Governmentality and Cartographies of Colonial Spaces:
The Progressive Military Map of Porto Rico
1908-1914

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submitted to
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Editor, Formations of U.S. Colonialism
(under review at Duke University Press)
January 2012
Introduction

In 1908, the recently formed “Porto Rico Regiment of Infantry” assigned three officers to produce a topographical, tactical map of Puerto Rico which scarcely ten years prior had become a possession of the United States. One of these officers, Lieutenant William Henry Armstrong, created a number of detailed field books in which he documented his topographical work and, in addition, provided descriptions, including sketches, postcards, and photographs, of towns and villages, the countryside, and the transportation networks that linked them. The Army War College printed the topographical map of Puerto Rico in twelve quadrants in 1914, but they have only recently been rediscovered. By means of a close examination of these cartographic materials, this chapter will examine the intersecting processes of imposing sovereignty, establishing disciplinary institutions, and exercising governmental rationality in the colony of Puerto Rico. First, I will show how the military map traced the division of coercive power between military and police forces. Second, I will consider the spatial dispersal of disciplinary institutions--the military service, the police force, and the public schools--in Puerto Rico. Finally, I will examine the cartography of appropriation, reconfiguration, and modification of economic spaces and transportation networks which linked them. With military cartography as our point of departure, the intent of this chapter is to shed light on the deployment of techniques of power as a means of creating colonial spaces. This paper will show how cartography divided and distributed sovereign functions over the territory, how it visualized the dispersal of disciplinary institutions, and how it represented the population and its political economy. In short, this chapter seeks to discover the ways in which the US imperial state created, documented, and normalized variegated colonial spaces.
Imperial Formations, Governmentalities, and Cartographies of Colonial Spaces

Much of Michel Foucault’s work focused upon different techniques of power and their effects upon subjects. His concept of “governmentality” defined the objects, forms of power, mechanisms, and the historical expansion of governmentality associated with the rise of modern states. First, the objects of governmental rationality are populations, which are understood in the terms of political economy and civil society. Second, governmental rationality differs from, but is articulated with, the rationalities of sovereignty and discipline. “Sovereignty” refers to the exercise of authority over political subjects by means of laws, decrees, and coercive apparatuses. “Discipline” refers to the techniques of regulating and normalizing bodies, their forces and capacities, in the context of institutions such as schools, prisons, military barracks, factories, monasteries, and so forth. One might summarize the different rationalities—governmental, sovereign, and disciplinary—in terms of their objects of observation, judgment, and normalization: populations, political subjects, and bodies, respectively. Third, governmental rationality deploys techniques and apparatuses that produce knowledge about the population and in this way provide for state security. In this sense, the effective management of populations, the “conduct of conduct,” provides for state security just as much as the coercive apparatuses such as armies, police forces, and surveillance agencies. Finally, the history of the modern state may be theorized as the “governmentalization of the state,” a process in which the governmental rationality gradually re-inscribes, recodes, and predominates over the rationalities of sovereignty and discipline. In this sense, “governmentality,” in the broad sense of the term, refers to the configuration of three intersecting elements of power: governmental rationality, discipline, and sovereignty.
Foucault’s theorization was oriented, above all, toward liberal European states. What, then, of colonial states? The question at hand is whether governmentality takes on a particular configuration in the colonies. Mitchell Dean has argued that liberal state regularly divides the population into those who qualify as political subjects and those who do not possess the attributes necessary for the full rights of citizenship. Indeed, liberal democracies often discriminate against internal populations by means of ethnic or racial criteria. Likewise, they commonly establish non-liberal, or authoritarian, governments in their colonies. Dean concluded that “authoritarian governmentality” differs from liberalism in that it delimits subject populations (whether internal or colonial), denies their capacities and rights as citizens, and expects unquestioned obedience. Authoritarian governmentality deploys more intensive and general “sovereign instruments of repression” in order to neutralize or eliminate any opposition to the dominant state formation.

One possible reading of this theorization is that colonial governmentality is simply an instance of authoritarian governmentality. While not incorrect, this interpretation seems too simplistic. Stephen Legg argued that sovereignty, discipline, and governmental rationality intersect in unique and multiple configurations in the colonies and urged us to carefully consider the specificities of colonial governmentalities which may vary considerably over time and place. In his contribution to the debate over the “colonial difference,” Legg concluded that the colonial state deployed more violence (techniques of sovereignty), invested less in disciplinary institutions, and used governmental rationalities to exclude, racialize, and pathologize subject populations. Furthermore, the state favored economic enterprises that were less modern and more extractive and exploitative. In addition, in his thorough study of urban development in Delhi, India, he found that the organization and representation of space was a central mechanism of
exclusion and control.¹⁶ James Duncan reached similar conclusions regarding nineteenth century Ceylon where the colonial state focused upon practices of surveillance, coercion, and corporal punishment to ensure the extraction of agricultural wealth. He concluded that the colonial state, for the most part, “rejected governmentality in favour of authoritarian biopower.”¹⁷

A serious limitation of these interpretations of governmentality is that they are circumscribed by the boundaries of states, whether modern sovereign states or colonies. The “liberal governmentality” of the national state is conceptually distinct from the “authoritarian governmentality” in the colonies. Recent historical research on the US “imperial state” has expanded the notion of the state beyond the narrow confines of the national bureaucratic apparatus to include complex and transnational processes that articulate both national and colonial state formations, national and colonial elites, and a myriad of empire builders, both public and private, that circulated widely between the empire and the colonies as well as among the different colonies. From this perspective, the modern imperial state was created through the synergetic interaction of three processes. First, colonial states were hybrid forms created from national institutions and principles which were exported and adapted to local situations and institutions. Second, the establishment of colonial states provided for the expansion of state power in the colonies and stimulated bold governmental experimentation, especially in areas of policing, drug prohibition, education, public health, environmental organization, warfare, and military organization. Finally, many of these governmental innovations in the colonies were repatriated back to the national sphere.⁸ The work of Alfred McCoy regarding the “surveillance state” in the Philippines is a convincing illustration of the value of this perspective. He showed how the U.S. colonial regime in the Philippines, built upon the centralized and authoritarian Spanish police system, expanded its use of information technology and surveillance in order to
both crush the revolutionary movement and control local politicians. The surveillance techniques were later repatriated to the United States and used by the FBI and also applied in counterinsurgency practices in other neo-colonies.\textsuperscript{9}

A recent book by Julian Go further broadens the scope of analysis and proposes a theoretical definition that facilitates systematic comparisons of systems of colonial governance. He conceptualizes “imperial formations” as hierarchical relations in which a state establishes subordinate territories, subject peoples, and dominated societies by means of “multiple tactics, policies, practices, and modalities of power.”\textsuperscript{10} In his comparative study of US and British empires he focuses upon the exercise of political power (formal or informal), the legal status of colonial subjects, the characteristics of dominant groups (religious, racial, or class), and various tactics of control (outright aggression, covert operations, protectorates, economic aid, and so forth). Go’s work is explicitly directed at refuting the claims of U.S. exceptionalism and he adopts a long-term, cyclical model of comparison which shows how social, economic, and political conditions in the colonies were determinate in the establishment of different modalities of governance. This allows him to show that, contrary to the theory of US exceptionalism, the British and US empire responded in similar ways to the variegated conditions in their respective colonies. Nevertheless, his broad comparative perspective must necessarily leave out finely grained analysis of processes of creation of subjects, populations, and spaces. Except for the political systems of governance, he does not examine other techniques of power, namely, the particular apparatuses of security, discipline, and governmental rationality which constituted the mechanics of imperial power and knowledge.

These two concepts, “imperial state” and “imperial formation,” suggest the possibility of a wider and more integrated application of the notion of governmentality than Foucault
originally conceptualized within the confines of European nation-states. First, the concept of the imperial state emphasizes the circulation of techniques of power, even though they have not been carefully conceptualized. Second, the concept of imperial formation stresses the importance of comparative analysis, even though it elides attention to diverse mechanisms that produce power and knowledge over colonial subjects. Absent in both of these concepts is the careful consideration of the creation of colonial spaces as an element in the deployment of power. If Foucault was entirely negligent when it came to the analysis of empires and their colonies, he was much less so regarding the relationships between space and power. His work on disciplinary institutions is filled with observations regarding the design and use of architectural spaces, such as the Panopticon, even though he does not address geography as such, except for his idea of the “spaces of dispersion” of disciplinary techniques. His later conversation with a group of French geographers associated with the journal *Hérodote* is one of the founding texts of critical geography, although his conclusions were at best tentative. Much of Foucault’s discussion of governmentality also refers to geographic dimensions, but without much explicit theorization.\(^\text{11}\) The techniques of governmental rationality imply the delimitation and administration of space. Foucault writes:

“The things with which in this sense government is to be concerned are in fact men, but men in their relations, their links, their imbrication with those other things which are wealth, resources, means of subsistence, the territory with its specific qualities, climate, irrigation, fertility, etc.; men in their relation to that other kind of things, customs, habits, ways of acting and thinking, etc.; lastly, men in their relation to that other kind of things, accidents and misfortunes such as famines, epidemics, death, etc.”\(^\text{12}\)
The first part of this definition stresses geography, namely, the relationship of the population (“men”), the spatial distribution of material resources (“things”), and the characteristics of the territory. Like governmental rationality (relative to the management of populations), sovereignty (relative to the control of political subjects) is also delimited, at least in part, geographically. Cartography has served as a central technique of both. In contrast, disciplinary institutions organize and manage internal spaces, as we shall see later in the instance of the graded school. However, the dispersal of such institutions throughout society can also be mapped. Cartography demarcates and defines territories and their administrative units; it delineates populations and describes their distribution in space; it provides inventories of demographic, economic, and natural resources. Maps also provide the basic grid for other techniques of knowledge production such as the national census and industrial surveys. In addition to the demarcation of national territories, cartography has been central in the division of the globe into colonies and the establishment of imperial control.

Yet, the paradox of imperial mapping is that its cartographical methods are virtually indistinguishable from those deployed in the governing of national territories. Michael Edney has argued that the difference between national and imperial mapping resides in the deployment of similar techniques for diverse ends; namely, nation building versus empire building. In the first instance, maps became a symbol of the nation just as the geographical and demographic information created a certain administrative unity. In the second instance, maps were but another method to claim territory and produce information for imperial administrators to subjugate colonial subjects. In the first instance, there existed a certain unity of knowledge between the national subjects and maps of themselves while in the second instance there was a disjunction between the colonial subjects and the administrators who mapped them. The “imperial map,”
then, is not a “distinct cartographical category.” However, this does not mean that imperial maps were neutral with respect to colonial power; to the contrary, cartographers were agents of the imperial state and they produced knowledge that delimited, defined, and controlled colonial spaces. Indeed, we might generalize: there can be no colony without a map, even though a map does not always designate a colony.

Therefore, by fusing these notions of imperial state, imperial formation, and governmentality we propose that the fields of dispersal of techniques of governmental rationality, discipline, and sovereignty extend geographically throughout the whole of the empire and even among different imperial formations. Furthermore, national and colonial state formations constitute uneven and unequal fields of dispersion of power and should express different configurations of governmentality. This idea of a wide, but variegated, dispersal of techniques thus suggests the necessity of comparative analysis. The US imperial archipelago did not institute a single, uniform pattern of government for colonial rule. Consequently, different sites should also exhibit different configurations of governmentality. Indeed, many of the above conclusions regarding colonial governmentality do not neatly coincide with the history of early twentieth-century Puerto Rico. When the United States took control of Puerto Rico in 1898, it was already one of the oldest European colonial settlements. What particular configuration of governmentality did the United States deploy? The following is a working hypothesis based upon a reading of the secondary literature.

First, the use of governmental techniques, such as public health and hygiene, military cartography, and the census were well known in the Spanish colonial regime even though their extensive deployment often lacked sufficient material support. The new regime in Puerto Rico simply broadened and deepened already established practices. Second, the new regime also
adapted many of the Spanish techniques of coercion that included the modern prison, rural and municipal police, centralized command structure, and virtually unchecked executive power. In Puerto Rico, however, the deployment of sovereign techniques seems to have been less intense than in the Philippines, largely because of the lack of armed revolutionary resistance. Third, the new regime financed the development of the most modern forms of road and railway construction and promoted the expansion of advanced sugar production and refining: the highly mechanized sugar mill (central). Finally, as we shall see below, a key attribute of governmentality in Puerto Rico was the establishment and wide distribution of disciplinary institutions, principally the graded public school. In addition, nursing schools, a normal school, and an officers’ school were also created in the first few year of colonial rule. Finally, the integration of Puerto Ricans into the state apparatus also took on disciplinary aspects of political tutelage.

In the following sections then we will detail the configuration of sovereign, disciplinary, and governmental rationalities as exhibited by the Progressive Military Map of Porto Rico. Cartography is understood as part of the process of appropriation (by a colonial state), reconfiguration (under a new sovereign), and modification of colonial spaces (the Americanization of transportation, political economy, and education). Let us turn first to the Regiment of Infantry, which produced the map, and its relationship with other security apparatuses.

**Porto Rico Regiment of Infantry and the Insular Police: The Intersection of Sovereign Power and Discipline**

As soon as the United States troops disembarked in July of 1898, Army officers, with the cooperation of the local elite, organized the Porto Rican Scouts, to assist with reconnaissance and
military maneuvers against the Spanish troops, and the Porto Rican Guards, to help maintain law and order in the areas under US control. When the war with Spain concluded the following August, the United States faced an even greater challenge than the Spanish Army: unrest and violence in the countryside. Seeking provisions, money, and vengeance against the propertied classes, groups of armed men throughout the interior attacked the stores and haciendas of both Spanish Puerto Rican property owners and merchants. The U.S. Army established rural patrols, provided guards for rural property, and tracked down the perpetrators of violence. Again, the cooperation of the Puerto Ricans was essential for surveillance, reconnaissance, and troop movement.  

By 1899, most of the unrest in the countryside had been put down and the United States began to organize and recruit its first overseas colonial regiment, with the plan of separating police and military functions. The result was the creation, in 1899, of the Porto Rico Battalion. Composed of American officers and Puerto Rican enlisted men, it was conceptualized both as defensive force against foreign threats and a back-up reserve for the Insular Police, created that same year to patrol the rural areas. The following year, an additional mounted battalion was created. In 1901, Congress combined the two battalions and created the Provisional Puerto Rican Regiment of Infantry, with headquarters in the capitol, San Juan, and barracks in the central mountain town of Cayey. The provisional regiment was initially comprised of Puerto Rican enlisted men and U.S. officers. In 1902, qualifying exams were offered to Americans who aspired to a commission in the regiment and two years later Puerto Ricans were also permitted to receive commissions as officers and several passed the exams and were commissioned as second lieutenants. Puerto Rican officers were subordinate to higher ranking American officers. In 1908,
the provisional regiment became a regular unit of the U.S. Army: the Porto Rico Regiment of Infantry. 21

From the very beginning, the Regiment had a strictly defensive military objectives; it did not have police functions, except to serve as back-up for the Insular Police. The organization of a colonial regiment in distinct units from the insular police meant that American soldiers were not required to intervene directly in the maintenance of law and order among the local population. The Army itself was not envisioned as the principal means of internal control and only San Juan and Cayey were garrisoned. Given the absence of armed rebellion against the colonial state, regular and volunteer troops of the U.S. Army were retired from Puerto Rico and many went on to serve in the Philippines. The Insular Police was organized precisely in order to reduce the necessity of military occupation. At first, the previously existing municipal guards remained active in the urban areas; later they would be disbanded and the Insular Police would cover both rural and urban areas. The Insular Police had a parallel structure with a military chain of command: American police officials occupied the highest ranks while Puerto Ricans made up the subordinate officers and the rank and file. In this way, the police force could exercise control and vigilance of the population, while at the same time policemen, detectives, and subordinate officers were subject to the hierarchical discipline of their superior U.S. officers. 22 Under the centralized command of high-ranking United States police officials, the Insular Police, composed of local policemen, was responsible for keeping order in the towns and the countryside.

This model was a variant of the Spanish system of municipal and rural guards which was adapted with great success by the United States in Cuba, the Philippines, and Puerto Rico. 23 The hallmarks of the Spanish system were centralized, intrusive law enforcement and the modern prison. These two attributes were carried over to the new regime in Puerto Rico with minor
adjustments. In contrast, in the Philippines the new regime quickly created a much larger and more complex security apparatus in order to wage war against the Filipino revolutionary army, to implement overt and covert counterinsurgency techniques against guerrilla forces, and to deploy secret police forces to demoralize and discredit nationalist leaders. The civilian government, established in 1901, created a complex security system for policing the provincial municipalities (lightly armed police), the capital city (Manila Metropolitan Police), and the countryside (the Philippine Constabulary). In addition, an infantry unit composed of Filipino soldiers and US officers (the Philippine Scouts) were integrated with the US Army. In addition, three of these security organizations, Manila Metropolitan Police, Philippine Constabulary, and US Army, had covert surveillance units: the Secret Service Bureau, the Information Division, and the Military Information Division, respectively. Since there was no armed, nationalist challenge to the colonial state in Puerto Rico, the security apparatus was far simpler and much reduced, although admittedly very little historical research in this area has been done.

Indeed, perhaps as important as its coercive function, the regiment in Puerto Rico was a disciplinary regime dedicated to the training of hearts, minds, and bodies. Writing in 1905, Governor Winthrop justified the Porto Rico Provisional Regiment of Infantry, not on military grounds, rather for its positive effect on the soldiers and officers, many who later entered civilian life. He wrote:

It is true that the maintenance of this regiment is unnecessary in so far as it affects the peace of the island, but the same may be said of the regiments stationed in posts throughout the United States. The continuance of the regiment is of great moment to the people of Porto Rico, affording, as it does, a school for the mental and physical development of many of the
natives of the island. It is a noticeable fact that after service with the regiment, owing to the regular life, nutritious food, and daily exercise, the men improve considerably in size and physique. Of the 800 men who have been discharged from this regiment, many have been enabled through their knowledge of the English language, secured in the regiment, to pass civil-service examinations for entrance to the Federal service. In others, the habits acquired of discipline and steady attention to duty have caused them to be sought after by the plantation owners and merchants to fill responsible places. The existence of the regiment, composed of native Porto Ricans, is a source of great satisfaction and pride to these people, and does much to inspire an impressive respect for the American flag.”

The governor’s description suggests that more than merely a coercive function, the regiment was a “school of mental and physical development,” a disciplinary regime that trained subjects for both military service and civilian life. In effect, the report portrayed the Regiment as an instrument of Americanization: the men learned English and were trained for civil service positions and jobs in the expanding plantations and commercial concerns. They both learned and inspired in others a respect for and loyalty to the colonial state. Strictly speaking, however, their military capacity was of secondary importance.

Similar to the Regiment, the Insular Police was also a coercive apparatus that functioned simultaneously as disciplinary regime. The Insular Police was organized along military lines, with a centralized chain of command, under the direction of an American officer. The governor considered the police an “impartial, model, and well-disciplined force.” Discipline was achieved through various techniques, including constant evaluation and one-year, renewable
appointments. Other disciplinary techniques were the drill, the concentration, and the police academy. The governor wrote:

"The concentrating of the police force for drill and instructions is of the greatest importance. A great deal has been accomplished toward bringing the force to a high degree of efficiency by concentrating the men four or five days, teaching them their duties and maintaining their discipline. These concentrations should take place at least twice a year, and each time in a different section of the island, so that those guardsmen who take part in the first concentration would not have to called upon to take part in the second, thereby making them less expensive."

The Insular Police, then, was a disciplinary institution similar to the Army. Both attempted to train subjects, whether policemen or enlisted men, and submit them to the hierarchy of a centralized system under the control of U.S. officers in the colonial government. Officers and guardsmen worked long hours and were assigned a wide variety of tasks, including supervising elections and strike breaking. In general, the insular police functioned to control the “dangerous classes” and to manage the “popular illegalities” related to their survival in and resistance to the new economic regime. In addition, the insular police sought to circumscribe mob violence in the political sphere and to contain collective actions by workers that threatened agriculture and industry. To date, scholars have produced little evidence of widespread use of surveillance as a method of military pacification and political control in Puerto Rico during this period. The concerted methods of surveillance that have been documented in the Philippines are not evident.

The Progressive Military Map, the Field Books, and the Military Gaze
When the US military forces first arrived in the Puerto Rico, they simply updated existing Spanish maps, including transportation, agriculture lands, and communications. The extensive mapping of Puerto Rico was also a primary concern during the first civilian administrations. In May of 1908, the U.S. Army ordered Lt. William Armstrong and two officers of the Porto Rico Regiment of Infantry to produce a “progressive military map” of the island. This map was a part of the Progressive Military Map of the United States, a large-scale project of the U.S. Army which attempted to produce an interconnected series of tactical maps of strategic areas of the states and territories. In Puerto Rico, the map project was a function of the division between the reduced responsibilities of the Army and the increased centralization of the Insular Police. It provided the means of mobilization of troops or of additional police in the case that the local police forces required additional forces to control unrest or in the case that foreign invaders threatened the island. For this reason, it paid attention to the elements essential to troop movement and communication, provisioning and quartering, topography and strategic deployment. Field books, including detailed road itineraries and town descriptions, were an essential part of the standard methods of the U.S. Army for making military maps. However, Armstrong’s field books, which will be the primary sources for the following analysis, were unique in style, materials, and presentation. He collected postcards, took photographs, sketched towns, and then he meticulously annotated, arranged, cross referenced, and bound all of these materials. The nine existing field books cover almost thirty towns, their agricultural environs, and the transportation infrastructure that linked them.

A “gaze” is a way of seeing objects and a way of speaking about them; it establishes a field of visibility and a mode of enunciation. The gaze is a part of a social apparatus, a dispositif, which creates knowledge, establishes relationships of power, and defines subjects. In this
section, then, we are interested in the military gaze, the ways in which the map and field books identified and described objects, the power created by these descriptions, and the subjects which were subsequently interpolated.\textsuperscript{31} The principal objects of the gaze were the territory, its resources, and population; the enunciations described the military value of the towns, the strategic topography, and the lines of troop movement. Furthermore, the military cartographers’ presence in the field embodied and exemplified the dominion of the Army over the entire island while the completion of his map enabled its deployment to any location. Armstrong and his two assistants moved freely for several years with without impediment or threat at any time. Finally, the field books assessed and evaluated the military character of the population. Armstrong’s work was one of reconnaissance rather than of surveillance; he sought to survey the topography and resources of a territory, not to keep a close watch over individuals, whether criminals or subversives. The element of surveillance, i.e., the collection of information regarding individual political subjects, was entirely absent. Likewise, his work was concerned, not so much with the delimitation of a sovereign territory, but rather with the description of an already demarcated space: the colony of Puerto Rico. The map reiterated and deepened colonial spaces, but it was a primarily a work of governmental rationality: the description of a population, its territory, and resources.\textsuperscript{32}

Despite its broad governmental scope, the principal function of the topographical map was military: to aid in the rapid mobilization and provisioning of troops, if, when, and where necessary. The field books directly addressed the issue of troop movement from town to town by means of trails, roads, and railways. They also explicitly addressed the issue of campsites, food and water, fuel, pasturage, medicines, hospitals, and sanitary conditions. In addition, they mapped urban spatial organization and prominent buildings, spatial distribution of commerce and
class. Both the map and the field books provided essential information regarding transportation: roads and trails, bridges and culverts, railroads and trolleys, and sea ports. The topographical aspects provided tactical information regarding troop deployment. Thus, the map used techniques of governmental rationality—the description of populations—but was an exercise of sovereign power in that it consolidated military control and prepared for possible threats, both internal and external.

In addition, the field books expressed concern over elements that are not immediately evident in the topographical map: the military character of the population and its loyalty to the colonial state. Armstrong continuously posed the following questions: Is the town pro-American? Are they willing to fight for the United States? How many local men can effectively bear arms? Is the police force reliable? Again, the technique was one of governmental rationality (the description of a population), but the issue was one of sovereignty, the loyalty of political subjects to the sovereign power. In general, Armstrong was not optimistic about the capacity of the local police forces or the towns’ population to defend the island from foreign invasion. He found them to be neither disciplined militarily nor loyal to the United States. In these discussions about loyalty and military character, Armstrong identified the perceived opponents of the regime: the Spanish, the Catholic clergy, and the local native politicians. The following description of a small town on the west coast (Añasco) captures the tone and the content of the field books regarding military character, the establishment of schools, and the adversaries of the colonial regime.

“As most of the business men are Spaniards and the greater part of the rest of the male population the peon class, it is doubtful if more than 200 would be of any use with arms. Of these, 25-30 might make good shots
under most favorable conditions. As defenders of the American flag I have but very little confidence in them. The picture [see annotated postcard] shows exactly what the people are. Mostly bare footed illiterate negros or half breeds. Of course there are many people of a better class. There are six or seven Americans in the town all engaged in missionary or in school work. There are few if any of other nationalities than Spanish or American. The people are indifferent toward Americans but it is safe to believe that their love for Americans is limited. The greater part of feeling toward Americans is encouraged by the town priest who has pronounced all Americans as ‘demonios’ and the public school as the ‘casa de demonios’ (devils and houses of devils). Nearly all the trouble throughout the island is caused by the half educated native priests and the cheap politicians. Romanism leaves its black trail in all parts of the island.”
Armstrong’s language deployed elements of class, race, and national origin, not as systematic, discrete categories, rather as the components of complex descriptions shaped by the military gaze. Except for the distinction between the agricultural “peon” and the urban laborer, he was oblivious to distinctions among the working classes; he dismissed them all as poor, illiterate, barefoot, and often referred to them pejoratively as negro, black, mulatto, or half-breed. He found very few men capable of bearing arms and even fewer were able to shoot well. He found that working classes were neither ready nor willing to fight for any cause. Likewise, among the educated and propertied classes he also found poor military character and very little loyalty. He often distinguished between Spanish and Porto Rican. This national distinction often delineated class differences: he stressed that the wealthy merchants were “Spanish” as distinguished from the Porto Ricans who composed the working classes. This class and nationality division was described for practically every town. Armstrong identified the Spanish
and native priests as opponents of the American regime and one of its central institutions, the public school. Yet, there is no evidence that Armstrong considered the Spanish Catholics to be a military threat, instead the issue was one of loyalty to the new regime and its institutions. Nevertheless, some larger towns had wealthy, educated Puerto Ricans which constituted the local elite and their loyalty to the political regime was shaped by the transition to capital-intensive, export-driven sugar production.

Loyalty was not entirely a question of religion or nationality. A close reading of his evaluations of the various towns suggests that it was, in part, related to recent economic turns of fortune: the depressed coffee areas were sometimes “anti-American,” but at the same time desperate for government assistance and schools. In his travels through the coffee regions, he found much opposition to the change of colonial regime and the subsequent collapse of the coffee market. He stopped at several coffee plantations in the interior and found the owners to be “very anti-American” even though they were usually “very friendly.” He did not find anyone hostile to his presence; instead, without exception he found the population in the coffee regions friendly and courteous.

In contrast, the inhabitants of the booming sugar areas were somewhat positive with respect to the American political economy, but at best indifferent towards the colonial government. The expansive sugar production had made many wealthy men, but paradoxically many of them now desired more political autonomy or independence. He noted that local politicians were both courteous to him and fond of stirring speeches against the colonial regime. He considered them to be misguided but not a military threat. At no time did he suggest that there was any armed resistance; indeed, he found very few men even capable of handling firearms. In general, the population was described as passive, both unable and unwilling to
fight for any cause, except for the Spanish inhabitants who were seen as impediments to the colonial regime. In contrast, the Spanish population was seen as an intractable obstacle to the American regime, both opposed to the public school and in conflict with the Protestant denominations. Instead of a military threat, however, opposition was directed at the new disciplinary institutions that increasingly occupied central spaces both in the towns and the countryside, as we shall see later.

Armstrong was not only a military agent; he was also a witness to the transformation of the land- and cityscapes of Puerto Rico under the new colonial government. His field books documented the material expansion and improvement of transportation, urban services, and agricultural production. First, the field books captured the processes of improving old trails and roads and creating new macadam roads. Armstrong commented that his map would soon be obsolete since the government was building “good macadam roads in all sections of the island and before many years trails now found on the map will be roads.”

Second, the field books documented the improvement of urban services, in particular water works and electrification, in various towns throughout the island, but especially in the sugar regions. In addition, he recorded the establishment of hospitals, clinics, anemia stations, and, of course, public schools. Third, the decline of coffee and the advent of sugar were evidenced in the reconfiguration of the landscape: the panoramic views and the topographical map illustrate the geographic distribution of cultivation, the location of coffee haciendas, old sugar mills, and modern *centrales*. The map is both littered with ruins of old mills and filled with the expansive new mills. Armstrong’s cartographic work left impressive documentation of the first phase of expansion of the sugar industry in Puerto Rico and his panoramic landscapes appears as if it were natural spaces for capital investment in sugar.
The following segment of the topographical map shows the modern sugar mill, Mercedita. It was located just east of the major city of Ponce and west of the small town, Juana Díaz (upper right corner). It is a thoroughly modern mill, surrounded by a network of good roads, with internal railways to bring sugar in from the fields for grinding, and with a pumping station for irrigation. All around are the remnants of old mills, identified as O.M., whose lands have been absorbed by Mercedita to supply sugar cane to the mill. Although the map segment did not indicate cultivation, it is clear that all of the flat lands shown were dedicated to the cultivation of sugar cane. Armstrong also documented this process of expansion of the modern mills by means of photography. The following photograph is a panoramic view of the Guanica sugar mill, at the time the largest sugar mill in the world. It transported sugar cane by railroad from all around Puerto Rico and shipped in sugar cane from the neighboring Dominican Republic to be processed by the most capital-intensive, advanced technology of the period.
In sum, Armstrong participated in and documented the creation colonial spaces by means of cartographic techniques. First, the military map applied a military gaze in order to produce strategic knowledge about the topography, the infrastructure, and the population. The field books provided detailed information essential to troop movement, provisioning, and the military character of the population. Second, the material process of “Americanization” may be seen in the land- and cityscapes: new roads and sugar mills. In many respects, they captured the changes of fortune of the elites due to the decline of coffee and the rise of sugar. The field books also commented on the impediments to the US regime, namely the local politicians, the Spanish upper class, and the Catholic priests and nuns. Although Armstrong witnessed the material transformation of the landscape, he was not convinced that roads and sugar would transform the hearts and minds of population. That task, perhaps, would be left to other colonial spaces, those circumscribed by that archetypical disciplinary institution, the public school.

**Spaces of Order: Graded Schools, Textbooks, and Desks**

The graded school was central to a new disciplinary regime that sought to manage both students and teachers. The effective use of pedagogical and supervisory techniques associated
with the new schools system required the centralization of authority in the Department. Several kinds of struggles arose over the new disciplinary structure of the Department: between teachers and students; between supervisors and teachers, and between the centralized Department and municipal control. In addition, conflicts arose over the specific content of the teaching, specifically instruction in English. Armstrong was very aware of these conflicts because before his military career he had worked as a district supervisor in the public school system in San Juan. His topographical work demonstrated close attention to the widespread distribution of public schools throughout the towns, villages, and countryside. In the larger towns he took photographs of the new concrete graded schools and in the countryside he mapped the locations of rural and agricultural schools. His work evidenced the wide dispersal of these disciplinary institutions; however, in order to identify the particular mechanisms of control of students and teachers we must consult the reports of the first two commissioners of the Department of Education, Martin Brumbaugh (1900-1901) and Samuel Lindsay (1902-1904).

When Brumbaugh took office he found that there were no virtually no public school buildings. This meant the Department had to rent facilities for that purpose. His report enumerated the difficulties of vacating the rented buildings, their deplorable sanitary conditions, the time and cost for their renovation, and the resistance of the current residents or owners. The Department of Education responded quickly to this situation by implementing a program of constructing new schools. During the its first years of operation, the department built scores of one-room rural schools, vocational schools (agricultural or industrial), modern graded schools (including primary and secondary), and a normal school for the training of local teachers. These new schools were widely dispersed through the towns and the countryside and Armstrong’s military map included many details of their geographic reach. He indicated the rural
schools on the topographical map by means of the letters S.H. In the field books he included
descriptions and photographs of the new urban structures and located them on his sketch maps of
the towns. The following sketch map details the town of Añasco, which we have discussed
earlier. The map shows the spatial location of the central disciplinary institution, the graded
school. It is worthy of note that in this town the two new graded schools, one of four rooms (200
students) and the other of six rooms (300 students), were built directly behind the Catholic
Church. It is no coincidence that the schools, symbols of the new regime, were centrally located
and at least one of the schools was partially visible from the central square (see also the postcard
of Añasco above). Two other wooden school buildings were built just outside of town, near the
railway station, but were not indicated on the sketch map. Armstrong also included in his map
the anemia station, the police headquarters, and the town hall, which included the jail and
telegraph station.
Closely related to the inadequate school buildings, the lack of discipline in the early classrooms was a problem in the first years of the new regime. In 1902, Lindsay complained that when he took office “there was no uniform course of study; no attempt at rules, regulations, or order; no thought of the rights of the child; no endeavor to apply pedagogical principles nor to furnish teachers with adequate equipment for their work.” Lindsay’s strategy focused on textbooks and desks. The introduction of textbooks, whether in English or Spanish, outlined a course of study by year and grade. The Department purchased thousands of school desks which were to replace the existing benches and tables “at which the children were formerly huddled together without any possibility of maintaining good order and without any regard for health and comfort.” Lindsay explained: “New individual desks create a change in discipline of the school and in the spirit of pride and degree of efficiency with which both teacher and pupil carry on the
work.” The textbooks and individual desks were articulated with the architecture of the new school buildings; the construction of modern multi-room, graded school houses provided for the spatial separation of grades corresponding to the curriculum outlined in the textbooks. Thus, the construction of the graded school, the installation of individual desks, and the use of textbooks assured the repartition of bodies, the temporal control of activities, and the division of sequential tasks in which students were watched, evaluated, and sanctioned as individualized subjects.

In addition to the discipline of students, conflicts arose over the supervision of the teachers. Brumbaugh described the conflicts between the district supervisors, who were most often American, and the local teachers:

“The difficulty attending their work is due to the friction of races and languages. The teachers who speak no English, and who are not wholly willing to accept the new order of things, look upon these supervisors as official meddlers. This has led to a few unpleasant and unfortunate experiences. But in general the teachers welcome this supervision, and now appreciate its value to them and to the schools.”

It is not clear exactly what Brumbaugh meant when he referred to the conflict of “races” but the context of the comment suggests that the races in question were American supervisors and Puerto Rican teachers. Likewise, Lindsay identified the “English supervisors” as the main agents of disciplinary management of teachers. “Those who willfully neglect their work, close their schools before the regular hour for closing, neglect to open them at the proper time, sham sickness, and in general do as little work as possible when the supervisor is not in sight are dealt with severely when they are found out. We have had the risk of closing some schools altogether,
by suspending within the last three months about twenty-five teachers for serious cause.” Since teachers were also to be model citizens, they could be suspended for lack of morals in private life: “We must not place the care and training of innocent children in the hands of any teacher whose life is not clean, wholesome, and earnest, no matter what other qualifications he may have.”

Thus, both commissioners emphasized the clashes between supervisors and teachers. These conflicts centered on the issues of the use of the English language, teacher preparation, and the authority of the Department of Education to hire, evaluate, and dismiss teachers. In addition to direct supervision, another instrument in the disciplining of Puerto Rican teachers was the establishment, in 1903, of the normal school which trained persons to teach in graded schools as well as the rural, agricultural, and industrial schools. The idea was to convert subjects into students of the disciplinary regime and only then would they become proper teachers.

Finally, the financing and construction of graded schools, as well as the supervision and training of teachers, required a centralized administration. The official reports indicated that the Department was structured in a way to remove the power from the local school boards and the municipalities. The local school boards were often politically subservient to the mayor while at the same time without a budget. The Department of Education was centrally structured and financed in order to establish a clear chain of command from the commissioner through the supervisors to the teachers. The local boards were weakened, but not eliminated.

The early commissioners of education recounted several conflicts and difficulties that arose from the establishment of a new disciplinary regime, or in Brumbaugh’s words, a “new order of things.” The discursive themes in the official reports centered on conflicts arising from student discipline and teacher supervision. The first two official reports of the Department of
Education provided evidence of the establishment of a new disciplinary discursive social formation in the public school system in Puerto Rico. Several changes in the school system were at the center of the department’s disciplinary regime. The techniques of discipline, broadly speaking, related to the distribution of bodies within institutional spaces, the control of activities, the division of tasks, and establishment of a chain of command: the graded school, the supervision of teachers, and the centralization of the Department of Education. Although Puerto Rico was without armed resistance to the colonial state, Lindsay used a bellicose metaphor; he wrote that the colonization of Puerto Rico was to be “carried forward by the armies of peace, whose outposts and garrisons are the public schools of the advancing nation.”

Apparently, Armstrong took this metaphor to heart: in his military map he was careful to include all of these disciplinary “outposts and garrisons.” These schools were the signs of the new order and had an important spatial presence as well as a demographic impact.

**Conclusion**

I have argued that colonial spaces are created through the deployment of techniques of sovereignty, discipline, and governmental rationality. In the U.S. imperial formation, these techniques were widely, yet unevenly, dispersed throughout the colonies. In Puerto Rico, sovereign techniques of repression and surveillance were not as prevalent as the wide spatial dispersal of disciplinary institutions which sought to train the hearts, minds, and bodies of the newly colonized subjects. Likewise, governmental techniques of collecting information about populations and political economy were equally important. Using the Progressive Military Map of Porto Rico as a point of departure, I have shown how cartography was an instrument of appropriation, reconfiguration, and modification, not only of landscapes, but also of colonial subjects and populations. First, it mapped the space of sovereignty and made possible the
functionality of its limited security forces. It helped make possible the division between policing the local population, undertaken by the Insular Police, and the defense of the island from foreign attack or internal disturbance, responsibilities of the Regiment of Infantry. Both institutions were simultaneously disciplinary institutions, in that they sought to shape the bodies and minds of the integrants, and security apparatuses which used, or threatened, coercion to maintain internal order and external defense. Sovereign techniques were minimal due to the relative political and military stability of Puerto Rico, especially when compared with the Philippines. Second, it mapped spaces of discipline and their distribution. In particular, the small, internal spaces of disciplinary institutions of the public school house were shown to have a wide geographical dispersal throughout the cities, towns, and countryside. Third, the map documented the recent transformation of scale and extension of sugar production and the intricate transportation networks that facilitated the export-based economy. The map traced the increasingly dense networks of transportation and their connections to the changing landscape of agricultural production. These were the colonial spaces created and described by the Progressive Military Map of Porto Rico: spaces of sovereignty and their functionality; spaces of discipline and their dispersal; spaces of economic production and their connection. The colonial difference of Puerto Rico may be characterized by a particular configuration of governmental rationality: the limited, but effective, uses of coercive techniques; the wide dispersal of disciplinary institutions; and the expansive, modern transformations of the political economy along with the systematic management of populations.

1 The original topographical map is located in the Map Collection of the Library of Congress. A copy is available in the Centro de Investigaciones Históricas, Universidad de Puerto Rico, Río Piedras. Seven original field books are housed in the Colección Puertorriqueña, Universidad de Puerto Rico, Río Piedras; two others are in a private collection. The library has digitalized its
collection which may be consulted on-line at the Biblioteca Digital, Sistema de Bibliotecas, Universidad de Puerto Rico, Río Piedras. I will use the abbreviation FB, followed by the original enumeration and page number, to reference quotes from the field books.


3 Scott applies Foucault’s concept of governmentality to a colony (Ceylon), but he does not distinguish precisely the colonial difference in the deployment of governmental rationality. Rather, he seeks to refocus the analysis away from attitudes of the colonizer and the forms of exclusion of colonial subjects and toward the analysis of the objects and techniques define the political rationality of the colonial state. I take a similar theoretical position although I hope to distinguish better the notion of governmentality in the context of the colonial state of Puerto Rico. See David Scott, "Colonial Governmentality," *Social Text* 43 (1995): 191-220.


5 Dean, *Governmentality*, 209.

6 Stephen Legg, *Spaces of Colonialism: Delhi’s Urban Governmentalities* (Oxford: Blackwell, 2007). He summarized the pattern of colonial governmentality in India as a mixture, on the one hand, of excesses in the realms of violence, ceremony, segregation, incarceration, exploitation, the ethos of Western civilization, social experimentation, and hyper-regulation and, on the other hand, of neglect in the realms of civil rights, direct rule, broad social integration, free markets, social welfare ethos, and the recognition of individuality.


Foucault, “Governmentality,” 93.


Lanny Thompson, *Imperial archipelago: Representation and rule in the insular territories under U.S. Dominion after 1898* (Honolulu: University of Hawai`i Press, 2010).


19 Edney, "The Irony of Imperial Mapping," 19.


21 Héctor Marín Román, *¡Llegó la gringada!: El contexto socio-militar estadounidense en Puerto Rico y otro lugares del Caribe hasta 1919* (San Juan: Academia Puertorriqueña de la Historia, 2009), 208-216.

22 Marín, *¡Llegó la gringada!*, 208-216.


24 McCoy, *Policing America’s Empire*.


29 First Lieutenant William H. Armstrong, First Lieutenant Teófilo Marxuach and Second Lieutenant Louis Emmanuelli were ordered to complete a Progressive Military Map of Porto Rico. Of the twelve quadrants that comprised the final map, Armstrong signed as topographer on ten and Marxuach on two. Apparently, Emmanuelli worked as an assistant to Marxuach. Efficiency report of 1st Lt. Wm. H. Armstrong, P.R.R.I., for the period from July 1 1908, to June 30, 1909. Record Group 94, National Archives and Records Administration, Washington, D.C.

30 A detailed background and description of the process of producing a map, as well as field notes, is provided by Roy Robert Lyon, “Field Work on the Progressive Military Map of the United States” Thesis for Advanced Degree in Civil Engineering, Michigan Agricultural College, 1914. A general description is also found in Ralph Ehrenberg, “Up in the Air in More

31 The notion of the “gaze” is found in Foucault’s early work on the clinic. I have extended the scope of the concept by following Gilles Deleuze, “What Is a Dispositif?” In Michel Foucault: Philosopher, edited by T. J. Armstrong (Oxford: Routledge, 1991), 159-161.

32 McCoy refers to this as “mute and blind information” because it did not contain information on specific individuals which might be used as a means of political control. His emphasis on surveillance techniques leads him to overlook the interaction of sovereign and governmental rationalities in the colonial state. See McCoy, Policing America’s Empire, 21.

33 FB 8, 42-44.

34 For description of the coffee areas, see FB 10. The sugar areas are described, above all, in FB 8 and 11.

35 FB 1, n.p.

36 García Muñiz, Sugar and Power.


39 Lindsay, 236.

40 I follow closely Foucault, Discipline and Punish.

41 Brumbaugh, 749.

42 Lindsay, 248.

43 For an nuanced discussion of these conflicts and compromises, see Solsirée del Moral, “Negotiating Colonialism: ‘Race,’ Class, and Education in Early-Twentieth-Century Puerto Rico,” in McCoy and Scarano, Colonial Crucible.

44 Lindsay, 257.