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A Companion to Latin American Anthropology

Edited by Deborah Poole



BLACKWELL PUBLISHING 350 Main Street, Malden, MA 02148-5020, USA 9600 Garsington Road, Oxford OX4 2DQ, UK

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First published 2008 by Blackwell Publishing Ltd

1 2008

Library of Congress Cataloging-in-Publication Data

A companion to Latin American anthropology / edited by Deborah Poole. p. cm.

Includes bibliographical references and index.

ISBN 978-0-631-23468-5 (hardcover: alk. paper) 1. Ethnology—Latin America. 2. Anthropology—Latin America. I. Poole, Deborah.

GN564.L29C64 2008 306.098—dc22

2007032294

A catalogue record for this title is available from the British Library.

Set in 10/12.5pt Galliard by SPi Publisher Services Pondicherry, India Printed and bound in Singapore by Markono Print Media Pte Ltd

The publisher's policy is to use permanent paper from mills that operate a sustainable forestry policy, and which has been manufactured from pulp processed using acid-free and elementary chlorine-free practices. Furthermore, the publisher ensures that the text paper and cover board used have met acceptable environmental accreditation standards.

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CHAPTER 17

Statistics and Anthropology: The Mexican Case

Casey Walsh

In a recent survey essay, Victor Toledo (2002) describes the emergence of ecological anthropology as a new "hybrid discipline" built on the foundations laid by cultural ecologists such as Julian Steward and Angel Palerm, and incorporating systems theory and, more recently, a turn to politics. A key innovation of ecological anthropology in Mexico, he argues, has been to question disciplinary boundaries, incorporating the methods and theoretical insights of other social sciences, hard sciences and history in forging a new, interdisciplinary research agenda that offers the possibility of easing the current environmental "crisis" in Latin America by making development sustainable. Other scholars seeking to transcend the fragmentation and excessive specialization of scientific disciplines recall the search for utopia that characterized early modern thinking about the Americas (Krotz 2002), and the harmonious relations postulated by Franciscan thinkers between humans and the rest of the world's living beings. According to the logic of these histories, the constitution of modern disciplinary thinking amounted to a certain fall from grace, a rupture between humans and their environment. In this light, anthropology's "hybrid" effort to understand human society as a complex ecological, social and cultural whole offers traces of an intellectual Eden where scholars study and promote more sustainable human uses of resources and treatment of the environment.

The history of ideas presented in this chapter shows that an interdisciplinary, ecological approach is a feature of Mexican anthropology in general, and is neither a "hybrid" novelty nor a survival of premodern intellectual traditions, but rather an alternate strain within modern statistical thought. Before anthropology, demography, political science, sociology and other social science disciplines took form in the 19th century, statistics was wide-ranging, "general useful knowledge" that included many kinds of narrative, pictorial and enumerative descriptions of social groups and processes. As the scientific disciplines took shape in the late 19th century, the discipline of statistics became much more numerical, while anthropology maintained, to a large degree, the comprehensive, encyclopedic manner of presenting information about

people and places. To understand the ecological and interdisciplinary way of thinking central to regional anthropological studies in Mexico, we need to understand the dynamics of this intellectual inheritance. Tracing this history of statistics will, at the same time, help identify the political and conceptual origins of the long and intimate relation between modern Mexican anthropology and the formation of the postrevolutionary state (Warman et al. 1970; see Nahmad Sitton, this volume).

Statistics enables one to abstract, enumerate and represent all kinds of social phenomena, thus making it possible to display, view and evaluate a vast amount of information about the world at once, and to compare and contrast very different kinds of things. By the 18th century statistical knowledge came to be considered by many Europeans as the essential characterization of the nation-state, and governments created statistical offices to define themselves and their power. Colonies and empires received the particular attention of states eager to know the extent and status of the far-removed resources and populations under their rule. It was in the 19th century, however, that the expansion of governments and bureaucracies all over the world gave rise to a "vast avalanche" (Hacking 1982) of statistical knowledge, and a concurrent popularization of statistical concepts such as "population," "type," and "normal."

Historians have begun to explore the histories of the prominent actors and institutions during the constitution and professionalization of Mexican statistics in the 19th and 20th centuries (Urias Horcasitas 2000; Meyer Celis 1999; de la Peña and Wilkie 1994), linking this knowledge to the formation of the nation-state, and the development of capitalist social relations. Two powerful features of statistical forms of knowledge aided the establishment of a Liberal political and economic framework of private property, taxation, and military service. First, as Sergio de la Peña (1994:72–74) argues, statistical language has a technological strength which derives from its utility as an intellectual tool used by state officials and capitalists. Knowing about aspects of social groups, such as their productivity, wealth or age, allowed Mexico's rulers to make the quotidian decisions of government and business: such as whether or not to buy or sell cotton or sugar; whether or not to build a railroad; how many teachers were needed in a city. Furthermore, statistical, numerical language facilitated communications between regional, national and international bourgeoisies otherwise divided by language and culture. As such, it was a language exceptionally well suited to the tasks of managing state and economy. Because of these features, statistics can be considered the "strong language" (Asad 1994) in which the business of capitalism and state formation was conducted. Finally, statistical concepts of population and type are at the heart of the intellectual effort to find and forge a national population in Mexico, defined by an array of interrelated biological, moral and psychological features (Meyer Celis 1999). «

This chapter examines statistical representations of Mexico during the late 19th and early 20th centuries, in an effort to trace the origins of the "ecological" way of thinking in Latin American anthropology. This approach to anthropology brings together what are now thought of as separate disciplinary topics: biology, culture, and environment. Statistical representations of the people, resources and social development of Mexico were produced with different goals and aimed at different audiences at different times, and thus differ according to the specific historical contexts of their production, circulation and consumption. Because a comprehensive discussion of these changes in statistical thought and representation in Mexico would be an enormous

STATISTICS AND ANTHROPOLOGY

task, I focus on three works that are emblematic of anthropology's shifting relationship to statistical forms: Antonio García Cubas's 1876 book The Republic of Mexico in 1876; an 1893 publication by García Cubas titled Mexico: Its Trade, Industries and Resources, and anthropologist Manuel Gamio's 1916 publication Forjando patria (Gamio 1960). These statistical "moments" correspond roughly to three well-defined periods in the history of Mexico: from Independence to the Porfiriato (1820-84); the Porfiriato (1884–1910); and the Revolution (1910–40).

While statisticians in the early 19th century treated a wide array of biological, cultural and social factors in a descriptive, narrative way, by the time of the modernizing dictatorship of Porfirio Diaz (1884-1910) statistics had become both more numerical and more narrowly focused on economics. Faced with revolutionary disturbances that Porfirian statistics, with its more limited scope, failed to predict or prevent, Gamio argued for an anthropology that recovered the earlier statistical attention to regional cultural, biological and social diversity, as well as a less enumerative and more narrative style. Widely considered the founder of postrevolutionary Mexican anthropology, Gamio fused race, history, politics, economics and culture into a regional ecological analysis that still defines much of the discipline in Mexico (de la Peña 1988), as elsewhere in Latin America (see Gordillo, this volume).

MERCANTILE STATISTICS

The term "statistics" referred to a great variety of intellectual activities during the first three quarters of the 19th century in Mexico. Following Alexander von Humboldt, whose 1811 treatise Political Essay on the Kingdom of New Spain fundamentally influenced all subsequent statistical work, Mexican statisticians practiced a kind of wideranging humanistic science that included topics that would later fall into the domain of professional disciplines such as politics, ethnology, archaeology, geography, medicine, biology or demography. The production of what these thinkers called "general useful knowledge" was dominated by the predominantly liberal intellectuals of the Sociedad Mexicana de Geografía y Estadística (Mexican Society for Geography and Statistics, or SMGE). Founded in 1833, the SMGE was the third such society in the world, and in many instances its members were the same people who ran the state and managed the economy. Liberal reformer and president Benito Juarez was perhaps the most prominent member. This kind of statistics has been labeled "mercantile" statistics because of its role in facilitating the accumulation of merchant capital, and the construction of hemispheric trade networks managed by the wealthy merchants of the northeast United States (Salvatore 1998). The Mexican liberals of the SMGE organized an effort to centralize state power, stimulate economic production, and promote internal and international commerce, all severely affected by the half century of civil war and foreign aggression that followed independence. In a project modeled on the experience of French state formation, the intellectual basis of this larger effort was to be the collection and publication of statistical information on the people, products and resources of the country. The national state's efforts to collect statistical information concerning localities and regions met with indifference and resistance on the part of local and regional powers, largely because statistics were used to levy taxes and conscript soldiers.

In 1853 the Mexican Secretaria de Fomento (Ministry of Development) was created under the tutelage of Miguel Lerdo de Tejada, and between 1861 and 1872 Antonio García Cubas conducted four statistical surveys for Fomento, commissioned in part to determine the effects of the land reform legislation drafted by Lerdo de Tejada. These surveys provided the data for a series of publications, including The Republic of Mexico in 1876: A Political and Ethnographic Division of the Population, Character, Habits, Customs and Vocations of Its Inhabitants, produced "with the view of removing the wrong impressions that may have been left on the minds of the readers of those works which, with evil intent or with desire of acquiring notoriety as novelists, have been composed and published by different foreigners in regard to the Mexican nation" (García Cubas 1876:1). In García Cubas's opinion, Mexico needed European colonists to develop a thriving economy and other features of a "civilized" country. He therefore wrote to dispel what he felt were popular misconceptions about the bodies and work habits of Mexicans, misconceptions which would discourage Europeans from immigrating to Mexico. He also carefully described the wealth of natural resources that Mexico offered to colonists, and included vivid images in the book of Mexican landscapes and people. "So many and so propitious gifts as those with which Nature has enriched Mexico," he wrote, "cause it to be one of the choicest countries in the world for colonization; but in order to attain this desirable object, it is requisite to make known those vital elements and fountains of wealth that yet remain unexplored" (1876:1).

While the writings of García Cubas during this period contain great descriptive detail about the material riches of Mexico (1857, 1874a, 1874b, 1877), the human resources are the primary subject of The Republic of Mexico. In his representation of the people of Mexico, García Cubas integrated social, biological and cultural elements, identifying three racially, culturally and regionally defined groups of Mexicans: "the white race and more direct descendants of the Spaniards, the mixed race and the Indian race" (1876:13). His first task was to defend the racial purity of the "white" Mexican elite against defamation by European travelers who, he felt, "would have done well in abandoning the routine of classifying the Mexican nation among the redskins. It is supposed that the thirst for speculation has obliged [those writers] to excite curiosity, by presenting the most extravagant types, instead of those that in their equality with Europeans, would attract little or no special attention" (1876:15-16). Together with their biological whiteness, elite Mexicans were defined by their European fashion and culture

The statistically derived concept of "type" is of central importance to the representations in García Cubas's 1876 book. The "types" discussed below are portrayals of populations by representative instances of those populations; they are examples of imagined means. That is to say that, while García Cubas may have used actual people as models for his "types," these people were considered "typical" because they conformed to visualizations of the norms of those populations. At the same time, the populations themselves were configured and delimited using statistical techniques. The preoccupation demonstrated by García Cubas with defining and defending racial and social boundaries depended to some degree on the statistical conceptualization of social groups as pure, ideal-typical abstractions.

Geographical region was of central importance to the ecological relation established by García Cubas between race and culture in his description of Mexican "types."



Figure 17.1 Mercantile statistical rendering of Mexican types.

Source: Antonio García Cubas, The Republic of Mexico in 1876: A Political and Ethnographic Division of the Population, Character, Habits, Customs and Vocations of Its Inhabitants (Mexico City: La Enseñanza, 1876).

The middle image in figure 17.1 is labeled "Washerwoman and servants, guard with bullion from Real del Monte," a mining area near Pachuca, Hidalgo. Here García Cubas shows us that the "lower class" of Mexicans are clean, well dressed, and not too different looking from the elite. The lower frame shows people from Guadalajara,

dancing and working. In other figures from the 1876 book we are presented with the "jarocho" types from Veracruz, also defined both by place and material culture, as well as physiology. Curiously, the only people actually labeled "mestizos" in the captions are two women from the Yucatan peninsula. In these images García Cubas refers to the people by their jobs and geographical origins rather than by race, evidence of the importance of class and place to the racial-cultural amalgam that made up the "types" central to the descriptive project of encyclopedic statistics.

Statistical knowledge was also fundamentally historical, and a concept of development lay at the heart of García Cubas's understanding of the relationships between race, environment, society and culture. This is clear in his discussion of the mestizo. He argues:

The natural inclination of the mixed race to the habits and customs of their white brethren, as well as their estrangement from those of the natives, is the reason that many of them figure in the most important associations of the country, by their learning and their intelligence, including in this large number the worthy members of the middling classes. From this powerful coalition, the force of an energetic development naturally results, which is inimical to the growth of the indigenous race. (1876:16)

In this narrative and in the visual images presented alongside it, the productive capacity of the Mexican nation is linked directly to its mestizo racial status. And the capacity of the mestizo nation to create this economic "development" is linked directly to the whiteness of both the existing Mexican elites, and the potential European and North American immigrants who were the intended audience for García Cubas's book. "Development" and "progress" were both racial and political-economic concepts, and the development and progress of the Mexican nation through European or North American colonization implied the whitening of Mexico through mixing with colonists and the creation of new generations of mestizos (García Cubas 1874b:62–63).

The statistics presented in *The Republic of Mexico in 1876* were directed at an audience of potential European and American colonists, who would have had access to this sort of book through a set of institutions that also emerged in the second half of the 19th century: expositions, public museums, and public libraries (Leach 1994; Muratorio 1994; Rydell 1984; Tenorio-Trillo 1996; Williams 1982). The images shown here come from a copy of the book held by the New York Public Library, a copy that was originally donated to the Philadelphia Centennial Exposition of 1876. In fact, in Mexico statistical data was gathered and books were produced for the explicit purpose of display at exposition exhibits and libraries, and for discussion at the international congresses on statistics, race, archaeology and colonial sociology that were held in conjunction with these expositions (Tenorio-Trillo 1996).

PORFIRIAN STATISTICS

In 1882, as a result of sustained pressure from Antonio García Cubas and Emiliano Bustos, the government's statistical agency (which dated from 1852) was refounded as the Dirección General de Estadística (General Directorate of Statistics, or DGE) within the Ministerio de Fomento (Ministry of Development). Antonio Peñafiel, who soon after assumed the directorship of the DGE and remained its head throughout the Porfiriato, was a key figure in the establishment of a statistical apparatus during this time. The "encyclopedic" kínd of statistics practiced earlier by Alexander

von Humboldt (1769–1859), García Cubas and others gave way to a set of specialized, professional academic disciplines institutionalized in universities, museums, and state agencies. The Porfirian era also witnessed the blossoming of bureaucracies which generated a huge amount of statistical information. Mexican statisticians who had previously dedicated themselves to producing "general useful knowledge," now focused their attention on measuring and monitoring the movements of an array of newly constituted social facts of this developing society: production, profit, imports and exports, currency exchange, labor migration, etc. The progress and development of the Mexican nation came to be understood by changes in the numerical indicators of these social facts. This more purely enumerative statistics was a language spoken by managerial capital (Chandler 1977) and by the vast bureaucracies erected by these capitalists and their colleagues in government. Mexican statisticians wrote their publications in this language in hopes of generating confidence among the new foreign investors.

The venues in which these statistical representations circulated and were displayed also changed. The statistical publications of the mercantile era were housed in public libraries, private homes and expositions. When the international expositions began around 1850 they were dedicated to demonstrating the advances of science and the progress of "man," but by the 1880s they had become massive marketplaces exhibiting the prime materials and products of the world. The expositions maintained their didactic nature throughout these changes, and they gradually became a place to educate the consumer desires of the emergent European and North American middle class. In fact, the transformation of expositions into markets was paralleled by the creation of the department store and the modern museum. As William Leach (1994) shows, through the free exchange of directors and curators, the creation of "design" as an art form, and the focus of late 19th century and early 20th century museums on presenting the "industrial arts" of the world, the modern museum and department store developed hand in hand. The statistics produced by the DGE, for example, were displayed at the 1889 and 1900 Paris Expositions alongside a dense array of products and images, and the director of the DGE, Antonio Peñafiel, was in charge of the Mexican pavilion at the expositions.

One institution which exemplified the fusion of exposition, museum and department store, and of different kinds of information, was the Philadelphia Commercial Museum. Created in 1894, it was a permanent exposition, holding exhibits from all over the world, garnered from other expositions. "The collections now on exhibition," the museum's publicists said, "comprise materials of great variety, all arranged in such a manner as to illustrate graphically the habits and customs of other lands, their resources and articles of production, the character of their commerce, their chief items of consumption, and their race characteristics" (Commercial America 1904:10). Among the exhibits were the famous "life-groups" which displayed mannequins of human bodies, and an exhibit which arranged the material culture (the "productive arts") of the world's peoples in serial form so as to facilitate comparison of cultures and their location within hierarchical evolutionary progressions. The museum was also quite clearly a market, where businessmen could survey the variety of the world's products and make investment and consumer decisions. For businessmen who needed more specialized information than that provided by the museum displays, the Philadelphia Commercial Museum provided the services of its Foreign Trade Bureau Library, a sort of statistical clearing house fed by the bureaucracies of national and

colonial states (Philadelphia Commercial Museum 1910). While the general useful knowledge of earlier statistics was divided into different academic disciplines, kinds of presentation and domains of study, and while statistics became a much narrower and more numerical kind of knowledge, statistical images and publications shared institutional homes with displays of commodities, artifacts and bodies. Moreover, these institutions utilized the statistical technique of displaying very different kinds of things so as to allow comparison. In these institutions, statistical representations of the Mexican economy were positioned in relation to, and made commensurate with, arrays of commodities and racially ordered displays of bodies.

One of the statistical works almost certainly held by the Philadelphia Commercial Museum's library is Antonio García Cubas's *Mexico: Its Trade, Industry and Resources*, published in 1893 to coincide with the Chicago World's Fair. The subject of this book is Mexico's "trade, industries and resources" – rather than "the population, character, habits, customs and vocations of its inhabitants" discussed in García Cubas's 1876 publication. The author does include a bit of narrative information about the people of Mexico that he originally published in 1874 (1874b), but most of the information is presented in the forms of graphs, charts and tables, and deals with subjects such as mining, shipping, education, and cotton textile production. The visual grammar of the statistical chart conveyed a sense of order, modernity and planning that went beyond the actual numerical or linguistic content of the charts themselves (see figure 17.2).

Although the racialized depictions of bodies and cultures of Mexicans are not found in this work, the same statistical concepts which organized those earlier depictions continue. The Mexican nation is still the subject of statistical representation, but features of that population other than bodies and minds are represented. Thus the argument that mestizos constitute an intelligent hardworking race especially good at the productive arts is made in this work by showing numerical representations of national levels of the production of commodities. The European whiteness of Mexico is represented by a different kind of representational image of the statistical concept of progress – charts and graphs of improvements in hygiene, electricity or education. Mexico's status as a civilized nation is depicted graphically through the enumeration of rising levels of commerce with other "civilized" nations such as the US and Great Britain, rather than by images of Mexican ladies dressed in the latest French fashions.

To a large degree this shift in the nature of statistical knowledge can be seen as a displacement of narrative and descriptive information to anthropology and other disciplines, and the displacement of images of bodies to other parts of the institutions dedicated to displaying statistical information. As the domain of statistical knowledge increasingly came to be expressed through numerical representations, and the discipline of statistics focused on the emergent social facts of managerial capitalism, the analysis of bodies and culture was taken on by other disciplines such as anthropology and archaeology. For example, the organizational force behind Porfirian statistics, Antonio Peñafiel, was an accomplished artist and antiquarian with a deep knowledge of prehispanic art and architecture. Among his more notable creative efforts was the design of the neo-Aztec building that housed Mexico's exhibition at the 1889 Paris Exposition (Peñafiel 1889). But although he published various books related to Mexico's prehispanic art, Peñafiel maintained disciplinary boundaries between his statistics and these other interests. Similarly, representations of race and economy were

FOREIGN TRADE.

Entries.

	STI	CAMERS.	SAILING	3 VESSELS.	TOTALS.			
COUNTRIES.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.		
distance measure		_	*****	-	-	_		
Germany	30	44, 889	24	8,353	54	53,242		
Belgium		,,,,,,,,	***	*******		*******		
Brazil			7	2,158	7	2,158		
Columbia	64	98,477	15	3,849	79	102,326		
Costa Rica			3	632	3	632		
Chile	1	80	1	800	2	880		
Denmark			3	1,042	3	1,042		
Ecuador			2	959	2	959		
Spain	71	140,525	27	3,833	98	144,358		
United States	460	469,329	183	42,459	643	511,788		
France	26	57.557	23	8,093	49	65,650		
Guatemala	1	890	4	1,324	5	2,214		
Hayti		********	1	376	1	376		
Hawai		********	1	1,297	1	1,297		
Holland	***	*******	2	507	2	507		
Honduras		********	***	********	***	*******		
England	96	154,083	157	43,801	253	197,884		
Italy	***	******	1	559	1	559		
Nicaragua	***	*******	1	28	1	28		
Norway		********		*******		******		
Argentine Rep			2	591	2	591		
Venezuela			15	4.025	15	4.025		
Orders	***		6	853	6	853		
	749	965,830	478	125,539	1,227	1.091,369		

Departure.

	STE	AMERS.	SAILING	VESSELS.	TOTALS.		
COUNTRIES.	Ships.	Tons.	Ships.	Tons.	Ships.	Tons.	
contracts distincted.	_	-		-		*******	
Germany	42	74,995	40	14,597	82	89,592	
Belgium	1	1,486	***	******	1	1,486	
Columbia	55	85,898	***	*******	55	85,898	
Costa Rica		********	1	739	1	739	
Carried forward	98	162,379	41	15,336	139	177,715	
					G.	C.,-4	

Figure 17.2 Porfirian statistical representation of Mexico's place among nations. Source: Antonio García Cubas, Mexico: Its Trade, Industries and Resources (Mexico City: Departamento de Fomento, Colonización e Industria, 1893).

displayed within the same expositions and museums, although in separate places. The public was educated about the connections between the statistical displays of economic progress and the evolution of technologies and bodies more by the reified, statistical form in which they were displayed than by spatial contiguity.

The creation of museums and expositions in metropoles such as Chicago, Philadelphia and Paris took a different shape in Mexico's capital city. The interest that surged during

the late 18th century among European states to gather and produce statistical information resulted in the creation, by the Bourbon colonial government, of a Natural History Museum in Mexico City in 1790. In 1825, with the establishment of an independent Mexico, this became the National Museum, which had the mandate of "providing the most exact knowledge of our country, in terms of its primitive population, the origin and process of its sciences and arts, the religion and customs of its inhabitants, its natural production and the properties of its soil and climate," (Castro-Leal and Sierra 1988:513). In the later part of the 19th century the statistical activities and collections of the museum were divided along disciplinary lines (anthropology and ethnology; ethnography; zoology; comparative anatomy; botany, etc.), while maintaining an explicitly national focus, with particular emphasis on Mexico's regional diversity. This orientation complemented the international emphasis of the museums and anthropologies emerging in Europe and the United States, and in 1890, for example, an exhibit of artifacts representing the regions of Mexico was collected for display at the Madrid Exposition of 1892. That same year the museum formalized its role as a teaching institution, a role which would be strengthened after 1910 with the creation of the International School of American Anthropology. The museum's role as the principal center of anthropological education in Mexico was solidified by the participation of foreign teachers such as Frederick Starr, Alex Hrdlicka, Sylvanus Morley, Alfred Tozzer and Franz Boas, as well as Mexicans such as Andrés Molina Enríquez and Francisco del Paso y Troncoso.

As the various disciplines that emerged in the second half of the 19th century narrowed and defined their fields of study, the discipline of statistics became increasingly focused on the numerical information useful for managing the economy in Mexico, with the emergent science of anthropology distanced from knowledge of these aspects of government. Nevertheless, the disciplinary split between statistics and other social scientific and humanistic fields did not mean that enumerative statistical analysis was absent from other newly formed disciplines, such as the anthropological race science of Nicolás León, who was employed as a "naturalist" at the National Museum. Nor did it mean, of course, that the fundamentally statistical concepts of progress and civilization at the core of narrative representations of Mexican racial types were absent from the more enumerative treatments of the socioeconomic facts of Porfirian Mexico. While academic professionalization marked the concentration of a certain kind of statistical thinking in the discipline of statistics, anthropology in Mexico emerged in the late 19th century as the direct heir of the "general, useful" knowledge that characterized earlier, "mercantile" statistics. The consolidation of different strains of statistical thought in different disciplinary and institutional settings in Mexico became even clearer during the long process of revolution and state formation that began in Mexico around 1910.

REVOLUTIONARY STATISTICS

The last "moment" which I will discuss in this brief history of Mexican statistics is represented by Manuel Gamio's Forjando patria, published in 1916 at the height of the Mexican revolution (Gamio 1960). The Mexican Revolution was an incredibly complex affair, irreducible to a thumbnail historical sketch. What is important here, however, is that Gamio argued in Forjando patria that works of Porfirian statistics

such as García Cubas's 1893 Mexico: Its Trade, Industry and Resources played a central role in the social upheaval because they were unable to envision things such as the needs and desires of the racially and culturally diverse indigenous and mestizo population in Mexico. Porfirian government failed because it failed to understand, statistically, the population and territory it sought to govern. Gamio intended Forjando patria to be a contribution to the effort to build a new state, and called for wideranging anthropological knowledge of the sort that characterized the mercantile statistics of the early 19th century. In a reaction against the Porfirian mode of Mexican statistics, Gamio argued for a more encyclopedic, less enumerative kind of knowledge: an anthropological knowledge that explicitly recognized the existence of "the Indian" and "the Mestizo" as social types and actors, and posited their hearts and minds as objects of inquiry and intervention.

For Gamio, there were two reasons why Porfirian statisticians missed the revolution. First, Porfirian statisticians actively chose not to include information about social tensions in their books and images. Because it was their job to generate confidence among foreign investors, those who produced the statistical information were not interested in showing the social tensions and instability of Mexico. The second reason is that neoclassical Porfirian statistical thinking was ideologically incapable of recognizing and representing such tensions. There was a firm belief among statisticians, economists and other neoclassical thinkers during that period that the unrestrained market would provide for the general health and welfare of society. As Susan Buck-Morss (1995) has shown, neoclassical representations fail to capture the kinds of social and historical dynamics that give rise to riot, rebellion and revolution. There were, of course, people producing other, less enumerative kinds of images and narratives about Mexican society. Statisticians such as García Cubas or Antonio Peñafiel produced works on the history and archaeology of Mexico all through the Porfiriato (García Cubas 1884, 1904; Peñafiel 1890). Andrés Molina Enríquez was well aware of the "great national problems" that faced Mexico, and in 1909 described them in a more narrative manner than his contemporaries (Molina Enríquez 1997). Molina Enríquez's ideas on agrarian politics, development and race had quite an influence among the radical liberals of the Porfiriato, and revolutionary intellectuals such as Manuel Gamio (Basave 1992). But in the circuits of international managerial capitalism, the language spoken during the Porfiriato was neoclassical, and numerical.

While Manuel Gamio was steeped in the alternate Porfirian liberalism of Molina Enríquez, from whom he took classes at Mexico's National Museum, he also owed a good deal of his reformism to his mentor Franz Boas. Gamio studied in the anthropology department at Columbia University around the time when Boas was conducting his craniometry research on immigrants. In 1908, Boas presented his findings before Congress as an intervention into a policy debate marked by eugenicist antimmigrant arguments. This work formed the basis of his 1911 book *The Mind of Primitive Man*, which is widely considered to be the first major and systematic critique of supremacist notions of racial difference in anthropology. Boas and Gamio were both public intellectuals who struggled to bring progressive anthropological knowledge to bear on social problems. In 1910 Boas accompanied Gamio to Mexico City, where, despite the outbreak of revolutionary political turmoil, they founded the International Americanist School, dedicated to archaeological and anthropological research (Godoy 1977). During 1911 and 1912 Boas gave a series of lectures on

Anthropology at the National University of Mexico, which were based largely on *The Mind of Primitive Man*. Boas returned to New York in 1912, but his influence on Gamio is clearly seen in an essay in *Forjando patria* entitled "Prejudice in Archaeology and Ethnology," in which he reproduced Boas's critique of ideas of racial supremacy.

In *Forjando patria*, Gamio described his understanding of what a Mexican statistics of the revolution should be and do.

The necessities of a people cannot be determined, nor can its improvement be procured without knowing its statistics. Statistics is a systematic integration of the economic, ethnological, biological, etc., etc., characteristics of human individuals and groups. Knowledge of these characteristics leads to knowledge of the necessities of the population, and suggests the measures to alleviate them. (1960:29)

Gamio thought that statistics should be encyclopedic, or in current terms, transdisciplinary. What it should do was understand the revolutionary nature, address the needs, and ensure the progress of the majority of Mexican people, all of which Porfirian statistics had failed to do. "In Mexico," he wrote, "statistics has tended to the quantitative understanding of the population, but almost not at all to the qualitative, which has been the cause of eternal governmental failures" (1960: 29). He argued that "general, useful" anthropological knowledge be brought back into the Porfirian statistical activities of government, and that, in turn, these Porfirian statistics be made more encyclopedic by including anthropological knowledge about race and culture.

The project Gamio directed in Teotihuacan exemplifies the integral character of his anthropology, its regional scope, and its clear developmental goals. By 1917 Gamio had succeeded in installing anthropology within the emergent Mexican state, and headed the Dirección de Antropología until 1924. He included personnel from many branches of the Secretaría de Agricultura y Fomento in carrying out a massive study of the prehistory, history and ethnography of the Teotihuacan Valley, a representative study of the central highlands that he sought to reproduce in nine other regions of Mexico (Gamio 1979:ix-xii, c-cii). These studies were designed to promote the "physical, intellectual, moral and economic development" of the Mexican nation by providing anthropological, statistical information on the "racial characteristics, material and intellectual culture, idioms and dialects, economic situation and physical, biological environment of the present and past regional populations" of Mexico (1979:x). The publication which resulted from the study is a monumental and detailed five-volume description of "the population of the Teotihuacan valley, the environment in which it has developed, its ethnic and social evolution and social initiatives to improve it" (Gamio 1979).

The fusion of "economic, ethnological, biological, etc., etc." (1960:29) elements in Gamio's anthropology would continue to define his thinking through the 1940s, and has remained at the heart of the discipline in Mexico. Gamio located the root of the revolution in the Mexican indigenous population, and the inability of mestizos and Europeans to understand the Indians.

Contemporary civilization has not been able to infiltrate our indigenous population because of two great causes: first, the natural resistance with which this population opposes culture change; second, because we do not understand the motives of such resistance, we don't know how the Indian thinks, we ignore his true aspirations, we

prejudge him with our criteria, when we should steep ourselves in his to understand him and make him understand us. An indigenous soul must be forged – albeit temporarily. Then we will be able to labor for the progress of the indigenous class. (Gamio 1960)

In this reconstituted anthropological statistics Gamio placed racial ideology back into state knowledge, and thus into the formation of the postrevolutionary state. Gamio's view of race was not identical to that held by Boas, who sought to prove racial categories empty by showing that more variation existed within so-called races than between them. Boas would not have been entirely comfortable with typifications such as "Indian" and "Mestizo," especially when coupled with Gamio's nationalism. Boas would also not have been happy with the interconnectedness of race and culture in Gamio's thinking, nor his argument that racial development in Mexico should be the object of eugenic social science and government migration and colonization policies (Gamio 1924, 1930, 1931, 1932a, 1932b, 1987; Walsh 2004).

Gamio incessantly argued - through the 1940s - for the need for accurate statistics concerning the racial/cultural populations of Mexico. The concept of race, fused with the concept of culture, was central to Gamio's developmentalist anthropology. Beginning in the late 1910s with the Teotihuacan Project, his longstanding goal was to perfect a statistical definition for racial and cultural groups using the census as his principal measure His representations of race in the 1922 Teotihuacan publication, however, were still very much limited to photographic portraits of racial "types" (see figure 17.3; Gamio 1979). He found an especially receptive environment for his developmentalist statistics in the agrarian reform movement that took place under President Lázaro Cárdenas (1934 to 1940). In 1934, for example, he carried out censuses in the states of Hidalgo (El Valle de Mezquital), Guerrero (la Costa Grande), and Morelos (Cuernavaca). Discarding language and physical appearance as too mutable to serve as indicators of race, Gamio (1937, 1987) seized upon the statistical analysis of material culture as the method by which the Mexican state could definitely know the racial composition of the Mexican nation, and identify those groups which needed development (figure 17.4).

Socioeconomic factors were also important to Gamio's racial/cultural statistics. Gamio argued that the Indigenous and Mestizo groups were biologically "deficient" due to centuries of socioeconomic oppression, and that if their material, cultural conditions were improved, the biological progress immanent in those races could be achieved. By this reasoning, state knowledge of the material culture of the population was the prerequisite for achieving this development:

the standard of living of more than 12 million people is deficient or semideficient, from the material point of view, which brings as a consequence the abnormality of its development in all aspects and principally in the biological.... The manner to resolve such an inconvenient situation consists not only in procuring the economic improval of this great mass, but also in teaching it to elevate its level of material culture. (Gamio 1987:57–59)

Gamio's focus on artifacts follows the reifying logic of 19th century museology, in which differences in material culture were construed as hierarchical evolutionary relationships between human races or nations. Gathering statistics on material culture and race would be central to Gamio's plan for indigenista politics through the early 1940s (Gamio 1942a, 1942b). By 1946, however, the complexity of doing material



Figure 17.3 Revolutionary statistical images of indigenous and mestizo types. Source: Manuel Gamio, La población del Valle de Teotihuacan (1922; Mexico City: Secretaria de Agricultura y Fomento, Dirección de Antropología, 1979).

culture surveys of all of Mexico (and the rest of Latin America) persuaded Gamio that language was a much more efficient, albeit inexact, basis for the identification of racial groups and the subsequent enactment of indigenists social programs (Gamio 1946).

Education, in Gamio's view, was a principal vehicle to achieve cultural, economic, social and biological progress. Faced with social disturbances during the revolution that neoclassical statisticians simply failed to see and address, Gamio posited a new arena of statistical research: the subjective, qualitative conditions of the Indian and mestizo populations of Mexico: their "true aspirations"; their "souls." Gamio was not new in positing culture as a terrain for politics, for progressives and radical liberals had been waging a largely unsuccessful educational and moral crusade among the illiterate and (what they considered to be) degenerate masses throughout the Porfiriato (Knight 1991). He is, however, representative of a moment in Mexican statistics that, although present in some form earlier, gained currency in the political culture of state formation after the revolution. Gamio proposed in 1935 that the Secretaría de Educación Pública enact his plan for formal education which recognized, built upon and changed the needs, customs, desires and beliefs of the indigenous groups (Gamio 1987). Gamio also argued that processes of acculturation could be harnessed for educative purposes, and he encouraged the immigration of Europeans and especially the repatriation of Mexicans from the United States, whose modern culture would act as a

TABULATION OF CHARACTERISTICS OF THE MATERIAL CULTURE OF THE VILLAGES OF "THE MEZQUITAL VALLEY," HIDALGO AND "ESCUDERO," GUERRERO

ORIGIN			CULTURE			1	PRODU	CTION	٧	RESULT			USE		
Prehispanic	Colonial	Contemporary	Indian	Mixed	Western	Domestic	Regional	National	Foreign	Efficient	Deficient	Damaging	Continuous	Sporadic	

Percent of material objects classified by origin, cultural type, production, result and, use

"JUAN R. ESCUDERO" COLONY

20.91 41	1.18 37.91	14.16	26,36	59.48	10.68	28.10	40.96	20.26	91.08	7.65	13.08	81.26	18,73
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VILLAGES OF "EL MEZQUITAL"

43.80	43.50	12.70	37.40	25.70	36.90	17.00	40.60	28.90	13.50	80.10	14.60	5.30	93.90	6.70	
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Figure 17.4 Revolutionary statistical representation of the material culture of rural Mexico. Source: Manuel Gamio, Hacia un México nuevo. Problemas sociales (1935; Mexico City: Instituto Nacional Indigenista, 1987).

progressive influence on the "inferior" and "deficient" indigenous (precolumbian) and mestizo (colonial) cultures (Gamio 1931, 1987:71–83).

Teaching Mexicans to "raise their level of material culture" was quite explicitly an effort to create new "needs" and "aspirations" – it was an effort to create a mass of consumers. In the 1920s, Gamio's exhortations to support his anthropological efforts to forge consumers and deepen Mexican consumer markets were aimed at US government officials and intellectuals. "As a practical and utilitarian result of this work," he argued to an audience at the Carnegie Institute in 1924, "the Mexican market amounting, to-day, to only three or four million buyers, will be increased to sixteen million, since the indigenous and mestizo inhabitants will then require necessities which can be satisfied only by importation" (1924:126). By 1935 Gamio was making this argument in support of the Cardenista plan to promote national industry. "Needs must be created for them and those which they already have must be modernized," he said; "they must be taught to consume" (Gamio 1987). But for Gamio, all attempts to improve the cultural and physical level of Mexicans; to educate desires, create consumers and stimulate economic development – all these depended on statistical, anthropological knowledge of the subjectivities of rural Mexicans.

Another important innovation made by Gamio was to shift the intended audience of Mexican anthropological statistics from foreign investors and colonists to the population of Mexico, by way of the Mexican state. Although commonsense statistical thinking was fairly well developed by the late 19th century, the neoclassical graphs, charts and tables produced by Porfirian statisticians for state officials and businessmen probably would not have been easily accessible to most Mexicans. The structure and language of Gamio's arguments were chosen to appeal to a national, popular audience well versed in the language of race. Moreover, the pressing issue of Mexican government was controlling rebellion and forging political unity at home, perhaps more than generating foreign investment abroad. Forging the nation, then, was a question of forging a national-racial "soul": delineating the subjective "Indian" conditions of revolution, and then reshaping them through the medium of the Mexican mestizo state.

Gamio's anthropology was a project to generate a national self-consciousness. He contributed his expertise on the topics of culture and nation-building to what Mary-Kay Vaughn (1997) calls the "cultural politics" of Mexico's Secretaría de Educación Pública in the 1920s. During the late 1920s and 1930s he worked on issues of migration, population and development, and participated in efforts to colonize Mexico's northern border with Mexicans repatriated from the United States. In the 1940s he helped found the Instituto Nacional Indigenista (National Indigenous Institute, or INI) and the Instituto Internacional Indigenista (International Indigenous Institute, or III), over which he presided for the next 20 years. In these capacities he was one of the primary forces behind the institutionalization of an encyclopedic kind of statistical knowledge within state anthropology, a national politics of indigenismo and mestizo state formation, and the dissemination of this politics on a popular, cultural level.

ECOLOGIES OF POWER IN MEXICAN ANTHROPOLOGY

A number of features of Gamio's statistical thinking characterize 20th century Mexican anthropology. The first is the encyclopedic effort to connect many different aspects of human life – economy, politics, culture, biology, etc. – in one discussion. Second, the region has continued to play a central role in the organization of research questions and methods in Mexico. Third, the "integral," regional approach to understanding people and historical process was especially well suited for applied anthropology seeking to promote development in the service of the state. The integral, regional anthropology founded by Gamio flourished in the postrevolutionary era, when the Mexican state promoted such research as the basis for national social-economic development and the formation of a national social and political consciousness.

In the late 1930s and early 1940s, partially in response to the desires of President Cárdenas to promote the development of his home state of Michoacan, collaborative regional studies of the Lake Patzcuaro area were made, under the direction of Daniel Rubin de Borbolla, of Mexico's Instituto Politecnico Nacional, and Ralph Beals of the University of California (Beals and Rubin de Borbolla 1940), and by the Smithsonian's Institute of Social Anthropology (ISA), in collaboration with Mexico's National Anthropology School (ENA) (Foster 1948). In the late 1940s the collaboration between the ISA and the ENA shifted its focus to Tajin, in coastal Veracruz, where ENA student Angel Palerm collaborated with Isabel Kelley (Kelley and Palerm 1950).

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Asad, Talal (1994) Ethnographic Representation, Statistics and Modern Power. Social Research 61(1):55–87.

Basave Benitez, Agustín (1992) México Mestizo. Análisis Del Nacionalismo Mexicano En Torno a La Mestizofilia De Andrés Molina Enríquez. Mexico City: Fondo de Cultura Económica.

Beals, Ralph and Rubin de Borbolla, Daniel (1940) The Tarasca Project: A Cooperative Enterprise of the National Polytechnic Institute, Mexican Bureau-Indian Affairs, and the University of California. *American Anthropologist* 42(4):708–712.

Buck-Morss, Susan (1995) Envisioning Capital: Political Economy on Display. In Lynne Cooke and Peter Wollen (eds), Visual Display: Culture beyond Appearances. Seattle: Bay Press.

Castro-Leal, Marcia and Sierra, Dora (1988) Las instituciones, vol. 7 of Carlos García Mora (ed.), La antropología en México. Panorama histórico. Mexico City: Instituto Nacional de Antropología e Historia.

Chandler, Alfred Dupont (1977) The Visible Hand: The Managerial Revolution in American Business. Cambridge, MA: Belknap Press.

Commercial America (1904) Commercial America (Philadelphia) 1(1).

de la Peña, Guillermo (1988) Las cuestiones medulares (Etnología y antropología social), vol. 4 of Carlos García Mora (ed.), La antropología en México. Panorama histórico. Mexico City: Instituto Nacional de Antropología e Historia.

de la Peña, Sergio (1994) Visión global de los orígenes de la estadística. Guía de forasteros y nativos a la historia de la estadística económica nacional. In Sergio de la Peña and James Wilkie, La estadística económica en México. Los orígenes (pp. 5–126). Mexico City: Siglo Veintiuno.

de la Peña, Sergio and Wilkie, James (1994) La estadística económica en México. Los orígenes. Mexico City: Siglo Veintiuno.

de Mier, Sebastián (1900) México en la Exposición Internacional de Paris. Mexico City: Secretaria de Fomento.

Foster, George (1948) Empire's Children: The People of Tzintzuntzan. Mexico City: Imprenta Nuevo Mundo.

Gamio, Manuel (1924) The Present State of Anthropological Research in Mexico and Suggestions Regarding its Future Developments. Washington, DC: Pan-American Union.

Gamio, Manuel (1930) Mexican Immigration to the United States: A Study of Human Migration and Adjustment. Chicago: University of Chicago Press.

Gamio, Manuel (1931) Migration and Planning. Survey Graphic 66:174-175.

Gamio, Manuel (1932a) Comentarios sobre la evolución de los pueblos latino-americanos. Rome: Comitato Italiano por lo Studio dei Problemi della Popolazione.

Gamio, Manuel (1932b) Sugestiones para el estudio de las poblaciones primitivas en los paises indoibéricos de America. Rome: Comitato Italiano per lo Studio dei Problemi della Popolazione.

Gamio, Manuel (1937) An Analysis of Social Processes and the Obstacles to Agricultural Progress in Mexico. *Rural Sociology* 2(2):143–147.

Gamio, Manuel (1942a) Calificación de características culturales de los grupos indígenas. América Indígena 2(4):17–22.

Gamio, Manuel (1942b) Las características culturales y los censos indígenas. *América Indígena* 2(3):15-19.

Gamio, Manuel (1946) La identificación del indio. América Indígena 6(2): 99-104.

Gamio, Manuel (1960[1916]) Forjando patria. Pro nacionalismo. Mexico City: Editorial Porrua. Gamio, Manuel (1979[1922]) La población del Valle de Teotihuacan. Mexico City: Secretaria de Agricultura y Fomento, Dirección de Antropología.

Gamio, Manuel (1987[1935]) Hacia un México nuevo. Problemas sociales. Mexico City: Instituto Nacional Indigenista.

García Cubas, Antonio (1857) Noticias geográficas y estadísticas de la republica mexicana. Mexico City: J. H. Lara.

García Cubas, Antonio (1874a) Atlas metódico para la enseñanza de la geografía de la república mexicana, formado y dedicado a la Sociedad Mexicana de Geografía y Estadística. Mexico City: Sandoval y Vázquez.

Both the Patzcuaro and Tajin regions offered the opportunity to pursue a collaborative, "integral" research agenda including studies of archaeology, history and ethnography, carried out by teams of anthropology students and professors. Julian Steward founded and directed the ISA, and these regional, integral studies contributed to a growing interest among US academics in "Area Studies" such as the People of Puerto Rico Project (Steward et al. 1956) after the Second World War (de la Peña 1988). Contemporary research in the Andes also took on a regional, ecological character under the guidance of the ISA (Tschopik 1947), a tendency reinforced in the concepts of vertical integration developed by John Murra (see Murra 1980).

Gonzalo Aguirre Beltrán further expanded integral, regional, developmental anthropology in Mexico, contributing discussions about intercultural dynamics between mestizos and Indians, and working on a practical level to implement cultural integration in "regions of refuge" (Aguirre Beltrán 1967) through the actions of the INI. "The Mexican school of anthropology," Aguirre explained, "since its initial steps directed research and action toward eminently practical goals, through the employment of interdisciplinary techniques" (1970:127). Like Gamio before him, Aguirre used the region as the social, cultural and geographical unit to organize integral theory, methods and developmental action (Hewitt de Alcantara 1984:47-57). Apart from its home in the INI, integral regional research also found support as part of the protracted effort by the federal government to develop agriculture through the construction of regional irrigation systems in Mexico's river valleys. Gamio himself participated in the planning and colonization of irrigation districts in northern Mexico during the 1930s (Walsh 2004), and Aguirre Beltrán, Alfonso Villa Rojas, Angel Palerm and many others participated in a later generation of regional irrigation schemes (Hewitt de Alcantara 1984:49). From his position at the Universidad Iberoamericana, Palerm directed an ongoing anthropology field school in the region of Texcoco, near Mexico City, where generations of students were taught integral, regional research. These students then went on to found and staff anthropology programs such as those of the Centro de Investigaciones y Estudios Superiores en Antropología Social (CIESAS), the Colegio de Michoacan, and the Universidad Autonoma Metropolitana (UAM) in Mexico City, among others. Guillermo de la Peña, Arturo Warman, and Roberto Varela are some of the more widely known students who propagated the regional approach in emergent institutional settings. And, despite important critiques of Mexican anthropology's developmental relation to the national state, the regional study continues to form the basis of discipline-straddling research aimed at understanding Mexico's national community and identity (Lomnitz-Adler 1992, 1998). As Mexico experiences the effects of globalization, the fracturing of the political pact forged after the revolution, and the emerging environmental crisis, problems of regional diversity and national integration promise to loom large, generating new iterations of regional, integral research.

REFERENCES

Aguirre Beltrán, Gonzalo (1967) Regiones de refugio. El desarrollo de la comunidad y el proceso dominical en mestizoamerica. Mexico City: Instituto Nacional Indigenista.

Aguirre Beltrán, Gonzalo (1970[1958]) El proceso de aculturación y el cambio sociocultural en Mexico. Mexico City: Universidad Iberoamericana.

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García Cubas, Antonio (1874b) Escritos diversos de 1870 a 1874. Mexico City: Escalante.

García Cubas, Antonio (1876) The Republic of Mexico in 1876: A Political and Ethnographic Division of the Population, Character, Habits, Customs and Vocations of Its Inhabitants. Mexico City: La Enseñanza.

García Cubas, Antonio (1877) Álbum del ferrocarril mexicano. Colección de vistas pintadas del natural por Casimiro Castro. Mexico City: V. Debray.

García Cubas, Antonio (1884) Cuadro estadístico. Mexico City.

García Cubas, Antonio (1893) Mexico: Its Trade, Industries and Resources. Mexico City: Departamento de Fomento, Colonización e Industria.

García Cubas, Antonio (1904) El libro de mis recuerdos. Mexico City: Antonio García Cubas. Godoy, Ricardo (1977) Franz Boas and his Plans for an International School of Archaeology

and Ethnography in Mexico. Journal of the History of the Behavioral Sciences 13:228-242. Hacking, Ian (1982) Biopower and the Avalanche of Printed Numbers. Humanities in Society 5:279-295.

Hewitt de Alcantara, Cynthia (1984) Anthropological Perspectives on Rural Mexico. London: Routledge and Kegan Paul.

Kelley, Isabel and Palerm, Angel (1950) The Tajin Totonac: Part 1, History, Subsistence, Shelter and Technology. Washington, DC: US Government Printing Office.

Knight, Alan (1991) Intellectuals in the Mexican Revolution. In Roderic Camp, Charles A. Hale, and Josefina Zoraida Vázquez (eds), Los intelectuales y el poder en México. Mexico City: El Colegio de México/UCLA Latin American Center Publications.

Krotz, Esteban (2002) La otredad cultural entre utopía y ciencia. Un estudio sobre el origen, el desarrollo y la reorientación de la antropología. Mexico City: Universidad Autonoma Metropolitana/Fondo de Cultura Económica.

Leach, William (1994) Land of Desire: Merchants, Power, and the Rise of a New American Culture. New York: Vintage Books.

Lomnitz-Adler (1992) Exits from the Labyrinth: Culture and Ideology in Mexican National Space. Berkeley: University of California Press.

Lomnitz-Adler, Claudio (1998) Modernidad indiana. Nueve ensayos sobre nación y mediación en México. Mexico City: Planeta.

Meyer Celis, Leticia (1999) Entre el infierno de una realidad y el cielo de un imaginario. Estadística y comunidad científica en el Mexico de la primera mitad del siglo XIX. Mexico City: El Colegio de México.

Molina Enríquez, Andrés (1997[1909]) Los grandes problemas nacionales. Mexico City: A. Carranza.

Muratorio, Blanca (ed.) (1994) Imágenes y imagineros. Quito: FLACSO.

Murra, John (1980[1955]) The Economic Organization of the Inka State. Greenwich, CT:

Peñafiel, Antonio (1889) Explication de l'edifice mexicain al l'Exposicion Internacionales de Paris en 1889. Barcelona: Espasa.

Peñafiel, Antonio (1890) Monumentos del arte mexicano antiguo. Ornamentación, mitología, tributos y monumentos. Berlin: Ascher.

Philadelphia Commercial Museum (1910) The Commercial Museum, Philadelphia. Philadelphia Commercial Museum Press.

Rydell, Robert (1984) All the World's a Fair: Visions of Empire at American International Expositions, 1876-1916. Chicago: University of Chicago Press.

Salvatore, Ricardo (1998) The Enterprise of Knowledge: Representational Machines of Informal Empire. In Gilbert M. Joseph, Catherine C. LeGrand, and Ricardo D. Salvatore (eds), Close Encounters of Empire: Writing the Cultural History of US-Latin American Relations. Durham, NC: Duke University Press.

Steward, Julian et al. (1956) The People of Puerto Rico. Urbana: University of Illinois Press. Tenorio-Trillo, Mauricio (1996) Mexico at the World's Fairs: Crafting a Modern Nation. Berkeley: University of California Press.

Toledo, Victor (2002) Antropología y ecología. Aportes y perspectivas de un planteamiento interdisciplinario. In Guillermo de la Peña and Luís Vázquez León (eds), La antropología sociocultural en el México del milenio (pp. 540-556). Mexico City: Instituto Nacional Indigenista/Consejo Nacional para la Cultura y las Artes/Fondo de Cultura Económica.

Tschopik, Harry, Jr (1947) Highland Communities of Central Peru. Washington DC: Institute

of Social Anthropology.

Urias Horcasitas, Beatriz (2000) Indígena y criminal. Interpretaciones del derecho y la antropología en Mexico, 1871-1921. Mexico City: Universidad Iberoamericana.

Vaughn, Mary Kay (1997) Cultural Politics in Revolution: Teachers, Peasants, and Schools in Mexico, 1930-1940. Tucson: University of Arizona Press.

Walsh, Casey (2004) Eugenic Acculturation: Manuel Gamio, Migration Studies, and the Anthropology of Development in México, 1910-1940. Latin American Perspectives 31(5):118-145.

Warman, Arturo et al. (1970) De eso que llaman antropología mexicana. Mexico City: Nuestro Tiempo.

Williams, Rosalind (1982) Dream Worlds: Mass Consumption in Late Nineteenth-Century France. Berkeley: University of California Press.