

From Colonies
to Countries
in the North
Caribbean

From Colonies to Countries in the North Caribbean:

Military Engineers in the Development of Cities and Territories

Edited by

Pedro Luengo-Gutiérrez
and Gene Allen Smith

Cambridge
Scholars
Publishing



From Colonies to Countries in the North Caribbean:
Military Engineers in the Development of Cities and Territories

Edited by Pedro Luengo-Gutiérrez and Gene Allen Smith

This book first published 2016

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data

A catalogue record for this book is available from the British Library

Copyright © 2016 by Pedro Luengo-Gutiérrez, Gene Allen Smith
and contributors

All rights for this book reserved. No part of this book may be reproduced,
stored in a retrieval system, or transmitted, in any form or by any means,
electronic, mechanical, photocopying, recording or otherwise, without
the prior permission of the copyright owner.

ISBN (10): 1-4438-8536-3

ISBN (13): 978-1-4438-8536-2

TABLE OF CONTENTS

List of Illustrations	vii
<i>Foreword</i>	xi
Pedro Luengo-Gutiérrez and Gene A. Smith	
Chapter One.....	1
<i>'Crumbling to Dust': British Military Engineering Efforts in the Hudson-Champlain Corridor in the Seven Years' War and its Aftermath</i>	
Michael G. Gunther	
Chapter Two.....	23
<i>Fort of San Carlos de Barrancas: Power and Control in the Gulf of Mexico and Southern America</i>	
Pedro Cruz-Freire	
Chapter Three.....	39
<i>Technical Transfer and Natural Environment: Inland Waterways in America in the Late Eighteenth Century</i>	
Pedro Luengo-Gutiérrez	
Chapter Four.....	55
<i>Military Engineers and the Building of the Railways in Cuba (1837-1898)</i>	
Rolando Lloga-Fernández	
Chapter Five.....	73
<i>Early 19th Century Ports, Fortifications and New Foundations along Cuba's North-West Coast</i>	
Enrique Camacho-Cárdenas	
Chapter Six.....	91
<i>A Contribution to the Study of Jules Sagebien's Architecture Projects in the City of Matanzas</i>	
Ignacio J. López-Hernández	

Chapter Seven.....	105
<i>Arsène Lacarrière Latour: Architect, Military Engineer and Agent Provocateur in the Gulf of Mexico Borderlands</i>	
Gene A. Smith	
Chapter Eight.....	125
<i>19th Century Havana, a Case Study of a Collective History of the City Wall: From Technology to Cultural Heritage</i>	
Ana Amigo-Requejo	
<i>General Conclusions and Perspectives</i>	139
Pedro Luengo-Gutiérrez and Gene A. Smith	

LIST OF ILLUSTRATIONS

Fig. 1. “A Map of the Eastern Part of the Province of New York with Part of New Jersey, &c / drawn from the best authorities, by T. Kitchin, geogr.” From The Lionel Pincus & Princess Firyal Map Division, The New York Public Library.

Fig. 2. “A Plan of the Town and Fort of Carillon at Ticonderoga,” Thomas Jefferys (1758), Courtesy of the Toronto Public Library.

Fig. 3. “A Map of the Province of New-York ... by Claude Joseph Sauthier,” Courtesy of Toronto Public Library.

Fig. 4. Map of Pensacola Bay. Joaquin de Peramas, 1784. Archivo General Militar de Madrid, USA-08-13.

Fig. 5. Map of Fort San Miguel. Joaquin de Peramas, 1784. Archivo General Militar de Madrid, USA-09-14.

Fig. 6. Fort of San Carlos after it was approved by King Carlos III. Joaquin de Peramas, 1787. Archivo General Militar de Madrid, USA-09-21.

Fig. 7. Arévalo, Antonio. *Mapa general del antiguo canal llamado el Dique situado en la provincia de Cartagena de Indias*. 30 de junio de 1794. AGMM, COL-02-07.

Fig. 8. Antonio Arévalo. *Plano particular y Perfiles de una parte del Canal nombrado el Dique*. AGMM, COL-02-06.

Fig. 9. Project for the *Canal del Dique*. Detail. AGMM, COL 16-03.

Fig. 10. Lemaur, Félix and Lemaur, Francisco. *Plano relativos al proyecto de las obras para dar paso al Canal del Batabanó por el Río de la Chorrera*. Habana, 3 de septiembre de 1801. MN, 19-E-28

Fig. 11. Lemaur, Félix and Lemaur, Francisco. MN, 19-E-34.

Fig. 12. Plan dated in 1837 showing the railroad line between Havana and Bejucal, first Cuban railway. Public Record Office of Cuba (Archivo Nacional de Cuba)

Fig. 13. Bridge over Almendares river. *Isla de Cuba Pintoresca*. Illustrated by F. Mialhe. Litográfica de la Real Sociedad Patriótica, Havana.

Fig. 14. Number of plans of the ANC dated between 1764 and 1898 according to the developed subject matters.

Fig. 15. Number of plans of the ANC dated between 1764 and 1898 according to the architectonic and engineering topics related with the railroad.

Fig. 16. Number of plans of the ANC dated between 1764 and 1898 that he shows the number of projects correlated to the railroad according to periods.

Fig. 17. Inscription of the Direction of the Subinspection of Engineers of the Cuba Island. Public Record Office of Cuba (Archivo Nacional de Cuba)

Fig. 18. Project of the line of inside the walls for the service of the Warehouses of San Jose and the Docks of Paula. Public Record Office of Cuba (Archivo Nacional de Cuba).

Fig. 19. Station of Fesser, Guanabacoa. Picture taken by the author

Fig. 20. Portico of the Station of Sabanilla, Matanzas. Picture taken by the author

Fig. 21. Engine's workshop of the Railroad of Sabanilla. Courtesy of Ercilio Vento Canosa PhD, Matanzas's Historian

Fig. 22. Plan of engine's workshop of the Railroad of Cárdenas and Júcaro. Public Record Office of Cuba (Archivo Nacional de Cuba)

Fig. 23. Warehouse of the Station of Villanueva. Photographic Record of MICONS

Fig. 24. Plan of the building for lodging and storehouse for the Railroad of Cárdenas and Júcaro. Public Record Office of Cuba (Archivo Nacional de Cuba)

Fig. 25. Félix Lemaux, *Plan topográfico de las inmediaciones del puerto del Mariel que comprende el de la costa del mar al este de su entrada hasta el río de Guajaibon, y hasta la boca de la Dominica al oeste*, 1819, General Military Archive of Madrid, Cartoteca, CUB-121-10.

Fig. 26. Félix Lemaux, *Plano de la población proyectada en el puerto del Mariel*, 1819 (copied by [Ramón de la] Cruz, 1822), General Military Archive of Madrid, Cartoteca, CUB-87-14.

Fig. 27. Manuel Pastor, *Plano de una batería proyectada en el Mariel*, 1820 (copied by Ramón de la Cruz, 1822), General Military Archive of Madrid, Cartoteca, CUB-202-02.

Fig. 28. Félix Lemaury, “Plano de la población proyectada en el cayo de Juan Tomás, situado en el puerto de Cabañas, enfrente de su entrada”, 1820 (copied by [Ramón de la] Cruz, 1822), General Military Archive of Madrid, Cartoteca, CUB-195-08.

Fig. 29. Manuel Pastor, “Plano de la punta del cayo de Juan Tomás, el torreón que custodia la bahía de Cabañas y proyecto de una batería para aumentar la defensa, efectuado según se representa”, 1825 (copied by Juan Antonio Callejas), General Military Archive of Madrid, Cartoteca, CUB-81-04.

Fig. 30. Nameless. 1834 c. *Plano, vista y perfil del puente de madera nombrado S. Luis sobre el río de S. Juan. Matanzas*. España, Ministerio de Defensa, Instituto de Historia y Cultura Militar, Archivo General Militar de Madrid, CUB-47/09.

Fig. 31. Sagebien, Jules. 1839. *Proyecto de una Cárcel para la Ciudad de Matanzas formado pr orden del Sr Mariscal de Campo D. Ant. Buitrago gobernador de esta ciudad*. España, Ministerio de Defensa, Instituto de Historia y Cultura Militar, Archivo General Militar de Madrid, CUB-79/09.

Fig. 32. Sagebien, Jules. 1839. *Plano de la Cárcel proyectada para la ciudad de Matanzas 1839*. España, Ministerio de Defensa, Instituto de Historia y Cultura Militar, Archivo General Militar de Madrid, CUB-79/10.

Fig. 33. *City of Jerusalem*. Hartmann Schedel, *Liber chronicarum*, 1493.

Fig. 34. *Plano de una parte de la plaza de La Habana y de los barrios extramuros* (1819) by Antonio María de la Torre. Instituto de Historia y Cultura Militar.

Fig. 35. *Ceremonia del inicio del derribo de las murallas* (Havana, 1863). Biblioteca Nacional de España.

Fig. 36. *Junta de derribo* (Barcelona, 1843). Pamphlet.

FOREWORD

The present volume contains eight essays that address the result of an international research project with a group of international scholars¹. This publication addresses a little-discussed yet interesting phenomenon in the Caribbean and Gulf of Mexico region—how military engineers reshaped the physical landscape for imperial reasons and, in doing so, laid the foundations for broader colonial development. Moreover, this transnational scenario reveals how military construction reached beyond cross-borders themes and histories from the age of imperialism². This project will improve our knowledge of the role of military engineers in the process of articulating new American countries from the late 18th to 19th century. More specifically, it focuses on the period from the Seven Years' War to the mid-19th century. While this time period is full of international and local conflicts, it remains essential for understanding the region's history—from the Gulf of Mexico to the Caribbean Sea—and even its current situation. Due to independence movements and Spain's Decree of Free Trade (1778), the region's connection with Europe changed. This affected the entire American continent, but peculiarly in the Caribbean and the Gulf of Mexico. Slave uprisings and internal commercial networks made it differ from the processes in South America or in Asia. The projects of military engineers ultimately reveal a complex heritage, shared by numerous countries of this area. The Seven Years' War also changed the way in which the metropolis dealt with American territorial articulation, a basic problem for both industrial development and defense. Afterward, military engineers increased their influence from merely fortifications and capitals to also addressing the disposition of unknown hinterland territories. Yet their first attempts were not quick enough, and

¹ The project was led by Prof. Alfredo J. Morales (Universidad de Sevilla, Spain) between 2012 and 2014. Entitled *Arquitecturas Dibujadas: Ingenieros militares en Cuba 1764-1898/ Drawn Architectures: Military Engineers in Cuba 1764-1898*, was funded by the Spanish government from the National Research Call, with reference number HAR2011-25617. The first meeting was held during the *Military Engineers in America. 18th-19th Century* international conference, which was held at the University of Seville from November 18 to 20, 2014.

² Gauvin Alexander Bailey, Carla Rahn Phillips and Lisa Voigt. "Spain and Spanish America in the Early Modern Atlantic World: Current Trends in Scholarship". *Renaissance Quarterly*, vol. 62, no. 1 (2009), pp. 1-60.

some decades later, when the Wars for Independence started, local uprisings altered the techniques of warfare. In fact, the role of the military and of fortifications changed from North American to South Caribbean territories. Engineers had to design and to construct their fortified works with an increasing attention to civil architecture, and closely linking them to the organization of future countries. For this reason, this volume underlines the key role of military engineers on other fields, from railroad design to environmental intervention, through cartographical works, in diplomacy, all the while overcoming the traditional perspective of military engineers as only builders of structures for war.

In this context, UNESCO and COLCULTURA (Colombia) organized an Expert Meeting on Caribbean Fortifications in 1996, the purpose of which was the inclusion of these structures as a single proposal for the World Heritage List. This first attempt was repeated one decade afterward with two international meetings in Campeche (2004) and Valdivia (2005)³. Their approach showed the intention of creating a common background between Spanish and the Latin American fortifications in their entirety. Nonetheless, the importance of the North Caribbean, today encompassing the United States of America, was undervalued. After another decade without significant progress on a new proposal, it is important to review the problem from a slightly different perspective. Lately, several Caribbean fortifications have been considered, such as Campeche, Mexico (1999), St. George, Bermuda (2000), Cartagena, Colombia (2008), Bridgetown, Barbados (2011), Porto Belo-San Lorenzo, Panama (2013), but the attempt of viewing them through a transnational approach has not succeeded.

Apart from other obstacles, the history of military engineers in this region has not traditionally addressed the problem from this global perspective, making such an approach more difficult. The most common approach to this topic is via an exploration of the local, with only references to regional and global processes⁴. Thanks to these studies, local

³ VV.AA. *Fortificaciones Americanas y la Convención del Patrimonio Mundial/ American Fortifications and the World Heritage Convention*. Campeche/Valdivia, UNESCO, 2005.

⁴ Janet R. Fireman. *The Spanish Royal Corps of Engineers in the Western Borderlands: Instrument of Bourbon Reform, 1764-1815*. Glendale: A. H. Clark Company, 1977. A more recent example can be found in the themed volume of *Quiroga: Revista de Patrimonio Iberoamericano* (2014) focused on Cuban military engineers between the 18th and 19th centuries. Some of them try to address the

examinations of military structures have advanced considerably⁵. Some other studies from the last decades have dealt with the topic as part of a composite of Spanish impact in the area, regarding architectural processes⁶, the connections with other works in Spain⁷, engineers' biographical data⁸, or their contribution to history of science⁹. Only a few scholars such as Tamara Blanes have tried to address the problem from a transnational and regional perspective¹⁰. Unfortunately, her volume covers a wide chronological period in a vast territory, only offering a few initial conclusions.

From these experiences, the current collection offers a transnational approach that focuses on the Caribbean and Gulf of Mexico fortifications from the Seven Years' War to the early 19th century. The methodology used, although not coordinated beforehand, shows a mixed and varied approach. First, the scholars have demonstrated talent for finding new details and historical sources on their respective topics. More specifically, the aforementioned project worked with a specific online database of maps and plans, where materials from international archives and libraries are saved. The copious amount of unpublished material has permitted scholars to explore diverse subjects such as descriptive styles, as well as fixing names, dates and building processes. Second, the editors considered it important to put this volume within the context of previous national historiographies. Some of the newest approaches on Latin American Art History have partially forgotten the vast Spanish-speaking historiographical tradition on the topic, especially the published material from the last few decades¹¹. This volume shows how this disconnection

topic from a different perspective such as Enrique Camacho. "Tipologías de material gráfico sobre Cuba entre 1762 y 1800". *Quiroga* 5, 2014, 48-59.

⁵ José Manuel Serrano. *Fortificaciones y tropas: el gasto militar en tierra firme, 1700-1788*. Sevilla: Universidad de Sevilla, 2004.

⁶ Ramón Gutiérrez. *Fortificaciones en Iberoamérica*. Madrid: El Viso, 2005.

⁷ Alicia Cámara (ed.). *Los ingenieros militares de la monarquía hispánica en los siglos XVII y XVIII*. Ministerio de Defensa, 2005; Alicia Cámara and Bernardo Revuelta Pol (coord.). *Ingeniería de la Ilustración*. Segovia, UNED, 2015.

⁸ Horacio Capel (et. al.). *Los Ingenieros militares en España, siglo XVIII: repertorio biográfico e inventario de su labor científica y espacial*. Barcelona, Universidad de Barcelona, 1983.

⁹ Enrique Martínez Ruíz, M. de Pazzis Pi Corrales (eds.). *Ilustración, ciencia y técnica en el siglo XVIII español*. Valencia: PUV, 2011.

¹⁰ Tamara Blanes. *Fortificaciones del Caribe*. La Habana, Letras Cubanas, 2001.

¹¹ Rafael López Guzmán and Gloria Espinosa. *América con tinta andaluza: historia del arte e historiografía*. Almería: Universidad de Almería, 2014.

made the correct understanding of engineers such as Arsène Lacarrière Latour or processes such as the channel design impossible. Only from this basis can we consider a transnational interpretation. But the simple reconstruction of historical processes from primary sources is nowadays not enough. A deeper interpretation, closely linked with current historiographical questions, remains critically necessary. For this reason, it is important to remark upon those core themes that rose to the surface from within these different chapters.

The key theme that can be considered as a general background for the entire volume is the role of these engineers as in-betweeners in several fields. As such, these engineers helped the American colonies to leave behind both the pre-European and the Western traditions and to create new solutions to daily problems. Only then these in-betweeners become part of and partially responsible for a new national culture. For this reason, it is important to address the processes in which these engineers helped to create new articulated territories from their solutions.

It is important to remark upon one of these: their role as in-betweeners among empires. For this reason, most of the papers deal with biographical details. At first glance, this interest can be seen as a descriptive endeavor, without meaningful interpretative consequences. On the contrary, this information is vital to reconstruct these professionals' cross-border relationships. The topic needs more research on the presence of North American engineers in the Caribbean, as well as Spanish technicians in North America because their movements and activities can be used to understand the diffusion of local solutions and technical improvements. At the same time, aspects such as their original training, later war experiences and other activities, and finally jobs permits us to develop a transnational approach.

Similarly, military engineers at this time in the Caribbean had to deal with the tensions between local concerns and European imperial designs. The characteristics of a European attack differ entirely from the threats of a local uprising. Even considering defensive building as a scientific activity, the technical challenges of warfare required new and rapid solutions from engineers. The first stages of independence movements and slave uprisings developed quickly into organized attacks, but far differently than from the techniques of Western armies. The need for improved knowledge of the hinterlands with updated cartography and the connection of these territories with coastal cities became essential.

Engineers also played a key role as in-betweeners, in the relationship between public and private initiatives regarding common technical projects. Most of these engineers worked for the army or the civil administration, but many of them also worked for private companies as well. Although these types of arrangements can also be found in Europe, the lack of trained personnel in American societies created opportunities where engineers moved easily between military, public, and private projects, allowing for the development of navigational channels, railroads, or even public spaces.

Apart from these, the most important role of these engineers was as *technical in-betweeners*. On the one hand, most of them had been trained in the Western scientific tradition, yet such theoretical training often proved difficult to adapt to the colonies. Moreover, local laborers generally embraced local building traditions, proven by experience and circumstances, and often enriched by other regional influences. The merging of local and regional influences forced military engineers to straddle a middle position in-between, especially in those cases in which one spent most of his life in the colonies.

The present volume attempts to provide a modern answer from the history of engineers to some of the current international questions facing History of Science, Cultural History, or History of Art. Apart from the consequences on historical studies, perhaps this collection can also be used as a tool for planning future projects on heritage conservation, restoration and enhancement. Only from a deep knowledge of the engineers themselves, their building techniques, the surroundings of these structures, and historical context and background, can modern readers gain insight into these important milestones, essential for local communities that have also become tourist attractions.

The volume was carried with the support of the Research Plan of the Spanish government. We hope that this book will produce a substantial series of similar contributions on the heritage of war in the years to come. At the same time, we trust in the usefulness of these contributions to the conservation, restoration, and enhancement of this preservation of the heritage of the Caribbean and of the Gulf of Mexico.

Pedro Luengo and Gene Allen Smith

CHAPTER ONE

‘CRUMBLING TO DUST’: BRITISH MILITARY ENGINEERING EFFORTS IN THE HUDSON-CHAMPLAIN CORRIDOR IN THE SEVEN YEARS’ WAR, AND ITS AFTERMATH

MICHAEL G. GUNTHER, PH.D.

GEORGIA GWINNETT COLLEGE

The campaigns of the British Army in the Seven Years’ War (1756-1763) marked a critical turning point in the environmental history of the Hudson-Champlain Corridor, defined as the territory between Albany, New York and Montreal, Canada. Algonquian, Iroquois, French, Dutch, and English peoples had claimed and contested the corridor for decades stretching back to the seventeenth century, leaving the region desolate and dangerous, at least to outsiders, and undeveloped in comparison to the core areas of colonial settlement. After difficult early campaigns against France and its Amerindian allies, British generals such as the Earl of Loudoun and Jeffery Amherst developed a new strategy aimed at military occupation and landscape modification of the corridor. Military engineers, including William Eyre, Harry Gordon, Adam Williamson, Adolphus Benzell, and James and John Montresor, played crucial roles in implementing the strategy, which necessitated surveying, mapmaking, and construction of roads and fortifications. With other British and provincial officers and soldiers, these engineers stood to benefit from the promise of wartime or postwar land grants, a corollary to regional strategic conceptions implemented by General Amherst beginning with his 1759 campaign.

In wartime, engineers sometimes supervised the work of thousands of soldiers, provincial militia, and contractors, and, at other times, were placed in temporary command of garrison posts. The fortifications were

considered shoddy and wasteful in hindsight, but they helped achieve victory over France and symbolized a shared sacrifice of labor by British and provincial soldiers while encouraging swift frontier settlement in the 1760s. Engineer Adolphus Benzell lived on the garrison grounds of Crown Point, supervising its expansion and plotting a commercial town for facilitating commerce on Lake Champlain. As late as August 13, 1762, three years after French evacuation and British occupation of the peninsula on which Crown Point stood, Benzell counted 365 men still working on the fort: four in the lime kilns, fifteen in the woods, twelve sawyers, two coopers, twenty-eight smiths, twelve brickmakers, ninety-three miners, forty-five masons, 154 carpenters, and others.¹ Benzell soon won acceptance for his applications for grants of land on and around the garrison. And yet, within a few short years, the works of Benzell and Amherst's other engineers would crumble in tandem with the increasingly shaky status of their land rights in the face of competition from New Hampshire claimants and neglect from politicians in London and the new commander-in-chief, General Thomas Gage. A counterfactual history of the American Revolution itself might well be drawn by focusing on this region—later site of the famous Saratoga Campaign in 1777—and its crumbling British military infrastructure in the late 1760s and early 1770s. If the vision of Amherst and his engineers had been allowed more time to gain traction, subsequent American history might appear different.

From 1755 through 1760, British armies conducted major operations in the Hudson-Champlain Corridor. The geography of the region—mountainous and straddling two watersheds, with falls obstructing passage on the upper Hudson River—hampered supply. General Edward Braddock helped address the logistical crisis by sending William Eyre to assist General William Johnson's Crown Point Expedition in 1755. Johnson reported Eyre's work in commencing construction on Fort William Henry and the rechristening of Lac du St. Sacrement as Lake George, where he achieved the first British victory of the war. In early 1756, King George II instructed General Daniel Webb "to send engineers to make carefull surveys from Fort Edward, across the carrying place, along the Wood Creek, . . . from thence to South Bay & Fort William Henry . . . taking a Sketch, of the Country within that Circle . . ." After undertaking this mission, engineers Ralph Burton, James Montresor, and William MacLeod

¹ "Men employed at Crown Point works," signed by Benzell, August 13, 1762, New York State Library, Sir Jeffery, 1st Baron Amherst: Official Papers, 1740-83 [hereafter Amherst Papers], WO 34/51, Reel 42. John Brinckerhoff Jackson, *Discovering the Vernacular Landscape* (New Haven, Conn., 1984), 150.

recommended intensive improvements to Eyre’s original design, including the construction of a forge, a guardhouse, a suitable well, and new exterior redoubts to deny the enemy the advantage of high ground near the fort.² Montresor’s sketches and journals of activities at Saratoga and Fort Edward reveal the variety and volume of military activities involving localized manipulation of landscapes. He managed a new sawmill at the mouth of the Fishkill, and directed and compensated teams of carpenters, sawyers, and soldiers who aided in clearing land, and cutting and hauling wood for blockhouses, burial grounds, and fortifications.³

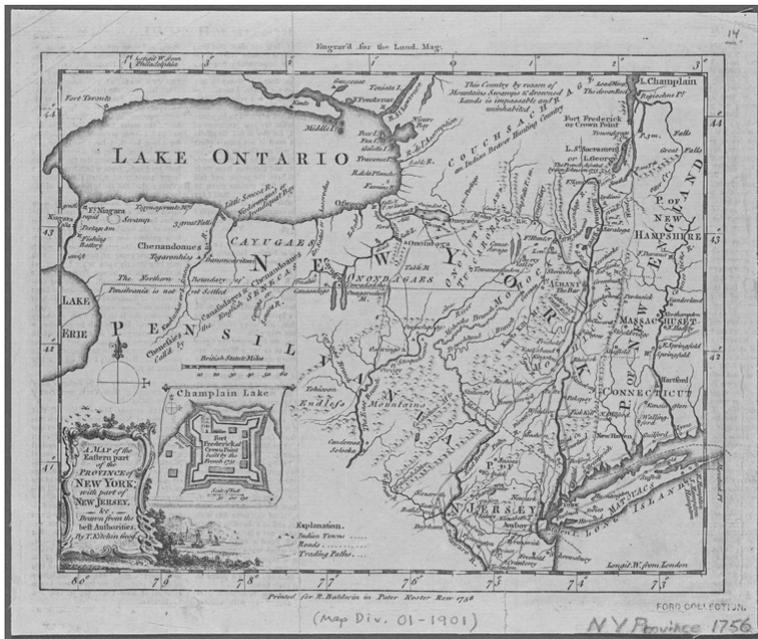


Fig. 1. “A Map of the Eastern Part of the Province of New York with Part of New Jersey, &c / drawn from the best authorities, by T. Kitchin, geogr.” From The Lionel Pincus & Princess Firyal Map Division, The New York Public Library.

² Eyre to Shirley, Sept. 10, 1755, LO 645, Loudoun Papers: Americana, 1682-1780, Huntington Library [hereafter Loudoun Papers].

³ “Journals of Col. James Montresor,” *New-York Historical Society Collections* (1881).

Professionally trained engineers such as Eyre and Montresor neither worked nor planned in isolation. Skilled, well-connected provincials also helped to construct new works and improve logistical systems that transformed the land. New Hampshire Colonel Nathaniel Meserve, a Portsmouth shipbuilder, created “a floating bridge, from Fort Edward to the island [Rogers’ Island, in the Hudson River],” and “large flat bottom’d boats, for passing rivers and carrying great loads.”⁴ Philip Schuyler of Albany employed mercantile connections in New York City and patron-client relations with rural householders in the upper Hudson valley to negotiate contracts with the quartermaster service. As Deputy Quartermaster General in the later campaigns of the war, John Bradstreet of Nova Scotia directed the movement of men and the supply of regular and provincial regiments. As Lord Loudoun put it, the key to victory (and the greatest obstacle thereto) was “supplying your people with provision.” Schuyler, Bradstreet’s protégé, later envisioned more permanent and transformative engineering works—canals connecting the Hudson River with Lake Champlain, the north, and Lake Erie, to the west—informed by his long years of experience in supplying armies over the difficult terrain of the northern New York borderlands.⁵

British officers attempted to ameliorate the difficulties for soldiers living in the wilderness. With the army’s logistical capabilities stretched to the breaking point late in the war, General Jeffery Amherst instituted the policy of sending foraging teams into the woods on the eastern shore of Lake Champlain to gather spruce needles to bring back to brewers posted in Forts Crown Point and Ticonderoga. General Loudoun had earlier inquired into the feasibility of mass-producing spruce beer, which was seen as a preventative for scurvy, providing salubrious refreshment and eroding soldiers’ dependence on rum. Massachusetts Governor Francis Bernard remarked after its implementation that “there never [was] known so healthy a return of the men as this last year.” He therefore urged Amherst to continue “providing the men with spruce beer ... [and] keep them from rum” The regiments paid for their own supplies, and

⁴ Loudoun to Henry Fox, Nov. 22, 1756, LO 2263, Loudoun Papers.

⁵ Loudoun to Webb, June 20, 1757, LO 3864, Loudoun Papers. On Bradstreet, see William Godfrey, *Pursuit of Profit and Preferment in Colonial North America: John Bradstreet’s Quest* (Waterloo, Ont., 1982).

soldiers could likewise pay for their own additional needs, consuming a beverage produced from the materials of nature on (or near) the spot.⁶

The efforts of the British and provincials to build bateaux and fortifications had the intended side effect of facilitating land clearance. It was widely understood that army units were more vulnerable to ambush in heavily wooded regions. William Hervey, traveling on the road from Fort Miller to Fort Edward, complained that “the roads are extremely bad by the river side, particularly a mile and a half new made through a stiff clay by the side of a mountain, where there are several very dangerous defiles for an enemy to molest you and thick swamps.”⁷ Officers periodically ordered troops to undertake tree-cutting missions and ordered hundreds of axes to be procured. As early as 1756, provincial General John Winslow informed Loudoun that “we have employ’d and do now employ all our axes, in falling trees from the Mountains to the Lake in a promiscue manner.” By the late summer of 1758, the southern basin of Lake George had been well-trod and partially denuded. Abel Spicer noted that on September 15, 1758, “they began to draw timber off the mountains to build a large row galley.”⁸

Fulfilling the dietary needs of soldiers in a large army in the wilderness prompted other innovations, necessitating further changes to the land. Bateaux carried oxen and livestock from the head of Lake George down to Ticonderoga (and then to Crown Point). Draft animals consumed native grasses and forced officers to consider bringing seeds into the region. Though vinegar was imported to help combat scurvy, General Amherst also ordered the creation of garrison gardens to produce turnips and other vegetables. As early as 1757, at Fort Edward, Phineas Lyman recorded in his orderly book:

⁶ Virginia Westbrook, “Spruce Beer,” *Bulletin of the Fort Ticonderoga Museum* XV (Spring, 1997), 505-515. Governor Bernard to Amherst, Mar 20, 1762, Amherst Papers, Reel 21; Major Durkee says in an orderly book, “4 barrels of spruce beer shall be kept constantly . . . with in the fort that the men at work may be supplied when they want it” He appointed a brewer, instituted regulations whereby each regiment was required to send a man to assist the brewer at given times, for eighteen pence a day, and also permitted sutlers to brew their own, “as much as they please.” Commissary Wilson’s Orderly Book, 18-19.

⁷ William H. Hill, *Old Fort Edward before 1800, Addenda* (Fort Edward, N.Y., 1956).

⁸ Winslow to Loudoun, Sept. 27, 1756, LO 1907, Loudoun Papers; Bellico, ed., *Chronicles of Lake George*, 104.

Twenty Ax Men of the Connecticut Troops To Go over to the Island Early Tomorrow Morning & 4 Spade Men in Order to Make a Fence Round ye Garden Belonging to the Troops. Two Carpenters will Attend & Shall Shew Them the Manner it is to Be Done.⁹

The first British-American attempts at borderland planting required fences, which were, in William Cronon's words, "the most visible symbol of an 'improved' landscape." General Amherst considered the planting of gardens to be one of the highest priorities for his troops, and in the summer months of 1760 and 1761, up to one thousand soldiers a day could be seen toiling and tilling the conquered soil around Crown Point.¹⁰

In late 1758, General Amherst assumed overall command of military operations in North America. Prime Minister William Pitt's instructions were to attempt the final "reduction of Canada." Though not as glamorous as General James Wolfe's victory at Quebec that year, Amherst's 1759 campaign against France's Lake Champlain forts consummated his own strategic conceptions and consequently marked a watershed in the environmental history of the region. His efforts in directing the construction of forts and roads, and encouraging permanent settlement by soldiers, opened a frontier to Anglo-American settlement and influenced the politics of land, the manner by which government officials, elites, and individuals of various cultural backgrounds, engaged in both conflict and negotiation over the terms of land tenure and land use, for at least the next fifteen years.¹¹ Ever aware that a seizure of Canada might be reversed in

⁹ Phineas Lyman, *General Orders of 1757; Issued by the Earl of Loudoun and Phineas Lyman ...* (New York, repr., 1899); John Grant, His Book Crownpoint, HM 595, Huntington Library; Amherst to Haviland, Feb. 11, 1760, Amherst Papers, WO 34/52, Reel 42. On April 17, Haviland wrote to Amherst, "I am very busy fencing the Garden and daly expect the seeds as the lakes are open," Haviland to Amherst, Amherst Papers, WO 34/51.

¹⁰ Cronon, *Changes in the Land*, 130; On June 21, 1761, John Grant recorded 880 people at work in the garden at Crown Point, an incredible number. "It is hoped," Grant wrote in his orderly book, "ye officers will recommend to ye solders to be diligent at work his Excilency General Amherst expects a great deal to be don by ye numbers that are hear," HM 595, Huntington Library.

¹¹ William Pitt to Jeffery Amherst, March 10, 1759, in Gertrude Selwyn Kimball, ed. *Correspondence of William Pitt*, 2 vols. (New York, 1906), vol. I, 64-66. Historians often depict Amherst's campaign as dull or disappointing, especially when paired with General James Wolfe's contemporaneous conquest of Quebec. Some have criticized Amherst for excessive caution, for in failing to attempt the final approach to Montreal he left Wolfe isolated in the heart of New France against Montcalm's formidable army. And the "reduction" of Canada was yet

the diplomatic whirl of European courts, Amherst sought not only to lead his armies into New France but to transform the region to make it inhabitable for large armies and defensible at war's end, no matter the diplomatic endgame or the reaction of New France's 65,000 inhabitants to a permanent conquest. Secretary Pitt embraced this strategy, ordering Amherst to take the time to construct forts at the head of Lake George, near the ruins of Fort William Henry, and at Crown Point. While attending to the myriad of small tasks associated with managing a large army, Amherst revealed his broader strategic conception by stopping to correspond with New York governor James DeLancey over the opportunities for farmers to settle lands around fortifications and military highways immediately.¹²

Not content to give provincial governors like DeLancey all of the leverage in planning for postwar land grants, Amherst encouraged both

again postponed. The most comprehensive criticism of Amherst comes in John Shy, *Toward Lexington: The Role of the British Army in the coming of the Revolution* (Princeton, 1965), 89-96; Fred Anderson, in *A People's Army: Massachusetts Soldiers and Society in the Seven Years' War* (Chapel Hill, N.C., 1984), describes Amherst's restraint thus: "Amherst's great caution saved lives but cost him the rest of the campaigning season" (18). Anderson's brief chapter on the campaign in his more recent book, *Crucible of War*, is called "General Amherst Hesitates," and herein, Anderson judges that "Amherst was anything but an optimist by nature and almost certainly expected Wolfe to fail." (342). The editor of his journal, J. Clarence Webster, asserts that the building of Fort George on the southern shores of Lake George, for example, was "wasteful of time, labor, and money" (11).

¹² "A Memorandum of Orders Sent to General Amherst in 1758," in *Correspondence of William Pitt*, Vol. I, 426-427. Pitt and Amherst also exchanged thoughts on the manner of communicating between and reinforcing the different wings of the three-pronged invasion of Canada, which would necessitate scouts of discovery, for British mapmakers and generals knew precious little about what we now call the Adirondack and Green Mountains, or indeed of the inlets and tributaries of Lake Champlain itself; Pitt to Amherst, *Ibid.*, Vol. II, 64-6; *Journal of Jeffery Amherst*, 142-67; Amherst-DeLancey Correspondence, in Amherst Papers, WO 34, Reel 24; "Proclamation for the Settlement of Land Between Fort Edward & Lake George," in *D.H.N.Y.*, IV: 556-558; Russell P. Bellico, *Sails and Steam in the Mountains: A Maritime and Military History of Lake George and Lake Champlain* (Fleischmanns, N.Y., 1992), 87-115. The argument regarding Amherst concerning himself with the frontier defense of New York and New England due to concerns about Canada being given back to the French, is partially derived from Stephen Brumwell, *White Devil: A True Story of War, Savagery, and Vengeance in Colonial America* (Cambridge, Mass., 2004), 140-143.

regular army and provincial officers to pursue grants while still in military service. Philip Skene, his major of brigade (chief of staff), sought to build a plantation at the fall line of Wood Creek (now Whitehall, New York). He drafted a memorial, which Amherst forwarded to Pitt with his recommendation, a process entirely unprecedented in the history of New York, as it bypassed the governor and council. In February 1760, Amherst wrote to Colonel Haviland, “I have yet no answer to Skeene’s Memorial about his Tract of Land; I am hopefull of having it by the next Packett, as I really think such settlers as he would be of immense service to the country.”¹³ Skene was excited about the opportunity arising from his participation in the war, and had the skills, connections, and steady income to set his plan in motion. Haviland replied to Amherst, “Major Skeen is full of his new estate, and tho’ he is hard of hearing, we cannot whisper . . . Wood Creek . . . that he does not bounce, and open out a map that has any of those places in it . . . and would talk of that country half the day.”¹⁴ Before the war was over, he succeeded in establishing Skenesborough, a locus of travel, exchange, and political deliberation in the Hudson-Champlain Corridor in the postwar years.¹⁵ Amherst, for his part, went on to assure Connecticut colonel Phineas Lyman that “nothing shall be wanting on his part to have them granted to such persons as I shall be pleased to name” from the army. Lyman and the commanders of five other provincial regiments soon thereafter petitioned for townships for interested veterans of their respective units. They asked that “the new cut Road” between Crown Point and Fort Number Four be “the Centre of each Township; as the most effectual way of preventing the Incursions of the Indians into our Country.”¹⁶

Whereas Amherst’s predecessors saw logistical improvements and concomitant landscape transformations as aids to victory, the general tied these initiatives more directly to the encouragement of frontier settlement. His infrastructure improvements, to be sure, were meant first and foremost to ensure security for his soldiers. For example, he “sent out 400 Axmen to clear each side of the road [between Fort Edward and Lake George] 30 yards to the right and left of it, leaving a few trees for the border of the road as a security to those that pass.” The fulsome forest of New York’s

¹³ Amherst to Haviland, Feb. 22, 1760, Amherst Papers, WO 34/52, Reel 42.

¹⁴ Haviland to Amherst, Jan. 24, 1760, Amherst Papers, WO 34/51, Reel 42.

¹⁵ Haviland to Amherst, March 5, 1760, Amherst Papers, WO 34/51, Reel 42.

¹⁶ Amherst-Lyman correspondence, in Amherst Papers, WO 34, Reel 35. On the relations between New England’s soldiers and the British regulars and officer corps, see Fred Anderson, *A People’s Army*.

summer still left too much opportunity for ambushes. This road, and others, needed constant improvement, too, for wagon wheels were constantly breaking. Later, “Schuylers & Ruggles [provincial] Regts . . . cleared the Road” from the landing place at the foot of Lake George to Ticonderoga, upon which the retreating French had cut and stacked trees. Amherst ordered the construction of a new road from Ticonderoga to Crown Point to facilitate supply and transport between the two posts roughly ten miles apart.¹⁷

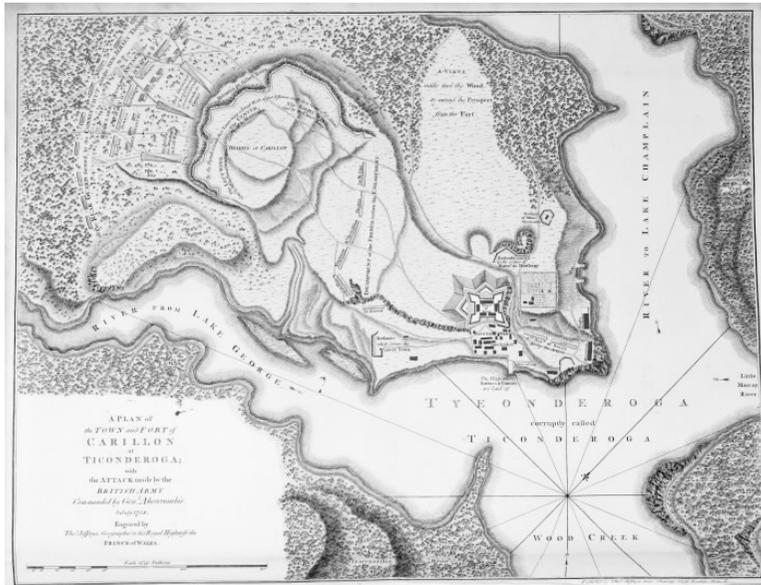


Fig. 2. “A Plan of the Town and Fort of Carillon at Ticonderoga,” Thomas Jefferys (1758), Courtesy of the Toronto Public Library.

While these roads and other improvements indirectly facilitated settlement by making travel and trade easier in coming years, Amherst’s decision to open up the “Crown Point Road” was a direct inducement to New Englanders seeking to migrate into the corridor.¹⁸ After taking Crown

¹⁷ *Journal of Jeffery Amherst*, 142-167.

¹⁸ In a military sense, too, Amherst calculated that most of his army’s horses, oxen and other livestock, and provincial soldiers came from New England. The Crown Point Road, in one sense, then, could be seen as a natural extension of the drive to improve army logistics.

Point, Amherst sent “200 Rangers to cut a Road to open a communication from New England & New Hampshire to Crown Point.” Later that year, he urged New England officers to march their soldiers home by way of the Crown Point Road to Fort Number Four, on the Connecticut River, thereby exposing colonial soldiers to new lands with agricultural potential. Ebenezer Dibble was one colonist who endured the walk home by way of the road to Fort N^o. 4: “Wee march By Otter Crick . . . and on the East Sid was Low Land all from Crownpint and Good”¹⁹ The road helped the war effort and served as the gateway for many New England settlers entering northern New York in the 1760s.

Amherst also contributed to the increase of knowledge of the geographical features of the corridor by dispatching rangers, engineers, and small parties of soldiers to explore and, in some cases, to take surveys and inventories. Locally, the men harvested resources such as wild vegetables, hay for livestock and white pine, white oak, and spruce trees for building materials and spruce beer. On August 15, 1759, Amherst sent Robert Rogers to “the other side the Lake to see for the best Place for cutting timber to erect the Fort, gave him leave to shoot Deer; he killed three and seven Bears.”²⁰ Under Amherst’s patronage, Ordnance officer William Brasier compiled the most important late colonial map of the Hudson-Champlain Corridor, offering further encouragement to prospective settlers and merchants by precisely locating the different depths, coves, islands, and tributaries of Lake Champlain.²¹ Phineas Lyman, speaking for a group of interested settlers, directly cited Brasier’s survey in one of his informal petitions to Amherst. He informed the commander-in-chief that the men from Infield, Hartford County, sought a

¹⁹ *Journal of Jeffery Amherst*, 142-167; “Diary of Ebenezer Dibble,” in *Papers and Addresses of the Society of Colonial Wars in the State of Connecticut*, I: 322; Diary of Jacob Kent, reprinted in Frederick P. Wells, *History of Newbury, Vermont* (St. Johnsbury, Verm., 1902), 380-1.

²⁰ *Journal of Jeffery Amherst*, 152. Amherst even provides a recipe for the brewing of spruce beer in his journal. He shared his thoughts on rum with General Gage on August 21, 1759: “I have every man in camp, exclusive of guards, at work, and not a drop of rum given, except to the carpenters, who have it by their contract . . . when cold weather sets in, or that the men were employ’d in water, or very wet work of any kind is about, then a dram is necessary . . . but not on other works or at other times.” Amherst to Thomas Gage, August 21, 1759, in Amherst Papers, WO 34, Reel 38.

²¹ *A Survey of Lake Champlain, from Crown Point to Windmil Point, and from thence to St. Johns. Survey'd by order of His Excellency Major Genl. Amherst, Commander in Chief of His Majesty's forces in North America, anno 1762.*

township which would include Grand Isle, on Lake Champlain, "that may be convenient & safe for the settlers to keep sheep from the wild beasts." To help inform Amherst of its location, Lyman reminded him of the location of Grand Isle opposite the mouths of two major rivers ("Beaver" and "LaMotte"), twelve miles' distance apart by Brasier's map.²²

Before his recall in 1763, Amherst's informal policy of supporting the settlement of "reduced" veterans in the Hudson-Champlain corridor was very successful, both in winning official support and in attracting interested applicants who saw its potential for agricultural or mercantile development.²³ The petitions of the provincial colonels and of Philip Skene were considered in London as early as February 1760, accompanied by letters of recommendation from Amherst and Pitt. With uncharacteristic speed, the Board of Trade fastened on the idea of settling the newly conquered corridor with veterans. "The making settlements upon those Lands . . .," the Board ruled, "the possession of which, must in its consequences give possession of the Country, provided it be done with a proper regard to our engagements with the Indians, is a measure of true wisdom and sound policy."²⁴ Some soldiers were fortunate enough to have land claims confirmed while the war still raged further north. New York Lt. Governor DeLancey promised Amherst that he would honor the claims of Connecticut troops: "acquaint M Gen Lyman," he wrote, "that I shall make the grant to the persons willing to settle at half way Brook as cheap as I can possibly & will give them the Fees of the Great Seal . . ." The lands out of which Connecticut veterans formed the townships of Kingsbury and Queensbury were drawn, lying between Fort Edward and the ruins of Fort William Henry, bore the heavy imprint of war. However, there were extensive clearings and ready access to the Hudson River, providing an advantageous start for frontier farmers.²⁵

During the three years between the surrender of New France (1760) and the Treaty of Paris (1763), Amherst and his subordinate officers

²² Lyman to Amherst, March 31, 1762, Amherst Papers, WO 34/43.

²³ Many officers, and most soldiers, were "reduced," or discharged, from the army at the end of a major war to facilitate cost-cutting. Reduced officers were usually granted half-pay, but Amherst's policy suggests the recognition that greater rewards were in order.

²⁴ Diary of Jacob Kent; Amherst to Pitt, Dec. 16, 1759, in *C.W.P.*, 219-26; Lords of Trade to Secretary Pitt, Feb. 21, 1760, and Amherst to William Sharpe, Oct. 20, 1762, in *N.Y.C.D.*, VII: 428-429, 508-511.

²⁵ DeLancey to Amherst, October 1, 1759, Amherst Papers, WO 34/29.

administered the Hudson-Champlain Corridor separately from both Canada and New York, in part, to give engineers and surveyors time to measure and define the borders of the lands, and to promote settlement by veterans. As General Thomas Gage wrote, “the boundaries have not been absolutely fixed . . . since the surrender of Canada, Crown Point & all South of it, . . . have been put by the Commander in Chief, under officers independent of the Government of Montreal.” Elsewhere, Amherst went even further, stating that “all parts of Lake Champlain, are . . . become the King’s property, and are not included in the limits I have fixed to the Government of Montreal.” In asserting this power, Amherst accepted petitions for assistance in obtaining land grants from the crown and instructed subordinates to monitor the movement of goods and persons between Albany and Montreal. In the wake of the outbreak of “Pontiac’s Rebellion” in the spring of 1763, however, Amherst was recalled to England, ending his direct involvement in the corridor just as news of the Treaty of Paris and the Proclamation of 1763 reached America.²⁶ With the treaty, Britain took permanent possession of Canada. In the subsequent proclamation, issued by King George III and his Privy Council on October 7, 1763, four new governments—East and West Florida, Grenada, and Quebec—were created. There would be no new colony of Crown Point. The 45th parallel was demarcated as Canada’s southern border, creating what evolved into an enduring geographic line which ignores the northward flow of Lakes George and Champlain into Canada.²⁷

²⁶ “Heads of enquiry relative to the State of Canada, answered,” in Sir Frederick Haldimand, *Unpublished Papers and Correspondence, 1758-1784* (hereafter *Haldimand Papers*), Reel 4, David Library of the American Revolution; Amherst to Haviland, October 24, 1760, and Haviland to Amherst, June 15, 1761, *Amherst Papers*, WO 34/51, Reel 42.

²⁷ The Proclamation is printed in Adam Shortt and Arthur Doughty, eds., *Canadian Archives: Documents Relating to the Constitutional History of Canada, 1759-1791*, 163-168. Also see Colin Calloway, *The Scratch of a Pen: 1763 and the Transformation of North America*, and, for more on Pontiac’s Rebellion, Richard White, *The Middle Ground* (Cambridge, 1991), 269-314. On the importance of the Proclamation in Virginia’s pre-revolutionary politics, see Woody Holton, *Forced Founders: Indians, Debtors, Slaves, and the Making of the American Revolution in Virginia* (Chapel Hill, 1999), 6-38. Major changes were afoot in England. A new monarch, King George III, had taken power in 1760, and William Pitt was dislodged from his place at the head of military and foreign affairs. Peace negotiations took place under the volatile ministry of Lord Bute, but George Grenville assumed power after Bute’s resignation in April, 1763. The treaty and the proclamation appeared after an extended public debate in London on whether

The Proclamation of 1763 effectively gave jurisdiction of the corridor to New York and established a political landscape that lasted, despite its contradictory elements and (as we shall see) increasing irrelevancy to events on the ground, until the American Revolution began in 1775. The Proclamation's importance to the region can be seen in its two most famous provisions. First, it ratified Amherst's pledge of land grants to disbanded soldiers and to reduced regular and provincial officers.²⁸ Second, the Proclamation codified the radical conception of a line, continental in scope, separating Indian territories from the frontiers of the seaboard colonies. The prohibition on granting "Warrants of Survey, or . . . Patents for any Lands beyond the Heads or Sources of any of the Rivers which fall into the Atlantic Ocean from the West" was tempered by a last-minute amendment: "until our further Pleasure be known." The King-in-Council extended this explicit protection of Indian homelands to abide promises made during the French and Indian War to various Indian tribes, to repudiate Amherst's Indian policies, which were seen as a factor in the origins of Pontiac's Rebellion, and to register imperial displeasure with

to retain Canada or the French sugar islands of Guadeloupe and Martinique. On the debate in London over the Proclamation, and Board of Trade President Lord Shelburne's role therein, see R.A. Humphreys, "Lord Shelburne and the Proclamation of 1763," *English Historical Review* 49 (April, 1934), 241-264. For the murky genesis of the 45th parallel boundary line, see John Pownall's memorandum written for the Board of Trade in early 1763, reprinted in full in Humphreys, "Lord Shelburne and the Proclamation of 1763," 258-264. Pownall stated that "the claims and pretensions of . . . New York and the New England colonies . . . in respect to the extension of their northern and western limits on the side of Canada," were once necessary but now not based in "sound policy." The line from the Gulf of St. Lawrence to the 45th parallel appeared to be "the true boundary pointed out both by nature and reason." Pownall seems to be saying that watershed boundaries were natural and rational, and indeed, the other important line created in the Proclamation—separating Indian country from the seaboard colonies—was based on a watershed line. However, Lake Champlain and Lake George, as part of the St. Lawrence watershed, should not have been included within New York based on this reasoning.

²⁸ Adam Shortt and Arthur Doughty, eds., *Canadian Archives: Documents Relating to the Constitutional History of Canada, 1759-1791*, 163-168. The King-in-Council mandated a sliding scale granting up to fifty acres for privates, 200 acres for non-commissioned officers, 3,000 acres for captains, and 5,000 acres for field officers, with the additional bonus of exempting these lands from the usual provincial documentation fees, as well as from royal quitrents for ten years.

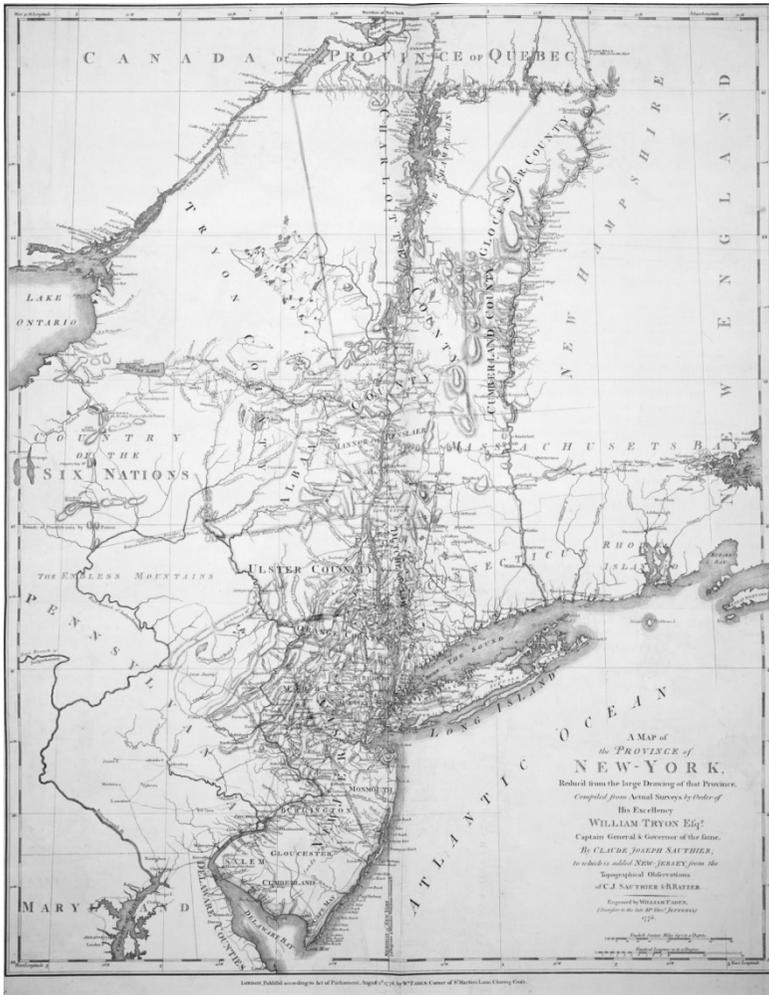


Fig. 3. “A Map of the Province of New-York ... by Claude Joseph Sauthier,” Courtesy of Toronto Public Library.

“Frauds and Abuses” endemic in prewar land-granting practices in the older colonies, including New York.²⁹

²⁹ Ibid. Calloway offers a fine map of the treaty settlement in *The Scratch of a Pen*, on p. 166. Also see H. George Stoll’s 1967 map for Hammond, at