

# Cuba's "Sneakernet"

An examination of Cuba's "offline Internet", a response to and extension of  
Cuba's "Special Period in the Time of Peace"

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## **Introduction**

Ever since the country was embargoed by the United States in October of 1960, Cuba has been relatively isolated from many of the technological developments of the rest of the world. This is perhaps no more clearly indicated than in the country's low levels of Internet adoption- as The Washington Post reported in 2014, shortly before the Obama Administration began moves to normalize relationships between the United States and Cuba, "only about 5 percent of the Cuban population can get on the full global Internet, and only, often, through government institutions, high-end hotels, and black market access" (Scola). But this lack of Internet penetration cannot only be attributed to the external force of poor American-Cuban relations- FreedomHouse notes that Cuba "has long ranked as one of the world's most repressive environments for information and communication technologies", and that many of the country's Internet usage statistics are artificially inflated with statistics regarding "the government-controlled intranet" (FreedomHouse). But the people of Cuba have come up with a novel solution to this dual-faced problem of oppression and lack of Internet penetration- they have developed a thriving Sneakernet, colloquially known as "El Paquete Semanal", or The Weekly Packet (Watts). This system, itself an extension of the Cuban people's numerous handmade technological innovations during "The Special Period in the Time of Peace", represented a continuation of the Cuban peoples' long-standing approach to technology- that which could not be procured from the outside (and this was much) had to be produced internally, utilizing whatever means necessary. To understand the significance of this system, in which illicitly imported and downloaded content is distributed around the country by way of USB drives, we must first explore the context of the country's relationship with other major players in the information technology marketplace, beginning with Cuba's embargo at the hands of the United States and ultimately arriving at today, and the country's increased focus on building Internet infrastructure.

## **Section 1: A (Brief) History of Isolation**

It would be easy to begin an examination of Cuba's relative isolation by examining the island nation's geographic isolation- it's distance from the mainland has had very real effects, historically, on the transmission of cultural and societal information between Cuba and its neighbors. However, while this geographic isolation is relevant to our later discussion of the Internet bandwidth bottlenecks of the nation, a more reasonable place to start our analysis of the country and it's relative information isolation is at the beginning of the United States embargo against Cuba, which in Cuba is known as el bloqueo. These sanctions, originally a "punitive measure against the Castro government for the expropriation of U.S. properties", took on a new meaning as a response to Cuban communism during the height of the Cold War, and had a very real impact on the economy of Cuba as a whole- not only did Cuba initially become increasingly dependent on the Soviet Union to meet its high need for imported food and technology, but after the collapse of the Soviet Union in 1991, this embargo essentially left Cuba isolated from the predominantly US information technology market (Cuba Now). This left U.S. businesses "to be relegated to mere bystanders", and left the island nation to develop along its own, unique path- a path which was heavily influenced and strictly regulated by

the Cuban government. As this is a topic I covered very thoroughly in my earlier policy paper, I will keep my writing here relatively brief.

Cuba's isolation has led to an increased focus on (or, as some might argue, scapegoating of) "state security", which, in the case of internet access, has led to the establishment of "Correos de Cuba", which are nationally owned and operated public Internet Cafes (Voeux). Outside of these Cafes, Internet access in Cuba is limited to those few individuals in positions of high government or business power, and within the cafes, the Internet in Cuba is split into two tiers- a 'relatively' affordable form of internet that consists only of a state-run and state-monitored email network, which only allows users to 'send messages within Cuba or abroad, but not to surf the Internet', and a more expensive "international" connection that requires government credentials and which is monitored by state-installed security programs that shut down the computer when certain anti-governmental terms are used (Voeux). This lack of access to the outside world by way of Internet has led to what some have called a technological stagnation- again, a topic I have written about extensively in my earlier piece on Cuban Internet access- a lack of access to outside technologies which began with the Cuban embargo and has been reified by the single Internet pipeline between Cuba and the mainland.

As a response to this lack of access to outside technologies, especially following the 1991 collapse of the Soviet Union, Cuba entered a period which eventually came to be known as "The Special Period in the Time of Peace".

## **Section 2: "The Special Period in the Time of Peace"**

When one wanders the streets of Cuba, one is likely to see a number of unique technological structures- handmade tools and technologies meant to solve the everyday problems faced by Cubans living on the island. As Cuba's economy "began to implode" with the crumbling of the Soviet Union and the resulting end of the influx of external technologies, the government, "aware that this crisis was going to be very complex", began to prepare the citizens of Cuba to be self-sufficient (Motherboard). This period of time, known as "The Special Period in the Time of Peace", represented a magnified period of Cuban isolation- as the Cuban government could no longer rely on the Soviet Union as a roundabout connection to the world economy, and was now feeling the full brunt of the United States embargo, they did their best to prepare the Cuban people to be as self-reliant as possible. As Ernesto Oroza, a designer and artist, explains, the Cuban government published a book, titled "The Book For The Family", which was "a compilation of international publications, including Popular Mechanics and others" (Motherboard). This publication included "simple fixes for electrical home appliances... medical instructions..." and more (Motherboard). Two years later, the book was followed up by one in which "all the ideas... came from the people", entitled "With Our Own Efforts", including a now-famous recipe for beef steak using a grapefruit rind substitute (Motherboard). Oroza gives another important example of the innovations of the time- though the Cuban government had largely standardized many technologies up until "The Special Period in the Time of Peace", including dual-purpose washer/dryer units, these technologies naturally began to degrade and break down over time. The Cuban people would cut off the dryer half of the machine, which was the most prone to

breaking down, and would turn the motor into other appliances- “a fan, or for a shoe-polishing machine, or for a key-copier, or something else” (Motherboard). Oroza calls this a “reinterpretation of technology”, and has spent years collecting the machines that showed “the scope of this inventiveness” on the part of the Cuban people (Motherboard). He summarizes this concept as ‘Technological Disobedience”, in which the Cuban people “disrespected the ‘authority’ held by these contemporary objects” and by the Cuban government, “surpassed this authority”, violating “all of the symbols that unify an object” (Motherboard). He says that “this liberation is a moral liberation” (Motherboard).

### **Section 3: Cuba’s SneakerNet**

The innovations of the Cuban people in the 90’s and early 2000’s continue today in light of the oppressive limits Cuban’s face regarding their Internet access. “In a country where the government, as per the constitution, owns all media” the Sneakernet “allows Cuban people to access content that would never be found on official media outlets” (Kessler). The data on the Sneakernet is “not a static library of files, but a weekly updated resource that includes some of the same living resources that you [as a citizen of the United States] might find on the Internet” (Kessler). The system, still largely mysterious despite becoming increasingly public, works something like this- each week, a large “Weekly Packet” of digital information, which one week included “the final Hobbit movie as well as the most recent episodes of Homeland, Blacklist and Two and a Half Men; BBC documentaries; Japanese manga; Brazillian telenovels and Korean melodramas... the last editions of 500 magazines, including National Geographic, PC Weekly, and the Economist” as well as “updated versions of Angry Birds and Fruit Ninja” enters the country, whether by way of illegally imported hard drives or the Internet access of one of the select few government officials within the country (Watts). The organization is “said to be Cuba’s largest private employer”, but is “technically illegal” and “the content is pirated” (slashdot). This data is then copied onto large-size flashdrives “with both USB and FireWire cables, making it hot-swappable on most computers” (Boutin). These “master packages” are then sold “by dividing it up into smaller deliveries right down to the level of the small-time distributors who sells the content in small units, sometimes even personally delivering these orders to the homes of buyers” (Risco). “The distributor then does his or her business... it is as it were an ‘offline Internet’ service- a way of having Internet access without actually going online” (Risco). The term “SneakerNet” emerged to describe the transmission of this data across the Cuban landscape- after the initial arrival of the data in the country, each of these external drives copies of “El Paquete Semanal” and its smaller subdivided forms is ferried across the country by business people and teenagers who act as “semi-legal data mules” (Watts). Comparisons to the drug trade are, in many ways, apt- the arrival of a single large block of ‘product’, the division of this ‘product’ into smaller sections, the delivery of these sections to various communities, and the final distribution at various price-points according to the wealth of the community itself. But where the drug trade is inarguably harmful to communities and their members, the SneakerNet, and its distribution of El Paquete Semanal, represents the only access many of these Cubans will have to the outside world and its multitudinous ideas- not just its TV shows and its

videogames, but to its news, its politics, its technologies. Just as the Cubans innovated during “The Special Time in the Period of Peace”, we see here that the Cubans have innovated a unique solution to their lack of Internet access- a loophole that circumvents government oppression and international dependencies and instead creates increased access for the people of Cuba. The SneakerNet represents a continuation of the “moral liberation” Ernesto Oroza studied in the 90s and dubbed “Technological Disobedience”- while the Cuban government has seemed to reluctantly accept the existence of the SneakerNet and El Paquete Semanal, they have done so begrudgingly, and have made little to no attempt to increase legitimate routes of access to international content. Nor have they eliminated laws that proclaim governmental ownership of all media or which render cable television illegal. At best, the loophole presented by SneakerNet is just that- a loophole. At worst, it is a tenuous connection to a larger outside world, one which has largely passed Cuba by.

#### **Section 4: The Future of The SneakernNet**

But what of the future of the SneakerNet? As I’ve explored not just in this paper but in my previous writing, the Cuban government is making slow-to-no progress towards opening up Internet access to a larger percentage of the Cuban people- even those new Internet access points that are being established continue to maintain the high cost of access that currently blocks most Cubans from accessing the international internet. Part of this slow expansion can be blamed on a lack of resources- the single Internet pipeline out of Cuba is largely reserved for government use, and because of an inability to form economic relationships with Western Internet providers, Cuba has little ability to increase bandwidth, and following that, decrease cost of access. As slashdot rightly points out, a legitimized El Paquete Semanal “would save scarce Internet resources for other applications”, though it seems unlikely that the extremely controlling Cuban government would legitimize a model so deeply rooted in anti-establishment disobedience and circumvention.

Looking internationally, the SneakerNet model as a whole “is also a possible model for other developing nations” (slashdot). And while the SneakerNet is doubtlessly a Cuban innovation, a uniquely nationalistic response to a unique national problem, slow Internet access, or a lack of overall access, is not a problem that only Cuba is facing- a 2010 study involving USB drive laden pigeons racing the upload and transmission of a small video file in rural areas of the UK found that the pigeons were actually faster at transmitting data than most of the Internet pipelines in the region.

Clearly, Cuba’s history of innovation has stumbled upon something significant, something with the potential to open up Internet access to an increasing number of people both intranationally and internationally. If the governments of the world can see the success of El Paquete Semanal and the SneakerNet as a symbol of the intense desire for increased Internet access, and if the citizens of the world can see these methods as a model to be emulated, perhaps we can very well expand Internet access beyond the relatively small section of the population it has currently reached and enable a truly globalized world to emerge.

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