NOTE TO USERS

The Gridiron City: Sixteenth-Century Urban Development in the
Spanish New World

Jason White

A Thesis

in

The Department

of

Communication Studies

Presented in Partial Fulfillment of the Requirements
For the degree of Master of Arts (Media Studies) at Concordia University
Montreal, Quebec, Canada

November 2004

Library and
Archives Canada

Bibliothèque et
Archives Canada

Published Heritage
Branch

Direction du
Patrimoine de l'édition

395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

ABSTRACT

The Gridiron City: Sixteenth-Century Urban Development in the
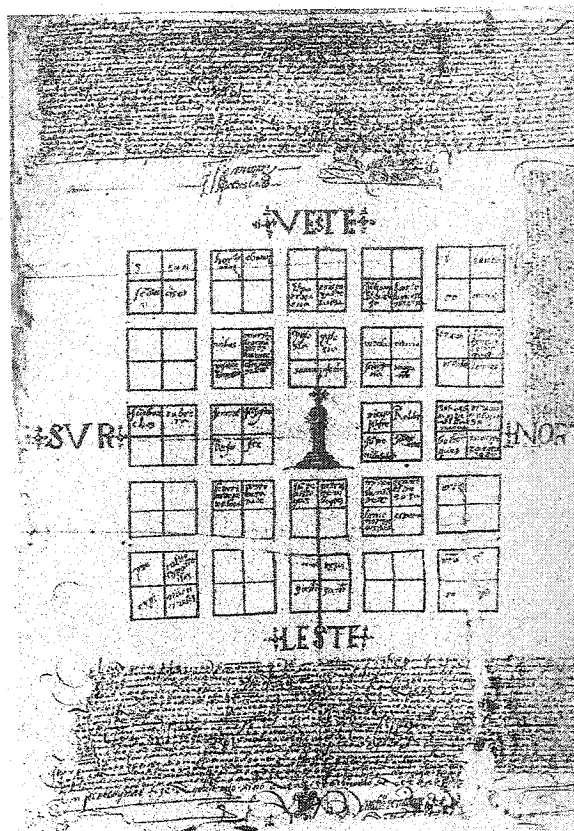Spanish New World

Jason White

During the sixteenth-century when the Spaniards were
colonizing the New World, they built a network of urban
centres that followed a specific template in their layout and
organization. Known as gridiron, or ordered cities, these
urban centres had a checkerboard design with streets that
intersected at ninety degrees.

Built to express Spanish rationality and superiority over
the natives and hinterlands of the New World, the gridiron
city was an imported urban plan that did not exist in Europe
at the time. Sixteenth-century European capitals were
chaotic, organic and, medieval. Although the plans for the
gridiron city originated in Europe, the space and economic
conditions did not exist to remodel the cities on that
continent. The New World however, offered the space, wealth
and, slave labour needed for the gridiron concept to be
realized.

Using an interdisciplinary approach, this thesis examines
the conditions and communication systems that interwove and
allowed for the implementation of the gridiron city in the New
World. In part, this includes: a vast exploitable work force,
the practice of the encomienda (a grant of land and slaves
given to favoured conquistadors), Spanish bureaucracy, and the
beginnings of a new era of thought in Europe.

Table of Contents

Mendoza

(Ministerio de Educación y Cultura. Archivo General de Indias.)

Figure 1 An example of a gridiron city. Rama, Angel. The Lettered City, Trans.
Chasteen, John Charles (Durham and London: Duke University Press, 1996) 2.

The Gridiron City: Sixteenth-Century Urban Development in the
Spanish New World

Introduction

During the early sixteenth-century, the Spanish Monarchy
embarked on the political, social, and physical colonization
of the New World. This enterprise started in 1493 when
Christopher Columbus returned from his voyage across the
Atlantic. Upon his return, the European-imagined world
ostensibly doubled in size. Naming the newly-found continent
the 'New World' was a doubling of how Europeans mentally
constituted their psychological and geographical world. A
simultaneous existence of two spheres, the Old World and New
World, was created. Moreover, the naming of the dual world
spheres "Old" and "New" implies an immediate European
perspective of how the land would be imagined and conceived.
This worldview dichotomy, singular in its implementation, left
little, if any, room for indigenous history or voice when
mentally and physically constructing and re-mapping the land.
The land was either "old" and thereby had history and
lineages, or it was "new" and without such vestiges. It is
from this perspective, a perspective of the new, uncharted and
conquered land (the land was "discovered" after all) that the
Spaniards began to physically and socially build their new
empire.

Economic exploitation and currying papal political favours were the prime motivations for the Spanish to colonize the newly "discovered" lands. The foundation for the Spanish colonial society was primarily established during a fifty-year period from 1524 to around 1574. Social, political, economic, and religious institutions were implemented and/or created to not only benefit the motherland but also to ensure the continued existence of the Spanish colony. These are the prime objectives of any colonial institution: exploitation of resources and continued political dominance.[1]

The institutions created for colonial rule, in turn, became legacies of the foreign occupation. For instance, Catholicism has become a dominant religion in the New World because of institutional Roman Catholic practise from five hundred years ago. Institutions and customs such as slavery and forced conversions were created to support and propagate the Catholic Church. Similarly, Spanish and Portuguese are the primary languages in the New World because the colonial political institutions that were established by the two dominant European colonizers used their mother tongues as the Lingua Franca. A third dominant legacy of the colonial era in the New World is the urban design of Spanish cities.

The Spanish urban legacy is as prominent in day-to-day life as the Spanish language or Catholicism for a majority of Latin Americans. A majority of capital cities in the New World

---

[1] Batalla, Guillermo Bonfil. Mexico Profundo: Reclaming a Civilization, Trans. Dennis, Philip (Austin: University of Texas Press, 1996) xvi.

are cities founded by the Spanish some five hundred-years ago.
Built to create a network of urban centres that facilitated
trade and communications in the New World, the Spanish cities
span an area from northern Mexico to the southern tip of
Argentina. Laid out during the initial era of colonization,
the cities were also the political, social, and economic
centres of the Spanish holdings in the New World.

The new cities appearing on the landscape were only part
of the immense changes taking place in the New World during
the sixteenth century. However, social upheaval was not
strictly limited to the Americas. Europe was on the cusp of
the medieval period and an age of enlightenment. Medieval
ideas and philosophies were on the decline while new ideals
waxed. Europe was very much in a state of beginnings,
discoveries and changes. A secular science of order began to
replace celestial absolutes.[2] As well, the combination of the
rise of a new era of thought and the discovery of the New
World spun hundreds of new innovations and markets in Europe.[3]
For instance, this era marked the introduction of maize,
cocoa, and other crops to Europe; sugar cane, cows and pigs
were sent to the New World. The transatlantic trade routes
were also established.

As the colonial empire in the New World expanded, it
became dependent more and more on communication systems. In

---

[2] Rama, Angel 3.
[3] Schlesinger, Roger. In the Wake of Columbus (Wheeling Illinois: Harlan Davidson, 1996) 82.

this case, a communication system is a process whereby a source of information, or knowledge, is used to convey information or a message to a receiver. For instance literacy is a communication system that allows us to use writing (information/knowledge) to send information (message) to a receiver. As long as the receiver can decode communication system (the written words), the message can be understood.

Communication systems are vital to any mission of colonization because no colony can exist in complete isolation from the motherland - it would cease to be a colony and become a different political entity such as an independent state. In the New World, some communication systems, like the trans-Atlantic mail routes, were created with the discovery of the distant land; others like the New world inter-city mail routes were established with the founding of new cities. However, the most intriguing communication system, at least concerning this thesis, is the directives, plans, and signs of the ordered city that the conquistadors carried with them on their expeditions of conquest.[4]

When the Spanish warriors became settlers, they built their new cities according to strict principles that were designed to reflect and convey order and rationality. These "ordered" cities were built using a gridiron pattern. Over two hundred of these cities were laid out and built, with a

---

[4] Rama, Angel 8.

gridiron design, by the end of the sixteenth century.[5] The city

plan was relayed from the governing head of state in Spain to

the settling conquistadors. This process of communicative

directives traveling from the centre of the empire to its

periphery form an integral part of our understanding of how

order and urban development came together to create the

ordered, gridiron city of the New World.

The rise of "order" occurred in sixteenth-century Europe

when, as Michel Foucault taught us, words began to separate

from things. There was a change in how epistemology was

understood and signs were becoming independent of their

traditional representation. Angel Rama, in The Lettered City,

writes that:

> The cities of Spanish America, the societies
> that were to inhabit them, and the "lettered"
> interpreters of them developed together in a
> time when signs became no longer direct
> representation of the world, linked to it by
> secret, solid ties of likeness or affinity with
> what they represent, and began instead to
> signify from within a body of knowledge and to
> take from it their probability or certainty.[6]

In the colonies, the make-up and belief in the power of

ordered urban civilization came to constitute a central part

of the Spanish empire. Not only were the cities the

institutional and administrative centres for the colonies,

they also represented new trends in social living.

---

[5] Kagan, Richard. Urban Images of the Hispanic World 1493-1793 (New Haven and London: Yale University Press: 2000) 73.
[6] Rama 3.

Many of these new trends and ideals were born out of the philosophies of the Ancient Greeks. In terms of the development of the ordered city, the most prominent Greek thinker was Vitruius. His pivotal text, The Ten Books on Architecture[7] (De Architectura Libri Decem), was a primary source for the theory of the gridiron. Yet in Spain, the centre of the empire, the merging of order and architecture on a citywide scale could only be imagined.

During the early sixteenth century in Europe, the capital cities were organic, chaotic and medieval. There was little, if any, town planning during medieval era and this resulted in crooked streets that intersected at different angles. However, the "organic" city layouts were at odds with the prevailing ideals of urban order and rationality of the sixteenth century. The ideals of that time though could not be physically realized in Europe. The space and economic conditions needed to modernize the medieval cities simply did not exist. However, the New World offered the opportunity for urban social experiments not only on a citywide scale, but also on a continental scale. The New World afforded the space and slave labour needed for a European ideal of social urban order. The result was an urban design repeated over and over of a gridiron pattern throughout Spanish America.

Built to express order, rationality and European superiority, the standard Spanish city in the New World had a

---

[7] Vitruvius. The Ten Books on Architecture, Trans. Morris Hicky Morgan, written circa 27 BC (Cambridge, USA: Havard University Press, 1914).

layout with ecclesiastic and municipal buildings occupying a central square. The streets intersected at ninety-degrees and formed a checkerboard pattern. This pattern is known as a gridiron layout in urban-design discourse. This style of urban development was used consistently across the continent for three hundred years after the initial Spanish invasion. However, it is the implementation of the concept of the ordered, gridiron city during the years 1524 and 1574 that is the focus of this study.

Like any social, cultural, or economic phenomenon, there is no single attributing force to explain the rise of the ordered city. Instead, there was a multitude of pressures that exerted themselves over the course of about fifty years. Not all pressures were equally exerted, nor did all factors coincide simultaneously. But, by linking the most dominant social, economic and cultural pressures together, the story of the gridiron city comes to the forefront.

Fortunately, the European side of that period of history is well documented. While trans-Atlantic communication was painfully slow, it was constant, and often multiple copies of any given text were sent to increase the odds of that message reaching its intended receiver. However, there are few recorded documents by indigenous peoples chronicling the Spaniards' arrival. Modern archaeologists have painted vivid accounts of the indigenous cultures prior to European contact and the effects of said contact on their society. As well,

many Spaniards documented the plight of the indigenous peoples during their conquest and colonization. However, archaeologists' constructions and the Spanish accounts are not the voices of the natives. Such being the case, this investigation into the rise of the ordered city will be primarily from a European perspective. Yet, in many ways the Euro-centric methodology is appropriate.

All too often, local cities and villages were razed so the European urban plan could be implemented. Furthermore, the checkerboard pattern of urban development was strictly a Spanish construct upon the countryside.[8] This particular form of city planning was not used by pre-Columbian Indian cultures: it was imported from Spain. Yet at the same time, no European capital had a checkerboard layout in the early sixteenth century. This means that on the one hand the new cities, while founded by Europeans, did not mimic European urban realities and on the other hand, the pattern was not indigenous to the region. The result was a non-European city designed by Europeans for Europeans and according to their principles, but built by and mainly inhabited by Indians. This schism can be attributed to how the New World was viewed by the Europeans at the time.

---

[8] Hardoy, Jorge. "European Urban Forms in the Fifteenth to
   Seventeenth Centuries and Their Utilization in Latin
   America", Urbanization in the Americas from its Beginnings
   to the present. (Paris and The Hague: Mouton Publishers,
   1978) 222-3.

The Spaniards sought to completely re-create Iberian

culture in the Americas. From political institutions, court

etiquette, black smithery, husbandry, folk customs, and

theology, all aspects of Spanish daily life were imported.[9]

However, the re-creations of homeland Spain became, during

their implementations, hybrid versions of their counter-parts

in the motherland.[10] The very fact that the re-creation of the

homeland was centred in the newfound cities and that these

cities resembled nothing in Spain attests to the immediacy of

the hybridity. At the same time, for the Spaniards, it was of

utmost importance to create urban centres of culture.

Not only did the Spaniards categorize civil society as

residing in urban centres, they also expressed their believed

superiority over Indians with examples of their own notions of

urban refinement and enlightenment. One expression of this

perceived civility was with the splendour of their gridiron

cities. Cities were sites of civilization to the Spanish,

while the surrounding jungle and hinterlands represented chaos

and barbarism.[11]

The dominant collective meanings promoted and propagated

by the colonizers through urban development were part of a

cultural hegemonic discourse. Hegemony is the exertion of

control without the use of force by one group of people over

---

[9] Burkholder, Mark and Johnson, Lyman. Colonial Latin America. (New York: Oxford University Press, 1998) 232.
[10] Lockhart, James. Spanish Peru: 1532-1560 (Madison: University of Wisconsin Press, 1998) 257.
[11] "Preface" Latin American Urbanization: Historical Profiles of Major Cities (Ed. Greenfield, Gerald Michael. Westport Connecticut and London: Greenwood Press, 1994) xiv.

subordinate groups of peoples through overlapping spheres of political, economic, social, and cultural institutions. This means that certain cultural beliefs, values, and practices that favour an elite are promoted and are empowered over others. Angel Rama offers this definition of hegemony:

> As an aspect of rule, cultural hegemony implies
> an indirectness that differentiates it from the
> total dominance of superior coercive force.
> Often hegemony involves vigorous give and take
> between those who exercise power and those who
> resist it, but the outcome is always some
> measure of consent.[12]

Hegemonic structures were built into the very foundations of the gridiron city. Never aspiring to be a site of equality amongst the Europeans and indigenous peoples, the gridiron city favoured the Spanish from conception to metropolis. Whether building a gridiron city over the ruins of an indigenous village or allotting the most valuable land in the new city only to Spaniards, the ordered city was a bastion of promoting colonial supremacy. This is not surprising because "nowhere else in architecture do we encounter the influence of the prevailing outlook so strongly as in town planning".[13]

Certainly the Spaniards believed in the power of order and urbanism and their prevailing outlook reflected this. The era of this study marks a period of intense urban development in the New World.[14] Also the foundation for a colonial society

---

[12]Rama xiii.
[13] Giedion, Sigfried. Space, Time and Architecture (Cambridge, USA: Harvad University Press, 1954) 816.
[14] Lezama, José Luis. "Mexico" Latin American Urbanization: Historical Profiles of Major Cities, Ed. Greenfield, Gerald Michael. Trans. Duquaine,

that lasted for centuries was established. Indeed, the Spanish had created all that was necessary for a colonial empire by 1574 to control their region of the New World. This included metropolitan centres, networks of satellite provincial cities, pertinent government institutions, and industries needed for European governance and lifestyle.

Part of the colonial construction was the segregation of Europeans and Indians into an "us" and "them" category. The natives of the New World were divided culturally, geographically, politically and linguistically into hundreds of different groupings. Before the conquest of the New World, there were vast empires with millions of inhabitants and smaller regional groups, isolated (for various reasons) from their neighbours. Yet, the Spanish conquerors saw all indigenous groups and cultures as a single entity. The repetitive nature of the urban planning being implemented in the New World not only refused any regional cultural influence by the indigenous peoples - the Spaniards did not stray from the gridiron design - it also helped conflate all the natives into the category of the "Indian". While some Indians lived inside the European city, thereby living under the guise of European civilization, others lived in the country and were considered even more barbaric by the urban Spaniards. In either case, differences among indigenous groups were ignored by the European urbanites and the "Indian" was created.

Ann and Greenfield, Gerald Michael (Westport Connecticut and London: Greenwood Press, 1994) 354.

Of course not all of the Spanish urban developments of that time followed such a rigid structure as the ordered city. Many mining camps, smuggler's and pirate's coves, way stations and agrarian centres were makeshift or shoddily built. Similarly, many urban centres were built using the gridiron format well past 1574, the date marking the end of this study. However, it is the rapid growth of ordered cities and the infancy of the Spanish empire in the New World that makes the years between 1524 and 1574 so fascinating to anyone who studies the history of urban development in Central and South America.

The starting date of this study, 1524, marks the re-building of Mexico City by Cortes in the image of the Spanish ideal. Mexico City was the largest urban centre in the New World[15] and became the launching point for many expeditions of conquest. Also, with the acquisition of Mexico and the gold that was taken from the treasury, Spain saw enormous profits. Prior to the capture of Mexico City, New World Spanish settlements were small, isolated and without a large indigenous populations. Many of these early settlements were even built around the gridiron pattern that was the model for Mexico City. In fact, King Ferdinand issued a decree that all towns were to be "ordered" in their layout and construction in

[15] Soustelle, Jacques. Daily Life of the Aztecs: On the Eve of the Spanish Conquest, Trans. O'Brian, Patrick (Stanford: Stanford University Press, 1970) 9.

1516.[16] However, Spain had conquered no urban centre even remotely close to the size of Mexico City.

While the date marking the beginning of this study of the gridiron city in the New World is relatively firm, 1524, the concluding year of 1574 marks a general period of change in the New World. By 1574, the indigenous empires of the continent had been conquered and the Iberians were firmly settled. Thirty Spanish cities were founded by that time in Mexico alone.[17] It also marked the arrival of the Jesuits who strongly objected to the harsh treatment the Indians endured. It was also the end of the spiritual conquest conducted by the Franciscans, the Dominicans and the Augustinians. A rise in sea piracy[18] and vast changes in administration policy also took place around 1574. Unlike the year 1524, there is no firm date to mark when these occurred. Instead, the year 1574 was chosen as an approximation of when these events transpired. Moreover, it was during this fifty-year period of conquest, expansion and colonial development that the gridiron cities were established from Mexico to Southern Chile and Argentina. The following is a list of major New World cities that were founded and built with a gridiron pattern and the date of their founding[19]:

Mexico –

---

[16] Kagan 122.
[17] Lezama 354.
[18] Schlesinger 34.
[19] All dates taken from Latin American Urbanization, ed. Greenfield.

Vera Cruz 1519

Mexico City 1521

Oaxaca 1521

Puebla 1531

Guadalajara 1531

Merida 1542

Ecuador –

Quito 1534

Cuenca 1557

Columbia –

Santa Marta 1525

Cartagena 1533

Santigo de Cali 1536

Santa Fe de Bogata 1538

Peru –

Pirura 1532

Jauja 1532

Trujillo 1535

Lima 1535

Boliva –

Sucre 1538

Potosi 1545 *

La Paz 1548

Cochabamba 1571

Chile –

Santiago 1541

Argentina –

Buenos Aires 1536

* Potosi implemented a gridiron pattern in 1572

This is by no means a comprehensive list of all the
gridiron New World cities. In addition, many of the founding
sites were not the final location of these urban centres. Many
cities moved slightly because of a lack of potable water,
better defensive positions, or more tolerable climates. These
slight shifts in location were possible because a "town could
exist – as a legal construct, that is, a *civitas* – even before
its site was actually determined".[20] Howevere, these moves
were limited to the local area of the initial founding. Not
included are the many ordered cities in Central America or
cities that were founded but later abandoned.

The above-mentioned ordered cities were all built to
exert control and influence over the vast hinterlands of the
New World. The newly founded cities, often on the same
location as indigenous villages, formed a network that allowed
for trade, communications and further expeditions of conquest.
Behind all the trade, communications, expeditions and speed of
urban development lay a political entity known as an
"encomienda".

The encomienda was a way a divvying the spoils of war
from the Spanish conquests. Grants of land and Indian slaves
were given to favoured conquistadors. This land could include
agrarian tracks and/or mines. The desire for an encomienda was

[20] Kagan 30.

so great that it directly fuelled the Spanish soldiers to
conquer new lands in hopes of receiving a land grant. The
established encomiendas provided the food, labour and raw
materials needed for new conquering expeditions, which created
more encomiendas. The encomiendas were also pivotal in
building the gridiron cities. Food and supplies from the
hinterland furnished the cities that in turn allowed for the
cities to grow. However, the cycle could not be described as a
symbiotic relationship because the urban Spanish only took
from the countryside. Even the Spanish priests and tax
collectors, who were prevalent in the countryside, took either
religion or tribute away from the Indians.

The tribute demanded from the Indians caught up in the
encomienda system was so large that basic sustenance became a
major issue. Tribute took the form of agricultural produce,
labour or both. It is fair to say that along with the Old
World diseases, the heavy tribute from the encomienda system
created the largest demographic shift in known history.[21] Yet,
without the forced labour demanded under the encomienda the
ordered cities could not have been built. The vast exploitable
work force was literally worked to death building and
providing for the Spaniards.[22]

---

[21] Diamond, Jared. Guns, Germs, and Steel: The Fates of Human Societies (New
York and London: W.W. Norton and Company, 1999) 67.
[22] de Zorita, Alonso. Life and Labour in Ancient Mexico: The Brief and
Summary Relation of the Lords of New Spain, Trans. Keen, Benjamin (Norman
and London: University of Oklahoma Press, 1994) 204.

The decline in labour force coincided with a decline in the founding and building of new cities. Unable to coerce the labour needed from the Indians -due to the fact that the vast majority had died- the Spaniards imported some slaves from Africa but their numbers were not nearly substantial enough to replace the millions that were missing. Compounding the labour shortage were the Spanish themselves who had a complete cultural aversion to manual labour, and risked losing titled status if caught participating in menial physical tasks.[23]

The grant of an encomienda elevated the recipient to the status of minor noble. The goal for many Spaniards in the New World was to hold an encomienda, a position on a municipal council, and to live in an ordered urban centre. Most Spaniards in the New World were either disgraced or impoverished minor nobles or poor land gentry from Spain. This was the case with Hernando Cortes, the most famous conquistador of the time.

It could be argued that the myth of the American dream began with Cortes. The minor noble from Spain led his small army into the heart of the Mexican empire, killed King Moctezuma, proclaimed the land Spanish territory, and emptied the treasury. Stories of Cortes quickly circulated in Spain, and the New World gained a reputation as a place of adventure and rewards. Bernal Diaz, one of Cortes's foot soldiers, chronicled Cortes's exploits in great detail in his text The

---

[23] Clendinnen, Inga. Ambivalent Conquest: Maya and Spaniard in Yucatan, 1517-1570 (Great Britain: Cambridge University Press, 1994) 40.

<u>Conquest of New Spain</u>.[24] Diaz's accounts and circulating myths

of endless wealth not only encouraged thousands of young

Spaniards to make the journey across the Atlantic but also

fuelled the frenzied pace of the conquest. Conquistadors were

in competition with each other to secure the next big empire,

territory, or mine. The futile search for El Dorado is an

excellent example of how determination and the myth of a city

made of gold persuaded hundreds of Spaniards to undertake

foolish expeditions, many ended in tragedy.

However, gold was not the only fuel that fired the

Spanish conquest. It was commonly held by the Spaniards that

the right to conquer the pagans of the New World was

bequeathed to them by God Himself.[25] In fact, Columbus thought

that his voyage was one of divine provenance. This was

certainly reflected in his son's account of their landing for

the first time in the New World. His son, a member of the

expedition wrote: "Having all given thanks to God, they knelt

on the shore and kissed the ground with tears of joy for His

great mercy. The Admiral stood up, and called the island San

Salvador".[26] Upon Columbus's return to Spain, King Ferdinand

and Queen Isabella secured the Vatican's permission to claim

and conquer the newly found land. Pope Alexander VII granted

all lands discovered and yet to be discovered by the Spaniards

---

[24] Diaz, Bernal. <u>The Conquest of New Spain</u>, written around 1574, Trans.
Cohen, J.M. (England: Penguin Books 1987).

[25] Schlesinger 37.
[26] Columbus, Ferdinand. <u>The Quest of Columbus: An Exact Account of the
Discovery of America</u>, Ed. Meredith and Smith (Boston and Toronto: Little,
Brown and Company, 1966) 50.

to be considered part of their empire in a papal bull in the late fifteenth century. Part of the act of claiming was to read a text aloud to any indigenous peoples found in the New World. The text, known as the "Requirement", or el Requerimiento, gave legal and moral justification to the Spaniards to commence hostilities if the locals did not submit to the will of the Spanish monarchs and accept God as their Saviour.[27]

However, not all European nations who were involved in trans-Atlantic empire building recognized the process Spain underwent to claim territory. Each nation had different processes through which they claimed land. Many ceremonies of possession were very elaborate and choreographed; others were simple acts of science or construction. The one distinction that must be made between Spain and its European rivals in claiming New World land was that only the Spaniards relied on material witnesses as recognition of being at any given location. For instance, the French would plant crosses or other religious icons atop high hills - usually overlooking the water. After the French left, the cross or statue would remain and signify a French presence. The tradition of a cross atop Mont-Royal in Montreal is a good example of this practice. The Spanish, on the other hand, had a notary witness the fact that the landing took place. Leaving tangible marks upon the newly claimed land was not part of the Spanish

[27] Seed, Patricia. Ceremonies of Possession in Europe's Conquest of the New World 1492-1640 (Untied Kingdom: Cambridge University Press, 1998) 88-9.

possession ritual. However, the gridiron cities that strung
across the new continent came to signify Spanish occupation
and claim to said territories.

While this is a minor consideration when detailing the
rise of the ordered city, it is important to note that the
national courts of Europe were trying to overturn Spain's
monopoly on New World colonies. A significant population
living in distinctly Spanish cities re-enforced - or so the
Spaniards wanted it to - Spain's right to its entitlements and
its monopolies on trade in the New World.

However, the Spanish monarch considered New World visual
depictions as state secrets and had them locked away.[28] This
practice was to ensure that locale information was kept from
the Crown's rivals. So on the one hand there is the attempt to
naturalize and promote Spain's claim to the New World through
the building of identical cities throughout the territory, and
on the other hand there is a total lack of images supporting
this claim.

Of course, squirreling away images of New World cities
meant that Spaniards, when founding a new city, could not rely
on complicated or elaborate instructions on how the layout
should look. The simplest written instructions on how to
create a layout for a new town would be to describe the
gridiron format. Similarly, the easiest way to divvy up land
in the planned urban centre would be to ascribe blocks of the

---

[28] Kagan 74-5.

checkerboard to the founders. Prominent members of the founding community were offered blocks closest to the Zocalo, the central square. The immediate plots of land surrounding the Zocalo were set aside for municipal buildings, the jail, and churches.

In many respects, the layout and division of land in the ordered city is the primary text for anyone interested in the history of urban development in South America. One can start at the centre of almost all colonial cities (there were two major Spanish centres built in the sixteenth century that did not adhere to the gridiron pattern: Cuzco in Peru and Asuncion in Paraguay) in South America and witness how urban development has changed in the past half millennium. The further from the centre you travel the newer the development. The enduring heritage of the ordered city, in terms of physical urban development, is that there has been little change to the original city layout. Of course the vast majority of buildings currently occupying the original city area are not over 400 years old, but there are many examples of the original street and plot sizes still existing.

Indeed, there are many elements of the ordered city that can be stated as certainties. The majority of underlying factors and pressures that combined to create the gridiron city have been addressed in this introduction. For instance, it is known that the Spaniards took full advantage of the large indigenous work force through coercive labour practices.

It is also known that this practice lead to the largest genocide in history.

The conquistadors assumed the right to claim the New World and enslave the Indians because they believed they were on a mission from God, and because the Spanish court recognized the reading of a text. The Requirement was used as the justification to commence hostilities if the indigenous peoples did not accept God and the crown rule of Spain.

However, after initially claiming the land as theirs, the Spaniards drew back to the cities for safety and the belief that the hinterlands represented all that was unordered and irrational. It was also easier to administer the word of God by relocating the Indians to areas with Catholic churches. Venturing out into the bush was dangerous and difficult. As well, within the city, it was much more difficult for the indigenous population to erect shrines and alters to celebrate their pagan Gods. This, in effect, removed the indigenous populations from their traditional customs, rites, and religious practices.

The pattern of the gridiron cites that was copied over and over also created an urban space that was a departure from any previously lived urban environment for the indigenous peoples of the New World. Moreover, the exact repetition of the concept of the gridiron leads to the conclusion that local culture had little influence on how the Spaniards constructed their cities.

These issues will all be examined through three principal
categories: communication systems and the encomienda, the
Aztec and Inca empires, and the urbs that were constructed.
The two largest empires in the New World in the early
sixteenth century were those of the Aztecs of Mexico and of
the Incas of Peru. It would be impossible to examine the
effects of conquest on all the hundreds of indigenous groups
in the New World at the time of European contact. Certainly,
generalizations will have to be made when studying how the
Europeans conflated the Aztecs and Incas into the singular
category of "other". While generalizations have exceptions, it
would be a Sisyphean task to account for all exceptions.
Without selected generalizations it is difficult to come to an
understanding of large and complex social phenomena. In fact,
these generalizations are what bind together my argument that
the gridiron city was an urban experiment carried out on a
continental scale.

The chapter breakdown within this study reflects an
underlying supposition that cities are comprised of two
distinct spheres. One is the city as defined by its physical
aspects, buildings, roads and uses of space. The human
interactions and associations within the city space define the
second aspect. The physical structures of a city are defined
as "urbs", and the city as a site of human interaction is
known as the "civitas".[29] The combination of civitas and urbs

---

[29] Kagan 9.

is what comes to constitute a city. The subsequent chapters

are divided into the urbs and civitas: elements that came

together to create the gridiron or ordered city. While the

section on urbs is specific to the New World urban design

implemented by the Spanish, the two chapters dedicated to the

civitas and its histories examines the differences and

influences of the Spanish and Indians on the ordered city.

Finally, it should be noted that this analysis of the

ordered city is interdisciplinary in its approach. In part,

the interdisciplinary approach is needed because so many

different academic fields have commented on and written about

Latin America during the sixteenth century. Interestingly

enough, very few texts solely focus on the rise and historical

legacy of the ordered city. Many have written about the

physical descriptions of specific cities in the New World.

Yet, all too often the birth of the specific city is not

examined in a broader inclusive context. This can be

attributed to the nationalization of the New World during the

era of independence. With independence, New World countries

ceased to be considered as provinces of Spain and began to

develop their own national agendas and programs. The gridiron

city went from being a continental Spanish project to a

colonial legacy within distinct political nations.

Many of the sources used for this body of work are

country or area specific. For example, much has been written

about the impact the arrival of the Spaniards had on the Incas

or the Aztecs. However, in terms of Spanish policy in the New
World, little distinction was made between the Incas or the
Aztecs. The council of the Indies located in Spain ruled over
the indigenous of the New World by treating them all as
Indians instead of as distinct groups of peoples. As well, the
grid pattern of urban development in the New World extended
well beyond any current national borders that were created
during the era of independence. It can be argued that Latin
Americans share a common history from the past five hundred
years because they share common urban environments. Also,
there is a shared history from the categorization of people as
either Indian or European; people were considered to be either
one or the other at one point. All too often this common bond
that existed between the populous of the New World is ignored
or not addressed. For this reason, an interdisciplinary
approach is essential. Borrowing from such fields as urban
theory and history, anthropology, art history, Latin American
history, philosophy, Latin American studies, cultural studies
and sociology the chasm between the ordered cities and the
nationalistic documentation of them can be crossed. The
ordered city was part of the colonization project of all Latin
America and will be studied as such.

This chapter examines dominant Spanish communication systems in the New World and how they are intricately connected to the ordered, gridiron city. These communication systems affected dominant social, political, economic and urban practices of the time. More specifically, prevailing trends that directly influenced the ordered city will be targeted. For this chapter, three of the foremost Spanish communication systems will be examined. These include: the Spanish bureaucracy, the method by which Spaniards claimed New World territory, and the practise of the encomienda.

The encomienda was not tied to any direct communication system. However, The Council of the Indies would be informed of any new encomienda allotments but the grant of land was not tied, nor dependant upon any specific or unique communication system. Yet, the frantic race across the New World by the Spaniards, and the communications systems developed to support the conquest, would not have been possible without the encomienda because it was the most sought-after prize by conquistadors. Warrior after warrior ventured further south in the New World in hopes of securing a grant of land. And as we shall see, the signs and plans of the ordered city were carried with these conquistadors.

Chapter one

Spanish Bureaucracy and Communication Systems

Without question, war and conquest were dominant aspects of sixteenth-century Spain. And, if warfare is considered to be the primary theme of that era of Spanish history, bureaucratization is second in line.[30] Ferdinand and Isabella believed that through divine intervention, it was their responsibility to restore order to the Iberian Peninsula.[31] In this case, order was determined to be in the form of excessive documentation. As a result, bureaucracy became a hallmark of the Spanish society and large numbers of officials were needed to govern the empire and ensure proper resources were allocated for successful military campaigns. Yet there was more to the bureaucracy than practicality; there was also a cultural trend of excessive paper shuffling.[32] It was this foundation that allowed for communication structures in the New World too not only flourish but also to be an integral part of day-to-day life.

The Spaniards in the New World would refer to the Council of the Indies in Spain for consultation on even the simplest of decisions.[33] The trading ships that sailed back and forth across the Atlantic were always ballasted with numerous

[30] Elliot, J. H. Imperial Spain 1469-1716. (England: Penguin Books, 1990) 170.
[31] Elliot 77.
[32] Elliott 177.
[33] Haring, C.H. The Spanish Empire in America (New York: Harcourt, Brace and World, 1963) 98.

written messages about the affairs and frivolities of colonial life. Letters and replies tended to be lengthy and elaborate with arguments that were laid out point by point.[34] In fact, the sheer volume of trans-Atlantic mail during the sixteenth century was so great that it is considered by many to be a literary genre in its own right.[35]

The dedication to be in contact with the motherland and to seek the permission of the Council of the Indies on even minor tasks was so pervasive that it bordered on the absurd. For example, the monk Gaspar de Carvajal detailed, in his diary, a failed mission to find El Dorado, fabled city of gold. Gonzalo Pizarro led the expedition shortly after he conquered and plundered the Inca Empire. The expedition ran short of supplies and abandoned its quest, but before heading back to the Altiplano and Christian settlements, Pizarro formally asked permission to forsake the search for the city of gold. He did this by signing and forwarding a letter that sought permission from the Council of the Indies in Spain to abandon the quest.[36] His signature was duly notarized by witnesses, as was the custom. However, it would take around two years for Pizarro to get his reply.[37] Of course Pizarro and his followers did not wait in the jungle for permission to abandon the search for El Dorado; still this illustrates the

---

[34] Rama 33.
[35] Rama 21.
[36] Aguirre: The Wrath of God. (Dir. Herzog, Werner. Germany: Anchor Bay, 1972).
[37] Haring 113.

Spanish custom and dedication to communication with the motherland.

The intense commitment to communication did not originate with the colonization of the New World; it was imported from Spain. In 1473, four years after Ferdinand and Isabella's wedding united Iberia, the printing press was first used in Spain. When the press was presented to Isabella and she asked what it was for the Bishop of Avila replied, "Your Majesty, language is the perfect instrument of empire".[38] As well, the court historiographer, grammarian and lexicographer at the time had often been quoted as saying, "language is the companion of empire".[39] The two servants of the court proved to be correct. The Castilian monarchs of the sixteenth century wielded their superior grasp of language and culture over the peninsula and empire.

However, before the gridiron cities of the Spanish New World were surveyed and laid out, the crown had to legally take possession of the land as part of its empire. Here again, the use of language is prominent in the Spanish ritual of possession. For the Spanish, in order to legally claim a newly "discovered" territory a legal document called the Requirement was read aloud to any indigenous people they encountered. The Requirement reads as follows:

---

[38] Elliot 128.
[39] Rama 35.

> ...therefore I beg and require you as best I can
> ... [that] you recognize the church as lord and
> superior of the universal world, and the most
> elevated Pope ... in its name, and His Majesty in
> his place as superior and lord and king ...and I
> in his name will receive you ... and will not
> compel you to turn Christians. But if you do
> not do it ... with the help of God, I will enter
> forcefully against you, and I will make war
> everywhere and however I can, and I will
> subject you to the yoke and obedience of the
> Church and His Majesty, and I will take your
> wives and children, and I will make them slaves
> ... and I will take your goods, and I will do to
> you all the evil and damages that a lord may do
> to vassals who do not obey or receive him. And
> I solemnly declare that the deaths and damages
> received from such will by your fault and not
> that of His Majesty, nor mine, nor of the
> gentlemen who came with me.[40]

The witnessing and notarizing of this act was all that was required for the land to become part of the empire according to Spanish law. The Requirement was used from 1512 to 1573[41] and Spain was the only European nation to use an ephemeral ceremony for claiming territory in the New World. However, the gridiron city, unique to Spain, was a physical manifestation that signified Spanish-owned land to other Europeans.

Every European power in the New World participated in some form of ceremony of possession to legitimize its claims in the New World. These ceremonies were not for the benefit of the Indians they encountered. Rather, the various methods of claiming New World colonies and appropriating indigenous land, beginning with Columbus's claiming of the first island he

---

[40] Seed 69.
[41] Seed 70.

31

encountered, were for the benefit of fellow Europeans.[42]

Interestingly enough, each European nation involved in claiming the New World as part of its empire had a different method or ceremony for legalizing entitlements. Even more interesting is the fact that none of the European countries recognized each other's method for claiming parts of the New World. The prevailing attitude at the time was that any given nation's method of claiming was the only virtuous one and all other methods were illegal.[43]

The European players in the struggle for dominance in the New World were France, Spain, Portugal, England, and to a lesser extent, the Netherlands. France recognized a procession ending with a mass and the erection of a cross on a hilltop or high peak as sufficient grounds for claiming a land as part of the French empire. Included in this tradition was permission from the local indigenous people to erect the cross. At one point, in 1503, French sailors decided to erect a thirty-five foot cross on a hill overlooking the ocean to mark the fact that Christians had landed. The cross was not only visible to all that passed through the area, it also created a physical manifestation of French presence upon the land.

The Portuguese explorers recognized scientific measurements as their basis for legal claims in the New World. Using a sextant, the Portuguese could fix a place on earth by the position of the sun. Being able to repeat this task

---

[42] Seed 4.
[43] Seed 190.

multiple times with identical results constituted legal claim

to any land that was newly discovered and uninhabited by

Europeans according to the Portuguese. Pedro Nunes wrote in

1537 that "it is evident that the discoveries of coasts,

islands, and continents has not occurred by chance, but to the

contrary, our sailors have departed very well informed,

provided with instruments and rules of astronomy and

geometry".[44] The Portuguese were the very best navigators and

cartographers at the time Nunes was writing.[45] The Portuguese,

like the Spanish, incorporate science and technology into

their ritual of possession. While the Portuguese used the

science of navigation and the sextant as the control medium to

legally claim land, the Spanish used the written word. The

incorporation of technology into land-claiming ceremonies

created a technological divide between the Europeans and the

oral societies they encountered. Moreover, the Portuguese and

Spanish saw themselves as civilized because they had superior

technology over the peoples they meet in the New World.

The English based their claims to New World territory by

the establishment of a building or cottage.[46] Even if the

building were to be abandoned, its presence was sufficiently

recognized by British law to signify ownership. A second

method of territorial markings that indicated ownership was

---

[44] Seed 126.
[45] Seed 102.
[46] Seed 19.

the existence of any English-style garden. The plants would reproduce leaving evidence of English presence and ownership.

However, the Spanish explorers, through their reading of the Requirement, demanded that the natives of the land submit themselves to the will of the Spanish crown and that they accept God as their saviour. Furthermore, the Requirement granted justification to commence hostilities towards the natives if these demands were not followed. The concept that the native populations did not understand what was being demanded of them, or the repercussions of failing to adhere to the demands, seems to have been lost on the Spanish. The technological divide is present here as well. The Spaniards had a written language through which they could document their actions. This innovation would have been new to the predominantly oral cultures of the New World. Then again, the understanding of the Requirement by the natives was not part of the ceremony; only reading the text was necessary for legal purposes. Moreover, intertwined in the Requirement is the belief that the Spaniards were destined to convert and civilize the natives they encountered in the New World. In fact, conversion became an integral factor in the Spanish process of legalizing their New World lands.

Upon Columbus's return to Spain, King Ferdinand and Queen Isabella sought the Vatican's recognition of Spanish claims to the lands Columbus came upon. The Pope at the time, Alexander VI, a Spaniard himself, issued a papal bull granting the

Spanish monarchs rule over all Atlantic lands they discovered that were inhabited by pagans.[47] Part of the Spanish obligation in ruling the distant lands was the active conversion of all pagan natives. Pope Alexander VI also retracted the right for other European nations to discover or possess New World territory.[48]

Not surprisingly, France and England took exception to the Pope's decree. Portugal was able to claim any land discovered one hundred leagues west of Cape Verde, according to the Papal bull. The primary objection raised by the French and English was the incorporation of a Medieval Papal law from 1493 which stated that uninhabited lands could be claimed by the first nation to discover them.[49] This approach to New World entitlement presupposed that the natives had no claim to the land they occupied. Even some Spaniards had trouble with this supposition. Francisco de Vitoria (1442-1546) writes in his text, De Indiis that:

> Not much, however, need be said about this …
> title of ours, because as proved above, the
> barbarians were true owners, both from the
> public and from the private standpoint. Now the
> rule of the law of nations is that what belongs
> to nobody is granted to the first occupant, as
> is expressly laid out down in the
> aforementioned passage of Institutes. And so,
> as the object in question was not without an
> owner, it does not fall under the title which
> we are discussing … In and by itself [this
> title] gives no support to a seizure of the

[47] Greenblatt, Stephen. Marvelous Possessions: The Wonder of the New World (USA: University of Chicago Press, 1992) 62.
[48] Schlesinger xvi.
[49] Elliott 69. Greenblatt 61.

aborigines any more than if it had been they
who had discovered us.[50]

As well, the Protestants sought to settle the right to
exercise power in the New World in ways that were different
from the Papal bull. The Protestants argued that it was not
realistic for the Native Americans to accept the authority of
the Pope. Such lines of reasoning directly engaged the right
of the Pope to award political legitimacy to any European
nation in the New World. However, in 1493 when the edict was
issued, little objection was raised about the Pope's
justification to grant legitimacy to New World claims or to
the right to convert natives. At the time it was very
difficult to contest the will of the Pope; the Catholic Church
was too powerful to challenge. So while Alexander VI's bulls
were clear in outlining Spain's duty to convert the natives,
questions about the methods undertaken to achieve the goal of
Christianizing the pagans could be raised. The top legal
experts of the sixteenth century examined whether the duty to
convert the natives included waging war against them,
murdering their leaders, and enslaving the population.[51]

At the same time as the legal experts were trying to
unravel and settle on the appropriate methods of converting
natives, none of the European courts recognized each other's
ceremonies of possession.[52] Each European nation involved in

---

[50] Greenblatt 61.
[51] Schlesinger 46.
[52] Seed 11.

New World land claims believed that their own practices were the only legally accepted methods of securing the distant land. This situation was the result of each nation using implied cultural understandings to express how political authority ought to be initiated.[53] One example of the discrepancies between nations when claiming parts of the New World is the usage of crosses.

The most significant difference between all the methods of claiming land in the New World and the Spanish method is the following: the Spanish relied almost entirely on oral pronouncements to exert their claim when all other European nations used tangible methods. The Spanish spurned ephemeral markings upon their initial landfalls in favour of oral declarations, which were notarized by witnesses.[54] So while other European nations could point to some sort of landmark or mathematical equation to prove that they had been to any given place in the New World, the Spaniards had a document that stated that a text had been read.[55] Another method of signifying Spain's claim to the New World was needed.

While the gridiron city was never formally recognized as legal entitlement to New World lands, the repetitious nature of the urban plan clearly indicated that the settlement was Spanish. The Portuguese New World settlements did not adhere

---

[53] Seed 7.
[54] Greenblatt 56.
[55] Seed 13.

to the strict urban planning used by the Spanish.[56] The gridiron cities were clearly a Spanish mark upon the New World, and a far cry from Columbus's declaration of possession. However, both the gridiron city and Columbus's method of possession were a result of Spain's bureaucratic culture.

After Columbus returned to Spain in 1493, the Queen's litigious cleric and administrator, Juan Rodriguez de Fonseca, handled everything regarding the New World. By 1522, a new system of governance was needed to handle the demands of the empire's holdings in the New World. In 1524, the year of Fonseca's death and the completion of Mexico City, the council of the Indies was founded to oversee and formally organize the governing of the New World.

The chain of communications, in theory, went from viceroy to Council to Monarch and vice-versa. In practice, many chose to go over the head of the viceroy and communicated with the Council directly. What can be said with certainty is that a constant flow of information went from the New World to the Council, to the King, and back again. If inter-government communication and discussion over any given program determined the success of a state, Spain was the most successful empire of the time.[57] No other country micro-managed its empire as much as did the Spanish Monarchs.

---

[56] Socolow Susan. "Introduction", Cities and Society in Colonial Latin America. (Albuquerque: University of New Mexico Press, 1986) 6.
[57] Elliott 316.

Of course, there were drawbacks to the extensive bureaucracy. There was a very real problem of over governing leading to no government at all. It did not take long before the endless bureaucratic quibbling between the motherland and colonies plagued the New World. The sheer number of cross-Atlantic letters, decrees, appeals, rebuttals, and orders was so great that the Spanish crown tried to keep lawyers out of the new territory of Peru. Fearing the negative effects of the litigious culture, titled and untitled lawyers were banned by the crown in Peru as part of an agreement with Pizarro in 1529.[58] Very little heed was taken of this prohibition on lawyers and letters continued to fill cargo holds in the ships plying the Atlantic at an unabated pace.

Shortcuts through the red tape had to be made or the empire could never have grown. The gridiron city is one such swath through the red tape of Spanish bureaucracy. The legal precedent for founding a gridiron city was established by Cortes, the most famous of the Conquistadors, when Mexico City was rebuilt. Considered a legal expert by many,[59] Cortes was able to establish a method of founding towns that could be copied by less legally minded Spaniards. Along with the legal template, the warriors-turned-setters used the gridiron layout that Cortes implemented during the rebuilding of Mexico City.

The establishment of Mexico City as a legal method of settling conquered land represents a pre-packaged

---

[58] Lockhart 70.
[59] Elliott 64.

communication system that included: city plans, distribution

of land, and political structures. As Angel Rama argues

> before becoming a material reality of houses,
> streets, and plazas, which could be constructed
> only gradually over decades or centuries, Latin-
> American cities sprang forth in signs and plans,
> already complete, in the documents that laid their
> statutory foundations and in the charts and plans
> that established their ideal design.[60]

As the Spanish conquered the New World, a frantic quest

across the continent – through some ten thousand kilometres of

jungle, forest, mountains, and rivers – they left ordered

cities in there wake.[61] Each gridiron city founded is the

physical reality of the signs and plans the conquistadors

carried with them.

Here there are two main communication systems in play.

One system is the cross-Atlantic messages, which the

directives on how to found and build cities travelled. The

other system is the implementation of the gridiron city

itself. It is the transmutation of language, signs, and plans

into physical architecture. These plans were carried and used

by the conquistadors as they pushed into the New World.

Moreover, the conquistadors were part of the technological

aspect that allowed for this communication system to exist.

Whether carrying written plans and directives or using

superior armour and weaponry, the conquistadors used their

superior technology so that the plans for the gridiron city

---

[60] Rama 8.
[61] Rama 10.

could be carried and used throughout the New World. Had the

conquistadors not conquered the New World peoples, the city

plans would have neither been carried very far inland nor

used.

The architecture used came from Spain and was put into

practise in America; from the governing head to where the

physical body of the city was to be laid. Along with the pre-

packaged communication directive was the assurance that the

urban space would reproduce and confirm the desired social

order, with Spaniards at the top of the social strata and

occupying the most prestigious locations in the city. In part,

this transition from language to architecture can be

attributed to the fact that the classical episteme, as a

whole, was propagated by a belief in order.[62] The gridiron

cities are a reflection of this belief of order being used as

a principal of urban planning.

The second communication system, the messages between the

motherland and the New World, was maintained by a caste-like

group of people known as the Letrados. Letrados, or literate

people of the New World, were considered almost priestly. But

instead of metaphysical absolutes, the Letrados used reading

and writing to re-enforce their station. Rama describes the

authority of the Letrados as:

> …the ascendancy of the Letrados then, lay in
> their ability to manipulate writing in largely
> illiterate societies. Amid the grammatological
> tendencies of European culture in the early

---

[62] Rama 5.

modern period, writing took on an almost sacred
aura, and doubly so in American territories
where it remained so rare and so closely linked
to royal authority.[63]

Early in the colonization of the New World, the Letrados

were mostly educated minor gentry who were schooled in Spain

but could not find employment there. Even though educated men

were needed in the bloated Spanish bureaucracy, the grammar

schools and universities were producing far more graduates

than the central government could use.[64] Still, there was an

almost endless demand for the educated and semi-educated in

the New World. Each conquest expedition, each settlement, each

city needed Letrados to maintain contact with the Council of

the Indies.

Surprisingly, there are very few detailed studies of the

Spanish bureaucracy from that era. Angel Rama elegantly

describes the role of the Letrados in the New World in his

book, The Lettered City, but does not delve into the place of

the Letrados within the bureaucracy as a whole. For all the

thousands of officials who were responsible for the

communications of the empire, very little is known about

them.[65]

The millions of letters that were sent throughout the

empire were not limited to a simple route from the New World

to Spain and vice-versa. The colonial administration sent a

continuous barrage of letters, official notices of prominent

---

[63] Rama 24.
[64] Elliott 177.
[65] Elliott 177.

events and gossip to major urban centres all over the New

World. For example, Vaca de Castro, in a letter sent to King

Charles V from Quito on the 15 of November 1541, describes the

actions he took to inform the New World of the murder of

Francisco Pizarro; the illegitimate son of Gonzalo Pizarro. He

wrote:

> I wrote immediately to the town council of
> Cuzco and to various parties, and also sent a
> copy of the orders whereby Your Majesty made me
> governor, authenticated by two notaries, along
> with testimony of how I have been received here
> in that capacity with attendant powers. I wrote
> Captain Per Alvarez Holguin, who has 150 men in
> the area of Cuzco preparing for an exploratory
> expedition; and then I wrote to Lima, sending
> copies of the dispatch by four separate routes,
> with letters for the town council and others
> such as Gomez de Alvarado and other persons of
> quality, who used to take their side but have
> since turned against them. I wrote to don Diego
> and also sent spies to write or come tell me
> what is happening in that city; soon I should
> have replies. And I wrote to the towns on the
> coast and to various private individuals there,
> as well, securing them all in service of your
> Majesty.[66]

Poor Vaca de Castro's enthusiasm for writing got the

better of him when a letter he sent to his wife detailing the

wealth he was skimming from the king was intercepted. However,

this example - one of many - details the common practice of

sending a multitude of letters to a multitude of recipients.

Often up to ten copies would be written and sent by different

routes in hopes of one copy making it to the council of the

Indies or any other given receiver. Along the way, many

---

[66] Rama 34.

documents were intercepted and used as blackmail, introduced
to authorities as discriminating evidence, or even doctored to
incriminate rivals. So, while the Spaniards invested a lot of
time in maintaining lines of communication, the system was
incredibly inefficient.

The lettered culture that existed in the New World, from
the European discovery to the era of independence, was
imported from Spain. Certainly the indigenous societies the
Europeans encountered had forms of communication but these
systems tended to be orally and pictorially based. Spain, on
the other hand, had a long tradition of excessive litigation,
scribes and written decrees. Remember, Columbus claimed the
New World by reading a text and this was legal in the Spanish
court, because a notary had witnessed it.

Moreover, because trans-Atlantic relays were so slow, the
simple urban plan that was established in the early sixteenth
century could easily be repeated. When laying out a town's
foundation, the conquistadors and settlers did not have to
wait for directions from the Council of the Indies in Spain.
Had communications been more rapid, city plans might have
differed depending on location and climate. It is possible
that the gridiron pattern would have fallen out of fashion in
the Spanish courts and a new style of urbanism would have been
promoted if communications had been more reliable. Instead
one design was chosen for all the New World, a design that

reflected what the Spaniards considered the best possibility

for urban development and city living.

Encomienda

Cortes popularized the founding of towns as a method to

secure land and organize the spoils of conquests.[67] His

successors often lacked the legal expertise to navigate the

strenuous demands and paperwork required by the Council of the

Indies to appoint themselves as governors of a region. It was

much simpler to found a new town and create a municipal

government using an established legal template than to create

a new precedent. By following Cortes's lead, Conquistador

leaders could create many towns and settlements. A good

example of this is the conqueror of the Incas, Francisco

Pizarro. Pizarro personally founded Cuzco (1533) and Quito

(1533) both on top of the existing native towns, and Lima

(1535) on the Altiplano. Sebastian de Belalcazar founded

twenty new towns during his conquest of New Granada

(Columbia).[68]

The network of cities built in the New World usually fell

into one of two categories: 1) suppliers for the mining towns

and transfer points for the ore mined and 2) mining centres.

However, both functions of the settlements, whether built for

support or exploitation of resources, were directly dependant

---

[67] Kagan 30.
[68] Kagan 30.

on a political system known as the encomienda for their very survival.

This system of rewards began with Columbus who compensated the New World settlers with parcels of land because of a lack of gold.[69] The tradition of the allotment of land and natives that Columbus distributed among his fellow Spaniards continued during the conquering of the continent. Furthermore, it is not an understatement to say that the encomienda became the economic foundation of Spanish colonization of the Americas.

Natives caught up in the tribute system of the encomiendas performed most forms of manual labour and agriculture production required by the Spanish. These included: mining, farming, and artisan trades such as iron-working and tanning. As well, all the raw materials needed to build the ordered cities were collected, carved and carried by Indian slaves. This means that the ordered city, the symbol of European civility, superiority, and rationality was built, maintained and subsisted, almost entirely upon the work of enslaved natives.

At the same time, for many conquistadors, their "legitimate" occupation of warrior became unnecessary with victory. Once a war is won, the warrior becomes redundant. However, supervision of an encomienda was considered appropriate for a member of the ranking caste.[70] The conquistadors sought above all else fine clothes, fertile

---

[69] Schlesinger xvii.
[70] Clendinnen 40.

land, livestock, and a position on the municipal council.[71] The encomienda system was the perfect compensation for the retired conquistadors, since it provided a system of immediate exploitation of the conquered while imparting the wealth the conquerors sought.[72]

It is not surprising that the encomienda became the reward of choice for the conquistadors. There are many examples of Spanish adventurers embarking on conquest after conquest in hopes of receiving an encomienda or receiving a land reward of greater value. There was no shortage of Spaniards who would risk life and limb for the riches of the New World. This certainly played a part in the blinding speed of the conquest of the New World.

Moreover, the belief in a city of pure gold (El Dorado) kept the Spanish conquistadors pushing deeper into the continent and not willing to settle for poor or mediocre land grants. Not all encomiendas were considered to be equal. Some included gold or silver mines; others were of value because of the fertile soil. Typically, only the old and injured settled for encomiendas in areas where natural resources and potential slaves were limited or poor.

By the mid sixteenth-century, the economic exploitation of the New World was almost entirely dependent upon the forced labour and tributes supplied by the encomiendas. At the same time however, the Spaniards gravitated to the newly founded

---

[71] Lockhart 23.
[72] Clendinnen 38.

47

cities. Urban life was not only identified as a civilized life
among the Spaniards, it was also popular to congregate in the
cities for protection and to secure or maintain positions in
local councils.[73] These new Spanish cities and towns quickly
developed their own social elite and political leaders.[74] Many
Spaniards became extremely wealthy due to their exploitation
of people and land. In fact, the local encomienda owners and
politicians became so wealthy and powerful that the Council of
the Indies in Spain was fearful of revolt in the New World.[75]

The fear of revolt stemmed from the great mineral wealth
that was being extracted from the New World and the vast
amount of land and natives among the encomienda holders. There
certainly was enough wealth and agricultural produce for
feudal lords to exert power independent of the royal
authority.[76] For instance, each of the Spanish cities of Quito,
Puertoviejo, Guayaquil, Piura, Trujillo, Huanuco, Lima,
Huamanga (Ayacucho), Cuzco, and la Plata (Sucre) was dominated
by several encomienda leaders whose families held powerful
positions and who were politically influential for
generations, and in some cases for centuries.[77] The endemic
power of the encomienda owners and conquistadors came to a
head during Gonzale Pizarro's great successes in the Inca
Empire during the years 1544 to 1546. There was much talk

---

[73] Clendinnen 39.
[74] Elliott 71.
[75] Elliott 66.
[76] Zorita 9.
[77] Lockhart 8.

about making Pizarro king of the New World and bestowing his

captains with duke and count titles.[78] During Viceroy Toledo's

term in office, 1569 to 1581, encomienda owners were

prohibited from holding public office. Prior to that, the

Spanish crown had tried to outlaw slavery in the New World

several times, in part to limit the potential wealth of the

landowners. However, each attempt throughout the sixteenth

century was met with extreme resistance and was eventually

annulled.

The first prohibition on slavery occurred in 1500 when

Columbus returned to Spain with shiploads of indigenous

slaves.[79] Prominent theologians protested the enslavement of

the 'innocents' and eventually Queen Isabella issued a formal

decree banning the enslavement of the New World Indians.

However, any Indian caught attacking Spaniards or

participating in such sinful practices as cannibalism or

sodomy could be forced into servitude. Finding pretexts for

saving Indians from devilish practices and enslaving them was

relatively easy. Entire villages of men, women, and children

were taken captive as slaves for the Spaniards.[80] A Royal

decree in 1530 sought to end all future enslavement of the

Indians but that too was annulled. The reality was that

without hundreds of thousands (millions)[81] of Indian slaves,

---

[78] Lockhart 42.
[79] Elliot 70.
[80] Elliot 70.
[81] Details of the decline in the Indian population is addressed in the
subsequent chapter

the New World cities could not have been built, nor could the urban populations have sustained themselves in terms of agricultural produce and daily needs such as firewood and potable water.

While the contribution to the New World cities by the Indian slaves was enormous in terms of labour, agriculture, building materials and economic support, the rural indigenous population was devastated by the middle of the sixteenth century. In the central Mexican valley alone it is estimated that the indigenous population went from 25.2 million in 1518 to 16.8 million in 1532 to 2.7 million in 1568.[82] Smallpox and influenza contributed to a large portion of premature deaths. However, the impossible tribute demands by the Spanish left much of the Indian population unable to tend to their own crops and livestock. Hunger was rampant and the immune systems of the Indians were weakened. As well, many Indians were sent to mines from which few workers ever emerged.

This system however, all but collapsed by 1574. The slaves needed to build newly found cities were no longer available in the New World and replacements that were shipped in from Africa were but a fraction of what was needed.[83] Encomiendas were not being granted at nearly the same rate after 1574.

The encomienda structure contributed to the rapid spread of Spanish urban development in two ways. Firstly, because the encomienda was allocated as part of a reward system, many

---

[82] Batalla 81.
[83] Burkholder and Johnson 126.

50

Spaniards participated in conquest after conquest hoping for a land grant. The second contribution to the development of the ordered city in the New World was the slave labour that was drawn from the encomiendas. Without the mass enslavement of the Indians the New World gridiron cities might never have been built.

Chapter Two

Indigenous Peoples' Civitas

The native peoples of the New World were largely responsible for the physical labour needed to build the gridiron cities. However, there was little, if any, indigenous input into the design, size or location of the new Spanish urban centres.[84] Although the Spaniards encountered vastly different cultures and urban centres in the New World, the imported gridiron city template did not change. This is a strong indicator of how local customs and urban tradition were not taken into consideration when the Spanish established their cities. While some indigenous cultures did have quadrant-based cities, the specific gridiron pattern used by the Spanish was unique to their colonization process.[85]

It can be argued that if there had been a stronger, more dynamic and influential cross-cultural exchange between local indigenous peoples and the Spanish, then it is likely that the commitment to the urban trend would have changed. Instead, the Spanish used one city template for all the New World territory they colonized. The role of the Indian in the building of New World cities was not that of architect or designer but of labourer and little else.

---

[84] Hardoy: 222-3.
[85] More about the similarities and differences between the Spanish gridiron and indigenous quadrant cities will be discussed later in this chapter.

Labour, in this case, included the gathering of raw

materials needed for the construction of buildings, as well as

the carving of rock and milling of timber. As well, the

Indians were required to provide foodstuffs for the Spaniard

or mine precious metals. The details of the tribute system

have been laid out in the encomienda section.

The mass enslavement of the Indian population in the New

World, fuelled by the Spanish thirst for wealth, was possible

because of conquistador treachery and certain similarities

between Spain and the two largest New World empires, the Incas

and the Aztecs. Both the Incas and Aztecs divided the

population into two different hereditary categories: noblemen

and commoners.[86] Spanish society also cast its population into

the two hereditary classes of aristocrats and peasants.[87] The

Spaniards who landed in the New World found two extensive

empires with large populations and developed governments.

These two empires had central focal points of authority and

power. For the Aztecs, the capital was Tenochtitlan that was

destroyed and rebuilt as Mexico City. The Inca capital was the

high land city of Cajamarca.

In the New World, the Spanish purposefully severed the

heads of the Aztec and the Inca empires and installed

themselves as the new nobility. This action had a two-fold

effect on the social makeup of the New World. By claiming the

position of lords of the land, the Spanish positioned all the

---

[86] Diamond 78. Zorita 6.
[87] Lockhart 94.

natives of the New World into a subservient category. The
Spaniards were the new leaders and solely occupied the
positions of heads of state and aristocrats. The indigenous
peoples, regardless of historical lineage or hereditary
positions, became the masses to be ruled. Among those stripped
of their positions in Aztec or Inca society were judges,
dignitaries, military and civil officials, soldiers,
messengers, attendants, clerks, administrators and tax/tribute
collectors.[88] These positions were taken by the Spanish
conquerors. As well, cultural, social and historical
differences among the indigenous peoples of the New World
ceased to be relevant in the eyes of the Spanish leaders. The
self-appointment as New World leaders by the Spanish created a
singular subservient class, at least in the eyes of the ruling
elite.

This social division along race lines meant that within
the colonial society, two distinct and irreconcilable groups
arose: the Spaniards and Indians. The Indians were considered
inferior and "other" to the Europeans; they were the
colonized. Before the Conquistadors, before Cortes, Pizzaro
and a host of other Spanish conquerors, there were no Indians
but rather groups of people who were identified by language,
culture, and region. All these categories were collapsed and

[88] Soustelle 50.

the peoples of the New World who were colonized by the Europeans were collectively called Indians.[89]

The creation of the Indian by the Spanish, however, served several purposes beyond mere classification. There were legal consequences. Spanish courts were notoriously biased against Indians. Indians also lost the right to own land and their personal freedom under the pretext of the Requirement.

As well, after conquering the Aztecs and the Incas, the Spanish crown sought to decentralize the authority of the empires from two central locations into the Spanish cities across the New World.[90] The decentralization of New World authority, including the possession of land and Indians, was in part, an attempt to curtail the influence of Conquistador leaders and to strengthen the power of the Council of the Indies. There was great concern that the rise of a new class of wealthy landowners would reject royal authority. Such an act would not only hurt the Spanish Monarchy economically but also destroy the illusion of an ordered, rational colony. In maintaining the central point of power in Spain with the Council of Indies, the Spanish broke traditional boundaries as they carved out new territories. In fact, from a legal position, the New World was considered to be a province of Spain, meaning that local indigenous legal traditions and customs held no weight in the Spanish legal system.

---

[89] Batalla 19.
[90] Gibson, Charles. The Aztecs Under Spanish Rule (Stanford California: Stanford University Press, 1964) 121.

Just as the term "Indian" negated cultural differences amongst the Natives of the New World, the Spanish legal system took precedence over any indigenous customs or laws to serve the interests of the conquerors. The taxation and tribute system was overhauled to reflect the needs and demands of the Spaniards. For instance, traditionally amongst the Aztecs, plumes and gems were considered more valuable than gold or silver.[91] Traditional Aztec songs and verses are full of references to the value of colourful feathers and shiny stones.[92] Not surprisingly, the Spaniards had no interest in plumes and little desire for semi-precious gems. Gold and silver were definitely the tribute of choice. Yet, the demands for gold and silver had to be impressed upon the natives as traditional items of tribute were forsaken.

Before the conquest, treasure was often considered to be the accumulation of agricultural products such as maize, beans, oil seeds, many-coloured feathers, precious and semi-precious stones, jewels, clothes, and ornaments. Tributes or taxes that were collected in the Inca and Aztec societies often included such things as: women's clothes, men's loincloths, embroidered skirts, suits for warriors with head gear and shields, live birds, clocks, peppers, feathers, necklaces, rubber, costumes, cotton, agave-fiber cloth, cocoa, honey, salt, tobacco, building materials, furniture, crockery,

---

[91] Soustelle 79.
[92] Soustelle 238-9.

gold, and paper.[93] The type of tribute and the amount given was determined on a province-by-province basis. Each area provided tributes that could be gathered or made from local resources. Under the Spanish taxation policies, Indians were often required to provide tribute items regardless of local resources or conditions.[94] If the traditional tributes offered were unwanted by the Spaniards, Indians would be relocated to areas where their labour could be used to meet the demands of the colonizers.

For example, the primary demand by the Spanish, in terms of tribute, was large quantities of gold and silver; therefore, thousands upon thousands of Indians were forcibly relocated to mining sites. This population movement removed people from not only their traditional land and labour practices but also from their family, friends, and customs. As well, exorbitant amounts of labour and agricultural products were taxed from the Indians who lived in fertile areas. The volume of goods handed over to the European conquerors far exceeded any tribute or tax ever paid to native leaders prior to the Spanish invasion. Alonso de Zorita, a New World Spanish judge of integrity and who was free of corruption wrote in his report to the crown that:

> What I can say with certainty is that one
> Indian pays more tribute today than did six
> Indians of that time [before the conquest], and
> one town pays more in gold pesos today than did

[93] Soustelle 82-3.
[94] Zorita 144, 189.

six towns of the kind that paid tribute in gold.[95]

The change in tribute demands had profound effects on the native populations. The obligation to provide gold alone drastically changed the native communities in the New World. Before the Spanish conquest, gold was only a small economic factor in day-to-day life. The conquered Indians had only minimal mining skills and little desire to excavate for precious metals.[96] The Aztecs, for instance, believed that wealth was derived from honour and honour was not attained by wealth among the ruling class. Or, to put it an other way "wealth was not pursued for itself; it came as a function of increasing power and official expenses. It was income and not capital. The only thing that really counted in the tecuhtli's [leader's] eyes was reputation".[97] Honour was only worth its weight in gold to the Spanish; they wanted material wealth and forced the Indians to provide it.

During and after the conquest, the Spanish desire for gold was so great, and the looting of shrines for gold so prominent, that a legend among the natives held that the Spaniards ate gold and silver in the place of food.[98] This legend grew and was popular well after the conquest era was over. In fact, one of the most famous images from the

---

[95] Zorita 189.
[96] Schlesinger xvi.
[97] Soustelle 58.
[98] Stern, Steve J. Peru's Indian Peoples and the Challenge of Spanish Conquest: Huamanga to 1640 (Madison: University of Wisconsin Press, 1987) 27.

sixteenth century New World depicts a group of Indians pouring molten gold into the throat of a Spaniard as punishment for the conquistadors' insatiable lust for gold.[99]

With the new demands in the type and amount of tribute, came changes in traditional notions of work, leisure and ceremony. The Spanish, in favour of Masses and slavery, outlawed communal work that intertwined pagan rituals and ceremonies with labour. Labour shifted from a social, moral and spiritual endeavour in the Native communities to a European concept of economic exploitation.[100] From a European perspective, these new labour arrangements embodied the "rationality" and superiority of the colonial world while purging the "irrationality" of the traditional working practises. The Native civilizations had embraced the natural world with their labour practices whereas the Spanish, at best, saw nature as something to exploit and, at worst, as an enemy to be conquered.[101]

Not all Spaniards, however, accepted the enslavement of the Indians and the acquisition of wealth garnered from the destruction of Indian culture and society. Alonso de Zorita was a champion of Indian rights as was the Dominican Bartolomé de Las Casas, also known as the "Protector of the Indians". Las Casas protested to the Spanish monarchs about the abuse of Indian labourers under the encomienda system. He writes: "And

---

[99] Greenblatt 64.
[100] Gibson 120-1.
[101] Batalla 27.

wherever killing with the sword has come to an end, they are

killing Indians little by little through the subjecting them

to servitude".[102] The enslavement of the Indians and the

destruction of their society could only be considered a

scandal in the eyes of God according to Las Casas. His pleas

for reforms were heard and new laws were passed to protect the

Indians. However, many of the reforms were impractical for New

World Spaniards and were therefore ignored.[103]

Finally, Las Casas convinced King Charles to establish a

free commonwealth for the Indians. In theory:

> The Spaniards would live among the native and
> teach them to work hard and be conscientious
> Christians through their good examples. Set up
> in 1520, Las Casas's bold enterprise failed
> miserably. By 1521, the natives in the
> settlement had revolted and killed two friars.
> In retaliation, a Spanish expedition enslaved
> all the Native Americans whom it could capture
> there.[104]

Las Casas's settlement marks a unique attempt at

incorporating Indians into the political affairs of the

Spanish in the New World. Many missionaries welcomed Indians

for the purpose of conversion but the notion of leading

through good example was not a popular practice. Franz Fanon,

a colonial theorist, describes this type of relationship as

one where the native can be freely arrested, beaten, and

starved and adds that "no professor of ethics, no priest has

---

[102] de Las Casas, Bartolomé. The Devastation of the Indies: A Brief Account,
Trans. Herma Briffault (Baltimore and London: John Hopkins University Press,
1994) 132.
[103] Schlesinger 38.
[104] Schlesinger 40.

ever come to be beaten in his place, nor to share bread with him".[105] Indeed, the vast majority of priests were more concerned with the project of eternal salvation and creating a colonial centre of European civility than with the day-to-day suffering of slaves.

Conversions usually blended physical coercion with bribes. Furthermore, while the process of conversion often took place in isolated missions or by wandering missionaries, the converted Indians were "encouraged" to leave behind their natural world and join a Spanish city or encomienda. For the Spanish missionaries, part of saving the souls of the Indians was to remove them from the chaos and disorder of the wild and to remove them from their natural world. The gridiron city, the pre-eminent concept of sixteenth-century European ordered living, was seen as the very opposite of the natural world. Nature was synonymous with discord to the Spaniards while civility was associated with urban living.

It was within this bastion of European rationalism that the souls of the damned could be saved. Yet, the gridiron cities that were founded on the continent by the Spaniards contained no notions of equality nor sought to become emblems of impartiality between the Europeans and the natives.

The gridiron cities, with their repetitious design, were created, in part, to sever the ties that the Indian populations had with their history, culture and society.

---

[105] Fanon, Frantz. The Wretched of the Earth, Trans. Farrington, Constance (New York: Grove Press, 1963) 44.

Whether in the central valley of Mexico or in the highlands of the Alto Plano, Indians who lived in the gridiron cities or who were indentured to Spanish landowners were subject to Spanish law and Spanish concepts of religion, order, art, and superiority. The ordered cities designed by the Spanish and built by the Indians reflected the Spaniards' contempt for nature and chaos while espousing rationality and order.

Finally, it should be noted that within the sixteenth-century New World cities, Indian artistic activities were largely based on European models and concepts of art as well as in the European economic system through which art is valued.[106] Indian artists began to produce European-style art. The same is true of Indian artisans of that era. The Indians within the colonial system replicated the needs of the Spanish whether by producing European food, artisan products, or works of art. The role of the Indian artist or artisan, however, could not be associated with the role of inventor. The work of the Indians within the New World society was not necessarily an expression of creativity or a reflection of creative impulse, but rather the reproduction of imported concepts and designs.[107] Just as the gridiron city came to represent the urban reality of the Spanish conquests of the New World,

---

[106] Gasparini, Granziano. "The Colonial City as a Centre for the Spread of Architectural and Pictorial Schools", Urbanization in the Americas from its Beginnings to the
present. (Paris and The Hague: Mouton Publishers, 1978) 270.
[107] Gasparini 280.

artistic endeavours by the Indians exacerbated the cultural impact of the Spanish upon their society.

It is often said that new cultural contacts between different groups results in the exchange of ideas and knowledge. While this is certainly true in the New World, what is not said about these cultural exchanges is whether the cross-cultural communications and trades are in any way equal or balanced. The indigenous civitas received a mortal wound during and after the conquest of their homelands. The population shift was the largest in known history.[108] Two extensive empires were destroyed, and traditional religious ceremonies and rites were replaced with Christianity. A new form of urbanism rapidly took hold across the continent drawing Indians into the world of the Europeans.

The new urbanism imposed upon the landscape by the Spanish was both physically and symbolically foreign to the Natives of the New World. Interestingly, the gridiron pattern used by the Spaniards was somewhat physically similar to Tenochtitlan, the Aztec capital that was destroyed by the conquistadors during the invasion from 1519 to 1521. Indeed that capital had a certain gridiron aesthetic to it and was noted for ruler-straight causeways connecting the island city to the mainland. Cortes and his fellow warriors even felt the sublime effects of the city's majesty and layout when they first saw it. There is even some evidence to suggest that

---

[108] Batalla 81.

Cortes wanted to present the city and its people, intact, to the King of Spain.[109] Held as a marvel, the canal and causeway city was compared to Venice by the foreign invaders. The city was divided into four quadrants with a central square and four surrounding sectors. However, strong resistance foiled Cortes's plan to bestow the city as a gift to the King and most of the city was destroyed. The Spanish had to make room for cannons and cavalry. When reconstruction began, the city was rebuilt according to Spanish aesthetics.[110]

The canals were filled in and streets widened to better suit the needs of the Spanish. The gridiron layout was employed, as it had been many times before. One of the most noticeable differences between Tenochtitlan and Mexico City (aside from the filling in of the canals) was the introduction of shops and stores. In Tenochtitlan there were no shops, rather, manufactured and agricultural products were sold in a great marketplace fair held every five days.[111] The Spanish introduced new methods of selling and buying, including permanent stores and European-style monetary exchange and bartering. Also, fair days went from being held on a five-day cycle to the seven-day, Christian cycle.

Still, a question of cross-cultural exchange remains. A certain similarity existed between Tenochtitlan and the

---

[109] Clendinnen, Inga. Aztecs (Great Britain: Cambridge University Press, 1991) 271.
[110] Knight, Alan. Mexico: The Colonial Era (UK: Cambridge University Press, 2002) 16.
[111] Prescott, W.H. History of the Conquest of Mexico (London: Phoenix Press, 2002) 69.

rebuilt Mexico City. Both employed straight lines, whether
causeways and canals, or streets, and both cities were built
around a central square. This being said, there is little
evidence to suggest that the urban plan of Tenochtitlan had a
profound or lasting impact on the building of Mexico City or
future gridiron cities.

The gridiron city had been well established in the New
World by the time Cortes had reached Tenochtitlan and the same
pattern was used long after the city was destroyed. The
witnessing of Tenochtitlan's layout did not alter how gridiron
cities were built. This suggests little cross-cultural
exchange in regards to urban planning. More specifically,
Tenochtitlan was not rebuilt; Mexico City was built. Some
elements were similar but major changes occurred during the
building of Mexico City.[112] Primarily, the urban centre went
from being canal-based to being dependant upon roads for
transportation needs. These changes were made to meet Spanish
needs and aesthetic demands.[113] Plus, there were no deviations
to the gridiron model after the invasion of Tenochtitlan.[114]
The predominant Spanish colonial mind-set was one of complete
contempt for the Indians of the New World, with little concern
for the plight of the indigenous peoples or their urban
traditions. The invading Spanish slaughtered thousands of
Indians and razed their villages. Traditional urban design was

---

[112] Please see the chapter on "Urbs" for more about the differences between
Tenochtitlan and Mexico City.
[113] Prescott 578.
[114] Kagan 33.

scorned and Indian slaves were forced to build Spanish-style cities atop of their ancestral homes.

Within one hundred years of Spanish colonization, the indigenous New World population was less then 20% of what it had been prior to contact with the Europeans. The cultural clashes between the Spanish and the indigenous peoples they encountered were marked by violence and warfare. With technological advantages such as gunpowder and steel, the conquistadors were able to conquer the peoples of the New World despite being overwhelmingly outnumbered.[115] The absence of draft animals in the New World also made the Spanish cavalry all the more deadly. Local warriors had no experience with cavalry or pike warfare and thousands upon thousands were slaughtered by mere handfuls of conquistadors. European diseases such as small pox and influenza also decimated the indigenous populations. The Indians of the New World who survived the wars and illnesses were all too often enslaved and literally worked to death in abject poverty. The tragedy of this holocaust can only ever be understated. Yet, without the slave labour the Spanish dream of ordered cities could not have been realized.

As the Spanish took possession of the land they conquered, and colonized the New World, they radically changed the indigenous societies. One of the most prevalent changes was the creation of the "Indian" and the subsequent

---

[115]Diamond 74.

positioning of the native peoples as heterogeneous to the

homogeneous Spaniards. Indians were "other" compared to the

Spanish. The heterogeneousness of the Indians, according to

the Spanish, did not reflect the diversity amongst the various

groups; they were all considered Indians. Rather, Indians were

considered a singular mass because of their inferiority and

lack of civilization compared to Europeans. This is not

surprising.

Historically, the worldview of imperialists has always

been one of superiority over the peoples they conquer and

colonize.[116] Along with the colonial notion of superiority come

the concepts of progress and liberation. At the same time, the

supposed down-trodden, in this case the Indians of the New

World, considered the invaders to be heterogeneous to their

homogeneity; the conquering culture is the "other":

> The Europeans who came to the Americas in the
> fifteenth and sixteenth centuries, for example,
> saw in the aboriginal people they met the
> social instincts of more or less advanced herd
> of animals. Interestingly, there is evidence to
> suggest that both sides wondered about the
> other along much the same lines. Native people
> were just as astonished at the strangeness of
> the newcomers, and their stories tell of their
> uncertainty about where they belonged in the
> great chain of being.[117]

However, the Spanish conquered the natives of the New

World and created a colonial society where they were the top

of the social and economic food chain. A primary objective of

---

[116] Stern 72.
[117] Chamberlin, Ted. "Babblers", If this is Your Land Where Are Your Stories?
(Toronto: Knopf, 2003) 11.

colonizers is to mould two cultures, in this case Spanish and Indian societies into "a single, organic polity blessed with internal stability, while simultaneously structuring the new society to favour the economic and political interest of the colonial elite"[118]; this is why colonization exists. A template for this mould in the Spanish New World was the gridiron city; it was a medium of a message of colonialism. Aside from establishing cities to spearhead campaigns of conquest and subsequent control over the hinterlands, the gridiron cities, through their architectural design, positioned Indian culture and society as subservient to the dominant Spanish rule. Within the city boundaries, the roles of the two different groups, the Spaniards and Indians, were clearly defined.

One of the roles of the Spaniards, centred within gridiron city, though not strictly limited to it, was the salvation of the pagan Indians. After the invasion, the missionaries began their work of converting the heathens to Christianity. The forced conversion of the Indians through bribery and unimaginable violence decimated not only countless peoples but also many religious beliefs and traditions. Yet the Spanish belief in their duty of salvation being directly handed down from God himself was so absolute that the destruction of indigenous cultures and the enslavement of the population were deemed to be a positive outcome; for many Spaniards that was the path to salvation for the Indians. The

---

[118] Stern 72.

intertwining of salvation through slavery, violence, and destruction not only exemplifies the contempt the Spanish had for the indigenous cultures of the New World but also their absolute belief in their superiority over the Indians. For instance,

> Francisco de Montejo in 1526 knew the 'pacified' Indians of Tabasco spoke a tongue intelligible to the Yucatan Maya. But he provided himself neither with an interpreter, nor even with a basic Mayan vocabulary. It was an extraordinary omission, and suggests that Spanish confidence in their destiny to master Indians was so complete as to obviate the requirement to hold human converse with them along the way.[119]

Such "omissions" were all too common among the New World conquerors. Yet, while the Spanish at best ignored the indigenous cultures and at worst actively pursued their eradication, the Europeans and Indians did live, at least in the Spanish cities, in the same urban environment. The gridiron city became a single lived reference point for both the Spanish and the Indians of the New World.

This does not necessarily mean that the gridiron city would be experienced in similar ways; after all, the lived city was a homogeniser of two distinct heterogeneous groups. However, the repetitious usage of the gridiron ensured a singular reference point between cultural divides no matter where the Spanish settled in the New World.

The gridiron city was an intermediary between the Spanish and Indians. Homi Bhabha refers to this type of intermediary

---

[119] Clendinnen 20.

as a "zone of intersection in which all culturally determinate significations are called into question by an unresolved and unresolvable hybridity".[120] The urban centres were areas of commonality as well as areas of hybridity. The shared lived experience in the gridiron urban environment was a new concept to both Europeans and Indians. It also offered singular reference points for all inhabitants. The reference point is still a homogenizing factor even if different interpretations are drawn; both Indians and Spaniards carried their cultural experiences *a priori* to interpreting the gridiron city. At the same time, the cultural lenses through which interpretations happen dictate a hybridity when culturally diverse peoples occupy similar sites.

Furthermore, because the Spanish ghettoized a majority of New World Indians into cities, the hybridity from the two distinct groups was apparent in every city. Concentrating Indians into cities not only provided an exploitable labour force, but also drew the indigenous peoples into the commercial economy of the time. A second consequence of relocating Indians to cities, mining centres and encomiendas was the decentralizing of any remaining imperial political authority from the Aztec and Inca empires.[121] Moreover, the new political institutions and authority were centred in the Spanish designed cities that favoured the colonizers over the

---

[120] Greenblatt 4.
[121] Gibson 121.

colonized in terms of social hierarchy, history, and legal status.

Chapter Three

Urbs

The urbs of any given city are the physical structures and infrastructures of the location; this includes roads, buildings, parks, churches, and jails. So far, it has been the social and political aspects of the city, the civitas, which have been examined. The civitas are the people and political institutions that comprise a city. In the New World, the belief in an ordered co-existence between the civitas and the urbs was a new and unique phenomenon. Distinguished by perfect checkerboard patterns, the European cities built in the New World not only incorporated a new concept of urban living to the indigenous peoples of that continent but also to the Spanish invaders.

The gridiron urban design in the New World was popularized with the rebuilding of Mexico City in the image of a Spanish ideal. The grid pattern had been used in the New World prior to Mexico City but the settlements were small and relatively insignificant. The capture of Mexico City and the subsequent assassination of Moctezuma represent the first major conquest of the New World. Moctezuma's empire had a population of millions, a highly stratified social structure,

an advanced economy, and highly developed cultural practices.[122] Tenochtitan, re-built as Mexico City, was the heart of Moctezuma's empire, so it is not surprising that Cortes made that famous city the centre of Spanish interests in the New World.

Rebuilding Mexico City after its capture was a top priority for the new Spanish rulers and it required thousands of Indian slaves. Cortes sought to raise the city "to her rank of Queen of the surrounding provinces, in the same manner as she had been of yore".[123] Here Cortes is referring to the authority Tenochtitan commanded over the hinterlands, not to restoring the physical grandeur of the city. The reconstruction was a relatively quick affair and during the process, the city was remodeled to express not only European dominance but also European ideals of civilization. So while Cortes wanted the city to influence the surrounding areas as the city had in the past, but with Spanish concepts of authority. Prescott, author of <u>History of the Conquest of Mexico</u>, writes:

> In less than four years from the destruction of
> Mexico, a new city had risen on its ruins,
> which, if inferior to the ancient capital in
> extent, surpassed it in magnificence and
> strength. It occupied so exactly the same site
> as its predecessor, that the plaza mayor, or
> great square, was the same spot which had been
> covered by the huge teocalli and the palace of
> Moctezuma; while the principal streets took
> their departure as before from this central
> point, and, passing through the whole length of

---

[122] Lezama 370.
[123] Prescott 570.

the city, terminated at the principal
causeways. Great alteration, however, took
place in the fashion of the architecture. The
streets were widened, many canals were filled
up, and the edifices were constructed on a plan
better accommodated to European taste and want
of a European population.[124]

The first gridiron plan in the Americas (the style that the
city of Mexico followed) was constructed in 1502 when Ovando
founded and built the town of Santa Domingo. Yet, Santa
Domingo was a small settlement and built along a haphazard
grid plan. The first mainland city, and first city to adhere
to the strict symmetry and 90-degree angles associated with
the gridiron city, was a town called Nata in Panama. Nata was
founded by Pedrarias Davila in 1522 and served as the model
for subsequent New World gridiron cities.

When laying out Nata, Davila followed a 1516 edict from the
king of Spain that dictated how towns should be founded and
physically arranged. Of particular interest in the edict is
point seven, which details how the urban pattern must follow a
model that presupposes order. The point reads:

> Having ascertained what things are necessary
> for the settlements and having chosen the site
> most advantageous and abundantly provided with
> all things necessary to those who will settle
> therein, distribute town lots for the
> construction of houses, in orderly fashion,
> according to the quality of the recipients, so
> that, once constructed, the town will appear
> well ordered as regards to the space designated
> for the central plaza, the location of the
> church, and the placement of the streets;
> because where such orders are given from the
> outset, orderly results will follow without

---

[124] Prescott 578.

under cost and effort, and in other places
order will never be achieved.[125]

The emphasis on order, prominent throughout the edict, was
meant to extend beyond the initial layout as the city grew.
From the beginning, a foundation was laid upon which the
concept of order could permeate as the city grew; "orderly
results will follow". At the same time, the edict suggests
that if order is not established from the beginning, "order
will never be achieved". The concept of order, a concept that
held great currency in Europe at the time, was meant to extend
beyond urban space and into the social sphere.[126] The Spanish
colonizers had placed tremendous emphasis on creating an
ordered society and at the heart of this society was an
ordered urbanism.

However, had the Spanish had been successful in creating
the desired social order through ordered urbanism, there would
have been no movement of independence in the New World. This
does not mean that the Spaniards did not try to extend the
rationality of the gridiron design into the social sphere.

The gridiron city, with its ordered streets and ordered
hierarchy of place, was a stronghold of colonial rule. The
houses closer to the main square were considered more
prestigious. Consequently, the conquistadors marked and
occupied the privileged space in the new empire. The Spanish
cities, whether built over the ruins of the past civilizations

---

[125] Rama 4.
[126] Rama 5.

or where no permanent settlement existed previously, were founded to suit the needs and benefits of the colonial occupiers. In fact, one can trace, through the chronology of the founding of New World cities, the developments and requirements of the Spanish enterprises. The first settlements were founded to foster warfare, colonization, and expansion. After conquering the inhabitants of the land, the colonization project built cities to pacify the conquered peoples through religion and brutality. Mining European agriculture centers soon followed.

A large local indigenous population base ensured abundant slaves and easier religious conversions. Mexico City was such a boon because of the vast population, not only within the city but also in the countryside. Making Mexico City a base of operations and recuperations allowed the Spanish to conduct raiding parties far into the hinterland. Once a significant portion of the native population had been subdued, often through acts of violence or the spread of disease, the Spanish started intensive mining and agricultural ventures. This chronology is also reflected in the development of the ordered cities; gridiron layout, assignment of lots, building of churches, the plaza, the hospital, the governor's house, the jail, the markets, and finally Indian quarters. The chronological development of the ordered cities followed a pattern of necessity but in doing so also engaged in distinct patterns of representations.

The paradoxes with this system of urban development and subsequent representations of urbanism are that specific concepts of representation are not inherent to given cultural belief systems.[127] Nor can it be said that representations are unidirectional because they are open to individual interpretations. Yet, this is precisely what the Spaniards were trying to achieve. The ordered cities were, on the one hand, meant to convey Spanish superiority and, on the other hand, to command all their inhabitants in a rational fashion: "…a planned and repetitive urban landscape and also required that its inhabitants be organized to meet increasingly stringent requirements of colonization, administration, commerce, defense, and religion".[128] However, history has shown us that the Indians did not read such representation in the manner intended by the Spanish. Yet, this method of urban living was copied over and over.

In the Spanish New World Empire there were 225 cities by 1580.[129] By the year 1630 there were 331, a marked decline in the rate at which cities were being founded.[130] The vast majority of these settlements followed the gridiron system and formed a web of not only trade, political, and communication centres across the New World but also a web of representations. The ordered city was one of the few regulations the Spanish leaders strictly adhered to in the New

[127] Greenblatt 4.
[128] Rama 1.
[129] Socolow 3.
[130] Socolow 3.

World. As a result, the ordered city became associated with the Spanish empire.

For instance, the Portuguese settlements (the only significant European competitor in the New World at the time) of the sixteenth century did not follow any particular pattern or design.[131] The Portuguese towns and cities tended to reflect medieval European urbanism with narrow streets, unevenly shaped blocks, and organic layouts. The Spanish centers, on the other hand, by following the strict gridiron pattern, created a specific representation through their urban design. This pattern of urbanism was recognizable hundreds of years later.[132]

The varied geographical landscapes upon which the Spanish built their cities made little difference. The urban ideal of order was physically imposed on the land and any natural variations that disrupted this process were altered. Symbolically, the New World cities overcame any natural obstacles to create the ordered symmetry of the gridiron.

Moreover, the Spanish conquest over nature did not hold the same meanings to the Indians. For example, the 1523 regulation from the Council of the Indies that specified that New World cities had to centre on a main plaza, with the gridiron street pattern emanating from the square, held different meanings for the colonizer and colonized.[133]

---

[131] Socolow 6.
[132] Lockhart 8.
[133] Schlesinger xiv.

While destroying historical urban areas to build the New World cities the Spanish created, through repetition, a sense that the ordered city belonged to the newfound land. This propagation of naturalism served not only to help create the "Indian" by negating cultural differences amongst the Native populations when building the ordered cities, but also demarked the boundaries of the Spanish Empire from those of other European powers. The rebuilding of Mexico City in a European ideal and replacing the historical cultural symbols with symbols from an entirely different culture popularized this process of naturalization.[134] It also placed a greater value on one culture (Spanish) over another (Indian).

One can only speculate whether or not Cortes had a vision of a Spanish empire that encompassed a continent with an intricate web of ordered cities and a clearly segregated, rational society. Perhaps the ordered city grew through some organic mimetic process. What can be said for certain, however, is that around the time of Cortes's conquest of New Spain, ancient Greek writings and philosophies were in prominent circulation in Europe.[135]

Indeed, long before Cortes rebuilt Mexico and even before Columbus "discovered" the New World, Europeans were writing about the importance of ordered urbs on the polis of a city. One of the most notable texts was De Rei Aedificatoria by the Florentine humanist Leon Battista Alberti (1404-1472). Written

---

[134] Greenblatt 137.
[135] Kagan 10.

in 1450, De Rei Aedificatoria claims that the urbs were an

outward manifestation of the civitas:

> ...his treatise, together with those by Filarete
> (1400-1469), Sebastiano Serlio (1475-1554),
> Andrea Palladio (1508-1580 and other architects
> helped to diffuse the idea that a city's
> nobility and grandeur depended a priori on the
> quality of its urbs as reflected in the design
> and magnificence of its buildings, the quality
> of its walls, and the layout of its squares and
> streets.[136]

The European capitals, however, were established during

the medieval era when urban design was haphazard, organic, and

chaotic.[137] The implementation of such ideals was beyond the

any feasible economic plan. However, the New World offered

plenty of space for experimental urban designs and plenty of

slave labour to turn European ideals into reality.

Alberti and his peers formed their principles on urbanism

from the Ancient Greeks. The most influential Greek on the

revived concepts of ideal urbanism was Vitruvius. He was also

revered for his knowledge on physical architecture. Vitruvius

outlines the fundamental principles of architecture as Order,

Arrangement, Eurythmy, Symmetry, Propriety, and Economy.

Order, the first principal of architecture, offers a

measurement of a work when considered separately in relation

to the whole. By this, is Vitruvius suggesting that any given

section of a work of architecture can, through an adjustment

---

[136] Kagan 10.
[137] Socolow 6.

by quantity, affect the whole work. Order is how the arrangement of a section of work corresponds to the symmetrical agreement of the proportions of the whole: "Arrangement includes the putting of things in their proper places and the elegance of effect which is due to adjustments appropriate to the character of the work".[138] The forms of expression articulated by arrangement include ground plans, elevation, and perspective.

Following order and arrangement, Vitruvius argues that Eurythmy is the beauty and fitness in a section of work. He describes Eurythmy as being "found when the members [parts] of a work are of a height suited to their breadth, of a breadth suited to their length, and, in a word, when they all correspond symmetrically".[139] The symmetry of a piece of work is based upon an accordance of a certain part, chosen as a standard, having an appropriate harmony with the different parts and the piece as an entire entity. For example, Vitruvius states that the human body has a kind of symmetry "between forearm, foot, palm, finger, and other small parts; and so it is with perfect buildings".[140]

Propriety, in terms of the perfect architectural formula that Vitruvius is espousing, seeks to create a perfection of style "which comes when a work is authoritatively constructed

---

[138] Vitruvius 13.
[139] Vitruvius 14.
[140] Vitruvius 14.

on approved principles".[141] The approved principles, from which propriety arises can come from prescription, usage, or nature according to the ancient Greek philosopher. Prescription, in this case, stems from usage of the appropriate format when building a work for, or on behalf of, the Gods. For instance, hypaethral edifices should be open to the sky in honour of "Jupiter, Lighting, the Heaven, the Sun, or the Moon: For these are gods whose semblances and manifestations we behold before our very eyes in the sky when it is cloudless and bright".[142] Architecture should reflect the nature of the Gods to whom a temple or alter are being dedicated. That is the prescription of propriety.

Propriety also arises from a correlation between the usage of a building and how it was designed. For instance, buildings with glorious interiors must have an appropriate and corresponding entrance court, anything less and there would be no propriety to the spectacle of the interior.[143]

Finally, propriety depends on the usage of appropriate natural surroundings with the appropriate usage of a building. Using sunlight from certain directions to accommodate one's needs is an excellent example of natural propriety. Vitruvius cites the example of "using an eastern light for bedrooms and libraries, a western light in winter for baths and winter apartments, and a northern light for picture galleries and

---

[141] Vitruvius 14.
[142] Vitruvius 14.
[143] Vitruvius 14.

other places in which a steady light is needed" to explain how
to use nature according to the precepts of appropriate
propriety.

The last fundamental principal of architecture, according
to Vitruvius, is Economy. The appropriate management of
materials in relation to the chosen site forms the Economy of
architecture. This entails the proper balancing of expenses
and common sense when working on a project. The principal
relies on the architect using elements and materials
appropriate for the scale and cost of the work. For example:

> it is not everywhere that there is plenty of
> pitsand, rubble, fir, clear fir, and marble,
> since they are produced in different places and
> to assemble them is difficult and costly. Where
> there is no pitsand, we must use the kinds
> washed up by rivers or by the sea; the lack of
> fir and clear fir may be evaded by using
> cypress, poplar, elm, or pine; and other
> problems we must solve in similar ways".[144]

In other words, use readily available materials.

A second aspect of Economy relies on the usage of
appropriate plans for the intended product. For instance, a
house in town calls for one type of edifice, while a house in
the country requires another. Similarly, a house for a person
of great wealth or of important stature should not look like a
peasants dwelling. Vitruvius writes, "the proper form of
economy must be observed in building houses for each and every
class".[145]   In the colonial New World, the proper form of

---

[144] Vitruvius 16.
[145] Vitruvius 16.

urban economy also demarked social inequalities with the cities. The Spanish sought to regulate activities with the urban space. The gridiron city plan both recognized and codified the distinction between conquerors and conquered.[146]

These ten principles of architecture were instrumental in the designing, layout and building of New World ordered cities, yet these principles were written in regards to the designing and construction of buildings not urban planning. Vitruvius's writings on selecting a city site were not nearly as influential to the Spaniards as his concepts of perfect architecture. It is as if the Spaniards took the elements that comprise ideal building architecture and applied them to laying out their new urban sites. Or, perhaps the Spanish understood what modern architectural theorists describe as an inseparable link between architecture and town planning:

> Architects today are perfectly aware that the future of architecture is inseparably bound up with town planning. A single beautiful house or single fine resident of development accomplishes very little. Everything depends on the unified organization of life. The interrelations between house, town, and country, or residence, labour, and leisure can no longer be left to chance. Conscious planning is demanded.[147]

Vitruvius's concepts of Order, Arrangement, Eurythmy, Symmetry, Propriety, and Economy resonate throughout the gridiron plan of the ordered city. The very theory of the gridiron city, with streets meeting at ninety-degree angles,

---

[146] Lezama 382.
[147] Giedion 25.

means that any given section of the city is in "symmetrical

agreement to the proportions of the whole".[148] With a grid

system predicated upon a central square where the most

important buildings were located, the church and municipal

buildings, a sense of proper place arises. Moreover, the

central square creates an elegance that is "appropriate to the

character of the work".[149]

The Eurythmy of the cities, the beauty and fitness of the

layout, would presumably come from the straightness of the

streets. In fact, the gridiron model of urban development was

so pervasive that it became a matter of conceit. Any

irregularities or "desigualidades" were considered grave

misgivings, and municipal chroniclers throughout the New World

were constantly providing excuses as to why a particular city

strayed from the perfect gridiron.[150] Furthermore, one could

consider the streets and roads of the New World city to be the

"height suited to [the] breadth" or the "breadth suited to

[the] width".[151] If a city is designed to have a perfect

checkerboard pattern, the streets within that city should

strictly adhere to that blueprint. This is the Eurythmy of the

gridiron city.

The symmetry of the ordered city lays in the suitable

proportions of the width and length of a city with number of

squares (Zocalos) and the size of the central plaza. Also, by

---

[148] Vitruvius 13.
[149] Vitruvius 13.
[150] Kagan 33.
[151] Vitruvius 14.

most accounts, when initially founding a new city, the Spaniards laid out the dimensions in rectangles or squares. With straight streets forming the Eurythmy, the Symmetry, the "proper agreement between members of the work itself, and relation between the different parts and the whole general scheme…"[152] is the square or rectangular plot of land that is equal is area to all other plots in the city.

The approved principles that the ordered cities were built from came not only from prescription, usage, and nature but also from Spanish law. As cited early, shortly after Colombus's voyage to the New World, when the first settlements were being laid out, the Spanish crown decreed that all cities should follow the checkerboard pattern. The adherence to this law is, in part, the propriety of the cities. However, usage and nature are also important to the propriety, the "perfection of style which comes when a work is authoritatively constructed on approved principles".[153] The prescription and nature aspects of the propriety of the New World cities fall along the same paths. For the Spanish, a fundamental characteristic of the ordered city was that it was in direct contrast to the jungle, pagan natives, and chaos that reined outside the city limits.

The city, which was a countenance to the Spaniards against the hinterlands, should, in its layout, reflect that which it seeks to portray. In this case, order and superiority are the

---

[152] Vitruvius 14.
[153] Vitruvius 14.

messages that the Spanish want to convey. The gridiron pattern was, according to the Spanish, the most efficient method of urban development to express these desired messages. The physical manifestation of rationality and order, the checkerboard cities, were thought to convey rationality and order beyond the buildings and roads of the city and organize a colonial society. Similarly, the theme of superiority over the jungle and pagans is expressed in the overall symmetry (order) of the city.

Yet, for Vitruvius, nature of Propriety arises from choosing the right location for the appropriate usage of space. He used the example of sacred precincts being built in healthy neighbourhoods with access to spring water. However, the Spaniards, when choosing a site for an urban centre tended to use three guidelines: access to large Indian populations, agricultural lands or mineral deposits.[154] Though the Spanish definition of nature of Propriety differs from the examples Vitruvius provides, most ordered cities were founded because of the proximity to the resources that were needed.

The final aspect of Propriety, usage, is the employment of an appropriate design of one section of work so that there is harmony with the whole. Vitruvius tells us that a grand interior is done a disservice with a low and unbecoming entrance. There would be no Propriety of spectacle in such a case. In terms of the New World city, the centre square would

---

[154] Johnson 239.

have to be an appropriate size surrounded with appropriate buildings for the usage of the grid pattern to have an appropriate Propriety. A tiny Zocalo with a modest church and municipal buildings would be unsuitable for an imperial capital like Mexico City or Lima. The Zocalo should match the size and importance of the city.

The Economy of architecture, the use of suitable and affordable materials for the scale of a work, in the New World, was primarily comprised of access to slaves. As previously noted, a correlation between the decrease in Indian population and the decrease in founding new ordered cities exist.[155] It is also known that by 1543, slaves were being sent to the New World from Spain to help with the construction of public and religious buildings in Peru.[156]

While the virtues of perfect architecture, at least according to Vitruvius, can be interpreted as being aspects of the ordered city, interestingly enough, Vitruvius' work on choosing the site of a city was practically ignored by the Spanish in the New World. Vitruvius argues that the best site and layout for a city is one that promotes health. At the same time, he offers many parables about the dangers or inconveniences of an improper location. Some of the parables Vitruvius offers are valuable; others are solely based on superstition and imagination. For example, his criteria for a beneficial location have as much to do with the direction of

---

[155] Lezama 184.
[156] Johnson 239.

the wind and location of the sun as anything. Vitruvius does recommend a site that is high in elevation, temperate in climate and distant from any marshes or swamps. However, he is much more concerned with early-morning wind patterns and their subsequent ill effects on a person's health.

For example, Vitruvius argues "… when the morning breezes blow toward the town at sunrise, if they bring with them mists from marshes and, mingled with the mist, the poisonous breath of the creatures of the marshes to be wafted into then bodies of the inhabitants, they will make the site unhealthy".[157] Though he is offering a valuable lesson for not building to close to a swamp for sure, the citing of the morning wind, as something to avoid, is somewhat circumspect. Similarly, he warns against a town, if it is on the coast, not to have a southern or western exposure because "these variations in heat and subsequent cooling off are harmful to the people living on such sites".[158] There is something to be said for avoiding a southern or western exposure when building a town in the Mediterranean because of the hot summers but the harmful effects of the contrast in temperature between day and night is simply not credible; humans have lived with these temperature changes for tens of thousands of years.

In the New World, however, the Spaniards took the principles of architecture Vitruvius laid out without much regard for the lessons in selecting the site for a city. Even

---

[157] Vitruvius 17.
[158] Vitruvius 18.

if many of Vitruvius's assertions were erroneous, there are

some nuggets of wisdom within his writings. The Spaniards,

judging by the number of relocations their ordered cities

underwent within the first five years of their founding, were

more concerned with exploitation of resources and projecting

superiority than examining the locale of their cities. If an

ordered city was built over an indigenous settlement, the site

was usually suitable for European needs. However, it was when

the Spaniards founded cities because of their proximity to

natural resources that they ran into trouble. Most often

cities were moved because of a lack of potable water. The

second frequent cause of relocation was intemperate weather.

Vitruvius broaches both of these issues, admittedly through

allegory and parables but the warnings are there nonetheless.

Employing many of the same principles as Vitruvius,

Alberti's work is part reflection and part furthering the

study of architecture and urban planning. Many of the parables

have been dropped in favour of concrete guidelines. For

instance, Alberti describes how to dig wells for water and to

determine soil conditions before finalizing the site of a new

city.[159] Sadly, many of the Spanish conquistadors did not heed

these types of warnings from Alberti and had to relocate their

settlements. Yet, the Spanish cities built in the New World

were influenced by Alberti's writings and his re-introduction

of Vitruvius to European thinkers and architects. Alberti does

---

[159] Alberti 44.

not specifically call for gridiron cities, but he does

establish a correlation between order and urban living.

Alberti argues that:

> ...if we are convinced of what the Philofophers
> [sic] teach, that the Occafion and Reafon of
> Building Cities is that the Inhabitants may
> dwell in them in Peace, and, as far as poffibly
> may be, free from all Inconveniencies and
> Moleftations, then certainly it requires the
> moft deliberate Confideration in what Place or
> Situation, and with what Circuit of Lines it
> out to be fix'd.[160]

These desires of urbanity that Alberti argued for were

incorporated into the ordered city of the New World. However,

this is not to say that the dream of inhabiting an ordered

city was strictly relegated to the New World. By the mid-

sixteenth century, drawers of European cityscapes straightened

the main roads and widened the thoroughfares to give the

impression of the order associated with the New World

cities.[161] The European capitals, at least in images, sought to

portray the principles of New World urban development. What

had been theorized in Europe and implemented in the New World

returned to the Old World in drawings and paintings. Yet, town

planning in Spain remained organic and medieval well into the

later half of the sixteenth century, around the time when the

New World cities began to wane.[162]

The success of the gridiron plan of the ordered city lay

in the physical reflection and manifestation of the society,

---

[160] Alberti 66.
[161] Kagan 14.
[162] Hardoy 224.

which created it. An emblematic association arose between order and urbanity because it was pre-ordained by the Spaniards. Seeking to bring stability to the perceived chaos of the New World, the ordered cities projected meanings the Spaniards wanted to receive.

Conclusion

Communication systems and order, which have been the constant and underlying themes of this study, will be examined in this final section in a binary fashion. As it has been argued, the gridiron city is the physical manifestation of a Spanish concept of urban order. However, before the coming together of order and urban planning in the New World a route had to be found through which the unique design could be accessed. Raw knowledge (or information), before it is categorized and encoded into some form of accessible format, is multi-dimensional - even ephemeral at times. This is why communication is encoded into a format that can be decoded by those who understand the system. Whether through oral or written languages, pictograms or computers, people place knowledge within a communication system to convey meanings to each other. The gridiron city is no exception.

Piggybacking its way through the mountains, jungles, and swamps of the New World in the heads and journals of conquistadors and missionaries, the gridiron city was a complete concept of urbanism in terms of plans, signs, and political structures. This communication system was used and gridiron cities sprung forth across the New World. The fact that a vast majority of Spanish urban centres used the same template - the checkerboard design with a central square - suggests that the communication system used to transmit the concept of the gridiron city was highly developed and that the

information contained within the system was not open to individual interpretation or mutation. Rather, it was encoded in a fashion that could be easily decoded by the conquistadors and without requiring much skill. After all, the Spaniards settled across some ten thousand kilometers of land and each city that the conquerors founded had the same layout.[163] The city traveled in a communication system that included architectural, political, economic, and social structures; structures such as the gridiron design and the encomienda.

The result of the urban-communication package that was carried to the New World by the Spaniards has been thoroughly explored. However, all too often the ordered city communication bundle - the urban plan and social structures - is deconstructed along national boundaries. Mexican scholars, for example, will tend to focus on the impact that colonization has had on the societies that inhabited the area of modern-day Mexico. The same is true for all of Hispanic America. Yet, the gridiron city transcends current national boundaries.

When deconstructing the major elements that comprise the gridiron city in the New World - factors such as Spanish and indigenous civitas - there is a commonality among all the ordered cities, both in their physical design and in their institutions. For instance, the encomienda was a standard practice of dividing the conquered territories throughout all

---

[163] As noted earlier there were two exceptions, Cuzco and Asuncion did not have a gridiron pattern.

the Spanish New World. Similarly, the Spanish legal system took precedent over local traditions, customs, and laws in all conquered lands. Little heed was given to native customs, laws or urban centres. In fact, the gridiron city was built over the ruins of countless native towns and cities. These are some of the commonalities amongst Spanish New World gridiron cities no matter what national boundaries currently encompass them.

Indeed, when examining the ordered city from its beginnings in the New World, it is more valuable to study the commonalities than the differences. Of course, valuable lessons can be learned from differences amongst the ordered cities but to gain a better understanding an overarching approach is needed. The scope of the cities that the Spanish built, which includes some two hundred urban centres (over a period of fifty years across two continents), demands this kind of methodology.

The more prominent facets of the ordered city have been studied here within a bird's-eye context. These facets include an exploitable work force, the largest demographic shift in history, the beginning of a new era of thought, a return to Greek philosophies, an imported city plan from Spain, little indigenous input into the new urban developments, the belief in a mission from God, and the practice of the encomienda. What can be said about all these elements is that every ordered city incorporated them. Some factors were less important to individual cities than others but all these

factors were incorporated, to some extent, into the new urban

centres. Quantifying the amount each element was incorporated

into any individual city serves little purpose here. Instead,

it is what binds these elements together and the common

threads that they share that define the gridiron city.

The importation of the gridiron design from Spain is well

documented. It is also known that King Charles issued a decree

in 1513 stipulating that all New World cities had to be

orderly. Charles did not detail his meaning of order; instead

he used the term over and over as if to convey his desired

meaning.[164] It was as if the repetitive use of the word order

would somehow define its meaning. For instance, exactly what

did King Charles mean by his command to "distribute town lots

for the construction of houses, in an orderly fashion…?"[165] Of

course, any inferences about the King's wishes must be made

within a historical context; images of conquistadors waiting

in a queue for lots of land are not prominent in New World art

or literature. However, by focusing on how the physical

manifestation of order took hold upon the landscape a detailed

analysis of the gridiron city can be compiled.

At the time of the Spanish colonization of the New World,

a concept of order was prominently circulating in the Old

World. In the Spanish New World this general concept of order

manifested itself as gridiron cities. The order of the

gridiron cities had no specific definition. Similarly, the

---

[164] The entire quote can be found on page 65-6.
[165] Rama 4.

concept of "ordered" that was taking hold in Europe could not be summed up in one or two sentences. Instead, there was an episteme of order. Episteme in this case, should be considered as distinctive patterns of cultural productions within an era that produces knowledge. Michel Foucault has taught us "what made the classical episteme possible as whole, of course, was its relationship to a knowledge of order".[166] During the sixteenth century it was this knowledge of order that manifested itself in cultural products in Europe and the New World. However, unlike the Spanish New World where order was primary connected with urbanism, the European knowledge of order tended to be explored through art and science. Leonardo da Vinci is probably the most famous example of how Europeans tended to delve into that aspect of the knowledge of order.

However, as the New World Spaniards explored their knowledge of order through urban development they almost completely ignored their new surroundings. The Spanish conquest, fueled to a frenzy by a desire for gold, destroyed countless cities, villages, cultures, and peoples. The Spaniards sailed to distant lands, claimed the land as theirs, and set about waging war. They risked life and limb in hopes of securing a source of gold. And this was considered a good Christian thing to do if souls were "saved" along the way.

Along with their communication systems and concepts of order, the Spanish brought Christianity and their commitment

---

[166] Rama 5.

to violently convert the indigenous peoples of the New World. There were serious consequences for the natives after the "discovery" of their land by a Spanish fleet. For instance, there was the largest population decline in known history and the destruction of two empires. Gridiron cities were constructed to favour the colonial elite socially, economically, and politically. Also, a European denial of indigenous cultures, societies, and peoples was a reality in the New World. In fact, it has been argued that the history of Latin America, for the past half millennium, has been one of continuous conflict, a conflict between the acceptance of a Mesoamerican heritage and a quest for Europeanization.[167] The gridiron city is a symbol of past attempts at Europeanizing Latin America through the imported concept of "order". Yet, theorists such as Batalla argue that turning the New World into a re-creation of Europe is a denial of an indigenous heritage.

This discord can be traced to the third decade of the sixteenth century, shortly after Hernan Cortes invaded and razed Mexico City.[168] It is important to note that this rupture within indigenous society did not occur immediately after the arrival of the conquistadors at the turn of the fifteenth century, but some three decades later when the conquerors became settlers and colonizers. The legacy of this transition, from warrior to urbanite, is still apparent today.

[167] Batalla xv.
[168] Batalla 70.

The urban sites of power that remained intact after
independence can be attributed to an architectural inheritance
from the Spanish. The Spanish crown not only left behind the
buildings and institutions needed to govern when it could no
longer exert control over the rebellious populous, it also
left the symbolic sites of meanings they had created
throughout their rule. The gridiron city was certainly one of
these sites, and the meanings the Spaniards wanted to
propagate are well known. Moreover, dominant collective
meanings and perspectives are not the domain of any given
person; they are the expression of an era.[169]

The cities that were built and that formed an integral part
of the Spanish Empire are a physical and tangible legacy of
Spanish imperialism in the New World. The three most notable
legacies of the Spanish invasion and colonization of the New
World are Christianity, the Spanish language, and architecture
(city planning). However, only architecture as a Spanish
legacy has left such a distinctly physical mark on the
landscape. Certainly, many churches, statues, and shrines were
built in the name of Christianity but the religion is based on
faith and metaphysics. The physical structures of worship are
only part of that legacy. The gridiron city on the other hand
has been a physical document of imperialism in the New World
for the past five hundred years. In fact, the longevity of the
gridiron city has led many Latin American theorists to call

---

[169] Giedion 31.

into question the continued use of the colonial emblem.

Batalla argues that:

> We must rethink and rebuild our cities, without
> forgetting that they are the creation and the
> bastion of the imaginary [European] Mexico.
> Their problems are not simple deviations,
> anomalies that can be repaired without
> rejecting the project of which they are the
> inevitable result. The city expresses, in its
> own way and with its own cancer, the unresolved
> contradictions of Mexican society and
> history.[170]

The call for a reformation of cities, that is to say how

they are both physically and mentally constituted, arises

because it is a colonial design. Cities cannot be thrown away

like broken pottery, threadbare rugs, or spoiled food. Nor can

a metropolis be abandoned like an out-dated factory town or

remote industrial centre where the single resource for revenue

has been depleted.[171] Indeed, the gridiron ordered city in the

New World has remained more relevant in day-to-day life than

any paper, painting, or oral record produced by the invading

conquistadors. The gridiron cities are a main front in a five-

hundred year old conflict, that, as Batalla argues, is between

two irreconcilable groups; one pursuing the simulacra of the

"west" and the other group maintaining ties to an indigenous

heritage.[172]

To pursue the westernization of Latin America according to

some theorists is to deny the history and heritage of the

peoples before the Spanish conquest. Others, more notably

---

[170] Batalla 156.
[171] Giedion 778.
[172] Batalla 70.

urban theorists, argue that, "cities have always, in every period, been essentially agglomerations of social, political, and economic interests".[173] Yet, one school argues that the gridiron city is a "bastion of the imaginary Mexico"[174] and subjugates the "profound", or pre-Columbian culture. The other line of reasoning argues that the cities are a combination of factors that include both the imagined and profound. Even though it may appear that these two arguments are theoretical equivalents of oil and water, both are apt descriptions of the gridiron city.

The gridiron city is both profound and imagined; it is both lines of reasoning at once, because it is a liminal city. Liminal, in this case, refers to the physical and imagined space between two distinct spheres or realms. It is the threshold between A and B, the centre of the preverbal doorframe, if you will.

The gridiron city is a non-European city, designed by Europeans for Europeans and according to their principles. But it was built and inhabited primarily by Creoles and Indians. It is liminal because it is a physical threshold between the Spanish and indigenous peoples. Two or more distinct realms can be found with the city (for Batalla it is the imaginary and the profound). Yet the gridiron New World city is also the agglomeration of social, political, and economic interests from today as well as from five hundred years ago. From

---

[173] Giedion 818.
[174] Batalla 156.

political systems such as the encomienda, which provided the wealth, labour, and resources needed to build the city, to the distribution of space in a hierarchical and orderly fashion, the gridiron city was and still is a unique architectural experiment of hegemonic symbolism and functionalism.

Built not only to serve as hubs for an overseas empire but also to signify very specific meanings, the gridiron city was both utilitarian and symbolic. Order, rationality, and Spanish superiority were the symbolic meanings the Spaniards wanted to convey through their gridiron cities. Considered to be in diametrical opposition to surrounding jungle, hinterlands, and pagan practises such as sodomy and cannibalism, the gridiron city was a haven from not only the "uncivilized" natives but also from the discord of "nature". In fact, the gridiron city was considered to be an antidote to, and triumph over, nature to the Spaniards. With its checkerboard layout, its intersecting streets and ninety-degree angles, the gridiron city was considered to be the cutting edge of European thought, architecture, and reason.

However, the gridiron city was unlike any urban centre in Europe at the time. The medieval, chaotic, and organic European urban centres were from a bygone era. The gridiron city, on the other hand, was more progressive and more in tune with European ideals of urbanism than the European cities of the time. The Spaniards were able to incorporate experiments

with order and reason into the urban architecture of the New World.

On a practical level, the gridiron city is an urban centre that formed the network for Spanish colonialism in the New World. Provincial, territorial, and local governments were situated within the city. As well, the vast majority of trade and communications in the sixteenth century New World went through the Spanish centres. The Spaniards congregated in urban areas for protection, and natives were ghettoized in cities on the pretext of salvation from their pagan ways.

The forcible relocation of Indians to gridiron cities is one area where the symbolic and practical aspects of the Spanish centre overlapped. It was easier and safer to administer conversions within ordered cities than to roam the countryside looking for pagans to "save". As well, by physically coercing Indians into the gridiron city, it was much more difficult for the newly converted to continue to worship and practice traditional idols and rites. On a symbolic level, the Indians of the New World cities lived in the supposed ordered and civilized space of the Europeans.

A second overlapping of the practical and symbolic elements of the ordered city is the communication systems and practices employed by the Spaniards. Communications, overseas and inter-colony, were constant but also tenuous in the sixteenth-century New World. However, conquistadors who were founding cities in the New World could easily follow the

simple plan of the gridiron city. No variations were needed, nor were conformations needed to lay out the checkerboard pattern. The plan also ensured that concepts of order, rationality, and Spanish superiority were incorporated into the new cities. The design was a practical method of ensuring that desired embedded meanings were encoded into a system that could be decoded. In this case, architectural plans were the medium of encoding. However, initially only the Spaniards could decode messages of order, rationality, and Spanish superiority. The natives of the New World would have to learn the primer to understand these messages. The primer in this instance was completely cultural and arbitrary, as opposed to a numerical primer that is mathematical and categorical. The physical layout of the cities had mathematical tenets but the meanings they conveyed were culturally relevant. It was by virtue of the knowledge and understanding that the city layout was in opposition to the chaos of the surrounding hinterland and Medieval European cities that allowed for the desired meanings to be read. These cultural understandings would have to be taught to the Indians by the Spaniards so they could understand the dominant meanings that the city relayed. The gridiron was laid out to be a beacon of order surrounded by the chaos of nature. This "beacon" would not necessarily have been intuitive to the many peoples of the New World. Similarly, the Indians would not have known that the gridiron

city was in contrast to the European cities in Old World at the time.

Of course, these cultural incongruities would have been bridged over time, as the Indians were educated in how to read the architectural primer. Yet, it is important to understand that architecture is understood and related to through cultural lenses. Moreover, it is even more important to understand that the meanings construed and understood from architecture are dynamic and open to interpretation. When deconstructing an architectural movement or era one must place the symbolic meanings within a static time and place for they will change over time. In other words as urban theorist Sigfried Giedion writes in Time, Space and Architecture: "only by isolating architecture as an organism in itself, and by obtaining in consequence understanding of its nature and growth, have we been able to seek out and fix its relations to other and cognate activities".[175]

This study has isolated the ordered gridiron in the New World from the years 1524 to 1574, which is roughly the beginnings of the Spanish city in Latin America to a point where there was a marked decline in the founding and building of the specific urban centres. Moreover, just as the architectural movement has to be isolated to deconstruct the gridiron city, the facets that came together to create the city must also be regarded within a static environment.

---

[175] Giedion 872.

104

Included in this slice of urban history have been several
of the major influences and factors that came together to form
the ordered gridiron city. These elements, such as
communication systems, order, Spanish bureaucracy, the
encomienda, indigenous peoples' civitas and urbs have also
been placed within a static framework from which the story of
the gridiron city has been built. Of course the perspectives,
attitudes, and cultures that mentally constructed the gridiron
city changed over the fifty-year period that this study
encompasses. Architecture is often dynamic because it is a
participatory medium; it has a utility. However, on a
theoretical level, there was no difference in a city founded
and built in 1524 and one built in 1574. Either New World
cities were gridiron or they were not. If the urban centre
fell under the category of a gridiron city then it
incorporated, at some level, the main building blocks
highlighted in this work.

One of the principal tenets of the gridiron city was the
belief in the power of order. There was also much discussion
on how one had to impose order from the beginning in a city if
the city and residents were ever to be rational. For some
Spaniards and Europeans who were living in chaotic, organic,
and medieval cities, ordered urbanism was seen as a solution
to many social ills. The premise was that an ordered city
would, by extension, produce ordered citizens. Indeed there
were those who believed that if a person did not live in an

ordered environment they could never be rational: "to put it simply, following Greek tradition, Spaniards understood that the polis created polite, or civilized individuals".[176] Following this line of inquiry, the Spanish believed that the more rational the physical structures of the polis, the more civilized the individual. However, this supposition proved to be incorrect. If the gridiron cities had been able to fashioned ordered inhabitants, presumably Latin America would still be a colony of Spain. Similarly, just as the presumption of the power of order was overstated and ultimately failed, the communication systems created to serve the overseas empire also broke and disconnected.

By the mid-sixteenth century, the Spaniards had successfully invaded most of Latin America and conquered the two largest empires in the New World. The frenzied pace of conquest abated, as did the prolific founding of new gridiron city. The marked decline in the founding and building of Spanish cities meant the signs and plans of ordered urbanism that the conquistadors mentally carried with them, as Rama has argued, were no longer needed. The knowledge of ordered urbanism that sprang forth from the conquistadors was in prominent circulation and carried in the minds, charts, and plans of the invaders because it was being utilized. Jean-Francois Lyotard, in his text The Postmodern Condition: A Report on Knowledge, argues that knowledge in an oral society

---

[176] Kagan 21.

is considered important and canonized because it is spoken.[177] The conquistadors carried the concept of the gridiron city because that knowledge had a utility. So while the knowledge of the gridiron was not lost when the need for it subsided – unlike in an oral society where knowledge is known because it is needed – the communication system through which the information travelled ceased to exist once the warriors became settlers. The transformation from warrior to settler marks not only the end of the conquest era of the New World but also the medium through which the message of the ordered city travelled.

The knowledge needed to build the gridiron city was not in the same demand. The communication system of carrying the signs and plans was dependent upon the conquistadors pushing further and further into the New World. After the initial conquest, the conquistadors were only venturing on campaigns occasionally, and the primary conduit through which the concept of the gridiron had travelled tapered off with direct correlation to the decrease in war-faring.

A second communication system associated with the New World – one that was ultimately severed – was the transatlantic mail routes. By 1650 "… Spain was in decline, and the orderly system of ships sailing in convey connecting

---

[177] Lyotard, Jean-Francois. The Postmodern Condition, Trans. Bennington, Geoff and Massumi, Brian (Minneapolis: Minnesota Press, 1979) 23.

Spanish America to the Metropolis had broken down".[178] Some

seventy-five years after the gridiron city network was

consolidated in the New World, (roughly 1574), and dedicated

communication lines were developed and heavily used, the

system collapsed. Spain was militarily over-extended, had

rampant inflation, and a crushing debt.[179] Pirate attacks

became bolder and more common as Spain could neither replace

their ships lost at sea nor maintain their once-great armada.

Unable to provide adequate security on the high seas only

compounded Spain's woes.[180] Valuable resources from the New

World were lost to the sea or pirates and the much-needed

money never reached the crown's coffers. Along with the lost

gold and silver were the letters and communiqués that were

destined to one side of the Atlantic or the other.

Ultimately, the ordered gridiron city was not the desired

site of rationality that the Spaniards had hoped for. Nor were

the communication systems created to build and maintain the

network of cities particularly enduring. However the city

itself, in a purely functional utility, has continues to be

used to this day.

---

[178] Knight, Frankin and Liss, Peggy. "Introduction", Atlantic Port Cities: Economy, Culture, and Society in the Atlantic World, 1650-1850. Ed. Knight and Liss (Knoxville: University of Tennessee Press, 1991) 3.
[179] Schlesinger 2-3.
[180] Schlesinger 34.

Figures

Medoza (ministerio de Educacion y cultura. Archivo General de
Indias)

Bibliography

Aguirre: The Wrath of God dir. Herzog, Werner. Anchor Bay:
    1972.

Alberti, Leone Battista. Ten Books on Architecture. Trans.
    James Leoni. Alec Tiranti Ltd. UK: 1955.

Archer, Christon. "Military", Cities & Society in Colonial
    Latin America. University of New Mexico Press, Albuquerque:
    1986.

Batalla, Guillermo Bonfil. Mexico Profundo: Reclaiming a
    Civilization. Trans: Dennis, Philip. University of Texas
    Press, Austin: 1996.

Burkholder, Mark. "Bureaucrats", Cities & Society in Colonial
    Latin America. University of New Mexico Press, Albuquerque:
    1986.

Burkholder, Mark & Lyman Johnson. Colonial Latin America.
    Oxford University Press, New York NY: 1998.

Chamberlin, Ted. "Babblers" If This is Your Land, Where Are
    Your Stories? Knopf, Toronto: 2003.

Chomsky, Noam. Year 501: The Conquest Continues. Black Rose
    Books, Montreal & New York: 1999.

Clendinnen, Inga. Ambivalent Conquests: Maya and Spaniard in
    the Yucatan 1517-1570. Cambridge University Press, Great
    Britain: 1994.

Clendinnen, Inga. Aztecs. Cambridge University Press, Great
    Britain: 1991.

Columbus, Ferdinand. The Quest of Columbus: An Exact Account
    of the Discovery of America. Ed. Meredith & Smith. Little,
    Brown and Company, Boston & Toronto: 1966.

Diamond, Jared. Guns, Germs, and Steel: The Fates of Human
    Societies. W.W. Norton & Company, New York & London: 1999.

Diaz, Bernal. The Conquest of New Spain. Trans. Cohen, J.M.
    Penguin Books, England: 1987.

Elbow, Gary S. "Costa Rica", <u>Latin American Urbanization:</u>
<u>Historical Profiles of Major cities</u>. Ed. Gerald Michael
Greenfield. Greenwood Press, Westport Connecticut & London:
1994.

Elbow, Gary S. "El Salvador", <u>Latin American Urbanization:</u>
<u>Historical Profiles of Major cities</u>. Ed. Gerald Michael
Greenfield. Greenwood Press, Westport Connecticut & London:
1994.

Elbow, Gary S. "Guatemala", <u>Latin American Urbanization:</u>
<u>Historical Profiles of Major cities</u>. Ed. Gerald Michael
Greenfield. Greenwood Press, Westport Connecticut & London:
1994.

Elliot, J.H. <u>Imperial Spain 1469-1716</u>. Penguin Books, England:
1990.

Fanon, Frantz. <u>The Wretched of the Earth</u>. Trans. Farrington,
Constance. Grove Press, New York: 1963.

Fernandez, Maria Augusta. "Ecuador", <u>Latin American</u>
<u>Urbanization: Historical Profiles of Major cities</u>. Ed.
Gerald Michael. Trans. Michael Jones Ferreira. Greenfield.
Greenwood Press, Westport Connecticut & London: 1994.

Frank, Andre Gunder. <u>ReORIENT: Globe Economy in the Asian Age</u>.
University of California Press, Berkeley: 1998.

Gasparini, Graziano. "The Colonial City as a Center for the
Spread of Architectural and Pictorial Schools",
<u>Urbanization in the Americas from its Beginnings to the</u>
<u>present</u>. Mouton Publishers, Paris and The Hague: 1978.

Ganster, Paul. "Churchmen", <u>Cities & Society in Colonial Latin</u>
<u>America</u>. University of New Mexico Press, Albuquerque: 1986.

Gibson, Charles. <u>The Aztecs Under Spanish Rule</u>. Stanford
University Press, Stanford California: 1964.

Giedion, Sigfried. <u>Space, Time and Architecture</u>. Harvard
University Press, Cambridge: 1954

Greenblatt, Stephen. <u>Marvelous Possessions: The Wonder of the</u>
<u>New World</u>. University of Chicago Press, USA: 1992.

Greenfield, Gerald Michael "Bolivia", <u>Latin American</u>
<u>Urbanization: Historical Profiles of Major cities</u>. Ed.
Gerald Michael Greenfield. Greenwood Press, Westport
Connecticut & London: 1994.

Greenfield, Gerald Michael "Brazil", <u>Latin American</u>
<u>Urbanization: Historical Profiles of Major cities</u>. Ed.
Gerald Michael Greenfield. Greenwood Press, Westport
Connecticut & London: 1994.

Greenfield, Gerald Michael. "Colombia", <u>Latin American</u>
<u>Urbanization: Historical Profiles of Major cities</u>. Ed.
Gerald Michael Greenfield. Greenwood Press, Westport
Connecticut & London: 1994.

Greenfield, Gerald Michael. "Venezuela", <u>Latin American</u>
<u>Urbanization: Historical Profiles of Major cities</u>. Ed.
Gerald Michael Greenfield. Greenwood Press, Westport
Connecticut & London: 1994.

Hardoy, Jorge. "The Scale and Function of Spanish American
Cities Around 1600", <u>Urbanization in the Americas from its</u>
<u>Beginnings to the present</u>. Mouton Publishers, Paris and The
Hague: 1978.

Hardoy, Jorge. "European Urban Forms in the Fifteenth to
Seventeenth Centuries and Their Utilization in Latin
America", <u>Urbanization in the Americas from its Beginnings</u>
<u>to the present.</u> Mouton Publishers, Paris and The Hague:
1978.

Haring, C.H. <u>The Spanish Empire in America</u>. Harcourt, Brace &
World, New York: 1963.

Haslip-Viera. "The Underclass", <u>Cities & Society in Colonial</u>
<u>Latin America</u>. University of New Mexico Press, Albuquerque:
1986.

Hoberman, Louisa. "Conclusion", <u>Cities & Society in Colonial</u>
<u>Latin America</u>. University of New Mexico Press, Albuquerque:
1986.

Hollier, Denis. <u>Against Architecture: The Writings of Georges</u>
<u>Bataille</u>. Trans. Besty Wing. MIT Press, Cambridge: 1992.

Johnson, Lyman. "Artisans", <u>Cities & Society in Colonial Latin</u>
<u>America</u>. University of New Mexico Press, Albuquerque: 1986.

Kagan, Richard L. <u>Urban Images of the Hispanic World 1493-</u>
<u>1793</u>. Yale University Press, New Haven & London: 2000.

Karasch, Mary. "Supplier, Sellers, Servants, and Slaves",
<u>Cities & Society in Colonial Latin America</u>. University of
New Mexico Press, Albuquerque: 1986.

Kent, Robert B. "Peru", <u>Latin American Urbanization:</u>
<u>Historical Profiles of Major cities</u>. Ed. Gerald Michael

Greenfield. Greenwood Press, Westport Connecticut & London: 1994.

Knight, Alan. Mexico: From the Beginning to The Spanish Conquest. Cambridge University Press, UK: 2002.

Knight, Alan. Mexico: The Colonial Era. Cambridge University Press, UK: 2002.

Kubler, George. "Open-Grid Town Plans in Europe and America", Urbanization in the Americas from its Beginnings to the present. Mouton Publishers, Paris and The Hague: 1978.

de Las Casas, Bartolomé. The Devastation of the Indies: A Brief Account. Trans Herma Briffault. John Hopkins University Press, Baltimore and London: 1994.

Lavrin, Asuncion. " Female Religious", Cities & Society in Colonial Latin America. University of New Mexico Press, Albuquerque: 1986.

Leis, Raul. "Panama", Latin American Urbanization: Historical Profiles of Major cities. Ed. Gerald Michael Greenfield. Tans. Gerald Michael Greenfield. Greenwood Press, Westport Connecticut & London: 1994.

Lezama, José Luis. "Mexico", Latin American Urbanization: Historical Profiles of Major cities. Ed. Gerald Michael Greenfield. Greenwood Press, Westport Connecticut & London: 1994.

Lyotard, Jean-Francois. The Post Modern Condition. Trans. Bennington, Geoff and Massumi, Brian. University of Minnesota Press, Minneapolis: 1979.

Lockhart, James. Spanish Peru: 1532-1560. University of Wisconsin Press, Madison, Wisconsin: 1998.

Lugar, Catherine. "Merchants", Cities & Society in Colonial Latin America. University of New Mexico Press, Albuquerque: 1986.

Markman, S.D. "The Gridiron Town Plan and the Caste System in Colonial Central America", Urbanization in the Americas from its Beginnings to the present. Mouton Publishers, Paris and The Hague: 1978.

Mauro, Frederic. "Urban Preeminence and the Urban System in Colonial America", Urbanization in the Americas from its Beginnings to the present. Mouton Publishers, Paris and The Hague: 1978.

McEwen, Indra Kagis. Socrates' Ancestor: An Essay on
    Architectural Beginnings. MIT Press, Cambridge: 1994.

Prescott, W. H. History of the Conquest of Mexico. Phoenix
    Press, London: 2002.

Price, Jacob. "Summation: The American Panorama of Atlantic
    Port Cities", Atlantic Port Cities: Economy, Culture, and
    Society in the Atlantic World, 1650-1850. Edited by Knight
    & Liss. University of Tennessee Press, Knoxville: 1991.

Rama, Angel. The Lettered City. Duke University Press, Durham
    & London: 1996.

Ramirez, Susan. "Large Landowners", Cities & Society in
    Colonial Latin America. University of New Mexico Press,
    Albuquerque: 1986.

Ricard, Robert. The Spiritual Conquest of New Spain. Trans.
    Lesley Byrd. University of California Press, Berkeley:
    1966.

Sargent, Charles S. "Argentina", Latin American Urbanization:
    Historical Profiles of Major cities. Ed. Gerald Michael
    Greenfield. Greenwood Press, Westport Connecticut & London:
    1994.

Sargent, Charles S. "Paraguay", Latin American Urbanization: "
    Historical Profiles of Major cities. Ed. Gerald Michael
    Greenfield. Greenwood Press, Westport Connecticut & London:
    1994.

Sargent, Charles S. "Uruguay", Latin American Urbanization: "
    Historical Profiles of Major cities. Ed. Gerald Michael
    Greenfield. Greenwood Press, Westport Connecticut & London:
    1994.

Scarpaci, Joseph L. "Chile", Latin American Urbanization:
    Historical Profiles of Major cities. Ed. Gerald Michael
    Greenfield. Greenwood Press, Westport Connecticut & London:
    1994.

Schlesinger, Roger. In the Wake of Columbus: The Impact of the
    New World on Europe, 1492-1650. Harlan Davidson, Inc.
    Wheeling Illinois: 1996.

Seed, Patricia. Ceremonies of Possession in Europe's Conquest
    of the New World 1492-1640. Cambridge University Press,
    United Kingdom: 1998.

Socolow, Susan. "Introduction", <u>Cities & Society in Colonial</u>
<u>Latin America</u>. University of New Mexico Press, Albuquerque:
1986.

de Solano, Francisco. "An Introduction to the Study of
Provisioning in the Colonial city", <u>Urbanization in the</u>
<u>Americas from its Beginnings to the present</u>. Mouton
Publishers, Paris and The Hague: 1978.

Soustelle, Jacques. <u>Daily Life of the Aztecs: On the Eve of</u>
<u>the Spanish Conquest</u>. Trans. O'Brian, Patrick. Stanford
University Press, Stanford, California: 1970.

Stern, Steve J. <u>Peru's Indian Peoples and the Challenge of</u>
<u>Spanish Conquest: Huamanga to 1640</u>. Univeristy of Wisconsin
Press, Madison, Wisconsin: 1987.

Vitruvius. <u>The Ten Books on Architecture</u>. Trans: Morris Hicky
Morgan. Harvard University Press, Cambridge: 1914.

de Zorita, Alonso. <u>Life and Labour in Ancient Mexico: The</u>
<u>Brief and Summary Relation of the Lords of New Spain</u>.
Trans. Keen, Benjamin. University of Oklahoma Press, Norman
and London: 1994.