Cords and Connectivity

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work in progress

A preliminary search in Google Scholar for the term 'infrastructure' yields results from disciplinary journals in computing, communication, law, history, geography and numerous other fields. As a concept, infrastructure's extensive reach resides in both the intangibility that allows for its flexibility, such as hierarchies of power, and its tangible implementation that quantifies or produces concrete elements like roadways and power lines. As a term, infrastructure originates in militaries and was used to describe the installation of structures, systems and operations (McCormack, 2016). Considering the original use o f the infrastructure illustrates active elements of its use in current rhetoric that reinforce and legitimate social norms as well as the connections between these norms, governance and imperialism. Unpacking the term supports these claims; for example, 'installation' implies a previous lack as well as a conscious construction, while 'operations' and 'structures' denote power relationships or hierarchies and their associated action or force. Built into these constructs of power relationships and actions is also the assumption of expansion or governance, particularly in regards to the military and its ties to imperialism. Infrastructure is used to secure dominance, such as the installation of infrastructure in Africa by British and American forces through the past several centuries. Dependency is also an element of infrastructure and its mediates our relationship to the powers that control infrastructure, which has become a relevant topic in the globalized configuration of Western societies.

This idea of dependency and imperialism is made salient in Nicole Starosielski's *The Undersea Network*, reinforced by the

interconnectivity, not only between countries or corporations but between moments in time by linking social and political impacts of fiber-optic cables through their physical occupation of locations that also belonged to "earlier telegraph and telephone cables, power systems, lines of cultural migration, and trade routes" (2015, p.2). Thus exploring paths of migration and exchange illustrate shifts in governmental modalities: modern governments information instead of militarized bodies in order to assert dominance as intelligence accumulates cultural and economic value. Starosielski notes that undersea cable networks "have the benefit of increased security, a consideration for military and government traffic," thereby reiterating the value of information and its circulation over the traditional means of security via physical violence (2015, p.). The inextricability between occupation and infrastructure results in a reiteration of previous types of geo-political dominance (military bases, fortresses, etc). The United States is connected to Asia through several cable networks, mainly the China-US Cable Network and the Trans-Pacific Express that lead to not only China but also Japan, Korea and numerous other countries and communities (2016). Although there are still active United States military bases throughout Asia, their occupation of countries is no longer limited to physical presence and embodies an ideological manifestation of siphoned American values reconstructed by capitalist interests. Google, notable for its close relations with the American government and its security data collection forces, has invested in several of the newest trans-pacific cable installations, such as FASTER (which went online in the past month). Likewise, corporations in China and other US telecom companies, such as AT&T, have become the main financial contributors to these means of communication, while also still maintaining a relationship with national authorities. (http://www.wired.com/2016/06/google-turns-giant-internet-cabl e/) While the authority of governments is in crisis due to increased globalization (see David Harvey's A Brief History of

Neoliberalism), corporations have emerged as the power holders, which seek imperialism and occupation of countries, communities and the spaces in between. Infrastructure has always been a means or method of control; however, what Starosielski points to is the problem of ignorance about these mechanisms through their consistent invisibility.

Thus, if the role of the archive is to educate, engage, and questions about circulation, discourse and communication, it must also address these forgotten or unobtainable pieces. But these objects, such as undersea fiber-optic cables and the installation machines that help make them, are difficult to archive, being both physically inaccessible and entangled by corporate legality. For archives, space is limited and constrained by university regulations and funding, making it even more difficult to consider larger or less accessible objects. The Residual Media Depot presents an interesting case study as it aims to make available the ephemera, specifically the cords and power adapters, which connect the media to larger networks. When first introduced into residential areas, electricity was primarily used for lighting, but this grew as its usefulness was realized and soon outlets and cords became ubiquitous. But early outlets had specific uses and the main area in which outlets and cords were used was for manual labor practices, particularly to do with household work (). Thus the labor practices of staff, particularly women, were a performative action that embodied and drove early technical development. However, domesticity and servant labor are not highlighted in many museums or archives, specifically those on early electrical technology. As a child I visited several museums that depicted various moments in Canadian life, but there was no mention of servants and domestic tasks were mediated through a consistent happy woman in the model of a nuclear family. Whether a diorama of an Asian-Canadian family in the 1920s or the groovy, modern family 1970s (all of these were in Vancouver which may account for my slightly different

interpretation of 'nuclear family'), items such as irons, washing machines, and associated domestic labor acts were unplugged or cordless. What follows is a list of domestic, electric powered items and when they were first available:

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1905 — electric iron;
1905 — Christmas tree lights;
1907 — motor-driven phonograph;
1909 — vacuum cleaner;
1911 - electric toaster;
1921 - refrigerator;
1924 - blender;
1925 — electric mixer;
1927 - coffee percolator;
1927 — electric saw;
1930 - heat lamp;
1935 - electric fan;
1937 — washing machine;
1938 - garbage disposer;
1939 - television set;
1947 - room air conditioner;
1951 — hand-held hair dryer;
1956 — electric can opener;
1959 - lighted telephone;
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1967 - microwave oven;
1972 - drip-type coffeemaker;
1973 - garage door opener;
1975 - video game system;
1975 - videotape recorder;
1978 - personal computer;
1982 - CD player;
1984 - phone answering machine;
1997 - DVD player;
1999 - plasma TV;
2002 - wireless router
(https://www.dli.mn.gov/ccld/PDF/eli bulletin history.pdf)
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Both Jussi Parikka's A Geology of Media and Lisa Nakamura's "Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture" raise important questions surrounding naturalization of media and the connection between this process and capitalism. Whether through Nakamura's discussion of the (mis)representation of the detail oriented work of Navajo women as innate (2014, p.921) or through Parikka's interrogation of the discourse around new earth materials driving process in electronics (2015, p.36), this impetus to investigate media's material tells stories beyond the assumed or accepted purpose. Archives, specifically those in non-traditional forms such as the Media Archaeology Lab and the Residual Media Depot, aim to create platforms to enable users to access or consider these alternative stories. Often these spaces provoke this type of research through their spatial design and the tools made available as well as the physical material itself. Curators and their choices produce the circumstances in which media is consumed and subsequently researched. Displaying a piece of media in a glass box encourages different types of interaction and questions than placing that same piece of media on an exposed table top. As twenty first century scholars, we enter archives with expectations that are premediated by various social and cultural assemblages. Archives are regarded as authoritative spaces and in some ways blackbox the entrant because of these assumptions. Spaces such as the MAL and the RMD do attempt to break this blackboxing; however, it is usually only with the combination of texts such as Lisa Nakamura's, that students and researchers are able to consider the forgotten work of women and the complicated relationship between bodies, agency and labor. In the Media Archaeology Lab I have created a space that shows a partially unassembled machine and beside laid tools such as screwdrivers inviting others to participate in the act of deconstructing. I still am working through how to engage visitors further and how to make present this forgotten labor in the act of deconstruction.

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