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## V. PROBLEMS OF TRANSLATION

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# Cuban Environmental Paradigms: Contemporary Agriculture and Colonial Forestry

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### Introduction

Since the early 1800s, Cuban agroecological history has been dominated by the sugar trade; large-scale monoculture led to extensive deforestation on the island and drove Cuban development and international relations (Funes Monzote 2008). Spanish colonial policy, American imperial interests, and Soviet support of Cuba revolved around the extractive industry, pulling the island into global networks of social and ecological exchange. International involvement in Cuba has led to conflicts between external demands for resources and local subsistence imperatives. In this article, I draw from archival sources, published research, and field interviews to consider two moments of socio-environmental transition in Cuba: the colonial forest policy debates of the late 1700s, and the sustainable agriculture movement that arose in the 1990s. [1] These periods represent the time immediately preceding Cuba's overwhelming transition to sugar plantations, and the years when sugar production plummeted after the collapse of the Soviet Union. While forest conservation policies were imposed by Spanish colonial powers, limiting local landowners' agency, sustainable agriculture was promoted by the national government, encouraging residents to cultivate land for subsistence. These cases illustrate distinct modes of interaction between local subsistence needs and broader environmental initiatives. Forest preservation and sustainable agriculture represent two strains of environmentalism in the context of globalization. While colonial forest preservation in the tropics has been described as an example of green imperialism (Grove 1995), Cuban

sustainable agriculture has been described as a form of ecological resistance to global capitalism (Funes et al. 2002).

### Sustainable Agriculture in Cuba, 1990s – Present

The dissolution of the Soviet Bloc and disintegration of the USSR from 1989–1991 had reverberating impacts on Cuban society. During the 1970s and 1980s, agriculture in Cuba was a large-scale enterprise dominated by collective state farms cultivating sugarcane monoculture in the Green Revolution model, with the aid of imported pesticides, herbicides, fertilizers, and farming equipment (Rosset and Benjamin 1994). The country was a net importer of food and fossil fuel; the Soviet Union accounted for 70% of its trade (Rosset 1997, 19). The loss of Cuba's primary trade partner and the strengthened US embargo led to economic collapse, an energy crisis, and food scarcity. Widespread famine ensued, and the government declared the Special Period in Time of Peace (Hearn 2008). During the initial years of the Special Period, from 1989 to 1993, Cuban imports dropped from \$8 billion to \$1.7 billion (Maal-Bared 2006, 350). Food that had been imported was no longer available, and the lack of oil impeded the operation of farm machinery as well as the transport of food from rural farms to urban centers (Funes et al. 2002). Oxen replaced tractors in the countryside, as machines became inoperable.

By the early 1990s, the Cuban government responded by greening the revolution (Rosset and Benjamin 1994). Policies advocated chemical-free organic agriculture, promoting the establishment of semi-commercialized organic farms (*organopónicos*) and family-scale permaculture gardens within Havana's city limits (Premat 2009). The state granted usufructuary rights to individuals and cooperatives who were willing to convert vacant

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urban plots into gardens for food production, a crucial shift in land policy that enabled the organic movement (Cruz and Sánchez 2001, 31).

The organic agriculture movement gained international attention for resolving the famine, yet food sovereignty remains a national concern. Recent hurricanes have decimated crops, and Cuba still imports as much as 80% of its food through re-negotiated pathways, including the United States (Pérez and Montano 2008). Reflecting the shift away from chemical inputs, one Cuban noted that “knowledge is the primary input for agriculture” in Cuba today. In the summer of 2009, another man questioned the large-scale potential of organic, de-mechanized agriculture: “oxen and earthworms aren’t enough to feed 11 million people.” A Cuban public official noted that due to material scarcity “organic agriculture was obligatory, but it’s not just new techniques: it’s another culture, another way of thinking... facing uncertainty, we don’t have another option.”

Addressing these tensions between ideology and necessity, Julia Wright (2009) recently argued that sustainable agriculture in Cuba has been driven primarily by the material lack of oil. While Cuban organic agriculture responded to acute material need, over the past twenty years a dynamic agroecological movement integrating rural and urban farmers, Cuban and international scientific researchers, government and NGO workers has emerged. The uncertainties of global trade have driven a re-conceptualization of agriculture in Cuba: it has moved from the countryside into the city, from large-scale monoculture to small-scale diversified crops, from an emphasis on exports to a focus on national sovereignty. While previous ideas and practices remain, Cuban understandings of agriculture have been complicated, and ideas of environmentalism have coalesced around the organic practices that emerged from necessity. In 2009, one peri-urban farmer expressed the dominant view of agroecological sustainability in Cuba: “to close our cycle” of resource use, focusing inwards. Another Cuban expressed the view that socialism may not be innately environmental, but no version of socialism can stop being environmentalist: “the challenge is to bring the environmental culture to the masses.”

The initiation of the Special Period represented a significant separation not only from Cuba’s recent ties with the Soviet Union, but from centuries of close exchange with colonial and imperial powers. While recent sustainable agriculture in Cuba encourages local production, during the late eighteenth century

small-scale agriculturalists were limited by colonial policies of forest conservation. From the 1770s until 1815, Spanish colonial powers were involved in a protracted struggle with Cuban agriculturalists over the right to clear land (Funes Monzote 2008, 1). While local landowners wished to convert their forested land to agriculture for subsistence and commercial purposes, colonial government officials sought to preserve Cuban forests for the use of the Spanish naval fleet (Funes Monzote 2008, 2).

## **Eighteenth Century Colonial Forest Conservation <sup>[2]</sup>**

The Spanish metropole sought to guard and control local timber extraction through a series of regulations. An edict in 1776 noted that it was illegal to cut cedar, mahogany, and oak without a license. [3] A government license was necessary to clear land for cultivation, and it was clarified that even with a license, cedars could not be cut unless they had grown to a sufficient height. Burning was prohibited. All households, no matter how small, were ordered to plant eight cedars that must be “cared for and always conserved for the service of the King and the public.” Cedar was prohibited for use in buildings where another species would suffice.

As a consequence of edicts to preserve forests for the use of the colonial government, local residents did not have enough space for agriculture, and they had difficulty harvesting the wood that they needed for their own livelihood activities. For instance, an edict in 1798 noted that trees should not be “inconsiderately” cut down to obtain beeswax - a local subsistence activity. [4] The same document ordered that “no one requests, nor should permission be granted to cut more wood than they need for their buildings and machines...because to do otherwise would be to contribute to the destruction of the forests.”

Top-down efforts to regulate deforestation fueled landowners’ frustration and had limited success. In a letter written in 1798, a farmer complained that “industrious cultivators” from Havana had their “arms crossed,” unable to cultivate the fertile land due to bureaucratic forest policies. [5] The same farmer suggested that regulations had driven up the price of wood: “since there have been regulations, or since there has been a subinspector, the price of wood has doubled...[because] we don’t have anywhere to cut wood.” Yet the farmer recognized the limits of a bureaucratic reach, with the comment that

“all of the [forest] guards of the world, and all of human vigilance, wouldn’t be sufficient to stop those who cut down trees and destroy what they wish.”

Spanish forestry regulations in late eighteenth century Cuba seem to support the historian Richard Grove’s assertion that “the hypothesis of a purely destructive environmental imperialism does not appear to stand up at all well” (1995, 7). Colonial policies of family-level afforestation and attempts to limit land conversion from forests to fields are aligned with modern notions of environmental restoration and biodiversity conservation. However, the Spanish crown’s motivation for forest conservation and restoration was explicitly utilitarian: conservation meant selective use by the privileged under regulated circumstances. Colonial policies of selective forest use also led to classificatory divisions of the Cuban environment. While some trees were designated for the crown, other species were acceptable for local use. The species most useful for shipbuilding — especially cedar — were subject to the most detailed regulations. While Spanish policies of forest conservation may not have been environmentally destructive, they do represent a utilitarian, selective view of nature. Trees were not conserved for their ecological value, but for future human use.

## Trajectories of Cuban Globalization

In 1791, the Haitian revolution led to the exodus of plantation managers from Haiti, destabilizing the world’s largest sugar producer at the time (Funes Monzote 2008, 41). Consequently, Cuba surged in importance as a locus of sugarcane production. In 1815, landowners won the fight with Spain for permission to clear their land, initiating a period of expansive deforestation across the island (Funes Monzote 2008, 1). Spain no longer valued Cuba for selective forest use, but for potential plantations. Throughout this transition, Spanish colonial powers continued to conceptualize Cuban natural resources for their productive and extractive value as part of a global system of commodity flows.

In 1830, the Spaniard Antonio de Berazas laid out his recommendations for strengthened Cuban–Iberian relations under the new framework of agrarian extraction. [6] He wished to impede the relationship between Cuba and the Americas, seeking to emulate the closeness of British–Jamaican relations. Antonio de Berazas viewed the natural world from a utilitarian perspective, describing nature as subject to human desires. He noted that “nature

exists for man’s favor on the surface, or beneath the earth, or in the atmosphere.” To strengthen the links between the colony and the metropole, he wrote that it was necessary to eliminate “all ideas of distance, and to confound the differences between climates and products with reciprocal necessity.” This tightened reciprocity was derived through trade. Specifically, products brought from Spain to the colony included “grains, broths, fat, salted meat, iron and metalwork, salted fish, potatoes, vegetables, rice, crackers, onions, and other small things that Spain could advantageously supply.” In return Cuba could provide “coffee, tobacco, cacao, cotton, wax, woods, sugars, and honeys.” In de Berazas’ view, this exchange would lead to relationships “so intimate between the Metropole and the Colony - by one needing the other - that it would be difficult to be separated due to the unity of habits, customs, religion, language, laws, and government, which are the ties that bind humans from the cradle to the grave.”

While the solidifying unity that de Berazas foresaw as a consequence of reciprocal necessity ultimately proved divisive, environmental and social consequences of the colonial relationship persisted long after Spanish rule was overthrown in 1898. By devoting land to sugarcane monoculture for international export, Cuba no longer produced sufficient food for its population. During the late Soviet period, Cuba imported between 44 – 57% of caloric intake per person (Moskow 1999, 127). As a consequence of the Cuban–Soviet relationship, the dynamics of food security on the island were profoundly unbalanced. The crisis of the Special Period resulted from unstable external exchange: Cuba’s reliance on Soviet support was not reciprocated.

The severe consequences of external reliance have led to a heightened awareness of food production within national borders. Farmers draw even smaller boundaries of self-sufficiency: the goal of agroecology, one suggested in 2009, is to “fulfill the entire cycle on the farm.” In the current mode of Cuban environmentalism, perceptions of agricultural sustainability draw increasingly internal boundaries of production. Due to the Special Period, “it was a strength to look inwards,” one man noted in 2009. Yet this new “environmental culture” draws from global knowledge of agroecological techniques. International agencies seeking to improve food security in Cuba have contributed funding and project assistance from Australia, Canada, Germany, the United Kingdom, and the United States. In this way, the trajectories of environmentalism in Cuba have shifted from externally

imposed colonial policies for selective extraction to national policies that incorporate international environmental ideas into local agricultural practices. While some Cubans view the transition to agroecological methods as a temporary solution, other farmers express the firm belief that agroecological techniques have enabled greater autonomy, and in so doing, a relief from pervasive uncertainty.

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## Endnotes

[1] To protect anonymity, quotes from personal interviews in Cuba are not attributed. All quotes are from fieldwork in the summer of 2009. All archival research was conducted at the General Archive of the Indies (Archivo General de Indias, hereafter AGI) in Seville, Spain. I have translated quotes from interviews and archives from Spanish into English.

[2] Following historical conventions for archival material, details are provided in footnotes.

[3] AGI. Ultramar 9, No. 1 – 17. Dr. Phelipe de Fonsdeviela y Ondea, Marques de la Torre. Forest edict given in Havana. March 7, 1776. All quotes in this paragraph from the same source.

[4] AGI, Ultramar 9, No. 1. Forest edict. December 11, 1798. All quotes in this paragraph from the same source.

[5] AGI. Ultramar 9, No. 1 – 6. Letter from Havana farmer. May 22, 1798. All quotes in this paragraph from the same source.

[6] AGI. Ultramar 147, No. 20. Letter from Antonio de Beraza. November 4, 1830. All quotes in this paragraph from the same source.

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