

The Iberian Pig in Spain and the Americas
at the time of Columbus

by

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B.A. (Pomona College) 2000

A thesis submitted in partial satisfaction of the
requirements for the degree of

Master of Arts
in

Latin American Studies

in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA, BERKELEY

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Spring 2005

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Dedications

I would like to thank all those who have helped in this effort, especially my thesis advisor, William B. Taylor, who was an invaluable source, not only of information but inspiration.

In addition to him, thanks go to the rest of my thesis committee, Stanley Brandes and Thomas Dandeleit; without their efforts this work would not have attained whatever qualities it does possess. Further thanks go to Louis Segal for pushing me along at that critical first juncture when I did not know if studying pigs would be a funny anecdote or a serious scholarly effort. I will let him decide his own opinion, but I do hope he finds it the latter. Also my gratitude to David E. Vassberg, whose correspondence and shared goals have been very helpful in my research. And of course all those forbearing friends and family members who have, by and large unwillingly, learned more than their fair share about pigs in the past two years.

To all of you, I say thank you.

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Introduction

Looking back at the year 1492, and with all due respect to Christopher Columbus, we might well consider it the year of the Iberian pig. Precisely at this time the conflicts between the Jews, Moslems, and Christians of Spain find an important manifestation in the question of swine. The two pig-abstaining cultures of Iberia suffered terrible defeats: the Jews were expelled, and the Moslem kingdoms were permanently overthrown. In that same year Columbus inadvertently discovered the New World, a world, we should note, that comprised two continents that had never even seen the pig, or any other European livestock for that matter. On his second voyage, Columbus brought along pigs from the Canary Islands to the Antilles, beginning the famous conquest of the Americas, both Spanish and porcine.¹

The entrance of Iberian pigs and other European livestock after the Encounter began possibly the greatest food exchange in the history of the world. Plants and animals (including disease microbes) isolated on opposite sides of the ocean for tens of thousands of years were in short order transferred from one continent to the other. Alfred W. Crosby has written that: “If the Europeans had arrived in the New World and Australasia with twentieth-century technology in hand, but no animals, they would not have made as great a change as they did by arriving with horses, cattle, pigs, goats, sheep, asses, chickens, cats, and so forth.”² Animals, more than technology, transformed the Americas.

One of the most voracious and important species to enter the New World was undoubtedly the Iberian pig, which entered a continent that for the most part had lacked large domesticated animals.³ But why did this pig travel to the Americas so soon, on just the second ship leaving Spain? It is the goal of this study to examine that question by looking at

the antecedents of the pig culture in fifteenth-century Spain, and further explore the resulting introduction of the Iberian pig into the unprepared American continents.

By any account, the Iberian pig is not a famous animal in the Americas. No battle was one or lost because of the presence of a peculiarly brave or agile porker. No babies were rescued from blazing buildings by valiant hogs. In fact, pigs shrewdly avoid trouble as best they can. Yet it is clear that the pig has been present in some way (often, it is true, in the form of dried salt pork) through each major exploration of the New World by Spanish conquistadors. At times these hogs even outpaced the Europeans in discovering new territory. It may be difficult for modern readers to imagine that the fat, slow, industrialized pig we are familiar with today could achieve this. However, it should be understood that the Iberian pig introduced by the Spanish was quite a different breed: sturdy, swift, self-sufficient, and smart, with hair and tusks more like a boar than a twenty-first-century commercial hog.⁴ And though these animals have left us no recorded heroes, the earliest pioneering pigs have a legacy that lives on to the present day.

Surprisingly, the Iberian pig is not the subject of any book about the Americas. This is a rather different attitude than we might find in the pig's homeland of Spain. There, on the contrary, many books have been written about hogs, and there are countless popular sayings involving *cerdo*, *puerco*, *cochino*, *lechón*, *jabalí*, and the many unique synonyms for pig present in local vernaculars. Only a few scholars, and just a handful of articles, have written about the pig in America.⁵ And while the arrival of horses, cattle, and even dogs to the New World are treated with great importance, the pig has been considered a secondary theme, sometimes— but certainly not always— appended or footnoted to works concerning these other, seemingly more important animals.

In its apparent insignificance, however, lies the pig's historical strength. Herded behind the Spaniards nearly everywhere they ventured, the study of the Iberian pig uniquely situates itself as a manner in which to witness the evolution of the European encounter with the New World. It will be the argument of this paper that the pig played a vital role in the conquest and colonization of the Americas. And what is more, these ubiquitous hogs were conquistadors themselves, both destructive and beneficial to the lands and peoples they encountered. Yet perhaps the droves of hogs were so ordinary, so ever present, that they have been passed over through history simply because their presence was too obvious to need much mention. This paper hopes to rectify this view, considering the diverse and essential purposes hogs fulfilled in the first century after Columbus, as well as attempting to explain why the pig's role has been disregarded by chroniclers, and subsequently by many modern historians.

Our journey into the pig's role in the Americas will begin just as their journey did, with the second voyage of Christopher Columbus who, according to Fray Bartolomé de las Casas, escorted the first eight pigs to the New World.⁶ We will consider first-hand accounts of the conquest and expeditions into the Americas, as well as chronicles and histories written in the first century after the fact. Both will offer glimpses into the pig's story. Much of this tale, we must realize, is left out of our records. For this reason, the primary source materials presented here are broad in both time and space: they cover the greater part of the sixteenth century, and extend from the islands of the Antilles to mainland Mexico, Central America, and into Peru. While particular conditions varied, the juxtaposition of such sources is meant only to illustrate patterns of the Spanish conquest, and some indulgence is required of the reader on this point.

As one might expect, the principal reason for raising hogs was nutritional. Even more valuable than its hams, however, was the pig's fat. It could be used as cooking oil, but also in the production of soap, candles, and even helped in fighting disease. Pork and its derivatives in large part helped feed the newly arriving colonizers, as well as the many Indians fallen under Spanish control.

The group most indebted to the pig, however, was undoubtedly the Spanish explorers of the sixteenth century.⁷ Hernán Cortés, conqueror of the Aztec empire, relied almost entirely on supplies of pigs when he set out from Cuba in 1519. In a similar fashion Francisco Pizarro would follow suit in his conquest of the Incan empire, and a few years later his brother Gonzalo Pizarro capitalized on the fecundity of pigs to outfit an even larger assemblage in search of cinnamon in the Amazon. But the best documented example of pigs in exploration comes from Hernando de Soto, who explored what is today the southeastern United States, and is still considered the father of the American pork industry.⁸

Before venturing further, however, it will be helpful to put into context the importance of the pig in Spanish life at the dawn of Columbus' encounter with the New World. Pig has a history in Spain that predates antiquity. Whether feasting on wild boar, domesticating and breeding select species, or preserving their meat as *jamón*, the connection has always been strong. But it is in the fifteenth century, during the time of the Catholic Majesties Ferdinand and Isabella, that the pig's importance is most tellingly revealed.

Chapter I: Pigs in the Old World

A Pig for all Ages

In Spain there is a popular saying that goes, “El tocino la olla; el hombre la plaza; y la mujer la casa.”¹ The refrain is meant to indicate that everything has its place or mission in life. Though today we might argue if the woman’s place is in the home or if the man should be idling in the plaza, very few would argue that pork belongs anywhere but in the cooking pot. The place of food seems obvious to us. Yet whether or not to eat the pig is a question that people have debated since Egyptian times. If one were to travel to Spain today— one of the top three consumers of pork worldwide— the debate would appear to be long over. The pork eaters are victorious on that peninsula.

The Spanish connection with the pig as a food has its roots far back in Iberian history, and it is not surprising that the conquistadors of the sixteenth century were so predisposed to the animal. Hogs were probably domesticated in multiple places and times, but ancient man in the Iberian peninsula surely feasted on wild boar well before that. More than just sustenance, the pig was, together with the bull and the lamb, an animal of pagan sacrifice. Numerous Celtic-Iberian statues called “verracos” in the shape of swine have been uncovered, including the famous one at San Martín de Valdeiglesias (Madrid). One scholar has called them “el mayor monumento que la humanidad ha hecho nunca al cerdo.”² Images of pigs have been found on the backs of ancient coins.³ This continued through the time of the Romans who also practiced the triple sacrifice of the pig, bull, and lamb (*suovetaurilia*), and even put *jamón*, Spanish ham, on the backs of some coins during the reign of Augustus.⁴

Hog raising in Iberia flourished under the empire. Pomeipolis (modern day Pamplona) had an economy structured around exporting *jamones* to Rome. In the city of Conesa in northern Spain a fossilized ham over two thousand years old has been found.⁵ The Romans had conquered a land already renowned for its *jamón ibérico*. Strabo tells us in his *Geography* that in Roman Hispania, “among these people excellent hams are cured, rivaling those of Cantabria.”⁶ In Rome, too, both common people and the aristocrats appreciated the succulent food. Pork was a common feasting food for celebrating the birth of a child.⁷ Raving about the pig, Pliny tells us in his *Natural History*: “they have almost fifty flavors, whereas all other meats have one each.”⁸ Another Roman, Lucio Columela, who wrote *Doce libros de agricultura* around the time of Jesus, describes in depth the occupations of *porqueros*, the hog raisers of Hispania. “Este porquero ha de ser vigilante, diligente, laborioso y cuidadoso,” he tells us. “Todas las situaciones del campo acomodan seguramente á este ganado: pues paze convenientemente en las montañas y en las llanuras; sin embargo, lo hace mejor en las tierras pantanosas que en las secas.”⁹ These qualities, both of the pig and the pig herder, would be vitally important on expeditions in the New World.

The Visigoths, who retained control of Hispania when influence from Rome waned, maintained and then expanded the porcine culture of the peninsula. They embraced the gastronomy of *jamón* and *embutidos*, meanwhile enacting laws in their codebook *Liber Iudiciorum* to protect the raising of pigs and the oak forests upon which they depended. The wild boar, or *jabalí*, was a favorite in the high court of Visigoth rulers, but domesticated pig was the principal meat for all classes of society in Spain during this period. The Visigoths had particular respect for the swineherd which they called *pastors*;

because they lived apart from the community and in constant contact with nature, they attributed to them magical powers. *Pastors* were even considered of a social class more noble than those who tilled the land.¹⁰

The Pig in Christian Spain

In the year 589 C.E. the Visigoth king Recared accepted Catholicism as the land's official religion. Since then the Spanish clergy has always had a connection with the pig, and some monasteries like the order of San Fructuoso had famously large herds.¹¹ Unlike the Sephardic Jews, or the Moslems who arrived in 711, raising pigs was something the Christian clergy saw as a clean enterprise, supported by their faith. Even under the influence of the Moors, who dominated Spain for nearly eight centuries, pig raising continued to flourish in the Christian communities of the peninsula.

During the Moslem occupation, the monasteries kept alive the ancient hog culture of Spain. In part the tradition of raising pigs stemmed from the need of such institutions to supply themselves independently with food. Monasteries typically held land, stables, agricultural plots, and a certain number of pigs. This habit would be carried over into the New World, where religious orders set up missions to convert the Indians, and taught them to raise pigs as well. Although monks might endure periods of fasting, in times when meat was allowed it did often come in the form of smoked or cured pork. Many clergymen came from the noble classes and were used to a good meal; they also felt it their duty to provide for passing travelers. They had such an interest in both the culinary and medicinal uses of the pig that throughout the Middle Ages they managed single-handedly to maintain the gastronomy of ancient Spain that might otherwise have been lost under Moslem rule.¹²

Perhaps because of this relationship it is not surprising that a number of Catholic figures have a connection to hogs. In fact, according to Antonio Freijeiro, Christian Europe has no less than sixty-one saints associated in some way with the pig. As Freijeiro reasons, “Es como si Europa quisiese desagaviar a este animal por el desprecio y los malos tratos que recibe en otras partes del mundo.”¹³ But there are two notable Christian saints, San Antón and San Martín, with a special relation to the pig in Spain worth exploring here.

San Antonio Abad (Saint Anthony the Abbot)¹⁴ is perhaps most identified with the pig. More popularly known simply as San Antón, he is so associated with swine that we have the following couplet to remember the fact:

Hubo seis cosas en la boda de Antón:
cerdo, cochino, guarro y lechón.¹⁵

As all four animals listed are Castilian synonyms for “pig,” we can deduce from this caricature that San Antón was accompanied only by his bride and faithful hogs.

(Incidentally, the saint was never married and is actually most famous as the father of Christian monasticism.) The festival of San Antón varies by time period and location. In Madrid the custom lasted until the eighteenth century, and usually consisted of a ceremonial pig crowned “king” and a young boy chosen at random to play the part of San Antón. As the following description shows, it was a rather boisterous event:

Al llegar a la ermita de San Antón, se subía a un tablado al «cerdo-rey» y al joven porquero, al que se le quitaban los vestidos que le caracterizaban como representación del santo, y vistiéndole con una estera pintarrajeada como manto y coronándole con la corona de ajos y guindillas que hasta entonces había llevado el gorrino, se le montaba sobre éste y era proclamado «rey de los cochinos» en medio de la algazara general...Volvían después todos a las proximidades de la ermita de San Blas, donde celebraban una gran comilona, tras la cual había baile al derredor de enormes hogueras, baile que duraba, a pesar del frío de la estación, hasta entrada la noche.¹⁶

Apparently the whole affair led to too much lawlessness and abuse of the one

unlucky enough to be chosen the “rey de los cochinos”— unhappily, he maintained his title for the entire year. The crowning of the “king” was subsequently banned in Madrid in the year 1697, but the festival persisted in modified forms.

The holiday is still practiced to some extent in small Spanish villages where pigs are prevalent like in Castile and Extremadura, as well as Galicia to the north, and in the sixteenth century was typical of the regions from which the conquistadors came. While fundamental elements of the custom have changed, the principal matter still revolves around the pig: Some devotee of the saint donates a piglet that is allowed to run about the village in search of food. A bell is tied around the pig’s throat to announce his presence, and as he approaches the doorsteps around town, he is sure to be graciously fed. On the day of the *fiesta* the now fattened porker is sold at auction or given away in a raffle that will pay for the festival’s expenses. Hams and other pig-derived delicacies are the traditional foods on this day.¹⁷

Another Christian saint, San Martín (Saint Martin of Tours), is perhaps more familiar to modern Spaniards. His saint’s day is the 11th of November, and in Spain the date signals the beginning of the *matanza*— the ritual slaughter of pigs.¹⁸ From this correlation we can somberly understand the meaning of the popular Spanish saying, *A cada cerdo le llega su San Martín*. The ceremony of the *matanza* deserves more elaboration here. By late August or September began the *porculatio*, the final fattening of the pig before its slaughter; in November, the month of San Martín, the slaughter commenced. Typically this practice involved the local butcher or meat vendor, but on certain occasions a number of *campesino* families might carry out their own *matanza*. Afterwards, together they could salt and prepare the meat into *salazones*, *jamones*, *embutidos*, and the like for

use during the year. The pig was a food imbued with community and ritual in Spain. Inevitably the best parts of the animal would end up in the stomachs of the nobles, while the peasants would maintain the *restos*: hogs' feet, organs, and lesser cuts of meat. It was an animal that fed all classes.¹⁹

Today, the *matanza* is considered a rather cruel and archaic custom by many modern Europeans, especially those residing outside of Spain. Ironically, however, it was a Spanish group, La Asociacion Nacional para la Proteccion y Bienestar de los Animales (ANPBA) that denounced the practice to the European Commission in September of 2002, prompting a full investigation.²⁰ The ritual slaughter of pig was found to conflict with Article 3 of the EU Council directive on the protection of animals at the time of slaughter:

Animals shall be spared any avoidable excitement, pain or suffering during movement, lairaging, restraint, stunning, slaughter or killing.²¹

Since that time, public *matanzas* have by and large adhered to the Commission's strict guidelines.²² However, another provision of the same directive extends these requirements to hogs slaughtered for personal use, as a Spaniard might wish to do on his own property during Christmas or San Martín. Under EU regulations, such a practice is only acceptable "provided that Article 3 is complied with and that pigs, sheep and goats have been stunned in advance."²³ It is difficult to assess how many people are adhering to the guidelines in the privacy of their own homes.

Traditionally, then, the *matanza* was most often carried out on religious holidays like Christmas, in anticipation of Lent, and of course on the day of San Martín. It has been part of the dietary customs in the Iberian peninsula since antiquity, and until recently was as much practical and necessary as it was symbolic and ceremonial. Gázquez Ortiz explains:

La *matanza*, sacrificio ceremonial del cerdo, comenzó como costumbre ligada al ciclo biológico del animal y a las necesidades alimenticias del hombre, pero pronto

adquirió connotaciones de ritual cárnico....²⁴

At different times the *matanza* carried different symbolism, but as the fifteenth century drew to a close, more and more its practice took on an ominously Catholic connotation.

Háblame en cristiano: Christians, Jews, Moslems, and pigs

Toward the time of Columbus, the *matanza* was thoroughly embraced by Christians. In fact it became symbolic of piety itself, serving to differentiate Old Christian Spaniards who ate pig from Jews and Moslems who did not. As Jaume Fàbrega describes:

En la península Ibérica, Sicilia— y más tarde en el este de Europa—, etc., la confrontación con judíos y musulmanes convierte la fiesta de la *matanza* en una exhibición de “fe” cristiana. Este hecho a menudo se menciona en los terribles documentos de la Inquisición, y tanto en castellano como en catalán, algunas palabras populares (*marranos...xuetes...*) son testimonio de este conflicto judeo-islámico-cristiano que simboliza el cerdo. Por otra parte, los cristianos santificaron al cerdo consagrándole un santo, San Antonio, llamado “del cerdito.”²⁵

The change was especially noticeable after the forced conversions of these pig-abstaining groups. In communities having had a long and stable Christian presence, the slaughter would ordinarily be committed out of view in the corral or inner courtyard of the house. However, in communities recently conquered from the Moors or with high populations of *conversos* or *moriscos* (converted Jews and Moslems, respectively), the killing was done at the front door, in plain view of the street. Such public displays showed at once the pure Christian blood of the citizen, and simultaneously supported the Christian establishment now dominating the politics of Spanish villages.²⁶

Although by this time Christians, Jews, and Moslems had cohabited the Iberian peninsula for over eight centuries, their dietary preferences had remained an issue of friction. As Spanish historian Henry Kamen suggests:

[I]n the everyday contact with Old Christians there was periodic irritation and conflict over dress, speech, customs and, above all, food. Moriscos slaughtered their animal meat ritually, did not touch pork (the meat most commonly eaten in Spain) or wine, and cooked only with olive oil whereas Christians cooked with butter or lard.²⁷

It could not have been easy for either of these abstemious cultures to quickly take up pork into their food habits. Their religions had considered the animal impure, sinful, and unclean. It forbade them even to touch the pig, so the thought of eating one must have been a humiliating sacrifice.²⁸

Not all Jews and Moslems felt the same. Famously Isaac ben Salimán, a Medieval Jewish doctor wrote in his *Tratados de Dietética* (990 C.E.) that despite whatever was written in Leviticus or Deuteronomy, pork was actually a healthful food. The eleventh-century publication *La Higiene de Albucahis*, written by a Moslem doctor in Córdoba, gives clear evidence that the pig was sold, eaten, and considered “muy nutritivas” by at least some Moslems.²⁹ Though they had routinely slaughtered pigs during the Islamic campaigns in the eighth century, once the Moslems had established control they appear to have been more conciliatory. The community of Serranía de Ronda, for instance, had *embutidos* flavored with aromatic Arab spices like cinnamon.³⁰

Despite these exceptions, however, the Jews’ and Moslems’ prevailing opinion about the pig was resoundingly negative, epitomized by the rabbi Moses Maimonides (1135–1204) who emphasized that the pig was an unclean animal both spiritually and hygienically.³¹ Born in Spain, and serving as court physician to the Islamic caliphate of Egypt in the twelfth century, Maimonides wrote, “The principal reason why the Law forbids swine’s flesh is to be found in the circumstance that its habits and its food are very dirty and loathsome.”³² Scholars today, including Marvin Harris, generally dismiss Maimonides’ “scientific” argument because pigs do not carry any more disease than other

livestock, and moreover the Bible is not a zoological treatise or medical manual.³³ Gázquez Ortiz argues that the prohibition of pig is and was always preposterous: “Este rechazo a la carne de cerdo por parte de la cultura semita y musulmana se puede catalogar, sin miedo a equivocarnos, de carácter totalmente irracional, y tan sólo debe a dictámenes teológicos.”³⁴

Whether or not it was true, in his concise statements Maimonides articulated the sensibilities of the majority of Jews and Moslems of his time, and we can infer the attitude held by them towards those who would persist in eating the pig— namely the Christians.

The attitude of Catholic Spaniards was predictably the opposite. Consider the following written by a Christian in 1513, dismissing such piggish slander:

[M]andó Dios que no comiesen los judíos carne de puerco; dándoles á entender que no fuesen en sus obras semejantes á puercos, que son animales sucios. Mas ellos dejaban de comer la carne, que es buena y de mucha provisión, y imitaban sus obras y sus suciedades: su dormir, su nunca mirar al cielo, no reconociendo los beneficios de Dios recibidos; pues debemos dejar de imitar las obras de los puercos, y aprovecharnos de la carne....³⁵

This rather glowing description of pork and reproach of the Jews comes from Alonso de Herrera’s famous *Agricultura general*, the largest reference of its kind at the time. In it he explains the many ways to cut and eat a pig, as well as a thorough list of medicinal uses for which pigs could be used to treat disease. Generally speaking in Spain at this time fresh pork was considered a cure for the injured and sick, and because of this it was always in demand on voyages to the Americas.³⁶

The derision by Old Christians in Spain during this time made the eating of pork more than just a food; it became a symbol for adhering to the edicts of the Catholic faith. Giving a gift of olive oil or cherries to the local constable, trustee, or Inquisition official might only get one so far. But just as the public display of the *matanza*, a gift of succulent ham or pork sausage would lay certain the purity of faith on the part of the giver. For this

reason, *moriscos* would exhibit a ham or slice of salt-pork, which they referred to as “medalla.” The salty medallion was insurance, or so they thought, from the Holy Office of the Inquisition who busily tried to sniff out irreligious converts.³⁷

The eating of pig— or not eating of it more precisely— indeed fell under the domain of heretical practice. It also proved to be a marker against Jews, who as a much smaller minority than the Moors tended to live in common with Christians in Spanish villages. Such precarious circumstances are readily evinced by cases like this 1568 trial against a woman accused of abstaining from pork. Under torture she admits her harrowing crime:

She cried “Loosen me, Señores and tell me what I have to say: I do not know what I have done, O Lord have mercy on me, a sinner!” Another turn was given and she said “Loosen me a little that I may remember what I have to tell; I don’t know what I have done; I did not eat pork for it made me sick; I have done everything; loosen me and I will tell the truth.” ... Another turn of the cord was ordered and she said “Señor I did not eat it because I did not wish to—release me and I will tell it.” She was told to tell what she had done contrary to our holy Catholic faith. She said “Take me from here and tell me what I have to say—they hurt me—Oh my arms, my arms!” which she repeated many times...³⁸

The abstention from pork was thus able to separate Old Christians from the new *conversos* and *moriscos* whose faith always remained in doubt. Such ideas can even be seen in the literature of the time. Take this rhyme about a Jew written by the poet Francisco de Quevedo (1580-1645):

Aquí yace Mosén Diego,
A Santo Antón tan vecino
Que huyendo de su cochino
Vino a parar en su fuego.³⁹

And in his “La vida poltrona” he mocks, “Haga yo mi olla / con sus pies de puerco, / y el llorón judío / haga sus pucheros.”⁴⁰ Clearly the idea of cohabitation between the three religions that had existed for hundreds of years in Spain was getting harder to maintain.

By the end of the fifteenth century things had hit a breaking point. Two basic industries in the Spanish economy, especially in Castile and Extremadura, had been

incompatible with Islam: viniculture, and hog raising.⁴¹ The *Reconquista* had made considerable progress, and the border between Moslem-held lands drifted further and further south until they were pushed entirely off the Spanish peninsula. The Holy Office of the Inquisition began in 1480, and the expulsion of the Jews and the final defeat of the Moors occurred in 1492. The national food of the peninsula had been decided, and much to the chagrin of Moslems and Jews, it was the “unclean” and highly symbolic pig.

Toward 1492

The exploitation of swine had actually been on the rise for some time before this period. Geographer James J. Parsons notes that the *encomienda* system of rewarding soldiers with property and labor benefited Christian pig raisers moving south during the *Reconquista*. Between the twelfth and the fifteenth centuries, the Christian advance resulted in moderate gains in the herding of this livestock, along with an extension of the forests and meadows needed to support them. Swineherding ran into direct conflict with sheep raising, the other traditional livestock of Spain. Proponents of the pig needed natural oak forests while shepherders wanted open pastures for grazing. Shepherders were reportedly accused of burning oak trees to create more pastureland. But with the Moslems defeated, the balance of power in Spain tilted toward the swineherds, and this practice seems to have ended. Swine again became dominant in central and southern Spain.⁴²

Tributary lists from the fifteenth century show that swine and sheep, known together (along with goats) as *ganado menor*, predominated in southern Spain. Raising pigs was the single most important economic activity in the Extremaduran city of Trujillo, from where Francisco Pizarro and his brothers hailed. This predilection is even evident in

language: a study of the regional Extremaduran dialect contains special sections for pigs and sheep, but none for cattle or other larger livestock, *ganado mayor*. The region was then and is still today especially proud of its *chorizos* and *jamones*. Extremeños remain biased toward pork and mutton, evidence corroborated not only anecdotally, but also by the local menus in districts like Montánchez, which contributed to the American migration.⁴³

Pigs were sold in fairs like the famous San Miguel held in Zafra, which dates back to at least the fifteenth century. From mid-October through January, herds of red and black Iberian hogs were traditionally driven through the hilly forests to be fattened on *bellotas*, or fallen acorns. In 1554 the Extremaduran community of Jerez de los Caballeros alone reported as many as 100,000 pigs being driven through their land for just such a purpose. Today, we often associate pigs with industrialized farms where they are penned up and movement is restricted. Herding, however, was the dominant practice in fifteenth-century Spain, and would prove useful to expeditionary conquistadors who depended on a mobile troop of sustenance to follow them through unexplored reaches of the New World.⁴⁴

The Spanish had formed a connection with the pig over millennia, and it was this culture and diet that they would bring to the Americas. Beginning in the fifteenth century, cookbooks began to appear that distinguished the diets of different social classes in Spain, yet *tocino* (salt pork) was apparently an indispensable part of everyone's diet, not only for noblemen but for peasants as well. The famous *olla podrida*, a dish filled with various things including pig meats, originates from this time, and led to the saying: *No hay olla sin tocino ni sermón sin agustino*.⁴⁵ As one historian has written, "no hay patriotismo más intransigente que el gastronómico, cosa que puede ser cierta porque atañe lo más visceral y rotundo de nuestro ser."⁴⁶

Nothing in the Americas would feel equal to the Old World diet that the Spaniards were accustomed to. Along the path to conquering the Aztec empire, the chronicler Bernal Díaz reported the following:

¡por ventura teníamos por comer, no digo de falta de tortillas de maíz, que hartas teníamos, sino algún refrigerio para los heridos, maldito aquel!⁴⁷

Even with an overabundance of corn tortillas, Díaz finds himself with nothing of substance in his stomach. To a Spaniard of his time, nourishing food could mean only one thing: meat and (wheat) bread, the diet that Díaz would have been familiar with from his native land. Such thinking was the prevailing view of the time, as evidenced by a Spanish doctor of the day, Juan de Avinón, who prescribed the following cure-all: “Add a pound of bread and two of meat ... half in the morning and half at night; and with this quantity, more or less, the health of the majority of Sevillian men can be maintained.”⁴⁸

So commonplace and necessary was meat to the Spanish that they had a hard time imagining any other way of life. The cannibalism of the Indians reported by early chroniclers was treated invariably as proof of the natives’ barbarism. But the famous historian and naturalist Bernabé Cobo had another rationalization— the lack of domesticated animals available for slaughter. He further explains:

Lo cual sin duda fué parte para introducirse la bestial costumbre que se halló en la mayor parte deste Nuevo Mundo, de comer carne humana sus naturales; pues vemos que donde más recibida estaba esta fiera costumbre, era donde menos animales se hallaron de cuyas carnes pudiesen los hombres sustentarse....⁴⁹

Livestock was extremely important to the Spaniards and, as we might expect, the animals and customs that emigrated along with the colonizers came from the same regions as their human counterparts.⁵⁰

The result of the cultural and dietary forces discussed thus far at least partially explains the meat-heavy, and especially hog-driven culture of the Extremadurans and

Castilians who were setting out for the New World in the late fifteenth and early sixteenth centuries. It is safe to assume that an elevated percentage of these emigrants had some sort of relationship to the rearing of livestock (especially pigs and sheep), worked in one form or another in the field, or simply hailed from regions of Spain that were traditionally pastoral. They were familiar with pigs and their uses, and brought hog-rearing, along with their morals and traditions, with them to the lands they came to populate in the Americas. As for sheep, the other Spanish mainstay, we shall see that their introduction was, at least initially, stifled by climate and physiology. The Iberian pig, however, readily provided the kind of meal that the Spaniards would bring on their voyages, as well as impose on their newly conquered lands. While traditionally we may think of Spanish colonizers as invariably in search of gold (or God), we should not forget that many were hoping to possess land and livestock, the traditional source of wealth in their homeland.⁵¹

Chapter II: Pigs in the Indies

And this little piggy went to the New World

As the explorers arrived in the Indies, they naturally compared the islands to home and Castile. They marveled at the exotic plant life, the naked “savage” Indians that populated the islands, the traces of gold, but perhaps what struck the Spaniards most was what they did not find. On October 16, 1492, just five days after first sighting land, Christopher Columbus reports:

“Bestias en tierra no vide ninguna de ninguna manera, salvo papagayos y lagartos. Un mozo me dijo que vido una grande culebra. Ovejas ni cabras ni otra ninguna bestia vide; aunque yo he estado aquí muy poco, que es medio día: mas si las hobiese no pudiera errar de ver alguna.”

Columbus had noticed a significant fact about livestock in the Americas— there were practically none.² This fact was all the more salient because the ship had just come from the Canary Islands, an archipelago along roughly the same latitude as where he was now, but which— logically— raised animals like pigs and sheep in abundance. Even after four voyages, Columbus would never find the large animals or domesticates that he had taken for granted in Europe. “Había perros que jamás ladraron; había avecitas salvajes mansas por sus casas....”³ Small dogs that did not bark, and little birds, but certainly no pigs, sheep, or cattle.

The fact of the matter was that the Americas, separated from the remainder of the world for thousands of years, had few large animals that could be domesticated. Notable exceptions include the llama and the alpaca, camelids of the Andes mountains in South America, used by the natives of that region for food, wool, and as pack animals. Another was the bison of the North American plains, but it was never domesticated on any large

scale. The Indians had at their disposal only a small species of dog that did not bark, the guinea pig, and fowl, including the muscovy duck and the large turkeys of North America.⁴

Recall Bernal Díaz's description of maize-cakes, and we can understand how the lack of large, familiar animals in the New World was akin to telling the Spaniards that there was no food available in this new land. Some historians have been baffled by how the Europeans—arriving in a fertile, abundant landscape that sustained millions of Indians for thousands of years—looked around and saw nothing edible.⁵ But it was without hesitation that Columbus writes once again:

Era cosa de maravilla ver aquellos valles y los ríos buenas aguas, y las tierras para pan, para ganados de todas suertes, y de que ellos no tienen alguna, para huertas y para todas las cosas del mundo que el hombre sepa pedir.⁶

With suggestive rapidity, the Admiral perceived that the future of the Indies under Spanish control necessitated the agro-pastoral economy and way of life that they were accustomed to. Bernabé Cobo notes that Columbus “advirtió la falta tan grande que en ella había ... mayormente de los ganados de Europa necesarios para el sustento y servicio de los hombres.”⁷ The Admiral insisted on this point through repeated communications with the Catholic Majesties after his return to Spain and for the following decade.⁸

On his second voyage to the Indies, Columbus was sure to bring domesticated animals with him. According to Bartolomé de las Casas, the Admiral makes an important stop in the Canary Islands where numerous livestock are purchased:

...el sábado siguiente, a 5 de octubre, tomó la isla de la Gomera, donde estuvo dos días, en los cuales se proveyó a mucha prisa de algunos ganados, que él y los que acá venían compraban y metían, como becerras y cabras y ovejas. Y entre otros, ciertos de los que venían allí compraron ocho puercas, a 70 maravedís la pieza. Destas ocho puercas se han multiplicado todos los puercos que hasta hoy ha habido en todas estas Indias, que han sido y son infinitos.⁹

From this day forward, the Canaries would become a requisite stop for all voyages heading

to the Indies, supplying outbound ships with food, plants, seeds, and livestock. Why not bring the animals directly from Spain? Firstly because they were cheaper on the islands, but probably more importantly, to reduce the amount of time they remained onboard. The trip was lengthy, and many animals did not survive the passage. Added to that, while alive pigs and other livestock were unwelcome traveling companions. They were dirty and demanding animals aboard any vessel, the stench alone making them disagreeable any longer than necessary.¹⁰

By 1500, all the most important domesticated species from Europe would arrive.¹¹ These animals were not only meant to sustain the crew, but for the more significant purpose of breeding them in the New World. Such supplies would be necessary for settlers and expeditions deeper into the Americas, and nothing of the sort could be found in the Indies. As sixteenth-century observer José de Acosta notes, “las islas de todos [animales] carecen, si no son los que han embarcado españoles.”¹²

After the conquest— and often in conjunction with it— took place the colonization of the acquired territory by the newly arriving Spaniards. Many Spaniards desired the opportunity to acquire property and livestock that had, in Spain, reached a finite limit of owners.¹³ Right from the start Columbus begins this drive. Bernabé Cobo explains:

En el segundo viaje que hizo el almirante D. Cristóbal Colón á esta tierra el año siguiente de 1493, con gente española para poblarla, trujo consigo de todos los ganados que cría España buen número de cabezas de cada especie, para que acá se multiplicasen y perpetuasen...¹⁴

Conquistadors used settlements to legitimize their claims before their monarch, and on an international level, the Spanish Crown endeavored to keep other European nations from its “justly acquired” land grab.

Livestock was such a necessary part of this colonization that animals were not killed

even in times of hunger. Pedro de Mendoza, leader of the first unsuccessful colony in Buenos Aires, was put on trial in 1536 for keeping back livestock from his starving companions.¹⁵ This may seem incredible, especially when the conquering expeditions would invariably complain of hunger while droves of hogs followed behind them. Yet the logic was practical, especially when dealing with pigs, because their fecundity assured that in a short time they could reproduce abundantly; it would thus be imprudent to slaughter them all. In the New World this practice has its basis at least as far back as Columbus:

Dijeron que yo había tomado el ganado a la gente que lo trajo acá, y no trajo nada nadie dello, salvo yo ocho puercas, que eran de muchos; y porque éstos eran personas que se querían volver luego a Castilla y las mataban, yo se lo defendí porque multiplicasen...¹⁶

Columbus' defensive attitude for his eight pigs demonstrates a logic that would prevail in successful expeditions throughout the New World. And the proof of its success is the rapid and incredible multiplication of European livestock in the Americas.

Hog wild: The proliferation of pig in the Indies

If the eight pigs sailing across the ocean on Columbus' second voyage were expecting the acorns from their homeland, they were sadly mistaken. Acorns aside, the pigs found health, shade, and new, delicious foods in such wild abundance that their numbers soon grew out of control. Indeed, pigs made themselves right at home in the Indies.

If we can believe Bartolomé de las Casas, from Columbus' first eight pigs all the "infinite" numbers of pigs in the Indies have descended.¹⁷ More than likely, Casas lifted this observation from the Admiral's own account. Writes Columbus:

...se ve ahora que hay acá dellos [puercos] sin cuento, que todos salieron desta casta, y las cuales yo traje en los navios y les hice la costa, salvo el primer gasto, que fue 70 maravedis la pieza en la isla Gomera.¹⁸

It is curious that both Casas and Columbus refer to the eight pigs in the feminine plural: *puercas*. Surely, we cannot believe that eight sows reproduced without the aid of a male hog, but it seems that in the chronicles *puercas* and *puercos* are sometimes used interchangeably. In any case, if the Spaniards intended to breed the animals, it makes perfect sense that they would bring more females than males.

While there is no doubt that these first eight played a vital role, other accounts make it evident that the many ships leaving Spain, and stopping over in the Canary Islands, brought with them a number of pigs as well. Bernabé Cobo confirms that:

...en todas las entradas y descubrimientos de nuevas provincias que los españoles hacen en estas indias, acostumbran llevar consigo el mayor número que pueden de animales mansos y plantas semillas, así para bastimentos en las tales jornadas, como para perpetuarlas en las nuevas tierras que van á poblar.¹⁹

There remains some debate over the type of pig that Columbus first brought from the Canary Islands, but it is generally agreed that it was an Iberian pig, *Sus mediterraneus*, the species common to medieval Europe. Compared to the modern pig, this Iberian derivative is smaller leaner, and tusked, weighing between 50 to 150 kilograms. It has a straight back, and a long narrow snout; it does not even have the “curly” pigtail we associate with the animal today. They are alert animals, rugged, and resourceful. Although the pigs vary in color, they are most often black or pink, with small bristles or hairs. In the Andes of South America, their descendents have survived until today and are considered *criollo*, or native, by local inhabitants, a tribute to their successful adaptation.²⁰

Disagreement persists, however, because the pigs were brought on board from the island of La Gomera, which was home to its own variety of sturdy pig adapted to life on the islands since men first colonized the Canaries thousands of years prior. Canarian scholar Antonio Tejera Gaspar reasons that it was more likely *cerdo paleocanario* that traveled

with Columbus. This species is smaller than the Iberian pig, with thicker black hairs, and pronounced curved tusks. Both are descended from the same lineage of wild pig, *Sus scrofa*. Whichever species came first, it is certain that the pigs brought on subsequent voyages were of both kinds, and that they interbred in the Americas with great success.²¹

Of all the livestock introduced by the Spaniards, the pig adapted most quickly to its new environment.²² With hindsight, this fact comes as no surprise because in the Indies the pigs found a veritable hog paradise. And if we are to believe that the first pigs were of a native species from La Gomera, then they were already pre-adapted to an island lifestyle of similar climate. The pigs encountered a largely uncontested niche in the Antillean forests, although certainly their growth crowded out many small, indigenous mammals that competed for food.²³ There was plenty of shade, abundant food, no natural predators, and no European infections to curtail their growth. Omnivorous pigs were willing to eat literally anything— except grassy pastures, which became the domain of cattle and horses.

Their favorite food, however, undoubtedly seems to have been the *jobo* (*Spondias mombim* Lin., sometimes called *mirobálano* or *hovos*), a tree particular to the American tropics. Its plum-shaped fruit is black, red, or yellow and is used today for medicine and dyes. Pedro Mártir de Anglería swore that pigs, unlike other imported livestock, tasted even better in the New World than they had in Spain due to their new diet:

Este árbol es tan peculiar de la Española, que los cerdos se ceban con su fruto; y cuando madura, los porquerizos no los pueden retener ni gobernar, sin que se les escapen y se vayan desparramados a las selvas que crían esos árboles; así es que gran muchedumbre de cerdos se han hecho silvestres. Por eso dicen que en la Española la carne de cerdo es más sabrosa y saludable que la de carnero, pues nadie duda que las varias clases de alimentos dan a la carne que se come varia virtud y gusto muy diferente.²⁴

Another account by Galeotto Cey confirms the pigs' affection for the fruit:

Pero quien se dedica a estos ganados necesita tener gran vigilancia, máxime

durante mayo, junio y julio, que dura la fruta de un árbol llamado “jobo” que hay mucho, y entonces escapan a los bosques al olor de ésta fruta, y una vez que huyen al bosque no se les vuelve a ver, a ninguno de ellos.²⁵

Oviedo y Valdés also speaks of a different plant native to Hispaniola, which he says the natives called *y*, that had a similar effect on the pigs: “Esta es muy gran pasto y bueno para los puercos, e los engorda mucho, y es a su propósito tanto e más que en España la bellota....”²⁶ Clearly one reason for the pig’s resounding success here was the rich abundance of nutritious and delicious foods— more delectable than even Spain’s acorn. Truth be told, the pigs apparently ate anything— even snakes. In Panama and Ecuador, locals reported that wild pigs had considerably depleted the number of serpents in the forests.²⁷

Pigs adapted well to environments that other Spanish livestock found unsuitable. The coastal lands of Brazil, for example, provided pastures too poor for cattle, but adequate for pigs. Thus in the early colonial periods of Río de Janeiro and São Paulo pork became a major component of the diet. An unnamed visitor to Brazil in 1601 remarked that: “Swine doe like very well heere and they beginne to have great multitudes, and heere it is the best flesh of all.”²⁸ The key to the hog’s overwhelming acceptance was its ability to efficiently transform whatever organic matter into pork chops and hams fit for human consumption.²⁹ Pork became a dominant form of sustenance for the Spanish and their slaves. Cobo tells us: “Háse extendido tanto por toda la América este ganado, que no hay población de españoles é indios donde no se críe copiosamente.”³⁰

The numbers, if we can believe them, speak for themselves. We have already considered Columbus’ claim that there were “sin cuento,” and a doctor, Beltrán, in a report about Hispaniola in 1512 counts the number of pigs as “sin número.”³¹ Anglería insists that, besides pigs, “en los macelos no cortan otra cosa.”³² Francisco de Garay

reported from Jamaica in 1519 that on the Crown's *hacienda* alone there were over one thousand pigs.³³ In 1514 Diego Velázquez de Cuéllar wrote to the king that on Cuba there were thirty thousand pigs. Alfred W. Crosby translates his remarks as “more pigs than I ever saw before in my life.”³⁴ Geographer Carl Sauer notes that this number appears excessive, but is plausible given that many of Velázquez's men reportedly brought swine to Cuba, and cattle did not arrive until some years later.³⁵

The pig's growing numbers were so alarming that they no doubt contributed to the extinction of certain plants and animals (as well as Indian mortality).³⁶ Casas, for example, speaks of at least two:

Había en aquella isla una especie de caza harto provechosa y abundante, que los indios nombraban guaminiquinajes, la penúltima lengua; éstos eran tan grandes como perillos de halda; tenían muy sabrosa carne, y, como dije, había dellos grande abundancia....Después que hubo puercos de los nuestros los acabaron todos, como en esta isla las hutías, que era otra especie de caza.³⁷

Voracious and disruptive omnivores, the swine often depleted the populations of native species, devoured their food supply, or irrevocably damaged their habitat. In many respects, pigs were not unlike their human masters.

In short order, the geometrically increasing pig population was too large to corral; they escaped and reverted to wild forms. We know this from a myriad of sources. Cobo tells us, “Hanse multiplicado los Puercos con tanto exceso en muchas partes, que se han hecho cimarrones y andan en grandes manadas por los campos y desiertos, sin dueño.”³⁸ Anglería echoes: “Ha crecido la multitud de puercos, y los que se escaparon de los porquerizos se han hecho silvestres.”³⁹ José de Acosta warns us that, “En partes se han hecho montaraces y crueles; y se va a caza de ellos, como de jabalíes, como en la Española y otras islas, donde se ha alzado al monte este ganado.” Oviedo y Valdés reports that “Puercos monteses se han hecho muchos en las islas que están pobladas de cristianos....”⁴⁰

He also explains that at least part of the problem stemmed directly from the *haciendas* which later abandoned hog raising for the profitable sugar trade:

De los puercos ha habido grandes hatos en esta isla, e después que se dieron los pobladores a la granjería de los azúcares, por ser dañosos los puercos para las haciendas del campo, muchos se dejaron de tales ganados; pero todavía hay muchos, e los campos están llenos de salvajinas...⁴¹

Pigs were also lost by their Spanish (or more often, Indian) caretakers, or escaped from their corrals.⁴² And as Anglería explained, the lush forest, and especially the *jobo* was enough to drive the pigs wild on their own.

Like most of the imported breeds of livestock, the American descendants of the pig grew larger.⁴³ Anglería remarked that “[l]as crías de todos animales, por la exuberancia de la hierba, se hacen mayores que sus padres....”⁴⁴ Pigs changed in other ways, too, resembling if nothing else a wild boar. López de Gómara noticed that “Los puercos que llevaron se han diferenciado, ca les crecen un jeme las uñas hacia arriba, que los afea.”⁴⁵ It is possible that many of these morphological changes resulted also from the mixing of the Iberian and the Canarian breeds of hogs.⁴⁶

Eventually, it would be another domesticated animal gone wild that depredated the pigs to more manageable numbers: the European dog, which unlike its American cousin, *did* bark— and bite. Already by 1505 the Spanish Crown had issued an official proclamation to reduce the numbers of wild pigs,⁴⁷ and again in 1508 responded with the following proclamation:

Asymismo los dichos Procuradores me suplicaron les mandase que las monterías de puercos que ay en la Isabela vieja, e en otras partes de la dicha Ysla, fueran comunes a todos los vecinos della, e que no se guardase ny vedase, porque dello venía bien a la dicha Ysla. E yo, por hacer bien y merced a los pobladores desa dicha Ysla, e porque tengan provechos e algún pasatiempo para su recreación, helo habido por bien.⁴⁸

Galeotto Cey further tells us “Los mestizos salen a cazarlos con perros, por los bosques, y

esta es su manera de vivir, ya que la carne de aquellos es excelente.”⁴⁹ The dogs, too, were lost and went wild as López de Velasco reports: “los perros... se han vuelto cimarrones, son tantos ya, que son más perjudiciales para el ganado menor que lobos en otras partes.”⁵⁰ It appears that the numbers of wild pigs and dogs oscillated, as did the demand for their meat obtained by hunting. While the Crown issues licenses to hunt as early as 1508, Fray Antonio de Remesal grievously reports in 1532 that untethered dogs were depleting pig stocks on their own:

porque los perros bravos que servían en la guerra y habían sido sepultura de muchos reyes y caciques, faltándoles este alimento, comían los hatos enteros de ovejas y puercos con notable sentimiento de la ciudad; hasta que se remedió este daño por orden del cabildo mandando, so penas graves, que cada uno tuviese atados sus perros en casa.⁵¹

At the same time that pigs and dogs were proliferating in great numbers, other European livestock had also arrived on Columbus’ second voyage.⁵² The Spaniards, especially those from Extremadura, were principally familiar pigs and sheep,⁵³ and it has already been suggested that this intimacy made certain that particularly these animals would arrive early in the Indies. So how did the sheep do? One scholar has called the first attempts at raising sheep in the Indies “auténticos fracasos.”⁵⁴ We can attribute this phenomenon mostly to the climate of the Antilles where sheep first arrived; no doubt they found the tropics too humid for their comfort.⁵⁵ Bernabe Cobo explains:

Es el ganado que menos extendido está en estas Indias de cuantos se han traído de España; no porque sea poco en número el que hay, sino porque no se cría en las tierras *yuncas*, por no serle á propósito el temple...⁵⁶

Beyond this was the fact that sheep, as well as goats who suffered equally in the Indies, do not reproduce in stressful environments. These animals were essentially sterile for up to a year after being transported to the tropical environment. Other scholars have pointed to the fact that sheep, as well as European chickens, had more difficulty struggling against

native pests and predators, especially on the mainland. The pig's thick skin defended it against snake bites, but the sheep were vulnerable.⁵⁷

It is also interesting to note that while vast numbers of pigs, cattle, dogs, and horses at some time escaped and reverted to wild forms in the Indies, the same is not true for sheep. Cobo attributes this peculiarity “sin duda, por ser la Oveja animal tan flaco y cobarde, que no pueda vivir sin la defensa y amparo del hombre.”⁵⁸ To be sure, sheep were a more particular animal than pigs, suffering in the humid tropics, but achieving notable success in more agreeable climates.

Cattle, on the other hand, did exceptionally well in the Americas. It was the bovine biology, though— specifically the cow's rate of reproduction— that precluded cattle's immediate use on a grand scale until later in the sixteenth century. The pig, by contrast, was pre-adapted to the Antilles just as the cow, but proliferated much more quickly. Swine scholar David E. Vassberg explains:

[Pigs] reach maturity at about one year, they breed throughout the year, have a gestation period of only 16 weeks, typically give birth to between 8 and 12 piglets, and they can easily live 25 years. Thus a single sow could theoretically produce seven million descendants within her lifetime.⁵⁹

While no actual pig is likely to approach such numbers, the relative biological advantage is apparent. Principally for this reason, the pig was of most significance during the first half-century after Columbus' arrival, and particularly wherever land was conquered and first colonized.

All told, the pig's arrival in America and its subsequent growth was nothing less than astounding. By contrast, sheep and cattle were not as successful or useful to the Spaniards in the very beginnings as pigs were in the conquest and early colonization of the Americas. But this would only be a matter of time. We must attribute the pig's head start, at least in

part, to the influence of the Extremadurans who imported, propagated and promoted their use in the New World. But it was the meteoric growth of pig populations, derived from its natural adaptation to the Indies' lush, forested environment, that explains the pig's incredible success.⁶⁰

Pig of the litter: The versatile uses of pigs in the Americas

Alfred W. Crosby has suggested that, in all appearances, it certainly looked as though Spain's mission from 1492 to 1550 was to replace people (that is, the Indians) with cows, dogs, and pigs.⁶¹ Because of its easy ecological transition to the Indies and astounding reproductive rate, the pig was able to provide a diverse number of uses to the Spanish colonizers. These came in the form of meat, lard, soap, fuel, and medicine. Nearly all expeditions brought supplies of preserved salt-pork, and also afforded themselves live pigs for mobile sustenance. Later, the pig would be used as a form of tribute from the Indians, and integrate itself into the New World's agrarian economy.

For the early part of the colonization, there seems to have been little else grown on farms besides hogs and native agriculture. Casas informs us:

Las granjerías de entonces no eran otras sino de criar puercos y hacer labranzas del pan cazabí y las otras raíces comestibles, que son los ajos y batatas.⁶²

Even if there was no other sign of Spanish civilization, there was surely a *porquero* to be found. Casas goes on to relate, "En aquel puerto no había más de un vecino de la villa de Santiago, que tenía una granja, que llamaban estancia, donde criaba puercos y gallinas...."⁶³

Hog ranches, called *corrales* or *estancias* in the colonies, sprang up wherever pigs were introduced, and their impressive fertility ensured high production.⁶⁴ They scattered throughout the forested regions of the Antilles and into the mainland of America. Any

concentration of Spanish immigrants resulted in ranches to supply the precious meat.⁶⁵

In short order, pork played a significant role in the New World diet. By 1600, meat was one of the cheapest foods in the Americas.⁶⁶ Eating hams and salt pork provided far more calories than cassava bread. At the same time, gold-hungry Spaniards found raising pigs more economically viable than growing crops because it required less manpower, which could then be diverted to other pursuits like mining. On the *encomiendas*, some Indians tended to the pigs while others worked in the mines; in truth, some of the richest Spaniards, including Francisco de Garay, made money more reliably in pigs than in gold. Pork also became an indispensable part of the Taino and Arawak diets.⁶⁷

On ranches, pigs might be allowed to feed in adjacent forests, but when fed on site, were generally given native plants like manioc (yucca) and maize. Recall that in Spain pigs had been fed nearly exclusively on acorns from oak trees, but no comparable species grew naturally in the Indies.⁶⁸ Yet it was no matter of contention for these undemanding hogs; in the Antilles they appear to have taken to manioc as rapaciously as they had acorns in Spain. The flour of this tropical plant has equal or more metabolic energy than wheat, barley, or corn. It is no coincidence that wherever the production of manioc was successful, so too was the raising of pigs. As ranches spread to the mainland and beyond, pigs were primarily fed corn— as is still true today⁶⁹— and in the tropics seasonal fruits like the guava, *caulote*, *guarango* and *algarrobo*.⁷⁰

The pig's diet purportedly gave it a different, more sophisticated flavor than the pork of Spain. Fernán Pérez de Oliva notes that while beef and lamb lost flavor in the New World, pork somehow benefited:

Vacas y carneros perdieron su sabor, aunque cuanto más tarde nacían, tanto eran mayores. Puercos es la más preciosa carne que hay en la isla, la cual se mudó casi en otra natura con pastos diversos que allá tienen.⁷¹

Galeotto Cey, who explained to us the pig's affinity for the *jobo* fruit of the Antilles, tells us that "muchas veces si no fuese por el cuero no se sabría si es cerdo o cordero."⁷² And Acosta confirms: "En muchas partes se come carne fresca de ellos, y la tienen por tan sana y buena como si fuera carnero, como en Cartagena."⁷³ It is interesting to note the inherent comparison between the meat of sheep and pigs, and it appears that for these observers, and perhaps more generally in Spain, the taste of *carnero* was preferred over *puerco*, all else being equal. If the sheep were a more sturdy and adaptable animal, perhaps its history would have been different in the Indies, as it was in the highlands of Mesoamerica and Columbia.

Whatever the reason for the pork's remarkable taste, raising pigs proved lucrative because the Spanish craved its meat. Just as in Spain, it was an especially common food for feasting. Casas reports that upon striking gold Francisco de Garay and Miguel Díaz "[h]icieron fiesta, y asando un lechón o cochino, lo cortaron y comieron en él..."⁷⁴ Garcilaso de la Vega, in his *Comentarios* relates a rather incredible story about Sebastián de Benalcázar's expedition: for a banquet the *adelantados* purchased a single pig at the ridiculous price of 1,600 pesos. Perceptively, the Inca reproves this characteristically Spanish excess:

Estos excesos y otros semejantes han hecho los españoles con el amor de su patria en el nuevo mundo, en sus principios. Que como fuesen cosas llevadas de España no paraban en el precio para comprarlas y criarlas, que les parecía que no podían vivir sin ellas.⁷⁵

From all accounts, it seems that the Europeans only grudgingly ate cassava, maize, and other native American staples; but given the option, they would have taken a fattened pig any day of the week.

Any day of the week is perhaps an all too accurate description. Vega further

informs us that pig fat was in such high demand “porque los españoles a falta de aceite, por no poderlo sacar, guisan de comer con ella los viernes y la cuaresma.”⁷⁶ The need for cooking oil appears to have suspended any obligation to Catholic religious fasting, which precluded meat on Fridays and during Lent. Cobo says: “El precio que tiene la manteca es muy grande respecto de las demás cosas, é increíble el consumo que hay délla, por gastarse en todas las Indias en los guisados cuaresmales en lugar de aceite, y en otros muchos usos.”⁷⁷ As early as 1541 the Spanish Crown petitioned the Pope to exempt the colonists from refraining from meat given their circumstances, and in 1562, they gratefully received a Papal dispensation from the fasting requirement.⁷⁸

What may seem trivial to us today was in fact an intolerable inconvenience for the Spanish migrants of the time. In Spain, cooking was done with olive oil, but try as they might, olives did not succeed well in the humid tropics of the Americas; the restless Spaniards even tried extracting oil from avocado pits. The Casa de Contratación sent two hundred and fifty olive seedlings to the New World as early as 1520,⁷⁹ but it would appear that the Spanish government had conflicting rules and interests regarding its production. They viewed olive oil as a Spanish manufacture which should be sold to the colonies, not produced there. In Mexico City, officials received complaints about shortages and the great expense of olive oil, but apparently could do little to reduce the prices charged by Spanish merchants. Where olive trees could be cultivated, notably in the coastal valleys of Peru and Chile, the industry did thrive, but because viceroalties traded directly with Spain, it did not reduce the cost of olive oil elsewhere in the Americas. The end result was that lard became essential to most colonists. It served as an inexpensive and sometimes singular replacement for olive oil, which along with meat, wheat, and wine, were cornerstones of the Spanish

diet.⁸⁰

Lard had a number of other uses as well, and it will surprise modern readers to realize just how many considering our current disuse of the animal. In the kitchen, lard was used to make candies, cakes, and deserts, as well as pastry dough. Bernabé Cobo relates: “Suele hacerse manteca todo el Cebón sin sacar más que los pernils y la demás carne magra, de que se hacen longanizas y otros adobos de regalo, de que carecían antes los indios.”⁸¹ What in English we call lard is denoted in Spanish into at least three qualities: *manteca*, *unto*, and *sebo*. The latter was of the lowest quality, but still served the purpose of providing fuel for illumination.⁸² Pig fat, and later the beef tallow that replaced it, was used in oil lamps to illuminate the homes and churches of the New World. Garcilaso de la Vega reports that members of Soto’s Florida expedition used lard combined with the resin from trees to pitch the brigantines for their return journey.⁸³ Lard could be manufactured into candles, and was also the main ingredient in soap. By the end of the sixteenth century, the tiny village of Saña received more than one-hundred-thousand pigs for the use in *tenerías*, where they would be manufactured into these diverse products.⁸⁴

Perhaps most strangely to the modern reader, lard had therapeutic purposes as well, a tradition that no doubt had its antecedents in the Iberian peninsula. As Gabriel Alonso de Herrera explained in 1513: “El unto o tocino gordo en su lugar es bueno para madurar muchas hinchazones y apostemas; y aun si uno tiene muchos piojos o liendres, y con ello se friega la cabeza, los matará todos.”⁸⁵ Padre Cobo tells us that pork, too, was considered medicinal: “En algunas tierras calientes se tiene por tan sana la carne de Puerco fresca, que la dan á los enfermos juntamente con las aves; y así, se matan cada día en los hospitales los Puercos que son necesarios....”⁸⁶ Galeotto Cey readily agrees that the tasty pig

is also surprisingly healthy: “su carne es hoy buena y sana, más que la del cordero, y además la recomiendan los médicos....”⁸⁷

Lard was especially important in curing an animal disease as well. Mange (called *carache* or *sarna* by the Indians), was an external parasite that afflicted the llamas and alpacas of Peru. Vega purports that two-thirds of the flocks died to this ailment until a mix of lard with sulfur was discovered to protect the camelids from infection. He further noted that “[p]or este beneficio que hallan en la manteca tienen precio los puercos que, según lo mucho que multiplican, valdrían de balde.” The price of pig in Lima, which Vega puts at only 10 pesos, was thus much higher than it would have been given the demand for its meat alone.⁸⁸ Lard was valuable, and in fact the hunting of wild pigs that took place in the Antilles was often done in pursuit of the fat, not the meat, which was otherwise amply available.⁸⁹

From a Spanish point of view, the invention of the pig, with its myriad of uses and appetizing flavor, was worth more than gold. It is no doubt with this in mind that in 1652 Bernabé Cobo compares the mineral wealth that the Indies gave the Spaniards (gold, silver, etc.) to the plants and animals that Spain returned in exchange:

no hay duda sino que es tanto mayor la que ella [las Indias] ha recibido, que la que le ha remitido en las flotas, cuanto va de riquezas naturales tan necesarias á la vida humana, como son los animales y plantas de que los españoles la han proveído.⁹⁰

Cobo’s assuming comments might face some cynics today, but any European of his time would no doubt agree, if only to soothe his own conscience.

Chapter III: Pigs in Exploration of the Americas

El Puerco Conquistador: The pig as a tool for Spanish explorers

There are three animals that were absolutely essential to the Spanish soldiers during the conquest of the Americas: the horse, the dog, and the pig. They form what Morales Padrón called, “la trilogía animal de la conquista.”¹ With the dogs in front, the horses underneath, and the pigs grunting behind, the Spanish expeditions of subjugation were phenomenally successful. Essentially the horses and dogs were instruments of war, although the horse also served for prestige, transport, and carried loads. The pig was the primary form of sustenance, but in hard times, as Gonzalo Pizarro could attest, a delicious dog or horse is far more useful than a valiant one.²

Already it has been shown that along with the pig many other Castilian livestock were readily available to the expeditionary forces that would conquer the enormous landmass from North to South America. Why, then, did so many Spanish explorers choose to bring pigs along as a primary source of sustenance? We have seen that sheep did not fair well in tropical weather, and that cows were not available in sufficient numbers in the first part of the Spanish invasion. As historian Eduardo Laguna Sanz insightfully noted: “La expansión y utilidad de los ganados españoles no fueron uniformes ni en espacio ni en el tiempo; ni tampoco fue igual la clase de aprovechamiento que proporcionaron.”³ Sheep were appropriate for higher elevations, thriving well, providing meat, cheese, and wool in cold, rugged climates. Cows offered tasty beef and milk, as well as hides which served a plethora of local uses, and which could be sold back to Europe. And pigs, as we have discussed at length, afforded a plentiful, breeding, and ambulatory supply of meat ideal for

expeditions.

These facts alone are not enough to explain the pig's near universal adoption. So before we examine the role hogs played in the journeys of specific explorers like Hernán Cortés or Francisco Pizarro, let us consider exactly how pigs could benefit *any* would-be explorer of the fifteenth or sixteenth century. I hope to show here that hogs offered many advantages over other livestock on an expedition: hardiness, a self-sustaining diet, easy herding, great fecundity, and a familiar flavor.

The simplest explanation for the utility of swine is simple economics. Bernal Díaz, the famous chronicler of the Cortés expedition, tells us quite matter-of-factly: “compramos puercos, que nos costaban en aquel tiempo a tres pesos, porque en aquella sazón no había en la isla de Cuba vacas ni carneros.” The pigs were so abundant in the Antilles— from where the earliest voyages invariably supplied themselves— that their cost relative to other animals was substantially lower. Pigs were cheap, and if that were not enough incentive, early on they were sometimes the *only* livestock available in sufficient quantity for purchase. Of course this was not always the case, as a number of competing expeditions at any one time might buy out entire stocks and expend them relatively quickly.⁴ This is what happened to Sebastián de Benalcázar in Nuevo Granada, leading him to purchase his famous feasting pig for 1,600 pesos. At that particular moment and location, pork prices had skyrocketed to 500 pesos or more; chronicler Pedro Cieza de León relates that pigs were so in demand that the Spaniards could not wait for them to be born: “de los vientres de las puercas compraban, antes que nasciesen, los lechones a cien pesos y más.”⁵ Excepting such outstanding situations, the cost of pig steadily decreased as the sixteenth century moved forward.⁶

While many horses died on ocean voyages, petite pigs also took up little space on boats, less than might cows or even sheep, and for their size provided a higher percentage of usable meat.⁷ Of course they took up even less space if slaughtered first and brought along as *tocino* (salt pork), or other preserved forms of meat. We can imagine that a typical maritime voyage would carry some sort of bread— likely of cassava, if it originated in the Antilles— along with dried pork and at least a few live pigs to maintain supplies.⁸ The Spaniards had millennia of experience salting meat in the form of *jamón*, *embutidos*, and *ibéricos*. These had proved useful in supplying the crew of ships during the long voyage from Spain. In the Antilles, the Spanish learned another method from the local Indians. There, hunting was a common source of meat, and smoking the carcass preserved it long enough for extended storage. Bernabé Cobo tells us of these *barbacoas*, “aprendieron los españoles de los indios, que no supieron hacer otro género de cecina sino éste, para guardar por algún tiempo la carne.”⁹ The Spanish readily added this method to their own retinue of culinary talents.

Bringing live pigs was as much a stored supply of food as it was an investment in future food supplies. Cobo tells us that the Spanish used pigs “para mantenerse déellos en las tales jornadas, si se viesen necesitados de bastimentos; que por ser ganado tan fecundo, da muy en breve copioso fruto.”¹⁰ Pigs were so easy to transport that a few were generally carried along and deposited on islands, left to reproduce prolifically until a later voyage might hungrily come across them, as this message to the incoming governor of Río de la Plata attests:

Quedan en una ysla de las de San Gabryel un puerco y una puerca para casta; no los maten, y si oviere muchos tomen los que ovieren menester y dexen siempre para casta, y asimismo de camino echar en la ysla de Martyn Garcia un puerco y una puerca, y en las demas que les pareziere, para que hagan casta.¹¹

We witnessed this same logic when Columbus defended his decision not to let his eight *puercas* be slaughtered for the one-time benefit of a tasty pork barbecue. Pigs were “seeded” on many islands that explorers would often only much later come back to, including Barbados, Bermuda, and the Channel Islands near California.¹²

Another of the pig’s key selling points was undoubtedly that it, unlike other livestock, could be herded through difficult and varied terrain. Pigs did not rely on large pastures of grass as did sheep and cows; these animals might have subjected the horses to unfavorable competition during long expeditions over rugged terrain. Instead, the pigs pretty much fended for themselves, eating whatever they could find en route, freeing the Spanish soldiers from a large investment in food or herders. Pigs adapted both to the tropical humidity as well as the mountains and dry land. They were also resistant to hunger and even lack of water because they do not perspire through the skin. Through varying American terrain, the pigs continued commendably, keeping up with the soldiers and finding novel food sources as they went.¹³

While herding pigs was relatively easy, and the Spanish had millennia of experience in this matter, keeping control of hundreds or even thousands of these self-reliant animals was not an exact science. An untold number of pigs escaped and went on to populate the regions through which they were being led. These pigs turned wild, just as they had in the Antilles, and reverted to a form similar to wild boars. Given their remarkable fecundity and resourcefulness, descendants of these hogs were destined to outpace the Spaniards in their conquest of the Americas. Coronado in his exploration of the American West would encounter Indians who had been hunting and exploiting wild boars well before his arrival.¹⁴ Later expeditions would benefit from this wild game, which could be hunted.

Perhaps the most obvious reason for bringing the pigs along is that they provided a valuable source of meat and nutrition. As one historian has put it, “every army travels more on its stomach than on its feet.”¹⁵ The Spaniards were generational veterans of wars, having fought the Moors for 800 years, and knew this fact very well. The rearguard of any expedition thus consisted of camps to raise and herd the pigs that would feed the soldiers on the frontlines of battle.¹⁶

Finally, we should not underestimate the fact that pork was a familiar food to the Spanish— and predominantly Extremaduran— conquerors. They had come to rely on pigs for their nutrition and livelihood in Spain, and without hesitation transferred this knowledge and predilection for pork into the lands that they conquered. For all these reasons, it should be no surprise that modern scholars like Justo del Río Moreno exaltedly affirm, “en la América del siglo XVI no hubo una sola huete que no llevara entre sus acopios algunos cerdos o que no basara su alimentación en sus carnes.”¹⁷

Hernán Cortés

Beyond just theoretical musings on which animal would have been best for a Spanish explorer in the New World, we have documentary evidence that often tells us precisely which animals and how many accompanied the conquistadors. In the early accounts and major conquests, the pig is always featured prominently. Perhaps the most famous conqueror of the New World is Hernán Cortés, who with the help of his Indian allies, brought down the once-powerful Aztec empire.

It seems that Cortés spent little time deliberating over which animals he would use to supply his expedition. Bernal Díaz tells us that the men supplied themselves as much as

possible from what was available in Cuba at the time.

Digamos ahora cómo todas las personas que he nombrado, vecinos de la Trinidad, tenían sus estancias, donde hacían el pan cazabe, y manadas de puercos, cerca de aquella villa, y cada uno procuró de poner el más bastimento que podía.¹⁸

Of course the problem with mounting any expedition is that there never seems to be sufficient quantity of what is needed, especially money with which to purchase such items.

Recall that Díaz told us that cows were not available at all in Cuba at the time, and it would appear that horses and sheep were in short supply as well.¹⁹ Many of the supplies, including those of pig (which traveled as *tocino*), would have to be obtained with diplomacy, as this interesting story relates:

...y en aquel instante vino un navío de la Habana a aquel puerto de la Trinidad, que traía un Juan Sedeño, vecino de la misma Habana, cargado de pan cazabe y tocinos, que iba a vender a unas minas de oro cerca de Santiago de Cuba; y como saltó en tierra el Juan Sedeño, fue a besar las manos a Cortés, y después de muchas pláticas que tuvieron, le compré el navío y tocinos y cazabe fiado, y se fue el Juan Sedeño con nosotros.²⁰

López de Gómara also tells us that Cortés' purchases effectively reduced Cuba's supplies of pig to zero: "Tomó a Fernando Alfonso los puercos y carneros que tenía para pesar otro día en la carnicería, dándole una cadena de oro, hechura de abrojos, en pago y para la pena de no dar carne a la ciudad."²¹

Almost immediately the workers "comenzaban a hacer cazabe y salar tocinos para matalotaje."²² This would prove to be the basis of the Spanish maritime diet; the etymology of the word *matalotaje*, which from the original French meant "mariner's salary," perhaps tells us that sometimes this was all they could hope to get. All told, Cortés took with him "cinco mil tocinos y seis mil cargas de maíz, yuca y ajís."²³ And even so, López de Gómara laments that the crew left "con muy poco bastimento para los muchos que llevaba y para la navegación..." and that Cortés sent for more supplies, including some pigs, from Jamaica.²⁴

There seems no doubt that Cortés was resupplied at times with essentials, and the original *tocino* was used up early on. Cortés ordered Diego de Ordás to begin raising hogs in Veracruz before he set out for the final conquest of the Aztec capital Tenochtitlán, no doubt to create such supplies.²⁵ More provisions arrived when the Narvaez's ships landed in an unsuccessful attempt to displace Cortés. As luck would have it another vessel arrived just in time for the banquet following the surrender of Tenochtitlán:

Cortés mandó hacer un banquete en Cuyoacan, en señal de alegrías de la haber ganado, y para ello tenían ya mucho vino de un navío que había venido al puerto de la Villa-Rica, y tenía puercos que le trajeron de Cuba...²⁶

Again we see that pigs, that familiar food from Spain, was especially important as feasting victuals, although unlike Benalcázar, Cortés would obtain them at a bargain price.

After several mentions about pigs being used to supply the expeditions, the paper trail often runs dry. As has been suggested, perhaps to a sixteenth-century Spanish chronicler or explorer, it was banally obvious how herds of pigs and dried salt pork supplies would be managed. Chroniclers appear reluctant to mention the herds of pigs on this expedition probably because Cortés had ordered them to trail four days behind the company in order to conserve their stocks.²⁷ There is ample evidence, however, that a large drove of pigs followed Cortés from Mexico to his conquest of Honduras. In a long roster of the persons and supplies that left with Cortés from México for las Higüeras, Díaz lists: “y una gran manada de puercos, que venía comiendo por el camino...”²⁸ López de Gómara confirms that Cortés took “una piara de puercos, animales para mucho camino y trabajo y que multiplican en gran manera.”²⁹

The journey to Honduras was an arduous one. Although the group was supplied with a map from local Indians, it did not readily explain how the expedition was to cross the jungles and swamps with their heavy supplies and animals. The horses were half

underwater, some of the company drowned; after it all, Gómara remarks “y aun cómo pudieron llegar los puercos fué maravilla.”³⁰ But Cortés knew that his armies depended as much on their fighting prowess as they did on mere survival, and the abundance of pigs were crucial in the fight against hunger. Near the end of his trek from Mexico all the way to Honduras, with supplies beginning to run out Cortés remarks:

...aunque en aquellas cuatro jornadas que desde Acuculin allí trujimos se pasaron innumerables trabajos...en especial de hambre —porque aunque traíamos algunos puercos de los que saqué de México que aún no eran acabados había más de ocho días cuando a Taniha llegamos que no comíamos pan sino palmitos cocidos con la carne y sin sal...³¹

Note that supplies of bread ran out well before those of meat. Having a rearguard that moved with the army had proven an excellent idea, one that would be copied by later conquistadors.

Of course many of the pigs that followed Cortés on this arduous march did not arrive. Those that were not eaten instead escaped and, as they tended to do, reverted to wild forms. Today the Yucatan is home to muscular, energetic boars with sharp tusks and oversized heads. Probably these are some of the most rugged pigs in the modern world, and surely they are descended from this expedition’s original herd.³²

Cortés took livestock very seriously, no doubt because of his Extremaduran roots. Once the conquest was completed and he was (more or less) in control of Mexico, Cortés sent for livestock, including pigs, to be brought from Santo Domingo, Jamaica, and Cuba.³³ There is even evidence that he sent for pigs from as far away as Genoa, Lombardia, and Barcelona.³⁴ He also imposed a series of *ordenanzas* that encouraged the proper and managed care of the livestock, especially pigs. In March of 1524 he proclaimed “que si algun vezino e morador u otra qualquier persona, tobiere sitio señalado por el dicho Consexo para crianza de puercos, que no se pueda dar a otro alguno en media lengua a la

redonda.” He further solidifies the rights of *porqueros* by declaring “sy algun criador de puercos quisiere sacar su ganado a otra parte, que nenguna persona le pueda entrar en el sitio o criadero que dexare, fasta seis meses primeros siguientes, porque mexor pueda rrecoxer el ganado que se le obiere quedado perdido....”³⁵

The Cortés expedition to Mexico resulted in the pig’s widespread introduction into that country. Soon after a specialized pig industry would develop in Toluca, which because of its high altitude was ideal for making *jamones*, *salzones* and *embutidos* that became famous in the New World.³⁶ Cortés’ *ordenanzas* come astoundingly soon, a fact which assures us of the important role this livestock would play, not just in the conquest of Mexico, but even more so in its early colonization.

The Pizarros

Of all the conquistadors Francisco Pizarro, the ill-famed conqueror of Peru, is perhaps the one most associated with pigs, but of which we have the least firsthand accounting. His contemporaries, however, had plenty to say. Pizarro was purported to have been a swineherd, but this information likely originates from López de Gómara’s unflattering biography in his *Historia General de las Indias*:

Era hijo bastardo de Gonzalo Pizarro, capitán en Navarra. Nació en Trujillo, y echáronlo a la puerta de la iglesia. Mamó una puerca ciertos días, no se hallando quien le quisiese dar leche. Reconociólo después el padre, y traído a guardar los puercos, y así no supo leer. Dióles un día mosca a sus puercos, y perdiólos. No osó tornar a casa de miedo, y fuése a Sevilla con unos caminantes, y de allí a las Indias.³⁷

Scholars debate whether these are the facts, or merely represent Gómara’s distaste for Pizarro manifesting itself in literary exaggeration. James Lockhart believes that Pizarro suckling a mama pig— the so-called “porcine legend”— is completely false, and notes that

Pizarro, even in lineage, had the qualities of a leader. David E. Vassberg contends that while the baby conquistador suckling a pig is far-fetched, it is quite possible that Francisco Pizarro did tend hogs in his native Extremadura, and the occupation was not considered lowly there. The vast majority of Pizarro's cohorts on the Peruvian expedition came from Extremadura, notably his hometown of Trujillo, and certainly the pastoral lifestyle in some ways prepared them to be physically strong, alert, and resourceful men. Calling Pizarro (or Cortés for that matter) a swineherd may easily have been a regional stereotype.³⁸

While the men who conquered the Incas came from Spain, the pigs came from Panama.³⁹ That story probably begins in Jamaica, from where many pigs made their eventual entrance into the mainland. In 1521 and reiterated again in 1531, Francisco de Garay was ordered by the Crown to send from Jamaica to Panama, among other supplies, “mil cabezas de puercos...para repartir entre los vecinos y favorecer el poblamiento de la ciudad.”⁴⁰ Another five hundred hogs were sent from Jamaica to Nicaragua, destined to follow Núñez de Balboa to the Pacific Ocean— another expedition fed primarily on the meat of pigs.⁴¹ But the first hogs to arrive in Nicaragua probably came to Santa María la Antigua with Pedro de Arbolancha in 1513, because there is evidence that when Pedro Arias de Ávila (better known as Pedrarias) arrived one year later, there were already some pigs available for slaughter. In any case, he sent back to Jamaica for even more and a group of hogs arrived in 1514, and another in 1515.⁴²

The pigs did not do quite as well on the mainland as they had in the Antilles, probably because predators like pumas, coyotes, and humans limited their growth. Oviedo y Valdés noted that “aunque de los puercos que se han llevado a Tierra-Firme se hayan ido algunos al monte, no viven, porque los animales así como tigres y gatos cervales y leones se

los comen luego.”⁴³ Deficient supplies caused the governor to insist in 1537: “sobre la forma de remediar la escasez y carestia de carne, mandando que los que tienen indios crien puercos.”⁴⁴

That said, thousands of pigs did survive in the Spanish *estancias*, and from these Panamanian pigs Francisco Pizarro supplied his expedition to Peru. He arrived there in 1531, and just as Cortés had left some pigs in Veracruz to reproduce and increase supplies, so too Pizarro left a few men in charge of hogs on the island of Flores, and later in the Peruvian mountains at Tumbéz.⁴⁵ There is scant firsthand accounting of how many pigs were driven behind the soldiers on their way to the Incan capital. Diego de Trujillo’s chronicle, like Bernal Díaz’s of Mexico, assumes that we know pigs were following behind.

At one point when the soldiers are nearly dying of thirst, Trujillo relates:

la gente que iba delante descubrió una laguna chica de agua verde, y allí nos remediamos de agua, aunque unos puercos que Hernando Pizarro traía de Panamá, la pararon de tal arte que era barro lo que bebíamos...⁴⁶

It seems likely that the number of pigs brought by the Pizarros was substantial. We have records sent back to Spain to verify the expenses of Diego de Almagro and Francisco Pizarro in their preliminary voyages south in 1525. Here witnesses attested to a great number of pigs; Alonso de Caceres claims that he saw “una manada de puercos que los suso dichos tenían al tiempo de la partida é que toda se hizo salar é algunos novillos....”⁴⁷ The evidence points to Pizarro using the same technique for his later voyages. He and Almagro also received royal licenses to import more livestock from Panama to Tumbéz and Cuzco in 1532.⁴⁸

The pigs brought by Pizarro to Peru became pork, the first meat weighed out in the *carnicerías* of Lima. This is corroborated by the ubiquitous nature of hogs in the Peruvian townships and landscapes for the first few years. Bernabé Cobo tells us:

Y así, los trujeron consigo los primeros españoles que entraron en este reino del Perú con su conquistador el marqués D. Francisco Pizarro en el año 1531; y crecieron y multiplicaron tan en breve, que la primera carne de Castilla que se pesó en la carnicería desta ciudad de Lima, luego que se fundó fué de Puerco.⁴⁹

The padre goes on to tell us that pork was the only meat available in Peru in any quantity for several years, and was strictly regulated by the municipality to ensure quality and supply. Just one year after the city's founding, an *arroba* of pig (about 25 pounds) was selling for only twenty *reales*. Garcilaso de la Vega reported years later that the price of pig went up, notwithstanding their large numbers, because the mange epidemic necessitated the lard for its cure. Despite it all, however, Vega assures us: "Las puercas han sido muy fecundas en el Perú."⁵⁰

Pigs also played a significant role in the civil wars that ripped through Peru two decades after the initial defeat of the Incas. Although the price of pig in Lima steadily declined from its founding in 1536, this trend reversed itself at the onset of fighting. All sides in the conflict armed themselves with horses and swords to be sure, but they also purchased hogs to maintain their soldiers in the fighting. It is clear that such droves were vital to the nutrition of the opposing bands, as this letter dated 1545 sent to Gonzalo Pizarro from Hernando Bachicao attests:

En este pueblo dexo a vuestra señoría quinientos puercos para que coma, que como yo voy depriesa, no comí más de ciento.⁵¹

Other letters similarly point to pigs and corn as integral to the soldiers' diet during this conflict.⁵²

While Francisco Pizarro may have delivered the pigs to Peru, it was definitely his brother Gonzalo that used them to their fullest extent. In 1541 he obtained from the city of Quito between two and six thousand pigs,⁵³ and a substantial number of dogs and llamas, which he brought with him on his ill-fated journey through the Amazon in search of the

País de la Canela. In short order this cinnamon expedition encountered such hardship and rains that Herrera y Tordesillas informs us: “por no perecer de hambre, comían de los perros y de los caballos, sin que se perdiese gota de sangre.”⁵⁴ When they returned one and a half years later, having traveled four hundred leagues, López de Gómara describes what was left:

No volvieron cien españoles, de doscientos y más que fueron. No volvió indio ninguno de cuantos llevaron, ni caballo, que todos se los comieron, y aun estuvieron por comerse los españoles que se morían...⁵⁵

There was probably no need to say what happened to the pigs.

Hernando de Soto

With good reason the industrial hog farmers of the United States today affectionately call Hernando de Soto the “father of the American pork industry.” In 1539, Soto arrived at what is today Tampa Bay, Florida with only thirteen pigs he had obtained in Cuba. With discipline that would have impressed Columbus, Soto did not allow the hogs to be slaughtered except in dire circumstances, and so by the time of his death three years later, his herd counted seven hundred heads. This number does not include what was eaten, those that were captured by or given to the Indians, nor the countless rogue pigs that escaped to seed the country for its future hog industry.⁵⁶

The Soto mission undoubtedly offers us the best sixteenth-century account of how the pigs were used on an expedition. There are several contemporary sources relating the story, all of which mention the numerous pigs following the soldiers.⁵⁷ The most detailed in relation to swine was written by Garcilaso de la Vega, who although not present in the journey himself, wrote a contemporary history of the trek by interviewing its participants, notably Alonso de Carmona. Even he, however, neglects the pigs at first and apologizes to

the reader, saying:

aunque hasta aoro no hemos hecho mencion que el Adelantado uviesses llevado este ganado a la Florida, es assí que llevó mas de trecientas cabeças machos y hembras, que multiplicaron grandemente, y fueron de mucho provecho en grandes necessidades, que nuestros Castellanos tuvieron en este descubrimiento.⁵⁸

Throughout the journey, Soto was cognizant of the herd following behind him, so much so that it will strike the modern reader as extreme. Soto marched only as rapidly as the soldiers and pigs could stand, and tried as best he could to avoid hunger by eating maize, not pork.⁵⁹ When the group encountered rivers, Soto had his men build rafts to ferry the pigs across.⁶⁰ Vega reminds us that these hogs were always protected:

“particularmente se les señalava, quando caminavan, una de las compañías de acavallo, que por su rueda los guardassen.”⁶¹ Clearly, the pigs were important to Soto to such an extent that their protection and treatment borders on religious.

This is not meant to say that the soldiers went hungry at the expense of the pigs.

Pork was reserved for the sick, but when extreme hunger took hold, Vega informs us:

El Governador passando tres dias que avian estado en aquel alojamiento, viendo que no se podia llevar tanta hambre, que cierto era mas que se puede encarecer, mandó que matasse algunos cochinos de los que llevavan para criar, y se diessen de socorro ocho onças de carne a cada Español, socorro mas para acrecentar la hambre que para la entretener.⁶²

But more than any other expedition, the one led by Soto was determined to breed the hogs. There are constant references to the pigs being reserved for breeding in case they should find a place to make a settlement.⁶³ Again this demonstrates how useful the pig was both as an instrument for conquest, but also as a vehicle for colonization. In a crude way, swine served as the “gateway” animal. Unlike other livestock, they could survive the arduous campaigns, and once a township was established, other animals like cattle and sheep could be brought in larger numbers. But until that stability took hold, pigs were

superlatively useful.

Perhaps even more than Soto might have wanted, the Indians of La Florida quickly became acquainted with the pigs, and more resolutely than most natives, they took a strong liking to pork. At first Soto offered the pigs to the Indian chiefs as gifts to keep them friendly and also to accustom them to raising the animal themselves. Vega recounts:

Y porque se acordassen dellos les dio el Governador entre otras dadivas, dos cochinos macho y hembra, para que criassen. Y lo mismo avia hecho con el Caçique de Altapaha, y con los demas señores de provincias que avian salido de paz, y hecho amistad a los Españoles.⁶⁴

The Indians were not always satisfied by the few hogs Soto was willing to give up, however. Thus, there are numerous accounts of pig-nappings and warfare committed against the expedition. In one case, the Indians set fire to the Spanish camp, and all but the piglets (who were small enough to escape their pens) died. Vega reports that “cada Indio traia çeñidos al cuerpo tres cordeles, uno para llevar atado un Castellano, y otro para un cavallo, y otro para un puerco, y que se ofendieron mucho los nuestros quando lo supieron.”⁶⁵ Besides such pig rustling from the Indians, some of the animals escaped on their own: “se perdieron muchos por los caminos, aunque sobre ellos llevavan mucha guarda, y cuydado.”⁶⁶ Unfortunately, it was out of the frying pan and into fire for many hogs, as free wild pigs proved to be a favorite animal for the Indian hunters.⁶⁷

The hospitable woodland environment, and Indians’ newly found appetite for pork, made certain the hogs would multiply in this region. Alonso de Carmona reported that he found a sow lost on the outward journey, now with thirteen piglets, each of which were marked on the ears. Vega reasoned that the Indians had marked them and were exploiting them just as the Spaniards might: “Devio ser que los uviessen repartido los Indios entresi, y señaladolos con las propias señales: de donde se puede sacar, que ayan

conservado aquellos Indios este ganado.”⁶⁸ As late as the twentieth century, the Choctaw tribe of this region was reported to have still been raising Iberian hogs.⁶⁹ The feral razorback, or “wood hog,” that survives in the woodlands of the southern United States has sparse bristles and long heads and legs. Almost surely, they are the legacy of Hernando Soto, descended from such sixteenth-century expeditions.⁷⁰

Chapter IV: The Indians and the Pig

The New Livestock

It should come as no surprise that many Indian groups, like those in the Florida region explored by Hernando de Soto, took immediately to raising pigs. The natives there— either given pigs outright from Soto, stolen from his band, or hunted in the forests— quickly began raising the hogs for their own use. North American Indians in fact became even more inclined to handle pigs when the English arrived in the following century. While the English colonists attempted to “civilize” the natives by introducing them to cattle raising on enclosed plots of land, to their chagrin it was the pig that most Indian groups welcomed. Either feral or semi-domesticated, hogs simply fit in with native hunting practices better than cattle. They ate scraps, needed less care, and proliferated quickly. American colonials in the seventeenth century noted that some Indians even found novel ways of utilizing lard to replace bear fat in “pummy” as well as to oil their skins.¹

In Mexico, most tribes seemed to take well to at least two imported livestock: chicken and pigs. In South America, the pig was also readily accepted by a number of tribes. Swine even gained new appellations from the Indians: *chancho* and *cochi*. The former derives from the Spanish *sancho*, and the latter from the interjection used to call a pig near.²

Nearly all the Indians began a relationship with swine— positive or negative— immediately upon the pig’s arrival in the New World. After all, they had little choice. Some groups valued the added source of sustenance, while a number of other tribes found the animals dirty and disgusting. In Mexico some would persist in buying dog meat even when the price of pig or beef was significantly lower.³ Clearly, we should never assume that the

Indians' response to European imports and customs were uniform, and the fact of the matter is that some native groups liked the pig while others simply did not.

At first the Spanish prevented the Indians from raising their own cattle and horses.⁴ Pigs, on the other hand, quickly found their way onto the tributary list of items that the Indians were obligated to provide for the conquerors. Thus, the Indians were permitted (and often forced) to be swineherds for the Spanish. Raising livestock was encouraged by conquistadors like Cortés and Soto, supported by the Spanish crown, and even recommended by the religious orders proselytizing in the Americas.

Franciscan friars encouraged the practice of raising hogs whenever they established missions. This is especially true in California and Texas. By 1843, a few years after the secularization of Spanish missions in Alta California, there were 321,000 pigs being raised on these Franciscan plots.⁵ Father Sahagún taught the Indians to eat “that which the Castilian people eat, because it is good food, that with which they are raised, they are strong and pure and wise.... You will become the same way if you eat their food.”⁶ In his *Historia de las Indias*, Casas includes in its entirety the instructions of the *frailes jerónimos* (Friars of Saint Jerome) sent to the New World in 1516 to help the Indians. The directives urge them to convince the Indians to move nearer the mines, and to raise livestock. Not surprisingly, the animals to be raised are predominately pigs:

Si ser pudiere, para cada pueblo de trescientos vecinos haya diez o doce yeguas y cincuenta vacas y quinientos puercos de carne y cien puercas para criar; éstos sean guardados a costa de todos, como bien visto fuere, y esto se procure de sostener de común hasta que ellos sean hechos hábiles y acostumbrados para tenerlos propios suyos.⁷

Especially suited to early colonial efforts, and already available in large supply, pigs outnumbered the other livestock on these reconstituted villages.

A similar practice occurred in Mexico following the conquest of the Aztecs. In 1524

Cortés' "Ordenanzas Dadas por Hernando Cortés, Para el Buen Tratamiento y Régimen de los Indios," the conquistador specifically lays out this function:

porque los Vecinos de las dichas Villas an de tener crianzas de puercos e otros ganados, e para la guarda e crianza dellos, an menester de los indios para ello licencia...para que puedan sacar de ellos los que fueren menester para guarda de los dichos ganados, e no para otra cosa...⁸

Such acculturation compelled the Indians to feed both the Spanish and themselves, and at the same time provide tribute to their conquerors and accustom themselves to the Spanish way of life.

In the Viceroyalty of Peru also, the Indians were employed as swineherds. Vázquez de Espinosa describes the sixteenth-century village of Villa Viciosa in Popayán as having "countless hogs" as well as other livestock. "In its jurisdiction, together with that of Pasto, it has more than 24,000 Indians... These Indians work as agricultural laborers and on the hog ranches."⁹ South American Indians took to raising pigs quite naturally. The Urabá Indians of Columbia, for example, had already pre-Columbian experience with peccaries—the pig's Suidae relative of the Americas. Though peccaries were never domesticated, they were captured, and it seems that many tribes familiar with the animal immediately took to the Spanish variety when introduced.¹⁰

Yet even others in South America with no such background accepted and saw the benefits of domesticated pigs. Perhaps this phenomenon can be attributed to their familiarity with domesticated animals like the llama and alpaca. It has already been discussed how lard was used in Peru to treat the camelid disease mange, and this fact could only have furthered the appeal of pigs in these tribes. Thus, pigs were especially in high demand in sixteenth-century Peru, where both pork and lard served the natives as well as the arriving Spanish population. Especially important was the growing mining industry in

places like Potosí, which demanded a constant supply of nourishment for the mostly indigenous labor force. The terrible cold and harsh conditions there made raising livestock difficult, so the pigs were marched up the mountains on hoof to meet their eventual death in Potosí, probably not long before the indigenous workers that they fed.¹¹

Pork and lard quickly became a common ingredient in *tamales*, perhaps one of the first examples of *mestizo* cuisine. One kind of *tamale*, which in pre-Columbian times was filled with human flesh, was replaced with another using pork. Indians of the Andes realized that food could be fried in lard in just half the time as boiling it in water, and with less expenditure of precious fuels. No matter how they sliced it, the pig had tangible benefits for the Indians.¹²

An Unwelcome Guest at the Table

For many natives, on the other hand, the question of eating pigs was not even under consideration. They maintained their traditions of raising crops of corn and beans, and did not see any benefits coming from these new competitors to their land. Even so, and pushed onto ever more marginal plots, these Indians were still affected by the European herds. Cattle reportedly grazed and destroyed Indian croplands, and the pigs followed up by rooting out the leftovers just below the surface, resulting in frequent disputes between natives and colonizers.

Some scholars have reasoned that livestock were a primary cause of the Indians' rapid decline. Estimates of the Indian population before and after the arrival of Columbus vary, but all are catastrophic. Mexico's population of roughly 20 million was reduced to 1.6 million by 1618. Crowd diseases like smallpox brought by Europeans originally derived

from domesticated animals that lived in close proximity to their human masters in the Old World. Influenza, for example, is known to have come initially from pigs. Although there is no record of an epidemic of this disease in the Indies until 1518, it is possible that strains of the “swine flu” were brought as early as with Columbus’ eight pigs.¹³

The most distressing indications of pigs transmitting disease comes from Soto’s expedition to North America. In the century after Soto visited the Mississippi valley, no Europeans reportedly came, but when the French appeared in the seventeenth century most of the cities and communities Soto encountered had been wiped out— an estimated demographic collapse of 90–96 percent. Ann Ramenofsky and Patricia Galloway speculate that Soto’s hogs might be responsible for the demographic collapse of indigenous populations in the area. Swine can transmit brucellosis, leptospirosis, trichinosis, tuberculosis, and even anthrax, infecting the indigenous human population directly, as well as the deer and turkeys they fed upon. Only a few of Soto’s wandering pigs would have been enough to infect the entire region.¹⁴

Besides being a carrier of Old World ailments (much like their Spanish masters), livestock like cattle and pigs displaced the Indians on their own land. Former Indian agricultural plots made way for large Spanish pastures for livestock. Fray Antonio de Remesal noted in 1532 that in the Antilles the natives protested the pigs:

Fue acordado que porque los naturales se quejan que les destruyen los maizales los puercos de los vecinos de esta villa, que cualquier persona que tuviere puercos en cualesquier maizales los maten sin pena ninguna y se los lleven.¹⁵

In Quito, from at least 1577 through 1584 the Indians complained that “los ganados de los españoles se les comen las sementeras.”¹⁶ Even the cropland that remained was often destroyed by escaping or free-roaming herds.¹⁷ The frequency and similarity of these complaints show that the problem was undoubtedly repeated wherever and whenever the

Spanish brought their livestock.

In Mexico City, the Indians complained to the *Cabildo*, and the Spaniards countered rather speciously that the Indians deliberately planted their crops exactly where these animals would roam.¹⁸ In 1544, the *Cabildo* petitioned the king to stop the Indians from “disturbing” the livestock:

...questa cibdad esta informada que los yndios perturban los pastos de los ganados e abrazaderos e se meten en labrar tierras que nunca se labraron...asy mismo bea e probea lo suso dicho para que asy mismo cese el dicho daño e perjuyzio.¹⁹

The Spanish Crown actually prohibited the raising of pigs near Indian agricultural plots in 1549, but given the continuing complaints, there does not seem to be any evidence that such a ban was widely enforced.²⁰ Similarly, a royal decree was issued in 1549 for Cartagena “prohibiendo que los españoles crien puercos en los poblados indios de encomiendas,”²¹ but its effect is not readily apparent.

It was not just these native groups put out of place by pigs that found them disagreeable. Interestingly, we find that also among the Indians who took up the practice of hog raising many developed a negative attitude towards pork. The Pausan and Julime Indians of Coahuila in northern Mexico, for example, reportedly raised pigs but did not eat its meat. Instead they sold or traded them to non-Indians. The Otomi Indians of Central Mexico, even through much of the twentieth century, raised hogs but sold the meat to *mestizos*; pork was reserved for ceremonial meals. Such examples suggest that not all Indian tribes were interested in adding pork to their diet even when it was available in large supply, and this fact remains true even for those who ate European chickens or lamb.²²

On the furthest end of the spectrum we have examples of Indians who were disgusted outright by the idea of dealing with pigs. While a minority to be sure, there are clear indications that at least some natives loathed the pig to a startling degree. An early

sixteenth-century account by an Indian in Michoacán lists lard in the same category, along with incarceration and beatings, as the worst inventions of the Spanish:

Como habemos de vivir según las cosas que han inventados los españoles contra nosotros, porque han traído consigo los señores, que ahora tenemos prisiones y cárcel y aporreamiento, y enlardar con manteca: con todo estamos esperando morir...²³

The Mayan Indians in general had an aversion to eating fat. Sophie Coe has suggested that perhaps there is a genetic difference in fat metabolism in these Indians, much as in other parts of the world certain groups have trouble digesting lactose or alcohol. Supporting her theory, it has also been documented that in the Antilles Indian workers assimilated more rapidly to eating pork than the leisure class, which frequently suffered from gout.²⁴ This may suggest that adding pork or other meats to the Indian diet might have been a shock to the body, one which was less problematic for highly-active Indians who metabolized more calories in the day.

Such reasoning contributes to an explanation for why some Indians disliked the pig, but it does not adequately explain it away completely. Just as in the Old World, certain communities— this time particular Indians tribes, rather than Jews or Muslims— were consciously and decidedly pig-abstainers. Consider this eighteenth-century account of the Indians in Sonora, written by the missionary Ignaz Pfefferkorn, peculiarly reminiscent of the Old World porcine divide:

Los puercos no se crían en Sonora aunque podría ser muy fácil la introducción de este animal. En otras partes de Nueva España se crían en tal abundancia que la manteca de puerco se usa diariamente como el único sustituto de la mantequilla. No puede esperarse que esta actividad se desarrolle en Sonora porque nadie quiere ser criador de puercos. Esperar que un español lo sea, sería inferirle una soberana ofensa y ningún indio puede ser inducido a hacerlo, no porque se interponga su orgullo, sino por su innato e implacable odio a los puercos. El indio aborrece tanto a este animal que prefiere sufrir hambres antes de comer un pedazo de carne de puerco doméstico.²⁵

More confounding still, these same Indians apparently hunted and ate the peccary— an

animal very similar to the pig— and it was the Spaniards who refused to eat it! When Pfefferkorn asked why, his Indian informant responded: “El seno [peccary], dicen, no es un cochi [pig], por eso lo comemos, pero los cochis mansos son españoles.” The refusal of the Sonoran Indians to include pigs in their diet appears an idiosyncratic objection, an affront to the Spanish perhaps. Though its causality is not necessarily direct, to this day beef consumption in Sonora far outstrips that of pork.²⁶

As we can gather from these accounts, the Indians responded to the pig in a number of ways. Curiously there does not seem to be a similar question over cattle or sheep, which by the end of the sixteenth century eclipsed the importance of pigs in the New World. Franciscan friars reported that the large size of cattle at first frightened some Indians, but they quickly gained an appreciation for beef. Sheep were immediately valued for their meat as well as their wool, and surely in areas accustomed to the llama and alpaca this introduction was well received. We can further add the European chicken to this list of welcomed animals; ironically the Náhuatl word *Caxtillan* means “land of chickens,” and no doubt the Indians approved more of the chickens than of the Castilians.²⁷ Why the pig was not taken up unopposed, as these other foreign creatures were, is likely the combination of several factors: dietary preference, association with the invading Spanish armies, and its “dirty habits.” In short, Indian views on the pig present themselves to be just as difficult to explain as the Jewish (or even earlier, Egyptian) abstention on eating pork.

The Original Atkins diet

The pig was only one of many new foods introduced by the Spaniards, the combination of which changed the Indian diet irrevocably. Perhaps the most marked

difference between the cultures was that many indigenous peoples were for the most part vegetarians until the arrival of the Spanish. Galeotto Cey relates this interesting story:

Hay aquí una nación de indios llamados guaiques que no comen carne de ninguna clase, ni de animales, ni de pájaros, porque tienen por cierto que muriéndose uno, el alma suya entra en un ciervo o en otra bestia o pájaro, y se morirían de hambre antes de matarlos. Pero después de estar un tiempo entre nosotros comen más que los demás y se ríen de sus antiguas opiniones.²⁸

The change to a meat-heavy diet was not uniformly beneficial, however. Some Aztec elders suggested that the overindulgence in the consumption of meat and drink was a root cause in the Indians' catastrophic mortality rates.²⁹ The Spanish Crown also sought an answer to why the Indian population was falling so precipitously. In the *Relaciones Geográficas* of sixteenth-century Mexico, reports sent back to Spain proposed a number of hypotheses: the deaths were because of the horrible treatment of the Indians, God's will, or the result of diseases. But just as many responses, like this one from the city of Ocopetlayucan, agreed with the Aztec elders and held the new *mestizo* diet as at least partly responsible:

Y [dijeron] que antiguamente vivían muy sanos, y que la causa de ser ahora así, a lo que entienden, es por haber mudado costumbres en las comidas y vestidos; porque, en su gentilidad, comían poco y comidas silvestres, yerbas y demás sabandijas d[ic]has...y ahora...comen más.³⁰

Others, like this reporter from Citlaltepec, while not as damning, concurred that such dietary assimilation was progressing rapidly:

...las comidas que comían eran más ligeras que las que ahora comen, que casi se ha convertido su complexión en la que nosotros tenemos, por haberse dado al comer carne de vaca y puerco y carnero, y beber vino...³¹

While not definitive, both of these statements clearly show how significantly the Spanish viewed the introduction of a meat-heavy diet. For better or for worse, the Indians were being affected by an increasingly protein- and fat-rich regimen.

At the same time, they were relegated to a second-class of meat eaters. It seems that

whenever there was a shortage of meat available to the cities, the Indians were the first to be rationed. In 1556, 1560, and again in 1568, just such an occurrence prompted action in

Mexico City:

Este día platicaron los dichos señores justicia y rregidores sobre la carestia y falta que ay de carnes para el abasto de las rrepublicas de lo qual es la principal causa pesarse carne para los yndios y para que se rremedie lo suso dicho...no se pese carne para yndios en parte ninguna de pueblos de yndios...³²

By blaming the Indians for the lack of provisions, officials in Mexico City were able to preclude the natives from eating meat and increase the supplies for their own carnivorous bellies. Although this tactic seems to have succeeded in the short-run, it does not appear that the *Cabildo* ever intended such ordinances to be permanent. Opinions on the subject, even among Spaniards, were not immutable and when the meat supply replenished, another petition from the same *Cabildo* called such rationing “ynhumanidad y crueldad grande” toward the Indians.³³

As much as the Spaniards wanted the Indians to adopt their ways, they did not intend for this process to happen at their own carnivorous expense. Eventually *mestizo* culture in places like Mexico and Peru would incorporate the pig as a staple ingredient in their national cuisines. Any cursory inspection of restaurant menus in Latin America today will attest to this fact. But the initial reaction to the pig, either of acceptance or rejection, especially along regional lines, is a curious and fascinating subject that recalls the pig’s divisive history in the Old World.

Chapter V: Colonial Pigs

Pig in the city

The Spanish Crown, unlike the Indians, never wavered on the subject of pigs. From the very start the pig's rapid breeding and its obvious utility for early colonizers was lauded by the powers in Spain. By the second half of the sixteenth century the Spanish Crown found it convenient to include clauses in the licenses granted to *adelantados* obligating the transport of pigs. A decree in 1541, for example, insisted that officials "compelan a los maestros y marineros de las naos que vayan a Nueva España a llevar el ganado y plantas."¹ Depending on the need and the destination ships might be compelled to carry between a dozen and five hundred hogs. The Crown saw this as a basic component of colonization, essential to progress and stability, as well as a potential source of income. The soundness of this policy is seen in the successes of Peru and Panama, and conversely in the disaster of the first settling of Buenos Aires, which lacked such pastoral support.²

For this reason it is obvious why early colonies and expeditions were principally supplied with swine. The following royal decree in 1521 provides an example during the colonization of Panama:

Pos las necesidades que me escribisteis, que teneys de batimento e ganado, para con que os podays sostener, entre tanto que haceys labranzas e que crien los dichos ganados, pues en esa tierra hay tan buena disposición para ello, y por vos hacer merced, envío a mandar a Francisco de Garay nuestro capitán de la Ysla de Santiago, que enviando vosotros a la dicha Isla, vos pongan en el puerto o puertos della que quisieredes y vos provea, de cincuenta vacas, e cincuenta becerros, e doscientas ovejas, e mil cabezas de puercos....³

It should be no surprise that the number of pigs freely given is greater by a factor of five to twenty times the numbers of other livestock. Firstly because their incredible adaptation to the Indies and high reproductive rate ensured such numbers, and secondly because pigs

were ideally suited to the efficient and rapid colonization of new lands. The Spanish Crown granted livestock as an incentive for colonization, offering married workers both a cow and a pig for moving to Panama.⁴

The number of hogs, and later other livestock as well, grew to such an extent that it quickly became no matter at all to procure them; instead the problem became how to exploit their use best. Thus, the specialized *estancia* in the Indies that raised only pigs would eventually give way to the New World *hacienda* of the highlands, which afforded larger spaces and an agreeable climate to raise a diversified and more profitable mix of sheep, cattle, pigs, as well as wheat and corn.⁵ Pigs grew with the cities as well. Ten years after the conquest of Mexico, pork was still the meat of choice feeding the hungry Spaniards. Indeed, as the Spanish founded new villages, initially pork was often the only European meat available. Rising numbers of livestock ensured the growing accessibility of meat, and New World dwellers were at the time some of the most meat-fed people on earth.⁶

In Mexico City, Veracruz, and Panama during the 1520s, as well as Peru in the 1530s, raising and selling pigs were particularly profitable industries. The price of pigs in Mexico City during this time was maintained by the high demand for both its meat and lard. Hogs were a steady commodity, and were even used as a medium of stable exchange; swine might be transferred to settle debts or to purchase items. Eventually, however, the number of heads available for purchase surpassed demand and the prices fell dramatically. This fact is most clearly demonstrated by the price of meat in Mexico City, which dropped from 334 maravedíes in 1524 to only 20 maravedíes in 1528, and a mere 8 maravedíes in 1541. In large part the arrival of the *Segunda Audiencia* in 1531 was also involved because

the new restrictions it imposed on the *encomiendas* caused a massive sell off of commodities, including pigs.⁷

Added to this was the increasingly available cattle supply, which made it inevitable for the high prices enjoyed by the pork industry to fall. The city of Mexico was not regularly supplied with beef until 1526, but even after that date the supply of meat went through boom and bust cycles that depended on weather, population flux, and new rules decreed by the Spanish Crown and the local *Cabildo*. Not to be underestimated as well was the demand for meat by other regions of the Americas. Just as Cortés single-handedly depleted the pig supply of Cuba in 1519 when he set out for mainland Mexico, other expeditions to Panama and especially Peru were diverting the livestock supply at sudden and irregular intervals. The colonization of such regions frequently required more livestock than people.⁸ The *Cabildo* endeavored ceaselessly to regulate the price and distribution of meat in Mexico City.⁹ They also took a proactive role in petitioning the Crown about grievances relating to the meat supply:

Otra cabsa es el agrabio general que se a hecho y haze en quitar las estancias de ganados...y lo que se ynforma para el quitar es malicia y pasiones yntereses particulares agrabiando notablemente a los dueños de ellas de que demas del daño particular en ser ynjustamente desposeydos rresulta general en faltar como falta por se quitar las estancias proueymiento de carnes en la tierra siendo como ha sido bastantemente abastada della.¹⁰

Just as in Mexico, the city of Lima was similarly reliant on pork during its first years, the entire process merely delayed by a decade. In 1536, one year after its founding, one pig a day was being slaughtered in Lima. The valleys of Juaja, Cuzco, and Charcas in Peru, as well as Tunja in Columbia, were also well-known for hog raising. The price at that time was an elevated 675 maravedies, but it fell precipitously to 280 in 1538. No doubt it would have fallen even further, but a number of factors reversed the trend and maintained elevated

prices for pigs for several decades during the sixteenth century. The demands of the burgeoning mining industry in Potosí needed an insatiable amount of sustenance to maintain its labor force. As Garcilaso de la Vega informed us, the mange (*sarna*) epidemic pushed the price of pig up: “Por este tiempo valen a seis y a siete. Y valieran menos si no fuera por la manteca, que la estiman para curar la sarna...”¹¹ Added to that were the intrusions of the civil wars, in which the porcine necessities of Gonzalo Pizarro himself seemed to maintain the high price of hogs. All these factors together nearly tripled the price of pigs in Lima during the 1540s despite a population of more than 14,000 heads ready for slaughter.¹²

The increasing amount of livestock in the cities, especially pigs, caused innumerable problems of hygiene and endless battles with the local authorities. During the first few years, Mexico City’s central plaza was the place used to sell pigs and other livestock for slaughter. In short order the plaza also became the center of excrement and unbearable odors, much to the dismay of the *Cabildo*. Because of this, the council ordered the sale of pigs and sheep moved near the slaughterhouse for cows. This attempt failed and again the pigs were moved to the plaza, but only temporarily, and restricted to specific hours. Eventually, as the city grew and the number of transactions increased selling livestock was moved to the outskirts of the city where they would remain.¹³

Part of the difficulty in regulating hogs in the cities seems to come from their adaptability to urban life. More than any other livestock, citizens accepted pigs as natural members of the household. Pens were constructed and attached to homes, and owners encouraged their pigs to rummage through the city streets in search of food, much to the consternation of the city authorities. Not surprisingly, this caused dire complaints of terrible

odors, contaminated water supplies, filth and excrement along the roads.¹⁴

The Mexico City council responded with tireless and seemingly ineffective decrees prohibiting pigs from the streets and, in many cases, from the entire city itself. Hogs found meandering the avenues could be taken or killed without penalty; nonetheless it appears that no amount of prohibition stopped the practice. As early as 1525 and lasting into the nineteenth century, the *Actas de Cabildo* are littered with such impotent decrees.

Este dia mandaron que se pregone publicamente que todas las personas que tienen puercos en esta Cibdad e en sus terminos los saquen de ella dentro de quinze dias por manera que no anden por la Cibdad so pena del perdimiento del quinto de los dichos puercos...¹⁵

The period between 1525 and 1534, the first years of Mexico City's existence recorded in the *Actas*, were especially insistent, with at least fourteen specific proclamations. Each time this same decree appears again with harsher language and stiffer penalties. Compare this pronouncement just over two years later:

Otrosy los dichos Señores dixeron que por quanto esta ordenado e mandado e pregonado que no anden puercos por esta Cibdad por el mucho daño e ynconviniente que de ello se recrece so cierta pena lo qual no se ha guardo ni complydo...mandaron que ninguna persona sea osado de traer puercos...so pena que sy fueren tomados los dychos puercos...e desde agora los aplican la tercia parte para las obras publicas de esta Cibdad e la otra tercia parte para el que lo denunciare.¹⁶

Either these ordinances were impossible to enforce, or the citizens were simply unwilling to part with their pigs.

It would appear that only in the mid-eighteenth century did massive and enforced penalties begin to dissuade citizens from keeping pigpens in the city center. A similar series of events occurred in Panama, Quito, and Lima. It is fascinating that the *Actas de Cabildo* for Lima repeat this same evolution of decrees, the whole matter simply delayed by one decade. But it was the same story all over Peru, especially in places like Trujillo where the

Indians had also taken up pig raising and allowed the animals to roam freely in the streets.¹⁷ There should be no surprise that these same sorts of tribulations existed in early North American cities as well, places like New Haven and Boston where hog raising brought by English colonials was prevalent.¹⁸

A cada cerdo le llega su San Martín

Although the pig was used as an animal in both the conquering and colonization phase of the Conquest, its importance would eventually diminish as other European livestock adapted to the New World.¹⁹ Perhaps most significant of all was the cow, which although it did not aid in the conquest would, as time progressed, serve the colonists most. Bernabé Cobo wrote that, excepting horses, “se debe á las Vacas el segundo lugar, por cuanto son de no menor utilidad que ellos.”²⁰ This was certainly true in 1652 when the padre penned these lines.

The proliferation of cattle was extensive, although it took some time for such expansion to occur and for generations to adapt. Cattle arrived in Mexico in 1521, but their slaughter was forbidden until their numbers could grow. This pattern was common; cattle use was slow at first, but eventually their numbers outpaced pigs.²¹ Eventually, as the availability of cattle increased, the Spanish came less to rely on pork and more on beef. In Santo Domingo this had occurred by 1520, and in Cuba the turning point probably arrived ten or twenty years later.²² By 1550, the economic and social importance of cattle was superior in the tropics than that of *ganado menor*, including pigs, sheep, and goats.²³

Cows did best on the open grasslands, not just in Mexico but also in places like the pampas of Argentina. These lands were, for the most part, vacant: no competing animals,

no diseases or parasites, and no natural predators. The Indians had not utilized this pastureland because, lacking large domesticated animals, had had no way of converting grasses into something fit for human consumption. Herds grew tenfold in just a few years, reproducing as fast as biology would allow. From the pig's point of view these wide-open spaces were less tolerable because of direct sunlight and heat, although they did do well along riverbanks.²⁴

The main difference between pigs and cows, once enough of each was available to compare, was economic. Cows ate grass, and given the ample unused pastures of the Americas, had a free and abundant food source. Domesticated pigs were fed on maize or manioc and therefore competed with humans for food and water. Cattle were also a source for milk and cheese. Even more significantly, cattle provided hides that could be sold in the Americas and exported to Spain at a high profit, and this feature alone considerably encouraged their numbers. Pigs, along with chickens, would always remain the preferred livestock of poorer people who did not own large pastures of land. It also explains their success in cities, where one or two could be incorporated into the urban dwelling.

The effect of cattle on the Indians in the second half of the sixteenth century, and well into the next was far more disastrous than the complications wrought by pigs. Cattle overran Indian lands, destroyed agricultural plots, and in a very real sense displaced the natives. Where villages might once have been, pastureland for cattle became the norm. This is especially true in Mexico, where Spain's first viceroy, Antonio de Mendoza, abolished cattle ranches in some parts of Oaxaca. He wrote to his successor: "May your Lordship realize that if cattle are allowed the Indians will be destroyed."²⁵ While both he and Luis de Velasco who followed him did pronounce edicts limiting cattle ranching in the

valley, it is evident that by the 1560's such prohibitions were no longer being enforced.²⁶

Sheep were far less destructive than either pigs or cattle, and became the most important Spanish livestock in the higher elevations, along with goats, in part because they could utilize pastureland that was damaged by cattle. Unlike valuable cowhides, however, sheep's wool was not as profitable on the international market; there was still plenty coming from Spain.²⁷

Writing in the year 1652, looking back on 150 years of Spanish influence in the Americas, Bernabé Cobo draws an insightful parallel between sheep and their Spanish masters:

Y ha mostrado la experiencia en este Nuevo Mundo, que toda tierra que no es aparejada para el Ganado ovejuno, es malsana para los españoles, y por el consiguiente está poco poblada déllos.²⁸

They especially thrived in the cooler, drier regions of the Americas, notably in the highlands of Central Mexico and in the Andes of South America. This climate was reminiscent of the Meseta of Spain, and in these areas it should be no surprise that sheep succeeded.²⁹ Pigs proliferated here as well, but usually in areas that had at least some forest or shade. Hogs were kept in sties surrounded by rock walls, of the same type that could be found in Extremadura during that time.³⁰

In summary, each livestock had its advantages and disadvantages, and the Spaniards were shrewd in their proper exploitation of each. Arguably, cattle would prove to be the most important livestock in the Mexico and the Río de la Plata region later in the colonial period, and sheep would find their place in the higher elevations of the mainland, spreading through both American continents. Wherever cattle or sheep could not grow, the pig would retain its supremacy.

Pigs on the Plate

The livestock and plants that the Spaniards sent to the New World were clearly indicative of what they viewed as important and useful in their homeland. Columbus brought a veritable Noah's ark along with him on his second voyage to be replanted in the Americas. Meanwhile back in Spain a number of plants and animals fell into disuse because of their association with the recently-conquered Moslems. Consider the telling fate of cilantro. The green herb, present since antiquity and even mentioned in the Bible, was common in the Oriental dishes of the Moors. Around the time of Columbus it was available in enough supply that it arrived in the New World and today is an integral part of Mexican and other American cuisines. Yet try as one might, it would be difficult to find cilantro in Spain today, despite the fact that it is incredibly popular in neighboring Portugal. This is because cilantro traveled to the Americas at the same time that back in Reconquest Spain the plant's use was fading under the taint of its supposed Moorish roots. Parsley, apparently a very Christian herb, inherited its place in Spanish cuisine.³¹

The pig, on the other hand, succeeded and thrived on both sides of the Atlantic. After all, what could be more (Christian) Spanish and less Moorish than the pig? Hogs garnered praise from Spanish explorers, agriculturists, leaders, and writers. Alonso de Herrera raved:

Hay tantas maneras y cosas y particularidades en los puercos que decir, y tantos adobos, que haberlos de decir sería nunca acabar, ni hay animal ninguno de quien tantas golosinas se puedan hacer....³²

Even Spain's most famous writer, Miguel de Cervantes (1547-1616) writes in *Don Quijote*: "Esta Dulcinea del Toboso, tantas veces en esta historia referida, dicen que tuvo la mejor mano para salar puercos que otra mujer de toda la Mancha."³³ If a woman's desirability was

linked to her abilities to salt pork, surely its place in popular culture was assured.

The pig, along with cheeses and other meats, fused with native ingredients and cooking styles to produce a truly *mestizo* cuisine that is obvious today in countries like Mexico and Peru. Pork and lard are standard ingredients in numerous dishes, although the preparation has been altered and expanded with American ingredients. The Spanish *chorizo*, a smoked sausage typical of Extremadura, attained new levels of spice with the addition of New World *ancho* peppers. Perhaps the first truly *mestizo* dish was the pork taco, served to Cortés during one of his many banquets. The process continues even now, new ingredients incorporated every day, as is plainly evidenced by the small Indian village of San Juan Chamula, whose famous regional dish is pork loin in Pepsi Cola.³⁴

Cooking techniques also combined. While the Spanish learned to smoke meat in *barbacoas*, indigenous groups found new options in using lard to fry. Indian cooking had usually involved boiling or roasting, never frying, and certainly not in animal fat. Even for the Spanish, cooking with lard was more of a necessity than a choice. Although the idea of using pork fat to cook was common to the French, most Spaniards would have much preferred to fry with the olive oil typical of their homeland. But the precious Spanish fruit was not readily available in the Americas, and very quickly both the Spaniards and eventually the natives found lard indispensable.³⁵

Latin Americans today continue to debate what is “authentic” to their cuisine. Regional specialties and local ingredients hold higher esteem than what we in the rest of the world typically think of as “Mexican” food. Renowned chef and restaurateur Alicia Gironella De’Angeli separates her homeland’s food into two distinct categories: one is “the same food we serve at home,” and “[t]he other is the popular Mexican food, the kind with

the grease and cheese and everything fried.” Furthermore, she notes rather pointedly, “We did not have the lard and the grease that most people think of as Mexican in our roots. The Spaniards brought the pigs.”³⁶

Conclusions

Pigs in the History Books

The single fact that the history books all seem to agree upon is that the Spaniards brought the pigs. Often this is the full extent they tell us about the introduction of the Iberian hog into the Americas. Without doubt the Spaniards owed much of their victory to their bravery, their greed, and their Indian allies. Yet as this effort has tried to illustrate, the important place of swine in Spanish culture, as well as the diverse and essential uses of the pig during the first half-century of conquest in the Americas, deserves more than just a footnote.

Some of the first colonizers in the New World, and among the most notable, were not people at all. European livestock— pigs, along with cattle, sheep, dogs, and horses— just as their Iberian masters, perhaps even more voraciously than they, sought to colonize this new land. Without natural predators, and with a raw abundance of available food, the pig in particular thrived and multiplied more rapidly than any other livestock.¹ They were present seemingly wherever the Spaniards went, and propagated so quickly that they settled places the Europeans had yet to reach.

Today the Spanish still praise the utility of pig just as enthusiastically as they did in the days of Ferdinand and Isabella. In the introduction to a recent book entitled *Elogio y reivindicación del cerdo*, Gallego López remarks: “Que un animal doméstico tan aprovechado y aprovechable sea protagonista de un libro, no debe extrañar en esta tierra, donde el cerdo forma parte del paisaje, del sabor y del olor.”² Says Ana Castañer: “En el cerdo todo es bueno, todo es útil y todo es agradable, y como si su cuerpo no proporcionase bastantes beneficios a la humanidad, el instinto del animal le hace descubrir

la trufa....”³ Every part of the pig is consumed or used in this land, evidenced in the popular Spanish saying, *del cerdo hasta los andares*. Pork is integral to the gastronomy of Spain, as well as many parts of Latin America. More than five hundred years past 1492, the future of the pig in Spain appears assured.

The same is not so in the Americas. Most historians here do not talk about these pigs. We know this is true even while they pontificate about cows, dogs, and their favorite animal, the horse. But as Spanish historian Carlos Pereyra has argued, “Pero si el caballo significó mucho en la conquista, el cerdo fué de mayor importancia, y contribuyó en un grado del que no podrá hacerse ponderación excesiva.”⁴ Of course historians cannot be admonished too severely because, as we have seen, contemporary New World chroniclers in the fifteenth and sixteenth centuries were not always talking about pigs either. These explorers focused on the new and unique features of the lands they were conquering; probably it did not even occur to them to mention the rather typical droves of hogs bringing up the rear of an expedition. Indeed, although perhaps thousands of pigs followed Francisco Pizarro into Peru during his conquest of the Incas, there is only one tangential reference to pigs in the first-hand accounts of the journey.⁵

When the pig is mentioned, it is certainly nothing special or out of the ordinary for the Spaniards. Taking the pig for granted contrasts most notably with the chroniclers’ account of horses, of which there were far fewer, but receive the bulk of their attention. How can we explain that even these contemporary eyewitnesses for the most part seem to have passed over the pig? Perhaps the things we use most in our daily lives are so common, so everyday, that there is little use discussing or recording their effect upon us. Imagine if you were to write a diary today: Would it not be silly and pointless to mention each day

that what you breathe is air, that you walk along a cement sidewalk and not in the middle of the road, and that the food you eat comes from a large supermarket located two miles from home? While it is clear that the Spanish explorers relied heavily on their pigs in the first stage of the conquest, perhaps it was a fact so obvious that it would not have occurred to them to emphasize it. Pigs, of course, did not take part in battles as the horses did.⁶

Nonetheless, for roughly fifty years the Iberian hog provided the Spaniards with an invaluable means of conquest. Although the brave horses that carried the Spanish richly deserve the credit lauded on them for aiding in battle, the pig has been forgotten in large part because it contributed to the less glamorous battle against hunger; while its utility is less obvious, it was no less essential. Hogs were the only animals available in the New World at the time that could breed fast enough to supply the Spanish expeditions with salt pork for the voyages. Moreover, no other animal could then be herded along the rigorous journeys, finding its own food, and still reproduce at a pace that might provide a mobile meat supply. A battle in which the horses took part might be won or lost in a matter of hours, but the long-term goal of survival for any expedition relied more heavily on supplies of meat and nutrition afforded by the pigs. After all, a famished soldier is hardly more useful than a dead one.

We understand that under such circumstances the pig has until now been relegated to an unwarranted level of historical insignificance in the Americas. Of course it is not the argument here that the conquest was literally accomplished by valiant hogs that brought up the rear of the Spanish expeditions. However, I am hoping to challenge the assumption that the conquistador was merely a soldier-figure, greedy, and impelled by God. He was more importantly an entrepreneur and an agriculturist who relied on good planning and

steady, efficient supplies as much as he did on his sword. After all, more Spaniards in the sixteenth century made their money in trade, especially in agriculture and livestock, than by plundering cities of gold and silver. It would have been far more difficult, if not impossible, for the continual offensives by the Spanish armies without the backing of a mobile, prolific, and rugged supply train following them through the Americas.⁷

The pig's moment in the sun was a brief one. From 1493 when Columbus brought the first eight pigs until the mid-sixteenth century, the pig was an invaluable tool for Spanish explorers and early colonizers. When the number of cows in the Antilles or later in Mexico City grew to sufficient numbers, the importance of pigs declined. Cows seem to have been more useful to the colonists in the settled areas because, besides meat, they provided a host of other products like milk, tallow, and extremely profitable hides. Cattle were also more suited than hogs to the grassy plains of central Mexico and the pampas of Argentina, and successfully converted grass—inedible for human consumption—into delicious steaks. Sheep and goats, too, found their place in the cooler climates of the highlands, providing not only meat but wool and dairy products. Eventually the pigs receded into the shade of history.⁸

To this day pigs have not received the same level of acceptance as other Old World livestock like cows, sheep, and chickens. Though by and large still raised and highly-valued, they are compelled to share their place with the other European livestock, animals which had taken a bit more time to get adjusted to the Americas, but suited the new colonial economy well. Even so, the pig is still not as well liked in the Americas as it is in its Iberian homeland. Considered a disagreeable animal by many, unclean by others, there are laws to ban its presence in cities. In Spain, pork is a staple in many people's diets, and certain pig

products are a delicacy. In the United States, on the other hand, despite consistently ranking as one of the top three pork exporters in the world, domestic per capita pork consumption is not even in the top ten.⁹ Making a profit from pigs clearly does not guarantee its local acceptance.

Where do hogs belong in the history books? I believe the pig should rightly be seen as one of the first of many colonizers to arrive from Spain. Its prolific growth and expansion into the American territories, its acceptance and rejection by the natives, its utility to the Spaniards: all these aspects have invaluable lessons for understanding the history of the Americas since the time of Columbus. The study of swine helps us to understand the culture that traveled to the New World, and the subsequent mixing of traditions that produced Latin America as we know it today. The pig, more fervently even than its Spanish master, implanted itself into the American landscape. As historian Francisco Morales Padrón stated quite poetically, the pigs “ponían su nota puerca, gruñona, roja, negra y blanca en el solar indiano que le ofreció el gustoso maíz.”¹⁰ But that *nota puerca* is a subtle one, a gesture that has been overlooked for too long.

Alfred W. Crosby asked, “It is possible to imagine the conquistador without his pig, but who can imagine him without his horse?”¹¹ It is my hope that after reading this study, Crosby’s remark will ring false, and it will be impossible to imagine a sixteenth-century Spanish exploration without a drove of pigs following behind. Without extolling the virtues of this animal too much, I believe we should acknowledge the pig’s place in the history of the Americas. And while the figure of the “conquistador cerdo” may have been overshadowed in history, perhaps in the future it can remind us that the things most commonplace in life, though sometimes going unnoticed, are significant to understanding

how we arrived where we are today.

Endnotes and Bibliography

Introduction

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² Alfred W. Crosby, Jr., *Ecological Imperialism*, 2 ed. (Cambridge: Cambridge University Press, 2004), p. 173.

³ The Americas were not completely bereft of large domesticated animals of course. Notable exceptions are the llama and the alpaca, camelids of the Andes mountains in South America, as well as a small species of dog that did not bark, the guinea pig, and fowl, including the muscovy duck and the large turkeys of North America. The bison in the American plains was similar in many respects to the cow, but it was never domesticated on any wide scale.

⁴ Alfred W. Crosby, Jr., *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport: Greenwood, 1972), p. 77.

⁵ The two most notable scholars who have devoted monographs to the pig include David E. Vassberg and Justo L. del Río Moreno. An exceptional volume about many of the Spanish animals brought to the Americas, including extensive information about the pig, can also be found in Eduardo Laguna Sanz's *El ganado español*. Surprisingly, a children's book about the pigs' arrival in the Americas was written by Laura Fischetto. See bibliography.

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⁷ Deb Bennett and Robert S. Hoffmann, "Ranching in the New World," in *Seeds of Change*, ed. Herman J. Viola and Carolyn Margolis (Washington: Smithsonian Institution Press, 1991), p. 102.

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¹¹ Torres, and others, p. 164.

¹² Gázquez Ortiz, *Porcus*, p. 27-8; Antonio Gázquez Ortiz, *El jamón en la gastronomía española*, 1 Feb 2004 <<http://www.afuegolento.com/noticias/73/firmas/agazquez/2856/>>.

¹³ Freijeiro, p.106-7.

¹⁴ The devout hermit was born in Egypt in 251 C.E. and lived to the saintly age of 105 years. He spent his early adulthood successfully resisting the temptations of Satan, and it is this period of his life that is most abundantly illustrated in the drawings and sculptures of Christian Europe. More often than not San Antón appears with a faithful pig at his side. The reason for this connection is unclear. Some believe that Satan appeared to him as a pig, but this association does not explain the positive connotation that can be derived from the depictions. The following explanation is perhaps more reasonable:

“Skin diseases were sometimes treated with applications of pork fat, which reduced inflammation and itching. As Anthony’s intervention aided in the same conditions, he was shown in art accompanied by a pig. People who saw the art work, but did not have it explained, thought there was a direct connection between Anthony and pigs – and people who worked with swine took him as their patron.”

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¹⁵ Castañer and Fuertes, p. 33.

¹⁶ Julio Caro Baroja, *Los Pueblos de España* (Madrid: Ediciones ISTMO, 1976), vol. 2, p. 125.

¹⁷ Eladio Rodríguez González, *Diccionario Enciclopédico Gallego-Castellano* (Vigo: Editorial Galaxia, 1961), vol. 3, p. 170; George M. Foster, *Culture and Conquest* (New York: Wenner-Gren Foundation, 1960), p. 75; Freijeiro, p. 115.

¹⁸ As far as any direct connection between San Martín and the pig, during the saint’s lifetime there do not appear to have been any outstanding incidents. Perhaps simply his saint’s day corresponded coincidentally with the proper time of year for the slaughter of pigs. Traditionally this needs to be done in the winter months to aid in the preservation of the meat as *jamón* and *chorizos*.

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- ⁴³ Rodero and others, p. 391. He is referring to Pérez de Oliva’s claim that animals “se engrandecen y entorpecen cuanto más tarde nacen allá...” Fernán Pérez de Oliva, *Historia de la invención de las Yndias*, 11 Dec 2003 <<http://www.cervantesvirtual.com/servlet/SirveObras/56813959762366117484457/index.htm>>. Crosby in “*Metamorphosis*” claims that modern archaeology confirms this observation (p. 80). However, Daniel W. Gade claims that the Iberian pig in the Andes is actually smaller than its Spanish counterpart, the latter traditionally mated to wild boars; Gade, p. 38.
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- ⁴⁶ Tejera Gaspar, p. 119-120.
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- ⁵² Casas, book I, chap. LXXXIII, p. 366.
- ⁵³ This discussion obviously leaves out Spain’s overall most beloved domesticated animal, the horse. Comparing pigs to horses is a case of apples and oranges, and is not the goal here. Rather the attempt is to contrast pigs with other Castilian livestock used primarily for food.
- ⁵⁴ Río Moreno and López y Sebastián, p. 18.
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- ⁵⁶ Cobo, book X, chap. VI, vol. 2, p. 365.

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- ⁵⁷ José Tudela de la Orden, *Historia de la ganadería Hispanoamericana* (Madrid: Ediciones de Cultura Hispánica, 1993), p. 138; Tejera Gaspar, p. 115-6.
- ⁵⁸ Cobo, book X, chap. VI, vol. 2, p. 365.
- ⁵⁹ David E. Vassberg, "The Spanish Pig in the Discovery and Conquest of the New World," speech to SSPHS conference (Madrid, July 2003).
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- ⁶¹ Crosby, *Columbian Exchange*, p. 75.
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- ⁶⁴ Rodero and others, p. 391.
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- ⁶⁷ Río Moreno, and López y Sebastián, p. 28, 31-2.
- ⁶⁸ Gade, p. 40.
- ⁶⁹ For an interesting discussion of maize and pigs then and now see Patiño, p. 310 and Laguna Sanz, p. 199.
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- ⁸⁵ Herrera, vol. 3, p. 525.
- ⁸⁶ Cobo, book X, chap. V, vol. 2, p. 365.
- ⁸⁷ Cey, p. 29.
- ⁸⁸ Vega, *Comentarios*, book VIII, p. 530-1; book IX, chap. XIX, p. 605.
- ⁸⁹ Patiño, p. 315.
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- ¹¹ Colección de libros y documentos referentes a la historia de América (Madrid, 1904-1929), vol. 6, p. 368.
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²⁵ López de Gómara, *Historia general*, chap. CXLIII, internet.

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²⁸ Vega, *La Florida*, book III, chap. II, p. 144. Note that Vega lists the number of pigs at 300, but scholars agree based on other accounts that the number brought to Florida was 13. By this point in the journey, however, the herd had already grown to 300 heads. This is corroborated by the Elvas account.

²⁹ Paul E. Hoffman, “The De Soto Expedition, a Cultural Crossroads,” in *The De Soto Chronicles, Vol. 1*, ed. Lawrence A. Clayton, and others (Tuscaloosa: University of Alabama Press, 1993), p. 7.

³⁰ Vassberg, speech.

³¹ Vega, *La Florida*, book III, chap. II, p. 144.

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³³ Besides the others listed here, see also Vega, *La Florida*, book VI, chap. VI, p. 316 and book V, part 2, chap. XVI, p. 307.

³⁴ Vega, *La Florida*, book III, chap. II, p. 144.

³⁵ Vega, *La Florida*, book III, chap. XXXVII, 220.

³⁶ Vega, *La Florida*, book III, chap. II, p. 144.

³⁷ Parsons, p. 228; Vassberg, speech; Laguna Sanz, p. 194.

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⁴ Vargas and Castillas, p. 56.

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- ⁴ Pereyra, p. 121.
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