edified my thoughts in profound ways.

[1] Wark, McKenzie. "Theory in a Pandemic." Identities. Journal for politics, gender and culture (2020): n. pag. Print.

Institutionally and officially: to those running and participating in the (mostly) annual CubaConf - those I met through this gathering, and what I learned via participating, were invaluable to the research presented here. Much of their work is simultaneously pushing against the boundaries of possibility on both Cuban and international stages. To the Instituto Cubano De Investigación Cultural Juan Marinello, many thanks for your local sponsorship, without which the already-labyrinthe research permissions would likely never have been achieved. To the Wenner-Gren foundation, who provided the research grant allowing the bulk of this work to progress - and further: for being one of the only large U.S.-based qualitative research foundations willing to brave the logistical difficulties surrounding research support in Cuba. To the Margaret Mead archive at the Library of Congress in DC, the Cuban Heritage Archive at the University of Miami, and the labor of those who work in those spaces - thank you for hosting me for across several weeks and facilitated the finding material I myself was not skilled or clever enough to locate. In much blurrier but no less important terms: to those anonymized that hosted me at the various local Joven Clubs I visited. Many of whom (despite my research credentials), were not permitted or declined to speak officially.

To the various home nodes of UC Davis: The dept of Cultural Anthropology's Summer research grants allowed me the ability to sketch out a viable path to research in Cuba. The guidance and patience of faculty across Anthropology and STS departments shaped my understanding of the discipline and process endlessly: Tim Choy, Alan Klima, Tarek Elhaik, Joe Dumit, Gerardo Con Diaz, Colin Milburn, and Jim Smith. Outside of these walls, thanks to Lily Irani, Hugh Raffles, Richard Roberts, Gabriel Coren, Nick Seaver, Andrés Pertierra, Danny Spitzberg, and Michael J Bustamante for further real-space and virtual conversations enriching the project.

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And finally to my parter Ivylise and daughter Maggie, without whom nothing would be possible.

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Abstract

Several modes of accessing the internet became prevalent in Cuba over the decade of the 2010s - making it a compelling site for observing the means by which the medium's meaning becomes created, contested, and deployed. The particular epoch of media forms have gradually crept into Cuban life, a slow drip throttled by a tangled web of stagnant post-soviet infrastructure and series of complications between the Cuban people, their state, and various stakeholders invested in global information networks .

By the early 2010s, there was little access to what much of the Global North thought of as commonplace access to the "internet", but multiple practices became locally constituted in its stead. Throughout the island locally constructed Ethernets link thousands of humans across city blocks, widespread "sneaker-net" systems of ferried media are circulated via USB drives, and small crowds gathered in public spaces to share limited, expensive, state-provided bandwidth to the wider global web. These distinct networks of technology, politics, and human actors reconfigured and forged anew senses of *comunidad*: how Cubans conceptualize relationships between each other, their state, and their world.

These situated practices are not entirely unique to Cuba, as of course the medium's spread plays out along axes of development, race, and income on the global stage. But that does not detract from the discrete factors at play in Cuba - these were/are situated practices in which the emergent Cuban internet forms a complex socio-technical assemblage - a blurry mix of use, technique and understanding iterated to this place at this time.

My introduction lays out the logistics of the work itself: methods of research, the project's genesis, timelines, key conceptual formations,and some edifying details of the process of doing research work in Cuba as a U.S. citizen.

Chapter 1 serves as an introduction to dissertation project broadly, with the wider lenses of histories of Cuban media and sovereignty used as entry-points for the larger questions in the work that follows. There I give a brief history here of U.S./Cuba relations, as this lays the groundwork for later conceptualizations of both the politicization of the internet in Cuba and the ethical ramifications of my own work there. This is juxtaposed alongside historical renderings of prior media paradigms within Cuba.

Chapter 2 delves into various constellations of the mediated Cuban imaginary - the ways in which iterative media spheres in Cuba are thought of - by Cubans, by outsiders, even by peer researchers of the internet. Multiple ethnographic threads are brought to bear upon some of the popular facing discourse of the internet in Cuba, highlighting some of the troublesome/too-easy ways we might conceive of the Cuban "lack" of access, alongside the way in which conceptualization of the culture of the "resolver" travels in and outside Cuba. This chapter aims to complicate those familiar narratives and compound conceptualizations of what cuban networks are/can be. It is paired with an ethnographic media experiment grappling with what can and cannot be captured by visual ethnographic techniques.

Chapter 3 serves as the bulk of the long-form ethnographic material in this project, focusing on detailing time spent across multiple organized mutual aid Free/Libre/Open software-oriented trips, contrasting with the lived experiences of multiple Paqueteros, people's whose work was to ferry hard-drives of pirated media content across neighborhoods. These are situated practices in which the emergent Cuban internet forms a complex socio-technical assemblage that is often contested in meaning, with participants engaged in negotiating varied understandings. They are practices that are in part developed locally through the entrenched Cuban DIY resolver engineering culture, but also traverse other potent influences, such as legal, infrastructural, and economic flows amidst a varied range of global discourses about the medium.

Chapter 4 draws from ethnographic and archival research to excavate significant ideological underpinnings to contemporary renderings of network cultures in the Global South. Highlighting the role of prominent anthropological thought during World War II and the entanglements of communications into a technoscientific post-war order, I seek to implicate these renderings of media in the global south as complicit in modes of control exercised through U.S. foreign policy in the 20th century. I present research regarding the Margaret Mead and Gregory Bateson- spearheaded "Committee for National Morale", explicating the role of my disciplinary forebears. In doing so, I aim to elucidate the means by which we (as both a disciplinary and Western "we") have arrived at the now common figures of "open" and "closed" media systems through configurations of "culture" via ICT as hegemonizing force.

Concluding then, I take cues from conversations covering oft-problematic interventions in the name of human rights, seeking to highlight how this constellation of discourse and practices link the medium to utopian ideas of a democratic public sphere but instead may have hidden results: as vessel allowing explicit threats to local autonomy. This dissertation asks: Is there such a thing as a distinctively Cuban internet? What does asking this question presuppose and configure as an inquiry? What can this

broad field of inquiry, and the ways we might answer - tell us about the ways contemporary forms of power wield “the internet”?

Methods + Timeline

Doing qualitative fieldwork in Cuba is not a particularly easy endeavor. It is made difficult by a onerous, politicized approval process (on both the U.S. and Cuba side), involving an inseparable mesh of academic and government figures (on both the U.S. and Cuba sides). Fieldwork as a foreign national in Cuba *further* ratchets up this difficulty, and doing so as someone from the United States, someone interested in politicized internet cultures - even more so. Simply visiting Cuba as a U.S. citizen of any standing has been severely limited for several decades now. It is a right of movement restricted criminally[2], via the United States by both major parties of government for well over a half-century.

These legal restrictions and bureaucratic hurdles shifted multiple times during the course of my fieldwork in Cuba - structuring my ability to do this work, the subject material itself, and therefore immeasurably the overall project. As such this ever-changing aspect of the work deserves elucidation, as logistical contexts reveal much about the social relations I was stepping into.

2011: My first visit to the country, not yet formally doing academic research, was via first traveling to Mexico. This route was a common legal/logistical loophole for many U.S. citizens traveling to Cuba for several decades. Purposefully, no one in either country, save for my academic advisors and peers, would know I was doing anything resembling "research". This first trip was explicitly to gauge the feasibility of travel and research conversations ongoing, as well as to form the bonds for "approved" research for all invested stakeholders. I was told by folks familiar with the process's difficulties to request Cuban customs officers not stamp my U.S. passport, a means to avoid questions/liability for the trip upon U.S. return.

[2] Recognized as in violation of international law by the vast majority of United Nations members every year for several decades. See "United Nations General Assembly: Necessity of ending the economic, commercial and financial embargo imposed by the United States of America against Cuba. "https://documents-dds-ny.un.org/doc/UNDOC/LTD/N16/310/59/PDF/N1631059.pdf?OpenElement

2013: My second trip, now officially utilizing U.S. research university credentials, placed me on a list of a dozen or so permitted categories[3] of U.S. citizen given permission to fly to Cuba - (for example, those doing professional business, with Cuban family relations, conducting govt work, as NGO "relief" work, religious reasons, or my personal reason, academic research). On the U.S. side, multiple letters were required from confused and seemingly anxious university bureaucrats. I was only permitted to fly on specially licensed charter flights directly out of the United States, limiting dates and times available. I still did not have Cuban permission for academic research, so conversations with colleagues/participants/acquaintances were kept as "informal" as needed for the situation[4]. Upon U.S. return I was halted for a not-insignificant amount of time by customs/immigration agents, all of whom seemed themselves confused about the intricate legalities of returning with gifts, doing declared research in Cuba, or what any of the required relevant paperwork should be. Again, following advice from peers in similar research situations, I volunteered my U.S. university credentials and actively avoided reference to my recently acquired Cuban institutional relationships.

2014: Upon third visit, I now carried the accrued credentialed weight of a large U.S.-based research grant, ongoing university backing, and the cooperation of a Cuban cultural research institution. I had learned the strange dance of which institutions expected which sets of paperwork - in addition which information should be obscured, where. All the while, the Obama administration had begun an array of "rapprochement" processes with Cuba: easing of the established, draconian rules restricting U.S. citizen travel into Cuba. Most of the bureaucratic headaches (some of which included weeks of

[3] " 515.560 Travel-related transactions to, from, and within Cuba by persons subject to U.S. jurisdiction." https://www.ecfr.gov/current/title-31/subtitle-B/chapter-V/part-515/subpart-E/section-515.560

[4] Stories abound between researchers of Cuba (particularly those from the U.S.) of the ways in which they've been watched, harassed, filtered, or even deported for their work. Some of this is overt (CUNY Sociologist Ted Henken frequently notes he was asked to leave the country specifically because of his associations and research), some much more blurry. I was, for example, advised by Cuban academics that I write on official application forms I was studying the "history of computation culture", rather than the contemporary lived experiences with networked technologies.

back and forth exchanges, notarized statements, and what may have been purposeful heel-dragging) ceased for myself.

Bolstered and emboldened by these changes, several skill-share based "un-conferences", in Cuba were organized: bringing folks from overlapping circles of activism and tech-related professional work into contact with Havana based open-source programmers. Despite the relaxed atmosphere surrounding Obama-era rules changes, difficulties in travel ease, finance (flagged/halted digital payments), official location permits (a seeming impossibility for all involved), and a general fear surrounding participation were still plentiful.

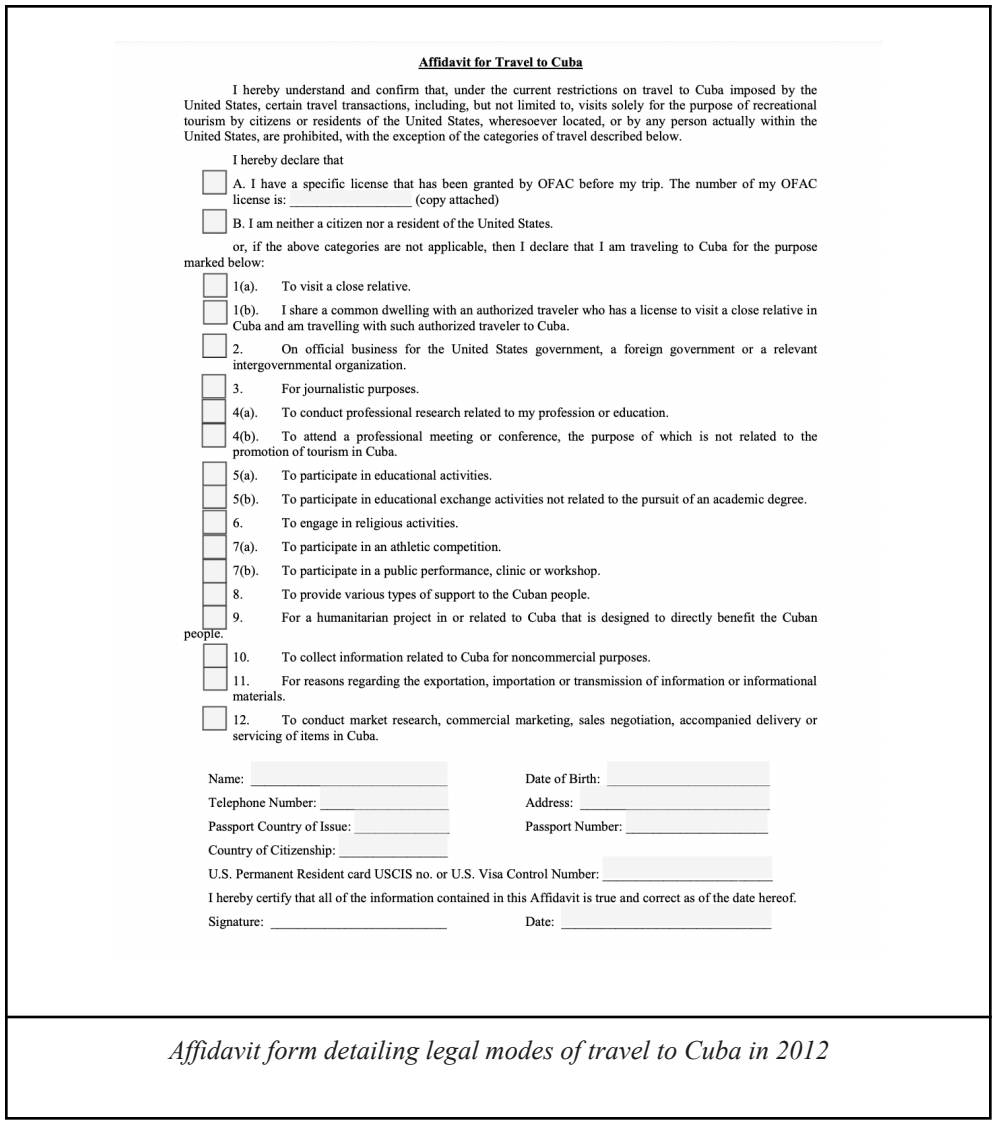
2015/2016/2017: My 4th and 5th trips were largely uneventful from a logistical standpoint - Cuban authorities had the inertia of prior institutional relationships and accepted forms, U.S. authorities had my ongoing travel and permitting as evidence others had allowed *something* to be transpiring. The prior years' stamps, older paperwork, and worn credentials relaxed most parties involved. These particular years in the mid 2010s were, as far as I can tell, *the only real time period for earnest, non-clandestine qualitative fieldwork to be done by a U.S. citizen in Cuba around sensitive subjects*. I attended Cuban conferences, spoke openly with Cuban research institutions, gained access to Cuban archives as a U.S. citizen, took classes at Havana University, and enjoyed the somewhat normalized relations the rest of the (non-U.S.) world experiences with Cuba. To be clear: plenty of international qualitative social science work exists involving Cuba - but it is extremely rare to encounter published material that is not heavily inhibited via the aforementioned bureaucratic constraints, steered away from contentious material, or completed in a manner hidden from "proper" Cuban authorities[5].

2018: My 6th trip, intended to wrap up fieldwork threads and conversations, was suddenly canceled due to new questions of legality and uncertainty of re-entry issues to the United States from Cuba. The fieldwork was swept up in several of the rash of

[5] Not a value judgment on any of this work, per se - I hold admittedly ambiguous feelings about the need for official governing bodies or their approval processes as related to the worth of ensuing social research. In terms of the production of these types of knowledge, it is worth noting the difficulties and narrow windows afforded by multiple institutions for this type of project, to contemplate the relative worth (and to whom) of those restrictions.

unilateral executive actions taken by Trump as 45th President of the U.S. Questions surrounded the ability to legally, ongoing fund more research in Cuba via U.S.-based granting institutions - an already conservative row of institutions, now justified in their reticence. Many of these restrictive contexts for travel, research, finance has either been continued (or in some cases made worse) via President Biden's administration as of 2021/2022, essentially resuming the pre-Obama admin status quo.

Having done sufficient research in-country (and gained enough contacts that could be reached via phone, email, or otherwise), attention pivoted to relevant archives and supplementary fieldwork across Miami, Washington DC, and New York City as a means to bolster the research with deeper historical resonances.



Affidavit for Travel to Cuba

I hereby understand and confirm that, under the current restrictions on travel to Cuba imposed by the United States, certain travel transactions, including, but not limited to, visits solely for the purpose of recreational tourism by citizens or residents of the United States, wheresoever located, or by any person actually within the United States, are prohibited, with the exception of the categories of travel described below.

I hereby declare that

☐ A. I have a specific license that has been granted by OFAC before my trip. The number of my OFAC license is: _____ (copy attached)

☐ B. I am neither a citizen nor a resident of the United States.

or, if the above categories are not applicable, then I declare that I am traveling to Cuba for the purpose marked below:

☐ 1(a). To visit a close relative.

☐ 1(b). I share a common dwelling with an authorized traveler who has a license to visit a close relative in Cuba and am travelling with such authorized traveler to Cuba.

☐ 2. On official business for the United States government, a foreign government or a relevant intergovernmental organization.

☐ 3. For journalistic purposes.

☐ 4(a). To conduct professional research related to my profession or education.

☐ 4(b). To attend a professional meeting or conference, the purpose of which is not related to the promotion of tourism in Cuba.

☐ 5(a). To participate in educational activities.

☐ 5(b). To participate in educational exchange activities not related to the pursuit of an academic degree.

☐ 6. To engage in religious activities.

☐ 7(a). To participate in an athletic competition.

☐ 7(b). To participate in a public performance, clinic or workshop.

☐ 8. To provide various types of support to the Cuban people.

☐ 9. For a humanitarian project in or related to Cuba that is designed to directly benefit the Cuban people.

☐ 10. To collect information related to Cuba for noncommercial purposes.

☐ 11. For reasons regarding the exportation, importation or transmission of information or informational materials.

☐ 12. To conduct market research, commercial marketing, sales negotiation, accompanied delivery or servicing of items in Cuba.

Name: _____ Date of Birth: _____

Telephone Number: _____ Address: _____

Passport Country of Issue: _____ Passport Number: _____

Country of Citizenship: _____

U.S. Permanent Resident card USCIS no. or U.S. Visa Control Number: _____

I hereby certify that all of the information contained in this Affidavit is true and correct as of the date hereof.

Signature: _____ Date: _____

Affidavit form detailing legal modes of travel to Cuba in 2012

While in Cuba, extensive qualitative fieldwork consisted of a near-daily, often blurring mixture of :

- Formal in-person interviews about personal internet practices, knowledge (or the lack of either, and what that might mean to them)
- 2nd hand, observational research of populations at wifi hotspots/joven clubs/paqueteros, supplemented with on-site conversations as able
- Personal interface with information networks (wifi hotspots, cuba *intranet*, paquete usage, etc).

These research practices expanded or contracted as possible via the locale's or year's level of access, often in direct proportion to oscillating U.S. foreign policy/hostilities towards Cuba.

Much of this project is admittedly urban-centric, with the majority of research gathered as practices developed across the metropolitan centers of Havana, Camaguey, Holguin, Matanzas and Pinar del Rio. Given the other difficulties of conducting this work in Cuba, this conceit was necessary for practical logistical purposes. Further research would have been (and still would be for the field of inquiry) deeply enriching towards this subject matter in the large swaths of people living rurally in Cuba.

Supplementary research completed between and after these trips in the years of 2016-2020 included:

- Multiple visits (constituting several weeks total) at the Library of Congress, Washington D.C., in the Margaret Mead archives (*Margaret Mead Papers and South Pacific Archives*)
- A week spent at the Cuban Heritage Archive at the University of Miami
- In-person interviews across Miami, New York, DC
- Phone/text/email interviews conducted as complementary to the 18 months in-person fieldwork: the vast majority of these were follow-ups to initial in-person conversations.

I have not been back to Cuba for several years now, with funding options and university permissions tied in a morass of confusion, cruelty, opportunism, and geopolitical grandstanding at the close of the 2010s - persisting into the early 2020s. A global pandemic in which Cuba was a global leader in global health response - did unfortunately little to ease these exhausting frictions. The ongoing punitive policies put in place by the United States governments of both

Presidents Trump and Biden (most notably the unconscionable extension of the half-century long Cuban trade embargo) underscore this project immeasurably. My abilities as a researcher have been both informed and actively constrained by these imperial formations, in a way dwarfed completely when compared to the lived experience of existing under the weight of these pointless, ineffective, and transparently inhumane policies.

Introductions

On “Media”, “Internet”, and the ethnographic study of them

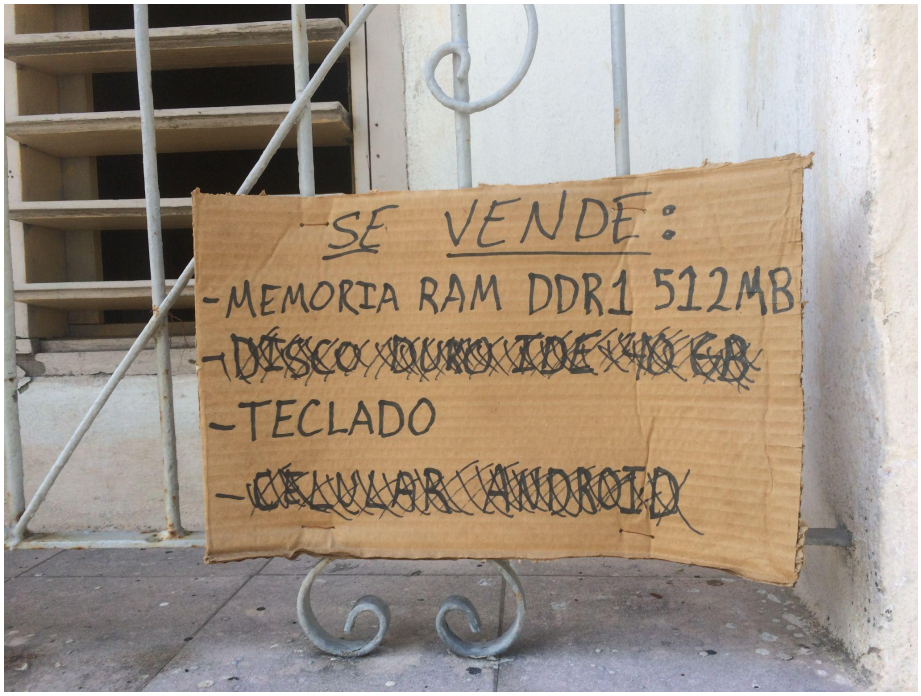
This work is now a decade out from the beginning, having first germinated the idea at the New School for Social Research during my MA Graduate program in 2011-2012. The socio-political and technological terrains involved have changed dramatically over the intervening time, to perhaps state the obvious. This interest in studying the contexts of the Cuban internet was borne out of an emergent sense in the 2000s that globally networked digital platforms were important emergent hegemonic forces (perhaps the *premier* hegemonic forces) shaping the world - contra the widespread adoption of habitual use (mostly via smart phone) in much of the global North. A relationship was clearly concretizing between the networked communications medium, the spread of neoliberal market forces, and their attendant ideological formations: embedding relationships of economic power and coercion along the grains of newly nearly ubiquitous technological practices.

The idea of the project at that interval was to capture the spread of the internet and its embedded meanings in cultural space learning it for its relative “first time” - the creation of the internet as a cultural force in a particular space and time, as it became. Amid the rise of satellite-assisted cellular data and globally pervasive personal technologies like netbooks and smart phones, spaces “without internet” continue to be a diminishing fraction of the human population. To be clear, *vast* gulfs exist across the variables of humanity’s internet access - *speed, reliability, content, time and price* - globally (and not coincidentally) tracing lines of class, race, and political order..

It was work initially flirting with, or at least in some ways ironically parallel to, a project of “salvage ethnography[6]”: a rightly maligned corner of anthropological practice designed to chronicle languages, ways of life, and material cultures before these spaces/peoples are swept up

[6] Clifford, James. "*The others: Beyond the ‘salvage’ paradigm*." Third Text 3.6 (1989): 73-78.

into dominant, globalizing hegemonic forces. Deeply critiqued and having North American cultural anthropology (mostly) moved on from the practice, cultural anthropology as a discipline has sought to expunge the underlying conceptual nodes ("noble savage", teleological cultural progressions, the gatekeeping of a mostly white, imperial, male archivist ethnographer, etc) from its practices. And yet - globally *there are* clearly cultures changing rapidly in face of various global hegemonic inertias - and only a few corners of institutionally funded research interested in these shifts as intellectually/morally significant.



2014: A vendor in Havana's university district, selling keyboards and RAM out of their window, having run out of Android cellular phones, 40 GB hard drives

This is ethnographic work about a moment of transition, with a strong distrust of the "progressive" ways the spread of the internet has been narrated by global capital. There was little desire to "preserve" or "save" - this research is rather a chronicle of what was contemporary at a point - a nearly unescapable tidal wave of change to a peoples' ways of being and understanding.

A historically "closed" media system, with a government invested in shepherding the population's media away from global inclinations, and actively failing at doing so.

My initial planning stages did not have a destination for fieldwork in mind, but an intention to land somewhere "early" in the cultural spread of internet materials and practices proliferating. Sitting down more than a decade ago, I literally wrote out a list of place and peoples globally "without" ready access to the internet:

1) Those far from cities, living deeply in rural spaces facing so called "last mile" material hurdles in infrastructure or state recognition.
2) Those prohibited by factors of economic inequality, unable to access reliably due to issues of financial access to spaces or tech
3) Those "without" due to the political order inherent in their local nation-state, the medium intertwined with questions of speech freedoms, political organizing, and state control.

Plainly: some of these criteria overlap in describing current, accessible-via-fieldwork populations of people, some of them do not. As PhD research proposals were drafted in the months following, the logistics of doing fieldwork on this subject repeatedly pointed me towards Cuba as a site of interest. Swaths of Cuba's population fit within the contexts of all three of these: facing "last mile" hurdles in infrastructure, access made difficult by economic relations (both individual and at a global geo-political level), and a government deeply suspicious of the implications the medium would have once widespread.

I was and remain deeply suspect of heroic ideologies asserted by western knowledge bases onto the internet as a force[7]. This is a tide that has shifted in very recent years, amid economic and political ruins at the metropole - but was *the* dominant framing of the internet for the majority of the world's population until the late 2010s. As this project began in the *early* 2010s, a dominant throughline in both academic and popular thinking[8] on the subject was affixed

[7] Detailed further in Chapters 3, 4
[8] Castells, Manuel. *Communication power.* Oxford University Press, 2013.

to the possible radical "democratic" relations facilitated by the internet, seeing it intertwined with (or even directly *causal* to) political upheavals in Egypt, Tunisia, Thailand, and the potential of digitally facilitated movements like *Occupy Wall Street* or *Black Lives Matter* in the United States.

At the same moment - one might squint and discern iterations of older Western cold war rhetoric in the ways a blurry notion of "freedom" (economic, artistic, speech, etc) was being packaged with the internet, concurrent to it limiting/controlling in spaces it was already ubiquitous. This second, darker rendering of the internet's consequence as an ascendent node of state-funded technoscience had theoretical forebears for decades prior[9], but had been mostly relegated in the academy to contrarian, critical positions. This prescribed dialectical dynamic in rhetoric on the subject: between an evangelism for the internet's potential and a suspicion of what it portends - shifts over the decade of the 2010s in the United States.

The domestic socio-political consequences to U.S. life under unprecedented, vast corporate forces like Facebook, Twitter, and Google (alongside the fallout to the various "gig economy" platforms), corrodes ideas about a heroic internet and its consequences across public[10] and academic venues alike[11]. As all manner of social, professional, and economic life in the

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Sauter, Molly. *The coming swarm: DDOS actions, hacktivism, and civil disobedience on the Internet*. Bloomsbury Publishing USA, 2014.

Shirky, Clay. *Here comes everybody: The power of organizing without organizations*. Penguin, 2008.

Tufekci, Zeynep, and Christopher Wilson. "*Social media and the decision to participate in political protest: Observations from Tahrir Square."* Journal of communication 62.2 (2012): 363-379.

[9] Across feminist critiques of co-mingling of state and technological institutions, via scholars such as Donna Haraway

[10] Fried, Ina. "*U.S. Majority Supports Tech Regulation to Preserve Democracy.*" Axios, 10 Feb. 2022, www.axios.com/2022/02/10/poll-majority-supports-tech-regulation-democracy.

Madrigal, Alexis C. "*What Facebook Did to American Democracy."* The Atlantic, The Atlantic, 12 Oct. 2017, www.theatlantic.com/technology/archive/2017/10/what-facebook-did/542502/.

Poole, Steven. *"Democracy Hacked: How Big Tech Poisoned Politics."* New Statesman, 3 Oct. 2018, www.newstatesman.com/long-reads/2018/10/democracy-hacked-martin-moore-review.

[11] Tan, Zhi Ming, et al. "*The ethical debate about the gig economy: A review and critical analysis.*" Technology in Society 65 (2021): 101594.

United States change via the ascendent power of tech industries, many aspects of the Cuban everyday transform as well; frequently via a relationship to the internet.

After formulating the plans, funding, and intentions for this project, 18 months of qualitative fieldwork in Cuba was accrued over the next several years: building relationships and understandings across sites, friendships, and other associations. As with many projects involving fieldwork in the social sciences, collaborators in this project span a spectrum of professional, social, and institutional relations. The bulk of fieldwork time (outlined fully in the prior introductory section) was spent in Cuba, but the work also involves people, internet practices, and art pieces, and archives across northern California, Washington D.C., New York City, and Miami.

As a fieldsite for cultural research, Cuba revealed itself to be replete with spaces in which to enrich and challenge my own thinking on the subject, stories to chronicle on the adoption/difficulties of technologies access from those living through it, and act as a strong proxy for understanding how geopolitical powers entangle personal lives with practices. *The hope for this project was to watch the internet become a cultural object in real time*, a method to shed light on some of these interweaving machinations. That I'd be learning from the folks experiencing, shaping, and making meaning of this technological/media shift as a way to contrast understandings with my own, hopefully synthesizing something anew. At the very least, the work could play a small role in chronicling a historic shift in culture and political economies in a locale often mischaracterized for U.S. audiences.

Cuba seemed ideal for studying the internet at that moment. But how to best use ethnographic research and cultural anthropology to a subject matter *that* vast and emergent?

Vaidhyanathan, Siva. *Antisocial media: How Facebook disconnects us and undermines democracy*. Oxford University Press, 2018.

Media and Ethnographic Attention

> *"It's been years now since we've been watching—without knowing where, when, and indeed, who "we" are"*
>
> - Kathleen Stewart, introduction to *Ordinary Affects*

Media studies has historically been a bastard, ambulant sort of subject: several overlapping schools of thought and method, scores of atomized conversations. It's most public-facing voices[12] are authors often writing in isolated, anachronistic engagements rather than informing by/with an academic field or building out an approach with peers. Further, media theorization is a fairly slippery field to inform ethnographic designs, often oscillating or combining hybrid formations across the humanities, social science, and continental philosophy. Some of my own academic training has been navigating this haphazard topical landscape – an interest and training I've bundled alongside (and often compare to) my time in cultural anthropology since my bachelor's degrees in both corresponding majors.

As all fields of study, media studies becomes concretized into its coherent forms through institutional programs, financing, and produced texts. Scholars of media more often than not find themselves vocationally housed into other disciplines: searching for tenure out from a sublimation of media interest into the established communications, design, journalism, or cultural studies departments' inertias[13]. As such, media studies in the familiar formation[14] may also be seen as *intrinsically* interdisciplinary (for quite some time) and perpetually searching in its mode. It is a realm of study revealed through contrasting approaches, foci, or renderings which network across the vast cluster of things "media" implicates. In this way, "media" is that which these vectors have produced as worthy of attention - ranging in contemporary forms across materiality, "new" socialities, creative practices, communities, content studies, and many

[12] We might think of McLuhan, Postman, Kittler, Baurdrillard etc

[13] Nordenstreng, Kaarle. "Discipline or field? Soul-searching in communication research." (2007)
Craig, Robert T. "For a practical discipline." *Journal of Communication* 68.2 (2018): 289-297.

[14] Speaking largely from a place of expertise on its Anglo/Western/U.S. context here and above, though it can also be extrapolated at a global level as far as this scholar is aware.

other iterations. It's boundlessness is blessing in its detached relations to prior generations and forms of study, a puzzle in terms of communicating clarity in research.

Coming from a concurrent academic training in North American cultural anthropology, this is somewhat familiar territory. Cultural anthropology's arguable core term and subject of "culture" has been similarly ethically implicated in its intended borders for many decades[15]. "Internet", my other central object of attention for this dissertation - adds additional indistinct boundaries. These are both addressed as well by the end of the introduction. But for the sake of clarity and common understanding: I take media in this work in this work plainly as its forms across broad and narrowcasting: newspapers, books, pamphlets, radio, television, cinema, and the internet in its myriad forms of communication and content. From the humanities and cultural studies of media I take the discursive content and histories of this media as important. From the social science of them - media anthropology- I take the human practices, communicative properties and general socialities surrounding said media as additional important dimensions (and likely the ones my home department is most interested in this dissertation remarking upon).

I do have much interest in a hierarchy across these varied attentions or understanding of "media", finding their overlap to be generative in building a more holistic understanding of the ways to understand the matter. This is both a personal preference and a reflection of the indeterminate, wandering eye the overall institutional academy has towards media-as-subject. The writing is frequently interdenominational and a somewhat agnostic towards concrete conclusions - preferring to arrange and curate the understandings of myself, my collaborators, and adjacent knowledges. Frequently (though not always), a process allowing the reader the burden of a concrete takeaway.

For example - I do not take strong fieldnotes. This is not a grad student self-flagellation but an objective statement of fact. My notes before, during, and after fieldwork are literally scattered and disorganized. Across various documents, plastered on top of pdfs I'm reading are thoughts and details - sometimes related, sometimes not, sometimes in transferable formats to other digital text languages… sometimes not. This continues across voice memos, photos and

[15] Marcus, George E. "Beyond Malinowski and after writing culture: On the future of cultural anthropology and the predicament of ethnography." *The Australian Journal of Anthropology* 13.2 (2002): 191-199.

videos, some of which have crucial details listed in their file names or metadata. As a bounded media form, my understanding of them needs to also incorporate the circumstances of their creation, my individual uses of them, personal histories with the form, etc.

As a media practice of utilizing them to construct this dissertation: this work and the relationship to my notation is necessarily be one of a conversation between my current self and the one that wrote, photographed, filmed, transcribed, or experienced these archival media prior. I've worked in the medium of collage for some time, thinking and writing about it a bit… finding the style the closest thing I have to a rhythm in terms of my longer form writing as well. Coherent narrative/method/data arcs across 20-40 pages do not come naturally to me, and so this text is necessarily one wherein thoughts and related ephemera can find resonance (and some concrete forms, ideally) with one another.

As described by Michael Taussig[16], anthropologists hold the notebook or fieldnotes as a demonstration of something like a "trail of subjectivity"... a record of what (or how) *you* thought where, and/or when. The practice and object of documentation here conspire and contort as a bridge to that moment, the one of writing then of reading. It produces something not directly representative, not really empirical, but proof of a self in-relation-to information, people, places, affects. Surrealism is present throughout Taussig's text on the subject: Burroughs' cut-ups in relation to sorcery, accident, intention. In his view, we are to embrace the distance between document and lived reality, "authorship" inherently implicit in doing so. Conjuring Barthes' "Third Meaning" points in this direction as well, a connotation of unnamable "significance", not of signified, something seeming more akin to a preternatural feeling in composition. Kathleen Stewart's mode of collecting, re-assembling, and *curating* her attentions towards her mediated subject also inform the flow of work that follows. Work like Stewart's *Ordinary Affects* demonstrate new forms by which we might explicate social subjects - as *"an idiosyncratic map of connections between a series of singularities"*[17] showing new potential roles for both writer and audience in terms of explication and understanding.

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[16] Taussig, Michael. *I swear I saw this: Drawings in fieldwork notebooks, namely my own*. University of Chicago Press, 2011.
[17] Stewart, Kathleen. *Ordinary affects.* Duke University Press, 2007, pg 8

There is something similar to writing this collaged work which crystallized these things for me, the reach of the form past the directly referential or symbolic. The dissertation that follows frequently shifts between ethnographic moments, discussions of theory, and explorations of resonant histories, an "idiosyncratic map" of the ethnographer's path. There is not always a satisfying, definite synthesis of ideas, but an ensemble of connections available to the ethnographer and curated in an effort to share that mode of understanding.

Social Research of the Internet and the Diminishing returns of the "Cyberspace" metaphor

> *"…Ethnographic practice has been reconsidered and reconfigured at different times and in different domains. Some of the convenient fictions that facilitated ethnographic approaches in the past have been less applicable to the new issues, theoretical and pragmatic, undertaken by researchers."*
>
> Jenna Burrell - *"The field site as network"* [18]

In Cuba - much of the Cuban government's proclamations[19] about the internet in the early 2010s demonstrate an understanding of the medium as intrinsically linked to flows of power - many they understand to be a site they will struggle to control - iterating on longstanding antagonisms by the United States. Covered by dominant English-language media in equal turns as laughable claims and/or authoritarian proclamations - these concerns about what the internet packages with it (and who gets to control its uses) are worth revisiting in the wake of the last decade.

As a reflection of the clearly oppositional means by which seemingly simple terms like "the internet" or "media" might be defined, the remainder of this introduction will be used to interrogate the taxonomy of the conceptualization of the terms of that research, and the means by which we might then elucidate them via writing. As shown, what "the internet" (the "*Internet"?)*, media, and access mean vary greatly - situated across academic disciplines, public-facing discourses, and understandings localized to their socio-political context. Taking some cues from Raymond Williams *Keywords,* the following passages explore some of the terms' uses - both the contexts of their use and this research, as a way to ground the discussions in the chapters that follow in their forebears.

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[18] Burrell, Jenna. "*The field site as a network: A strategy for locating ethnographic research*." *Field Methods* (2009)
[19] Baron, Guy, and Gareth Hall. "Access online: Internet governance and image in Cuba." *Bulletin of Latin American Research* 34.3 (2015): 340-355.
Firchow, Pamina. "A Cuban Spring? The use of the internet as a tool of democracy promotion by United States Agency for International Development in Cuba." *Information Technology for Development* 19.4 (2013): 347-356.

The bulk of anthropological/ethnographic attention of internet practices- my predecessors in research of this subject - draw explicitly from and rely heavily upon notions of the medium's social interactions or spatiality as "virtual"[202122]. From 1990 through the 2000s, reflecting popular conventions of the time. "Cyberspace"[2324] and "imagined community"[25] are leading conceptual frames during this era[26]. This reflects the moment's dominant conceptual underpinnings and available sites of inquiry – research occurring in tandem with online social communities rising into visibility to researchers: first through usenets[27] or communal posts like *The Well*[28], later through the virtual Massively Multiplayer Online Game (MMOG) spaces of *Second Life, Everquest,* chatrooms, and other organized spaces[29] of being together online. These immediately novel and emergent socialities attracted technologically inclined ethnographic work (sometimes explicitly trained in social research, sometimes not[30]) towards new objects for study.

Literally *through* computers, an early anthropology of the internet began – finding new terrain for social research: researchers joined emergent communities, fitting prior anthropological modes and tropes[31] into what was sometimes framed[32] as a possible paradigm shift[33] in

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[20] Kozinets, Robert V. "On netnography: Initial reflections on research investigations of cyberculture." *NA-Advances in Consumer Research Volume 25* (1998).
[21] Boellstorff, Tom. *Ethnography and virtual worlds: A handbook of method*. Princeton University Press, 2012.
[22] Boellstorff, Tom. *Coming of age in Second Life: An anthropologist explores the virtually human*. Princeton University Press, 2015.
[23] Escobar, Arturo. "Welcome to cyberia: notes on the anthropology of cyberculture." *The cybercultures reader* (2000): 56-76.
[24] Ito, Mizuko. "Theory, method, and design in anthropologies of the Internet. "*Social Science Computer Review* 14.1 (1996): 24-26.
[25] Wilson, Samuel M., and Leighton C. Peterson. "The anthropology of online communities." *Annual review of anthropology* (2002): 449-467.
[26] Burrell catalogs some outlier,, often cutting-edge work in her *Fieldsite as Method* article, but they are *exceptions* rather than indicative of varied schools of thought.
[27] Hauben, Michael, and Ronda Hauben. "Netizens: On the history and impact of Usenet and the Internet." *First Monday* 3.7 (1998).
[28] Hafner, Katie*. The well: A story of love, death & real life in the seminal online community. Avalon Publishing Group, 2001.*
[29] Rosenzweig, Roy. "Wizards, bureaucrats, warriors, and hackers: Writing the history of the Internet." *The American Historical Review* 103.5 (1998): 1530-1552.
[30] Rheingold, Howard. *The virtual community: Homesteading on the electronic frontier*. MIT press, 1992
[31]"*Coming of Age in Second Life"*
[32] Rheingold, Howard. "A slice of my life in my virtual community." *High noon on the electronic frontier: Conceptual issues in cyberspace* (1996): 413-36.
[33] Kuhn, Thomas S. The structure of scientific revolutions. University of Chicago press, 1968

foundational practices of sociality. There was (and though greatly diminished, somewhat remains) a robust debate on the legitimacy and efficacy of this as anthropological practice: whether or not these practices are indeed *"real"* sociality, what connection/disconnection might be signaled by online acts vs. offline, and how ethnographers might possibly draw the boundaries of an internet "fieldsite" that coheres meaningfully.

The century-long inertia of anthropology's *de facto* preference for bounded, atomized communities also brought much to bear upon the thinking of these new ethnographic projects. "Cyberspace", and the aforementioned adjacent phrases ("virtual" & "imagined communities") did much to acclimate and bridge these researchers into historical trajectories. The boundaries of internet fieldwork and anthropological inquiry would be the "space" in which communities gather, opening up avenues for conversations around multi-sited ethnographic work and new intersections of "media" into anthropological attentions. The shift echoes a loosening of bounded ethnographic work alongside the greater flows that processes of 20th century globalization would necessitate of social researchers.

Arising from writer William Gibson[34], the term "cyberspace" roots a deeper history of cybernetic theory[35] along with an emergent cyber*punk* aesthetic in the late 1970s[36] as an electronically mediated *place*:

> *Cyberspace. A consensual hallucination experienced daily by billions of legitimate operators, in every nation, by children being taught mathematical concepts... A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the nonspace of the mind, clusters and constellations of data. Like city lights, receding. (Gibson 72)*

Gibson's newly fabricated locale was mediated, but contained unmistakable signifiers of presence, information and being. It represents an epistemological crossroads for the

[34] Gibson, William, "Burning Chrome", *Omni*, volume 4, number 10, page 72 . 1982 July. (This is the first usage of the term, it was later further explored and popularized through the novel *Neuromancer)*
[35] Wiener, Norbert. Cybernetics or Control and Communication in the Animal and the Machine. Vol. 25. *MIT press*, 1961.
[36] Bruce Bethke's etymology of cyberpunk: http://www.brucebethke.com/articles/re_cp.html

anthropology of media more generally – tethering thinking about content, form, and aesthetics to space, environment, and individualized communication.

The keywords and central metaphors for this moment - *cyberspace, virtual, et al* – have a direct relation to the conceptual framing internet fieldwork takes during this time. They mark a paradigm wherein engaging the practices or representational politics of media content (nearly always indicative of "mass" cultures) no longer seem fully adequate – and underscores a robust social within and enabled by of the internet – something both *through* and *of* the medium's content/processes. Parallels might drawn here to prior anthropological thinking, the bounded, holistic depictions of social lives within Bronislaw Malinowski's Trobriand Islander's[37] or echoes within Margaret Mead's rendering of Samoa[38]. Processes of globalization do much to break down anthropologist's access to (and thinking about) this conceit of "isolated" cultures, as the spread of the internet into everyday life does the same to notions and methodologies of "cyberspace".

Jenna Burrell's *Fieldwork as Network* chronicles the development and eventual decay of this moment – the rise and fall of seeing the internet as a "place" with discrete communities available for ethnographic engagement. She presents an alternative method/verbiage/metaphor for the work: *following* and building out *network* out from the fieldworker during one's time in the field[39]. Building atop more recent discussions regarding how anthropology might navigate multi-sited ethnography, quoting Miller and Slater[40]: *"we need to treat Internet media as continuous with and embedded in other social spaces".* The spatial research preoccupations of the internet begin to collapse between 2000 and 2005, with increasing awareness and methodological shifts signaling the understanding that the internet colludes, influences, and constitutes social activity outside of itself:

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[37] Malinowski, Bronislaw. *Argonauts of the Western Pacific: An account of native enterprise and adventure in the archipelagoes of Melanesian New Guinea*. Routledge, 2002.
[38] Mead, Margaret, Franz Boas, and Sreten Marić. Coming of age of Samoa: a study of adolescence and sex in primitive societies. Penguin Books, 1954.
[39] Itself a riff off of George Marcus's conceptualizations here: Marcus, G. 1998a. Ethnography in/of the world system: The emergence of multi-sited ethnography. In Ethnography through thick and thin 79–104. Princeton, NJ & here: Marcus, G. 1998b. Imagining the whole: Ethnography's contemporary efforts to situate itself. In Ethnography through thick and thin, ed. G. Marcus, 33–56.
[40] Miller, D., and D. Slater. 2000. *The Internet: An ethnographic approach*. London: Berg.

> *Should we define the field site by the movement and dwelling of the fieldworker or, alternately, as the space in which a social phenomenon takes place? These are no longer considered one and the same. As Marcus (1998b) notes, contemporary ethnography is often a study of parts rather than wholes. Researchers cycle in and out of the field, skip certain areas entirely, and may rely on the recollections of participants in interviews to map out the space. Fieldworkers' movements are no longer coextensive with the way the social phenomenon under study extends across space. (Burrell 8, emphasis mine)*

Concurrently in the late 2000s– the cultural role of the internet shifts in the United States – blogging becomes mainstream, Facebook trickles out from the Ivy league across millions of lives, the spread of broadband access allows streaming video and widespread piracies to enter the lexicons as standard nodes of techno-social action. So-called "smartphones" bring the ubiquity of the internet's presence in the everyday to higher and higher plateaus[41]. As more and more of Marcus's cultural *"parts rather than wholes"* become mediated through these avenues (finance capitalism, modes of creativity, labor forms, entertainment platforms, intimacies), it becomes impossible to justify the purpose of delineating the digital/virtual/online from "the real" in ethnographic work – they are enveloped into one another.

As such, how far does the metaphor of the "network" function to engage the enveloping of online into the "real"? What might this type of fieldwork look like[42]? How has this "network" approach to researching the internet been taken up elsewhere, either explicitly or implicitly? What bridges have been built (or might be built) between these conceptualizations and research methods? What might these recent iterations of "network" tell us about the present moment as "cyberspace" informs the past – and what might lie ahead?

> *In a "field site as network," the point of origin, the destination(s), the space between, and what moves or is carried along these paths is of interest. It is an approach, "designed around chains, paths, threads, conjunctions, or juxtapositions of locations in which the ethnographer establishes some form of literal, physical presence, with an explicit, posited logic of association or connection among sites that in fact defines the argument of the ethnography" (Marcus 1998a:90). Defining the field site as a network is a strategy for drawing the social phenomenon into view by foregrounding it against the social*

[41] Poushter, Jacob. "Smartphone ownership and internet usage continues to climb in emerging economies." Pew research center 22.1 (2016): 1-44.

[42] Alternatively (or in addition) Michel Callon's *Social Network Analysis* might be of use here to think through the metaphor of the network when designing fieldwork approaches and methods

complexity of its urban setting. *(Burrell 10)*

What marks this moment[43] in ethnographic fieldwork involving the internet seems to be a distinct engagement with varied methodologies, all seeking to pivot past purely discursive treatments (focusing on "virtual" sociality) and to experiment as a means to disengage with methods that solely deal in framings of *place, community, or content.* The past decade has given rise to such varied terrain as the material *stuff* and practices of the internet's making[44], the means by which infrastructural networks[45] might be thought culturally, and the power inequalities (both on macro corporate/colonial and micro labor) as economic forces became shaped (and shape) the medium[46].

The recent pivot from "cyberspace" to Burrell's titular "*network"* represents a very specific moment in the genealogy of this type of research[47]. Does it still hold? How might we amend it? Most simply: How and why has the landscape of internet-related anthropology shifted in the decade since this dissertation's writing? What do other clues point towards a new understanding of the internet as integrated social lives and practices?

"As words change, the world changes. This ancient conceit turns on the power of words to make worlds, but the world, we know, also has the power to change words. Words are always in motion, and as they move across space and time, they inscribe the arcs of our past and present"

- Carol Gluck[48]

[43] Roughly the late 2000s onward, generalizing major movements shifting in fieldwork practice/conceptualizing
[44] Parikka, Jussi. *A geology of media*. U of Minnesota Press, 2015.
[45] Star, Susan Leigh. "The ethnography of infrastructure." *American behavioral scientist* 43.3 (1999): 377-391
Starosielski, Nicole. The undersea network. Duke University Press, 2015.
[46] Fuchs, Christian. Digital Labour and Karl Marx. Routledge, 2014.
Fuchs, Christian, and Eva Horak. "Africa and the digital divide." *Telematics and informatics* 25.2 (2008): 99-116.
[47] Perhaps similar to breakdowns in prior anthropological conceptualizations of "nation" or even "culture" - holistic, fairly concrete entities that break down as thinking advances and discursive/institutional support in the world shifts
[48] Gluck, Carol, and Anna Lowenhaupt. Tsing. *Words in Motion: Toward a Global Lexicon*. Durham: Duke UP, 2009. Print.

In April of 2016, Associated Press editors announced stylebook changes, including the lower-casing of Internet to internet, alongside the lesser-used Web to web. Thomas Kent, AP Standards Editor noted "The changes reflect a growing trend toward lowercasing both words, which have become generic terms", highlighting both the vernacular practice guiding the associated editors and the point at which the words become "generic" in a larger cultural sense. Anna Tsing and Carol Glucks's edited ethnographic compendium *Words in Motion* opens with the above, helpful rumination on the importance of tracking words as they move through spaces and people.

The shift in popular U.S. vernacular between the proper noun of "Internet" and the miniscule "internet" form[49], a watershed moment in its wider conceptualization, is worth dwelling upon to further explicate – it informs what the word is capable of (or intended to) conceptually arrange in the United States. As with prior technologies turned banal mediums ("phonograph", "television", "radio" all having experienced similar transitions[50]), style guides and institutionalized language more broadly first highlight a new technological entity as novel – worthy of capitalization in a kind of particular capital singularity. This lower-casing then may be taken as a shorthand acknowledging the internet's ubiquity in the everyday in the United States, as the above AP figure notes. Further, it indexes a particular means of thinking/talking about the internet as *place* – as a unique, singular, proper-noun style locale of communication –*the* Internet, as opposed an *an* internet. The moment marks a culmination of the internet's ascent into cultural ubiquity as much as an end to decades of back-and-forth[51] justifications of the term's casing in journals, newspapers, and other print forms[52]. Capitalizations do not return.

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[49] Martin, Katherine Connor. *Should you capitalize the word Internet?* http://blog.oxforddictionaries.com/2016/04/should-you-capitalize-internet/

[50] Wurtzler, Steve J. *Electric sounds: Technological change and the rise of corporate mass media*. Columbia University Press, 2007.

[51] *"If you like being ahead of the game, you might prefer to spell internet and web as internet and web, but according to standard usage they should be capitalized. Keep in mind, however, that commonly used proper nouns sometimes lose their capital letters over time and that Internet and Web may someday go the way of the french fry"*

Wilbers, Stephen (13 September 1999). "Errors put a wall between you and your readers". Orange County Register. Santa Ana, California

[52] See the Wikipedia article *Capitalization of "internet"* for a good compendium of the word's historical variance across countries and institutional forms : https://en.wikipedia.org/wiki/Capitalization_of_%22Internet%22

In the aforementioned *Words in Motion (2009),* Ana Tsing and Carol Gluck's contributors illuminate the analytical role that words and concepts can occupy as they travel and shift – all at once helping to define social practices in varied tenses: identifying, excluding, creating spaces, illuminating dialectical opposites, shaping political institutions and ideologies. This collected engagement with often categorical words gives a path with which to follow when attending to something like the "Internet" versus the "internet", these almost hopelessly nebulous things, similarly to how the book wrangles with words in entries like: "security", the "sublime", or "conspiracy". The capitalized versus minuscule internet-as-word; this one-time *Arpanet*[53], sometimes World Wide Web, 'net, occasional *information superhighway* - indexes and inscribes particular moments in understanding, usage, and preponderance. Tsing compounds the importance in (and perennial process of) tracing these formations:

> *"Words stabilize our understanding. They allow us to insert ourselves into discourses, institutions, and social relations... Words offer special insight into the remaking of worlds at different scales because they condense past motion into their material form… There was no end to the trail of words in motion. "Following words in and out of cosmopolitan discussions, national languages, institutional configurations, and imperial impositions brings out the motion inherent in cultures, nations, and regions. Tracking words shows where global standards break down as meaning is reinvented"*

This wider dissertation research is very much interested in poking at this rhetorical and conceptual transfer, at translations occurring across scale and standards of knowing. Parsing our "Internet" from their "internet", the export and import of formations between Havana, Silicon Valley, Miami, and Washington D.C. A shift in wider U.S. proper forms and understandings – a newfound generic word newly lacking the spatial metaphorics signaled by capitalization - marks the internet as an ongoing process in conceptualization, a fluid dynamic signaling relations between technologies, peoples, and practices.

[53] Sterling, Bruce. *Short history of the Internet*. Internet Society., 1993.

"The Barrier" and the *Why* of it

The foremost inquiry received from those asking about this fieldwork in Cuba - the question of "why", why don't they have it, why is this worthy of study - needs to be addressed. For the last decade, when mentioning (to friends, family, academic peers) this work into the cultural significances of the emerging internet in Cuba, I'd inevitably be asked to address two things:

1) What is is like living in a space without ambient internet access in the mid 2010s,

2) and **why *they* don't have it *there*.**

To the detriment of PhD elevator pitches and the aforementioned asking me these questions, there is no single, satisfying, holistic response to these bundled questions. Infrastructures, the adage goes - are complex systems hidden from everyday life - masked facets of the quotidian up until the inflection point wherein they stop working.

"Infrastructure" as a multi-disciplinary fascination has had a raised profile across the social sciences in the last few years[54]. It represents a means to study how material structures - things like running water, electricity, transport systems, roads etc… can be taken for granted until their ease of use is impeded by accrued distress or disaster, the processes by which maintenance or upkeep practices[55] envelope humans into infrastructure, and as a heuristic for the Global North to interpret their lives/futures with infrastructure.

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[54] Larkin, Brian. "The politics and poetics of infrastructure." Annual review of anthropology 42.1 (2013): 327-343.

Bowker, Geoffrey C., et al. "Toward information infrastructure studies: Ways of knowing in a networked environment." International handbook of internet research. Springer, Dordrecht, 2009. 97-117.

[55] Björkman, Lisa. *Pipe politics, contested waters: Embedded infrastructures of millennial Mumbai*. Duke University Press, 2015.

Tsing, Anna. "The global situation." *Cultural anthropology* 15.3 (2000): 327-360

To the first query - *"What is it like?"*, I've tried to shade in the experience in my ethnographic details in each relevant chapter. The honest and transparent answer is that this ethnographer never fully experienced this "lack" as most in Cuba have. Upon first visit the internet was scarce, slow, and difficult - but never *unavailable* in total. My means, station in life, and sheer lottery of birthplace gave access to hotels, university spaces, and internet cafes. These all had added labor (and/or arguably were devoid of "convenience" experience elsewhere), but were functional for basic communication needs.

The *"Why"* of it is truly the thorniest question undergirding the entire project. "*Why don't they have it there"* is answered in several ways, many of them overlapping and/or contradictory.

Q: Is the technological advancement of this particular infrastructure inhibited in important material ways by the enforcement of the US's embargo?

A: *Without a doubt.*

Q: Does the Cuban government seem to also have a real reticence regarding its adoption, use, and promotion of the internet there?

A: Very much so.

Q: Is internet access widely available today in Cuba?

A: Sort of? In ways?

Q: Are there legitimate reasons for the Cuban government to be suspicious of the ways in which the adoption of the internet might change social dynamics on the island?

A: I think so, yes.

Q: Can it be argued that the withholding of internet access, benevolent or otherwise, represents an infringement upon the populations' "freedom"?

A: Perhaps.

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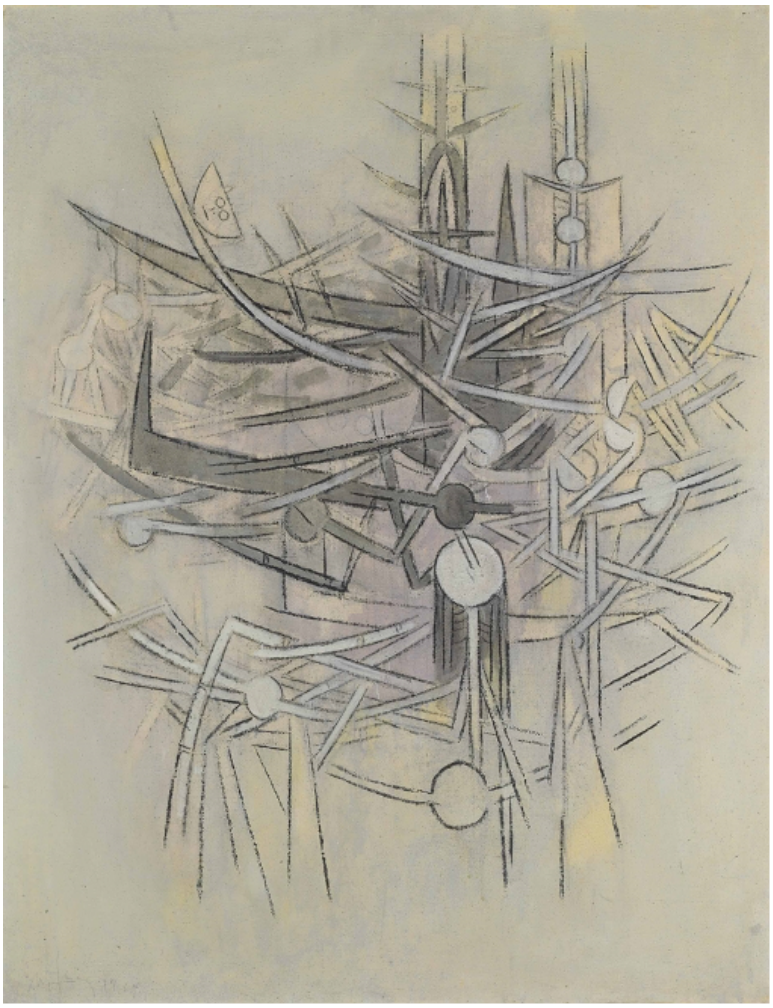

Wilfredo Lam's *La Barrière, 1964*

Several years ago I saw a replication of Wilfredo Lam's *La Barrière*[56] painting hung in Havana, devoid of context other than its date (1964) and medium (oil on canvas). A contemporary of Frida Kahlo, Pablo Picasso, and Henri Matisse - Lam's work blends abstract mid-20th century expressionist tendencies with archetypal Afro-Cuban figures and aesthetic touchstones. Alfredo Lam was born in Havana, having lived there periodically his entire life -

[56] *Wifredo Lam (1902-1982), La Barrière, 1964. Oil on canvas, 116.5 x 89.4 cm*

while also eventually having homes in New York City and Italy. Viewing his paintings in a chronological continuum, it's clear that Lam progresses over his lifetime towards more minimalist abstracted tendencies, aiming for efficiencies in gesture, reducing the spectrum of his color palette, and including fewer legible signified depictions. *La Barrière* appears in the final quarter of the artist's life, firmly emblematic of this more refined, minimal style.

Wandering Havana and constantly considering a communications medium dominated by conversations of interconnectivity (as this researcher was wont to do between interviews) - it was hard not to be struck by this messy matrix of varied, connected lines draped and washed across dynamics. Spending longer with the work, one can make out a rudimentary face - perhaps a few central nodes - and a darkened humanoid figure presiding over and through the situation. The figure is made mostly of the same gestures and shades as the rest of the network, excepting the sole loop in the entire painting, giving the shape its head.

I dwelled on this image throughout my fieldwork, continually coming back to it in various modalities until I simply made it my laptop desktop background, lingering - passively ruminating on it - for years. I was caught by the fraught connections, the haphazard-yet-still-articulated composition, the centralized veiled force gathering, wielding, shaping the threads as they bend and suspend around. Or was it the figure that was gathered, wielded, and shaped? This was certainly *one* way to think humans embedded within, about, by, and for a network, yes?

A conflagration of factors are at play in this work: political economies of control (via both the Cuban state and the U.S. dominion of western hemisphere), financial hurdles at all scales, historical tensions between states, tensions between capitalism and socialism, etc. This dissertation, for all that it might tackle, does not explicitly attempt to solve that "*why don't they have it"* as a discursive goal. Rather it takes the "absence" or "lack" - and eventual adoption - as a starting place of wandering inquiry. Like many questions that bridge answers between the United States and Cuba, an individual's potential rendering of the subject at hand reveals

ideological understandings of power in the world - just as much as their more material expertise in the subject matter.

That is all to say, the ethnographer is certainly not apolitical or neutral here, caught up in my surrounding matrices much the same as the figure in Lam's *La Barrière.* Nor are they attempting to find oneself as a participant-observer doing fieldwork somehow "outside" the political fields one brings with themselves or enter into. Transparently: I am in aggregate significantly more sympathetic to most renderings of Cuban life that consider it's role being: a) antagonized by a superpower for over a century (often illegally in violation of any modern conception of sovereignty) and b) repeatedly playing a humanistic role for the peoples of the Global South under its communist government.

This dissertation does not explicitly take on the work of reproducing the myriad historical and ongoing modes in which the rest of the hemisphere has been dominated, often brutally, by the United States, though that bubbles just beneath the text Overt and discrete forms of unilateral economic and military aggressions stretch past a century at this point, making clear the long-term stance of the U.S. vis-a-vis leftist movements in the Western Hemisphere. These have been and remain interpreted as a threat to U.S. power, if we are to take the overwhelming logic of these actions on their face. An overview of the broader histories and concrete renderings of these actions can be found across such well-detailed, clarifying works as Galeano's *Open Veins of Latin America*, Bevin's *The Jakarta Method*, Kinzer and Schlesinger's *Bitter Fruit*, and Naomi Klein's *Shock Doctrine*. This truth regarding regarding my birthplace country's overtly imperial actions have real weight in guiding senses of causality, morality, and interpretation throughout the research.

Concurrently, the Cuban government and single state party - for reasons attributed to and perhaps too often excused by the above stipulations of hemispheric aggressions - also undoubtedly display tendencies of authoritarian control, albeit at smaller, domestic scales. Certain spheres of everyday life (abilities to self-organize politically, publicly protest, and agency in navigating the economic system more broadly) are restrained in ways in Cuba that strain professed democratic potentials. Questions of domestic political viabilities and public

expression within Cuba persist for reasons that transcend the U.S. emboldening those narratives, and the Cuban government too often leans on U.S. antagonisms as the *paramount* explanatory reason for a majority of hardships. In short, one should not look for renderings of purely good or purely bad institutional actors here - that does not reflect my research, or the experiences of essentially *any* of my collaborators in this work. At the same time, it would also be an egregious analytical oversight to consider both nation-states similarly worthy of critique, as their respective sins contain magnitudes of order in their difference.

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I've kept *La Barrière* in mind for years - as a kind of meditative figure in my thinking, a template of both the messy ways in which we both make infrastructures and are in turn, made in ways by them. Lam painted the work in 1964, having been thoroughly recognized alongside his contemporaries with solo shows across New York, Paris, Stockholm, and Paris, with several of his paintings in the permanent collection of the New York City Museum of Modern Art - he was comfortably into a successful career.

Two decades prior, he'd fled Paris following the German invasion - decamping alongside many of the surrealists there (Andre Breton most notably), and collaborating[57] with them extensively. He eventually traveled across the Atlantic with anthropologist Claude Levi Strauss to temporarily relocate to Martinique. He was imprisoned on immigration charges before leaving for Cuba months later. We do not know[58] the extent to which Lam was familiar with the work of Levi-Strauss (whose most famous work on structuralism was yet to occur), though it is interesting to hold the association with the surrealists in tandem with the nascent thinking about cultural systems Levi-Strauss was engaged with at the time.

[57] L. Stokes Sims, "Myths and Primitivism: The Work of Wifredo Lam in the Context of the New York School and the School of Paris, 1942-1952," in J. Leenhardt et al., Wifredo Lam and His Contemporaries, New York, The Studio Museum in Harlem, 1992, p. 77.

[58] Cernuschi, Claude. "The Art of Wifredo Lam and the Anthropology of Lucien Lévy-Bruhl and Claude Lévi-Strauss." Wifredo Lam: Imagining New Worlds (2014): 25-67

Lam's output in this period was successful and steady, frequently a hybrid of Cubist and Surrealist[59] practice and fed by a stream of Afro-Caribbean reference. Looking at the rest of this period's catalog, *Barrière* is extraordinary work in that moment for its specificity in depiction, when much of the rest of his later content blurs forms and non-figurative abstractions. Rather than drawing from the broad strokes of human or animal-esque gestures contained in much of the rest of this era, he instead directly depicts *Eleggua* here, a specific Santeria figure. The Eleggua is a "gatekeeper to the beyond", a guardian of sorts - meant to delineate spaces between the natural and supernatural worlds. Between the mixture of curvatures, orbs, and linkages, Ellegua presides a crossroads of liminal thresholds, between what can, what might be, and what is.

The syncretic reference of Elleggua is known across the Dominican Republic, Columbia, Cuba, Puerto Rico, and Haiti as a holder, or "Orisha" of roads and paths - the force of nature whose dominion these things fall within. Within Cuba, there is said to be a particular distinction between two brother Orisha's that "hold" the roads, Elleggua being the less dangerous of the two [60]. Ellegua's brother Echu instead a harbinger of dark possibilities in travel, change, or "opportunity". To mark this distinction between kin and possibility, Elleggua is often depicted carrying three keys - signifying a transition to the past, present, or future without tension.

Last year this painting was put up for bidding at Christie's Auction House. It was estimated in price between the ranges of $400,000 and $600,000, but selling[61] for $725,000 - more than the artist ever saw in their lifetime. The painting's relative "worth" floats up into the ether of investment capital art futures while the initial museum I encountered the work slowly crumbles in Havana. The image remains a fixture in my thinking, a reminder of the inside-out ways socio-cultural structures shape lives, and the shifting material practices of those lived lives turning to shape culture in return. Of the ways these roads we build, use, and trespass hold a dual possibility across opportunity and dark possibilities, and how difficult it may be to discern the two.

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[59] M.-P. Fouchet, Wifredo Lam, Barcelona and Paris, Polígrafa /Cercle d'Art, 1976, p. 122, no. 141 (illustrated in color).
[60] Lopes, Nei (2004). Enciclopédia brasileira da diáspora africana. São Paulo, SP: Selo Negro Edições. p. 252.
[61] "La Barrière." *Wifredo Lam (1902-1982)*, https://www.christies.com/en/lot/lot-5949132.

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Wifredo Lam (1902-1982), *La Barrière,* 1964. Oil on canvas, 116.5 x 89.4 cm

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Chapter 1:
PreHistory of the Cuban Internet

Abstract: This chapter serves as a primer to the terrain of the dissertation project broadly, with the wider lenses of histories of Cuban media and sovereignty used as entry-points for the larger questions in the work that follows. What iterations of connections between *Cubanismo* and the national media sphere(s) can be drawn? Following, a brief history is given of U.S. - Cuba relations, laying the groundwork for later conceptualizations of the politicization meaning of "the internet in Cuba" and the ethical ramifications of my own fieldwork there. How has media, over the course of the intertwined last 150 years of history between these countries, articulated relationships of power between them? What can it illuminate about how more recent formulations of media and state power are wielded?

Situating Technology with Two-way Pagers in Havana

I met Luis during one of my first visits to Havana, over a decade ago. I'd been staying at his *casa particular*, a tiny backroom rented just off Calle de Simón Bolívar in Centro Havana. We bonded quickly, moving past the niceties of conversation expected when living in someone's home - fast friends after hearing him blast the late 1990s rapper DMX[62] out from a blown iPod-synced apparatus. Luis was in this moment falling in love with music from the United States: mostly 90s R&B and a particularly bombastic, machismo-laden strain of rap (he'd traced *DMX to 50-cent, then back to Notorious BIG, and Eazy-E…)*. American hip hop became a common language for us as the weeks went on, a cornerstone in a relationship quickly compounded further as I added to his mp3 trove to include lineages of *Norteamericano* soul and funk.

[62] "DMX - Ruff Ryders' Anthem (Remix)" YouTube. YouTube, 2012 https://www.youtube.com/watch?v=Cni5clotpmc

His iPod had been of that first (U.S.) 2000s generation: a "click wheel" interface, more than a dozen years old at that point, screen-scuffed in such a way as to only be legible from certain angles, the casing cracked and bolstered by encrusted layers of tape. This music player had been left for my host by a musically inclined former guest, passed on as a gift after a particularly congenial stay. The tunes were amplified through a series of mechanical interventions: frayed dongles and loosely fashioned stray wires connected to speakers and electric – the system working in full only when finessed into proper formation by Luis, chief engineer. He indicated multiple times the makeshift jukebox was his favorite possession, calling it *mi tesoro* ("my treasure").

Luis approached my partner and I one night looking for help in translation and transcription. He was looking to learn the words to one of these songs he'd fallen in love with over the past couple months – hoping to impress someone he'd recently begun dating. He needed assistance with the lyrical content to Sharissa's "*Any Other Night*"[63].

Unbeknownst to Luis, the song wove a complicated tale wholly inappropriate towards his goals. The internal narrative was of a woman responding to advances from an erstwhile lover: repeatedly assuring him that she'd welcome his visit – but only at a different time – *"any other night".* The song's protagonist was currently entertaining other, similarly inclined company. In addition to the possible thematic hurdles the song presented for Luis's courtship uses – my partner and I were quickly gobsmacked by one notable string of lyrics that surpassed everyone's abilities in translation.

"Boy you picked the wrong time, boy you picked a fine time, to show up
*Boy you picked the wrong time**, <u>did you get my two-way,</u>***
You didn't answer your phone at home
Boy you picked the wrong time, noooo, yeah..
Boy you picked the wrong time, what's a girl to do."

Sharissa – *Any other Night, 2001,* emphasis mine

[63] An admittedly middle-of-the-road entry in the milieu of late 1990s/early 2000s R&B, a song no one I've relayed this story to since had any familiarity with: Sharissa, "*Any Other Night (Official Video)"*. Music Video. Youtube. https://www.youtube.com/watch?v=24ZeuHUZcoc

A “two-way” was a slightly upgraded version of a pager – colloquially also known in many places as “beeper”. The tiny telecommunications device, strapped normally to one’s waistline, would alert the wearer via a series of numbers and letters that someone was vying for their attention via phone. In that moment - 2012 Cuba, wireless communications technology was virtually non-existent, with only the exorbitantly rich or professionally specialized able to possess (barely functional) cell phones.

How does one accurately translate the necessary contexts and significance of a two-way pager to someone who’d never left Havana – where any notions, practices, or widespread representations of mobile telecommunications systems have really only emerged[64] in the last several years? What is transferred in that attempted translation, and what is lost?

The assumed socio-cultural functions of the technology are, to some degree - what Walter Benjamin might call *inessential*[65] in moments of translation, outside the information strictly necessary in a sterile, 1:1 explanation of the “beeper”. The difficulty is not necessarily explaining *what* a two-way pager is (my partner and I attempted, fumbling through the language, to explain it as an early personal messaging device) but the *hows* and *whys*: What are *meanings* of the 2-way pager, to us, to the song, to Luis? My partner and I quickly thought of numeric acronyms, the wandering to find a pay phone… about associations with certain vocations, subject positions, and musical genres. Luis *might* be enlightened by contextualizing tales of clandestine “143” crypto-numerical codes or the device’s relative proximity to the drug trade in the United States. These may also land inartfully (reader: they did) - seemingly random assortments of narrative information only adjacent to the devices essential function, bereft of our own lived experiences.

“*Why not just call?”* Luis asked.

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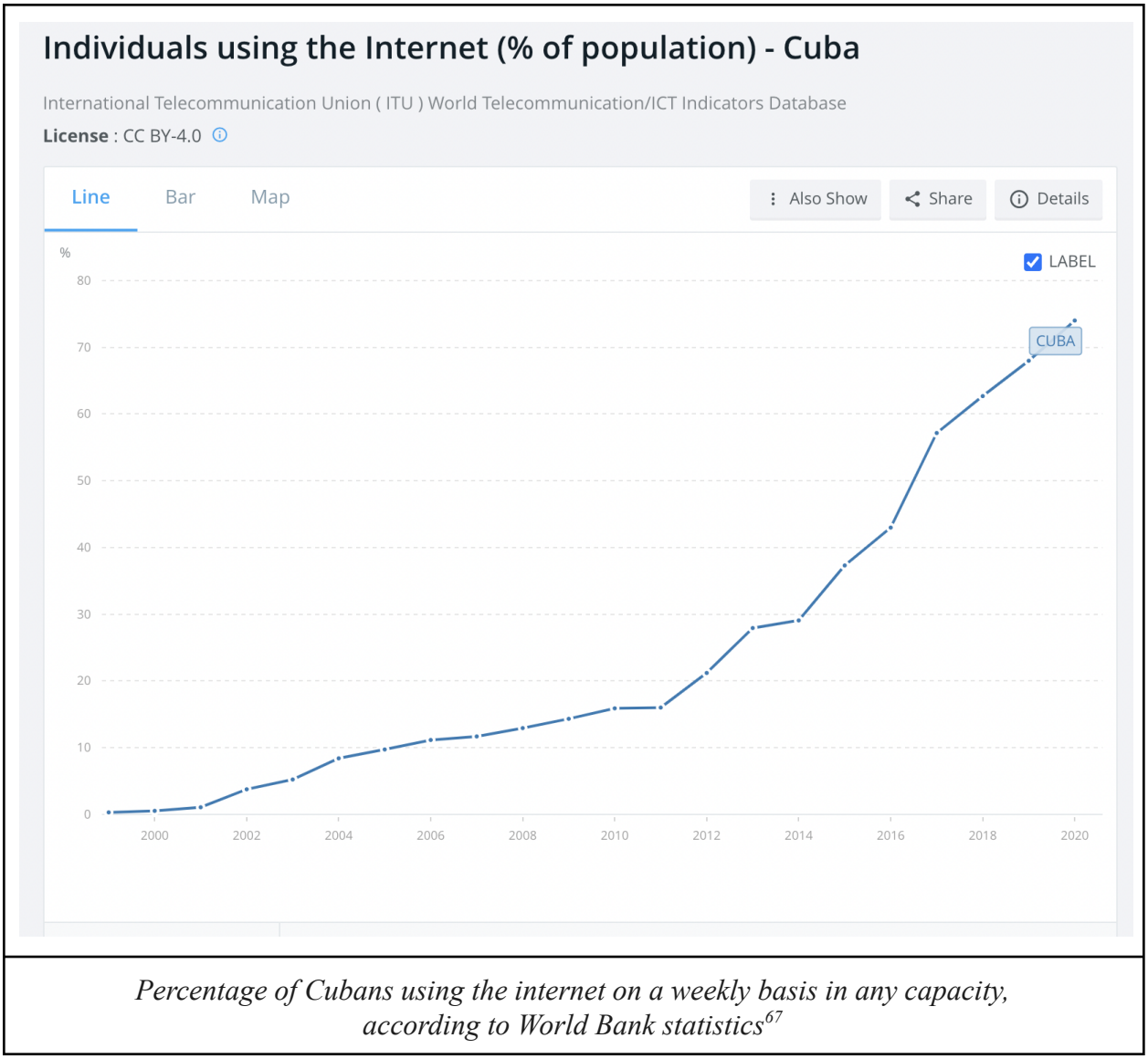
[64] Press, Larry. "Past, Present, and Future of the Internet in Cuba." *Papers and Proceedings of the Twenty-first Annual Meeting of the Association for the Study of the Cuban Economy (ASCE)*. 2011.
[65] Benjamin, Walter *(1968b). The task of the translator. In H. Arendt (Ed.), Illumination s (pp. 69-82). New York : Schocken.*

This seemingly banal moment from early fieldwork has stuck with me ever since, a shorthand with which to remind myself of the conceptual webs surrounding communications technology we find ourselves in, a way to bypass the often teleological understandings of the ways in which technological forms change and entrench themselves into meaning differing things to differing peoples. My inadequacies at explaining 2-way pagers to Luis in Havana gives me alternative means to think about what is entailed in knowing various forms of communication technology across socio-cultural contexts: distributed and conceptualized through both economic means and cultural practice. The ethnographic moment reminds me of the constellation of factors any "technology" needs in order to achieve salient meaning - attendant histories, discourses and human interactions.

When I began fieldwork in 2012, the presence of anything resembling a normative (re: U.S.) connection to the internet was hard to come by in Cuba – it was *extremely* rare to encounter home internet connections and was virtually unheard of for a Cuban citizen to owning a cell phone to include data/web access. Both avenues to connection remain now, nearly a decade later, equal parts restricted by cost, infrastructural, and bureaucratic hurdles. Most surveys put the national level of monthly access to the internet including a population anywhere between 5-20% of Cuba's total inhabitants[66], a disparity in data often caused differing definitions (by those polled and polling) as to what counts as "accessing the internet".

[66] FreedomHouseDC. "Cuba Country Report" Freedom House. https://freedomhouse.org/report/freedom-net/2015/cuba



Percentage of Cubans using the internet on a weekly basis in any capacity, according to World Bank statistics[67]

My fieldwork traversed the years in which networked data became somewhat commonplace in Cuba, transcending the realm of professional specialists, niche hobbyists, and the the handful of monied families in Cuba – to now be part of the everyday for larger and larger swaths of Cuban life[68]. Just as my acquaintance Luis had minimal means to which to understand

[67] "Individuals Using the Internet (% of Population) - Cuba." Data, https://data.worldbank.org/indicator/IT.NET.USER.ZS?end=2020&locations=CU&start=1999&view=chart.

[68] Janetsky, Megan. "Cuba's Informal Market Finds New Space on Growing Internet." Tech Xplore - Technology and Engineering News, Tech Xplore, 28 Nov. 2022, https://techxplore.com/news/2022-11-cuba-space-internet.html.

Sharissa's (and my own) socio-cultural bundles of meaning associated with the "two-way", I lacked adequate contexts to begin to grasp what the emerging data networks in Cuba might bundle for him and other Cubans. This chapter is some of my attempts to bridge that gap, a chronicle of some of the exemplars of the meeting place between Cuban culture, sociality, communication technologies, and something like politics or civic life.

Fabricating Cuban Medias

> *"Technology is not the sum of the artifacts, of the wheels and gears, of the rails and electronic transmitters. Technology is a system. It entails far more than its individual material components. Technology involves organization, procedures, symbols, new words, equations, and most of all, a mindset"*
>
> - Ursula Franklin[69]

Fabricate:[70]
Verb, From the Latin fabricare – "something skillfully produced"
1. To invent or concoct (something), typically with deceitful intent
2. To construct or manufacture, especially something from prepared components,

This dissertation is ostensibly about the emergence of the internet in Cuba – about the ways in which the Cuban internet is made, constructed, or otherwise fabricated there. I say ostensibly, because while much of the fieldwork began as a means to understand and chronicle emergent Cuban networks, it became equally about the means by which these communicative technologies are understood, exerted, and distributed by those *outside* of it, frequently by the government of the United States. It became impossible to write this dissertation without the dynamic framing of the research including its (often imperial) neighbor 80 miles to the north, the culture and country informing the bulk of the ideas I brought into the field with me. This chapter, and the theory-focused introduction that precedes it – are intended to compile my conceptual orientations (how the internet/communicative technologies are ethnographically rendered) with the socio-historical contexts of Cuban media. This chapter should ideally expand the terrain I (and the reader) have available to ground understandings of telecommunications technologies in Cuba *to* Cuba – to historicize how relationships between media and people have been articulated, constructed, and "made" there. It would also then double as a kind of buffer for other readers of the work, an array of material to better understand the understandings the author has worked from.

[69] Franklin, Ursula. *The Real World of Technology. 1989. Revised Ed. Pg 3*
[70] "Fabricate". Merriam Webster Online, Merriam Webster.

The narrative/theoretical vignettes which follow emerge from historically situated moments where media is deployed, created, or otherwise becoming entrenched as a recognizably Cuban form of technical and social relations. It is designed as a *start*[71] building a "prehistory" of the internet's fabrication through ruminating on affinities, practices, and conceptualizations in Cuba in an effort to better contextualize the related local inertias informing understandings of Cuban media. A "prehistory" then, takes these prior forms not as a direct, teleological lineage, but rather a space to dwell in the shared, overlapping conditions and events that may color contemporary understandings of the internet.

I've chosen[72] the subtitular "*fabricating"* purposefully – invested in the ways it oscillates between modes of construction and making from disparate parts, as well as the implicit de-essentializing understandings the word as an *invention* or *concoction*. The word envelopes in discourses of craft, invention, and creativity – important threads for understanding the individualized modes of accessing the internet in Cuba. I also like that the word's current usage seems to holds "truth" at arms length, allowing me to think in modes of inquiry into "*how does this come?" to be* while concurrently wondering "*how might we construct a different narration?".*

What is available for ethnographic inquiry – addressing both above questions - are the practices and ideas constellating the medium in varied settings, the sociality and cultural contexts that together make entrenched meaning. The space and scales between individual users sorting new practices and the moments where something becomes normal. These processes become legible as *fabricated* when history, practice, and understanding are brought to bear, together, and narrated as such.

The chapter is by no means an exhaustive account of these tendrils through setting and time. It should be taken as a series of snapshots, some resonating with each other, some with my wider work, some (for the moment) standing alone. I've hopefully done enough work to make

[71] My training is not formally as a historian, and as such - scholars looking for an in-depth media history of Cuba should look elsewhere. The text here is intended to excavate significant socio-cultural resonances amidst the history of media there, rather than follow a straightforward, teleologically-told progression of things. It hopefully provides some touchstones of how contemporary meaning comes to be constructed, but is by no means a holistic retelling.
[72] Not to mention the repeated formations of "making", "constructing", etc.

clear how these fit together, but also intended, to some degree, to leave things hanging together in a way which does not over-determine this ethnographic work as the "reality" or "explanation" of contemporary Cuban networks.

What is being mediated here, and how? What social practice does this highlight? If we are conceiving of something as a technology or a medium, what kinds of expectations, practices, and understandings become explicated? What relations might we draw between them, to think something of Cuba, Cubans, or of my own conceptions of media/technology? Where is the state/governance in relation to communication? What does the mode or practice reveal about civil or social life at that moment? Overall, this chapter is a space where the social aspects of telecommunications technologies (and perhaps, what gets to count as a communications technology) are stretched, shaken, unsettled. I'd like to see what these categories might be able to contain, and where my own boundaries lie in terms of qualifying social practices as such.

Cuba's unique[73] economic and historical contexts inform ideas of technology there greatly: not fully apart from, flirting with isolation, in many ways simply different than. The island's people and position provide an opportunity to research these conceptualizations along a different legibility: fractured and constructed amidst human discourse, economics, and socio-technical relations rather than understood exclusively as mechanistic, material objects that have the capacity to change society.

Initial Cuban Press, Early "Public Spheres", and Imperial Pressures

The colonization of Cuba by the Spanish began in the late 15th century, devastating the indigenous communities of the Taíno people via direct violence, disease, and enslavement. The first European settlement on the island was established in 1511 by conquistador Diego Velázquez de Cuéllar, founding the city of Santiago de Cuba. Over the next few decades, the Spanish colonized other parts of the island, establishing plantations and bringing in African slaves to work the land. Cuba's exploitation of Cuban resources became an important source of sugar, tobacco, and other agricultural products for imperial Spain, which then shipped the products

[73] Peter Schwab. *Cuba: Confronting the US embargo*. Macmillan, 1999.

back across the Atlantic for distribution across Europe, entrenching routes of capital trade alongside other colonial nodes. By the mid-16th century, the established Cuban Taíno population had been almost completely decimated, and the island became predominantly populated by Spanish colonists and the numerous enslaved forced to work plantations.

Despite its economic importance to Spain, the wider spheres of Europe and the trans-atlantic slave trade, Cuba remained a relatively small and isolated colony for much of its early history. It wasn't until the late 19th and early 20th centuries - when the island eventually became a major producer of sugar and other export crops - that it began to attract significant foreign investment and become more integrated into the global economy. With a larger population came a more defined social sphere (and material media culture surrounding it), giving rise to a literate bourgeois class of landowners, bureaucratics, and its own robust political machinations outside of imperial spain.

In contrast to other Spanish colonies, Cuba was relatively late in having a functioning printing press. In comparison to other Caribbean entities and the majority of Latin America though - it was relatively early. When Capitan-General Gregorio Guazo Calderon first came to oversee Cuba in December of 1718, proclamations were issued as hand-written manuscripts. By 1722[74], through the efforts of a man named Carlos Habre (and under the auspices of the Spanish captain-general of the time), there existed modest means to produce runs of texts. Little is known of Habre, though it is clear that some degree of mass production occurred, including poems and medical guides, and that they resided in Havana (both printer and press).

Until 1781, only a relative few and small-scale printing operations seem to have existed in Cuba, when the *Imprenta de la Capitania General* was established. The shop published Cuba's first newspaper, *Gazeta de la Habana,* expanding to produce Cuba's first magazine as well in 1790: *Papel Periodico de la Habana.* These publications' existence and content was guided strictly by Spanish colonial press laws, dictating the purpose and tone of the prose. The papers employed journalists reporting on the governance of the island, events occurring in the city, and news from elsewhere under Spanish rule.

[74] *Kenneth C Ward, 2016 – Carlos Habre, Francisco Jose De Paula, and the "Pre-History" of Printing in Havana, Cuba* pg 336-337

By the 1830s, news operations had begun to include the work of *costumbristas*, "editorial essayists of Cuban customs and manners", according to researcher Suarez-Murias[75], expressing "a strong civic concern about educating the *pueblo, society at large"* – suggesting the beginnings of centuries wherein various political regimes would attempt to homogenize Cuban society. The press at this time was legibly apolitical in terms of critique of the larger colonial structures in place, functioning more so to inform a literate middle and upper class of day-to-day affairs while ushering a proto-liberalism into place.

During this later period of colonial rule, the social spheres of Cuba were heavily structured along defined racial and class lines. The island's major decisions were dedicated by Spanish authorities, and carried out through systems of military and bureaucratic oversight on-island. The African slaves and few remaining indigenous had few, if any, rights to exert. Within the Spanish colonial community, there were also distinctions based on spectrums of wealth and political connection. The wealthier Spanish landowners and city-based merchants enjoyed a higher social status, the agricultural managerials often lacked political power or education.

Despite these divisions, there are also notable areas of social interaction between the different groups heading into the 19th and 20th centuries. As Cuba begins to populate and become more integrated into the global economy, the social dynamics of the island became more complex and diverse. A middle class emerges alongside universities and a growing merchant class. Immigrant groups, such as Chinese and non-Spanish Europeans arrive on the island, diversifying institutions and cultural practices. Race and class divisions continued to shape Cuban society for many years, and it wasn't until the 20th century that significant progress was made towards greater social equality.

By the mid nineteenth century, Cuban has a robust array of newspapers pushing past the (mostly) unidirectional messaging of the Spanish-regulated press. A struggle ensued to contain this newly un-yoked press, responsible for circulating much of the discourse calling for self-rule

[75] *Kenneth C Ward, 2016 – Carlos Habre, Francisco Jose De Paula, and the "Pre-History" of Printing in Havana, Cuba* pg 336-337

of the Cuban state. Subversive presses were shuttered, inducing others to operate clandestinely[76]. By 1869, many years deep into the Cuban struggle for independence, the colonial government reversed course, worried it was losing the war of public sentiment, issuing a "press freedom" decree - with the aim of shoring up moderate reformist support towards the newly lenient sovereign.

The resulting months resulted in a cacophony of textual voices, with periodicals (and their editors) in this newly "open" era forging many of the public figures to play an outsize role in Cuban affairs over the next few decades. Most notably, *El Cubano Libre* ("Free Cuba"), edited by Carlos Manuel de Cespedes and founded in 1969 became the de facto voice of Cuban revolution and autonomy, while *La Voz ("*The Voice") provided an outlet for the (oft land-holding and aristocratic) far right. *La Voz* is historically significant for providing a discursive home to the *voluntarios*, a violent band of white vigilantes which carried out extrajudicial (often racial) killings in the name of squashing subversion against the colonial power.

La Patria, another Cuban periodical, was founded in 1892 – notably published in New York and distributed amongst cities holding secondary Cuban populations (New York, Madrid, Mexico City) in addition to Cuba. A prominent exiled Cuban writer had been the inspiration for the news magazine – one of the loudest international voices calling for Cuban autonomy: a journalist and poet by the name of Jose Marti.

Assembling Marti

On February 24, 1905, a crowd gathered in Havana's Central Park, awaiting the unveiling of Cuba's first marble statue of José Martí. A decade prior, alongside General Maximo Gomez (military leader of the rebellion against a colonial Spain) Martí played a crucial role in initiating Cuba's *third* war for autonomy against an imperial Spain. He was a venerated writer and thinker amongst a certain literary class of Cubans, but had yet to become a known quantity in the vast majority of the island's consciousness.

[76] McGovern, Eileen Marie. From Varela to Marti: Four nineteenth century Cuban emigre newspapers. Temple University, 1990.

Jose Martí's power as a writer – an essayist, poet, journalist, philosopher kind of polyglot – was held in an almost religious reverence amongst Cuban revolutionaries of the time. Reared in Havana but having lived most of his life *outside* Cuba, Martí oscillated between stays in New York, Spain, and Central America after being exiled by a the colonial Spanish-Cuban governance at age 18. His writing orbited Cuba's ongoing struggle for independence, a continent of Latin American political struggles more broadly, and an articulation of a certain hemispheric potentials of autonomy outside the understood imperial goals of a quickly expanding United States. Martí wrote from his late teenage years until the end of this short life- producing a *vast* body[77] of words and ideas designed to inspire and enrage, effective in both guilting *and* rallying varied publics on opposing sides of the imperial dynamics.

Martí finally returns to Cuba in 1895 – at the height of revolutionary struggle and the beginnings of the Spanish-American war, smuggled into the island, only to last 5 weeks before spectacularly dying on his native soil. Martí had contracted a close friend just weeks prior to compile his writing into volumes in the event of his death – something all but guaranteed given his lack of military training and absolute zeal to play a leading force resisting the Spanish.

Riding a white horse, and wearing a black jacket, Martí broke rank and charged the Spanish, rallying only one companion amongst his peers to join him. Both were shot and killed without having breached enemy lines.

Today, Martí's visage absolutely permeates contemporary Cuban society – more so than Che Guevara, more than the Castros, arguably more than revolutionary postures and aesthetics. One can scarcely travel a handful of blocks in Havana without encountering a mural or more likely, a sculpted bust of this writer and erstwhile revolutionary fighter. His writing is everywhere, often some of the only English-language texts available in bookstores - besides compendiums of Fidel's speeches.

Lillian Guerra, a Jose Martí scholar, notes that the narrative of Marti is so central to contemporary ideas of what is to be Cuban (or what is it to be *Cuba*) that *"competing*

[77] Martí, José. *José Martí Reader: Writings on the Americas*. Ocean Press, 2007.

interpretations of Jose Martí *represent different, conflicting interpretations of a nation*[78]". Martí becomes a vessel for multiple ideological configurations. His writing is of now help in sorting this out – his corpus of writing so vast one can locate both deep admiration[79] for the U.S conventions and politics alongside stark warnings towards Latin America sovereignties as U.S. expansionist policies transition into credible threats towards postcolonial autonomies. Martí's attentions (and sometimes his politics), were so transient that it is not difficult to construct whatever ideological formation you'd like out from his life's actions and ideas.

As such, Martí is nearly equally as present a figure across the Florida Straits in Miami. The city's Cuban population (approaching 3 million, a clear majority of the city's populace[80]) – has adorned him upon countless murals, and made common practice of naming streets, parks, libraries, gymnasiums after him. The largely conservative exile communities[81] of Little Havana, Miami have one iteration of Martí, fighter for a kind of pan-American, bootstrapping nationalism they render at odds with the last half-century of authoritarian Castro-led governance. 100 miles South, across the water, Martí's history of anti-imperial sacrifice is played up, his image coupled with a slogan painted upon countless Cuban facades over the last several decades: *Revolución O Muerte (*"Revolution or Death").

Martí's death in 1896 spurs a shift into his narrative as folk hero - his story now hyperbolic, distributed through military and revolutionary lore as a man of ideas willing to sacrifice himself for a motherland's betterment and freedom - largely erasing his stupendously poor judgment on the battlefield. There are multiple eras of Martí interpretation and deployment which follow 1885 - 1895, alive in writing - appealing to cultural clubs, to intellectuals, to those within a mediated distribution chain and a capable set of eyes (Cuba was about 30% literate at

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[78] Guerra, Lillian. *The Myth of José Martí: Conflicting Nationalisms in Early Twentieth-Century Cuba*. University of North Carolina Press, 2006. Pg 21.
[79] Kirk, John M. (November 1977), "Jose Marti and the United States: A Further Interpretation", Journal of Latin American Studies, Cambridge University Press
[80] "Miami-Dade county census". US Census Bureau
http://www.census.gov/quickfacts/table/LFE041214/12086
[81] Moreno, Dario, and Christopher L. Warren. "The conservative enclave: Cubans in Florida." From Rhetoric to Reality. Routledge, 2019. 127-145.
LeoGrande, William M. "From Havana to Miami: US Cuba policy as a two-level game." *Journal of Interamerican Studies and World Affairs* 40.1 (1998): 67-86.

this point in time[82]). His visage and ideas have come to mean many things to many people – a strange sort of a prism negotiating and standing in for people's politics, philosophies, and ideas. Marti's body lies still but his corpus vibrantly alive… mediating a multiplicity of publics and bolstering justifications for varied sets of governance or economic organization.

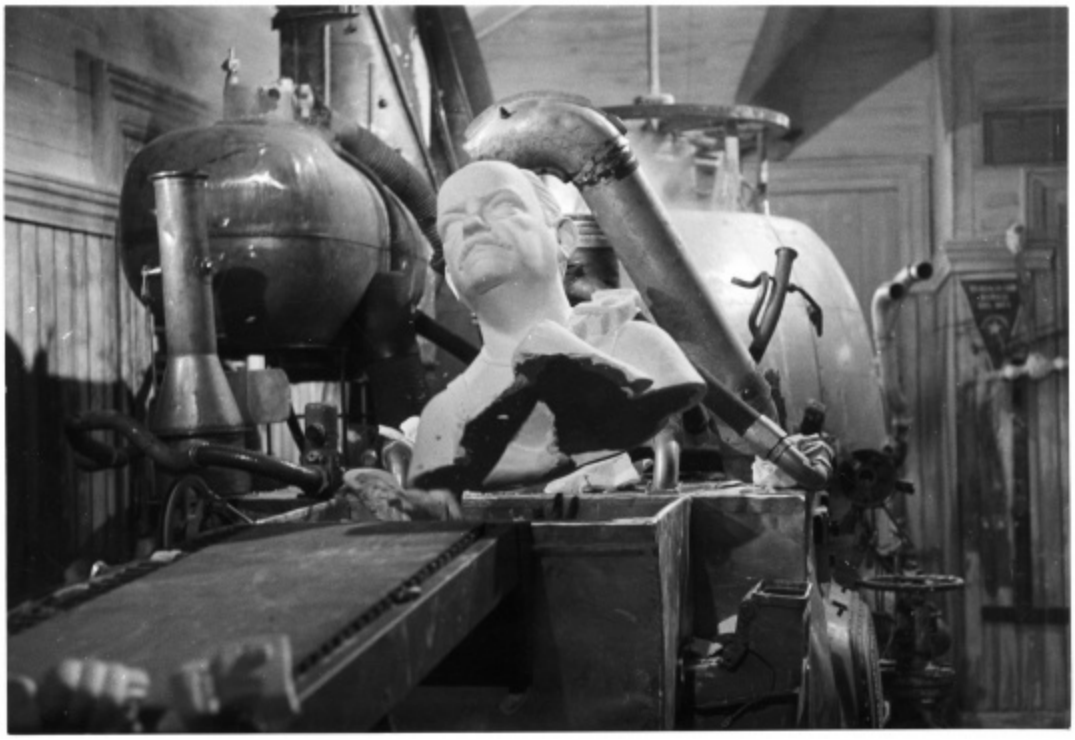
Following the struggle for freedom out from Colonial Spain, a domineering United States largely controlled the affairs of the country to varying degrees for the next 60 years[83]. The following 60 some-odd years vacillate wildly in terms of governance and corresponding strains of nationalism - a mélange of populists, U.S.-installed despots, and democratically elected authoritarians all hold seats of power, all articulating a new version of Martí to justify their moment's *Cubanidad*. Martí bifurcates into many over the 20th century, his indexing depending on narrative best-fits: radical poet of democracy, muckraker journalist railing against an elite business class, nationalist par excellence, or admirer and watchdog of U.S. intentions of expansion through the hemisphere[84].

The 1966 Cuban film *La Muerte de un Burocrata[85] (The Death of a Bureaucrat),* is a satirical look at the contemporaneous bureaucratic structures emerging in Cuba. The press was entirely consolidated to state control by this time. Any outright communications form (public speech, print, artistic production in most modes) of subversion of the revolutionary government was widely repressed/punished, but cinema remained (and has for the last half-century) a bastion of critique against the state.

The film opens with a funeral, as mourners stand around the grave of Francisco J. Perez. The scene roots the rest of the film: as the audience discovers the main character of the film, the remembrances of his life and times structure a retroactive narrative arc of the film's remainder. As a life-long populist supporter of Cuban liberation, Francisco – owner of a marble working studio - became the principal sculptor of Jose Martí busts following the revolution. An

[82] Leiner, Marvin. "The 1961 national Cuban literacy campaign." *National Literacy Campaigns*. Springer US, 1987. 173-196.
[83] Pérez, Louis A. *Cuba and the United States: Ties of singular intimacy*. University of Georgia Press, 2003.
[84] Virtually all of this made visible through Lillian Guerra's monumental archival undertaking in *The Myth of Jose Marti*. I've condensed some of the deeply historically situated argument laid forth there, to a degree that greatly pales in comparison to the much richer telling there.
[85] *The Death of a Bureaucrat La Muerte De Un Burocrata. 1966. Dir. Tomas G. Alea*

incredible undertaking (these marble translations of nation-state myth were in great demand in the 1960s), Francisco's work is what he believes to be in keeping with serving one's country and allying oneself on the right side of history. After trying (yet failing) to keep up with the insatiable demands of the s state-building cultural project, Francisco devises a machine to manufacture Martí busts, improving the efficiency of his labor process.



Film still from *La Muerte de un Burocrata,*
depicting the manufacture of a Jose Marti bust

In one (of many) of the film's allegorical turns, Francisco's machine becomes stuck. He climbs atop the apparatus, reaching inside, slips, and falls into it. The device *whirr*s into action, transforming him into a fleshed iteration of the Jose Martí busts. His former employees place the Cronenberg-esque sculpture atop his gravestone.

La Muerte de un Burocrata brilliantly juggles these formations, poking at the relations between national myth, symbolic transfers, government inertias, and state-building modes of

control. It questions the individual costs of turning a self over completely to the task of from another's myth, of the details of a life orientated around state-making practices, towards a perceived tension between populist/socialist policy formations and the possibilities for a semblance of individualism to survive. It gazes directly at the centralized "efficiencies" (that often were not) developing in the now Soviet-lite administration. It wields the image of Martí – a person sometimes called the "*soul of all Cubans*" [86] to contemplate the inherent contradictions that develop when one's image is stretched thin, deployed past signifying limits, perhaps articulated into one-too-many ideal forms.

Indeed - today we can find Jose Marti's visage etched across parks and memorials in Miami, often alongside his words, in ways running contrary to those just across the Florida Straits. On memorials for the ill-conceived (and U.S. fomented) *Bay of Pigs* attack, marking the space where many Cubans were received and bureaucratically processed following the *Mariel Boatlift* wave of immigration in 1980, adorning gyms, restaurant walls, and sculptures in the name of "freedom". This constellation of words, images, and ideas - assembled by varied ideological publics to be a kind of fungible lodestar - should be kept in mind towards the larger questions of how specific technologies come to hold their meaning.

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"Struggles of Masses and Ideas"

Latter in the 20th century, we can catch glimmers of the practices aimed at homogenizing the thought/politics of Cuba's population through mediated, charismatic speech following the revolution. Fidel Castro famously delivered rapturously received, long-form speeches which stretched for hours at a time, sometimes rallying millions of listeners at once. These speeches, particularly in the first several years of the revolution (though continuing less explicitly, and less rapturously received in the subsequent decades) combined a genre of constitutional, founding nation-state documents to public oratory performance and gathered affirmation of cause.

[86] Guerra, Lillian. Ibid. pg 45.

"This epic before us is going to be written by the hungry Indian (re: indigenous) masses, the peasants without land, the exploited workers. It is going to be written by the progressive masses, the honest and brilliant intellectuals, who so greatly abound in our suffering Latin American countries. Struggles of masses and ideas[87]."

- Fidel Castro, Feb 1962

Two speeches in particular set the mold for this construction of assembled public body, political will, and charismatic leader. The "Declarations of Havana", sweeping in scale – represent political manifestos, plans for the future of the country, and directions for the revolution to resist imperial power and spread on a global scale. They are considered *ratified* documents, written and circulated following these massive gatherings in Havana, authorized by the call and response of crowds numbering perhaps 2 million (easily 25% of the contemporaneous island population) and a leader perceived as channeling their struggle. The people gathered here in this moment become known as the *National General Assembly of Cuba,* a name invoked continually to channel a particular relationship between people, media, and state.

"Where the roads for the peoples are closed, where the repression of workers and peasants is fierce, where the rule of the Yankee monopolists is strongest, the first and most important task is to understand that it is neither honorable nor correct to beguile people with the fallacious and convenient illusion of uprooting by legal means which don't exist and won't exist ruling classes who are entrenched in all the state positions, monopolizing education, owning all media of information, possessing infinite financial resources a power which the monopolies and oligarchies will defend with blood and fire and with the might of their police and armies. " (Castro, Ibid)

The speeches are used to justify/verify state practices, often holding up the centralizing tendencies of the revolutionary government as a win against the formerly monopolistic imperial powers – once of Spain, now the United States. They position a particularly revolutionary formulation of media power – one which colludes populist, public displays of nationalism with a fierce aestheticizing of the masses as sovereign. The increasingly monolithic narrow discourse regarding the state is, in these moments, performed as a way of indexing the will and rights of

[87] Castro, Fidel. "The Duty of a Revolutionary Is to Make the Revolution: The Second Declaration of Havana." *speech delivered in Havana, February* 4 (1962): 104-115.

the people, an affirmational role that greatly shifts as the decades (and the embargo) of the 20th century wear on. Media, in various ways at this moment - are centralized and deployed by the power of the state towards their goals. How long can this centralization hold against the liberalizing inertias of the 20/21st century?

Doctors, Teachers, Projectionists

1961 was an eventful, pivotal year in Cuba. The spectacularly failed "Bay of Pigs" invasion, launched clandestinely in mid-April by the United States, made clear the Kennedy administration's regards of the Castro government's (and Cuba's historical) autonomy – compounding and complicating an already deeply fraught relationship following the economic blockade imposed on the island. It marked a more pronounced Soviet presence on the island, as military and politburo figures helped integrate various tools of established socialist statecraft into the still nascent forms of governance emerging there[88].

The Cuban state was in many ways beginning to articulate itself anew, starting to be made more legible by demonstrating it's capabilities and hinting towards future possibilities. It perhaps it *needed to*, following several years of purges, a consolidation of private press in revolutionary control, state-sanctioned killings of oppositional figures, and a massive exodus of (both forced and voluntary) some populations on the island. The promises of the revolution – in terms of immediately necessary state-craft initiatives and the longer-term, populist utopian futures - beckoned for visible progress. Many figures in the revolutionary government were aware of the potential power of the press, while looking ahead to newer forms of media like radio and film.

> *"The propaganda that will be the most effective in spite of everything, that which will spread most freely over the whole national area to reach the reason and the sentiments of the people, is spoken words over the radio [la oral por radio]. The radio is a factor of extraordinary importance. At moments when war fever is more or less palpitating in everyone in a region or a country, the inspiring, burning*

[88] Duncan, Walter Raymond. *The Soviet Union and Cuba: interests and influence*. Praeger Publishers, 1985.

word increases this fever and communicates it to every one of the future combatants" - Ernesto "Che" Guevara[89]

Concurrently: a state-provided system of robust healthcare had been pledged since Castro was surrounded by guerilla fighters in the *Sierra Maestra* mountain range in '58, nearly always paired alongside promises to educate a large population of illiterate *guajiros* (farmers, country-folk). These promises were finally coming to pass in 1961, as an effort to empower the impoverished population's body *and* mind – campaigns waged simultaneously as infrastructures and workers spread from cities into the fields. Anthropologist Ariana Hernandez-Reguant discusses[90] the government's multiple uses of the 1961 literacy campaign thusly, tying the need to effectively message and communicate to a population with the technology of reading and radio broadcast:

"...designed as a propaganda campaign, mostly over radio but also over printed media and billboards, in order to reach as many people as possible throughout the island. Radio was used to broadcast not only literacy classes but also numerous programs and spots to involve every citizen in the literacy drive. The Literacy campaign sought, obviously, to teach the illiterate to read and write, but as importantly, to disseminate revolutionary ideology as well as to bridge the urban/rural divide by bringing urban residents to the countryside to teach.

As those programs began in earnest, *another* front of cultural enrichment and social cohesion opened up, co-mingling media and sociality further with the revolutionary project. The so-called *Cines Moviles* (Mobile cinemas) were added to propagate alongside these initiatives: portable showings of both entertaining and educational films designed explicitly to rally the people, to inspire awe at the state's capacities to implement change, to gesture towards a unified technologically enabled future, and perhaps most importantly - to distribute ideologically favorable curated content to captive audiences[91]. The aforementioned Soviet tendrils had spread into these cultural programs as well – whether by some affinity of methods or direct involvement

[89] Guevara, Ernesto. *"La guerra de guerrillas."* La guerra de guerrillas (2020): pg 24.
[90] Adriana Hernandez-Reguant, *Radio Taino and the Globalization of Cuban Culture Industries, Dissertation* (University of Chicago, 2002),108.
[91] Tamara Falicov, *Mobile Cinemas in Cuba: The Forms and Ideology of Traveling Exhibitions.* Public: #40 Screens. Issue editors Susan Lord, Dorit Naaman, and Jennifer VanderBurgh. Toronto, Canada, 2010, 104-108.

from the new politburo guests, the *Cines Moviles* program clearly mirrors the Russian agit-prop film distribution processes following the Russian 1917 Revolution.

These tripartite Cuban cultural programs spread through the island in 1961: teachers, projectionists, and doctors often deployed together through trains, trucks and buses, occasionally buttressed by burro or the odd fishing boat. Films from politically friendly nations (Spain, Germany, China, the Soviet Union) would be paired with Cuban film, alongside the odd English-language film within acceptable ideological expressions[92]. Villages without cinemas would often screen their first films[93], quite often both the first signifier of change these rural towns would have experienced since the redistribution of farmland following Fidel's "liberation" of the land – and many of the *guajiros* first experience with film, full stop.

As Tamara Falicov outlines in her survey of literature corresponding to *Cines Moviles* – these new programs were all inter-related and coordinated, meant to foster senses of a kind of sublime equality and *communidad* through organized, revolutionary transformation. It is likely not coincidence that the first nation-wide mandatory defense exercises also began this year (and continue to this day), a constellation of "(1) collective experiences for people, and (2) new experiences"[94]. These newly incorporated media hinterlands, as Falicov notes, also provided a critical platform of media pedagogy: those involved in the creation and screening of the films learned immediately their emergent audiences and trained projectionist/curators in the process.

> *"…The ICAIC created the Department of Film Dissemination, which was charged with organizing and maintaining the mobile cinemas. This department oversaw the process of training projectionists in the provinces directly and teaching them how to think critically about media as part of this process. These workers were entrusted to help educate "the masses" in understanding Marxist aesthetics and ideology; this was part of an effort by the Revolutionary government to help raise the workers' consciousness about what it means to participate in the building of a revolutionary society….*
>
> *Sometimes trained in the provincial capitals from where they came, they would apprentice with more experienced projectionists before striking out on their own. In addition, they would organize a seminar with filmmakers and film technicians every three months for all of mobile cinema workers. There they would watch films and learn about history, theory, and production*

[92] Charlie Chaplin's *Modern Times (1936),* a commentary on the hardships and pitfalls of Capitalist industrialization in the early 20th century, was widely screened during this campaign. Charlie Chaplin remains a hugely beloved cult figure in Cuba, with figurines, and portraits adorning many homes and restaurants in Havana.
[93] Vega, S. (2010). Soy Cuba, de cierta manera. *Cuban Studies*, *41*(1), 68-84.
[94] Falicov, *Mobile Cinemas,* Ibid

practices-the idea being that they would gain a level of education and expertise that they could then pass on in the screenings. "

The media practice developed was in many ways a self-reflexive praxis, intended at once to build out a national audience for revolutionary ideals, but also to build a networked group of filmmakers and projectionists sensitive to Marxist dogma, the Cuban nation-building project, and the reception of the films by their audiences. By 1962, through 4,602 screenings, there'd been 1.2 million spectators to these roaming shows. By 1976, over 3 million Cubans were participating in the program annually in a country barely twice that size[95]. The *Cines Moviles* would be replaced in the 1980s by regional, state-built cinemas. The project was hugely successful and at the time, matched an expanded nationalized health care system and overwhelmingly effective literacy campaign[96] as pillars of what appeared to be the relative success of the Cuban revolution.

[95] Valera, I. P. (2010). El campo intelectual cubano en la Revolución. *Revista de la Biblioteca Nacional de Cuba José Martí*, (3-4).

[96] (literacy rates in Cuba were between 35 – 45% before the revolution, they're now consistently ranked above the United States at near 100% of the population) - Kozol, J. (1978). A new look at the literacy campaign in Cuba. *Harvard Educational Review*, *48*(3), 341-377.

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Tamara Falicov, *Mobile Cinemas in Cuba: The Forms and Ideology of Traveling Exhibitions.* Public: #40 Screens. Issue editors Susan Lord, Dorit Naaman, and Jennifer VanderBurgh. Toronto, Canada, 2010, 104-108.

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World Bank, Internet Users per 100 people http://data.worldbank.org/indicator/IT.NET.USER.P2

Chapter 2

Contemporary Media Circulations Of & Within Cuban Imaginaries

Abstract: This chapter explores constellations of the mediated Cuban imaginary - the ways in which iterative media spheres in Cuba are thought of: by Cubans, by outsiders, and by peer researchers of the internet. Multiple ethnographic threads are brought to bear upon some of the popular facing discourse of medias in Cuba, highlighting several of the troublesome/too-easy ways we might conceive of the Cuban "lack" of access, alongside examining how the conceptualization of the culture of the "resolver" travels in and outside Cuba. This chapter aims to complicate those familiar narratives and compound conceptualizations of what cuban networks are/can be. It is paired with an ethnographic media experiment grappling with what can and cannot be captured via visual ethnographic techniques.

1) Karst

In early 2015 I witnessed someone "bounce" a wi-fi connection "against a mountainside" as means to relay internet towards an otherwise un-networked hometown. The claimed workaround was an expressive Cuban gray-market fix – a clandestine satellite internet connection wired to signal booster, positioned further still to relay off a nearby wall of ancient karst rock formations - a mix of improbable and hard-won expertise. It certainly worked, though its full functioning and process of connection were only ever partially explained to satisfaction.

This connection to the internet was available for free periodically to those randomly checking or otherwise enough *in the know* – a system financially subsidized by a blurry network

of off-island familial cash infusions and Miami-based NGOs invested into “global expansions of internet access”. The particular mechanical figuring in front of me arose out from local lineages of technological knowledge, idiosyncratically restricted material resources[97], a boundless variety of imperial needling by the United States, and the geological formations of a barrio composed amongst arrays of dark stone.

Alongside a narrow dirt path leading to several kilometers of tobacco fields, with the sounds of innumerable cicadas and birds filing the air, we came upon the device partially housed inside of a hollowed tree. It was a refurbished industrial-scale piece of networking tech - the type normally used to link several floors of an office building or university - tailoring now to more rural needs. It leeched power quietly from a nearby node of municipal streetlights. Neighboring children watched us from afar, the ethnographer a clear aberration to his social and environmental surroundings.

In those same conversations of being introduced and connected to the device, I was also informed by the group’s core engineer of the means the signal was directed: *“lo rebotado”* (“It was bounced”) off the mountain’s rock faces. Intentionally harnessing the local mineral composition in a way purported to boost its reach, a clear mixture of amateur and expert knowledges, one that was functional regardless. The idea was immediately enchanting: a literal terroir aiding in their goals, commingling flows of “folk” knowledge, ideology and lived environmental factors. A thousand “materiality of media” essays flashed before my eyes as a successful connection to the device was achieved, at a speed measuring faster than the state-provided wifi in the center of town.

[97] Kuntz, Diane, and Cheryl Jackson. "The Politics of Suffering: The Impact of the US Embargo on the Health of the Cuban People: Report of a Fact-Finding Trip to Cuba, June 6–11, 1993." International Journal of Health Services 24.1 (1994): 161-179.

Séror, Ann C., and Juan Miguel Fach Arteaga. "Telecommunications technology transfer and the development of institutional infrastructure: the case of Cuba." *Telecommunications Policy* 24.3 (2000): 203-221.

"*He has no idea if that's actually true*", his compatriots quickly followed, puncturing my nerdish reverie regarding the role of the Karst formation in "bouncing" the signal.

"*He reads too much online*", they said.

The exact location of this place remains unspoken – out of a mixture of simple pragmatics and fear. Similar networks have been shut down elsewhere on the island, families have been harassed by local neighborhood CDR[98] outposts, state jobs lost, social connections severed, and jail time acquired for less. These pragmatics include the desire to continue my work and my interlocutors wish to continue theirs – and that fear arises out from the exceedingly wide spectrum of consequences the Cuban state may or may not wield against those enabling media forms outside its historically tight purview.

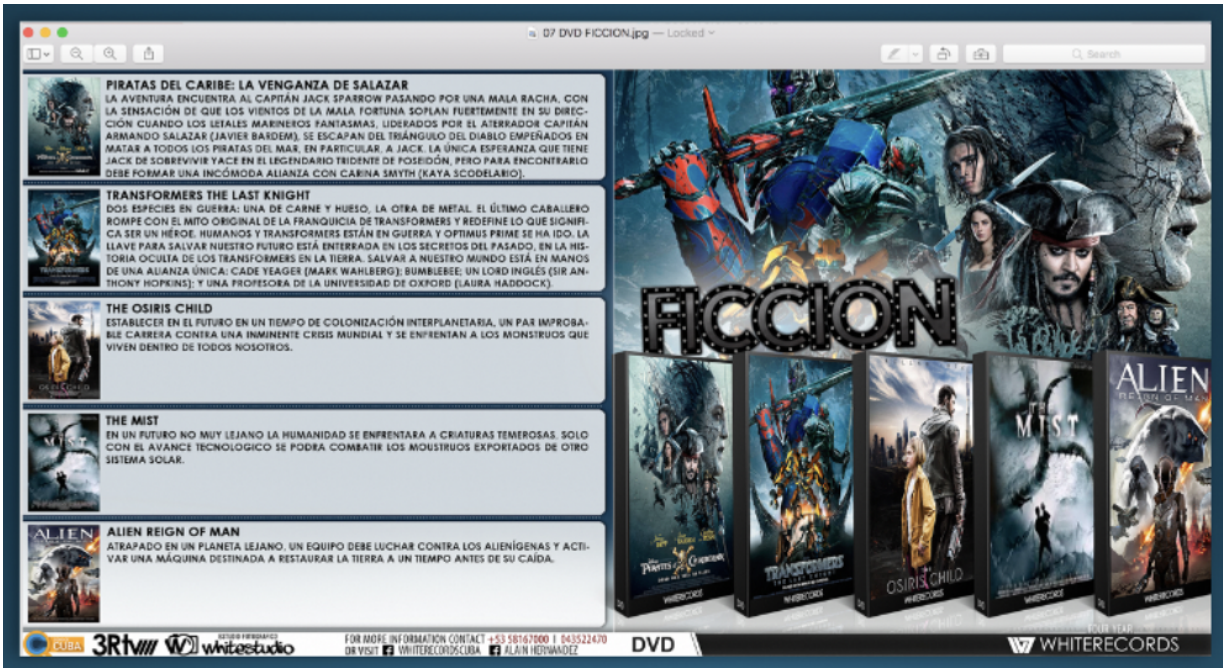
Cuba's access to the internet has been consistently cited in the past decade as the lowest in the Western Hemisphere - imbricating both population figures of accessing the internet over periods of weeks or months, *and* the data transfer speeds by which that access could feasibly occur. Quantitatively, there is little to argue there - the island simply was not well networked to global data systems in any serious way until the 2010s, and only a tiny fraction of the population had anything resembling steady access (or any access) before the later half of the last decade. Knowledge necessary for this karst network, ranging from detailed diagrams, programmatic documentation and some of the actual software - had mostly come from *El Paquete Semanal*, or "the weekly package" – a sneaker-net distribution chain linking millions across Cuba**.**

[98]Colomer, Josep M. "Watching neighbors: The Cuban model of social control." Cuban Studies (2000): 118-138.

2016 Paquetero mobile set-up, photo courtesy of Ernesto Oroza, 2016

El Paquete is a network of hard-drives, ferried from house to house, hawked for roughly 1-3$ (U.S.) per week, containing hundreds of Gigabytes of varied data, refreshed regularly. It contains essentially everything one might find in the top 100 torrent rankings internationally[99], encompassing: new music, pirated films, contemporary streaming shows, "cracked"[100] software , pdf scans of books, magazines, downloaded copies of full webpages, and youtube video blogs. It is notably devoid of pornography or content critical of the Cuban government, but would otherwise be familiar in scope/scale to anyone familiar with contemporary media piracy and streaming culture outside the island.

[99] Pirate Bay. *"Toplists - Top 100 Torrents per Category."* The Pirate Bay - The Galaxy's Most Resilient Bittorrent Site, https://thepiratebay.org/top.php.
[100] Enabling it to function without official license/registration/payment



Bundled DVD set (one of dozens available). Screen shot taken by Joshua Zane Weiss, via August 2017, Week #2 Paquete in Vedado Havana

It stands in contrast to, and in many ways *due* to, Cuba's concurrent mid-2010s modes of accessing the internet – all of which are inhibited by hurdles: the U.S. embargo, an aged communist party with a historically tight grip over any available media platforms, a much wanting national infrastructure, and high usage costs running up against uniformly low wages in the country. The wider web, across essentially most of the 2010s (*especially* larger media files) remained much to burdensome, too data-heavy, to expensive and slow to access in public to obtain this media without a physical alternative like the *paquete.*

Notably, there is also a Cuban built *intra*-net*,* a data network provided for and maintained directly by the Cuban government. It is a tightly controlled, monitored, and curated space confined to Cuba - one completely devoid of non-state sanctioned content. Outside of a few specific work cases (some corners of academia, medical knowledge, some successful *craigstlist-esque* community centered uses), the intranet does not seem to been adopted for

regular use by nearly anyone I spoke to over several years of ethnographic interviewing. In some instances, more was known by the ethnographer about the medium than the Cubans being asked.

Overall the physical *paquete* network closes multiple aforementioned gaps: it offloads issues of bandwidth to physical transfer, downloads are handled by a 3rd party specially tailored to succeed at that labor, and negates issues of scarce access points by providing door-to-door availability via paquetero delivery or storefront. The social lives of the paqueteros (and their sometimes storefronts) are further explored in chapter 3.

Cuba has often ranked poorly in terms of internet "freedoms", a complicated qualitative and morally-laden set of measurements which purport - often via U.S.-based agencies [101] with explicit government ties - to classify internet access along particular metrics of human rights. These sets of qualitative judgements on the characteristics of Cuban internet are shot through with fraught descriptive measurements of Cuba's socialist governance, media ecosystem, and generally selective framing by those doing the measuring. These aspects of thinking through who frames "rights", and "access" regarding media (and why) are explored further in Chapter 4.

Further, the above potential renderings of the Cuban do not account for the fairly ubiquitous sets of *informal* distributed data networks, with the aforementioned *paquete* being only one example. For decades, there have been deeply questionable links between claims of speech, democracy, "freedom", and the means by which the internet may or may not facilitate

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[101] The organization "*Freedom House"* releases annual, international rankings of News Press and Internet Freedoms along a host of metrics (including infrastructure, government screening, surveillance, etc). It is far and away the most publicized version of a such a ranking, receiving news coverage and prominent reference in aggregated, informational spaces like wikipedia. These yearly rankings have an uncanny ability to harshly critique foes of U.S. foreign policy and downplay the weaknesses of allies.

The organization is funded in majority by annual federal earmarks in the United States Defense Budget, the very same financial earmarks for the "U.S. Agency for Global Media": the organization tasked with running Radio and Television Marti, Radio Free Europe, Voice of America, etc. (significance expanded in Chapter 2).

"Cuba: Freedom on the Net 2021 Country Report." Freedom House, https://freedomhouse.org/country/cuba/freedom-net/2021.

Andrea Suozzo, Ken Schwencke. "Freedom House Inc - Nonprofit Explorer." ProPublica. https://projects.propublica.org/nonprofits/organizations/131656647.

those nebulous concepts[102] amongst various silos of expertise. That is all to say - there is a lot of gray space to be explored analytically and via fieldwork of the "Cuban internet" and its significance to Cuban society. What exactly *is it* in material terms, or philosophical terms, if the uses and infrastructures pertaining to it are so varied? In more explicit terms - perhaps the questions are not so much regarding the accuracy of measurements given by organizations like *Freedom House* in evaluating the Cuban internet - but how are these metrics wielded, by whom, and to what ends?

This project in Cuba was designed to investigate "the internet" as both a discursive and technological object: how it becomes narrated, fabricated, and given meaning as it transitions from relative scarcity to relative commonality on the island. Some of the alternative informal internet modalities include:

- Local Area Networks (LAN) enveloping thousands across larger cities
- Bluetooth mesh systems allowing clusters of folks to share music on their cell phones
- State-provided intranet systems
- *Many* covert workarounds like the aforementioned illegal rural satellite linking, and
- The *paquete* with attendant hand-to-hand transfers of data.

There is a case to be made that via these alternate formations, much of the global internet's common uses and contents still reach huge numbers of Cubans – albeit along different manifestations of time, space, and practice. This chapter is designed to engage the ideological formations embedded in my karst-internet facilitated interlocutor's (perhaps) un-scientific declarations about rock wifi magnifications schemes *and* his compatriots interjection – "*He reads too much online* ". To think about the hows and whys surrounding the historical iterations

[102]Cropf, Robert A. "Benkler, Y. (2006). The Wealth of Networks: How Social Production Transforms Markets and Freedom. New Haven and London: Yale University Press. Social Science Computer Review 26.2 (2008): 259-261.

Castells, Manuel. *The Internet galaxy: Reflections on the Internet, business, and society*. Oxford University Press on Demand, 2002.

Galloway, Alexander R. "Protocol." Theory, Culture & Society 23.2-3 (2006): 317-320.

Terranova, Tiziana. "Network culture." *London: Pluto* (2004).

of Cuban "gray" technical literature, and the formations of blurred formal Cuban media reverberate historically.

It is also designed to historicize the current cluster of U.S. discourses surrounding *el paquete*, a premier fetishized technological object in coverage of Cuba over the last 10 years, frequently portrayed as some sort of fantastical, widespread source of subversion against a hard-line Cuban regime. As such, I'm using the phrase "imaginary" - drawing from a longer history of the phrase[103] as a means to lay a boundary for the ways in which ideas of these Cuban knowledge networks and discourses regarding media circulate.

Imagining Cuban Media Ingenuity

In order to run the clandestine network utilizing the mountainside, the team needed to build out a rudimentary server from a spare laptop – enabled by software, instructions, and a youtube instructional video – all assembled through varied refreshed versions of the paquete. Reflexively, they'd sent out requests to their weekly package's vendor for specific material – the understanding was that their guy floated the idea to his, that went up the chain, and so on and so on – until what was needed was found and arrived.

These makeshift, rural, quasi-criminal sys-admins showing me their work encompassed a cross-section of Cuban life. A married couple in their 60s (a teacher and a physician), and a middle-aged member of an agricultural cooperative - not what many would project demographically onto a project constructing secret internet networks. But in fact, these folks had been engaged in practices of making, hacking, and otherwise mechanical figuring for decades, the digital facet was the only truly new element to their lived design practices.

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[103] Thinking with " Imaginary" most directly via the parameters set in George E. Marcus's *Technoscientific Imaginaries* introduction (pgs 3-6): as related to the means by which social actors envision, innovate, create futures, a view the material world via ideas. That volumes mostly dwells in the realm of the so-called "hard" technoscientific, while this work explores the ways in which ideas surrounding media, mediation, communication become concretized through media content and socio-political implementations.

Marcus, George E., ed. Technoscientific imaginaries: Conversations, profiles, and memoirs. Vol. 2. University of Chicago Press, 1995.

Cuban design theorist Ernesto Oroza calls this genre of Cuban labor and thinking "*technological disobedience"* – the making of what he's deemed *"objects of necessity"* that are "*at the same time an understanding of a need and a response to it"***.** The "disobedience", for Oroza is one which centers the individual user's ability to transcend/react to their surroundings, skillfully triangulating the material world, their macro political structures and their articulation of "needs"[104].

Soviet "Orbit" fan repaired with telephone components and a vinyl disc as blades, next to a Guillotine mousetrap made from wooden base, metal spring, and pieces of a beer can. Both cataloged in Cuba by Ernesto Oroza, left 2007, right 1999 (with Penelope de Bozzi)

These "needs" do not require a stigmatized relationship with want or late capitalist aesthetic conception of accumulated wealth, rather Oroza find his use of the word harmonizing

[104] Weiss, Joshua Zane. (2018, May 7). *Belief in the potential object: Ernesto Oroza on technological disobedience in Cuba.* Walker Art Magazine.. Retrieved from: https://walkerart.org/magazine/ernesto-oroza-technological-disobedience-cuba

with a Spinozan emergence, or from Marxist thought. "'Freedom is the conscious need'", Oroza has said, (that Engels would say).

This type of engineering practice is endemic to Cuba, referred by colloquially as the culture of "*resolviendo*" (or "fixing" in English). The connotation and use of the term transcends simple mechanics, pushing into a description of the struggles by which many contextually intuit how to best make things work. In that sense, the culture of the *resolver* also includes knowing the guy that can get you the thing, how/when to cut official or legal corners: what can bend and what will break. Going deeper into these matters in his "*Declaration of Necessity*[105]*",* Oroza presents together how "need" and "creativity" express through the figure of the *resolver* in organic fashion - a rebuke of bourgeois conceptualizations of how human figuring functions under scarcity:

> *"Because of the central role of the necessity in the generation and regulation of this kind of making… is that I associated it with the natural production known as stalactites and stalagmites, where the shape is the result of a fluid movement of the materials attracted by the gravitational force. In this popular architecture, the irrepressible movement of the materials also produces a grid of lines and holes, a superposition of layers and structures that as in the natural process of sedimentation are supported one over the other. This fluid movement answers to such a powerful and unavoidable strength like the one of gravity: the force of the necessity.*
>
> *The bourgeois stigmas that sanction as weak to the needed and vulgar to those that express their demands, and that finish for manipulate and censor the creative spirit of those that don't have basic means of life and that therefore are pushed to disobey the rules of the contexts were they live, still fly among all of us. Therefore when some people decide to express their demands to alive voice in a direct way, without chastity or modesty, by the creation of solutions to their necessities they undress one of the most contradictory problems of the contemporary life: the insensibility we have acquired to elude our truly needs, and the ability we have gained to fabricate pseudo necessities or accept that others do it for us."*

[105] Oroza, Ernesto. "Architecture of Necessity." (2019).

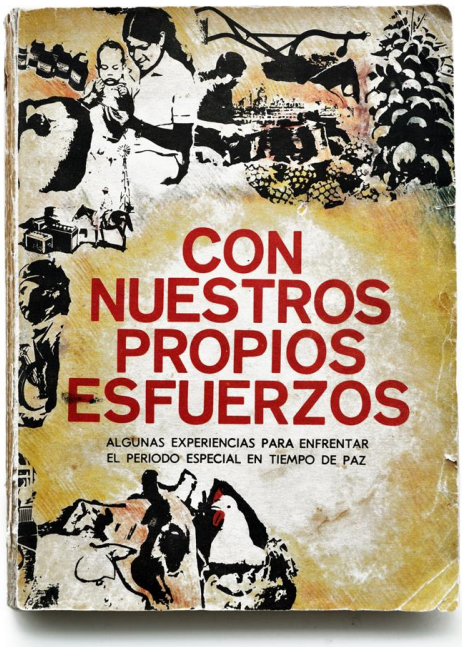
Recycled Cups in Cuba, made by mixing plastic from various sources. Resolviendo Archival photo. Photo by Ernesto Oroza

These particularly Cuban (and yet recognizable as not quite singular) cultural settings: a government with a predilection to control media, several decades of a stagnant economy, an embargo blocking huge swaths of products from entering the country – mean not just that there is a dearth of technological maintenance going on in this setting, but also that various modes of expert knowledge have needed to pass through similar channels as my interlocutor's scuttled internet system. Oroza's rendering of such knowledge and material practices suggest ways of

seeing this labor both in opposition to loca regulations, but at the same time in a degree of harmony to the larger proletarian goals of the Cuban socialist governance.

Compiled for the state by Editor Verde Olivo (a non de plume, referring to the color of the Cuban military), the book-length volume *Con Nuestros Propios Esfuerzos* (in English, "*With our own Efforts/Abilities"*) was released in 1992. The subtitle here translates roughly to "*Some Experiences to Deal with/Confront the"Special Period in a Time a Peace"* – the appellation given to the tremendously difficult economic period in Cuba the followed the collapse of the Soviet Union (and the collapse of many of the economic avenues the Soviets facilitated).

That *"Special Period"* in Cuba had been announced two years prior, an overarching narrative used by the Cuban state and used to nominalize the massive cutbacks in spending, food rations, medicine, and general qualities of life that shifted once integral Soviet subsidies disappeared.

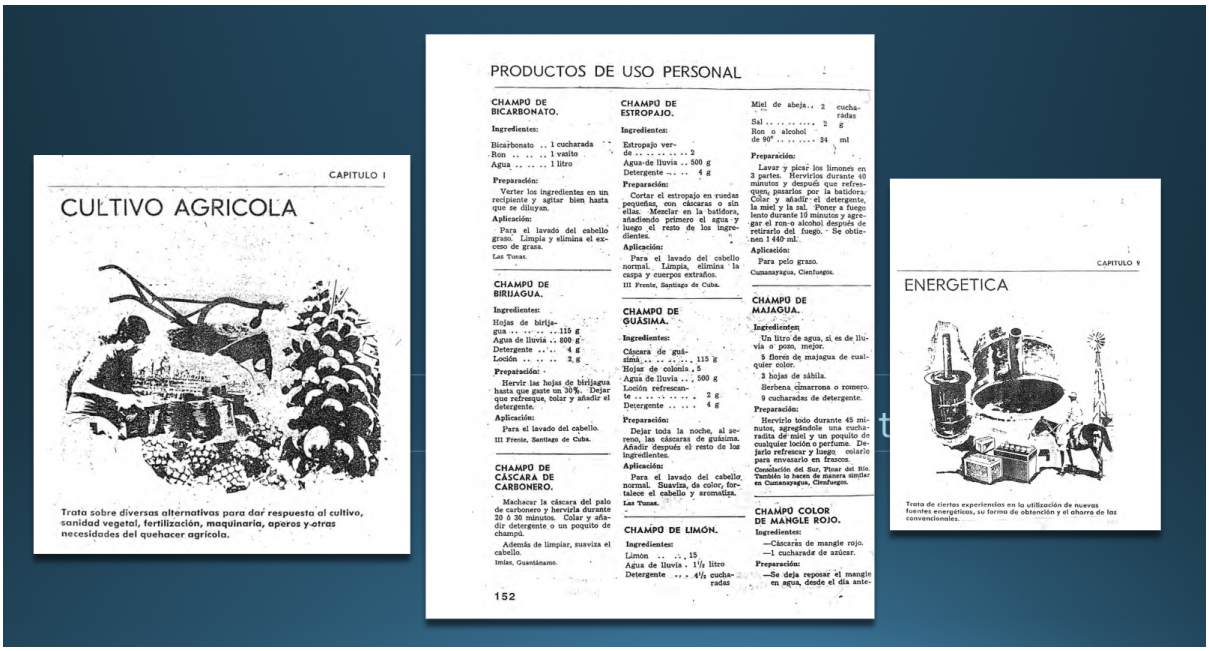


The book is a remarkable thing: hundreds of pages of recipes, diagrams, instructions, and expert advice regarding a whole host of things necessary to continue (or at least stave off maximum decay of) certain Cuban expectations of living. Contained within one can find detailed point-by-point sections on bicycle repair, construction of DIY farming equipment, and detailed assessments with dosage info regarding the potentials for natural medicinal remedies[106]. There are how-tos illustrating the transformation of hairdryers

[106] A precursor and hint to the complicated relations that continue between the state, the population, the healthcare system and the homeopathic medical cultures in Cuba, as detailed in:

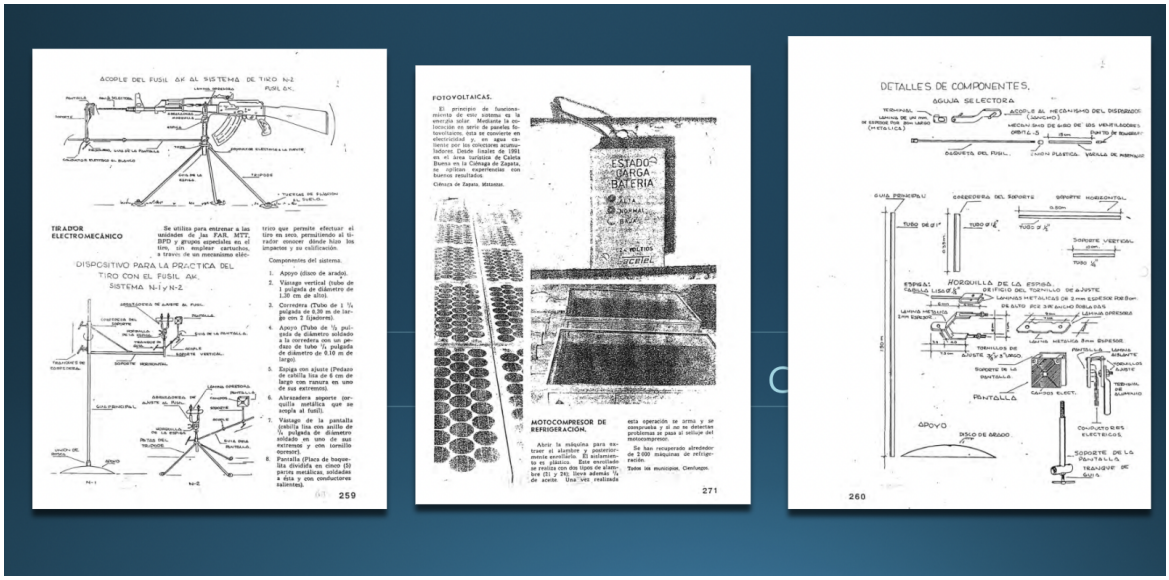
Brotherton, P. Sean. Revolutionary medicine: health and the body in post-Soviet Cuba. Duke University Press, 2012.

into makeshift welding guns, plans for soccer balls woven from cured grapefruit skins, and recipes for faux-meat fried steaks (*also made from grapefruit skins!).*



Sections of Con Nuestros Propios Esfuerzos detailing agriculture and energy designs - with the center section containing recipes for making various herbal shampoos

Several hundred thousand copies were printed for a Cuban population of no more than 7 million or so at the time. The guide was compiled from a prior decade of amateurs (or experts without a mode of address to publish) transcribing and *clandestinely* distributing their know-how. Rather than built from prior bounded volumes of knowledge, this book came to be out from widespread cultural practices of passing technical documentation amongst local practitioners, from bypassing the state's informational and socio-technical apparatuses. The guides are compilations, eventually facilitated by the state, of folk expertise distributed by other (contrary, even oppositional) means in the decade prior. .



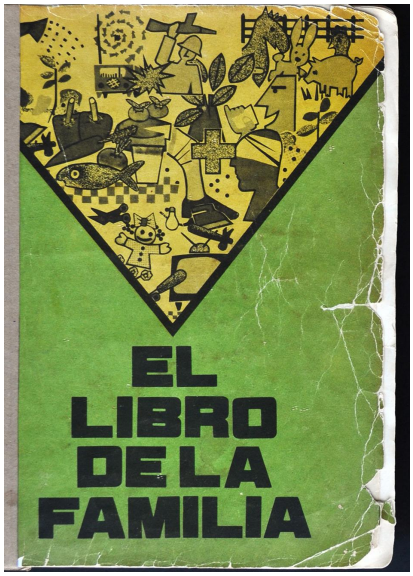
From Left: (1) diagrams for mounting assault rifles, (2) building out arrays of photovoltaic batteries – commonly used for backup, as electricity/gas shortages were common at this time, (3) the dimensions/info for parts needed to repair a record player)

And yet despite these origins, the dossier greets the reader with the following, enfranchising text from Fidel Castro, taken from the introduction:

> *"At the gates of the 21st century, when the global hegemony of imperialism prevails, a new conviction is consolidated in the historical legacy of the Cuban Homeland, as explained by our Commander-in-Chief:* ***"What we have in the future we have to create ourselves, We have to conquer it with our arms, with our intelligence. "****. Talent and intelligence accumulated and developed, combined with the ability to fight in difficult situations, allow us to face these circumstances and obtain favorable results."*

The book has both a prologue and an introduction containing these full-throated articulations of autonomy on varied scales: Castro's utterances about "create(ing) ourselves", "conquer it with our arms, with our intelligence" doing the double work of referring to the macro scale of Cuba's ongoing, proud resistance in the face of U.S. hegemony, and the individual Cuban's plight of transcending their material conditions through creative labor. The framings work at scale - appealing adjacent to the well known Cuban iterative descriptive signifier of *la lucha,* the struggle that comes with the labor of truly being alive.

It's a retroactively noble premise - as mentioned, Cubans had already been engaging these practices for years, often under vigorous hostilities from the state for doing so. The vast bulk of material making up the compilations of *Con Nuestros Propios Esfuerzos (*and it's less known forebear in 1991, *El Libro De La Familia*) were at first explicitly contraband, then became official distributed state material. A decade of correspondence chased down by the singular state party, presumably a simultaneous revealing that all might not be well/under control – by the powers that be.



If the "grayness" of these media is in some way triangulated from their alienation or dialectical relationship to recognized modes of published circulation – those deemed worthy of historical or canonical attention[107] – the grayness of this Cuban, once illegal but then govt. distributed DIY instructional material may be illustrative on several fronts: This compiled material had been behind (and despite) the watchful eye of the Cuban state. A combination of ineffectual centralized distribution practices and the U.S. enforced trade embargo had conspired to dramatically reduce the amount of consumer goods reaching the island following the revolution - and by the 1980s it was becoming commonplace for practices of maintenance to spread and take root. As a result, there had been

[107] Conrad, Lisa. "Organization is the message: Gray media." (2019): 63-87.Conrad, Lisa. "Organization is the message: Gray media." (2019): 63-87.

more than a decade of photocopying, carbon rubbing, tracing, and other means of sharing iterative directions and DIY specifications for all manner of fixing and building.

Said distribution problems all also complicate the available historical work here – in that beyond the beyond the social/legal prosecution one might face from distributing these materials in the 1980s – they were often made from paper (or paper like substances) prone to rapid decomposition. My closest physical connection to the proto, ghostly history preceding *Con Nuestros Propios* are those that handled them, most of them no longer worried in the 2010s about speaking about such things publicly – the quiet codes of what can/can't be said having relaxed somewhat in the intervening 40 years. Cuban State histories still largely disavow the increasing economic and social strains of the 1980s, and multiple Cuban librarians have confirmed a vacuum of engagement with this cultural practice.

From my interviews, I learn that there was a transition in the type of materials one might uncover in this milieu of gray – plans for floatation devices, rafts, boats, long distance radio/TV receivers (all illicit for specific reasons too long to unpack in this forum, though hopefully signifying properly to those with a passing awareness of the longstanding U.S. Cuba dynamic), poisons, explosives, and home-made drugs like LSD or crack cocaine have all been reported to me.

By the first iteration of this gray media transcending it's "grayness" (I think of this book as a beta test of sorts, in 1991, less than 10,000 seem to have published by the state) some of those more dangerous taboo designs remain – *In these pages to El Libro de La Famila we can see plans for flotation devices made from pants, alongside plans for making bleach at home*. By the next year, upon publication of Con Nuestros Propios Esfuerzos**,** anything deemed dangerous (to the state, to the individual – suicide rates spiked at this time), has been removed from this corpus of design plans.

As noted by my interlocutors, the publishing of *Con Nuestros Propios Esfuerzos* in 1992 coincided with elevated proclamations from the state, via radio and television, to distrust non-state sanctioned information sources. The U.S. was said to be actively spreading dangerous disinformation (a not *untrue* claim), and around this time, the presence the paper trail used to build publication began to wane. This cluster of concerns and possibilities rears it's head once

again with the rise of Cuba's various contemporary distributed networks, and I can softly hear the trepidation to trust non-sanctioned sources even now from those smuggling internet access on farmland : "He reads too much".

2. Tremendo Paquete

The fieldwork for this dissertation was completed over nearly a decade in the 2010s – as a newly rekindled conversation[108] about the nation seeped into wider U.S. consciousness. The discourse was fueled in large part by techno-social configurations often about the internet – linking particular forms, figures, and archetypes many in this corner of academia are likely well familiar with by the 2020s: the means by which technological "openness" or access might link discursively to ideas of "freedom", the (apparently) self-evident democratic and radical power of distributed networks, the technologist, tinkerer, inventor as rebel archetype, the heroic innovator in the face of oppressive, regulated status quo.

There is *a lot* then, for these narratives to feed off of in Cuba. Some of the most consumed media regarding Cuban culture in the last 10 years has been public facing pieces (ini video and writing) regarding the seemingly radical, ad-hoc media cultures present.
These illustrations of Cuban life resonate in particular ways as they travel through the U.S. population in my experience – emoting some kind of failure of the communist party to fully indoctrinate it's population, transmitting a teleological, progressive notion of technological change embodied by the internet's global spread, and a resonating confirmation bias that the slow march of civilization bends towards the signifiers of "life" as understood in the United States.

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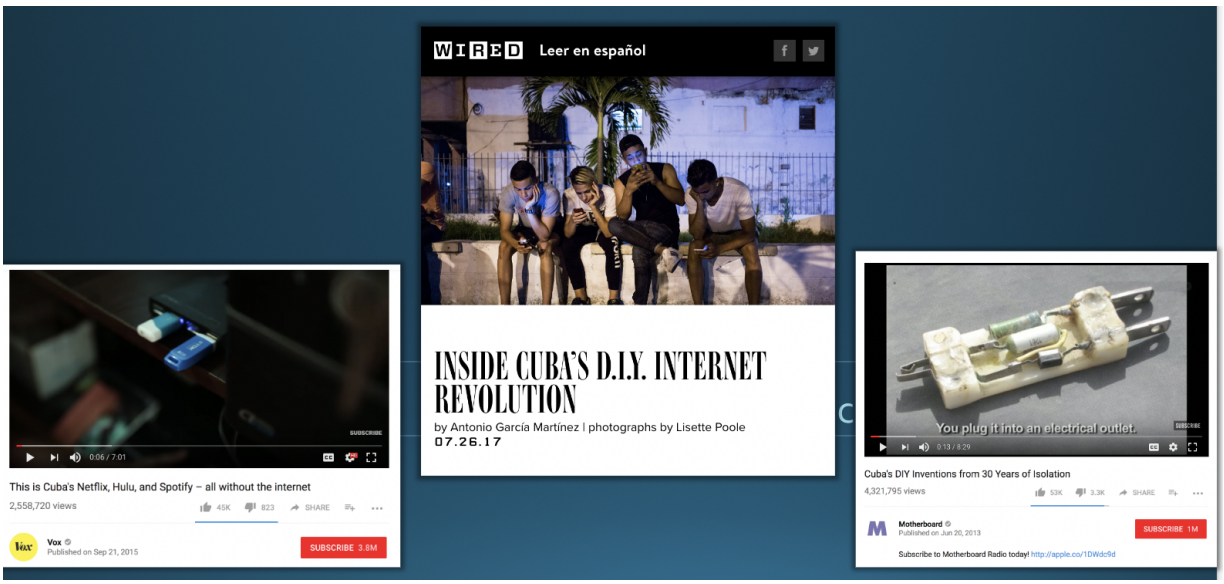
[108] Domínguez, Jorge I. "Reshaping the relations between the United States and Cuba." *Debating US-Cuban Relations*. Routledge, 2017. 39-61.

Pertierra, Anna Cristina. "If they show Prison Break in the United States on a Wednesday, by Thursday it is here: Mobile media networks in twenty-first-century Cuba." *Television & New Media* 13.5 (2012): 399-414.



Various high-profile media engagements with the el paquete network

"*Tremendo paquete"* is slang around Havana for what in English we would call something like a…. "*big bunch of bullshit"*. The discourse surrounding *El paquete* ignores *decades* of resonant cultural practices surrounding gray media distribution techniques, and counter-poses these practices with a Cuban government helpless to stop it. The reality is much closer to an ongoing dance, a slow incorporation and play amongst varied declensions.

There is a deeper timeline that Cuban vernacular design scholar Ernesto Oroza unpacked in conversation[109] with me:

> *For many decades, reproduction was an exclusive right of the state. The reproduction of printed media is still very closely monitored by the government. Digital culture weakened that control.*
>
> *Unexpected propagation channels appeared. Some of these channels or protocols were created by the government but ended up exceeding their own control. For example, in the 1980s the first satellite dish was brought to Cuba. This antenna was brought to the island as part of an operation of the Ministry of the Interior. The antenna and dozens of video recorders were installed in a house in the Miramar neighborhood. The plan was to copy American movies and TV shows. Every Friday three video cassettes were prepared,*

[109] Weiss, J. (2018, May 7). *Belief in the potential object: Ernesto Oroza on technological disobedience in Cuba.* Walker Art Magazine

multiplied and distributed for the weekend entertainment of senior government and military officials.

This instance could be as the oldest antecedent of what is now known as the Paquete Semanal (Weekly Package). The drivers and the people who worked for these high officials made their own copies and circulated them among their families and neighbors.

A more recent phenomenon is S-net, a wireless network that has thousands of users. S-net grew spontaneously because of the desire of many young people to play online. When they were detected they chose to accept the demands of the police and assumed an inviolable internal regulation that has as one of its first commandments the prohibition of talking about politics. In S-net there is a lot of pirated information, as in the Paquete Semanal.

The Cuban government has, in the last few years, implanted it's own material in the paquete networks, begun distributing it's own versions, and depending on who you talk to in the chain – may be itself profiting from the network, putting it in line with a *long* series of cultural management techniques on the island since the revolution. The paquete's mythical status, perpetuated by these global narrativizings of Cuban life, mark it as an anomy, an affront, a tear in the fabric of imagined Cuban life.

Chasing the Sneaker-net

Louis's ipod (Chapter 1, 2011) remained a treasured commodity only so long as it took for mobile USB drives - as cultural practice and business model - to become ubiquitous in Cuba in the subsequent years. The data contained there was precious only so long as Louis lacked access to larger networks and modes of acquiring (likely pirated) music files. There is a marked shift in media consumption and storage practices as the Cuban sneaker-net popularizes.

Here, we should explicate the Cuban "sneaker-net" the chapter title advertises. The sneaker-net in Cuba is first: a massive concatenation of nodes and moments - customers, audiences, management, content producers, USB-drives, couriers, store-fronts, pirates. The word "sneaker-net" refers to essentially any means of distributing data by hand and mobile data storage. In Cuba, this occurs via micro USB drives (and occasionally multi-terabyte external hard drives) – ferried throughout both small towns and metropolitan centers.

"Sneaker-net" dates as English nomenclature back 30 years, formerly to describe floppy disk demo exchanges in silicon valley in the 1980s, continuing to in frequent usage in local tech contexts until more recently than one might think. This thriving business and media practice is not technically *legal* in Cuba – the Castro government has held tight regulations on media distribution and broadcast since shortly after the revolution, yet the sneakernet exists relatively out in the open and has never fully been challenged by any part of the Cuban legal apparatus. This then *gray-market* network, by precedent illegal but currently tolerated – is also potentially the largest private enterprise operating in Cuba[110]: conjoining thousands of workers across an island where private companies are rarely allowed to employ more than 40 employees. In the face of non-existent or paltry internet speeds, the sneakernet has arisen in Cuba to bring films, television shows, an assortment of pdfs, and increasingly more and more *exclusive* paquete content to a burgeoning consumer market.

In Summer of 2014, the entire second season of *Orange is the New Black* appeared for me in crisp 1080p resolution via USB drive - less than a week after the Netflix streaming premier in the United States. Producer and DJ Diplo actually paid to have Major Lazer's music included into *El Paquete* in 2015, a move intended to foment larger receptive audiences several months prior to his scheduled Havana concert.

Commentators have sought to explain the Cuban state's break from prior behavior regarding the paquete network – noting its continued existence as without precedent in contemporary Cuba. The state may be involved explicitly via stick or carrot, or perhaps this is a stopgap measure releasing pressure years before what appears to be steps towards fuller liberalization. Perhaps the notoriously aged government is unable to fully conceptualize what is happening here - a blurry space between broadcast form and dividuated media practices. There is some empathy for me in that explanation, as a moment in which *El Paquete* exceeds prior practices and knowledges. As an ethnographer, I grasp here for something to tether this semi-black-boxed figure onto – histories, policy inertia, individual or group practices, content,

[110]Watts, J. (2014) Cuba's 'offline internet': No access, no power, no problem, The Guardian. Guardian News and Media. Available at:
http://www.theguardian.com/world/2014/dec/23/cuba-offline-internet-weekly-packet-external-hard-drives

market changes, globalization, vendors, couriers, Diplo, Louis's mangled ipod. Rather than rendering this array as a multiplicity or plurality, I'd like to hold up the aforementioned descriptive figure of the *concatenation* as a navigational tool thinking through networks and scale[111]s.

Concatenations[112], as a phrase, may be used to describe both the linked units in a series *and* the processes of doing so. As ethnographers we can think about networks, but only have access to moments and framings, never a whole. The phrase is experiencing a recent resurgence in usage in certain programming languages, referring to the act of joining keyed commands together into one, contiguous-but-separate chain of phrasings. I'm attracted to concatenation because of this resonance, its ability to riff and refine an ethnographers approach to the networks of Latour[113] or Callon[114], and also its resonance with Jenna Burrell's "tracing" approach to ethnographic work of the internet[115]. Secondly, it resonates with the framing of my larger project into the ways in which the Cuban internet (here including the sneakernet as part of that internet) is "*made and maintained*" – drawing form the distinctly Cuban process that Ernesto Oroza has chronicled as the process of *resolviendo – essentially* an entrenched engineering culture of contextual fixing & maintaining specific to the economic and pedagogical forms specific to Cuban contexts.

It is in these ways that I engage the conceptualizations of the internet in Cuba, my broader research project – tracing various concatenations running from the ordinary affects of everyday uses to their larger, itinerant, structuring forces. These varied chains become legible, indeed "*made*" through an entire spectrum of practitioners, access, and policy: we have the so-called local LAN "S(or Street)-net" urban network[116] through which people play games and

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[111] Appadurai, Arjun. "Disjuncture and difference in the global cultural economy." *Postcolonialism*. Routledge, 2023. 1801-1823.

[112] From Latin roots in *concatenare*,, meaning "to link or chain together")

[113] Latour, Bruno. "Network theory| networks, societies, spheres: Reflections of an actor-network theorist." *International journal of communication* 5 (2011): 15.
Harman, Graham. *Prince of networks: Bruno Latour and metaphysics*. re. press, 2009.

[114] Callon, Michel. "The sociology of an actor-network: The case of the electric vehicle." *Mapping the dynamics of science and technology: Sociology of science in the real world* (1986): 19-34.

[115] Burrell, Jenna. "The field site as a network: A strategy for locating ethnographic research." *Field methods* 21.2 (2009): 181-199.

[116] Weissenstein, Michael. "Cuban Youth Built A Secret Internet Network." Business Insider. Business Insider, Inc, 26 Jan. 2015. Web. 13 Nov. 2015.

cooperate on coding projects, the shared devices and connections in the countries burgeoning set of public wifi access spots[117], and of the aforementioned human-USB drive assemblage that is this talk's titular "sneaker-net" distribution chain[118]. All of these present opportunities to conceive of *variegated* chains of the Cuban internet in the making.

I'm interested in a kind of sociology of knowledge project regarding the Cuban internet as it moves through spaces and people, along these chains – research not tracking what it *does* or *is*, but a tracing of the multiple modes by which one thing shifts across a a path of audiences, uses, and settings. To do so, we might stretch what Star and Griesemer[119] began when working with disciplinary boundary objects: as things

> ***"…both plastic enough*** *to adapt to local needs and constraints of the several parties employing them, yet robust enough to maintain a common identity across sites. Something weakly structured in common use which becomes strongly structured in individual-site use… They may have different meanings in different social worlds but their structure is common enough to more than one world to make them recognizable, a means of translation."*

But the internet is of course, too ubiquitous, amorphous, and generally slippery of a subject to coherently track as well as their discretely realized disciplinary objects. The slipperiness is in part what interests me, a space through which multiple chains of sense-making and contextualizing by an observer can provide not holistic comprehension, but entry-points to curated understanding.

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[117] Katz, Jonathan. "Cuba Is Coming Online, but Who Will Control Its Internet?" The Verge. 15 Oct. 2015. Web. 13 Nov. 2015. <http://www.theverge.com/2015/10/15/9534205/cuba-internet-access-google-huawei-government-censorship>

[118] Watts, Jonathan. "Cuba's Offline Internet: No Access, No Power, No Problem." The Guardian. 23 Dec. 2014. Web. 13 Nov. 2015

[119] Star, Susan Leigh, and James R. Griesemer. "Institutional ecology,translations' and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39." *Social studies of science* 19.3 (1989): 387-420

Crowds of people in Havana Vieja (Old Havana), huddled in a town square with wifi access in 2016. Some are paying full price (6$ an hour for spotty 2 MB download speeds), others are paying Intermediary vendors who receiving and split the state-provided wifi into smaller portions of bandwidth for cheaper.

"Chasing the Sneakernet", from the title of this section, operates as a descriptive phrase for me twice over: First: referring to the physical, real methodological problem – *how might I as a media ethnographer chronicle what may ultimately be impossible to trace mediums.* There is a hurdle here in terms of data collection, and the scalar capabilities of ethnographic work.

Secondly though, the title refers to an *epistemological* dilemma for researchers of media – at what scale do we locate the moment of capture or comprehension? Various hopes, futurities and much more banal affects tangle around the making of the Cuban internet: liberal dissident activism funded by right-wing, US institutions, state department and multinational corporate interests overlap. The sneaker-net becomes rhetorically linked all at once to imperialist subversion, to freedom, to control, human rights, entertainment, placation, provocation and

means to organize. Once might find inertias of what is sometimes called the "*California Ideology*"[120], a zealous conflation of democracy with technological innovation rubbing against the state party's tendency of tight message control. The so-called "ConnectCuba" Campaign – partially funded by the US State Department's USAID program – released a video labeling the USB drives as "tiny vessels, filled with hope". Hilary Clinton, as secretary of state in 2011 – labeled such accesses to information as a quote "*on-ramp to modernity*", offering quote *"freedom from want*" in developing nations[121]. My interlocutors conceptions of the Cuban internet, generally counting the sneaker-net as simply one part – fall betwixt, overlap, and exceed these ideological nodes. Practice, history and economic factors compound - Jose Marti contra Mark Zuckerberg – Chasing concatenations, without clear beginnings or end.

[120] Barbrook, Richard, and Andy Cameron. "The Californian Ideology." *Science as Culture* 6.1 (1996): 44-72.
[121] Clinton, Hilary, "*Remarks on Internet Freedom*" 2011, Speech at George Washington University <https://www.youtube.com/watch?v=acDcUQoeFxY>

U.S. Mediating Cuba: The "ConnectCuba" Campaign

> *"Welcome to Cuba, the island of the disenchanted, the disenfranchised, the disconnected. Here minds are trapped in quiet suffering, and the game is survival. Bloggers are banned, and sharing outside information, is equal to insurrection. But in this place, where communication is blocked one way, it can get out another. One idea can spread to places unimaginable. It can pass through tiny vessels filled with hope. The streets call out for people willing to make things happen, risking everything for a chance to connect with the outside world, and tell the story of a new generation."*
>
> - *"Connect Cuba" Campaign video*[122]

So states the text prologue opening *Connect Cuba's* fundraising video, uploaded to Youtube. Released in late 2013, a full year before the Obama administration began to publicly engage the Cuban government. It was the USAID-funded organization's first foray into video, and the opening salvo to their media campaign that eventually included Cuban-American celebrities like Gloria Estefan. The short video muddles narratives of struggle, hope, revolution, technology, together in just under four minutes. It opens on capitol city Havana, establishing shots of the city's iconic northern *malecon* shoreline walkway and city skyline. The famous Che Guevara steel façade to the Ministry of the Interior follows, quickly transitioning into oscillating shots of hunched, elderly Cuban men conversing in public. These languid images are followed ominously by slow pans invoking a harsh authoritarianism: police officers, men in militaristic fatigues brandishing automatic rifles. An orated narration then pronounces:

> *"A generation is crying out for a new life, a new beginning, because a movement is happening. The hunger for opportunity, for knowledge for change, is becoming insatiable. The challenge: how do you speak when no one will listen? You find a symbol, something that will inspire everyone to stand up, and demand access, demand knowledge, demand freedom. For a movement to bring change, it needs to expand, to be embraced, that's where you come in. You who have the access, you who have the voice, can help.*

The clip makes short work of enveloping people with structures, space with affect, political subjectivities with infrastructure. Why and how are they so readily relational, even to the casual audience? The video follows its harrowing preamble with an extended narrative of

[122] Connect Cuba (2013) YouTube. Foundation for Human Rights in Cuba. Available at: https://www.youtube.com/watch?v=gSur2wlw_8E&t=2s

redemption. The audience is led through scenes of clandestine citizen journalism in action, as a young Cuban woman records the local *jinteras*[123] working her neighborhood in broad daylight. Snapping photographs from her window, the video's protagonist quickly documents the moral indignity via digital camera, and transfers the shots to a USB thumb drive (a "tiny vessel filled with hope"). The photos are covertly ferried across the capitol city to an interlocutor, who then disseminates the story online through unknown means. The video culminates in organized, well-branded social upheaval. We see meetings in basements with pumped, raised fists bathing in the glow of a laptop and wifi symbols spray-painted throughout Havana's center, now imbued with the colors and singular star of the Cuban flag.

A Protestor spray paints a stencil of the wifi logo adorned with the colors/symbols of the Cuban flag in a fictionalized Havana. Still from "ConnectCuba" Campaign video, screengrab by the author

[123] Female "Hustlers" (nomenclature for Cuban sex workers, but this is a complex social category/practice not fully explicated by this translation or its understanding in the United States) - for further context:

Wonders, Nancy A., and Raymond Michalowski. "Bodies, borders, and sex tourism in a globalized world: A tale of two cities—Amsterdam and Havana." *Social problems* 48.4 (2001): 545-571.

Here, these networked technologies become linked explicitly to several things: the sharing of ideas, a globalized projection of justice/human rights, vague notions of freedom and democracy. The language used in tandem with the video belies the assumption that these various components come as bundled, co-constitutive elements. However unclear the algorithm resulting in "freedom" might be, it can surely be built on a foundation of access to wireless, high-speed internet. The voice-over concludes:

" Let's give the disconnected a way to become part of our world, so we can become part of theirs for once and for all. Visit connectcuba.org and sign the global petition to bring open internet access to the Cuban people... Above all, share this message with others you know, and help make 11 millions voices heard. Join the Connect Cuba Campaign, to give Cuban civil society something they've never had before: a choice."

- *Still from "ConnectCuba" Campaign video, screengrab by the author*

The campaign was part of a (now abandoned) large-scale project to flood the island with USB drives, under the belief that a network of such devices would be the lynchpin needed to foster a strident oppositional force against the revolutionary government. It was funded almost

entirely by the U.S. government, facilitated by a stridently anti-Castro network of Cuban exile organizations in Miami.

The *Connect Cuba* campaign is only one iteration in a *long* line of incursions from the United States into the Cuban media sphere. The practice of dropping anti-Castro pamphlets over Havana - in violation of Cuban airspace (and international law) went on for decades[124] – finally spurring an international incident in 1996[125]. During the Reagan Administration, *Radio and Television Marti* were founded with ample allotment from the state department (that continues to this day), stations which broadcast subversive material from the Florida keys 80 miles South to Havana televisions and radios[126]. In 2010 USAID funded another project, a "fake twitter" app designed to inspire and network Cuban dissidents[127]. In 2014, the national telecom ETECSA reported that SPAM texts – often "political in nature" from United States were overloading their SMS servers[128]. The United States – it should be noted - also beat the Cuban revolutionary government to *cinema moviles* by several years. As cinema historian Hector Garcia Mesa shows [129], the United States Information Agency (USIA) made covert efforts to distribute pro-United States films in Havana and its outskirts from the mid to late 1950s via caravan.

While significantly lacking the scale of the revolutionary *moviles* would have several years later – this push-pull of media access and content between the two nations is a perfect harbinger of the seemingly perennial war for messaging a public on the island. By 2015, Cuba began fielding overtures from U.S. tech companies like Google[130], purportedly offering to build out an internet infrastructure on the island, potentially for "free". These offers have frequently been met with public suspicion by the state government[131].

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[124] Huling, J., & Zinn, H. (2011). Corporate Media Bias and the Case of the Cuban Five. *Censored 2008: The Top 25 Censored Stories of 2006-07*, 219

[125] Spector, J. (2001). The Cuba Triangle: Sovereign Immunity, Private Diplomacy, and State (In-) Action. Reverberations of the" Brothers to the Rescue" Case.*The University of Miami Inter-American Law Review*, *32*(2), 321-360.

[126] Frederick, H. H. (1986). *Cuban-American radio wars: Ideology in international telecommunications*. Ablex Pub.

[127] Lewis, P., & Roberts, D. White House denies 'Cuban Twitter' ZunZuneo programme was covert.[Online] The Guardian, April 3, 2014.

[128] Oppman, Patrick. "Cuba: U.S. Using New Weapon against Us: Spam." CNN. CNN

[129] Hector Garcia Mesa, "Estructura del cine movil," *Cine y Revolución en Cuba,* Santiago Alvarez et al. (Madrid: Editorial Fontamara, 1975), 132.

[130] Zillman, Claire. "Obama Says Google Has a Deal To Expand Internet Access in Cuba." Fortune

[131] Romero, Yuniel. "A Los Jóvenes, La Verdad Argumentada Y No El Dogma - Cuba - Juventud Rebelde - Diario De La Juventud Cubana." (His comments about the internet, and possible forms of "cultural imperialism", are mid-interview)

Concatenation:

- The so-called local LAN "S-net" clandestine urban networks[132] through which people play games and teach each other to code
- The human-flash drive assemblage that is the gigantic "sneaker-net" media distribution chain[133]
- The (often low-bandwidth and expensive) shared connections to wifi: provided by the state telecom ETECSA and accessed in public squares[134].

The above listed variations inarguably do the bulk of data sharing and network the population – in the process both reifying and complicating common conceptualizations of what the internet may be. From my fieldwork interviews, it is clear that users frequently use circulated understandings of internet outside Cuba as a benchmark of what access *should* resemble, while often engaging in uniquely Cuban means of sharing data and communication with one another. The notion of what the internet could potentially be (and is in other countries), is brought up in nearly every interview conducted during fieldwork .

The above multiple and situated Cuban internet practices present opportunities to conceive of varied Cuban internets in the making, not quite fully separate but certainly more discretely divided than much of the global North's more holistic conceptualizations of accessing the medium.

Researching the contemporary context of the internet in Cuba is complicated by a tangled history of tightly controlled access by the state, an endemic perception of stagnant governance, and the still-somehow-present U.S. embargo throttling economic viabilities. Regardless, the

[132] Weissenstein, Michael. "Cuban Youth Built A Secret Internet Network." *Business Insider*. Business Insider http://www.businessinsider.com/cuban-youth-built-a-secret-internet-network-2015-1
[133] "Cuba's 'offline Internet': No Access, No Power, No Problem." *The Guardian*. Guardian News and Media http://www.theguardian.com/world/2014/dec/23/cuba-offline-internet-weekly-packet-external-hard-drives
[134] "Cuba Is Coming Online, but Who Will Control Its Internet?" The Verge. http://www.theverge.com/2015/10/15/9534205/cuba-internet-access-google-huawei-government-censorship

"whys" of the current levels of access remain muddy[135], even amongst Cuban telecom experts. These slowly shifting levels of access shifted rapidly (perhaps not coincidently), alongside the mid 2010s *detente* with the United States. The seemingly concurrent "opening" of the Cuban internet along closer relations to the United States bundles new narratives of causation, confusing and narrating further the aforementioned factors – economics, ideology, personal practices, and access to an ever-changing discourse about/from the technology… not entirely discrete categories.

Qualitative research regarding the internet remains to some degree a slippery thing (see introduction). It is conceptually similar in many ways to what MIT historian Leo Marx[136] marked accused of the concept "technology" more broadly – "*a hazardous concept*" – something both nebulous and over-determined, a word connoting what should rightly be understood as process of changing practices and mechanical developments rather than a singular mechanistic thing acting upon the world:

> *"…As for the hazardous character of the concept, at this point I need only say that the alleged hazard is discursive, not physical. I am not thinking about weaponry, nor am I thinking about the destructive uses of other technologies; rather, I have in mind hazards inherent in, or encouraged by, the concept itself - especially when the singular noun (technology) is the subject of an active verb, and thus by implication an autonomous agent capable of determining the course of events, as we constantly hear in count- less variants of the archetypal sentence: "Technology is changing the way we live." When used in this way, I submit, the concept of technology becomes hazardous to the moral and political cogency of our thought" (Marx, 268)*

The internet, much like Leo Marx's[137] historicized reading of *technology,* often discursively presents itself similarly: a concept connoting a force acting upon, a force *disrupting*, changing the way we live and relate. We needn't look any further than popular tech coverage headlines or the rhetoric emerging from Silicon Valley to see this framing in action.

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[135] Press, Larry. "Cuban Internet infrastructure ownership and regulation alternatives". The Internet In Cuba. 12/16/2015. http://laredcubana.blogspot.com/2015/12/cuban-internet-infrastructure-ownership.html
[136] Marx, Leo. "" Technology": The Emergence of a Hazardous Concept." *Social Research* (1997): 965-988
[137] Smith, Merritt Roe, and Leo Marx. *Does technology drive history?:The dilemma of technological determinism*. MIT Press, 1994.

This problem carries and informs my fieldwork and the processing of it. I'm interested in tracking notions of the medium as they travel in/through/from Cuba, all the while also tracking practices as they develop and attempting to highlight the human dimensions of technological practice. It means doing extra explanatory work, and sorting out how to see it both through and inside this fairly thick conceptual fog. The question then, for thinking about the subject in ethnographic research – is how to address its unwieldiness with a particularly *cultural* kind of attention – one grounding the thinking rather than adds any further to this "hazardous" obfuscation.

Obtuse and Intransigent

On top of *La Guardia*, objectively one of the better restaurants in Havana (and perhaps the premier Havana eatery of the jet-set community), you'll find a bar serving eight-dollar Cuba Libres and mediocre mojitos (nearly) exclusively to tourists. It isn't the case that Cubans cannot get in the building, but that destination restaurant's price point exceeds the average local monthly salary by several fold. Adorning this rooftop bar, facing an impossibly blue[138]ocean, is a huge empty frame.

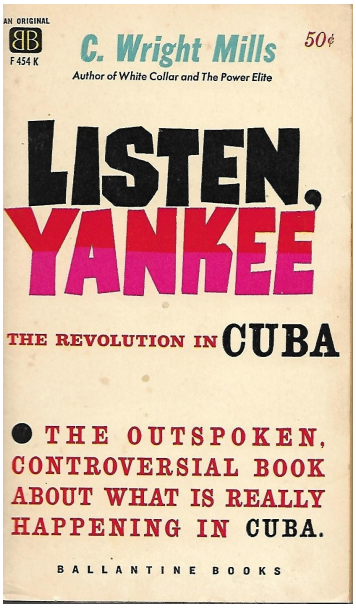
The view facing north off of *La Guardia* balcony in Central Havana, 2017.

The frame is not empty, of course. Gazing through the frame gives the (likely inebriated, likely foreign) visitor a purview of a hundred Havana rooftops, a glimmer of the malecon ocean promenade, and various Habanero denizens going about the tedium of daily life: they're hanging clothes, tending water tanks, feeding dogs, ferrying goods up and down from the mobile street

[138]Mitchell, W. J. T. "Havana Diary: Cuba's Blue Period." Critical Inquiry 34.3 (2008): 601-611.

vendors below. The frame shows an equally dilapidated and picturesque[139] sight, one of the only World Heritage locations to find itself marked by human residency, rather than some splendor of the natural world or long past ancestors.

La Guardia, and this literal/figurative frame, pose an uncomfortable set of questions that run through the entirety of this project. These questions are not especially unique to Cuba - the political and epistemological hows/whys of the foreigner viewing the local, but they are pronounced and bolded in this place's distinctive antagonism/characterization at the hands of the United States. For over a century, Cuba has been at different turns coveted, vilified, racialized, romanticized, outright dominated or coerced by the United States.



Left: *Administration's advertisement, run nationally in newsprint, touting the humanitarian ("BUT FOR HUMANITY'S SAKE") nature of "American Rule in Cuba" vs. Spain following the Spanish-American War*

Right: *Sociologist C. Wright Mills' "Listen, Yankee", a widely read book of ethnographic, social depiction published in the years following the Cuban Revolution*

[139] Centre, UNESCO World Heritage. "Old Havana and Its Fortification System." UNESCO World Heritage Centre, https://whc.unesco.org/en/list/204/.

Much of this has come (or at least been deeply supported by) text or visual media, in the form of written travelogue, cartoons, filmic depictions, and general propagandizing via one government or another. All ethnographic sites are rife with the difficulties and vagaries of objectivity filtered through personal lived experiences. Special in this instance is the sheer quantity of politicized messaging/images that most *NorteAmericanos* use to make their baseline imaginary of what Cuba is.

This question of what is remarkable, objective or (at the very minimum) *responsible* about viewing and depicting Cuba has plagued my ethnographic project from the outset. An anthropologist of media unable to take a photograph of their site that doesn't resemble a postcard, or one of thousands of others now geo-tagged to this place. How to document the sensory experience without reifying discourses of a Cuba "trapped in time", or that of a ruinous post-soviet developmental regime, a pastelled Caribbean playground, of abuelas too-taken by rum and tobacco?

Lived reality and its depictions are always - as Lucian Taylor notes[140], "Obtuse and intransigent", resistant to the impulses of categorization and documentation. Images of my fieldwork spaces in Cuba are doubly so – having been thoroughly caricatured for over a century – a genuine hurdle in a discipline expecting one's ability to describe (and qualitatively explicate) lived contexts for others.

What follows is one experiment undergone to break some of these conventions and formations. Utilizing a 360 degree immersive lens, I captured myself - and the contextual space around me - in the act of attempting to access the internet across Cuba in 2015-2017. To at the very least, break the frame of standard video/photo capture and allow the viewer some agency/complicity in the act of observing. I've journaled, edited, and tried to further enrich these video snapshots with further resonant context and literature. The videos are designed to be navigated alongside reading the accompanied text, hopefully an experience lending itself to

[140] Taylor, Lucien. "Iconophobia." Transition 69 (1996): 64-88.

multi-modal consumption. Rather than the relative boundedness of the page (or the photo) the process may hopefully shake loose some of the anxieties/problems mentioned above in capturing the realities of this space. The reader/view should be able[141] to click though each image to open the video file (hosted on Youtube), then drag the image around to redirect their gaze/listening anywhere within a 360 range.

Interspersed and blended with this media, two other stray pieces of a seen/unseen Cuba: the ongoing saga of the symbols surrounding the U.S. embassy (née U.S. "Special Interests Section) in Havana, and a failed attempt to build a purportedly apolitical communications "Portal" inside a golden shipping container, bound for Cuba.

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Viñales Oct 12th 2017

Fall of 2017 I was just outside Viñales Cuba, nursing a swollen ankle, put up following a misbegotten hike through a series of farmways after the mud had swallowed my shoes. My host family was tilling their soil via Chinese-manufacture tractor[142]. They were simultaneously readying an expansion of their plot mechanically and socially - the farm equipment humming alongside a lengthy back-and-forth with their local governance arbitrar. Their home was a casa particular[143] (in which I was staying), and a node of their neighboring agricultural co-op's soybean growing operation. I was told both income streams were needed to provide for the rapidly increasing family's numbers.

[141] If you *dear reader* are not reading this via a file able to easily hyperlink you to the youtube videos, please access them here: https://www.youtube.com/@joshuazaneweiss9517/featured

[142] John Deere/Caterpillar is one of the largest corporate proponents in the United States lobbying to end the Cuban embargo, paying off in 2017 with one of the only major distribution deals between the two countries to be established in the last decade.
https://www.miamiherald.com/news/nation-world/world/americas/cuba/article182406136.html
A 3D-printed tractor part company led by two ex-IBM engineers was initially one of the loudest, most excited companies in the United States following Obama's mid 2010s détente – applying for Cuban permission to establish a factory and U.S. Treasury permission to work around the embargo. The deal has since stalled, indefinitely.
https://www.bloomberg.com/news/articles/2016-06-09/cuba-s-first-american-owned-manufacturer-will-make-tractors

[143] Temporary housing, frequently for tourists, frequently alongside hosting families

(click above image to load/navigate 360 video, drag with cursor on youtube to move image around)
Vinales, Oct 12, 2017. Video recorded by the author.

There were other properties around town that had received a similar allowance for expansion towards the hillside much more quickly, purportedly due to connections to those who would grant such a thing. This host family, being transparent about the problem but visibly anxious to tell me - lacked the connections for any glad-handed, ready approval. Alexandro, the middle-aged father of this family, was in equal turns enraged and resigned to his current interactions with presiding policy. His father-in-law, Ernesto (who didn't seem to much like me or my questions) rallied the farming cooperative workers to till the soil regardless of legal outcome - pluckily insisting on steering the land he'd lived on (and off of) for most of his life.

The entire family dealt with anxieties as I laid about that day, shooing chickens and pigs out from under the tractor's path, gazing frequently out towards neighbors' houses and the center of town… spaces where observations, murmurs, and consequences might coalesce. My presence that day on the porch, as the only non-familial witness to the extralegal plowing event, seemed to

switch an important mode of candor with Alexandro. Flush with bureaucratic exasperation, he approached me anew several times with increasingly frank conversations that day, dropping a furtive veneer I'd grown accustomed to from Cubans I did not intimately know. I stopped recording when he approached.

This video simultaneously is capturing me accessing my email extralegally, facilitated by a satellite link its owners had housed inside of a non-functional water collection drum. The connection was shared by several of the residences within reach - a closed, private network easily discoverable but impossible to access without password. Alexandro did not yield on this for several days, till he saw me interacting with the *paquetero* in town.

There were only a few other dependable points of internet access nearby: one could travel into the center of Viñales proper and go through the school system's connection, the local *Joven Club*[144], or one of three government-run (re: costly, public) wifi spots. Viñales is considered a main hub of Cuban tourist travel. "*Hundreds"*[145] of public wifi points had supposedly been deployed by the Cuban government by this point, and yet here I was, bypassing state infrastructure via figured, clandestine workaround. My bum leg proved perversely complimentary to my momentary neighbors' lack of time/want to travel into town for access. My shared witness to the state's impediments joined us for a second in quietly sharing internet access modes.

Some stark differences persist and nag at my sense of communal experience: my hosts depended on this gray connection to effectively market/monetize their residence and business. They were mostly pulling in guests as tourists via the AirBnB platform, refusing the costly middle-men of travel brokerages much of the rest of their neighboring casa particulares depended upon. I was emailing my wife and university, attempting to download a TV show the *paquetero* could not provide.

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[144] Community technology center, (see chapter 3), or spanish-language documentation here:

145 Granma citation

In the accompanying video, It is quite hard not to position one's lingering gaze upon the tractor, the terrain, and the slow tumble of cloud shadows. It underscores for me the difficulty of ethnographic capture regardless of data form. It misses completely the depth of anxiety felt by this ethnographer for this family, the rush of intermittent connections (to my wife over chatting platform, my family/friends/colleagues via stray emails), and the delicate ongoing negotiation between my interlocutors and I as to how much of their dance with authorities might be shared.

—

Viñales Oct 19th 2017

(click above image to load/navigate 360 video, drag with cursor on youtube to move image around)
Vinales, Oct 19th, 2017. Video recorded by the author.

The above captures me some days later, at a makeshift *Orisha* shrine under a large, ancient-seeming tree. A ceramic Bhudda and a decapitated, bloodied plastic Christ-figure

presided. The found assortment includes recently rotted fruit, stray candles, cookware, and rusty gears - presumably from outmoded or broken farm machines. A splintered, haggard toothbrush lay blackened with some unknown material and brushed onto my feet as a dropped the camera.

This canopied alcove was found via geotag marked ("*santuario*") on open-source mapping mobile software - the singular marking for several km as I hiked the dirt paths connecting tobacco farms behind the nearby village. The tag (perhaps the entire tree and and shrine as well, for all I know) no longer exist, the geotag recently removed. I began taking 35mm photographs of this space as well, a markedly different rendering and experience than penetrating the 360 digital camera *amidst* the ritualized display, an action I felt immediate discomfort from (as evidenced by my quick escape out of frame, and short runtime). I had saved a cached map of the surrounding area to my phone, mindful of the spotty cell phone service and sparsely populated areas I was traversing.

Unbeknownst to me, at this exact moment my wife was seriously ill, sick enough to spend several days in the hospital. We were out of contact for nearly 12 hours that day, as I traversed tobacco fields, chatting up *vaqueros* about their online experiences/knowledge. I knew she wasn't feeling well when I left for my day - I came back to my residence to a cascade of panicked voicemails and texts as her condition worsed. The feeling that occurred at that moment, that of pain, fear, and disconnect from those I loved, crystalized a meaningful part of the connective properties elevated in discussions of the internet. I'd had a smartphone for less than a decade at this point, coming late to phones even capable of texting - and yet experientially - for both my wife and I - it was deeply, genuinely traumatic to have been out of contact for the better part of a day. The anxieties of that moment, of being out of the range of immediate communication, stick with me still today.

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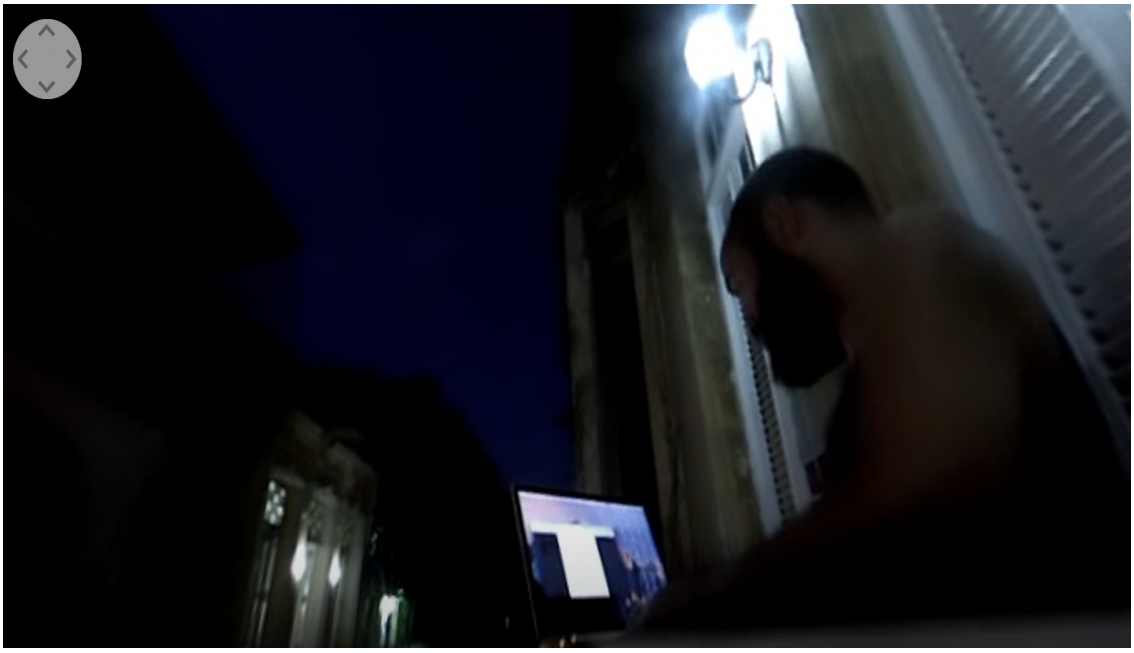
Centro Habana, November 12th 2017



(click above image to load/navigate 360 video, drag with cursor on youtube to move image around)

Centro Havana, November 12th, 2017. Video recorded by the author.

Centro Habana is, by this point in 2017, rife with iterative networks - sanctioned, unsanctioned, and *otherwise* by the government. It is, by a wide margin, the most networked space I encounter during every stint of fieldwork. I am staying with a group of Bay Area activists and technologists as a a partial host/guide/go-between for them as we spend the week attending Cuba's open-source programming conference. Our *Casa Particular* owner offers us access to his private LAN network, which turns out to have access to both Havana's *intranet* (used mainly for file-sharing and gaming), but also - somehow - unfettered access to the global internet. He mentions a neighbor with a "*Antena potencia"* (powerful antenna/antenna with power), declining to offer more details with a laugh. On the balcony (pictured in attached video), we are just out of reach of the official city wifi hotspot, but teenagers below/between access that wifi and relay via cellphones repurposed as hotspots. They then sell a shared and less reliable connection for a

fraction of the price. Local wireless network abound, some private and some open, several actively attempting to implant spyware upon access.

I am using the somewhat rare moment of readily available access to speak with family and friends in real time, to cache some podcasts, to update my fieldwork funding institutions on my progress, to make plans for further research via interviews and archive visits. Around me: a cross-generational game of dominos, a mother yelling to the neighborhood evening for her son to return home, a mobile vendor moving onions and garlic, street dogs, communist neighborhood watch, taxis, general purpose technicians fixing, *paquete* 2nd hand sellers offloading tv shows/movies/mp3s onto hard drives.

—

Malecon Promenade, Habana, Dec 2 2017

(click above image to load/navigate 360 video, drag with cursor on youtube to move image around)

Malecon Promenade, Havana Dec 2, 2017. Video recorded by the author.

In August of 2017, reports began to surface[146] of personnel stationed at the U.S. embassy in Havana becoming seriously ill. Diplomatic posts were becoming untenable *en masse*, with workers there purportedly afflicted by symptoms affiliated with brain injuries. Further, they shared stories of having experienced the presence of shrill, high-pitched, and deeply localized noises in the run-up to their symptoms. In a fit of cold-war echoes, these occurrences and their effects were dubbed the *"Havana Syndrome"*. U.S. officials quickly and publicly[147] entertained the possibilities of "sonic-ray" technologies by enemy forces, weaponized purposefully as a means to attack government proxies at their posts. Soon after these first occurrences and the publicity surrounding them, Canadian peers in Cuba reported similar symptoms, and the U.S. logged additional cases in the months following across other diplomatic settings in China, Vietnam, Austria, and Columbia.

Donald Trump's administration, eager to beat back as many of the prior Obama-era achievements as possible, quickly moved to use the incident as political cover in reversing precedent on multiple state orientations vis-a-vis Cuba. Within months, the U.S. had regressed the vast majority of its newest policies - across tourism, trade, and money-exchange services - to points often further draconian than the decades prior. Unprecedentedly, these strange events led to direct FBI cooperation with Cuban police in Havana[148], with no evidence found of weapons or deliberate attack. No known weapons (or indeed, even *theoretical, not-known-to-exist weapons)* are understood to be capable of producing these results under these circumstances[149].

Despite the glaring absence of local evidence and the clear global reach of the phenomena, investigations into the "Havana Syndrome" continue at the highest levels of the U.S. government - with congress allocating millions of dollars in payments to those government personal "afflicted"[150] following the incidents. It has been suggested (and considered at length by the U.S. State Department[151]), that one

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[146] Hurley, Dan (March 22, 2018). *"The Mystery Behind Neurological Symptoms Among US Diplomats in Cuba: Lots of Questions, Few Answers*". Neurology Today. 18 (6): 1, 24–26

[147] Leighton, Timothy G. *"Ultrasound in air—Guidelines, applications, public exposures, and claims of attacks in Cuba and China."* The Journal of the Acoustical Society of America 144.4 (2018): 2473-2489.

[148] Lederman, J. (2018) *Tillerson tells AP Cuba still risky; FBI doubts Sonic Attack*, AP NEWS. Associated Press. https://apnews.com/article/37deffe6a9ad408abc5a1a0277056d90

[149] Della Sala, S. & Cubelli, R. (2018). *Alleged "sonic attack" supported by poor neuropsychology.* Cortex, 103, 387–388

[150] Barnes, Julian E. *"C.I.A. Begins Compensating Victims of Havana Syndrome.*" The New York Times, The New York Times, 24 Aug. 2022, https://www.nytimes.com/2022/08/24/us/politics/havana-syndrome-compensation.html.

[151] One can read the report the U.S. government has leaned on for several years of legislative and legal action here, thanks to a Freedom of Information Act retrieval by Buzzfeed in 2022:
JASON Report. *Acoustic Signals and Physiological Effects on U.S. Diplomats in Cuba*.
https://www.documentcloud.org/documents/21068770-jason-report-2018-havana-syndrome

possible explanation of the events are psychogenic[152]: i.e. caused by the psychological stresses of the hostile environs that come from working diplomatic (and/or intelligence) posts for the United States. To date, no existent weapons or culprits have been meaningfully fingered, with the Cuban government[153] (and multiple independent researchers[154]) suggesting the most likely source of the sounds heard by local diplomats are the plentiful local crickets.

—

The above capture videos me sitting along the Malecon, a few hundred feet from the same purportedly under-siege United States embassy. Doing so during the timeframe the government has provided for the attacks - obviously unbeknownst to me in the moment. One can see dozens of others using the *Malecon* to jog, to sell wares, to fish and gaze upon the ocean. Teens dance for one another along the seawall to the east. At night, it is a regular sight to see crowds in the hundreds and thousands gathered along this coastal barricade, easily one of the busiest stretches of walkable space in the city.

	
U.S. Special Interests Section, 2011	*U.S. Special Interests Section in 2006. Photo by Patrici Grogg.* *Black flags in memoriam of those lost during the U.S. facilitated "Bay of Pigs" invasion. Pixellated messaging board inside the SIS is also visible.*

[152] Baloh, R. W. & Bartholomew, R. E. (2020). Havana Syndrome: Mass Psychogenic Illness and the Real Story Behind the Embassy Mystery and Hysteria. Springer Nature.
[153] Kirk, John M. "The strange case of the Havana 'Sonic Attacks'." International Journal of Cuban Studies (2019).
[154] Stubbs, Alexander L., and Fernando Montealegre-Z. "Recording of "sonic attacks" on US diplomats in Cuba spectrally matches the echoing call of a Caribbean cricket." *bioRxiv* (2019): 510834.

The building in which U.S. diplomatic personal do their work has been a fraught presence for many years in Cuba - oscillating between designation as an official international "embassy" and the opaquely named "*Special Interest Section*"[155] for decades as U.S. policy waffled. These few city blocks of space have been some of my most visited across the last decade of ethnographic work - a strange outpost of dampened state power, saturated with overt, signifying visuals: the building with the troubled nomenclature as a gray, fenced-off relic fortress of 20th-century statecraft replete with mirrored, darkened windows. Cuban and American security forces both stand guard, within shouting distance of one another. It addition to its stated diplomatic role (and likely intelligence operation[156]), the building and its surroundings clearly function as a physical manifestation of status between the two nations.

A series of densely-placed flag poles make up the entirety of the city lot immediately to the east of the structure, 100 exacting markers of contested insignia. In the early 2010s, my first visit to the area, I witnessed dozens of Cuban flags raised defiantly in the face of the windows facing them. A year later the poles were bare, and the following year a mixture of international vexillology (including the U.S. flag) replaced the negative space. *Prior* iterations had seen dozens of black flags[157] in memoriam for those killed during the failed U.S. "Bay of Pigs" invasion.

For several years the peculiar space also hosted pixellated, moving "ticker" banner[158] in the Special Interest Section window, a large version of the type you might see at a check-cashing business elsewhere in the world, or on city-blocks relaying the details of a stock exchange. For much of its life it relayed curated charged quotes from notable figures - a dissertation[159] on the project's evolution (and interview with its state-department creator, James C. Cason) covers the transition into more active "dialogue" with its surroundings:

> *"The first words the electronic billboard scrolled through were from another march, the "March on Washington for Jobs and Freedom" of 1963 which was followed up by what became known as the America's own "Million Man March" on October 16, 1995 organized by Nation of Islam leader Louis Farrakhan, calling for "able-bodied African American men to come to the nation's capital to*

[155] John Caulfield. America needs an embassy in Cuba, The Hill. The Hill. https://thehill.com/opinion/international/354357-america-needs-an-embassy-in-cuba/
[156] Weiner, Tim. *Legacy of ashes: The history of the CIA*. Anchor, 2008.
[157] Patrici, Grogg. "CUBA-US: Forest of Flag Poles Ratchets Up 'Billboard War'," InterPress Service News Agency, February 6, 2006 http://www.ipsnews.net/2006/02/cuba-us-forest-of-flag-poles-ratchets-up-billboard-war/.
[158] Robles, Frances, "U.S. Uses Billboard to Jab at Castro during Mass Protest," Knight Ridder Newspapers, January 26, 2006. http://www2.ljworld.com/news/2006/an/25/ususesbillboardjabcastro-duringmassprotest/.
[159] Genes, Laura Serejo. Art salvos: aesthetics of figurative acts of war between the US and Cuba along Havana's Malecón. Diss. Massachusetts Institute of Technology, 2018.

address the ills of the black communities and for unity and revitalization of African American communities.

...After visiting the electronic ticker the first night it lit up, Fidel Castro began to stage his retaliation. First, he organized a million-man march; Parmly's people at the U.S. Interest Section at the time estimate it was 1.4 million. Castro had many bones to pick with the United States, so rather than acknowledge the brilliant provocation, he instead organized a march to protest the United States' refusal to extradite Luis Posada Carriles, a Cuban exile and former CIA agent convicted in the 1976 bombing of a Cuban airliner that killed 73 people. Led by former Nicaraguan President Daniel Ortega, the march was the one of the largest of past decade, lasting seven hours.

As the story goes, just as Fidel, 79-years old at the time, positions himself in front of the building to speak to the masses, American diplomats couldn't resist taking advantage of a captive audience and lit up the electronic ticker billboard:

"TO THOSE OF YOU WHO WANT TO BE HERE, WE RESPECT YOUR PROTEST. TO THOSE WHO DON'T WANT TO BE HERE, EXCUSE THE BOTHER."

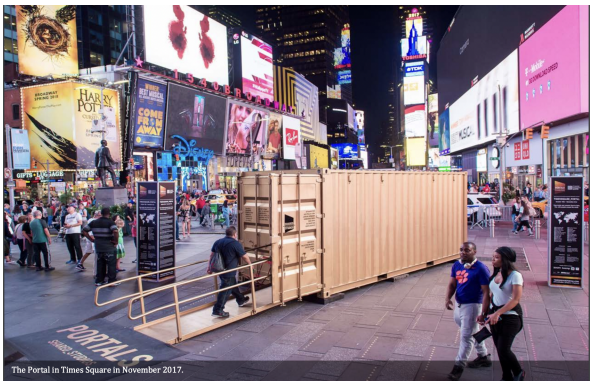
No matter how loud he spoke into the microphone, there was an interference Castro could not fight, at least not immediately. A visual, written, scrolling spectacle was actively competing with his sonic spoken one-a literary battle of political pageantry. Although the USINT electronic ticker would return to its regular scheduled programming of quotes from people like Abraham Lincoln, George Orwell and Frank Zappa, the voice it had debuted behind Castro's back would resurface to contribute more apropos phrases like: "HOW COME WE CAN ENTER YOUR HOTELS AND YOU CAN'T."

It is my understanding that the hundred flag poles stand completely unadorned again at this point in writing in 2022 - awaiting their next role as visual barometer of geopolitical status. It would be this same stretch of city blocks, host to countless public declarations against imperial forces and capitalism's global domination, that would host John Kerry as Secretary of State at the initiation of the détente. A run of international concerts, ranging from Diplo + Major Lazer to the Rolling Stones would be attended by hundreds of thousands. In one of the last major signs of easing tensions between what had been and what might be, Vin Diesel raced down the *Malecon*, filming *The Fate and the Furious.*

Portals

I developed a habit of long daily walks during fieldwork in Cuba, looking for space to process the work and my thoughts. Early fieldwork occurred at a staccato pace, as official visas and funding limited the length of allowable stays in-country - meaning flyby weeks back at home in northern California became interspersed throughout 2013-2016. Back in the U.S. these walks continued with my wife, taking the time to spread our understanding of our adopted Oakland and Berkeley neighborhoods. Multiple times during this period, we walked past a *gold-painted shipping container* parked at the Oakland International High School soccer field.

The giant gold box was an arresting sight - but not a magnitude more strange than other things one might find walking through the Bay Area, so for awhile it remained an anachronistic blip in our exercise routine. One evening, the local news packaged a report revealing its significance - as a *"Portal",* part of an extensive project blurring vectors public art, finance capital, and ideologies about the humanizing potential of conversation enabled via technology. Just half a mile from my apartment, this golden node of a communications web spanning dozens of countries (and including a purported outpost in Havana), sat quietly on children's athletic field, all the while emanating the world-changing power of "human to human communication" on the nightly news.



Other "Portals": across the San Francisco Bay in Crissy Field[160], San Francisco, and Times Square, NY in 2017

[160]Brinklow, Adam. "Golden Shipping Container Portal Moving to Presidio." Curbed SF, Curbed SF, 13 Sept. 2017, https://sf.curbed.com/2017/9/13/16302418/portal-presidio-shipping-container.

Conceived by Washington Post reporter and one-time State Department employee Amar Bakshi, the spread of these *Portals* began as a smaller scale project in 2014. Initially developed as a set of two unvarnished shipping containers, physically housed by and socially conjoining two art galleries (one in New York City, one in Tehran, Iran) via video chat - it soon became a deeply funded endeavor and spread to dozens of cities across the world. An addendum to his *How the World Sees America* series of reporting, Baskshi cited a longing for the cross-world rapport he'd enjoyed during his time working as an international journalist for Washington Post. The project was initiated soon after his departure from said work, after becoming employed by the U.S. State Department[161] under Susan Rice.

In setting up the *Portals,* Bakshi professed a wish *"...to connect people across all forms of distance, if that's political, theological, based on gender norms, or another,"*[162]. He bounded this idealized experience of a cross-cultural, international encounter inside internet-enabled shipping containers, and painted them gold as a means "*to invoke the notion of them being sacred"*[163]. They were outfit with computers, cameras, and screens through which participants could interact via both prompts and free-form chat sessions.

The company found rapid success and waves of apparently discrete[164] financial backing, spreading hundreds of these portals globally across cities like Palo Alto, Oxford, Washington DC, Mumbai, Aspen, Gaza City, London, Davos, Berlin, New Haven, Mexico City, and El Progreso in just a few years. Participants included President Barack Obama, Samantha Power (current head of USAID), Vint Cerf, Thomas Friendman, John Kerry, WIll. I. Am., Sergey Brin, Melinda Gates, and Steven Pinker [165]. In order to manage such a venture, the Harvard graduate set-up *Shared Studios*, a for-profit LLC that strives to create (via mission statement):

> *"...a global, purpose-driven start-up forging connections that build toward a more inclusive and collaborative world. We believe that this world begins with stronger human connections, and that human connections are built on moving conversations.We imagine a*

[161] Bakshi, Amar. "*An Unfair Portrait of Susan Rice.*" CNN, Cable News Network, 14 Dec. 2012, https://www.cnn.com/2012/12/13/opinion/bakshi-susan-rice/index.html.
[162] Rohan, Naik "*Yuag 'Portal' Connects New Haven, Iran.*" Yale Daily News, https://yaledailynews.com/blog/2015/02/25/yuag-portal-connects-new-haven-iran/.
[163] Bakshi, Amar. "Story." *Amar C. Bakshi*, http://www.amarcbakshi.com/story.
[164] A representative for the company shared that funding from expansion had come from *"many large-format grants, private donors, and our ongoing consulting work"*. The same representative assured me they would follow-up with a more detailed and transparent breakdown of these funding sources (including specifically if any governmental organizations were involved) - such a follow-up with this information was a never received.
[165] "Notable Guests." *Shared Studios*, https://www.sharedstudios.com/notable-guests.

world stitched together by meaningful human connections that allow everyone, everywhere, to contribute meaningfully to building a brighter future together"

By the time I was first encountering these portals in my Oakland neighborhood only a few years after *Portals'* conception, participants were purported to be contemporaneously linking with others in Havana, Cuba (according to the local news report) - with ambitious plans for sites in Afghanistan, Iraq, and North Korea being proposed[166]. I set up a phone interview with Amir Bakshi, curious to speak through how exactly he'd accomplished the feat of installing an largescale, U.S.-led art installation highlighting the power of connectivity into Cuba, famously reticent to cooperating across multiple declensions of the project. I'd also read about how Bakshi had, in the mid 2000s, purported to be imprisoned in Zimbabwe (as a consequence of his undergraduate research into youth propaganda there) a story unsubstantiated[167] by Harvard, the local police, or the government of Zimbabwe - and actively questioned by the media at the time.

The day of the scheduled interview, I was instead connected to a friendly individual coordinating media relations for Shared Studios LLC, and told Bakshi would be unable to join the call, or to reschedule it to another time. Questions regarding funding sources and profits (given the choice to operate as an LLC, instead of a non-profit) were met with unfulfilled promises to follow-up via email. Asking for specifics about the project's ability to get a foothold in Cuba, I received a chuckle on the line and a small window of transparency: after Cuba's refusal of the gold container, and the proposed site of the *Portal* at the prominent *Hotel National*, the company opted instead to set up a video-link on a laptop inside of *OnCuba Magazine's* headquarters.

Months later I would visit *OnCuba* in Havana, where we were unable to get our *Portal's* proprietary video client up and running, an apparently recurring issue. Staff there revealed only a handful of conversations ever happened via their particular node - the majority with journalist peers they or *Shared Studios* had corralled into the experience.

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[166] Landau, Lauren. "'Portal': A Shipping Container-Turned-Art Project Connecting People across the Globe." WAMU, 9 Oct. 2016. https://wamu.org/story/15/07/03/portal_a_shipping_container_turned_art_project_connecting_people_across_the_globe/.

[167] Fahrenthold, David A. *"Student Says He Was Detained in Zimbabwe Arrest on Research Trip, Unsubstantiated." The Washington Post*, WP Company, 12 Jan. 2006, https://www.washingtonpost.com/archive/politics/2006/01/12/student-says-he-was-detained-in-zimbabwe-span-classbankheadarrest-on-research-trip-unsubstantiatedspan/de01b3d5-b934-4e20-924c-71f88a2e9750/.

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Chapter 3: Cuban Networks

***Abstract**:*

This chapter focuses on detailing time spent across multiple organized mutual aid Free/Libre/Open software-oriented trips, contrasting with the lived experiences of multiple Paqueteros, people's whose work was to ferry hard-drives of pirated media content across neighborhoods. These are situated practices in which the emergent Cuban internet forms a complex socio-technical assemblage that is often contested in meaning, with participants engaged in negotiating varied understandings. They are practices that are in part developed locally through the entrenched Cuban DIY resolver engineering culture, but also traverse other potent influences, such as legal, infrastructural, and economic flows amidst a varied range of global discourses about the medium

"Mutual Aid"

In 2016 and 2017, two trips were organized as a means to bring a spectrum of non-Cuban participants into physical, collective meet-ups with free/open-source software (F/OSS) workers in Havana. As an ethnographer inherently interested in interrogating what being brought personally to bear upon my subject, increasingly convinced some form of self-enveloping-ethnographic work resonated well with the scaling U.S./Cuba relations scaling in the rest of the fieldwork, and bolstered by newfound relaxed relations between countries - I became co-organizer of multiple group excursions to Havana. The groups brought ranged in participants from professional programmers and technologists more broadly to political organizers - some specializing in technology, some a wider swatch of social justice engagements in the United States.

"Open-Source" and "Free/Libre" as a signifiers and denotations are vast subject matters - covered extensively as a socio-cultural historical phenomenons elsewhere[168]. Overlapping and often blurring with spaces held by F/OSS software, the work of open-source is demarcated by the intention that users may use, alter, distribute, investigate the inner-workings of software at their will[169]. Bolstered by the lack of clear copyright (or intellectual property ownership in general) enforcement in Cuba, F/OSS software holds a fairly anachronistic role in Cuban technology, as compared to much of the rest of the world. Due to hurdles in various modes of access (material availabilities, bandwidth, access points, etc), it has also historically had unique problems in the processes of software development.

Additionally, F/OSS occupies a political space not easily collapsed into traditional left/right narratives - something many thinking with/through anything in Cuba may feel exhausted. It's a possible means to see things slightly askew from these dominant lenses, and offer substantively different material futures in avenues (hopefully) apart from those saturating this space, as Gabriella Coleman offers:

> *"Although F/OSS is foremost a technical movement based on the principals of free speech, its historical role in transforming other arenas of life is not primarily rooted in the power of language or the discursive articulation of a broad political vision. Instead, it effectively works as a critique by providing a living counterexample…*
>
> *Returning to the terminology offered by Bruno Latour[170] F/OSS production acts as a "theater of proof" that economic incentives are unnecessary to secure creative output…Equally crucial was that free software production was never easily shackled to a Right versus Left political divide, despite numerous attempts early in its history by critics to portray it as communist. In an era when identification with conservative or liberal*

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[168] Not an exhaustive catalog by any means, but my education (from my very specific academic background) on the social contexts and history of F/OSS include primarily the work of :

Kelty, Christopher M. *Two bits: The cultural significance of free software*. Duke University Press, 2008.

Coleman, E. Gabriella. "Coding freedom." *Coding Freedom*. Princeton University Press, 2012.

[169] There are a myriad ways to become pedantic on the differences and politics surrounding "Open" vs "Free" software - the central division is around the importance of licensing/credentialing/tracking authorship in the process. It is my (admittedly limited) experience with this community that there is much more in common ideologically/process-wise than the perennially divided nomenclature suggests, and unpacking these differences is outside the worth any reader would find in my vulgar, condensed rendering.

[170] Latour, Bruno. *The pasteurization of France*. Harvard University Press, 1993. Pg 87.

often functions as politically paralyzing form of ideological imprisonment, F/OSS has been able to successfully avoid such polarization and thus ghettoization[171]*."*

In the early years of fieldwork, the dynamic collaborators conversations and interactions *repeatedly* centered with me was that *between* Cuba/Cubans and elsewhere. Rather than continuing to push back against an unceasing tide, and the impulse of the ethnographer to isolate some isolated (unattainable) "local" knowledge, these trips leaned into the messy, generative topic of "between". Further, there was a clear untapped well of curiosity[172] regarding subject matter outside strict wonky academic concerns. Organizing functional grouped meetings seemed a fruitful way to multiply positive aspects of the work already occurring, to be reciprocal for Cuban collaborators, and to briefly experiment through what felt a polar opposite of U.S. diplomacy for the last half-century – "mutual aid" for the needs of all involved.

The trips were purposefully international in terms of recruitment, at the request of these prior collaborators I'd worked with. The local Cuban open-software enthusiasts themselves spanned a range of engagement: some vocationally involved in relevant everyday work (F/OSS being widely deployed across educational and health settings in Cuba), some programming hobbyists or burgeoning entrepreneurs in the nascent Cuban tech sector. Both trips were organized around the notion of partial inclusion and participation in the (at the time) annual "CubaConf" conference for open-source/free/libre software development. A notable reflection of the difficulty of planning and organizing semi-independently within Cuba: only one of these trips resulted in the successful anchoring of the trip around CubaConf.

Together - the group's core organizers arrived at a language of "*mutual aid"* by way of a dissatisfaction and disavowal of their respective institutions. Prior to the trips, we arrived at a shared intention that our respective governing bodies (granting the ability to travel, to organize, to finance, to dictate material/informational goods exchanged) were not acting in means always best for the community to thrive. Mutual aid as a concept traces[173] back to the thought of Peter Kropotkin, an anarchist essayist and philosopher - the concept emblematic of Kropotkin's belief

[171] Coleman, Ibid, pg 184
[172] Contemporary media interest detailed in chapters 1, 2, further contextualized in 4)
[173] Kropotkin, Kropotkin Peter. *Mutual aid: A factor of evolution*. Black Rose Books Ltd., 2021.

that cooperation (rather than *competition*) was at the heart[174] of human progress. In contemporary practice, mutual-aid tends to center notions of solidarity over charity[175], allowing those involved to choose their level of participation and articulation of their own needs, eschewing social and financial power dynamics as possible. The hope was that the core ideologies in the approach resonated in a way that might sidesteps patronizing charitable techniques of organizing, and more thoughtfully reflected the spirit of the F/OSS community itself.

2016

The 2016 trip, organizing in the wake of (at that point, the still logistically and legally unclear) announcements of rapprochement from the Obama administration, we made several attempts at an organized, institutionally-sanctioned meetup. Though initially uncomfortable at taking on additional attention in an already precarious-feeling project, this ethnographer petitioned several cultural centers and the University of Havana about the use of their space. Most parties did not return messages - written, spoken, emailed or otherwise. The University in particular let me know I would be subject to an approval process - one that would likely not occur at the timely speed (6 months out from the event) necessary. Tone and facial expressions suggested I would have little luck at securing a physical location outside of private residency, so we opted to find temporary residency for the group large enough to host our Cuban F/OSS counterparts.

[174] Kinna, Ruth. "Kropotkin's theory of mutual aid in historical context." *International Review of Social History* 40.2 (1995): 259-283.
[175] Spade, Dean. "Solidarity not charity: Mutual aid for mobilization and survival." *Social Text* 38.1 (2020): 131-151.

Participants is the mutual aid trip, from Spain and the United States, resting just outside of our residence for the week. Appearing in front of street art depicting the Cuban flag nestled within the Apple Computer logo, an illustration with iterations throughout the city.

Following, as a group we opted to be nimble - organizing as able during the planned week. As a whole encompassing Cubans and international participants, we oscillated in numbers depending on the activity and day, ranging between 12 and upwards of 30. The group utilized parks, designated hackerspaces, restaurants, a *Critical Mass*[176] style bicycle ride, and large AirBnB/*Casa Particular* those traveling from abroad were staying in. During the week participants rotated in-and-out as comfortable and able - as job obligations, finance, child-care, heat exhaustion, and areas of expertise all varied the scale and significance of involvement. Some events and meetings involved weeks of planning beforehand, some organized days (or even hours) prior as the needs of participants guided the proceedings.

[176] Furness, Zack. "Critical mass rides against car culture." *Cycling Philosophy for Everyone. A Philosophical Tour de Force* (2010): 134-145.

To mark our first day: as many participants as able joined at the traveler's residence, and together posted the subject matter, practices, questions, and concerns they wished to be addressed. The group did so in the most tech-crowd-friendly medium we were fluent, the modular brainstorming mess of sticky-notes applied to a blank wall. As a group, it was decided upon to build base platforms of "OFFERS", "REQUESTS", and "IDEAS" to begin, reflecting the particular orientations of the mutual aid intention. The Cubans as de facto hosts were asked to contribute to the heap of notes as an initial offering. The group of outsiders joined after a few minutes, and the foundation for the following days of conferencing (or "unconferencing") had been contributed.

Danny Spitzberg, trip organizer and UX researcher, contributing and compiling initial notes

The planning exercise revealed a handful of patterns:

Across all:

- A pool of shared programming knowledge existed between the two groups. Unbeknownst before the exercise, we had multiple people (Cuban and international) who had contributed to both the OpenOffice and LibreOffice projects over the prior few years. They knew each other's work but not names or faces.
- Documentation of the event itself was desired - as much as possible - to be posted ongoing and available for all as online/offline data
- Discussions and the building of a longer-term project bridging the Cuban open-source community to those outside (a "*red de solidaridad*" / "network of solidarity")
- Possibilities / Realities of crypto currencies in Cuba, at this point in 2016, was of frequent interest to many across the groupings as a means to bypass both U.S. and Cuban government involvement in activities

For the Cubans:

- Help with bringing in expert speakers, academics, and professional technologists for more knowledge sharing internationally.
- Interest in talking through pricing models for freelance labor and software distribution at the international level (and talking through the various difficulties of sending/receiving financial transactions into Cuba), given the lack of context for new Cuban tech entrepreneurship enterprises
- Offers of discussions towards the various strengths of the Cuban open-source community: resourcefulness without materials, building networks across disparate levels of computational power
- Assistance obtaining access to design, illustration, and graphic software, alongside relevant expert professionals or documentation

For those from outside Cuba:

- Discussion of realities of mutual aid in terms of: material help importing outside physical tech, difficult to obtain software, or academic/intellectual/professional networks for ongoing assistance. Discussions of need vs. want, prioritization.
- Desire to learn more about the large intranet / LAN / "S-net" systems built out In Havana (in large part by many of those participating on the Cuban side)
- Ability to visit the organized cooperative/hackerspaces Cubans were working in

Ongoing, a separate list of notation practices began in the household, seemingly spontaneously, as the non-Cubans and houseguests also compiled notable details, quotes, and scenes they'd experienced over the week *contra* the "organized" pile (pictured below):

"Organized" pile

The nearly week-long project, over a handful of days shared - was overwhelmingly seen as a success. There were clear, actionable benefits for most involved. Material goods - (signal encryption devices, commercial software usable without a license, etc) were exchanged for those who needed, and a tremendous amount of knowledge was shared. Plans for longer-term projects (and return trips) began, with many of the interactions recorded via audio, video, or annotation available to all who participated. In the spirit of horizontal participation, I've included the below selection, detailing the importance of the work, spoken directly by the Cubans involved. (Unnamed participants had not given permission for their names to be used, so letters are used to designate speakers in those cases. Translated from Spanish by the author unless otherwise noted).

A: **Why should we teach free software? Basically, we should teach free software because we mostly want to be technologically free.** Being technologically free, using software the way we want, and with a system we can understand – not prefabricated software, or prefabricated firmware by a private developer who has his own specifications that nobody can modify.

Why is that? The objective is to study projects that evolve technology, and free projects – making things free. For example, the same project: Free Router – there are many routers with preconfigured firmware, but there's a lot of third parties that make free firmware. Like DD-WRT, or open WRT (Libre Router), that are used to modify the firmware of the router and to give them more functionality, to modify them internally, without any problems, any legal problems where they could sue you for modifying equipment.

No the equipment is mine. I can use it my way. I can download and install free firmware – that's it.

B: You have networks you've built to collaborate, networks you've built to share information. It's all a collective effort that's no less than..

A: ..And all of this with free software!

B: Ah, exactly – **It's *the chicken in the rice & chicken*. We have a free software community which is, like we say… like Cubans say, "We're four cats" (We're just a few) that use Linux or FreeBSB, or another free operating system,**

without restrictions, and we use it to develop personal projects that are institutional, or educational programs, or whatever we need.

And with all that experience – like I was going to talk about yesterday but couldn't – the Cuban goes to the heart of the matter! The Cuban looks for every last error that the software gives you, and documents it. Every last bit of compilation of the program, we study it, and we know what it does. And one day, if there's a problem or error in the code, we know why it happens and where, and we go to the core of the problem, we study it, we change it, and adapt it to our needs.

Screenshot of A (name unreleased), speaking to the group in 2016. Translation, transcription, and video courtesy of Helena

Pablo (speaking in English) – **Here in Havana, we create one solution for one thing, and in Mantanzas, someone creates the same solution for the same problem, because we don't talk – we don't' have any way to communicate.**

And now we have internet, we have intranet – but we keep that thing on the mind, and people keep doing the same, even when they have the tools! You go give a phone to your grandmother, and she prefers to send letters, because they're not used to using the phone – this is the thing.

—

C: Staying in Cuba to work here in this sector – its every developers' completely personal decision. Migration is relatively easy, to go work somewhere else, in any other country, just as easily.

Gavin: (speaking in english of the ways in which putting faces/names to those involved in open-source projects is important) *They seek out the people* who have co-contributed to the libraries, because they see their names on the little lines of code, and they see their work, and they see their messages, and in a way, it's a very pointed and practical and focused…message board. **And so you break the ice – and when you go to an international conference, you go "Hey, you're that guy who wrote that *for loop* that, you know, blab la bla, you know – And then you know them! It's so valuable, its so valuable.**

Pablo – Yeah but this is the point. We don't go to any, and meet people. I have friends who contribute for LibreOffice, LXD, many things, and nobody knows these guys because we don't have an open source conference here. **This is why we need CubaConf.**

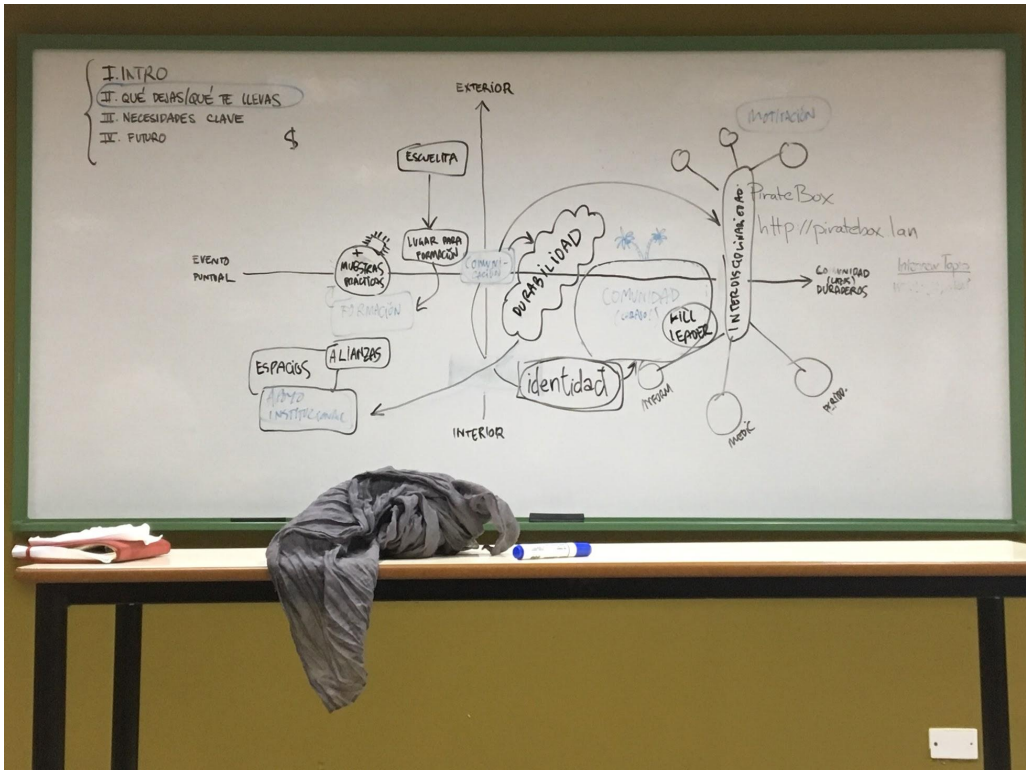
This trip ended with a shared and emphasized belief that the CubaConf gathering (delayed in 2016 via institutional troubles) integral to continue and build annually by the health of the open/libre software community there.. Those involved worked to continue the momentum into the following year, and to make outreach to international participants a fundamental part of the organizing labor.

2017

The following year's planning involved explicitly anchoring a similar group (some overlapping participants from the year prior) of folks from outside Cuba to a 2 day, organized conference hosted in Cuba with hundreds of participants. This ethnographer played a role in guiding a small group (roughly a dozen) into the conference, but was by no means as integral to the gathering as the prior year's event.

The author and 2 mutual aid conference participants (U.S. and Mexico, respectively), entering the Kcho Google Center, Miramar Cuba. Text Translates to "With Internet, I can…." Photo by Danny Spitzberg

Hosted officially inside of educational facilities in Havana Vieja, *CubaConf 2017* brought together a magnitude more people inside much more institutional and deliberately organized settings, a stark contrast from the generative and organic qualities a year prior. *CubaConf 2017* had multiple days of scheduled meetings held inside classrooms, sprawling across a dozen rooms. A large grided schedule was posted in the connecting hallway, allotted with fixed topics,



Scenes From CubaConf 2017: Top - An open forum on what future iterations of CubaConf should look like, Below - a freeform diagram showing the priorities different approaches to F/OSS in Cuba could have

lessons, or sessions, alongside empty spaces designated to organically be filled if/when need had arisen. The conference, as all conferences do - blurred into adjacent meals, sidewalk cigarettes, and long walks exchanging stories. The demographics were only a slight majority Cuban, often having journeyed from far outside Havana - with many other participants representing european, asian, and Latin American countries of origin.

As a participant and witness I learned a dramatic amount about both the subjects at hand and the meta-contexts of the proceedings. The complicated history of Cuba's Linux fork *Nova* was unpacked for the uninitiated, purportedly inspired by a visit from Richard Stallman - widely understood as the (not uncontroversial) figurehead of the free software movement. Cuba's healthcare databases, designed entirely upon open-source software (and designed for easy export to wanting nations within the Global South) was detailed at length. Also on view though: multiple moments where the Cuban government was critiqued for its lack of support to certain aspects of the community, a heated shouting match between international corporate representatives and activists, at least one (barely) clandestine overture from a U.S. embassy diplomat to the group I was hosting, and one veiled threat from the school hosting the conference that the organizers must hold to their promise to not have the proceedings "vuelve político" *(become political)*.

In the end, some accounting of the relative "success" of these trips is worth evaluating:

- Both gatherings ended with participants enriched across metrics of cross-cultural exchange and F/OSS skill-sharing, having done so exhaustively and horizontally.

- Documentation was extensive, with a trove of video, photo, notations and interviews occurring across the participation of all. Some of that was compiled and uploaded for sharing, some never has been.

- In the immediate aftermath of the conferences, financial exchanges and informal contracts were granted for project work in Cuba that would not have been funded without these moments of networking.

- Larger, ongoing projects were initiated or planned, to mixed success. Exchanges (involving software and material technology) were set up that continue still today between the Cuban F/OSS community and their Mexico City counterparts.

- A multifaceted wiki, with the intention of bridging Cuba to the international F/OSS community more actively was built and contributed to for several months. Within the year, it was abandoned and is no longer active.

A more holistic view of these proceedings, with the recognizing the important roles of reflexivity and inspired[177] to incorporate an important components of thinking transnationally with interlocutors, remains in process with many of the Cuban participants, to be expanded and published as its own text.

[177] Beltrán, Héctor. "The First Latina Hackathon: Recoding Infrastructures from México." Catalyst: Feminism, Theory, Technoscience 6.2 (2020).

Paqueteros

Vendors selling digital copies of media in Cuba have been active since the mid 2000s, a vocation at varying levels of state scrutiny[178] that continues in practice today. By the early 2010s it is impossible to walk any major Cuban city without seeing their displays, often spilling out into the surrounding street. Occupying a legal gray area across multiple dimensions ("allowable" content, copying mechanisms, legality of devices in which to play the media, the copying of media as a focal point of a licensed business enterprise[179]), this type of media distribution quickly became ubiquitous across cities first, with rural areas following shortly thereafter. Over the first decade of the new century Cuban authorities grappled with what could and should be done to mitigate the spread of unwanted cultural ephemera.

As mentioned earlier in this dissertation - the "paquete" is a system of ferried hard drives containing a massive amount of copied entertainment forms - ranging across film, television, music, and the printed/scanned written word. Paquete is short for *paquete semanal* - or "weekly package", denoting the frequency in which it is updated and distributed. The designation of "paquetero" is in my fieldwork experience, a bit blurry. Technically speaking, the word refers to a person or store acting as vendor to the paquete, though this was not always explicitly found to be the case with those identifying as such. Some vendors had archived media libraries built out by the paquetero or other means, but did not sell access to the weekly paquete itself.

Others still had *zero* working relationship with the paquete, selling copies and dubs of older media predating the paquete network, yet still adopting its name. When asked, one of these non-paquete-interacting "paqueteros" offered it was a "helpful marketing tool" - the designation having become so synonymous with purchasing entertainment media in Cuba that it buoyed the more old fashioned vendors media past. In the following passages I am speaking broadly to the

[178] Over the course of the last two decades, this type of work went from a completely clandestine activity, to a gray legal/social status in public, to an official state-licensed category of work (one critiqued still today by state party, figures regardless of its legal designation)

[179] Vertovec, John. ""No trabajaré pa'ellos": Entrepreneurship as a form of state resistance in Havana, Cuba." *Economic Anthropology* 8.1 (2021): 148-160.

phenomena and its forms - but use the word itself to refer specifically to those either in physical shops or as mobile couriers interacting with the nationwide weekly hard drive network.

A media vendor in Centro Havana, dating to the early 2010s. The business has not only transitioned from a pre-paquete media vendor to an explicit paquetero, but also from a business operating without official license to one recognized by the state. (This is not the shop that allowed me to linger and interact for many days in Centro Havana, which will remain unidentified)

Across Miramar, Pinar del Rio, Havana, and Cienfuegos, I frequented these vendors for years during fieldwork trips, watching the shops evolve over the decade. Over many visits, I became a familiar face, and several of them granted me the ability to stay in the shops for hours at a time - speaking with them about the business and media practices. According to several paqueteros and these adjacent media vendors - the paquete was not a particularly surprising

phenomena to them - highlighting the prior existence of widespread file-sharing before the current system's ubiquity. They noted a presence "*entre redes universitarias, LAN barriales y grupos sociales"* ("across university networks, neighborhood LAN, and other social groups"), a history standing in staunch contrast to personal expectations and widespread non-Cuban coverage of the paquete phenomena. Reflecting a decades long battle[180] by the revolutionary governance in Cuba to strongly guide available media content to the population, sharing practices had often clandestine, but this was no longer the case for the majority of media.

When traveling, other than bringing media into the country, the paquete is now the dominant form of access one had to many versions of entertainment media forms - tv shows, films, sports etc other than the comparatively paltry public-facing options of Cuban radio and television. For this researcher, access to expanded entertainment was a necessary respite from graduate school reading, archival research, interviews, and networking. Traditionally broadcast television watching as a practice occurred at many homes I shared with Cubans - but too often with a non-dependable antennae connections and frequently lacking in my preferences for engaging content. A fair sample or not of the Cuban population's taste: my hosting families watched a glut of broadcast telenovelas, poorly dubbed films, and dry roundtable discussions between bureaucratic Cuban figureheads[181].

Paqueteros were sometimes contained within their own shops, sometimes found within a corner of shared marketplaces between other merchants. Hawkers of digital media throughout Cuban urban centers all took upon fairly similar logistical and aesthetic set-ups: walls of available media items, often bundled into packages by genre, artist, actor, or country. Collages of subject matter, "official" art, and celebrity faces were printed upon jewel-case sized paper inserts, capable of interchange and update as the popular or available catalog shifted.

Perusing the paquetero's shop is not dissimilar in many ways from how those with rental media vendors may have done so in other international markets in the 1990s or 2000s - albeit in

[180] Alfonso, María Isabel. "In Cuba, Independent Media Struggle to Navigate Polarized Waters: As long as US aggression and Cuban government censorship continue to stoke uncompromising positions, all the island's journalism—whether official or alternative—will suffer the consequences." *NACLA Report on the Americas* 53.4 (2021): 387-394.

[181] Media forms all certainly with their own unique merits to the some particularly capable media ethnographer (but not this one)

Cuba via much more compact forms. Movies and television shows - of English language, Latin American, and some international provenance plaster the walls. The shops often have some degree of rotation based on the item's "release" (in Cuba) and popularity. Some paquetero shops kept archives dating back *years*, with terabytes of goods perpetually available for customers requesting something from years gone. Large binders with tattered edges and handwritten notes were kept for quick reference, but there were also active discussions of abandoning this practice due to how cumbersome the cataloging labor had become.

A wall of film and television compilations spanning both English and Spanish. Some organized by actor, some by genre, some as compilations of film series. Photo by the author, July 2016

Prices are posted across a spectrum of use-cases: individual pieces of digital media, weekly or monthly genre folders updates, special requests, and available storage media tech. Customers bring their own devices (Laptop, phone, or tablet), storage mode (portable usb drives, disk-based hard drives, or solid state cards), or buy storage formats (cd-r, dvd-r, or hard drive).

Transfer rates for many of those aforementioned modes were quite slow, and as such it was common for receiving mediums to be left behind to be picked up later, after customers' daily work or errands. Informal practices were nearly universal across the multiple shops I was allowed to linger, with prices adjusted or fully waived for friends and family. Robust secondary and tertiary layers of course exist in this distribution chain, as content from the paquete finds its way onto shared LAN networks in urban neighborhoods or transitions into a freely exchanged commodity inside buildings and shared households. In one of my shared living spaces, weekly paquete folders were exchanged in a barter system between roomates, with one exchanging laundry duties for access to the shared video recordings of world cup games.

By the interval that I'd begun spending full days in the paquetero shops in 2016, most customers had stopped perusing the individual media selections, opting instead to pay full price (several CUC) to update their weekly folders of films, TV series, News, or Sports to its most current iteration. This transition, according all shopkeeps I interacted with, marked a gradual shift over just a few years as the price and availability of larger digital storage media shifted. Many customers were also comparatively flush in spaces like Havana compared to years prior, where an upsurge in U.S. tourism invigorated particular sectors. Virtually all of these storefront vendors[182] had increased steadily in business as the decade progressed, despite the ubiquity of mobile paquete vendor proliferation occurring simultaneously[183].

The paquete network spread across the entirety of the island country, an eventuality growing out from the success of smaller, regional networks using earlier tech in the mid to late 2000s. Versions of Havana's extensive LAN "S-Net" (Street Net) existed in more diminutive scales across cities like Camagüey and Cienfuegos, using the linked computers as means to share media similarly. Notably, two interviewed "humanitarian" workers operating out of a prominent foreign embassy in Havana (circa 2007, now employees at Google, and very much wishing not

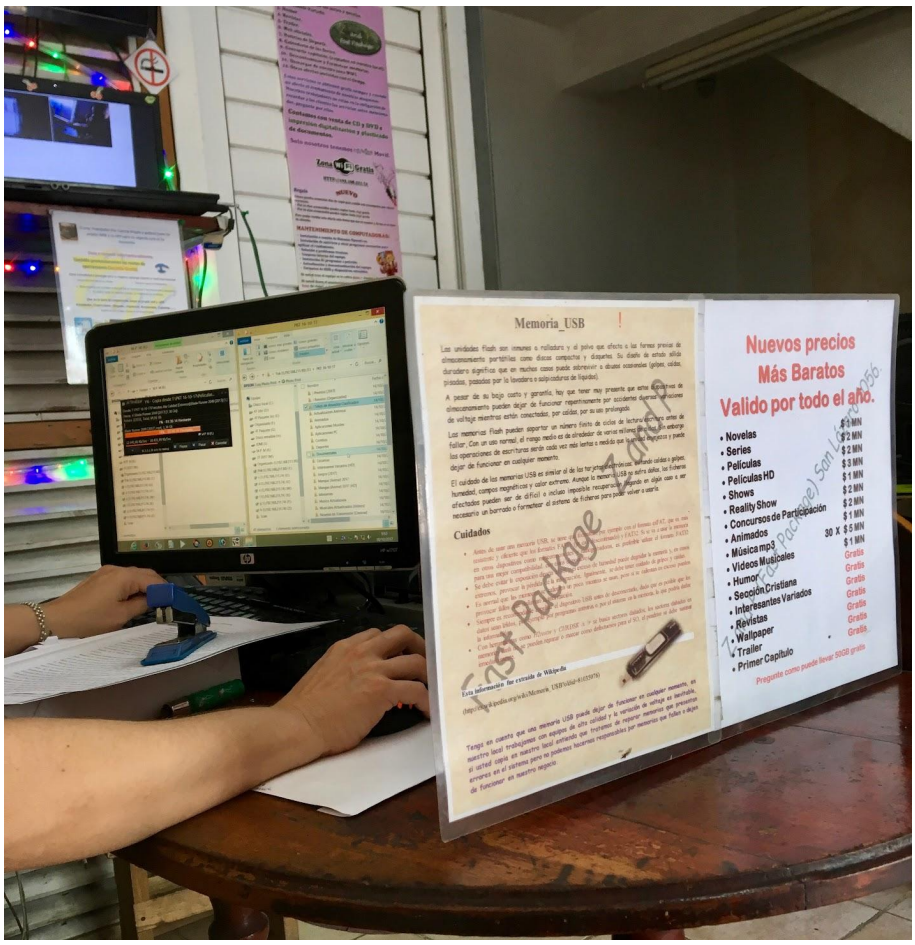
[182] A dozen vendors were frequented with return visits over the course of this fieldwork, across multiple cities (and one more rural space). Three of these Paquetero shops eventually allowed me extended stays in the space, interacting with them and customers. Multiple paquetero couriers were also interviewed as a means to inform this work.

[183] Humphreys, Laura-Zoë. *"Utopia in a Package? Digital Media Piracy and the Politics of Entertainment in Cuba."* boundary 2 49.1 (2022): 231-262.

to be named), relayed stories of organized operations to distribute foreign media via the first waves of USB flash drives.

By the mid 2010s, the paquete system was easily pushing upwards of 2 Terabytes of content weekly across the island - a system maintained[184] by three distinct but overlapping teams, all covering wide swaths of Cuba. Compiled across a range of methods including: “mulas” (mules) traveling with stored content from Miami[185], usage of higher-speed connections at schools and government facilities, clandestine satellite connections, and plenty of usage of the same ETECSA networks as the rest of the population, the top-level of the paquete system employs dozens to assemble the product each week. A second layer of couriers (including many public transportation workers) bring the paquete across each region at the start of the week, distributing to larger nodes that pay between 15-20 CUC[186] - the traveling couriers or shop-level vendors. Excepting national-level emergencies[187], this weekly cycle has operated without ceasing for over a decade.

[184] Harris, Johnny. “*This Is Cuba's Netflix, Hulu, and Spotify - All without the Internet.” Vox*, Vox, 16 Nov. 2017, https://www.vox.com/videos/2017/11/16/16658322/cuba-paquete-internet-netflix.
[185] Cearns, Jennifer. "The “Mula Ring”: Material Networks of Circulation Through the Cuban World." The Journal of Latin American and Caribbean Anthropology 24.4 (2019): 864-890.
[186] Indicative of the 2017-2018 rate
[187] Catastrophic Hurricane Irma in September 2017, for example, played a role in delaying the otherwise steady pace of the paquete.



Paquete Vendor (Paquetero) at work in a smaller town just outside Havana, with policies and prices at display. This particular workflow prioritizes and recommends a practice of buying/refreshing particular folders of media on a reusable flash drive, with many customers coming back to do so every 2 weeks or monthly. Photo by the Author, August 2016.

"Piracy", as it is understood in the United States (and much of the so-called "free-market" economies of the world), is not the proper framing for Cubans or their reasoning for their tentative secrecy. While framing it as a completely unknown concept would be overstating the case (nearly everyone I asked as a consumer or purveyor of the paquete was aware that media ownership and duplication functioned differently elsewhere) the act of copying media simply does not hold equitable contours of significance in Cuba. Never truly operating

under enforced[188] copyright regimes following the revolution - the intellectual, creative, and legal schemas of copyright are blurry understandings in every practice that have no real bearing on everyday life. In the following, Laura-Zoë Humphreys concisely tracks[189] developments (and motivations) for policy shifts in copyright since the 1980s:

> *As Cuban musicians acquired international fame in the late 1970s and a 1988 amendment to the US embargo made it possible for artists to earn royalties in that country, a number of Cuban artists joined foreign copyright societies such as the Spanish Sociedad General de Autores y Editores (SGAE) in order to col- lect earnings abroad. In 1986, the Cuban state established its own copy- right collecting agency, the Agencia Cubana de Derecho de Autor Musical (ACDAM), and, in 1994, the SGAE opened up an office in Havana to facili- tate interactions with their growing Cuban clientele.*
>
> *In the 1990s, meanwhile, Cuba made further adjustments to its national copyright law, working to bring it in line with international standards as part of an effort to attract foreign investment following the collapse of the Soviet Union. In the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) culminating in 1994, ratification of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) was established as a prerequisite for member- ship in the World Trade Organization (WTO) as a result of intense lobbying by the United States government at the behest of its music, film, software, and pharmaceutical corporations and against vocal criticisms about the potential impact of TRIPS on developing and Global South nations. In 1995, Cuba thus became a signatory of TRIPS when it joined the WTO, and in 1996, it signed on to the Berne Convention. The ACDAM subsequently entered into agreements with collection societies around the world and, along with other agencies and institutions on the island, has been active in efforts to educate Cuban artists, institutions, and small businesses in copyright law.*

Humphreys goes on to detail the means by which - despite accruing deep ties to international institutions signifying the recognition and enforcement of copyright regimes - Cuban TV and film industries themselves (and in parallel, the population by other means) continue to utilize piracy in the absence of funds, a moral significance, or criminalized deterrent.

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[188] Moore, Robin D., and Robin Moore. Music and revolution: Cultural change in socialist Cuba. Vol. 9. Univ of California Press, 2006.

[189] Humphreys, Laura-Zoë. *"Utopia in a Package? Digital Media Piracy and the Politics of Entertainment in Cuba."* boundary 2 49.1 (2022): 231-262. Pg 241.

Rather than the potential and realized legal troubles from sharing duplicated media forms one might feel elsewhere, restriction takes the form of government expectations in "appropriate" media. These expectations have been found repeatedly[190] to be voluntarily enforced[191] by the paqueteros, purportedly without any direct intervention by the state. Certain genres, such as the pornographic or directly "political" are avoided in the name of keeping the paquetero system running without the spectre of government-involved interruption. Perhaps too vulgar to be understood one-dimensionally as "censorship" (the term itself a conceptual outgrowth of overly simplistic conversations surround "freedom of speech" that never has been), the Cuban government clearly acts out of both self-interest in dominating the public discourse towards revolutionary aims, while also gatekeeping culturally.

Not simply the (admittedly subjective category of) pornographic material but also historically an antagonistic relationship with reggaeton[192], hip-hop more broadly, and representations of queer culture - show the government as having an uneasy relationship with certain forms of content. Practices dating prior to the paquete (and continuing throughout its rise) show alternative channels for viewing this "banned" material remain readily available[193]. A mixture of declarations from prominent government figures and direct, policed interventions - it is clear the Cuban state sees culture, politics, and mass media as intertwined - and therefore in the interest of the state to manage. The questions that remain then around the murky politics of state curation of information, revolve around the feasibility and potential consequences of that management, not to mention the populations' faith in state intent.

Rebecca Gordeon-Nesbitt's work[194] *To Defend the Revolution is to Defend Culture* is edifying in this regard:

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[190] Köhn, Steffen. "Unpacking El Paquete." *Digital Culture & Society* 5.1 (2019): 105-124.
[191] Pertierra, Anna Cristina. "If they show Prison Break in the United States on a Wednesday, by Thursday it is here: Mobile media networks in twenty-first-century Cuba." *Television & New Media* 13.5 (2012): 399-414.
[192] Boudreault Fournier, Alexandrine. "Positioning the new reggaetón stars in Cuba: From Home Based recording studios to alternative narratives." *The Journal of Latin American and Caribbean Anthropology* 13.2 (2008): 336-360.
[193] Rodríguez, Fidel A. "Cuba: Videos to the left–circumvention practices and audiovisual ecologies." *Geoblocking and Global Video Culture* (2016): 178-89.
[194] Gordon-Nesbitt, Rebecca. *To defend the revolution is to defend culture: The cultural policy of the Cuban revolution*. PM Press, 2015. Pg 327.

"...We have seen how, in pre-revolutionary Cuba, artists and writers tended to assume a critical stance in response to tyranny and injustice. When the revolution triumphed, creative practitioners were encouraged to set aside their dissent in favour of consent. Maintaining a critical stance, intellectuals understood that it would not be enough to identify past mistakes or question existing reality. In accordance with Hegel's theory of absolute negativity, positive emancipatory visions of the future were taken to rely on achieving a negation of negation….

This was accompanied by an acknowledgment, on the part of the revolutionary government, of the continued need for intellectuals to undertake self-reflexive critique and to cultivate the critical abilities of the people. In this way, the dialectical nature of critique was embraced, in anticipation of a cultivated and educated people capable of forming opinions about social reality in constant flux."

Meanwhile in the U.S.: as the phenomena of the paquete gained more and more coverage for its novelty ("The Internet on a flashdrive", "Cuba's USB Netflix", etc), it was also positioned as subversive act, utilizing a dominant U.S. perception of the heavy-handed Cuban government. Salivating coverage, like a piece printed in Forbes[195] in 2015, actively imagine the myriad ways impish, "modernizing" technologies like the paquete act contra the control of the aged, stale communist guard. But the truth was much more complicated.

Both in public and private over the last decade, debates simmer within Cuba on the consequences the paquete leaves in its wake. Perhaps learning from an earlier, embarrassing attempts to legislate the proliferation of reggaetón in Cuba[196], overt national-level government action upon the paquete has been virtually nonexistent. Abel Prieto, having served multiple lengthy terms as minister of culture admits[197] a kind of defeat in prior government approaches in this realm - speaking to the National Union of Writers and Artists in 2014:

" ...I have come across people, all of them revolutionaries, some professionals with a high educational level, who watch and enjoy these programs;

[195] Helft, Miguel. *"No Internet? No Problem. inside Cuba's Tech Revolution.*" *Forbes*, Forbes Magazine, 23 Mar. 2016, https://www.forbes.com/sites/miguelhelft/2015/07/01/no-internet-no-problem-inside-cubas-tech-revolution/.
[196] Boudreault Fournier, Alexandrine. "Positioning the new reggaetón stars in Cuba: From Home Based recording studios to alternative narratives." *The Journal of Latin American and Caribbean Anthropology* 13.2 (2008): 336-360.
[197] OnCuba Writing. "Abel Prieto Se Refiere Al Paquete Semanal." *OnCubaNews*, 30 Sept. 2018, https://oncubanews.com/cuba/economia/abel-prieto-se-refiere-al-paquete-semanal/.

some say to entertain me, to disconnect, television does not entertain, if there was something better I would watch it... they do these analyzes and it may be that they are even somewhat right… I am not saying that it must be prohibited, I believe that the path is not, of course, to prohibit the Package. We already know what happens when you prohibit things… they are the result of mistakes made by our educational and cultural institutions and our media. We have not yet been able to create that cultured and free people of Martí."

Minister Prieto's comments ring true to the widespread sentiments expressed by fieldwork interviews conducted with consumers: a boredom with the quality of state provided television and radio, a perception of the quality of international media production, and a strong desire for media for the sake of entertainment, rather than ideological enrichment.

Paqueteros and consumers both relayed concerns about what the spread of the paquete foretold culturally in Cuba, with the implicit pivot away from the paternalism of state curation in both rigid and softer forms. One older paquetero shop-keep interviewed expressed a longing for the days in which ICAIC (The Institute of Cuban Cinematographic Art and Industry) loomed larger in the international conversation of film, and a perception that the footprint of "*arte intellectual"* in Cuban life was on the wane. Feelings were mixed as to the progression of things as positive or negative, but *"simplemente asi" (merely so).* Outside Havana, two paqueteros relayed stories of early 2010s harassment from their local Committee for the Defense of the Revolution (CDR) heads, and accusations of contributions to either subversive activities or a kind of *"decadencia cultural" (moral decay).* These tensions quickly cooled, with the paqueteros left to their own devices and one of them notably incorporating weekly stops to the very same CDR's office less than a year later.

Arriving in country first in the early 2010s, and with my research at the time mostly dependent on English language media, it was hard not to notice that much of the public[198] discourse about Cuban digital networking was rather about the "lack" thereof. It focused on difficulty of connection, upload/download speeds, and access stratified by high costs and low

[198] Chapter 2, Chapter 4

average wages. Yet speaking to international mass culture - there was virtually no lag discernable in the major cities. Bad Bunny and Beyonce songs rang out from rooftops the same week of their releases, massive international theatrical film releases like *The Dark Knight Rises* or *The Avengers* appeared as promoted digital files for less than a dollar within a month of their premiere. As *Halt and Catch Fire*, a multi-season dramatization of the a nascent U.S. internet infrastructure aired in the mid-2010s back in Oakland - I was able to recommend the show to interested interlocutors, with ready knowledge of its availability via the neighborhood paqueteros.

The paquete represents a *progression* of media duplication practices, rather than a wholesale aberration, taking into account the multiple, decades long bursts of media duplication mechanisms and vines in Cuba . Alongside longstanding practices of smuggling media (pornography, banned books, un-sanctioned films, etc) out from under what has been at times - a fairly intense government interest in controlling of such things. The trade embargo waged against Cuba by the United States has often worked hand-in-glove with the revolutionary governance in Cuba to ultimately restrict the mode and content of information (entertainment or otherwise) available to ordinary Cuban people.

By the early 2010s across in cities in Cuba, it was already hard to make the case that this trend of (relative) media scarcity in Cuba was continuing against the tides of hardware proliferation. Regardless of the state intentions or the egregious "successes" one might argue the U.S. trade embargo has imposed upon the everyday people in Cuba, options to consume and distribute were multiplying. Smaller and cheaper storage options, alongside screens and various small processors (smartphones, netbooks, inexpensive desktop systems, etc) were trickling, then steadily flowing in. To be sure, there are forms of material scarcity in Cuba as compared to much of the Global North, but hardly a complete vacuum of media access or exposure as when contrasted to much of the remainder of the world.

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Chapter 4:

Media Ethnography for National Morale: Complicities and Inertias in Anthropological Attention

Abstract:

This chapter draws from ethnographic and archival research to excavate significant ideological underpinnings to contemporary renderings of network cultures in the Global South. Highlighting the role of prominent anthropological thought during World War II and the entanglements of communications into a technoscientific post-war order, I seek to implicate these renderings of media in the global south as complicit in modes of control exercised through U.S. foreign policy in the 20th century. I present research regarding the Margaret Mead and Gregory Bateson- spearheaded "Committee for National Morale", explicating the role of my disciplinary forebears. In doing so, I hope to elucidate the means by which we (as both a disciplinary and a Western "we") have arrived at the now common figures of "open" and "closed" media systems through now configurations of "culture" through ICT as an efficacious hegemonizing force.

Excavating

This chapter arose out from a need to better contextualize and engage the ideological formations haunting the process of media-oriented anthropological fieldwork – those that arise at least in part from the ethnographic act of telling and thinking through stories[199]. What am I, as an ethnographer of ICT technologies arriving from the United States, bringing to bear upon my renderings of these telecommunications infrastructures in Cuba? What understandings undergird this type of work, or across different registers: how might we excavate some of the contemporary assumptions underlying "our" narratives of techno-social media formation in the elsewhere of the Global South that this type of work often occupies? What histories and inertias are ethnographers of media bringing to bear upon observations and their reporting?

[199] "Karst" for example, from chapter 2 of this dissertation

Long-established feminist critiques of knowledge production and disciplinary boundary are drawn from: decades ago Haraway's *Situated Knowledges* implored the adoption of intellectual practices containing *"radical historical contingency for all knowledge claims and knowing subjects*[200]*"* and a recognition of our own "*'semiotic technologies' for making meanings*". Lucy Suchman, in an essay[201] utilizing Haraway's *Situated Knowledges* as launch point continues this discussion about dislodging hegemonic objectivity, stating outright:

> *"The feminist move in particular reframes the locus of objectivity from an established body of knowledge, not produced or owned by anyone, to knowledges in dynamic production, reproduction and transformation, for which we are all responsible.* ***These reconceptualizations of objectivity are particularly relevant for our thinking about technologies, insofar as technologies comprise the objectification of knowledges and practices in in new material forms."***

Specifically locating "technology" as one particular locus of possibilities for a feminist techno-social intellectual practice, Suchman conjures an analytic space robust in that the knowledges actively constructing them may be more readily embodied in material (and therefore the reader may glean, more observable) forms. This chapter aims to partially dislodge the prevailing Western "essential truths" of media formation (it's *"god trick"*, in Haraway parlance) by highlighting their role in imperial, militaristic power formations over the course of the 20th century. How might we come to read materials (like the aforementioned Karst-based wifi reflector that sets chapter 2 into motion), as not somehow *outside* those held western "truths", but alongside them?

Interrogating the contexts of global tech-lead development is one path in doing so. As competing projects from Google, Facebook, and a consortium of other tech interests race to lay the infrastructure necessary to deeply envelope the globe in their networks – what type of market and ideological relations come bundled in those endeavors? Further - how might one from the Global North arrive at notions relating individuals and their various "freedoms" (market, civic,

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[200] Haraway, Donna. (1988). "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies*, vol. 14, no. 3, 1988, pp. 575–599 (pg 579)

[201] Suchman, Lucy. (1994). "Working Relations of Technology Production and Use". Computer Supported Cooperative Work (CSCW). Vol 2, 1994, pg 21.

or otherwise) to their media environs? Anthropologists Jean and John Comaroff complicate[202] this question of "objectivity" further: How might we begin to envelope (or even start from) the non-western empiricisms of other places and peoples?

> *"These other worlds, in short, are treated less as a sources of refined knowledge than as reservoirs of raw fact: of the minutiae from which Euromodernity might fashion its testable theories and transcendent truths. Just as it has long capitalized on non- Western 'raw materials' by ostensibly adding value and refinement to them... What if we posit that, in the present moment, it is the so-called 'Global South' that affords privileged insight into the workings of the world at large?"*

From these interventions, the audience and the author might hopefully begin to view askance that opening ethnographic vignette. From (and to) where does one's attention and latent interpretation derive during reception of this story? Where and what are you caught by? Are the interpretations (yours) the same as the subjects of the narrative (theirs)?

What to do then, with the seeming heroics of clandestine, questionably legal internet fabrication? Or the ingenuity of those engineering through/despite scarcity? The "hacker" vs the overbearing state? The white male anthropologist's reported "risk" versus[203] those he's engaging? The seemingly impossible-to-avoid moral renderings through which a state(s) might impede individual "rights" towards communications with one another, with those at a global scale? What becomes "refined" to/from the Global South as I relay stories of internet connection in Cuba?

My ethnographic research in Cuba has thus far been amongst the ways network cultures become narrated, fabricated, and given meaning in the various contexts of Cuban technological practice, with the medium transitions from relative cultural scarcity to relative cultural ubiquity. The sites of inquiry have included those participating in massive local area networks (LANs),

[202] Jean Comaroff & John L. Comaroff. (2012). Theory from the South: Or, how Euro-America is Evolving Toward Africa, Anthropological Forum: A Journal of Social Anthropology and Comparative Sociology, 22:2, pgs 113-131

[203] Referencing the legal/political consequences for my interlocutors, possible legal consequences for myself (also see U.S.A.I.D. contractor Alan Gross's 2009-2014 imprisonment). There is a long and storied history of international researchers running into legal/diplomatic trouble on the island.

"sneakernets" distributing media diets to millions via ferried hard drives[204] , a nascent Cuban start-up scene, and families newly leaning on emergent ICT practices to tend social relations across physical distance and heavily politicized borders.

Many of these technological formations are in turn interpreted by their Cuban users/builders as entirely banal – products of the structural conditions they're enmeshed within. And yet, audiences at conferences across the United States seem transfixed by tales of "innovative" Cuban workarounds I've witnessed during fieldwork. What to make of reactions received from outside audiences towards tale of Cuban technological feats not syncing with my interlocutors' own understandings of their practices? What precisely *is* remarkable here, to whom, and why? What was being reinforced here, what is the triumph, and where is the banality? Just how had it become *so* easy to cheer for some micro-vanguard of networking practices at the perceived hinterlands of a vast globalized system?

This subject for graduate fieldwork is among those rare anthropological subjects not especially difficult to churn into interest for audiences outside of academia – the topic has "gone public" at a steady hum throughout the last decade of fieldwork. Countless breathless pieces of journalism devoted to the shared subject over the last few years. How to locate the space between coverage via *Vox.com* or *Vice* of these network digital practices and the North/South gaze on display in Dennis O'Rourke's canonical documentary *Cannibal Tours?* What is on view, what is up for consumption, and what is the audience reflecting ideologically from the encounter?

Some histories of these modes of thinking are needed here – exhuming our predictions towards network cultures, of concepts linking public spheres, individuals to media form, cultural research to mediated identity. Fred Turner's historicizing work in *The Democratic Surround*

[204] Dye, Michaelanne, David Nemer, Josiah Mangiameli, Amy S. Bruckman, and Neha Kumar. (2018). "El Paquete Semanal: The Week's Internet in Havana." In *Proceedings of the 2018 CHI Conference on Human Factors in Computing Systems*, p. 639. ACM.

(2013) weaves together some of these seemingly varied threads, detailing the rise of a particular "surround" information aesthetic in the United States during the run-up to direct involvement in World War II. Turner's media "surround" aesthetic imbricates Western and liberal politics of participation in a public sphere alongside a perception of liberty vis-à-vis presumed individual agency, and bears a striking resemblance to the "open" relations often ascribed to the internet as those in the Global North come to know[205] it.

Most important to the 150 pages of work that precede this - Turner directly implicates some of the most notable 20th century cultural anthropologists in developing and promulgating this ideological constellation as part of a quietly organized para-governmental workgroup. Margaret Mead, Gregory Bateson, and Ruth Benedict, together responsible for some of the most deeply cited and publicly known anthropological work ever produced, are all intimately involved in this process. Drawing from and often extrapolating their anthropological work as means to contribute conceptual policy recommendations – the intellectual lineage of *The Democratic Surround* begs the question of how the cultural anthropology of the time may have steered media conceptualizations for decades to come. As means to reckon with this intra- disciplinary conceptual heritage, I spent two weeks in the Margaret Mead archive[206] at the U.S. Library of Congress, sorting through the largest available collection of material regarding the Committee for National Morale.

[205]This is not to claim here that tracing the paths of these particular ideological matrixes between computers, network cultures, notions of "freedom", "democracy", and utopian rebellions – is a wholly original scholarly pursuit. I am gesturing broadly to an established discourse, but working *directly* through the ideas of Fred Turner, Lilly Irani, and Chris Kelty in this piece.

[206] Formally called the *Margaret Mead Papers and the South Pacific Ethnographic Archives* - the collection was compiled with the intention of the anthropologist to be preserved in posterity, and donated by her estate. It includes the vast majority of Mead's private correspondence and drafts, as well as a sizeable collection of Gregory Bateson's contemporaneous (and often collaborative) materials.

The Committee for National Morale

> *"Across the 1930s, committee members such as anthropologists Mead and Bateson had worked to show how culture shaped the development of the psyche, particularly through the process of interpersonal communication. In the early years of the war, they turned those understandings into prescriptions for bolstering American morale...they defined the "democratic personality" as highly individuated, rational, and empathetic mindset... they argued that the future of America's war effort depended on sustaining that form of character and the voluntary non-authoritarian unity made it possible. In their view, both individual character and national culture came into being via the process of communication."*
>
> *– Fred Turner, The Democratic Surround*[207]

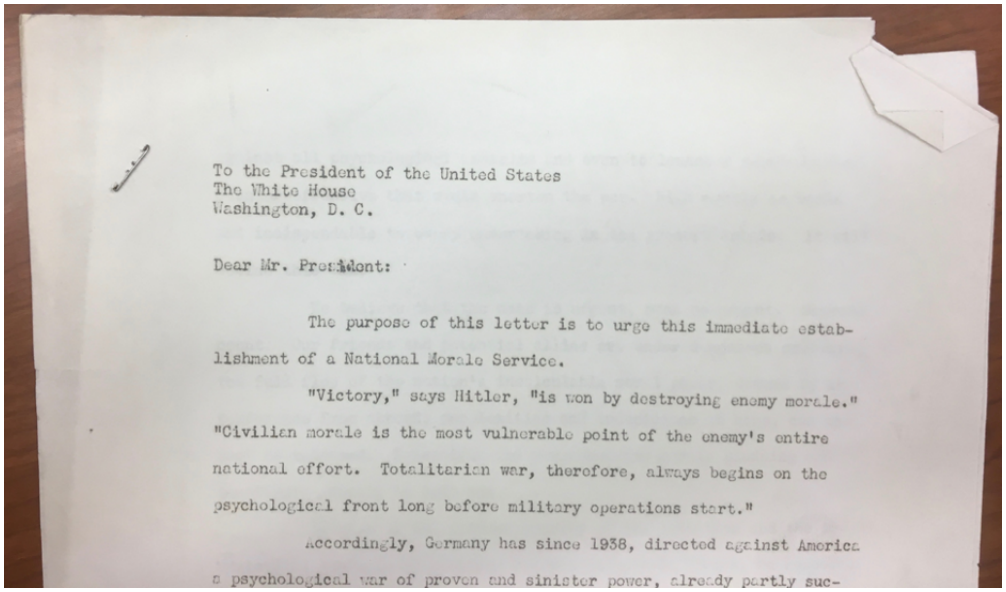
Some 75 years ago, Margaret Mead, Gregory Bateson, and Ruth Benedict met ongoing with a revolving group of prominent scholars as part of a federal-level executive branch directive called the *"Committee for National Morale"* (hereafter referred to as CNM). Though the group counted nearly 50 scholars as members, notes regarding meeting attendance, frequency of correspondence, and general output under the banner of the CNM suggest less than 10 individuals[208] were responsible for the group's core output. The umbrella of the CNM gathered together a cluster of elite social scientists and intellectuals towards a unique task: to "*analyze and promote national cultural efficiencies and social cohesion"* as the U.S. became drawn into WWII. Margaret Mead and Gregory Bateson were by far the most active writers and managers in the group: the Mead archives reveal them at the helm of organizing meetings, hiring supporting staff, building out the group's rolodex, and by the early 1940s - beginning to sell the importance

[207] Turner, Fred. (2013). *The democratic surround: Multimedia and American liberalism from World War II to the psychedelic sixties*. University of Chicago Press, 2013. pg

[208] It is abundantly clear from the archive that the group is *officially* convened by Arthur Upham Pope, but the driving inertia in the majority of writing, the overall conceptualization of purpose, and the bulk of interpersonal networking is a joint effort between Margaret Mead and Gregory Bateson. This can be most transparently inferred through the abundant early paper drafts, personal annotations, meeting logs, and personal letters from these years. The committee appears to be Pope's intention and initial spark, with an overwhelming bulk of the day-to-day labor (both logistical and intellectual) then left to Mead and Bateson.

of this nascent cluster of specialists to any type of government, academic, or social group that would have them.

A phalanx of prominent U.S. intelligentsia specializing in cultural systems, social psychology, and national character, the CNM's explicit goal was to articulate and promote their perceived linkage between nation-states' macro cultural threads and their citizen's civic character. Their aim was three-fold: to identify hallmarks of positive/negative morale in the United States, to design social feedback systems as a means to promote ideal forms of cohesion, and counsel on means to export these systems globally in the name of international/domestic stability. Turner argues for the significance of the group in setting these policies during what would become the reconstruction of Europe, the ensuing Cold War, and countless other extensions of U.S. hegemonic power for decades to follow.



To the President of the United States
The White House
Washington, D. C.

Dear Mr. President:

The purpose of this letter is to urge this immediate establishment of a National Morale Service.

"Victory," says Hitler, "is won by destroying enemy morale." "Civilian morale is the most vulnerable point of the enemy's entire national effort. Totalitarian war, therefore, always begins on the psychological front long before military operations start."

Accordingly, Germany has since 1938, directed against America a psychological war of proven and sinister power, already partly suc-

Fig 1: Committee Letter, 1940, opening lines of communication between the executive branch and the Committee for National Morale (Margaret Mead Papers, 1940). Addressing "To the President of the United States, White House, Washington, D.C."

For several years, the CNM published topical reports, broad analysis, and targeted memorandums regarding what were explicitly labeled as propaganda strategies - encouraging research broadly amongst all the members on the topic of national "morale". The project built upon both established and emerging 20th century anthropological, sociological, and psychological empiricisms, extrapolating theoretical correlations between societal coherence, nation-state efficiencies in a global conflict, and the cultural processes steering civic ideologies.

> *"High morale shows itself by enthusiasm, confidence, teamwork, endurance... In essence morale is a state produced by a clearly envisaged value of such commanding power and authority that it evokes all the capacities of a man or a group, fusing them into an intense and durable emotional and ideational unity that increases, sustains, and organizes all effort."*
>
> *– 1941 correspondence sent from CNM member Arthur Upham Pope to Margaret Mead (*Margaret Mead Papers, 1940)

The Mead archives reveal a range of activity from detailed linguistic analyses of Hitler's speeches, case files on social movements in France, China, Germany, and Japan, and plans to promote U.S. homogeneity of ideology through popular song, radio programs, and large-scale participatory public expositions on democracy. Throughout it all, the figure of "morale" stands in as a kind of barometer: linking a perceived ideal citizen to the ability of the nation- state to achieve its goals. The CNM analysis commissioned by for the Office of Strategic Services (the main predecessor of the Centralized Intelligence Agency in the U.S.) takes a deeply relativist positioning, advocating for a individualist, choice-foregrounded approach to U.S. morale. This, according to the CFN, is justified not via any ethical claims towards the importance of rational liberalism or any confabulation of "democracy", but in the belief that it was more in keeping with already-present U.S. cultural "character".

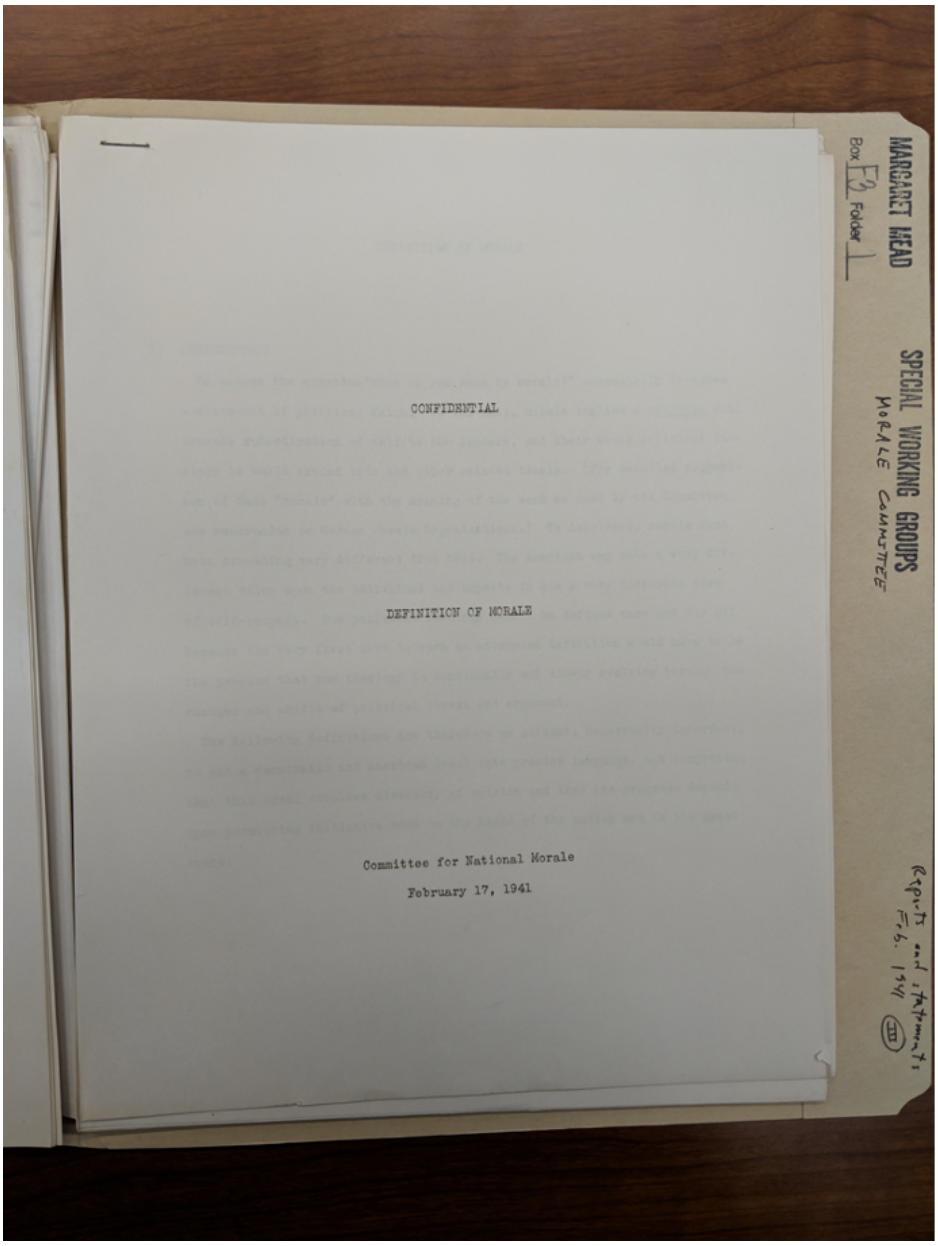


Fig 2: "DEFINITION OF MORALE" - Committee document outlining U.S. morale in contrast with other nations and cultures (Margaret Mead Papers, 1941)

A committee-authored file, conveniently marked DEFINITION OF MORALE, reads:

> *"To answer the question 'what do you mean by morale?' necessarily involves a statement of political faith. To the Nazi, morale implies a positive will towards subordination of the self to the leaders, and their whole political ideology is built around this or other related ideals... To Americans, morale must mean something very different from this. The American way sets a very different value upon the individual and expects in him and very different sort of self-respect. Out political ideology cannot be defined once and for all because the very first term in such an attempted definition would have to be the premise that our ideology is continually and slowly evolving through the changes and shifts of political stress and argument."*

Later, in a paper labeled THE PROMOTION OF MORALE, after an extended rumination on the nuances of the term "propaganda", the authors use the following framing of intention:

> *"...the whole business of influencing people has very different psychological laws according to the frame of mind in which we set to work. If like the advertiser or the propagandist, we believe that we know how the machine works and we can tamper with it, we shall get one sort of result, and this result will differ from the spontaneity upon which a healthy morale must build.*
>
> *The committee has therefore arrived at a use of words somewhat different from of (sic) Propaganda Analysis. We use "propaganda" for those manipulative techniques which end in disillusion and "morale building" for healthy methods which develop spontaneity rather than apathy."*

The committee, with Mead and Bateson as their foremost authors and thinkers, set forth in solidifying a conceptualization of the ideal U.S. subject – a person not steered by a uniform set of ideas, but rather of an individual enmeshed within a multiplicity of discourses and choices, through which an agential navigation is linked the common goals of the nation-state. In contrast to perceived mono-directional form of social organization and communication forms in contemporaneous 20th century authoritarian regimes, the social cohesion of the United States was

posited to be a located through a near-universal vantage of possibility – a citizen invested in their respective nation by perennially narrated sense of choice and individual possibility.

The aforementioned group of anthropologists – Mead, Bateson, and Benedict - had unique stature and experience in the Committee for National Morale. In aggregate, their prior ethnographic work had furnished them ready-made for the wartime functions of conjoining national character to individual personality, with media relations a prominent[209] actionable item. It becomes clear through engagement with the archive's correspondence just how integral Mead and Bateson in particular were to this committee, personally choosing members through either explicit politicking (angling to be integrated into – or at least funded by - government intelligence) and/or fidelity to like-minded modes of thinking on the subject.

In retrospect, much of this directly aligns with established intellectual corpus: historians of the conceptual flows in mid-century social science should recognize these canonical anthropological figures heading into what would be the twilight years of holistic, structuralist renderings of culture. All three having collaborated with experimental, mediated ethnographic forms. Mead and Bateson in particular having already done work both explicitly and implicitly for U.S. intelligence[210]. These anthropologists were unique among the CFN group - not only due to the implied globalized contexts inherent to anthropological practice, or for how culture writ-large may vary across spaces and peoples as a system of cohesion, but for embodying the

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[209] Bateson and Mead had both engaged in prominent cultural anthropological experiments in film, photography. They had also just begun to consult and plan nascent immersive museum experiences at the time, work that would lead directly to informing the prominent "Family of Man" exhibition.

Bateson, Gregory, and Margaret Mead. *"Balinese character: A photographic analysis."* New York (1942): 17-92.

Mead, Margaret, and Gregory Bateson. *Trance and Dance in Bali. 1951.* Video. Library of Congress.

[210]David Price details the work of dozens of anthropologists working at the behest of the OSS (The direct predecessor to the contemporary CIA) during the war, several of them finding their way into the *Committee for National* - Gregory Bateson, in particular, having facilitated clandestine operations in North Africa and South Asia for the intelligence agency. Anthropology had, as much of the country, become swept up in some way or another adding aid to the war – ranging from translation to full-on consulting towards military procedures

Price, David, H. (2008). *Anthropological intelligence: the deployment and neglect of American anthropology in the Second World War.*

intra- national power structures that ethnographic translations between a Global North and South inherently carries with it.

The work of the committee truly blooms early in wartime, building on the domestic deployment of these ideas. Public missives from members and internal written reports ("gray" documents like memorandums, letters between departments, white papers, etc) saturate the available archival material at this juncture, making clear the CNM was operating at a peak capacity. The committee becomes flush with publications under its banner, meets regularly, and is commissioned broadly across federal intelligence and military agencies for years, long after the war concludes.

> *Since mass media prevented precisely the sorts of encounters with multiple types of people and multiple points of view that made America and Americans strong, the shoring up of the democratic personality would require the development of new, democratic modes of communication. For that reason, members and friends of the committee advocated a turn away from single-source mass media and toward a multi-image, multi- sound-source media environment...In place of instrumental, message-driven modes of communication, they developed a theory of what I will call surrounds – arrays of images and words built into environments"*
>
> *- Fred Turner, The Democratic Surround*

The Committee for National Morale had successfully cohered an actionable media aesthetic dialectically counter-posed to the opposing WWII unilateral propaganda machines. They advocated to both differentiate and represent the U.S. character as individualistic and national all at once. The unidirectional, monolithic mass media forms of Hitler, Mussolini, and Stalin, then paired with the fascist tendencies feared in an *overly unified* ideological population provoked anxiety amongst entrenched government figures and liberal academics alike. A fractured pluralism, regardless of the varied nature of those political formations, quickly became preferable to the conservatives and liberals alike.

Contemporaneously, Mead packs her widely read book[211] *Keep Your Powder Dry (1942)* [212] with linkages between claims of "national personality" endemic to the United States and its corresponding media forms[213]. The conceptual connections expand further into public U.S. consciousness through explications by the equally well-read Marshall McLuhan inside his influential treatise on the meanings of media, *The Mechanical Bride (1949)*[214]. Outside of the author himself, Mead is the second most prominent voice in that book, a pattern that continues into subsequent publications[215]. Conservatively estimating, tens of millions of readers became exposed to these ideas through some of the most widely read and discussed public intellectuals of all time.

Bateson and Mead continue working together, designing multimedia explorations of American culture meant to be experiential proto "happenings" in surround. They mixed sound, film, photography, and for its time, a relatively maximalist aesthetic approaches in commissioned Museum of Modern art exhibits. These would be later iterated and expanded upon by the hugely successful touring *Family of Man* exhibit[216]. Turner's analysis finds these forms and their content directly linking to rise only a few years later of performance art, the reclamation of public spaces in the "free speech" movements in the mid 1960s United States. Ultimately, and most important to work regarding the social perception of media formation: that the aggregate of Mead and Batesons's activities are driving force behind the dazzling constellation of media "surround" exploding in the United States, as compared to the unidirectional broadcast movements of adversaries like the USSR or China. The impact of these ideas is potentially tremendous and ongoing, but their tenure at the forefront of their deployment is short-lived.

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[211] Easily one most successful publications to emerge from the field of anthropology in terms of both cultural footprint and publication figures. The book has run 12 editions with over 20 million published copies, a majority of which sold in the two formative decades during/after WWII.

[212] Mead, Margaret. (1942). *And keep your powder dry: An anthropologist looks at America* (Vol. 2). Berghahn Books.

[213] These are fully declarative, definitional accounts of a set of homogenous character traits to the U.S. citizenry, in support of moralized global war in which the U.S. emerges victorious - such as : *"The strengths and weaknesses of the American character, are the psychological equipment with which we can win the war"* - Margaret Mead*, Keep Your Powder Dry.*

[214] McLuhan, M. (1951). *The mechanical bride: Folklore of industrial man*. Vanguard Press.

[215] Cavell, Richard. McLuhan in Space: A Cultural Geography. University of Toronto, 2002. Pg 37.

[216] Turner, Fred. (2012). *The Family of Man and the Politics of Attention in Cold War America*

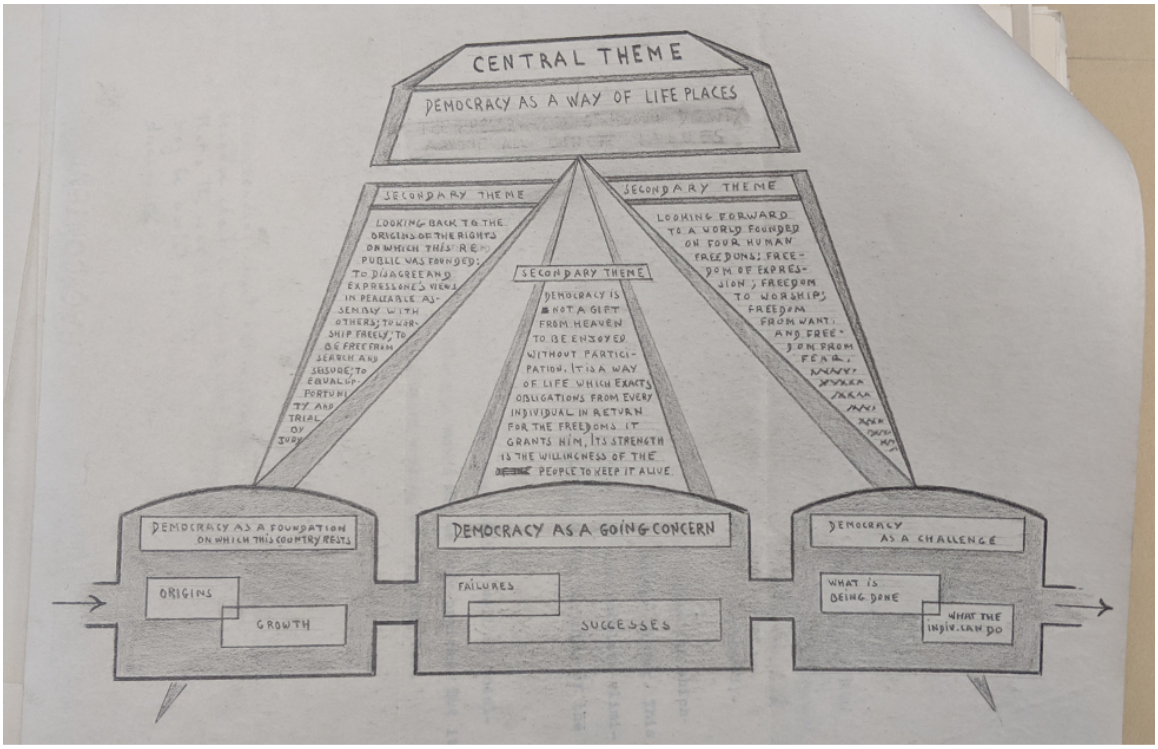

Fig 3: DEMOCRACY AS A WAY OF LIFE PLACES - Sketch by Margaret Mead of possible exhibition designs, to be used in order to promote space for U.S.-styled democratic values (Margaret Mead Papers, 1941)

The "Culture and Personality" school of anthropology eventually wanes[217] under the various fissures that post-structuralism incurs, undercutting the disciplinary weight of much of the CMN's published output in subsequent decades - but the conceptual framework had already made an indelible mark upon policymakers and those with hands upon cultural levers. The means by which these anthropologists explained the world, and explained the U.S. character to itself (by way of *othering* "closed" media systems) – remains entrenched. It echoes today across dominant schools of advertising, communications theory, foreign policy, and the dominant public-facing discourses of technology. The means by which national social psychologies and

[217] Kaplan, Bert (1961) "A Survey of Culture and Personality Theory and Research," in Studying Personality Cross-Culturally, ed. Bert Kaplan (Evanston, Ill.: Row Peterson), 9 – 90

media link to nation-state characteristics are based upon the long tail of canonical figures, texts, and concepts cannot be overstated.

What are the consequences to anthropology's entrance into and heavy guidance of these conversations? How have they shaped attentions both in and outside the discipline? As these systems of thought travel, which cultural values might be highlighted or effectively smuggled into spaces that they not been prior, easing and bolstering a rising tide[218] of U.S. dominion? As far as this author can tell, the explicit linkages between figures like Margaret Mead and Gregory Bateson, the U.S. state department's interest in foreign media structures, and the global flows of U.S. hard/soft power, have never explicitly been excavated. For those of "us" doing ethnographic fieldwork in media, computation, and ICT structures of the Global South, what complicities might we be working within? What of these inertias do we carry with us and iterate onto our audiences?

[218] Some of this is shared by other national projects at the time, and other overlapping concerns of social science at the time. *Mandarins of the Future* by Gilman lays out some other "modernization" schools of thought/disciplinary inertias also blossoming during this WWII moment as well (but does not touch on ICT/communications theory).

Gilman, Nils. *Mandarins of the future: Modernization theory in Cold War America*. jhu Press, 2003.

Anthropological Knowledge as Soft-Power, ICT as Development Paradigm

> *"One of the great hardships endured by the poor, and by many others who live in the poorest countries, is their sense of isolation. The new communications technologies promise to reduce that sense of isolation, and to open access to knowledge in ways unimaginable not long ago"*
>
> *- World Development Report (1998/1999, pg 9)*[219]

Anthropology's sometimes close proximity and outright collaboration with soft-power agencies such as USAID, SEADAG, or AACT following World War II is well[220] documented. The relations between professional anthropological knowledge production and global hegemonic forms continue in many explicit, applied forms, from the "cultural consultancy" programs deployed during the early years of the war in Afghanistan, to the "Human Terrain System" program developed post- 9/11. While pondering the historical roles this relationship may have had in structuring modes of thought as both a U.S. anthropologist and citizen, it is worth grounding that in poking at what the knowledges produced by the discipline may inflict in real time.

Anthropologist (and historian of Anthropology) David Price closes out *Cold War Anthropology (2016)*, a survey of relationships between anthropology and intelligence services,

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[219] World Bank and IMF reports explicitly shift around the mid-90s to include metrics towards adequate telecommunication infrastructures, signaling their role as a signifier of the "developed" contemporary economy.

World Bank. *World development report 1998/1999: Knowledge for development*. The World Bank, 1998.

[220]González, Gusterson, Price. (2009). Chapter 1. *The counter-counterinsurgency manual: or notes on demilitarizing American society*. Prickly Paradigm Press. Pg 8.

Hymes, Dell H. (1972) ed. *Reinventing anthropology*. New York: Pantheon Books, 1972.

Price, David, H. (2008). Anthropological intelligence: the deployment and neglect of American anthropology in the Second World War.

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Price, D. H. (2016). *Cold War anthropology: The CIA, the Pentagon, and the growth of dual use anthropology*. Duke University Press.

with an essay titled *"Did They Get What They Paid For?"* – asking the degree to which the direct applications of anthropological knowledge have even been useful, *especially* as contrasted to the soft-power impacts of large-scale knowledge production already in motion inside U.S. academia. The specter of clandestinely gathered cultural knowledge being used by national intelligence services is familiar to anthropologists who've been fortuitous to have been taught under rigorous, critical, self-reflexive scholars housed by cultural anthropology programs. What should we take to be the nature of this pervasive, ongoing interest in anthropological knowledge production, particularly among those doing fieldwork in nations the U.S. has historically antagonistic relations towards?

Price reminds us that the torrent of university funding released in the years following WWII was designed explicitly to enlarge the capacities for U.S. ideas on the global scale. These decades academic work fostered longstanding intellectual relations, carrying the echoes of U.S. epistemological values broadly in their form and content. Much of this knowledge, wittingly or not - becomes "duel-use" much the same as those initiatives explicitly labeled so in the life-sciences, beneficial to both academic/professional pursuit and government/military at the same time.

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What I am most curious about opening up here with a conversation between these moments is the intellectual lineage between ICT scholarship (particularly ethnographic), the growth of these networks into "modernization"/humanitarian discourses in the 1990s, and the rhetorics/expectations wielded by the United States against nation-states not conforming to so-called "democratic" forms of media (such as Cuba). Certain corners of academia has done work in the last two decades to enshrine scare quotes around the liberatory potentials of networked media, but also too often rely (this work included) on charismatic narrative characters as related to tech: the hackers, the patient-zeros of connectivity, those doing the configuring, and the capturing.

At this point in fieldwork, I've sat with folks from USAID, with NGOs working towards expanding internet access, with policy-makers allocating funds, and with the corporate managers of initiatives intended expanding internet forms into further corners of the globe. They *all* reiterate some version of this section's opening quote – a seemingly benign combination of political potentials, global capitalist integration, ICT infrastructure. Almost without fail, these same individuals reveal themselves eventually through rhetoric about "becoming modern".

There is a kind of two-step at work here: the familiar echoes of trickle- down economic theory combined with communications paradigms, a slight of hand blurring the space between access to markets, exploitable labor, and one's ability to participate in public speech, in politics - in a neoliberal global contemporary. Economic emancipation coupled with something else: a complimentary *social* liberation enabled in part, perhaps, by a prior generation of anthropology's conceptualizations linking people, "national character", and media form. Take, for example, this declaration from Hilary Clinton, acting as Secretary of State:

> "*A connection to global information networks is like an on-ramp to modernity. In the early years of these technologies, many believed that they would divide the world between haves and have-nots. But that hasn't happened. There are 4 billion cell phones in use today. Many of them are in the hands of market vendors, rickshaw drivers, and others who've historically lacked access to education and opportunity. Information networks have become a great leveler, and we should use them together to help lift people out of poverty and give them a freedom from want.*
>
> - Hilary Clinton[221], (2011)

The implication by Secretary Clinton (and countless others) assumes technologies and economic attendants as teleological, wielding unstoppable progressive momentum, ignoring the very designed contingencies surrounding the condition (and relative "success" of their spread. Neoliberalism and capitalism here become a kind of assumed eventuality, the technologically emboldened U.S. saddled alongside as great liberator – and those living outside access or at low

[221] Clinton, Hilary, "*Remarks on Internet Freedom*" (2011), Speech at George Washington University <https://www.youtube.com/watch?v=acDcUQoeFxY>

bandwidth outside ability to bask in its liberatory glow. Turner's "surround" here takes center stage in a form of (nearly always domineering) U.S. foreign policy, that the national character of the U.S., expressed through media form, might be exported to individuals elsewhere.

Many Cubans I speak with frequently use circulated understandings of the internet outside Cuba as a benchmark of what access *should* resemble, concurrently engaging in uniquely Cuban means of sharing data and communication with one another. The aforementioned varied Cuban internet practices present opportunities to conceive of *multiple* Cuban internets both conceptually and physically in the making – systems not quite separate from but certainly more discretely divided than much of the global North's more holistic conceptualizations of the internet's form.

Cuba has notably been host to an endless line of incursions from the United States into their media sphere: the practice of dropping anti-Castro pamphlets over Havana - in violation of Cuban airspace (and international law) continued for decades[222] following the 1959 revolution – finally spurring an international incident[223] in 1996. During the Reagan Administration, *Radio & Television Marti* were founded with ample allotment from the U.S. state department, stations explicitly built to broadcast subversive material from the Florida keys 80 miles south to Habanero televisions and radios[224]. The United States Information Agency (USIA) made frequent [225] covert efforts to distribute pro-United States films in Havana and its outskirts from the mid to late 1950s. In 2010 a USAID-funded project aimed to create a "fake twitter" app, designed to inspire and network[226] Cuban dissidents. In 2014, the national telecom ETECSA reported that

[222] Huling, J., & Zinn, H. (2011). *Corporate Media Bias and the Case of the Cuban Five*. *Censored 2008*. pg 219.
[223] Spector, J. (2001). The Cuba Triangle: Sovereign Immunity, Private Diplomacy, and State (In-) Action.
[224] Frederick, H. H. (1986). *Cuban-American radio wars: Ideology in international telecommunications*. Ablex Pub
[225] Hector Garcia Mesa, "Estructura del cine movil," *Cine y Revolución en Cuba,* Santiago Alvarez et al. (Madrid: Editorial Fontamara, 1975), 132
[226] Lewis, P., & Roberts, D. (2014) White House denies 'Cuban Twitter' ZunZuneo programme was covert.[Online] The Guardian, April 3.

SPAM texts – often "political in nature" from United States were overloading[227] their SMS servers.

These are not forlorn political terrains since the time of the Committee for National Morale, they are active spaces of tension, funding, and statecraft strategy on behalf of U.S. postcolonial formations. Presently, Cuba is fielding overtures from U.S. tech companies like Google[228] offering to build out an internet infrastructure on the island (for "free", depending on the report). These offers have been met with suspicion[229] of "*imperialismo cultural*" and so far, a near total refusal by the Cuban government to cooperate.

[227] Oppman, Patrick. (2014) "Cuba: U.S. Using New Weapon against Us: Spam." CNN.
[228] World Bank (1998). *World development report 1998-knowledge for development*. The World Bank, 1998. Zillman, Claire. (2016) "Obama Says Google Has a Deal To Expand Internet Access in Cuba." Fortune
[229] Romero, Yuniel. "*A Los Jóvenes, La Verdad Argumentada Y No El Dogma - Cuba - Juventud Rebelde - Diario De La Juventud Cubana."* (His comments about the internet, and possible forms of "cultural imperialism", are mid-interview)

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Huling, J., & Zinn, H. (2011). *Corporate Media Bias and the Case of the Cuban Five*. *Censored 2008*. pg 219.

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Margaret Mead Papers and the South Pacific Ethnographic Archives, Manuscript division, Library of Congress, Washington D.C. Box F2, Folder 1. Accessed Nov 2017.

Margaret Mead Papers and the South Pacific Ethnographic Archive. (1941). DEMOCRACY AS A WAY OF LIFE PLACES. Margaret Mead Papers and the South Pacific Ethnographic Archives, Manuscript division, Library of Congress, Washington D.C. Box F2, Folder 1. Accessed Nov 2017.

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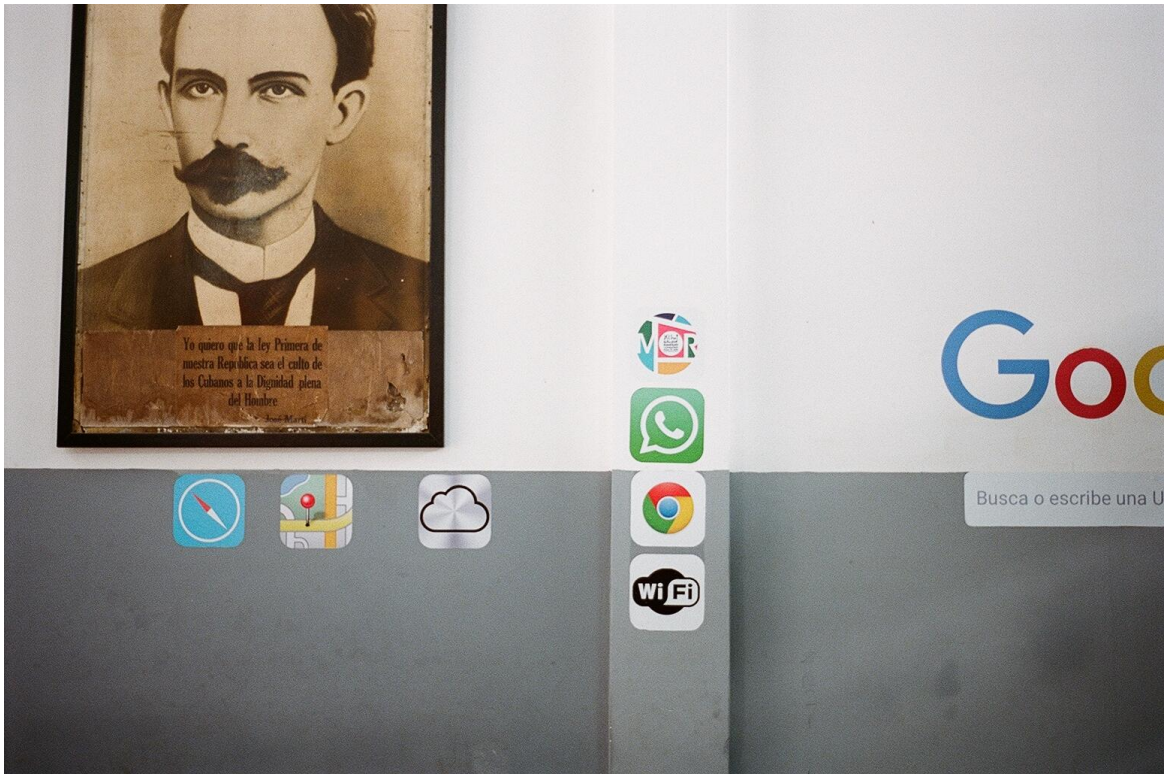
World Bank (1998). *World development report 1998-knowledge for development*. The World Bank, 1998.

Zillman, Claire. (2016) "Obama Says Google Has a Deal To Expand Internet Access in Cuba." Fortune



"Google Kcho Center", March 2017, Miramar Cuba - photo by author

Post-fieldwork, my mind drifts often to a photo taken during fieldwork, showing the interior of the "*Google Kcho Center".* Heralded as signifier of major rupture in the Cuban state's approach to U.S. corporate entry (and the internet at large), the center was purportedly[230] a "cutting edge" Google-sponsored hub just outside Havana, brimming with technology the Cubans lacked. Enthusiastic corporate press releases (and the U.S. journalists re-voicing them) claimed the center would have[231] *"the internet for free and at speeds nearly seventy times faster than what is currently available"*, as well as a host of contemporary Google products - ranging from laptops to virtual reality set-ups. It was hosted by sculptor Alexis Leiva Machado, also known as *Kcho*, and open to the public for free, five days a week, beginning in 2016. International news coverage positioned the *Google Kcho Center* as part of a flood of recent developments in Cuba, indicating a new wave of tech-enabled cracks in the perceived crumbling facade of Cuban authoritarianism; U.S. easement and benevolent[232] billion dollar corporations shepherding Cubans without access gently into modernity. Eager to see such a rubicon crossing first-hand, one of the aforementioned "mutual aid" groups took a short day trip over to Miramar to see what Google had been up to.

The Kcho center's city block had a small crowd of 30 or so milling around in an adjacent park, squinting intensely at their phones in the midday sun. A fairly common site in the age of publicly positioned ETECSA Cuban wifi access points - we knew where to head first to get the group's connection fix. We paused there to take advantage, excited at the prospect of unfettered and upgraded bandwidth. Not one of us could successfully join that provided network, and a quick survey of those in the park signaled few of them could either. "*Solo lo funciona a veces"* (it only works sometimes), we were told. We proceeded to the Kcho's center's front gate, to be told that the center was not open that week, despite the normal posted hours. Seeing the size of our group, and perhaps reacting to our international composition - they opened up the space for a quick visit.

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[230] Weissenstein, Michael. "*How Google Plans to Improve Internet Service in Cuba." Associated Press.* 22 Mar. 2016, https://www.csmonitor.com/Technology/2016/0321/How-Google-plans-to-improve-Internet-service-in-Cuba.
[231] Art Forum. "Cuba Artist Kcho Partners WIth Google To Bring Cubans High Speed Internet". *Artforum International Magazine*, 24 Mar. 2016.
https://www.artforum.com/news/cuban-artist-kcho-partners-with-google-to-bring-cubans-high-speed-internet-58927.
[232] Morozov, Evgeny. "Don't be evil." *The New Republic* 242.11 (2011): 18-24.

Directly upon entering the main space one could see the decorated wall represented by the photo. *A la izquierda*: a decades-worn poster of Jose Marti, presiding over fresh Google-provided vinyl stickers that emulated the composition of Android smartphone app buttons. Next to it, a transparency overlay of familiar Google's familiar search home screen. Marti's visage appeared over text that read "*Yo quiero que la ley Primera de nuestra Republica sea el culto de los Cubanos a la Dignidad plena del Hombre" (I want the primary rule/law of our republic to be the cultivation by Cubans of the full dignity of men).* The loaded tableau may well have been completely incidental, but given the recently curated aesthetic of the rest of the center, that is hard to fathom.

On a table next to this image lay several torn and unusable cardboard set-ups for the (now, largely abandoned) Google cardboard augmented/virtual reality[233] projects. Only one of the cardboard set-ups was in usable condition, and the smartphone inserted was cracked to a degree preventing functionality. Several lines of ants snaked across the neglected set-up. Another set of tables and chairs, host to roughly a dozen of Google's chromebooks, was in similar disarray. It was unclear if there was a single piece of usable tech remaining, less than a year after the center's opening. Someone in our party noticed that the chromebooks and android phones, while not working, were also models dating several years old at that point. Our host, who worked at the center, explained the status of the available gear as due to the high traffic preceding us - but also that they had requested replacements from Google many months ago, without any inclination of a refresh anytime soon.

The building's interior looked amazing, despite the tech rubble. The aesthetic was not one that had (yet) made it to Havana, but a familiar sight to many of us who had seen the interiors[234] of tech start-ups and "WeWorks" dotting the Bay Area in the preceding years. It was uncanny. Seeing this many fresh coats of paint - not to mention across multiple, bright primary colors, was not a frequent occurrence during my years in Cuba otherwise.

We asked about the free, supposedly high-bandwidth connection outside - why and how it was possible, and what the persistent trouble was with it. The center worker couldn't speak to

[233] Vonau, Manuel. "Google Stops Selling Cardboard VR Goggles." Android Police, 3 Mar. 2021, https://www.androidpolice.com/2021/03/03/google-finally-stops-selling-cardboard-vr-goggles/.
[234] Gaybert-Doyon, Josh. "Why Does Every Advert Look the Same? Blame Corporate Memphis." *WIRED UK*, 24 Jan. 2021, www.wired.co.uk/article/corporate-memphis-design-tech.

Google's claims of bandwidth at "seventy times faster", and that they never had been. It was just an ETECSA connection without necessary paid login, and like nearly every other access point on the island it worked *"así como cualquier cosa"* (as well as anything).

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Like democracy, technology is a multifaceted entity. It includes activities as well as a body of knowledge, structures as well as the act of structuring. Our language itself is poorly suited to describe the complexity of technological interactions. The interconnectedness of many of those processes, the fact that they are so complexly interrelated, defies our normal push-me-pull-you cause-and-consequence metaphors.

How does one speak about something that is both fish and water, means as well as ends? That's why I think it is better to examine limited settings where one puts technology in context, because context is what matters most

- Ursula Franklin[235]

"We in anthropology so often find ourselves troubled by the fate of things that do not seem to find a footing on contemporary ground. What do we seek in the company of such others but a means of living beyond the present, some way of passing with them into a time beyond this night?"

- *Anand Pandian* [236]

Until Donald Trump's election in 2016 and all that followed, it felt for a moment as if there may be a fairly tidy way to describe the shifts occurring in Cuba along more macro scales - however complicated an ethnographer may choose to represent it at the personal level. There was a clean and well-trod geopolitical narrative lens available - how people's lived lives, by way of their technologies, are impacted at the geopolitical scales of nation-state inertia. The "thaw" in relations between the United States and Cuba during the Obama administration came hand-in-hand with policy conversations[237] surrounding internet access, bundling neoliberal hopes

[235] Franklin, Ursula M. *The real world of technology*. Anansi, 1999.
[236]Pandian, Anand. "The time of anthropology: Notes from a field of contemporary experience." Cultural Anthropology 27.4 (2012): 547-571.
[237] Trotta, Daniel. "U.S., Cuba to Negotiate Billions in Claims against Each Other." Reuters, Thomson Reuters, 7 Dec. 2015, https://www.reuters.com/article/us-cuba-usa-idUSKBN0TQ2W020151207.

of economic potentials within ideologies of personal and political agency via telecommunications infrastructure.

Hilary Clinton's presupposed ascendency to power in those years seemed a capstone to this precise global momentum, a figure whom for decades proselytized[238] the humanity and potential of liberalized economic paradigms emanating out of the West, and the importance of the internet within those matrices. Corporate technology sectors in the United States were in those pre-election years still frequently heralded as heroic "job creators" and transformers of #culture - not yet fully dealing with the widespread social reckonings that erupt under, and sometimes due to, Donald Trump. Those reckonings continue today[239], an aggregate of congressional investigations, competing bids reign in the industry antitrust[240] legislation, stock dumps[241], and plummeting public goodwill[242] towards "silicon valley". As a global, psychological landscape - the spreading internet's use as a globalizing frontier of "democracy" has waned nearly entirely, replaced with nearly as much gusto with conversations of its use as a destabilizing disinformation[243] force, and who should get to use it as such.

Similarly: when this fieldwork began in the early 2010s, it was difficult to imagine why the Cuban embargo had persisted the better part of a century. Only a few years later, as the Obama "reapproach" began in 2014, it became difficult to imagine a world wherein such a thing could survive much longer, given the historic repositionings. And yet. It can often feel as if these winds shift faster than the speed of 21st graduate school ethnographic practice might effectively capture. Still, here we are a decade later - trade embargo firmly in place, with a liberal president presiding the executive office in the United States, and many U.S. policies having now regressed to Obama (or pre-Obama) levels of imperial antagonism towards Cuba. Via Recent Cuban

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[238] Clinton, Hillary. "Internet rights and wrongs: Choices & challenges in a networked world." US State Department (2011).
[239] Merchant, Brian. "The End of the Silicon Valley Myth." *The End of the Silicon Valley Myth - the Atlantic*, 29 Dec. 2022, www.theatlantic.com/technology/archive/2022/12/big-tech-fall-twitter-meta-amazon/672598.
[240] Nylen, L. (2022) How American Innovation and Choice act regulates Big Tech, changes the internet, Bloomberg.com. Bloomberg.
[241] Forbes. "Why Were Tech Stocks down in 2022-and How Long Will the Slump Last?" Forbes, Forbes Magazine, 20 Jan. 2023,
[242] Brenan, Megan. "Views of Big Tech Worsen; Public Wants More Regulation." *Gallup.com*, Gallup, 20 Nov. 2021,
[243] Bloomberg News. "*Russia's Information War in Ukraine Includes Spoofing Foreign Media."* Bloomberg.com, Bloomberg, 7 Feb. 2023,

protests (largely organized online), audiences in the U.S. were again given framings of an authoritarian state, threatened[244] by connectivity. And yet, most of these same protestors now had access to the internet, but explicitly protested a lack of foodstuffs, electricity blackouts, and fuel prices. All of them, commodities shortages inarguably directly exacerbated by the U.S. trade embargo of Cuba.

As historian Fred Turner has worked to show, the ideal media environment promoted in the United States - in part by way of anthropological conceptualizations - does much to explain what some are beginning to recognize as hollow signifiers: huge "surrounds" of media, explicit rhetorical links between culture, democracy, and communications systems – reified perceptions of individual choice, a liberal public sphere, and the so called "market-place of ideas" via consumer models for information.

It remains difficult not to conflate any representation of the spread, understanding, and use of the contemporary internet alongside larger political machinations. The executives of a search-engine-cum-advertising corporation dine with and have the ear of U.S. presidents[245] - in turn the largest of internet companies appear to play an outsize role in setting both domestic and international policy[246], and have been accused of playing similar roles to the extractive imperialists of the 19th and 20th centuries[247] - often colluding state power with infrastructure amid discourses of "well-being" and "rights". More and more[248], the global expansion of corporate technology with the aim of capture and extraction becomes understood as the dominant logic of these movements.

As of time of writing it is clear that the assumptive links that persist for many between participatory democracy, forms of citizen action, and the telecommunications technologies said

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[244] Wirtschafter, Valerie. "*What Role Did the Internet Play in Fomenting Cuban Protests?*" Brookings, 23 July 2021
[245] Geoff Earle, Deputy Us Political Editor. *"Google's Extraordinary Access to Obama Revealed as White House Visitor Logs Show 427 Meetings between Company and Administration Officials." Mail Online*. Associated Newspapers, 2016. Web. 11 Sept. 2016.
[246] Francis, Davis. (2016). By The Numbers. *Foreign Policy.* "These 25 Companies Are More Powerful Than Many Countries." Foreign Policy. March.
[247] LaFrance, Adrian. (2016) "Facebook and the New Colonialism." *The Atlantic*. Atlantic Media Company. February. n.d. Web.
[248] Couldry, Nick, and Ulises A. Mejias. "The costs of connection." The Costs of Connection. Stanford University Press, 2019.

to enable them are due for wholesale reevaluation, excavation, and rethinking. What are we to do we do with anthropology's role in setting some of the stakes of our current discourse – our conflations[249] of technological practice with political potentials? What residues remain from that moment, whether methodological, conceptual, or imperial? Further: How might an ethnographer of media unpack the stigmas that Cuba's deliberately designed information ecosystem of state tv, state radio, and state internet had produced in U.S. – to see more clearly possibilities of media otherwise? What are the possibilities (and ethical imperatives) towards developing a research orientation sympathetic to a society intending to, however quixotically, buffer themselves from hegemonic forms and content?

The following quotes were both found by this ethnographer in the Margaret Mead archives at the Library of Congress, scattered among other missives[250].

> *Anthropologists first duties are to humanity as a whole, and that, in a conflict of duties, our obligations to humanity are of a higher value than those toward the nation; in other words, that patriotism must be subordinated to humanism"*
>
> *- Franz Boas, (1917)*
>
> *"Anthropology since its inception has contained a dual but contradictory heritage. On the one hand it derives from a humanistic tradition of concern with people. On the other hand, anthropology is a discipline developed alongside and within the growth of the colonial and imperial powers. By what they have studied (and what they have not studied) anthropologists have assisted in, or at least acquiesced to, the goals of imperialist policy"*
>
> *- Radical Caucus of the American Anthropological Association, (1969)*

[249] Weiss, Joshua Zane. "Review of Cuba's Digital Revolution." *NACLA Report on the Americas* 53.4 (2021): 439-440.
[250] (Chapter 4)

Taken increasingly apriori[251], technological shifts tend to be accepted *as is*[252] by most audiences in the United States: effects in knowledge and machine hurtling *forward* towards some rationalized *next.* Cuba's unique[253] economic and historical contexts, however, inform ideas of technology there greatly: not fully apart from, flirting with isolation, in many ways simply *different* than. The island's people and position provided an opportunity to think these conceptualizations along a different legibility: fractured and constructed amidst human discourse, economics, and socio-technical relations - rather than understood exclusively as mechanistic, material objects with a progressive, teleological capacity for changing society.

This field site/this nation of Cuba has been for the last decade, perhaps more than any other metric-as-descriptor, represented in wider discourses through its types and rates of internet access, nearly always in frames of intoning their "freedoms". Such standards and expectations commonly wielded in the same breaths as other infractions like their state-run press, singular political party, and a critique of standards of living (always neglecting any role the half-century economic blockade imposed the United States may have). Cuba has, for a long time now, been several nations at once - sometimes only barely. The island's been a site for constant push and pull between colonial powers, local resistance, charismatic figures, corporate interests and a seemingly perennial simmering of populist fervor. Mapping out the localized history of technological interaction – the expectation of this place's people between their machines, each other, and their state – does much work to begin sussing out the specific socio-political contexts of the internet that Cubans are currently developing.

Telling the story of another place and its people through the schemes of my own government is certainly not a practice championed by contemporary anthropologists - peers who might go to lengths to describe/prove their bona fides in truly understanding the "local"

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[251] Marx, Leo. "" Technology": The Emergence of a Hazardous Concept." Social Research (1997): 965-988.
[252] Leo Marx 's label "Hazardous Concept" historicizes the term "technology": particularly in its rise in current vernacular to describe a directly causal, deterministic role that invention and machine have upon society. He charts a shift in the way machinery, progress, and engineering become interrelated in a specific way in the 19th century, shifting into constellations of sociotechnical systems which are fluid, evolving, and nearly always teleological. There's a marked change from the prior incremental pace of how/why/ and who-made of *inventions* and *inventors*. The social effect becomes embedded into the term, the role of human labor/creatively/responsibility becomes occluded. In this way, the term becomes a kind of catch-all for a an entire spectrum of things and behaviors, much like *culture* behaves in contemporary cultural anthropology - obscuring complexity in a falsely bounded concept.
[253] Schwab, Peter (1999) *Cuba: Confronting the US embargo*. Macmillan.

perspective on a topic. And yet it is central to this project's work, my own motivations for doing so, and ultimately the consequences of all that it envelopes. An ethnographer going to Cuba looking for alternative ways of thinking through the questions vexing me about technological hegemonies back at home: What are the repercussions of technological adoption, of the cultural shifts that surround them? Are there iterative lessons - via material mutual aid practices or skill sharing - that might inform one another's experiences in our respective moments? How much does the ethnographer experience vs observe in work like this, what purviews are available and translatable to the written page? What *should* be communicated by the ethnographer, given the predatory nature of U.S. intelligence and corporate power in a space of potentials like Cuba[254]?

The internet of course has humanistic potentials, much the same as its capacity for control[255]. Who do we allow to frame, interpret, and promote these values? How might we expand our vocabulary for such things beyond their 20th century origins in anthropology and elsewhere? The internet - not only in Cuba but everywhere, is *polyglossic*. It is not made of some unilateral lingua franca of understanding and use– but of and between differing conversations, understandings, and practice. The internet's "connectivity" in and of itself is not an ideal to strive for, but a stage upon which individuals become affected by all scales of actors. Certainly the case of all communicative technologies, but especially true of our nomenclatured "internet": it bundles many things into its meaning: a blurry communion of varied platforms, uses, and political formations.

The pace and rhythm of ethnographic output can feel out of step with contemporary developments, smearing perceptions across differing comprehensions than those around you. If only to shed a *fraction* of those prior held state and disciplinary inertias, this work has been generative. It is my hope that some of this work has grasped steadily towards those more humanistic appreciations.

[254] Chapter 4
[255] Deleuze, Gilles. "Postscript on the Societies of Control." *Surveillance, crime and social control*. Routledge, 2017. 35-39.

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GLOSSARY

CubaConf - A (mostly) annual gathering of Cuban Free/Liber/Open-source (F/L/OSS)programmers. The conference has been a means for Cubans working in the world of open-source to gather physically and skill-share. Multiple years have also prioritized international interfacing, designed to both broaden the skill-share pool and expose international audiences to the work being done in Cuba.

Cubanidad - in Spanish: "Cuban-ness", with a particular loaded weight depending on who has deployed it. The state party frequently invokes the term with appeals to localized socialist causes, the open-source organization uses it to denote for vocational/ideological similarities, and the Cuban exile community in the United States wields it as a politicized term of inclusion/exclusion.

Committee for the Defense of the Revolution - (CDR) - State party affiliated Cuban neighborhood networks, to which a sizeable portion of the population belong in some capacity. The group coordinates grassroots level political initiates, and has also been accused by critics as serving towards clandestine spying/intimidation practices in service of the state party.

Habanero - Person living in or from Havana, Cuba

Joven Club - A state funded community computer learning centers. There are hundreds of these Joven Clubs in various scales of operation across Cuba, generally in proportion to the population nearby. Since the 1990s they have served as spaces in which Cubans are able to learn skills of computation across networking, programming, and basic uses, such as word processing.

Malecón - a stone-built embankment esplanade along the north coast of Havana, stretching 5 miles Havana Harbor across the neighborhoods of the Vedado, Centro Habana, and Habana Viejo. It is a culturally significant place in the city, as one of the most prominent spaces for casual public gatherings, vendors, and tourists alike.

El Paquete /Paquetero - formally called *El Paquete Seminal* ("The Weekly Package"), the paquete is a "sneakernet" system of distributing media files across Cuba as a means of circumventing the slow bandwidth of in-country internet systems. Included content spans music, film, TV and otherwise (detailed at length in Chapters 2 and 3). Paquetero refers to one to delivers (or houses in a shop) the paquete for distribution as vocation. The entire system exists largely in a gray zone of legality in Cuba, but is largely allowed undeterred by the government.

Radio/TV Marti - Founded during the 1980s Reagan administration in the US, Radio and Television Marti state department run broadcast stations, designed to transmit subversive material from stations in the Florida keys 80 miles South into Cuba. Run with large, federally funded budgets of $20-30 million annually, these stations are extensions of prior (and some ongoing) U.S. “counter-media” programs like Radio Free Europe, designed to give subversive and U.S.-friendly counter-programming media narratives.

Resolver/Resolviendo - translated literally as a verb meaning “to solve”, *resolver* culture in Cuba invokes the ingenuity it takes to create solutions under material scarcity. Reflecting both the material realities of non-consumer oriented socialist lived conditions and a half-century of U.S. enforced trade embargo, *resolver* is a verb that comes to be emblematic of Cuban know-how in the absence of, the ability to make-do without affluence.

Sneaker-net - a term describing physically moving large quantities of data physically (via hard drive, or disk) between computers rather than over network connection. Examples of this are plentiful in the U.S. from prior to ubiquitous networks, and more contemporary examples range from the *paquete* in Cuba to

U.S. Special Interests Section/U.S. Embassy - The name for the U.S. diplomatic base in Cuba while the two nations were not *officially* diplomatically linked. It functioned as an informal base of U.S. diplomatic and (allegedly) intelligence operations for decades in Havana (unpacked at some length in Chapter 2).

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