Chapter 14 The Spanish Occupation of the Central Lowlands of South America: Santa Cruz de la Sierra la Vieja

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14.1 Introduction

In the center of South America, a large-scale urban project was accomplished from scratch: the founding of Santa Cruz de la Sierra on February 26th, 1561. The documented motivation showed the benefits of such an environment for a settlement; benefits, which 40 years later, were gone back on, to fundament its compulsive desertion. Wrapped in the vicissitudes of European colonial policies on American territory, men and women (many of them coming from Asunción in the early years) who had founded the city of Santa Cruz de la Sierra in 1561 were forced to leave by the vice regal authorities between 1601 and 1604 (Còmbes and Peña 2013; Finot 1939).

During the interactions between Spaniards and natives, a change was registered, moving from conquest (promoted from Asunción as "advanced" and set in a context of good relations with local ethnic groups) to colonization; Santa Cruz de la Sierra became an "enclave" when the base in Asunción had to be moved because of the policy of permanent belligerence from the Charcas (Martínez 2013): "From an outpost into the rich land, it would become a frontier post, a defensive enclave against the Chiriguanos and a source of laborers for the haciendas and mines in the sierras" (Martínez 2013, p. 66). We understand that this meant that the city became a pivotal place among local ethnic groups "…on the border with two chiriguanaes provinces…," between the Andes and El Pantanal (Suarez de Figueroa 1586 in Còmbes 2013, p. 22).

These characteristics allow to inquire into the population organization experimented on different scales by the foundation of the town in the very heart of the South American continent. In the heart of and so far from everything... there lie the very reasons for settling and abandoning the place; constant dialectics of

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colonization by means of cities that were populated and subsisted or were abandoned and/or relocated (Musset 2011; Hoberman and Socolow 1993).

By means of the archaeological excavations carried out with in our project, called Santa Cruz de la Sierra la Vieja" (from now on SCLV) in 2004–2007, we wanted to find the exact location of the city and typify the construction process taking into account its environment and its own structure. To that effect, we performed extensive and intensive prospection and excavations (E), both trial-excavations (E3, E4, E5, E6) and open-area ones (E1 and E2). The registered constructive contexts and the materials analyzed in general enabled to fundament that the foundation and growth of the city took place in that area and it also enabled us to advance some of its characteristics.

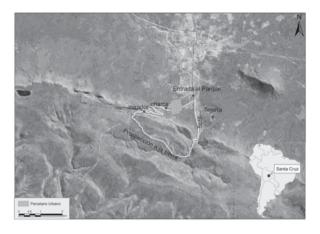
14.2 Santa Cruz de la Sierra in the History of the Spanish Conquest of South America

A strong heart in a weak body. In the sixteenth century the Spanish crown was stretching its domains beyond its breath. The anxiety of the body made the blood simmer. The enterprising personalities dared roam the unknown land in search of the promised riches that were both real and magnificent. More than 200 cities that were founded between Zacatecas and Buenos Aires in less than 100 years are a clear evidence of this dynamic (Fowler 2011; Romero Romero 1989). The stories of the "Amazonauts" reflect the anxiety, the vice regal consolidations, the need to quench that thirst, or at least to placate it with politics (Morales Padrón 1963).

The process of foundations in the area of the Rio de la Plata, in which the settling and later abandonment of Santa Cruz de la Sierra la Vieja (SCLA) between 1561 and 1604 is inscribed (Finot 1939), is based in this dialectic of anxieties and respites, ideals, and ideology. The rush of a tireless captain (Ñuflo or Nufrio de Chávez) and a group of men and women that had settled in Asunción (1537) and who firmly believed in their aspirations were the necessary ingredients to fulfill the aim to conquer, settle and, above all, after the failed attempts of the "great entry" of Martínez de Irala (1548), colonize.

This colonization is the answer to a stage that begins with Irala's death and the death of a generation of discoverers (1556). A second stage, this time of colonizers, with its indomitable strength, gave birth to a city that was powerful from its very foundation: Santa Cruz de la Sierra (1561). So far, that was what the Spanish new-comers desired. But their declared need to settle and conquer had a counterpart: one presented by those that were covered more than discovered (Dussel 1994). It has been clearly stated in other works that the lands that fell under the jurisdiction of SCLV were not empty (Combes 2013). A wide spectrum of ethnic groups, prominent for its variety, inhabited them and more important still, resisted them (Balza Alarcón 2001; Combes 2013; Métraux 1942; Susnik 1978). Thus, to speak of SCLV as an urban triumph on uninhabited lands seems a neocolonial excess, deeply involved in the construction of the present local identity, which is built on the systematic denial of any link with any Andean culture and which holds a vision of white, European supremacy, registered since the foundation and later migrations of an archaeological

Fig. 14.1 Location of Santa Cruz de la Sierra La Vieja (SCLV)



city constantly called upon to give meaning to the identity of Santa Cruz (see Pro-Santa Cruz Committee Management Plan as an example—Gandarilla 2004).

SCLV (located in the center-east sector of the present republic of Bolivia—17°52′6.54″ S—60°44″52.6″ W) lay on the side of the Serranía del Riquió and obtained its supply of water from the Arroyo Sutó (Fig. 14.1). In this way it secured its chances of success as a city amid the strong opposition from local peoples who, despite their massive incorporation as colonial forced laborers, in "encomiendas" or even as slaves, soon were able to repel the invasion. In fact, the nomadic nature of the city of SCLV was the result of two different kinds of pressure: one coming from the outside, in the shape of excessive ambition and its counterpart from the inside, a necessary resistance. The city was moved up to its actual site on the margins of the Rio Piraí. Thus, Santa Cruz became one of the nomad cities listed by Musset (2011). This fact generated a high-resolution archaeological record at the place of its first settlement.

14.3 Setting

The site is placed in the heart of South America, in the transition areas between Amazonía, and Chiquitano Monte and Dry Forest. The climate ranges from subhumid to dry, with temperatures of 24 °C and a mean annual rainfall of 910 mm. The rainfall pattern is strongly seasonal with a wet period between November and March (155 mm) and a dry period between April and July (12 mm). The site lies within the Amazon basin and its main watercourse, the Arroyo Sutó (3 km from the site), has a low flow of water during the dry season. In the area, the Laguna Lateí is an excellent resource typical of the wetlands where more than 100 species can be found ranging from tall trees to grasses. Trees are centennial and signs of decay can be found such as dead trees both standing and fallen. Approximately some 70 species of animals have been recorded only in this area; mostly birds, rodentia, and in lesser numbers cervidae, felidae, canidae, dasypodidae, and myrmecophagoidea. Soils correspond to the Chaco-Beniana plains and 90% are classified as unsuitable for agriculture (Muñoz Reyes 1980; Suárez Núñez del Prado et al. 2004).

14.4 Background

The area of Chiquitanía where SCLV was thought to lie was suggested by Cortés (1974) after making some field observations and stratigraphic crosssections in certain mounds. However, the author took it for granted that the coal and tiles found corresponded to what Enrique Finot had previously surveyed in documents (1939). Twenty years later, Sanzetenea (Sanzetenea and Tonelli 2003) carried out field survevs to support the creation of the National Historical Park of SCLV. In his excavations, he found evidence of what could be an urban structure but his manuscript does not detail or substantiate his conclusions. It only describes the materials and impressions that lead him to conclude that the archaeological remains corresponded to that of a city (although, as a whole, he attributes the diagnostic elements, ceramics, to native American typologies; Chiavazza 2013, p. 115). Until then and 30 years later, when we began our work in 2004, it was imperative to find empirical bases that showed that the records mentioned by these two authors in a brief note and a manuscript belonged to an urban site and that this site was, effectively, that of the Spanish foundation of SCLA in 1561. This was achieved after 3 years of work (Chiavazza and Prieto Olavarría 2006, 2007). On this basis, after our work was finished, local and Spanish archaeologists continued excavating and they even resumed the study of the objects that we rescued, recorded, and left in warehouses at the National Park. Their reports (Delfor Ulloa 2007 in Callisalla Medina 2012) confirm our hypothesis and theoretical and methodological framework after extending the excavations and increasing the collection of objects we obtained, even though they do not include the corresponding references in the background and they only mention "vessels discovered by Argentineans in 2004 and 2006" (Callisalla Medina 2012, p. 7) in the epigraph of an image.

14.5 Approach and Aims of the Urban Archaeological Work in SCLV

Historical inquiry in cities makes us face and resolve aspects directly related with social and political life. The material dimensions express the degree of conflict resolution produced in a medium that accelerated the contradictions, thus generating an urban culture. This is particularly relevant in cases when, as in Santa Cruz, urban phenomenon was imposed as a mechanism of domination (there were no cities prior to this foundation). Thus, from the analysis of the archaeological contexts, the situation aims at considering the turning point that the foundation of a settlement

with evident colonial intentions meant to in the history of the Spanish conquest of South America. Nevertheless, from a strategic geopolitical continental scale, it did not reach fruition because of those same dynamic processes of Spanish imperialism; also taking into account local resistance that eventually caused the abandonment and move of the city. This means that, in context, the abandonment represented a triumph for the native peoples over the colonial project, with a noteworthy precedent in the failed campaign against the Chiriguanos, in which Viceroy Toledo himself was repelled (1574). However, the price the natives paid for their victory was the consolidation of another urban settlement elsewhere and the strengthening of a colonial policy that continued during the stages of independence and republic and which eventually took its toll on the indigenous peoples.

We not only decided to excavate a colonial city but to delve into a failed process of colonial conquest and the success of indigenous resistance in an environmental context where the ruins of an ephemeral city represent the acceptance of colonial defeat.

In this way, we would focus on historical archaeological practices in the modern sense but under the category of historical criticism, for the inclusion of America to this dimension would, as we understand it, fall within the logical analytical results of a universal history (global), while actually it becomes a precedent in the theoretical construction of a domineering West, even from the proposed neocolonial discourse (see Dussel 1994 for considerations from a contextual history).

The founding foundation of cities is part of "the birth of Modern Age conceived in European Medieval cities..." when Europe could face "the Other" and control it, defeat it, violate it; when it could define itself as an "ego" that discovers, conquers, colonizes the very Otherness of Modern Age (Dussel 1994, p. 8). Thus, by means of the foundation of new cities, Europe realized the colonization of South America. It would then be in the sixteenth century when Europe would achieve the status of global center (in the territory) and inaugurate Modern Age (in time).

The inquiry into SCLV from this theoretical viewpoint was centered in the analysis of all edited documents and bodies of historical works, and above all, of works on prospective and archaeological excavation on the site. These works aimed, in the first place, at detecting and limiting the site according to different scales, then at establishing the overall characteristics of the urban structure (streets and blocks), and finally, excavating sectors that, in theory, served to different purposes within the set, such as temples, yards, and rooms (Chiavazza 2010; Chiavazza and Prieto Olavarría 2006, 2007).

14.6 Scales of Analysis: Prospection and Excavations in SCLV

The work was organized round three spatial scales of work: territorial, urban, and structural units. The first one allows to consider the environment in which the city was inserted; the second one supposes the analysis of the shape of the city; and the

third one dwells with domestic life within an urban context. In the first case, the landscape is dominated by a serranía (range of mountains), in sharp contrast with the plains that spread out from there, which enables us to understand the city as an enclave that, from the geopolitical point of view, had to be supported, and from there guarantee the control of resources such as water. The urban scale shows a rather irregular layout (in analysis) due to its position at the foot of the mountains and it is dominated by a nucleus formed by the "plaza" and the two churches of the city. The third scale allows to understand how the inhabitants of the city respond to differentiated identities. The cultural material abandoned shows elements (made by indigenous people or settlers) used and discarded in a multidimensional urban lifestyle.

Prospecting the land involved covering the ground and tracing our steps by means of GPS, following the paths. Vegetation and escarpments make it impossible to think of different paths. The urban layout was also traced by means of GPS, placing the given relation between mounds and depressions, probing by means of a bore, at regular intervals along transects and articulating the results with a topographical map of the set of blocks around the area known as "plaza." In this area six excavations were made.

14.7 Results

The general result showed a unique and widespread settlement with materials that corresponded with those used during the sixteenth century. This enabled us to confirm that there had been a colonial settlement from the sixteenth century in the site. It could be determined that it corresponded with that of the city of SCLV (an aspect that so far had not been possible to establish due to the lack of documentation). The characteristics of the settlement, the type of constructions, the distinctive layout, and the materials found allowed to support the correspondence of the site with the historic foundation. A radiocarbon dating gave 445 ± 38 years BP (URU0424) consistent with the only fragment of majolica (green) registered in the site (Chiavazza and Prieto Olavarría 2006, p. 53).

14.7.1 Walking the Land

Prospections showed that the chosen site fulfilled a strategic role in many ways. In the first place, the visual reference of the Riquió is important when considering its presence and relevance in a flat landscape. The city was founded at its foot, with the logical connotations in terms of a homogeneous, mountainous, and unknown landscape, difficult to "dominate" but that in this way it was controlled from its main height (Fig. 14.2). Thus, in the second place, we can see the importance that colonial tactics gave to strategy; the representation is put into practice when exercising domination.



Fig. 14.2 Panoramic view from the viewpoints of Mount Riquió, to the south of the city. *Below* lies SCLV and to the *right* Mount Turubó

This high viewpoint that allows to keep greater visual control of the green plains is reached by accessible paths, and areas of wide visual control can be accessed quite fast. This fact is not only an advantage from the symbolical point of view but from the material one as well. In the strategy for subsistence, positioning the city at the headwaters of the Sutó creek guaranteed, in the third place, the satisfaction of the need for water in an environment with clear seasonal contrasts as regards its availability. Water abounds and is scarce at alternate times. The city is far enough from floods and near enough to satisfy the needs of its inhabitants.

...the city gets its water from a creek that flows from some rocks, that exudes from them; it is about a wrist deep. In the wet season this creek flows into some lagoons four leagues away, more or less, and from these lagoons come so much fish (four species) that it can feed all of the inhabitants abundantly.... (Pérez de Zurita in Finot 1939, p. 184)

But even so, it is also documented that the creek did not provide enough water for the whole population and therefore holes in the ground were also made, which stored the water and we realized that they were used as an alternative source in the city (Fig. 14.3).

... the locals ... drink from hand-made troughs so that (rainwater) collects there and life goes on; and sometimes water is scarce and they kill each other for it..... (Pérez de Zurita circa 1586 in Finot 1939, p. 185)

Thus, from the colonial point of view, the city lies at a significant place, with a strategic view and can satisfy the needs in order to subsist. In many ways it resembles the model elaborated by Bernardo de Vargas Machuca in 1599 to establish cities in America almost 40 years later (Morse 2002, p. 280).

So far, SCLV looked like a colonial success on a local scale. However, in a world plagued with uncertainties, indigenous resistance and geopolitical requirements would attempt something against these virtues. Without a clear support for local strategies, these strengths eventually weakened the city. This took place when the city experienced isolation due to a different organizational scheme of the colonial



Fig. 14.3 General view of a waterhole that can still be found on the second block to the east of the plaza and which stores rainwater

lands within the Viceroyalty of Perú on a macro scale. The once valued labor force, now depleted due to excesses (Combes 2013), became the armed force of a native resistance that would be impossible to dominate.

14.8 Archaeology of the City SCLV

The layout of the city is relatively regular, with perpendicular streets which form blocks. Very likely, the postdepositional processes, the growth of vegetation, the random construction of entrances, new agricultural fields, etc., distorted the original layout. However, there is an underlying irregularity in the layout and a not entirely orthodox planning. Because of its position so close to the mountains, the central axis, even if centered on the plaza, is tilted to one side because of the presence of the mountain side, close to which the city was built, giving protection and easy access to viewpoints wherefrom control the whole territory (Fig. 14.4). However, just opposite the "plaza" two mounds stand out; they are the remains of the Mercedarian and Jesuit temples the city had, keeping a structure consistent with the religious significance colonization had. López de Gomara said "…He who does not colonize, does not completely conquer, and if the land is not conquered, its inhabitants will not be converted…" (in Morse 2002, p. 283).

14.8.1 Structures and Urban Equipment

14.8.1.1 Plaza and Streets

An open space of ca. 10,000 m², clearly differentiated, corresponds to the "plaza" that presented an area of bricked floor. An intrasite prospection was performed with

Fig. 14.4 Map of the city and the land around it



a bore with a diameter of 10 cm at 10 m intervals along two perpendicular transects, each 400 m long. This enabled us to check an occupation layer between 80 and 100 cm deep in the mounds and check the interfaces between streets, buildings (debris), and floors. It is interesting to point out the existence of a layer of gravel at a depth of 40–50 cm that we have taken for the transition between streets and buildings in low sectors. This feature was found in the grids from the southern end in excavation 1 (at the most prominent mound which we believe is the Jesuit temple). Materials are very scarce in the depressions between the mounds (= streets) and increased at the mounds (= eroded buildings; Fig. 14.5)

These studies gave some degree of certainty to the preliminary description of the urban layout that has enabled to hypothesize a vectorial plotting not wholly regular of the urban layout (*sensu* Nicolini 2005). Besides, in stratigraphical terms, a difference in ground level between streets and buildings was detected, allowing to pose that in certain parts of the city, the buildings were mounted on previously built platforms (terraces) made of earth to raise the floor level and this feature can be related to the floods during the rainy seasons. However, not all buildings present this feature.

14.8.1.2 Temples

From documentary descriptions we know that there were two religious orders in the city following the presence of priests in a temporary church whose location has not been documented: the Mercedarios (ca. 1571) and the Jesuits (ca. 1587–1599) (Tomichá Chapurá 2013).

Based on the hypothesis that they were temples, we excavated two mounds, one to the north and the other to the west of the "plaza." It all seems to suggest that they were remarkable buildings that demanded a remarkable constructive inversion. We established excavation 1 (E1) on the northern mound. There, we observed the evident collapse of a roof and a tapia wall that could have supported it. This structure was at some distance behind the hypothetical façade line. A striking aspect of this



Fig. 14.5 Topography and location of the excavations in the area of the "plaza" and nearby blocks

mound is that it develops from east to west and that toward the inside there is a hollow (probably resulting from processes of deflation or even plunder). Notwithstanding, the slopes are gentle and there were no stratigraphical variations that showed a process other than the burning down of the wooden structure (below the level of tiles and in contact with the tapia wall) and the collapse of the roof (above the level of burnt wood and the tapia wall).

For preservation purposes, this excavation did not go beyond the level of the tiles which was left uncovered and the excavation reached deeper levels just in places where its continuity was not observed (Fig. 14.6).

Working upon the hypothesis that it was a temple and based on the mound orientation, we carried out a trial excavation in the middle of the hollow, making it coincide with an inner and central sector of what could be the church. The aim was to detect floors (tamped down and/or tiled) and funerary evidence. In this way, we might establish on the one hand the level of the church floor, and on the other, its orientation according to the burials that were found (E4). The results were satisfactory. A human burial was detected which was positioned from west to east (head to feet) which we believe would confirm that: (1) The place corresponded to a church. (2) The positioning (façade–altar) would go from east to west, that is, side by side with respect to the "plaza" (as it has been documented in other colonial cities, Nicolini 2005). (3) The person buried there would be a priest (because of its positioning with the head towards the altar). (4) The level of the floor of this building was about 1 m

Fig. 14.6 Tile level as a result of the collapse of the roof of the temple that we estimate belonged to the Jesuit order



above the level of the street and "plaza." This supposes a cambering (highlighting) of the building in the urban context and, at the same time, the use of mounds as foundations in construction. In view of these results, it can be interpreted that there was an attempt to highlight the building within the urban context and guarantee its integrity and functionality in the event of potential flooding.

To the west of the "plaza," we worked in order to understand the presence of a set of rocky blocks that could be observed lined up on the intermediate and upper sectors of a mound of middle height. However, this mound stands out for its position on higher land than the "plaza." We made four excavations which enabled us to establish the existence of another significant building although no traces of a roof could be observed. The meaningful aspect was the laying foundations with rocks put together with mud (Fig. 14.7). The basis of the foundation was above the level of what was considered to be the street.

This corroborated the use of mounds to build upon. Furthermore, to the northern sector, in the vicinity of the foundation, a hole was excavated on what could tentatively be labeled as a dumping ground (E5.3). There was a great variety of artifacts and fragments of ceramics in a carbonaceous matrix together with extremely degraded bones. In this case, some of the objects found cast some doubt about the place being a dumping ground. We have seen this kind of pits associated to foundations of temples (as in the Jesuit church in Mendoza; Chiavazza 2005) where objects appear suggesting a hypothetical meaningful aggregation. The excavated



Fig. 14.7 Foundations of the church attributed to the Mercedarios (to the west of the "plaza")

sector was named E5.3 and here the greatest variety of objects can be registered, together with a large amount of pottery and coal. Pellets, buttons, flint-stone, remains of a padlock and even a presumed "sucking stone" (pacifier) make us presume that in this place not only trash was dumped. This presumption is based on the fact that the so-called dumping ground was situated near the foundations of a temple, not toward the street but toward the inside of the possible cloister. There is also the possibility that those objects correspond to trash that was dumped during a period of time prior to the construction of the church that, we think, belonged to the Mercedarios Order. So these objects could have been dumped between 1561 and 1571 (before the Mercedarios were established). It is of significance to have found among the discarded objects some related to defense: pellets and flint stone, which were not easily available and more so, in such a conflictive context as Santa Cruz, they could have been highly valued. These pits could have been offering sites of a foundational nature in certain buildings, such as churches. Anyway, for the time being this is mere speculation.

14.8.1.3 Houses and Yards

According to some documentary data (Julien 2008), the early city had "... straw houses and staked fences and there was no other shelter...," there were no "...tapia walls nor tapia-fenced pens, they were made with sticks...." But 30 years after its foundation, toward 1590, houses were built after a pattern detected in other contemporary South American cities, e.g., Santa Fe (Calvo 2011).

Chambers and bedrooms were connected with the street through yards:

...did not dare sleep in his/her bedroom that was in front of that chamber, but he/she went out to a room closing the door that led to his/her bedroom, and this room had a door that led to the yard that in turn, led to the street and another opposite it that led to a kitchen garden and on the other side there was another room that served as a pantry.... (Combès and Peña 2013, p. 262, underlined by us)



Fig. 14.8 Excavation 2 with the remains of the collapse of a room with partition walls

They were even connected to areas destined to productive activities associated to the houses:

...It was taken out to a small pen away from the main house.... (Combès and Peña 2013, p. 262)

Although it is clear that constructions in general had no tile-roofs or bricks in most parts:

... bricks and tiles that many people from the city, attracted by the news, watched come out, that were thrown from that chamber, from an elevated corner where, they say, saw two shadows, not having in the house nor even in many neighboring houses brick or tile, using palm leaves, emptied, as tiles.... (Combès and Peña 2013, p. 263, underlined by us)

To the northwest of the "plaza," in the heart of a block, we proceeded to excavate an area that we estimated was open but within the domestic realm (E3). This possible yard did not show any traces of floor conditioning and the recovered materials were extremely scarce. The excavation did not allow to distinguish features connected to concrete uses or activities nor closures or specific separate places.

Excavation 2 (E2) contributed with significant data regarding the material characteristics of domestic life (Fig. 14.8). It was made in a room located in the inner sector of a house situated to the east of the "plaza." It would comply with the room pattern already documented.

This room had partition walls and charred remains and imprints of motacú palm trees (whose leaves were traditionally used to roof houses) were found. The wood imprints were attached to the charred clay plaster that lined the houses.

In terms of construction, because of the start of a sustained war against native Chiriguanos, fortifications were needed. Thus, when Ñuflo de Chaves returned from Charcas in 1566, "he found this city strong and protected, surrounded by tapia walls and two walls high, houses and yards all built and a lot of food on the ground..." (Service reports from Hernando de Salazar 2008 [1568], p. 176. In Martínez 2013, p. 63). The finding of fragments of coat of mail, pellets, and flint stone supports the evidence of the use of violence to maintain the colonial settlement in South

America. However, except for the area adjoining the rocky wall of the mountain bordering the city, we could not find other evidence of this kind of construction.

To sum things up we can mention that there were buildings on earth mounds, on top of which important buildings such as churches were founded. The Jesuit church had tiled roofs (E1), whereas the Mercedario one (E5) presented less material investment (but important rocky foundations). Correspondence between burial sites and temples was only registered in the case of the church we consider belonged to the Society $(E4)^1$. With regard to domestic areas, we could observe building techniques such as partition walls (E2) creating rooms that led on to the streets (E6) or to inner yards surrounded by tapia walls (E3).

14.9 Life in the City: Some Documentary Evidence and Archaeological Material

The pieces recovered from the excavations do not present great diversity. Those made of earth and clay (constructive and ceramics) predominate. A striking aspect was the low frequency of findings related to subsistence (zooarchaeological and archaeobotanical). We relate this aspect to postdepositional processes. Notwithstanding, there are documents that mention products which the inhabitants valued as resources (Table. 14.1).

When it comes to subsistence, urban life was, according to the documentation, tough. In Table 14.1 it can be seen that agricultural products predominate in a city that has no supplies

...and this land is so poor that it has no wheat, no wine, no oil, and to say Mass, they are brought from Perú, 120 leagues from Santa Cruz and the wine jug, that would be the equivalent to a pitcher or an arroba in Spain, costs 100 to 120 pesos, that here are yardsticks of cloth, because there is no other currency, each costing six reales, that would make 600 reales or more.

Instead of wheat bread, we eat bread made from maize, yucca and sweet potatoes, that are roots from this land that also produce wine; and yet people are healthy, thank the Lord, there is no physician in this place and some people are over 100 years old and, at the Society, no one has died in more than 13 years since we came, thank the Lord. The mettle of the land should help, although from September to March it is hot and it would be almost uninhabitable if Our Lord had not provided that rains are more common in this season; and so when they are late, we suffer from their absence in November with the sun on our heads and during the other season it is seldom cold; and that happens only when the south wind from the Pole blows, that is like the Cierzo in Europe, for this land lies on the Tropic of Capricorn. (Combes and Peña 2013, p. 271)

^(...)

¹ A documentary source presents a precise event; a Mercedario priest leaving his church towards the "plaza" heading to the west. This points to E5 as being that church. Therefore, taking into consideration the evidence found in E1, which is associated to a religious place, we ascribed it to the Jesuit church. The report from Callisalla Medina (2012) is not clear about this but the fact that he mentions the "gobernación of Santa Cruz de la Sierra La Vieja" even when evidence of Catholic burials has been found (Callisalla Medina 2012, p. 9) is striking.

Table 14.1 Plant and animal resources mentioned in documents according to their origin (sixteenth and seventeenth centuries). (Sources: Pérez de Zurita in Finot 1939, pp. 184–186; Fernández 1896, p. 125; Knogler in Hoffman 1979, p. 166; Schmid in Hoffman 1979, p. 190)

Plant resources	Animal resources			
Native and wild	Native and domestic	Introd.	Native	Introd.
Palm trees 1	Maize 1	Grapes 1	Fish	Horses1
			1, 2, 3, 4	
Guava 1	Beans 1	Melon 1	Hares 3	Cattle
Pineapple 1	Pumpkin 1	Figs 1	Wild boars 3	
Granadillas	Peanuts 1	Sugarcane 1	Rats 3	
Ambaiba	Mates 1 (calabazos)	Rice	Mice 3	
(Cecropia palmata) 1				
Lúcuma1	Yucca		Snakes 3	
Tucumay (tarumá?) 1			Monkeys 3	
Cotton plant 1			Bees 4	
Garrobilla 1			Birds 4	
Dye roots 1				
Motaquí 2				
Bananas				

 Table 14.2 Existing indigenous people in SCLV (based on data from Combes 2013, pp. 30–31)

Indigenous	Indigenous					
Registered	Domestic repartimien-	Personal service in				
	tos in urban area	the city				
30,000-60,000	n/a	n/a				
15,700	n/a	n/a				
n/a	9000	3000				
n/a	8000-3000	n/a				
n/a	10,000-20,000	n/a				
4000	n/a	n/a				
	Registered 30,000–60,000 15,700 n/a n/a n/a	Registered Domestic repartimientos in urban area 30,000-60,000 n/a 15,700 n/a n/a 9000 n/a 8000-3000 n/a 10,000-20,000				

Despite the previous account, due to droughts and lack of food, illnesses took their toll, and 30 years after the foundation of the city, deeply affected the population: "Around July of that year [1590], there was an outbreak of smallpox and measles that killed many people" (Combes and Peña 2013, p. 260).

In this context, documentary data clearly highlight the presence of indigenous "encomendados" both within and around the city, even when its numbers were dramatically decreasing (Table 14.2). This decrease in population in 40 years was very likely linked to illnesses due to feeding and subsistence problems.

In addition, the huge language diversity is remarkable. Six linguistic groups have been identified in Santa Cruz La Vieja: Arawak, Guaraní, Chiquito, Zamuco, Guaycurú, and Otuqui-Chiquito which are in turn, subdivided into more than 15 ethnic groups, without taking into account those that do not identify themselves with any definite tongue (Combes 2013, p. 22).

On an archaeological level and bearing in mind the pottery skills and the availability of clay, this diversity produced a local manufacture component with very

Excav.	Material	Material								
	Pottery	Bone	Metal and	Glass	Lithic	Carbon	Spindle	Organic	Wick-	Total
			scoria			samples ^a			erwork	
1	157	-	2	-	1	18	_	4 ^b	_	182
2	2368°	11	3 ^d	-		83 ^e	1	9 ^f	2 ^g	2477
3	48 ^h	4 ⁱ	-	-	-	-	_	-	-	52
4	29	1 ^j	-	-	-	-	1	-	-	31
5.1	577	2	1 ^k	-	-	58	-	-	-	638
5.2	3	1	-	-	-	1	-	-	_	5
5.3	861	10	3 ¹	1 ^m	3 ⁿ	12	-	-	-	890
5.4	172	3	-	-	-	13	-	-	-	188
6	214	15	-	-	-	25	_	-	-	254
Total	4429	47	9	1	4	210	2	13	2	4717

 Table 14.3
 Summary of recovered objects during the excavations in Santa Cruz de la Sierra la Vieja (SCLV)

^a Samples of different weights

^b Archaeobotanical indeterminate

^c It includes 13 vessels whole or partially reconstructed

^d Coat of mail, nail, and grater-percolator

^e One sample of a charred wooden structure

f Leather and taquia (plant)

g Imprints on burnt lumps

h Lid on tile

ⁱ It includes an egg shell

^j Human skeleton

^k One button

¹ One lead pellet and one iron padlock

^m Bead

ⁿ One flint stone, one quartz tassel or pacifier

diverse shapes and decorations both of indigenous and Spanish traditions. Only one fragment of majolica was found and registered at E1. This can be an evidence of the isolation that SCLV experienced, where exchanges were reduced to the essential. However, this can be revised in the future, when new excavations are performed or if we consider that we are in the presence of a situation of abandonment so that the imported pieces, which were greatly valued, were moved with the city. But it is remarkable the low frequency of these type of objects, which with greater or smaller quantities, generally appear in cities from this period.

14.9.1 Trends in Materials

Pottery is the most abundant material in the site (N=4429) and it represents 93.8% of all the archaeological items recovered (Table 14.3).

It must be said that the presence of indigenous pottery pieces in all of the excavations is small. They do not present complete and clearly defined regional typologies but, according to some recent and general propositions (Callau and Canedo 2002;

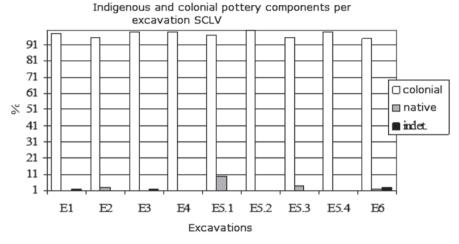


Fig. 14.9 Comparative tendencies of colonial and indigenous pottery artifacts

Requena and Callau 2006), it was possible to differentiate those pieces made following European techniques from those of local extraction (at least considering stylistic aspects in this first approach).

Excavation E2 deserves to be highlighted since there a context of departure was found, with whole vessels onto which a motacú roof and partition walls would have collapsed. This could be a domestic place for storing and processing (kitchen). The vessels present both colonial and indigenous typologies. They were found together with other utensils such as a copper percolator, abundant carbon remains, undetermined mineral scoriae, bone splinters, spindles, and traces of wickerwork (imprints of what could have been a rush-mat woven with fibers).

Regarding pottery, 54% of the total amount was recovered in E2, in a context with a density of 88.5 archaeological elements per square meter. This density is only surpassed by the pit next to the foundations of the Mercedario building (E5,3) with 445 archaeological elements per square meter but that contained 19.5% of the total pottery found. These two excavations also presented the greater diversity in terms of kinds of artifacts (Chiavazza 2010).

During the first detailed analytical assessment of the fragments, 27 types were defined according to microscopic aspects related to surface treatment, coloring, decoration, shape, and thickness. They were analyzed by means of a magnifying glass and different patterns of material as regards the matrix and the inclusions in terms of shape, color, size, and density (Chiavazza and Prieto Olavarría 2007, pp. 71–76) could be observed. This characteristic together with formal and decorative aspects enabled us to present two large typological groups (colonial or historical and indigenous or native). Even if the result presented a marked tendency toward typological diversity, it showed the predominance of handcrafts typologically related to the colonial group (Fig. 14.9).

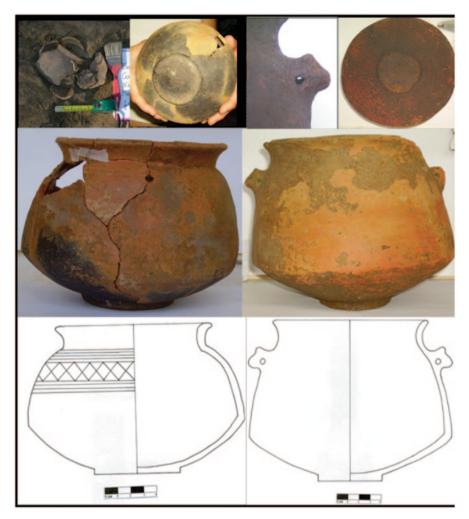


Fig. 14.10 Specimens of pottery with indigenous (left) and colonial (right) stylistic features

This would show that the numerous indigenous populations, with a strong traditional component as potters, was rapidly incorporated into the new pottery techniques not only from the point of view of design associated to new ways of storing, cooking, and consumption but also of decoration (Fig. 14.10). Pieces classified as belonging to indigenous tradition are found in lower numbers than colonial ones in this site when compared with other sites with components limited to the sixteenth century (e.g., Mendoza—Chiavazza et al. 2013; Ciudad Vieja in San Salvador— Fowler 2011). We do not rule out the influence of bias when sampling, generated by the choice of sites where to excavate.

14.10 Results and Conclusion

...This road presents another difficulty, from the huge Guapay river to Santa Cruz, almost 50 leagues, there is no river or spring but lagoons of water from the sky, that one can drink from, so at times you cannot travel because of too little and at other times, because of too much (water). (Combes and Peña 2013, p. 259)

The nucleus of the city and the territory showed evidences that denote an urban process that grew for 40 years (according to documentation) because of its strategic position in the frontier during colonial disputes but that, when it was no longer useful to the geopolitical macro-regional interests, had to be abandoned. The discovery of new routes and the increase in costs for its upkeep, given the absence of the promised riches and the indigenous resistance, made it nonviable.

Archaeological excavations and the study of documents have allowed to confirm the existence of an urban settlement in this sector and that its chronology corresponds to the period comprised between the foundation and the abandonment of the city (1561-1604). From this information, an extensive outline of the urban process of foundation, growth, and abandonment of SCLV is proposed. Furthermore, the analysis of the correlation between mounds and depressions allowed to establish that they are related to the discontinuity between public (streets) and private (buildings) places. As regards artifacts, small general diversity was perceived which we understood could be the result of its short period of occupation and, above all, of a context of planned abandonment that involved moving many goods. This short period of occupation enables to define a stratified archaeological component, giving a high level of temporal resolution for an urban installment (it fulfills the expectation of excavating an intense and dense settlement but not older than 40 years). With regard to pottery artifacts, the lack of correspondence with the documented narration about a huge ethnic diversity inhabiting the city was striking, since this diversity is not reflected in the amount of pottery artifacts of indigenous origin found.

In short, we were not only excavating a colonial city but also having the difficult experience of the failed consolidation and, above all, a colonial defeat for the Conquistadores. Between 1561 and 1604, Modern Age laid its foundations in a city that could not settle down. This brought about a forced move to the west. On the site of its original settlement, the ruins emerge as the undisputed evidence of the decision to abandon it; which, to a certain extent, represents the acceptance of an indigenous victory according to the interpretation we offered to its makers. This proposition was clearly contradictory to the interests for its enhancement, where the monumentalization of the site aimed and still aims at the exaltation of the identity of Santa Cruz as counterpart to its belonging to Bolivia. The research has been productive, the interpretation can, naturally, be debatable; perhaps that is why our interpretation has not yet prospered.

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