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Since the first humans reached South America more than 12,000 years ago, the unique environment of the Central Andes has been the habitat for numerous societies, all of which featured their own particular set of subsistence strategies and forms of social organization. The region has thus been the backdrop for a long-term, multifaceted development of culture.

Many cultural activities of economic or social character produce material remains, such as projectile points, ceramic vessels, postholes, figurines, cave paintings, or temples. As Gordon Childe once stated, the study of these remains can help to reconstruct at least some aspects of the culture of past people and to delimit this culture's presence in space and time. Child pointed out that "[w]e find certain types of remains - pots, implements, ornaments, burial rites, house forms - constantly recurring together. Such a complex of regularly associated traits we shall term a 'cultural group' or just a 'culture'" (1929:v-vi). Naturally, a sharp and unambiguous delimitation of cultures is not possible. Such units highly depend on the subjective weighting of cultural markers by the person who defines them.

Most early theorists equated a culture - in an archaeological sense - to an ethnic group or even a race (e.g., Childe 1929:vi, Kossinna 1911). This is problematic because different ethnic groups may share a very similar culture and may therefore belong to the same culture group (cf. Narr 1985). If an ethnic group is understood as a social construct (Barth 1969) it is hardly possible to delimit it on the basis of archaeological remains because there is generally no unambiguous evidence for group identities based on ideas of ethnicity (though Sommer (2003) is more optimistic in this respect). The equation with race is obviously inadequate because any kind of culture can potentially be adopted by any human individual, regardless of race. Accordingly, there are many examples of past and present societies acculturating persons or groups of foreign (cultural and genetic) origin, for example Roman Italy, where Latins, Greeks, Etruscans, Celts, and numerous Italic

tribes were incorporated into Roman society during the course of the centuries.<sup>23</sup>

In short, when referring to the prehistoric past, it seems most appropriate to focus on cultural rather than ethnic groups (Chrisomalis & Trigger 2004). Accordingly, an archaeological culture is a culture group of the past which has been (re)constructed on the basis of its material remains. It is commonly defined by the presence of those types of relics (and their specific constellation within the body of material remains) that are regarded as characteristic by the archaeologist. Namely, certain stylistic traits of artifacts and architecture, special burial customs, or a combination of these are usually seen as culture markers. Distribution patterns of such markers help to delimit the habitat of a past culture group and to reconstruct its development through time and space. William Conklin puts it this way:

Pattern analysis is actually a common, though perhaps somewhat unconscious, tool of the analytic archaeologist. Where pattern configurations can be related to earlier or later ones, they are presumed to reveal cultural continuity. Where similar sets are synchronic, cultural coherence is suspected. Analyzing the quality and symbolic meaning of patterning is the proper work of the art historian, but analyzing the societal implications of patterning is indeed the central work of the archaeologist (1988:147).

It has to be cautioned that even if identical or closely similar cultural markers can be identified at different sites, the people who lived, worked, or otherwise acted at these sites cannot be assumed with certainty to have shared the same culture. Groups of people using the same design for certain artifacts do not necessarily share the

<sup>&</sup>lt;sup>23</sup> Also see Barth (1969) for a general discussion of ethnicity. Barth explicitly mentions several cases of constant incorporation of outsiders into certain present-day ethnic groups.

same language, values, beliefs, economic strategies, or political organization (cf. Narr 1985).

More concrete information on these aspects may be available where written sources exist which can be deciphered by today's specialized scholars. In South America, however, no such records predate the arrival of the Spaniards. Keeping this in mind, the assumption that the distribution of similar material remains is related to the habitat of a more or less uniform past culture group is only a model whose appropriateness must be tested continuously. Its validity may come into doubt or it may even be completely rejected in light of future studies. Archaeological cultures defined on the basis of the distribution of material remains are analytical units of present-day researchers which are meant to reflect the actual existence and range of a more or less uniform past culture group but may actually fail to do so (cf. Eggert 2012:305-318).

### 3.1 Cultural Macro-Regions of the Central Andes

When discussing external relations between past societies in the study area and neighboring valleys to those of more distant regions, I will frequently refer to broader cultural macro-regions within the Central Andes. Such a spatial division is commonly employed by anthropologists and provides a rough geographic orientation. Since the ranges of specific archaeological cultures overlap and change over time, these macro-regions cannot be delimited sharply on the basis of material remains, especially when regarding time intervals of several millennia. For this reason, scholars draw borders differently, although the core areas are generally agreed on (e.g., Bennett & Bird 1949:95-103, Lanning 1967:30-32, Lumbreras 1972/1981). A distinction is usually made between coast and highlands. The transition between both zones is fluent, but the frontier could be placed between yunga and quechua at approximately 2300 m.a.s.l. To the east, the beginning of the rupa rupa at about 1000 m.a.s.l. delimits the highlands from the tropical rainforest (selva). The coast and the highlands can further be subdivided into northern, central, and southern sections. For the selva, this is hardly possible because only small sections have been archaeologically explored (Raymond 1988). In accordance with most researchers I would draw the approximate limits of the cultural macroregions as follows (Map 5):

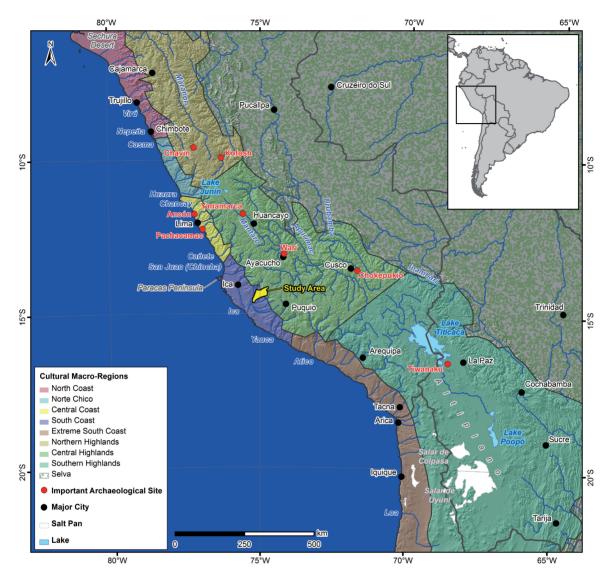
- 1) North Coast: the valleys south of the Sechura desert down to the Huaura river.<sup>24</sup> The North Coast can further be subdivided into a northern and a southern part with the border running between the Nepeña and Casma valleys. The southern part is known as Norte Chico. In the following, the term "North Coast" will therefore be used for the northern section only.
- 2) Central Coast: the valleys between the Chancay and Cañete rivers.
- 3) South Coast: the valleys between the San Juan (Chincha) and Loa rivers. The South Coast, too, can be subdivided into a northern and a southern part with the former stretching down to the Yauca valley and the latter comprising the much larger section between the Atico and Loa rivers. This southern part, the Extreme South Coast, is particularly arid and has comparatively few archaeological remains. Many authors therefore actually refer to the northern section only when speaking of "South Coast". This will also be the case in the following chapters of this study.
- 4) Northern Highlands: the gashed mountain sides east and west of the upper Marañon river.
- 5) Central Highlands: the relatively flat areas around Lake Junín and the more rugged highlands paralleling the Mantaro and the Apurímac rivers.
- 6) Southern Highlands: the relatively flat altiplano around Lake Titicaca and farther south, and the mountain chains delimiting it to the east and west.
- 7) Selva: the eastern Peruvian and Bolivian lowlands below 1000 m.a.s.l. characterized by dense tropical rainforest.

Again, I want to stress that this is a technical division and should not be confused with actual cultural boundaries. In the following, when referring to cultural macro-regions according to this definition these are spelled with capital letters.

#### 3.2 Previous Research

The impressive ancient monuments of the Central Andes were already of great interest to the

The northernmost extreme of Peru is culturally, climatically, and ecologically related to the equatorial area and is not regarded as part of the Central Andes as defined at the beginning of Chapter 2.



Map 5. Cultural macro-regions of the Central Andes and important archaeological sites mentioned in the text. The study area is located in the transition zone between South Coast and Central Highlands. Map: VS.

Spanish conquistadores and the viceroyal administration. Unfortunately, this interest was not born out of the desire to study the pre-Hispanic cultures or to preserve their material heritage. In fact, it was the tremendous quantity of gold and silver objects buried in ancient times as grave offerings in the tombs of high-status individuals which attracted the conquerors. Temples and graves were looted by official mining companies on a quasi-industrial scale and tons of fancy items containing precious metal were smelted down into bars for the benefit of the colonial rulers. In the end, these gold and silver bullions also financed the costly European wars of the Spanish kings (cf. Moseley 1992:16, Ramírez 1998: Chapter 5, Zevallos Quiñones 1994).

Scientific interest in Andean antiquities arose during the 19th century fueled by the journeys of Alexander von Humboldt. Humboldt's habit of documenting all kinds of phenomena made him a pioneer for many scientific disciplines in the Americas. Besides geology, botany, zoology, history and contemporaneous politics, he also paid close attention to the pre-Hispanic monuments he had the opportunity to visit (Humboldt et al. 2004 [1813]). Other early scholars followed his example. The great merit of their work lay in the detailed drawings, photographs, and descriptions of many monuments that were later destroyed or badly damaged by human or natural impact. Some documented excavations were also carried out, already. Especially impor-

tant in this respect are the works of Mariano Eduardo de Rivero y Ustáriz and Johann Jakob von Tschudi (Rivero y Ustáriz & Tschudi 1971 [1854]), Ephraim George Squier (Squier 1973 [1877]), and Wilhelm Reiss and Alphons Stübel (Reiss & Stübel 1880-1887, Stübel & Uhle 1892). They were all well aware of the fact that the Inca culture, treated in Spanish chronicles and still extant in the contemporary indigenous population, had predecessors, and that some of the monuments they visited, particularly those at the site of Tiwanaku immediately south of Lake Titicaca, were not erected by the Incas but much earlier. Still they did not know how far back they went in prehistory. This problem could only be addressed by further systematic archaeological studies based on controlled excavation.

#### 3.2.1 The Development of a Chronological Framework

The German scholar Max Uhle is generally referred to as the "father of Andean archaeology".25 During his fieldwork in Peru between 1896 and 1911, he dug at numerous sites, but concentrated on cemeteries. Uhle's broad knowledge of so many important sites enabled him to identify superregional stylistic similarities. In this respect, his works at Tiwanaku (Loza & Uhle 2004, Stübel & Uhle 1892), at the Bolivian side of Lake Titicaca (although he was not allowed to dig there) and at Ancón (Kaulicke 1983) and Pachacamac (Uhle 1991 [1903]) north and south of Lima, respectively, were of special significance. They allowed him to distinguish a pre-Inca style that could be identified at all three locations and that was apparently also older than the respective local cultures which were known to have directly preceded the Inca.26 It marked what would later be called the Middle Horizon. At Pachacamac and many other sites he further noted that there were even older layers and tombs that contained artifacts of regionally different styles and at Ancón he identified the, to that day, oldest known remains which he attributed to a "primitive fisherfolk". With the identification of a pre-Inca cultural horizon separating an early and a late period of regional developments, Uhle laid the basis for the broad pan-Andean chronological framework that was later worked out by Kroeber (1944) and Rowe (1962) and is essentially valid still today.

The second person of outstanding importance in early Andean archaeology was the Peruvian Julio C. Tello who, similar to Uhle, also

conducted countless excavations at sites all over Peru between 1919 and 1942 (Dagget 2009). Tello was the first to recognize that Uhle's "fisherfolk" in fact used stylistic elements similar to those observable in architecture of and artifacts from the impressive ruins of Chavín, Kotosh, and other sites in the northeastern highlands, as well as on the Paracas Peninsula on the South Coast (Tello 1929/1960), thereby identifying a third, early horizon (Kaulicke 2010:93–104).

While temporarily employed by the University of California, Uhle had accumulated a large collection of artifacts, especially pots, which he sent to Berkeley, where the University and its museum are located. This collection stimulated further research at this institution with a special focus on style development. The anthropologist Alfred Louis Kroeber (1930) began to study the Uhle collection in the 1920s and led two archaeological expeditions to Peru in 1925 and 1926. Drawing on the works of Uhle and Tello, he fully established the idea of pan-Andean, or at least pan-Peruvian horizons which he defined as follows: "By horizon style I mean one showing definably distinct features some of which extend over a large area, so that its relation with other, more local styles serve to place these in relative time, according as the relations are of priority, consociation, or subsequence" (1944:108).

In the 1960s, John Rowe, another scholar teaching at Berkeley, proposed a general chronological framework for the Central Andes based on the earlier works of Uhle, Tello, and Kroeber. He named the period of Inca influence the *Late Horizon*, that of Tiwanaku and Wari influence the *Middle Horizon*, and the time when the so-called Chavín style was widespread he called the *Early Horizon*. These horizons were separated by periods of local developments termed the *Early* and the *Late Intermediate Period*. The period before the spread of the Chavín culture is called the *Initial Period* and it starts with the introduction of pottery.<sup>27</sup>

- <sup>25</sup> A good overview of Uhle's life and work is given by Rowe (Rowe 1954).
- The quintessence of Uhle's ideas is best resumed in a manuscript stored in the Ibero-Amerikanisches Institut in Berlin, written in 1918 but only published posthumous in 1959 under the title "Wesen und Ordnung der altperuanischen Kulturen" (Uhle & Kutscher 1959 [1918]).
- Whether the introduction of pottery is a suitable criterion for the delimitation between Initial Period (or the Formative) and Archaic Period remains under discussion since other major developments regarded as milestones, such as the domestication of plants and animals and

Rowe's approach is special not only for its introduction of a systematic nomenclature but also for the fact that his periods, unlike the evolutionary concept of stages, are regarded as strictly chronological units. It should therefore be possible to establish a numerically dated "master sequence" in a chosen region as a fixed standard to which styles from distant areas could be related and thereby dated (Rowe 1962). Rowe chose the Ica valley for this purpose, which lies immediately north of the Río Grande drainage. Both valleys had always been closely related culturally throughout prehistory. Since Uhle, Tello, and Kroeber all had undertaken excavations there, the Ica region at that time was one of the archaeologically best investigated areas in the Central Andes. Rowe studied the pottery collections gathered by Uhle and Kroeber but also undertook further field work in order to document stratigraphic relations between pottery-bearing archaeological contexts. Additionally, he applied the recently established method of 14C-dating (Rowe 1961/1965). His Ica sequence could then serve as a master sequence for most of the Central Andes. Rowe's scheme of horizons and intermediate periods is still widely accepted as a feasible framework for a rough chronological orientation, although his numeric dates have to be adjusted.28

In the 1970s, Luis Lumbreras (1974b) proposed a slightly different chronological framework based on evolutionary stages, although most of his temporal units largely correspond to Rowe's periods. Lumbreras termed the Middle and Late Horizons Wari Empire and Inca Empire, respectively, while the Early and Late Intermediate Periods correspond to his Regional Developmental Period and Regional States, respectively. The early part of Andean prehistory is subdivided by Lumbreras into a Lithic, an Archaic, and a Formative Period. The first two periods fill the gap left by Rowe for the earliest millennia of human presence in the Andes while the Formative lumps the Initial Period and the Early Horizon. This is supported by newer research which has shown clearly that the styles attributed to Chavín influences actually had predecessors reaching back many centuries before the emergence of Chavín itself (Kaulicke 2010).

Today, many scholars use a mixture of the chronological schemes of Rowe and Lumbreras, drawing on Rowe for the periods from the Early Intermediate Period onwards and on Lumbreras for all earlier periods. The numeric dating and subdivision of these chronological

units, however, remain much debated and there is a general trend towards the establishment of largely independent regional chronologies (e.g., Kaulicke 2010).

3.2.2 The Introduction of Settlement Pattern Studies

Uhle, Tello, Kroeber, and Rowe had all focused their work on burial contexts, refuse middens, and some outstanding monumental architecture. A different approach was chosen by Gordon Willey and his colleagues of the Virú Valley Project which was launched in 1946 (Willey 1953). This project had been designed to study the cultural history of a limited region – the Virú valley at the North Coast – by way of the analysis of settlement patterns and by incorporating researchers of different disciplines in order to get a thorough picture of both cultural remains and the natural environment. Willey defined the term settlement patterns as:

the way in which man disposed himself over the landscape in which he lived. It refers to dwellings, to their arrangement, and to the nature and disposition of other buildings pertaining to community life. These settlements reflect the natural environment, the level of technology on which the builders operated, and various institutions of social interaction and control which the culture maintained. Because settlement patterns are, to a large extent, directly shaped by widely held cultural needs, they offer a strategic starting point for the functional interpretation of archaeological cultures (Willey 1953:1).

The approach is rooted in ideas and research designs developed during the late 19<sup>th</sup> and early 20<sup>th</sup> century in England and North America (Parsons 1972) and was especially inspired by the anthropological works of Julian Steward in the Great Basin (western USA).

As a new method, aerial photographs were extensively used to detect archaeological sites,

the erection of monumental buildings, occurred much earlier (Kaulicke 2010, Lumbreras 2006, Ōnuki 2001). In this study the introduction of pottery is taken as the border stone for technical reasons, because the chronological classification of most sites analyzed heavily depends on surface sherds. Furthermore, the only pre-ceramic site identified so far in the study area and the first sites where pot sherds are present are separated by a 1500-years hiatus.

<sup>28</sup> For a detailed discussion, see Chapter 5.2.2.

especially along the valley margins, which are almost completely free of vegetation cover. A local ceramic style chronology was established from excavated contexts with reliable stratigraphies. By reference to this chronology, sites that were not excavated could be assigned to a period through the classification of diagnostic surface sherds.<sup>29</sup> By comparing the patterns of contemporaneous sites, further conclusions about the cultural development through time could be drawn. The scale, the degree of incorporation of different scientific disciplines, and the adaption of newly available technologies (airborne photography) made the Virú Valley Project a milestone in Andean archaeology and regional settlement archaeology in general. Its approach was widely adopted and further developed throughout the world, especially in Mesopotamia (Adams 1965/1981) and Mexico (Sanders et al. 1979).30

In Peru itself, only few archaeological projects which took up Willey's approach dealt with a spatial scale, time depth, or interdisciplinary scope comparable to those of the Virú Valley Project. Most were limited to small valley sections or only considered sites of a certain type, size, or period (cf. Wilson 1988:5). In their 1972 review on Peruvian settlement pattern studies, Moseley and Mackey concluded that "[...] it is apparent that in 20 years' time settlement pattern research in Peru has not moved beyond the original Virú Valley foundations. Willey's work remains the best and most complete of this kind" (1972:79).

Only some years after the publication of the cited article, two major projects were launched which can be compared to Willey's work in Virú:

- 1) Jeffrey Parsons, Charles Hastings, and Ramiro Matos Mendieta surveyed the upper Mantaro and Tarma drainages (Central Highlands) in 1975/76 and published their data together with a detailed analysis in 2000.
- David Wilson worked in the lower Santa valley (North Coast) in 1979/80, presenting his results in 1988.

Thereafter and until present, the Palpa Project (since 1997) is the only one which can compare to the Virú Valley Project and even goes beyond it in terms of the extension of the study area, time depth of registered sites, and the scale of interdisciplinary cooperation (Reindel & Wagner 2009).

3.2.3 Settlement Archaeology in the Río Grande Drainage

In the Nasca drainage, as in the Central Andes in general, archaeological interest in ordinary settlements is a relatively recent phenomenon that evolved during the last decades. Most early scholars concentrated on the excavation of tombs and large temples or stylistic studies of pottery and textiles. Most research activity has been concentrated on the Nasca culture and, to a much lesser degree, on the Paracas and Wari cultures. Earlier and later phases received very little attention.<sup>31</sup>

Largely drawn from his excavations of cemeteries in the Chincha and Ica valleys in 1900-1901 (Uhle 1913/1965 [1924-1927]) and from additional vessel purchase, Max Uhle's collection at Berkeley comprises hundreds of polychrome fineware pottery. Pieces attributable to the Nasca culture are particularly well represented. This collection, partly shown in museum exhibitions, boosted public and scientific interest in South Coast antiquities. Before he could extend his activities to the Nasca drainage, Uhle had to travel to San Francisco to hand over his newly gathered pieces to his employer and Maecenas during these years, Mrs. Hearst (Rowe 1954:8). He apparently had another opportunity in 1905 to undertake some explorations in the area and to buy more vessels from looters (Menzel 1977:54, Uhle 1914:8).

In 1922, William Farabee, curator of the Museum of the University of Pennsylvania, undertook an expedition through south and central Peru, including the Nasca region. He visited the large Late Intermediate Period town of Huayurí in the Santa Cruz valley and excavated several Nasca tombs around the great Early Nasca center of Cahuachi. Especially interesting are his photographs of the predominantly Late Nasca center of Estaquería with its somewhat mysterious lines of wooden posts many of which were "[...] dug up and used at wine supports" around 1960 (Kosok 1965:55). As stated by locals, most of the remainder was chopped down in the 1980s or 1990s – to produce charcoal. <sup>32</sup> Farabee died in

- <sup>29</sup> It is always possible, however, that especially the oldest occupations of a long-used site are not represented adequately in the surface material as Willey himself states in a retrospective (Willey 1999).
- See Kowalewski 2008 for a recent overview.
- <sup>31</sup> For the location of places and sites mentioned in this sub-chapter refer to Map 6.
- <sup>32</sup> Also see Kroeber 1944:26–27. The posts may once have supported roofs of superficial funeral structures: cf. Tello's and Mejías Cementerio E de La Marcha in

1925 before he could publish the results of his journey but his successor in office, John Alden Mason wrote a posthumous illustrated report based on Farabee's diaries and field notes (1926).

Julio Tello (Tello 1959:45-47) worked in the area in 1915 excavating numerous tombs in the Nasca valley but he did not describe settlements. Between 1925 and 1929 he directed an expedition of the Museo de Arqueología Peruana in Lima to the South Coast (Tello & Mejía Xesspe 1967). Most of the field work in the Nasca drainage was done by the team members Toribio Mejía Xesspe and Antonio Hurtado (Novoa Bellota 2002). At the same time and in close cooperation with Tello, Alfred Kroeber headed another South Coast expedition sent out by the Chicago Field Museum of Natural History (Kroeber et al. 1998). After a short reconnaissance in 1925, the main campaign in the Nasca drainage took place in 1926 while Tello's team worked in the same area slightly later in 1926/27. Although both groups concentrated on cemeteries again, this time the original documentation also comprises some short descriptions and sketch plans of important settlement remains at sites from different epochs, such as Ocungalla, Majoro, Curvi, Cahuachi, Estaquería (Kroeber's team), Poroma, Pacheco, Pueblo Viejo, and Huayurí (Tello's team).

The Pacheco site deserves a word because it became famous for a large Wari offering deposit where tons of Wari fineware vessels were intentionally broken, probably during some kind of ritual (Menzel 1964:23-28, Tello 1959:49-50). Additionally, there had been several cemeteries around containing tombs from the Early Intermediate Period, the Middle Horizon, and the Late Intermediate Period (LIP) as well as a LIP settlement (Novoa Bellota 2002:200-207). In 1930 Ronald Olson, curator of the American Museum of Natural History undertook an expedition to Peru (Olson 1931). He also worked in the Nasca valley and especially at Pacheco where he excavated small rectangular subterranean structures containing more oversize Wari vessels that were broken up. Unfortunately, the results of his research have never been published in detail and are only briefly mentioned by Menzel (1964:24-25), Paulsen (1983:103, figure 1b), and Schreiber (1988), who apparently had access to his field notes. The site was largely destroyed by 1950 but Schreiber assumes that a Wari administrative center may once have existed here (Schreiber 2001:436-437). There nevertheless is no clear evidence for this assumption. The surface architecture was originally explicitly reported by Mejía as being "Chincha," and thus dating to the LIP and not to the Middle Horizon. Dorothy Menzel and John Rowe visited what remained of the site in 1958 when "[...] sherds and structural remains were still to be found scattered over an area of about 300 by 300 meters" (Menzel 1964:23, Rowe 1963:15).

In 1932 Heinrich Ubbelohde-Doering undertook an expedition to the Río Grande drainage. After working in the Santa Cruz valley he went on to Cahuachi where he excavated further tombs. In total, about 50 graves were examined but his published observations on settlements are limited to brief descriptions of the two large LIP towns of Huayurí and Matuaré in the Santa Cruz valley and a mention of a Middle Horizon site somewhere in the Atarco quebrada in the SGD (Ubbelohde-Doering 1936/1958).33 Ubbelohde's field notes concerning his works in the Santa Cruz valley were later critically revised, complemented by additional fieldwork, and published in detail by Angelika Neudecker (Neudecker 1979).

In 1952/53 William Duncan Strong, who had participated in the Virú Valley Project some years before, led an expedition sent out by Columbia University to document settlements in the Ica valley and the Nasca drainage. These works included limited excavations at chosen sites. Strong was the first to do so in this area as "no stratigraphic or settlement-pattern studies whatsoever had been accomplished in the region prior to 1952" (Strong 1957:1). In total, 81 sites were registered, though Strong himself indicates that "this does not purport to be a thorough survey. There are many more sites in the area than are listed here" (1957:3). Of particular importance are Strong's excavations at Cahuachi, the largest and most important site of the Nasca culture, which he believed to have functioned as "the main capital site of the Nazca civilization in the time of its own peculiar highest florescence" (ibid.:32). He also visited Estaquería and Huaca del Loro. Unfortunately, this brief preliminary report is the only available publication about the expedition.34

- the Las Trancas valley (Novoa Bellota 2002:181-188, particularly the drawing on page 183).
- 33 The latter was completely destroyed between 1938 and 1954 (Ubbelohde-Doering 1974) and cannot be located precisely.
- Helaine Silverman, who had access to Strong's field notes, published some resuming information and drawings in her 1993 volume (pages 43–54). A complete edited version of the original documents would be of great value to future Nasca research.

In the following year, 1954, the University of California launched an expedition headed by John Rowe (1956) to the South Coast and the Cusco region. The main goal was to further develop a chronological scheme for the various pottery styles identified in several collections housed in North American museums. In addition to this, several important sites were recorded, surveyed, and test pitted, especially in the Acarí and Ica valleys. In the Nasca drainage, the team member David Robinson (1957) surveyed the southern branches and registered 111 sites, most of which he classified as "cemeteries". His catalog offers brief site descriptions, but his main concern was about the distribution of ceramic styles and no analysis of settlement patterns is offered.

In 1957 and 1972 Toribio Mejía Xesspe (1972/1976), who had worked with Tello for many years, performed a limited reconnaissance in the Palpa valley, mainly along an 8 km section north of the town of Palpa between Chichictara and Carapo with some excursions to places elsewhere in the region. He briefly described 27 sites from different periods but his analysis focused on stratigraphic relations of Paracas and Nasca pot sherds drawn from test pits dug into a few domestic occupations.

Through the 1950s to the 1980s, the Swiss scholar Frédéric Engel identified, mapped, and described numerous sites in Peru in general and on the South Coast in particular. Especially important are his works about Archaic and Initial Period sites (1966a/1963) and the Paracas culture (1966b/1991). Engel also marked and briefly described sites registered by him and others in an archaeological atlas and catalog (Engel 1980/1981). Although he provides valuable photos and sketch plans of sites and objects, in most cases the information given is sparse and confusing. His limited descriptions of settlements at the mouth of the Río Grande and in the Monte Grande valley pocket (about 8 km inland) nevertheless are of some interest for the present study (Engel 1981:60).

Since 1983, the Centro Italiano Studi e Ricerche Archeologiche Precolombiane<sup>35</sup> is conducting a long-term project in the SGD directed by Guiseppe Orefici. Excavations were undertaken at several sites with the main focus on the important Nasca centers Pueblo Viejo<sup>36</sup> and Cahuachi (Isla Cuadrado et al. 1984) between 1983 and 1988. Since 1989, works concentrate on Cahuachi alone (Orefici 2012:64–71).<sup>37</sup> Additional excavations at the same site were carried out in 1984/85 by Helaine Silverman (1993) in

preparation of her PhD thesis. Silverman concluded that Cahuachi had only a small permanent occupation but that pilgrims came here for ritual feasts.<sup>38</sup>

The excavations by Orefici and Silverman were the first sizeable undertakings in a settlement site in the Nasca drainage since Strong's works in 1952. However, Silverman stated in 1993 that "[p]ublications by the Italian project are few and extremely preliminary" and that "Orefici's colleagues await publication of architectural plans and a comprehensive site report on the stratigraphy and associated remains" (1993:28). Although since the release of her book, several publications by Orefici and his team have appeared (Orefici 2012, Orefici & Drusini 2003, Orefici et al. 2009), these in first place present nice pictures of findings but little if any systematic information about their context. A detailed, readable site plan is still missing.<sup>39</sup> Given the unique importance of the site, a comprehensive publication of the archaeological data remains a pressing need.

Since the 1980s, several survey projects were launched in different valleys of the Nasca drainage. Katharina Schreiber and a team of students from the University of California in cooperation with Peruvian colleagues undertook intense and systematic surveys in most of the SGD in several campaigns between 1984 and 1996, registering more than 600 sites (Schreiber 1999/2001, Schreiber & Lancho Rojas 1995/2003). Unfortunately, the publication and analysis of this data is limited to a few pages of very general comments on settlement patterns during the Nasca and Wari phases and some coarse distribution maps in the cited works. For this reason, comparability between settlements in the NGD and the SGD is very restricted (cf. discussion in Soßna 2012:224-226). Most of Schreiber's data remains unpublished though some of her students worked with it.

- 35 Italian Center for the Study and Research on Pre-Colombian Archaeology.
- 36 Kroeber named the same site Agua Santa (Kroeber et al. 1998:265).
- 37 Apart from one campaign dedicated to excavations at Estaquería.
- This theory has since been questioned as there is, in fact, plenty of evidence for domestic activities at Cahuachi. See Vaughn 2009:163–172 for a critical discussion of Silverman's argument.
- <sup>39</sup> Three scanned black and white plans are offered in Orefici 2012 on pages 150, 402, and 420, which give at least an idea on where Orefici had worked but for an understanding about the arrangement of structures, Silverman's (1993) maps are much better.

In 1988/89 Helaine Silverman surveyed the Ingenio valley in order to support her theory about the status of Cahuachi with data on settlement patterns (Silverman 2002). Her study is the only one concerning settlements in the Río Grande drainage that has been published in detail, though it is limited to some 350 sites with Paracas or Nasca occupations. MH and LIP sites are mentioned briefly and in general in Silverman & Proulx 2002 (Chapter 11) but were not analyzed.

About the same time, in 1987 and 1989, David Browne and José Baraybar undertook reconnaissance in the Palpa area between the junction of the Río Grande and Ingenio valleys and Chichictara, including both margins of the great floodplain but not the Viscas valley northeast of Carapo. Their survey area hence extended to that of Mejía to the south. Though the two published reports (Browne & Baraybar 1988, Browne 1992) are only preliminary, they include relatively detailed distribution maps and a catalog of 239 sites of all periods, including coordinates. In an unpublished manuscript, Browne describes perhaps the most important Early Nasca center in the region, Llipata, in detail, including a good site plan (Browne n.d.). As the site is successively being destroyed by the extension of the modern village of Llipata, this document may be of special value for future research.

In 1990, Patrick Carmichael surveyed the lowermost section of the Río Grande river and the coastline between San Juan Bay (halfway between the outfalls of the Grande and Acarí rivers) and Independence Bay (south of the Paracas peninsula). He registered a total of 64 sites, most of which correspond to small shell middens, isolated dwellings, or small cemeteries. Especially interesting for the present study are his site descriptions for the Monte Grande oasis in the lowermost section of the Río Grande river about 8 km inland from the shore where also Engel had worked. Carmichael documented several settlements, augmenting the information given by Engel. This includes the large Nasca center of Pedregal, which was also briefly visited by members of the Palpa Project. Unfortunately, Carmichael's 1991 report has never been published officially.

Donald Proulx closed the remaining survey gap between the lowermost section of the Río Grande valley and the confluence of the Nasca river with the Usaca *quebrada* in 1998. His preliminary report, last updated in 2007, is available online as an illustrated PDF document including

maps and a catalog of 128 sites of all periods with coordinates (Proulx 2007).

The most extended surveys were carried out by the Palpa Project between 1997 and 2010 (Isla Cuadrado 2010, Isla Cuadrado & Reindel 2005, Reindel 2009, Reindel et al. 1999, 2001). The study area was widened several times until it stretched from the junction of the Grande and Ingenio rivers up to the water divide around Cerro Llamocca in the puna at 4424 m.a.s.l. This includes the complete Palpa and Viscas valleys and the Río Grande valley up to an altitude of about 1100 m.a.s.l. as well as the adjacent mountains and ridges. In total, 1155 sites from all periods were registered. Additionally, major excavations took place at several settlements, especially at Pernil Alto (Arcaic/Initial Period, Reindel & Isla Cuadrado 2009), Jauranga (Middle-Late Paracas, Isla Cuadrado et al. 2003), Cutamalla (Late Paracas/Initial Nasca, Castro de La Mata Guerra García et al. 2012. Reindel & Isla Cuadrado 2013), Los Molinos (Early Nasca) and La Muña (Middle Nasca) (Reindel & Isla Cuadrado 2001), Parasmarca (Late Nasca, Reindel 2009:455-456, Tomasto Cagigao et al. 2009), and Huayuncalla (Paracas/ Nasca/Wari, Castro de La Mata Guerra García et al. 2012). Minor excavations were realized at numerous additional sites.

Christina Conlee, a student of Katharina Schreiber, had worked with LIP settlements in the SGD in her M.A. thesis (Conlee 1996). For her PhD project she chose the MH/LIP site of Pajonal Alto for excavation and did a detailed analysis (Conlee 2000/2003/2005/2006/2010), which still is the only published in-depth study of an LIP settlement in the entire Río Grande drainage. Conlee has been working at the La Tiza site near the Aja/Tierras Blancas junction since 2004 (Conlee et al. 2009, Conlee 2011). At La Tiza, she found evidence for important settlements of different phases between the late Early Horizon and the LIP. She also claims that an archaic occupation dating around 3600 may have existed here.

In 1997/98 Kevin Vaughn, another student of Schreiber's, excavated the Early Nasca village of Marcaya in the Middle Tierras Blancas valley at about 1000 m.a.s.l. in preparation of his PhD thesis (Vaughn 2000/2009). His study is the first one about the Nasca culture that focuses on domestic activities and subsistence of ordinary people rather than on temples, tombs, and the fancy objects of social elites. Marcaya differed from contemporary settlements in the NGD in that it consisted of circular and oval stone struc-

tures rather than angular wattle-and-daub huts. It thus represents an architectural pattern that is more reminiscent of Middle-Late Paracas or Middle Nasca highland sites in the study area of the Palpa Project than of typical Early Nasca foothill settlements. Vaughn and his colleagues continued their research with test excavations at further sites dating to the same epoch, especially at Upanca (Vaughn & Linares Grados 2006). On the webpage of the *Proyecto Nasca Temprano* (Vaughn n.d.) they mention additional places, but no publication about the work carried out there is available, yet.

Hendrik van Gijseghem, also a student of Schreiber's with access to her unpublished field data, and Carlos de la Torre Cevallos undertook excavations in the Paracas/Initial Nasca habitation site of La Puntilla at the confluence of the Aja and Tierras Blancas rivers (Torre Cevallos & Gijseghem 2005, Gijseghem 2004/2006). These excavations were continued until 2010 by the La Puntilla Project, which also included the neighboring contemporaneous site of El Trigal where evidence of fortifications and sling stone deposits were found (Castro-Martínez et al. 2008/2009/2009). Another recent excavation in a settlement in the Río Grande drainage was conducted by Schreiber's student Matthew Edwards at the Middle Horizon site of Pataraya in the upper Tierras Blancas valley (Edwards 2010). This site is the only one in the whole SGD known so far where rectangular architecture has been found which can be attributed to the Wari culture without doubt. It may have functioned as a small administrative center.

Since 2006, the Proyecto Bajo Río Grande directed by Burkhard Vogt from the German Archaeological Institute is undertaking a site survey in the upper section of the lower Río Grande river, south of its confluence with the Nasca river (Vogt 2010). According to the preliminary results, settlement density seems to have been highest during the Early Horizon and the LIP. A special focus has been put on the documentation of aceramic sites. A major excavation took place at Las Brujas below a natural rock shelter, which revealed traces of manufacturing and domestic activities dating to almost all pre-Hispanic periods. The so far oldest layers date back to the 4th century BCE, though still older remains may be discovered during the next campaigns (B. Vogt, personal communication). Also within the scope of this project, Peter Kaulicke investigated looted Early Paracas tombs at Coyungo (Kaulicke et al. 2009).

3.2.4 Archaeological Cultures of the South Coast and the Adjacent Highlands

In this subchapter I will give a brief overview of important archaeological cultures that thrived on the South Coast and in the adjacent highlands. This is essential because cultural development in the study area will not be understood in isolation. People in the NGD maintained close economic, social, and cultural ties to contemporary groups from near and far. Furthermore, migration to and from neighboring regions is an important factor to be considered when analyzing population development and cultural influence. The location of sites and places mentioned in the text is shown on Map 5, Map 6, and Map 7.

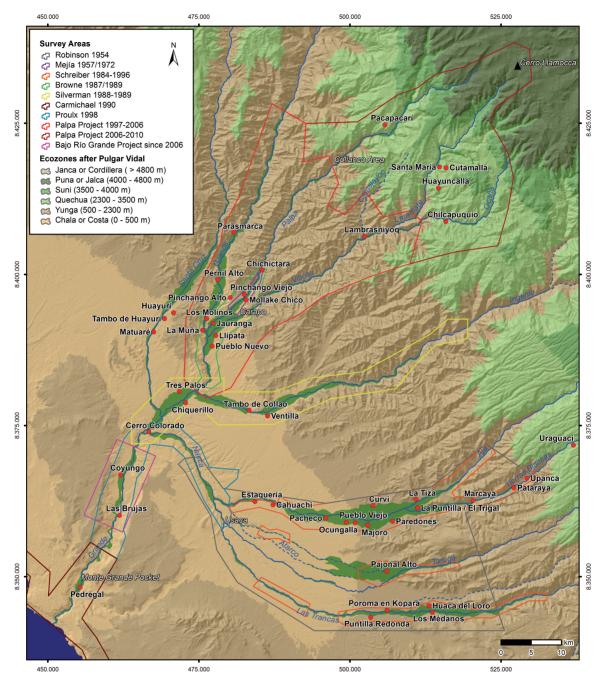
### 3.2.4.1. The Initial Period (IP) and the Early Horizon (EH) Paracas Culture

During the Initial Period (1500 BCE - 800 BCE), tendencies toward increased social complexity developed in many parts of the Central Andes (Kaulicke 1994/2008). Although the introduction of pottery was taken as the marker for the start of this period by Rowe (1962), the use of ceramics as such does not constitute a crucial turning point in cultural development (Lumbreras 2008:113). In fact, the transition between the Late Archaic and the Initial Period was fluent. Pottery was probably introduced either from Ecuador or from the Amazonian lowlands where it had already been in use for hundreds or even thousands of years (Roosevelt 1999). Its spread from the north to the south of the Central Andes took several centuries. It probably arrived on the South Coast around 1500 BCE.40 Although hunting and fishing remained important agriculture and herding became the prime subsistence strategies during the IP.

On the South Coast, only a few sites related to the Initial Period have so far been investigated (García Soto & Pinilla Blenke 1995, Silverman 1996). Disco Verde next to the Paracas peninsula (Engel 1966a/1991:120–126), Hacha in the Acarí valley (Riddell & Valdez Cárdenas 1987/88, Rob-

<sup>&</sup>lt;sup>40</sup> Rowe originally proposed a date of 1930–2000 BCE for its first occurrence in the Ica valley, the place of reference for his chronology, based on a single 14C sample from the site of Erizo. The reliability of this date is questionable when regarding the general inconsistencies in Rowe's numeric dates (Rowe 1965, also see Chapter 5.2.2.2). New data from Pernil Alto near Palpa suggest a date around 1500 BCE (Reindel & Isla Cuadrado 2009).

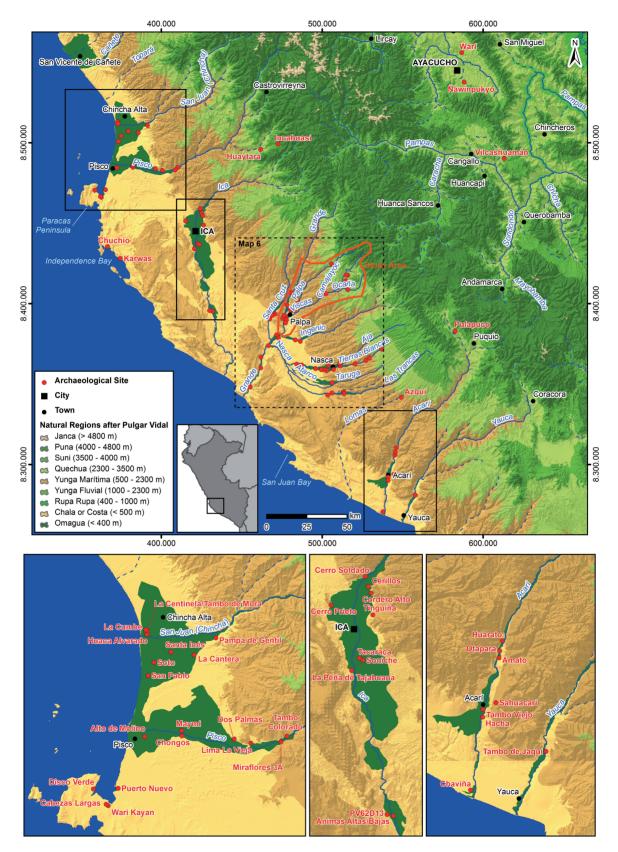
Previous Research



Map 6. Location of sites mentioned in the text and areas in which archaeological surface prospection has been carried out by different scholars. Map: VS.

inson 1994, Rowe 1963), and Pernil Alto close to Palpa (Reindel & Isla Cuadrado 2009) can be considered the best known examples for that time. Typical features of ceramic vessels found there are ring bases, angular bowls, and bottles with two short spouts, a waisted body, and a centrally placed top handle (cf. Engel 1966a, fig. 41 B, Reindel & Isla Cuadrado 2009, fig. 17, and Robinson 1994, fig. 14–17).

None of the mentioned sites shows monumental architecture comparable to those known from the North Coast and the Northern and Central Highlands and there is no obvious evidence of pronounced social stratification or complexity. Villages were probably sovereign communities connected economically by exchange relations and perhaps also through intermarriage. At the inland sites of Hacha and Pernil Alto, domestic



Map 7. Mentioned archaeological sites on the South Coast and in the adjacent highlands. See Map 6 for details of the Río Grande drainage. Map: VS.

structures are angular and agglutinated. Walls are 30-50 cm thick and made of compacted clay. Vegetal remains and tools for plant processing, particularly grinding stones, leave no doubt that the principal subsistence strategy of the inhabitants was agriculture, though hunting and foraging were still important (Reindel & Isla Cuadrado 2009:277). In turn, the coastal settlements reported by Engel, including Disco Verde, seem to have relied primarily on seafood (cf. García Soto & Pinilla Blenke 1995:47). Virtually nothing is known about the Initial Period in the cabezadas, except Engel's brief note on Ramiro Matos' find of some ceramic sherds of the Disco Verde type in the cabezadas of Pisco (Engel 1987:90).41

About the burial customs of the epoch, just as little is known as about settlements. Robinson briefly describes two burials from Hacha, one of a man "interred in a loosely flexed position lying on his back and facing upwards" and another of a woman "placed in roughly the same manner [...] but in a more loosely flexed position," both originally covered by some kind of poorly preserved textile (1994:14-15). The male individual had been given some grave offerings including a necklace, pigments, and an obsidian point. Most interesting is the discovery of a deposit of three adult crania. This could be the earliest evidence known so far for the practice of ritual taking, treatment, and deposition of human heads, which are commonly referred to as "trophy heads". Trophy heads are frequently found in contexts from all later periods in much of the Central Andes (Verano 2008).

Around 800 BCE, stylistic influences from the north, commonly known as "Chavin style" mark the beginning of the Early Horizon. Contrary to Tello's (1960) theory, many typical design traits of the Early Horizon styles did not develop initially in the highlands but were adopted there from North Coast people (Cupisnique style) and then locally modified (Bischof 1994/2013). Still, the site of Chavín de Huantar seems to have played a major role in the later spread of the "chavinoid" art style, iconographic program, and the concepts behind it, which were supposedly of religious character.<sup>42</sup> Between 800-200 BCE, "chavinoid" stylistic and iconographic influences were widespread among cultures throughout the Central Andes, a fact that justifies the term Early Horizon for this period.

On the South Coast, the local Early Horizon culture is known as the Paracas culture. It was originally defined by Tello based on his excavations in ancient cemeteries on the peninsula of the same name located south of the Pisco delta (Tello et al. 2005 [1959], Tello & Mejía Xesspe 1979). Tello distinguished two types of tombs which he attributed to two phases: Cavernas and Necrópolis. These are now seen as representing only the last phases of a long-lasting tradition and the transition into the Nasca culture. Although ceramics, textiles, and, to a lesser degree, architectonic features of the earlier phases of the Paracas culture show a strong Cupisnique/Chavín influence, it clearly developed out of local Initial Period predecessors and many sites, including Disco Verde, Hacha, and Pernil Alto, were continuously occupied in both phases.

Other simple early-middle Paracas villages, mostly showing remains of agglutinated rectangular structures built of unfired mud bricks (adobe), wattle-and-daub (quincha), or unworked stones with mud mortar, were partly excavated or at least test pitted at Puerto Nuevo, just east of the Paracas peninsula (Engel 1991:64-65, García Soto 2009), at PV62D13 in the lower Ica valley (DeLeonardis 2000/2005), and at Mollake Chico (Mejía Xesspe 1972:82-83), north of Palpa. At the Karwas site (also spelled Carhua(s) or Carhuaz) south of the Paracas peninsula, where a number of fine Chavín style textiles were excavated from tombs (Wallace 1991), another early Paracas settlement might have existed below the younger structures mentioned by Engel (1981:28-29) and Tello & Mejía (1979:92, also cf. Massey 1986:281-282). The slightly later first occupation at Jauranga near Palpa was also a simple village (Isla Cuadrado et al. 2003, Isla Cuadrado & Reindel 2007, Reindel & Isla Cuadrado 2004). In turn, at the site of Cerillos in the upper Ica valley, a more sophisticated structure with different levels connected via stairways was found which is thought to be a temple (Wallace 1962, Splitstoser et al. 2009). Cerillos may mark the beginning of a development towards a more pronounced social complexity.

During the later phases, the Chavín/Cupisnique influence decreased and some further important developments occurred: In the Ica and Río Grande drainages and apparently also in

<sup>41</sup> No citation is given. Possibly, Engel refers to personal communication.

<sup>&</sup>lt;sup>42</sup> See Burger (1992), though the character of the phenomenon is under discussion and Burger's chronological placement has to be dismissed completely in the light of newer research (Bischof 2000, Kaulicke 2010, Rick et al. 2009).

Pisco and Chincha, the number of settlements increased dramatically and some reached considerable sizes.<sup>43</sup> Many were located in defensive positions on hilltops and some were walled. In the northern valleys of the South Coast (Chincha to Ica), new ceremonial and political centers with monumental adobe architecture emerged, namely at Animas Bajas and Animas Altas in the Ica valley (Massey 1986/1991) and a number of complexes and huacas in Chincha, including San Pablo, Soto, Huaca Alvarado, and La Cumbe (Canziani Amico 2009:158-165). Chongos was an important settlement in the Pisco valley (Peters 1987-88). On the Paracas peninsula, Wari Kayan was an extended town as were Chuchio and Karwas at the coast farther south (Engel 1980:28-29, García Soto 2010, Tello 1959, Tello & Mejía Xesspe 1979). In these areas, a high degree of socio-political complexity can be assumed, but so far there is no evidence for a formal multi-valley political entity. From the Río Grande drainage, neither extraordinarily extended settlements nor monumental architecture are known.44 At the cabezadas, sites were documented which show a markedly different architectural pattern of round stone structures, but are associated with the same Paracas-style fine ware known from the coast, though in much lower quantities. Research about these highlanders is still at its beginning and will be treated in more detail in Chapter 6.4.

The burial customs of the people associated with the Paracas culture are diverse, but it is obvious that there were notable differences in the elaboration of tombs and the quantity and quality of grave goods, suggesting a pronounced social hierarchy in the Paracas societies. Some early interments from Mollake (Mejía Xesspe 1972) and Pernil Alto (Isla Cuadrado 2009, Reindel & Isla Cuadrado 2006) follow the pattern known from Hacha: a single extended body with slightly flexed legs, wrapped in cloths and placed in a simple pit with no, or relatively few, simple grave goods. Only one grave in Pernil Alto contained two skeletons.

In other cases, funeral chambers in more simple or more elaborate variants were documented, namely at Coyungo (Kaulicke et al. 2009) and Mollake Chico (Isla Cuadrado 2009, Reindel & Isla Cuadrado 2006). These contained the remains of up to 23 individuals each. Those from Mollake were obviously not in their anatomic position and seem to have been re-deposited in a process of secondary treatment. Mejía (1972) reports other cases of simple graves with incomplete or dismembered bodies and no of-

ferings from the same area. In Coyungo, the case is not clear, due to disturbance of the site by looting.

Early Paracas textiles from the Karwas site are known to originate from looted tombs (Wallace 1991) which probably contained mummy bundles. At least Tello and Mejía (1979:92) mention that they found such bundles in a cemetery at the site during a brief reconnaissance before the looting, though they compare them to those found at Wari Kayan which date to a late phase.45 Such Paracas mummy bundles usually consist of a body in a flexed seated position wrapped in numerous layers of textiles, eventually with smaller adornment and other objects placed in between. It is possible that this kind of body treatment is limited to the regions north of Ica, though Kaulicke et al. (2009) think that the Coyungo tombs might also have contained mummy bundles.

Two simple burials in a seated flexed position were excavated at Pinchango Viejo, near Palpa (Reindel & Isla Cuadrado 1998:54-62), but of particular interest are the Middle and Late Paracas graves from Jauranga. While most earlier burial contexts maintained the pattern of extended dorsal position with flexed legs wrapped in cloths, in a number of later contexts the bodies were "placed in a seated posture within simple pits, legs flexed to the chest and arms folded to the chest or around the legs" (Isla Cuadrado 2009:127). Especially children were also often put in large jars serving as funerary urns. Special cases are the three large chambers with multiple burials showing traces of intentional burning at Jauranga. In sum, the later Paracas phase apparently saw the introduction of new burial customs, including multiple burials and the placement of the body in a seated flexed position.

One further cultural innovation should be mentioned: the transition from petroglyphs to geoglyphs. On the South Coast, petroglyphs can be observed at many sites, including Chichictara near Palpa (Fux et al. 2009, Mejía Xesspe 1972/1976, Nieves 2007). They are difficult to

For the Pisco and Chincha valleys, cf. Canziani Amico 2009:155–175 and Wallace 1971/1972, for the Ica valley, cf. Cook 1999, Massey 1986/1991, and Menzel 1971, and for the Grande drainage cf. Isla Cuadrado & Reindel 2007 and Silverman 1994.

<sup>44</sup> Cf. Silverman 1996:131 (note that she calls the local Paracas style variant "Tajo").

<sup>45</sup> Also see the survey report by Alana Cordy-Collins in Carmichael 1991:28–38.

date directly, but judging from iconographic parallels, most seem have been carved during the Paracas, Nasca, and Wari Periods. Some may be older and originate from the Initial Period, however, though this is speculative for now. Towards the end of the Paracas Period, the first geoglyphs were constructed on the hill slopes around Palpa by clearing away the dark oxidized surface stones revealing the bright subsurface sand (Lambers 2006). They show the same iconographic program as many petroglyphs, especially anthropomorphic beings with ray heads. Accordingly, the first geoglyphs apparently constituted a new medium for the expression of traditional ideas.

#### 3.2.4.2. The Nasca Culture of the Early Intermediate Period (EIP)

The Early Intermediate Period (250 BCE – 650 CE) was a time of regionally distinct cultural developments during which the quality of already well-advanced handicrafts like pottery, textile production, and metal working reached a climax in many Central Andean regions. Social complexity and differentiation grew considerably, and in many societies formal ruling elites emerged who controlled extended territories and tens of thousands of subjects.

On the South Coast, the current state of research seems to support the model of a coexistence of at least two cultural traditions during the first centuries of the IEP: Nasca in the Ica and Río Grande drainages (Proulx 2008, Silverman & Proulx 2002) and Topará in the northern valleys (Peters 1997, Silverman 1991, Tinteroff Gil 2008, Wallace 1986). Both show strong continuities with the latest phases of the Paracas culture. With the abandonment of Animas Altas and other sites, the Ica valley apparently lost importance while at the same time Cahuachi in the Nasca valley gradually developed into the prime center as indicated by the beginning of the construction of the first great temple mounds and platforms (Orefici 1989, Silverman 1993, Strong 1957). In the Nasca drainage there were numerous further settlements of this phase, some of which were of considerable size (up to 20 ha) but none showed complex monumental architecture (Silverman 2002, Soßna 2012). They rather mostly consisted of simple habitation terraces with quincha structures and eventually some small-scale adobe or field stone architecture. For Ica, Rowe mentions a "great habitation site" at Cordero Alto, but no further information is given (1963:11).

In turn, the principal settlements associated with the Topará tradition were built more solidly and seem to have had a planned layout. They usually consisted of agglutinated rectangular units of stone and adobe walls. Examples are Cabezas Largas (or Arena Blanca) at the Paracas peninsula (Engel 1966b:193-210, Tello & Mejía Xesspe 1979), the Topará occupation of Chongos (Peters 1987-88, 1997) and Dos Palmas in the Pisco valley (Canziani Amico 2009:296-297, Rowe 1963:10-11, Soldi 1995:99, Wallace 1971:83-84), and Pampa de Gentil in Chincha (Canziani Amico 2009:292-295). Further sites with large adobe mound constructions are Huaca Santa Inés in Chincha and, on a smaller scale, Alto de Molino in Pisco (Silverman 1997). Topará-style ceramics can also be found frequently in the NGD where they are almost always mixed with Ocucaje 10/Nasca 1 sherds (Hecht 2010:29), suggesting a close interaction and exchange between cultural groups.

Around 200 CE, the Nasca culture reached its peak and Cahuachi turned into a great temple city. Evidence of strong Nasca influence has been found all over the South Coast from Chincha to Acarí and, to a much lesser degree, even in the Cañete valley (Menzel 1971, Ruales 2000:378) and in the Arequipa region (Häberli 2001). The precise character of this influence, however, is still not well understood. Early scholars argued for a unified polity with Cahuachi as its capital (Rowe 1963, Strong 1957) but since the 1980s a loose confederacy of local chiefdoms held together by a common religion was postulated (Carmichael 1995, Silverman 1993, Silverman & Proulx 2002). The recent works of the Palpa Project again support the model of a stratified society organized in a unified multivalley polity, at least during this phase of heyday (Reindel & Isla Cuadrado 2001:313-314).46 It is generally agreed that the Ica and Río Grande drainages constitute the Nasca heartland. In the Acarí valley, the great center of Tambo Viejo was originally classified as a Nasca settlement (Menzel 1993 [1954]:35-44, Riddell 1986), but newer studies attribute it to a local culture group known as Huarato which was influenced by but not identical with Nasca (Carmichael 1992, Valdez Cárdenas 2009). To the north, the Carmen ceramic and textile styles are strongly influenced by Nasca, but no pure Nasca settlements are known, either.

<sup>46</sup> Also see Llanos Jacinto 2009 for a recent study independent from the Palpa Project arguing for a unified Early Nasca polity.

By about 300 CE, Nasca society seems to have faced a severe crisis. Cahuachi was gradually abandoned as were other important settlements, including Los Molinos (Reindel & Isla Cuadrado 2001) and Llipata (Browne n.d., Soßna 2012) near Palpa, Cordero Alto in Ica and Tambo Viejo in Acarí (Riddell 1986). In turn, new local centers came into power, like La Muña (Isla Cuadrado & Reindel 2006, Reindel & Isla Cuadrado 2001) and - at a later time - Parasmarca in the Río Grande valley (Reindel 2009:455-456, Tomasto Cagigao et al. 2009), perhaps Cerro Soldado and later Tinguiña in Ica (Menzel 1971:86-93, Rowe 1963:11), and Chaviña in Acarí (Valdez Cárdenas 2000:21/2009). In turn, Ventilla in the Ingenio valley (Silverman 2002) seems to have been occupied continuously until the end of the Middle Nasca phase. Towards the Late Nasca phase, settlement patterns hint to a drastic population decline in the NGD (Silverman 2002:170–171, Soßna 2012) but to a possible increase or at least a concentration of people in larger settlements in other South Coast areas (Menzel 1971, Rowe 1963, Schreiber 1999:167-168).

Regarding ceramic production, the characteristic distinction between Paracas and Nasca is the introduction of pre-fire painting on Nasca wares. This requires a profound knowledge of the properties of mineral pigments and perfect temperature control during firing. The resulting pottery is extraordinarily fine and hard (Carmichael 1994). Nasca fineware vessels even seem to have outdone elaborate textiles as the principle high-status good. Apart from pottery technique, there are further changes that attest to the emergence of a new culture (Silverman & Proulx 2002:16).

The Nasca are famous not only for their fine pottery and textiles but especially for the geoglyphs crisscrossing the desertic pampas, slopes, and ridges. These include straight lines, trapezoid shapes, and figures (contributors in Aveni 1990, Aveni 2000, Lambers 2006, Reiche 1976). The first geoglyphs had already been constructed during Paracas times, but the overwhelming majority, including all larger ones, date to the Nasca Period. Most were not constructed on slopes but on the plain pediment between the river valleys. Instead of anthropomorphic beings, zoomorphic and abstract figures were depicted, but these are much less frequent than lines and trapezoids. The geoglyphs most probably played a prominent role in rituals linked to water and fertility (Lambers 2006, Reinhard 1988).

Nasca burial customs were more uniform than those of the Paracas Period, though deviations from the norm are known. The articles by Patrick Carmichael (Carmichael 1995) and Johny Isla Cuadrado (2009:128–134) and the magister thesis by Niels Hecht (Hecht 2004) currently provide the most detailed overviews.<sup>47</sup> The three most common tomb types, generally all made for a single individual, are:

- Large jars containing the body that were placed in simple pits. In most cases, the deceased are children "placed in a seated posture, with legs flexed to the chest, or flexed in a lateral position" and often wrapped in plain cloths (Isla Cuadrado 2009:130).
- Floored tubular pits with a base of fine sand on which the body was placed in a flexed seated position. The shaft is filled in, but sometimes the mummy is protected by a kind of tilted roof of wooden beams
- Barbacoa tombs whose chambers are often lined with stones or adobes. The chamber is covered by a massive roof of wooden beams reminiscent of a grill (barbacoa in Spanish) and packed stones, mud, and leaves. In the Palpa region, the bodies in these graves were "placed in an extended, dorsal position, legs flexed to one side" (Isla Cuadrado 2009:131).

There are differences in the quantity and quality of grave goods which include textiles, tools, adornments, vessels, and food. The *barbacoa* graves tend to be richer than the first two types and in general this tomb type implies a relatively high social status.

Large elaborate elite tombs like those excavated by Isla and Reindel (2006) at La Muña represent a fourth type which is clearly not common. It is characterized by deep, ample, rectangular chambers with *adobe* walls, a massive *barbacoa* roof, and a roofed surface platform enclosed by an *adobe* wall. Although at La Muña all tombs were looted, some leftovers, including fancy gold necklaces, point to an extraordinary original richness. The existence of such graves strongly suggests a pronounced social stratification of Nasca society.

Some Nasca tombs contain headless bodies (e.g., DeLeonardis 2000) while at some sites deposits of specially treated human heads were found (e.g., Browne et al. 1993). These so-called trophy heads are often depicted on vessels, tex-

<sup>&</sup>lt;sup>47</sup> For primary data, especially from the SGD, see Kroeber et al. 1998 and Novoa Bellota 2002.

tiles, and even some geoglyphs and must have played an important role in Nasca world view and rituals. Whether the heads were actually taken from captured enemies is still debated (Proulx 2001, Williams et al. 2001). Recent genetic and isotope analyses suggest that they were taken from locals and not from foreigners (Bower 2008, Knudson et al. 2009).

Little research has so far been done in the cabezadas. The works of the Palpa Project point to a depopulation of the headwater areas of the NGD at the beginning of the Nasca Period but also to a rapid repopulation on a notable scale only a few centuries later, during the Middle Nasca phase. Settlements consisted of round stone houses and were often established at elevated positions. In the upper Tierras Blancas valley (SGD), Kevin Vaughn excavated the Nasca settlement of Marcaya which was also built of round and irregular stone structures similar to those in the cabezadas of the NGD (Vaughn 2000/2009). The architectural pattern markedly differs from the one observed at the foothills where structures are rectangular and built of quincha and adobe. Though the associated fineware ceramic is clearly Nasca style, the architecture might hint to cultural differences between foothill and upper valley/cabezadas dwellers.

Round stone structures were common in the more distant highlands of the Ayacucho region, where the Huarpa culture developed. To date, the Huarpa people are believed to have organized in several more or less independent chiefdoms that developed out of local precursors (Gonzáles Carré 1982:65-77, Isbell 1997, Leoni 2009, Lumbreras 1974b:133-138). In the later phases, sites like Nawinpukyo, Wari, and others evolved into larger centers with administrative and ceremonial architecture. At the same time, a strong influence from Nasca culture is observable in ceramic assemblages (Benavides Calle 1971, Knobloch 1989/2005, Leoni 2009, Menzel 1964:8-10, Ochatoma Paravicio & Cabrera Romero 2010, Paulsen 1983). Arguably, also the construction of agricultural terraces boomed, allowing a much denser population (Isbell 1977:9, Schreiber 1992).

## 3.2.4.3. The Wari Culture of the Middle Horizon (MH)

The Middle Horizon (650–1000 CE) phenomenon has been subject to scientific debate since the works of Max Uhle (1959 [1918]) in the early 20<sup>th</sup> century.<sup>48</sup> All over the Central Andes, stylistic traits developed which show strong

influences from either highland Ayacucho or the Titicaca basin. Sherds and complete vessels of these local styles can often be found alongside imported wares from one of these two regions. The great urban centers of Wari (Ayacucho) and Tiwanaku (Titicaca) were the seats of power of two distinct but somehow interrelated largescale political entities. Wari presence was strongest in most of the Central Highlands, on the Central and South Coast, and the northern half of the Extreme South Coast, while the Southern Highlands down to Cochabamba in Bolivia and the southern half of the Extreme South Coast seem to have been dominated by Tiwanaku. The exact nature of the Wari and Tiwanaku polities is still debated. While some regions appear to have been under direct control of one of the two paramount centers, others might have been loosely allied or may only have maintained intense trade relations (contributors in Jennings 2010).

Wari presence on the South Coast is widespread, but still poorly researched. Concerning the valleys between Ica and Chincha, most known Wari artifacts originate from excavated tombs or surface collections (Kroeber & Strong 1965 [1924-1927], Kroeber et al. 1965 [1924-1927], Menzel 1964, Uhle & Kroeber 1965 [1924-1927], Wallace 1972:3). The Programa de Investigaciones Arqueológicas Chincha excavated some rectangular Wari stone structures at La Cantera in the Chincha valley which belong to a small administrative center, but aside from a short preliminary report (Alcalde Gonzales et al. 2001) no further publications are available to date. Martha Anders excavated parts of a Late Nasca and Early Wari settlement at Maymi in the Pisco valley where she found a deposit of broken Wari style vessels (Anders 1990/1994). The architecture, however, is built with adobe and quincha which is typical for the Nasca culture but not for Wari. A contemporary habitation site in the same valley was investigated by Raphael Santa Cruz (2007) at Miraflores 3A.

The apparent coexistence or immediate succession of the latest Nasca and the Early Wari occupations has also been observed in the Río Grande drainage. Conlee reports a Middle Horizon domestic occupation at the La Tiza site in the Nasca valley. Since the site was inhabited at least between 200 BCE–1476 CE, it also includes

For an overview over the recent state of research see contributors in Bergh 2012, Isbell & McEwan 1991, Jennings 2010, and Kaulicke & Isbell 2000/2001.

a Late Nasca occupation (Conlee 2010/2011). The Palpa Project also documented a number of Middle Horizon sites, which include a Late Nasca component, e.g., Huayuncalla (Castro de La Mata Guerra García et al. 2012, Reindel & Isla Cuadrado 2013).

At Huaca del Loro in the Las Trancas (or Tunga) valley in the SGD, an unusual circular stone building associated with Late Nasca and Early Wari ceramic material was identified (Novoa Bellota 2002:93-96, Paulsen 1983, Schreiber 1988, Strong 1957). It was integrated into a complex of large angular compounds with domestic remains and built of field stones set in mud mortar but partly also of adobes, which was partly destroyed after 1957. Next to these structures, a badly looted cemetery was registered which apparently included Nasca elite tombs similar to but smaller than those of La Muña (Isla Cuadrado & Reindel 2006). The ceramic material from Strong's excavations, especially that originating from a waste midden, belongs to the styles Nasca 7, Nasca 8 and Nasca 9/ Chakipampa and hence date to the transition between the Early Intermediate Period and the Middle Horizon (Paulsen 1983). A similar site is said to have existed at Tres Palos between the confluences of the Ingenio and Santa Cruz rivers with the Río Grande (Strong 1957:36-37), but no investigation has so far taken place. 49 The round structure is reminiscent of the so called East Plaza at Nawinpukyo which is believed to belong to the late Huarpa occupation of the site (Leoni 2009/2010). This architectural parallel may therefore also hint to strong cultural relations between the populations of the Nasca drainage and the Ayacucho region some time before the emergence of the Wari.50

As Paulsen (1983) argues, there is reason to assume that locals coexisted peacefully with immigrants from the Ayacucho region when the EIP slowly faded into the Middle Horizon. Soon, however, the last traditional Nasca merged completely with the highlanders before epoch 2 of the Middle Horizon (8th and early 9th century CE) when the Nasca region was probably ruled from Wari via local governors. During the Middle Horizon, no new geoglyphs were constructed, but the existing ones were respected and some of them stayed in use (Lambers 2006). This is another clear sign of cultural change occurring as a gradual transition.

Pure Wari sites, which can be attributed to the height of the Middle Horizon, are comparatively rare. Examples are Pataraya (Edwards 2010) and perhaps Pacheco (Novoa Bellota 2002:200-207) in the SGD, and Lambrasniyoc and Chilcapuquio in the NGD (Chapter 6.6). Furthermore, Helaine Silverman (Silverman & Proulx 2002:273-275) identified a compound of angular structures in the Ingenio valley as a possible Wari site. All these sites are modest in size, present compounds of orthogonal rooms and in some cases D-shaped structures, all built of stone. These installations most likely served administrative functions related to imperial rule. At the cabezadas of the NGD, the Palpa Project registered a number of further Wari sites that suggest a stronger Wari presence at higher altitudes. It is very possible that intense surveys in the headwater sections of the neighboring valleys would bear similar results, but these areas remain largely unexplored by archaeologists. Arguably, there were more Wari sites in the lower South Coast valleys too, which were either never recorded (or recorded but never published) or which have already fallen victim to the widespread and accelerating destruction caused by land claims and construction projects.

The burial customs on the South Coast changed in the Middle Horizon, but rather gradually, combining Nasca traditions with those probably introduced by Ayacucho highlanders. The best documented tombs of this time are located at sites in the Río Grande drainage (Isla Cuadrado 2001b/2009). Isla distinguishes three basic types: "simple or uncovered pits, barbacoa and roofed pits surrounded by a quadrangular stone structure, and roofed funerary chambers with a stone enclosure in the upper part" (Isla Cuadrado 2009:135).

The first of these tomb types resembles simple Nasca pit graves and usually contains a single body in a seated position. Such tombs, though poorly documented, have also been reported from Tambo Viejo in the Acarí valley (Niles-Hensler et al. 1988). Examples of the second, the *barbacoa* type, resemble the elite Nasca graves of La Muña and other sites but also show some

<sup>&</sup>lt;sup>49</sup> The site might have been related to Chiquerillo near the Grande/Ingenio confluence (Novoa Bellota 2002:207– 216, Isla Cuadrado 2001b).

Schreiber (Schreiber 1988) argues that round structures were also common in the middle and upper valleys of the Grande drainage, having in mind some dwelling sites with small and simple round houses. The large and carefully built structure at Huaca del Loro, however, was probably not a simple dwelling and it was surrounded by residential sectors with angular rooms. Quite obviously, Huaca del Loro does not compare to Schreiber's villages.

differences. They are smaller, the chambers were generally not filled, the quadrangular surface structures are of stone, not adobe, and they are often arranged in a line, sharing a wall. The Nasca tombs, in turn, are usually separated by a free space. Most notably, the Middle Horizon version frequently contains more than one body. In many cases of multiple burials an adult is accompanied by one or several infants. The third tomb type features quadrangular chambers lined with field stones and covered by a massive barbacoa roof. These tombs also have rectangular surface structures with stonewalls up to 1.5 m in height. High-status tombs often contained mummy bundles, which are intentionally mummified bodies in a seated flexed position wrapped in elaborate textiles and often wearing feather headdresses (Isla Cuadrado 2001b). Again, multiple burials of adults together with one or several infants seem to have been the rule, as far as it can be judged from contexts disturbed by looting (Isla Cuadrado 2009).

Numerous tombs of the early MH, including many of types two and three were also excavated by Tello and Mejía, especially at Huaca del Loro (Las Trancas Norte), Los Médanos (Las Trancas Sur), and Pacheco in the SGD (Novoa Bellota 2002). Conlee (2010/2011) reports looted rectangular, but also some oval, tombs from the foothill site of La Tiza in the Nasca valley, which she attributes to the Middle Horizon. These seem to correspond by and large to Isla's second type. The agglutinated graves with rectangular surface structures excavated by Lothrop and Maler (1957) in Chaviña (Acarí) can also by assigned to the second type.

Interestingly, burials at the *cabezadas* differed greatly. Contrary to earlier phases, not all tombs were subterranean. Small stone houses, so called *kuntis*, were also common. These are generally rectangular in shape and contain the bones of numerous individuals, many of which having deformed skulls. As these graves are easily recognizable, practically all of them have been opened and disturbed during the last centuries, but it is likely that they were also reopened frequently in ancient times to deposit additional bodies. Very often only skulls and long bones are observable, which indicates secondary internment.

Recent excavations at Huayuncalla in the cabezadas of the NGD have revealed several different types of MH graves, including large circular funeral structures with a ledge and a central sunken quadrangular chamber, carefully paved with flat stones (Castro de La Mata Guer-

ra García et al. 2012). This layout resembles the circular structure at Huaca del Loro, which perhaps might actually be a tomb. In the Ayacucho region (the Wari heartland) burial types and customs are manifold and have been resumed by Isbell (2004) and Valdez et al. (2002/2006).<sup>51</sup> Multiple burials and accessible stone chambers are well known, but in these cases the chamber itself is generally subterranean. Free-standing small stone houses are not common.

The causes for the demise of the Wari realm are still not well understood. Wari seems to have lost control over most of its actual or would-be provincial administrative centers between 800-1000 CE with the core area around the city of Wari itself being the last bastion (Isbell 1997). The NGD suffered severe depopulation around 800-900 CE when all known Wari centers in the region were abandoned. Schreiber (Schreiber 1992:34-36) lists a number of potential factors that may have played a role in the decline of the Wari political system and finally in the demise of the city of Wari itself, including an excessively costly imperial administration, invasion by a foreign power, disease, and climatic deterioration. In the end, only intensified archaeological investigation in the wider Ayacucho area can be expected to reveal the data necessary for a better understanding of what happened to Wari and its people at the end of the Middle Horizon.

# 3.2.4.4. Cultures of the Late Intermediate Period (LIP)

With the final breakdown of the Wari and Tiwanaku polities and the disappearance of their influence in distant areas, a restless time of regional developments began. It is characterized by more or less profound cultural changes, apparently significant migration movements, and widespread warfare. This so-called Late Intermediate Period (1000-1470 CE) lasted until the incorporation of most of the Central Andes into the Inca Empire during the second half of the 15th century CE.52 A general characteristic of that time seems to be that most ethnic groups were divided into several largely autonomous subgroups often fighting each other and uniting only in the event of external threats. Contrary to all earlier periods, some oral tradition survived into the early colonial period and, having passed through several filters, found its way

<sup>51</sup> Also see Leoni 2010 for a number of excavated burials of diverse types from the site of Ñawinpukyo.

<sup>52</sup> See Conlee et al. 2005 and Covey 2008 for recent overviews over important LIP cultures in the Central Andes.

into chronicles and administrative documents. Although these sources should be used carefully and critically, the information may occasionally help to link archaeological remains to historic records. In some cases, this allows speaking of actual ethnic groups and political entities rather than of mere archaeological cultures. Nevertheless, the most important source of information is still the material remains.

The most important and best known polity on the South Coast was surely the one centered in the Chincha valley (Menzel & Rowe 1966, Rostworowski de Diez Canseco 1977, Sandweiss 1992). The capital of La Centinela/Tambo de Mora still preserves large monumental adobe and tapia53 mounds and high enclosure walls as do several other contemporaneous complexes (Canziani Amico 2009:410-424, Wallace 1998, Uhle & Kroeber 1965 [1924-1927]:63-86, Wurster 1999:146-152). The Lords of Chincha are known from ethnohistoric sources to have been wealthy and powerful thanks to their domination of maritime trade along the Peruvian coast (cf. Menzel & Rowe 1966, Rostworowski de Diez Canseco 1977). There is, however, a certain chance that the Chincha only acquired such a position due to their status as favored Inca allies and that they may have been far less powerful before the Inca expansion. At least, there is no evidence that the Chincha also directly controlled the neighboring valleys of Pisco and Ica, or even the Río Grande drainage (Conlee et al. 2005:222–229, Menzel & Rowe 1966:63–67). The people living there surely shared a similar culture but their societies seem to have been less hierarchical and complex.

The ruins of a major LIP settlement in the Pisco valley can be found directly adjacent to the great Inca complex of Tambo Colorado, but these do not include monumental or special purpose architecture. Dozens of further sites were briefly described by Wallace (1971) but no excavations or detailed surveys were carried out. In Ica, the preserved monumental architecture is sparse and of much smaller scale than in Chincha although there are a number of simpler LIP settlements. The site of Ica La Vieja, also known as Tacaraca or Tajaraca, is seen as the capital of an independent chiefdom in the Ica valley (Kroeber et al. 1965 [1924-1927]:122-123, Menzel 1976:12-26/1977:8-18, Uhle 1913). A certain degree of (perhaps only temporary) political unification of the northern South Coast via asymmetric alliances rather than direct control is nevertheless possible but hard to prove from the archaeological record.

LIP settlements in the Río Grande drainage were built by the Nanasca people. They are often large but lack any kind of monumental architecture comparable to the mounds and platforms in the northern valleys. At the foothills, they predominantly consist of agglutinated angular fieldstone structures connected by streets and passageways and are often protected by walls or natural topography or both. The perhaps best-known example of this type is the site of Huayurí in the Santa Cruz valley (Novoa Bellota 2002:230-231, Kroeber et al. 1998:39, Neudecker 1979, Ubbelohde-Doering 1958). Between the Palpa and Río Grande valleys the LIP settlement of Pinchango Alto was documented by the Palpa Project and a 3D model was produced by specialists from the ETH Zürich (Eisenbeiss 2009, Reindel 2005). In the SGD, Conlee's work at the small village of Pajonal Alto constitutes the only detailed investigation on an LIP settlement, though many others are known superficially (Conlee 2000/2006).

Farther to the south, Kroeber (1944:22–23) reports occurrences of Ica style sherds in the Acarí and Yauca valleys as does Menzel (1993 [1954]). The settlement pattern in Acarí is summarized by Menzel who states that "[t]here was no monumental site built in the native tradition comparable to La Centinela in Chincha and Old Ica [Tacaraca]. Sahuacari and Otaparo, the largest concentrated native settlements, are no more than good sized villages, without imposing monumental buildings" (1959:131).

Hardly any research has been dedicated to settlements at the *cabezadas* although these are numerous, often extended, and mostly well preserved. Construction patterns are markedly different from those at the foothills: houses are generally round and often arranged on terraces surrounding a hilltop. Since in the entire Río Grande drainage no site exists which would classify as the capital of a drainage-wide polity, it seems likely that power was split between a number of small, either competing or perhaps (at least temporarily) allied, chiefdoms.

The settlements at the *cabezadas* of the Río Grande drainage can be attributed to the Rucanas people (also spelled Lucanas) who occupied the upper valleys and the adjacent *puna* on both sides of the continental divide. To the northeast their settlement area bordered that of the related Soras (Abraham 2010, Meddens & Schreiber 2010, Mölders 2010, Schreiber 1993). This area

<sup>&</sup>lt;sup>53</sup> Tapia are large blocks of compacted or rammed clay.

includes extended and highly productive agricultural terraces in the valleys, which are supplemented by vast grazing grounds in the puna. The Rucanas are mentioned in several early colonial documents and chronicles, but most information concerns the situation under Inca and Spanish rule (Abraham 2010, Guillén Guillén n.d., Meddens & Schreiber 2010, Mölders 2010, Schreiber 1993). Rucanas settlements in the cabezadas of the NGD are associated with low quantities of Ica style ceramic sherds while the bulk of the surface material consists of plain, non-diagnostic coarseware. In turn, the Andamarca region on the opposite side of the puna had its own decorated ware (Schreiber 1993:80-82). The architecture, however, is largely identical in both regions. Many Rucanas settlements have defensive walls and are located on hilltops. After Cieza, the Rucanas also had to defend against raids by the Chinchas, who "did great harm to the Soras and Lucanas" (Cieza de León & Pease 2005 [1553]:202 [Chapter LXXIV]).54

Relatively little published information is available on LIP burial customs on the South Coast. Uhle excavated a number of tombs near the old Chincha capital, but he paid little attention to describing the graves themselves (Kroeber & Strong 1965 [1924-1927], Uhle & Kroeber 1965 [1924-1927]:87-90). Generally, most tombs had a chamber which was carved out horizontally either directly into the vertical front face of a natural terrace or parting from the bottom of a deep vertical pit. In most cases, the graves contained multiple burials. Canziani (Canziani Amico 2009:420-422) describes semi-subterranean, rectangular elite tombs in the Chincha valley, which were made of stone or tapia and apparently designed for reentry. Such tombs, though badly looted, are also still observable at the LIP settlement next to Tambo Colorado in the Pisco valley. In Chincha as well as in Pisco, they always contained several individuals.

In Ica, Uhle excavated a number of LIP graves, but in most cases he concentrated on grave goods, especially ceramic vessels, and did not document the complete contexts. Only for the Soniche cemetery more detailed information is given (Menzel 1976:17–23/1977:8–28, Kroeber et al. 1965 [1924–1927]). After Menzel, urn burials were the rule also for adults. In elite tombs, the principal dead was placed in an urn while several bodies of young adults and children, perhaps servants or relatives, were placed around him. The principal body often shows clear signs of secondary treatment, especially of red painting on the bones (1977:8–28). The

deeper and richer tombs were originally marked at the surface by a carved wooden post, which was cut down and buried when the tomb was definitely sealed (Menzel 1977:21–22). Most of the tombs opened by Uhle, however, belong to the Late Horizon and the early colonial period.

In the Río Grande drainage, no systematic studies on LIP burials have been undertaken. In the NGD, the remains of looted LIP graves can be observed at many sites, but almost all tombs seem to have been simple pits containing a single mummy in a seated flexed position wrapped in plain or sometimes painted cloths. No elaborate elite tombs like those from Chincha, Pisco, and Ica are known. At Pacheco in the SGD, Tello and Mejía excavated some simple pit graves in cemetery C (Novoa Bellota 2002:203). At least at the foothills, LIP burials in the Río Grande drainage thus resemble the settlements in that they are numerous but relatively simple and do not reflect a pronounced social stratification. Proulx, however, reports that LIP tombs from the lower Río Grande valley "tended to be large, deep and rectangular in shape, often with adobe lining" (2007:8). Certainly, more research is necessary to gain a more complete picture of LIP tombs at the coast and at the foothills.

The situation is different at the *cabezadas* where large round stone houses for multiple burials known as *chullpas* were erected in or next to important settlements. They somehow seem to continue the customs known from the Middle Horizon, though the shape of the structures changed from rectangular to round. Although almost all *chullpas* have been looted, the disturbed bones can often still be found inside. Burials can also be found in small caves or below rock shelters (*machay*) closed by walls, though in many cases the dating of these contexts is not clear (Reindel et al. 2008:59,135–141).

### 3.2.4.5. The Inca Culture of the Late Horizon (LH)

The Late Horizon is defined as the epoch during which the Central Andes were incorporated into the Inca Empire. As different provinces were established at different times, the exact beginning of the epoch varies from region to region but most conquests occurred during the reign of Pachacutec (1438–1471) and the first years on the throne of his successor Topa Inca (1471–1493).

<sup>54</sup> My translation. Orginal reads: "[...] hicieron gran daño en los soras y lucanas [...]."

The major campaigns essentially concluded with the victory over the Chimú Empire on the North Coast in 1476 (Rowe 1946). The Spanishled conquest of the Inca Empire started in 1532 and by 1533 most of the former Inca reign was under the control of the *conquistadores* and their numerous native allies. The last Inca refuge in the Vilcabamba area west of Cusco, however, was not taken before 1572. In sum, the temporal core when most of the Central Andes was firmly under Inca rule only comprises about half a century (1476–1532 CE).

Much of the South Coast was apparently annexed within the scope of the same campaign that brought the Soras and Rucanas under Inca control. Ethnohistoric sources<sup>55</sup> tell of stiff battles between Inca and Soras while there is no clear evidence that the Rucanas were involved in the fighting (Meddens & Schreiber 2010, Mölders 2010, Schreiber 1993). It is very possible that they surrendered peacefully when facing the overwhelming superiority of the imperial army. There is some debate whether the campaign was led by Pachacutec or by one of his generals almost immediately after the conquest of the Chanka territories in the Huancavelica region (around 1440 CE) or by Topa Inca in the early 1470s (Julien 2008, Menzel 1959, Rowe 1946).

The inhabitants of the valleys of Nasca, Ica, and Pisco seem to have surrendered without major fighting while those of Chincha resisted. Miguel Cabello Valboa, Bernabé Cobo, and El Inca Garcilaso de la Vega tell of military engagement.<sup>56</sup> Pedro Cieza de León states that the Chinchas themselves told him that they had reached a peaceful agreement with the Incas while natives from other ethnic groups informed him about a great war (Cieza de León & Pease 2005 [1553]:427-428 [Chapter LIX]). It is also possible that the fighting refers to a first, unsuccessful attempt of conquest in the 1440s and the peaceful surrender to the arrival of the army of Topa Inca in the early 1470s. In any case, the privileged status of the Lord of Chincha under Inca rule argues against a major clash causing great losses to the Inca army.

The Inca administration of the South Coast differed from valley to valley but in general, local elites stayed in power and were only supervised by an official from Cusco (Menzel 1959). While in more rebellious provinces forced population exchange and military occupation were the rule, such measures were not taken on a major scale in case of the South Coast (Rankin 1994).<sup>57</sup> In Chincha, a large Inca administrative compound was added to the existing capital at La Centi-

nela (Uhle & Kroeber 1965 [1924–1927]:75–80, Wurster 1999:153) and another, smaller one to Tacaraca in Ica (Menzel 1959:128/1976:12–15). In both cases, direct Inca presence in the respective valleys seems to have been limited to the residence of the representative of the Sapa Inca<sup>58</sup> and his staff and perhaps the establishment of a temple to the sun, the principal Inca deity.

The situation is different in the Pisco valley for two reasons: first, no capital with administrative facilities comparable to La Centinela and Tacaraca already existed, and second, the Pisco valley provided the best connection between the coast and the highlands. The Inca built a major road leading from Cusco via Vilcashuamán and following the Pisco valley to Chincha, but very likely this route had already been in use for many centuries or even millennia (Hagen 1978, Hyslop 1984, Proyecto Qhapaq Ñan 2006). At least four major Inca sites are known: Lima La Vieja and Tambo Colorado at the foothills, and Huaytará and Incahuasi in the cabezadas. Incahuasi seems to have been a kind of royal spa equipped with baths, and may have served as a road stop for important travelling officials (Wurster 1999:173). At Huaytará, the finely dressed stonewalls of an apparent temple, now integrated into the local church, as well as the walls of some other associated structures can still be seen (Barranza Lescano n.d., Rosales Huatuco 1978, Uhle et al. 2005 [1902], Wurster 1999:166-173).

The principal site for storage and administration surely was Tambo Colorado, where a large complex of storehouses and a palace were erected directly adjacent to an existing major settlement (Canziani Amico 2009:493–496, Kroeber 1944:41, Protzen 2006/2008, Uhle et al. 2005

- 55 Cieza de León & Pease 2005 [1553]:402 (Chapter XL-VII), Cabello Valboa 1951 [1586]:304 (3rd part, Chapter XV)
- <sup>56</sup> Cabello Valboa 1951 [1586]:338 (3<sup>rd</sup> part, Chapter XVIII), Cobo & Mateos 1964 [1653], vol. 2:81 (2<sup>nd</sup> book, Chapter XIII), Garcilaso de la Vega & Urtega 1941 [1609]:160–167 (6<sup>th</sup> book, Chapters XVII and XVIII).
- <sup>57</sup> Garcilaso de la Vega mentions that some Nanasca were resettled to the lower Apurímac valley, on the Andean east flank northwest of Cusco, because they were well adapted to a hot climate. But he also explicitly states that these mitmaqkuna were only few in number because of the limited arable land available along the steep river banks (1941 [1609]:276, 3rd book, Chapter XIX).
- The term Inca, though it is now used for the entire people of Cuzco, originally referred only to the members of the noble families. The "king" himself held the title of Sapa Inca (meaning "the only Inca" in the sense of "peerless").

[1902], Wurster 1999:156–165). Lima la Vieja seems to have been another native settlement which was amplified by Inca architects to serve as an administrative center (Hyslop 1984:111–112, Soldi 1995). Hyslop assumes that it served to control coastal traffic while nearby Tambo Colorado supervised movements of goods and people to and from the highlands. Lima la Vieja also served as the preliminary capital of the Viceroyalty of Peru for a few months in 1534, before the foundation of Lima in 1535.

In the Nasca drainage, a small administrative center or governor's residence was built in the foothill section of each major valley: Tambo de Huayurí in the Santa Cruz valley, Pueblo Nuevo (Tambo de Llipata) in the Río Grande valley (Novoa Bellota 2002:212-214, Reindel 2009:458-460), Tambo de Collao in the Ingenio valley (Hagen 1978:208, Menzel 1993 [1954]:53-55, Silverman & Proulx 2002:282), Paredones in the Nasca valley (Novoa Bellota 2002:197-199, Canziani Amico 2009:496-498, Menzel 1959), and Poroma in the Las Trancas valley (Novoa Bellota 2002:197–198). The complexes in the Río Grande, Ingenio, and Las Trancas valleys are now completely destroyed but are still observable in old aerial photographs. In the foothill section of the study area, there are several additional minor Inca sites, often directly adjacent to older LIP settlements, but there is only one clear Inca administrative center in the cabezadas. It forms part of the site of Santa María, overlooking an extended complex of agricultural terraces. It consisted of only three buildings and was much smaller than the principal centers downstream. Apparently, direct Inca control focused on the yunga and the coastal road between Chincha and Acarí.

In Acarí, Tambo Viejo was erected as one of the major coastal administrative centers, comparable in scale to Tambo Colorado. There were further habitation sites close-by, which apparently were already occupied before the Late Horizon (Menzel 1993 [1954], Menzel 1959). In Yauca, Inca administration had its seat in Tambo de Jaqui (Menzel 1993 [1954]:53).

It bears repeating that information on Late Horizon burial contexts is sparse. The general cultural continuity between LIP and LH on the South Coast suggests that burial customs did not change significantly, at least not for commoners. Members of the ruling local elite naturally had much closer contact to the Inca officials and hence were more influenced by their culture. For Chincha, where horizontally carved out chambers had been the rule, Uhle states that

"[w]ith the entrance of the Inca civilization, the [tomb] type changed, and we find graves of the Inca period excavated cylindrically 3 to 4 meters deep and the bodies set around the walls at the bottom" (1965 [1924–1927]:90).

Some more detailed information is available from the Soniche cemetery in Ica where Uhle had excavated a number of LH tombs of commoners and nobles. Menzel, who had access to his unpublished field notes, summarizes the data as follows:

Burials of commoners are shallow, unstructured interments in the sand, without provision for re-entry [while those of nobles were] [...] deep and large, excavated through approximately 12 feet [3.7 m] of drift sand into the clay subsoil of the valley. The main grave chamber of each tomb was a rectangular room cut into the hard, moist clay. These chambers were evidently meant to be dwellings for the dead, for they were provided with lattice roofs of poles and thatch. The standard size of the chambers found by Uhle varied from about 6 feet by 6 feet [1.8 by 1.8 m] in area and 3 feet [0.9 m] in depth to 14 feet by 9 feet [4.3 by 2.7 m] in area and 7 feet [2 m] in depth. The chambers contained several dead, sometimes 12 or more. One or two large entry steps, and in one tomb a zig-zagged access way about 18 feet [5.5 m] long, were built to make entry into the chambers easier and perhaps more ornate (1977:9).

The richest tombs, however, were the first ones to be plundered by the Spaniards. No scientifically investigated Late Horizon elite tombs are known from the Río Grande drainage. Simple pit burials of commoners, in turn, may have contained the same material as in pre-Inca times and would thus be difficult to distinguish from Late Intermediate Period tombs.

When in 1528, Inca Huayna Capac (1493–1528) and his designated heir both suddenly died of disease while campaigning in Ecuador, a war for succession broke out between two other sons of the deceased ruler. Atahualpa, who had accompanied his father, assumed command over the northern army and had his major power base in north Peru and Ecuador while his half-brother Huascar, who had stayed in Cusco, controlled the resources of the Inca heartland and was supported by much of the Cusco nobility.

The Rucanas and probably also the South Coast peoples seem to have fought on Huascar's side. At least, the Rucanas took part

in the great battle of Yanamarca, near Jauja, which ended with a decisive defeat of Huascar's army (Murúa & Ballesteros Gaibrois 1987 [1611–1616]:184–185 [first book, Chapter LII]).<sup>59</sup> Shortly after, Atahualpa won the final battle and took his opponent prisoner. The war had raged for five years and had left many provinces devastated (D'Altroy 2003:76–83, Rostworowski de Diez Canseco 1988:148–178) but the South Coast, including the *cabezadas*, does not seem to have been affected directly.

Shortly after Huascar's defeat, a small Spanish war party led by Francisco Pizarro landed at Túmbes in northern Peru. 60 Pizarro took advantage of the still unstable political situation via changing alliances with the different factions (Rowe 2006). In Cajamarca, the *conquistadores* managed to take Atahualpa prisoner in a risky coup. After his execution, the Spanish supported the Huascar side and had Manco Inca, another son of Huayna Capac, crowned as a puppet ruler. Manco, however, soon launched a rebellion against the Spanish but was finally defeated and retreated to the largely inaccessible Vilcabamba region west of Cusco.

In the following years, the Spanish managed to establish and consolidate their supremacy by making and breaking alliances and playing off the tensions between the various ethnic groups and factions, pitting them against each other. Even when the *conquistadores* started to fight amongst themselves (1537–1542), the native lords supported different Spanish parties. In later years, the potential for native resistance was se-

verely weakened not only by segmentation but also by drastic depopulation, especially of the coastal regions. In the case of Chincha, Menzel and Rowe deduce from colonial sources that:

[t]he native population declined catastrophically in the half century following the conquest, from over 30,000 heads of households in 1533 to 979 counted in 1583. The decline was probably a reflection of a combination, of epidemics of diseases of European origin, such as measles and smallpox, and famine resulting from the disruption of native organization produced by years of destructive warfare. Severe general epidemics are reported for Peru for 1546 and 1558, and famines occurred in 1539 and 1548. All coast valleys in Peru showed a heavy loss of population in the 16th century, but Chincha was one of the valleys which suffered the most (1966:69).

There is no reason to assume that the neighboring valleys, including the Río Grande drainage, were less affected, because these should have suffered from the same hazards. Cieza de León even explicitly states that "the wars of the past consumed with their cruelty [...] all of these poor indios. Some Spanish of credit told me that the greatest harm which came upon these indios causing their destruction was the quarrel between the two governors Pizarro and Almagro about the limits and terms of their governorates, which had been so costly [...]" (2005 [1553]:204 [Chapter LXXV]).61

<sup>59</sup> Cf. Mölders 2010:71–73 for further indirect indications in colonial documents.

A good recap of the events during the years 1532–1572 is given by Morris and von Hagen (2011:234–244), D'Altroy (2003:311–321), and Rowe (2006).

My translation. Original reads: "Las guerras pasadas consumieron con su crueldad [...] todos estos pobres indios. Algunos españoles de crédito me dijeron que el major daño que a estos indios les vino para su destrucción fue el debate que tuvieron los dos gobernadores Pizarro y Almagro sobre los límites y términos de sus gobernaciones, que tan caro costó [...]."