

Andean Past

Volume 11

Article 16

12-15-2013

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Recommended Citation

Carmichael, Patrick (2013) "Regionalism in Nasca Style History," *Andean Past*: Vol. 11 , Article 16.

Available at: https://digitalcommons.library.umaine.edu/andean_past/vol11/iss1/16

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REGIONALISM IN NASCA STYLE HISTORY

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INTRODUCTION

For over fifty years, Lawrence Dawson's Nasca pottery seriation has been the standard reference employed by archaeologists studying Early Intermediate Period remains on the south coast of Peru. In recent years, a growing number of researchers have questioned the validity of Dawson's seriation. This paper argues that the seriation is valid for the Nazca Valley, but is not directly applicable elsewhere on the south coast. Three south coast style areas are proposed, each with its own history, and it is acknowledged that further study may yet establish separate style histories for each valley. South coast valleys, rather than being labeled as "centers" or "backwaters" at different points in time, are best seen as filters through which ideas flowed.

BACKGROUND

The Nasca culture occupied the oases of the Ica River and the drainage basin of the Río Grande de Nazca (Figure 1) during the Early Intermediate Period (hereafter EIP, also known as the Regional Developmental Period). Nasca potters produced undecorated utilitarian ceramics and fine polychrome with elaborate iconography. Nasca polychrome, the focus of this article, has long been used by archaeologists as a relative time marker because of pronounced stylistic shifts in the sequence.

In the early 1950s, Lawrence Dawson, working under the direction of John Rowe at the University of California, Berkeley, used

similiary seriation to establish a sequence of style phases for Nasca pottery (Rowe 1956, 2010 [1960]), which Rowe (1962) then used to define the epochs (time units) of the EIP (Figure 2). However, Dawson did not write down the details of his seriation, and while students in the 1960s and 70s produced term papers and dissertations on aspects of the sequence, some phases received minimal attention. The seriation has never been published in its entirety. In reality, the Nasca seriation was a work-in-progress that stalled decades ago, though today it is often referred to as a fait accompli.

Donald Proulx provides the most comprehensive overview of the sequence in his masterpiece, *A Sourcebook of Nasca Ceramic Iconography* (2006:30-48). While this book will be a standard reference on Nasca for generations to come, its focus is on iconographic interpretation, not chronology. As Proulx (*ibid.*:29) writes:

. . . to this day a complete description of the full nine-phase seriation has not been written and is not attempted here. The main goal of this book is to describe and interpret the ceramic iconography of the Nasca. Additional analysis needs to be accomplished before the seriation can be published in its entirety.

Nonetheless, Proulx's phase summaries are the most extensive currently available. In this same work, he gives a complete history of research on Nasca pottery and an excellent discussion of Dawson's methods. The bibliography is compre-

hensive. For all matters pertaining to the history and development of Nasca pottery studies, the reader is referred to this single, definitive source.

In recent years, Dawson's seriation has been the focus of growing discontent. The main reasons for criticism are:

1. The style phases were never fully published, leaving ample room for confusion.
2. Recent data from Palpa contradicts Dawson's original phase markers, thus calling into question the validity of the entire sequence.

LACK OF PUBLISHED PHASE DEFINITIONS

There is a huge literature on the general subject of Nasca pottery, but only a small amount is devoted to similiary seriation and comprehensive phase definitions. By *comprehensive phase definitions*, I am referring to the illustration and detailed description of all of the vessel shapes, and all of the iconographic designs that occur together in a given phase, in addition to the features that mark its beginning and end.

Dawson originally identified nine Nasca style phases, though he placed Phase 9 in the Middle Horizon. By consensus in the late 1980s, Phase 8 was renamed Loro and also relegated to the Middle Horizon. Some researchers regard Nasca Phase 1 as culturally contemporary with Late Paracas (*e.g.* Sawyer 1966:96; Schreiber and Lancho 2003; Van Gijseghem 2004, 2006), while others place it in a transition period between the Early Horizon and the EIP (Unkel and Kromer 2009:243). Published descriptions of the phases are scattered. Menzel, Rowe and Dawson partially outlined Phase 1 (1964); Dwyer referred to some Phase 1 and 2 iconographic traits (1979); Proulx defined Phases 3 and 4 (1968); and Roark covered Phase 5 and

part of 6 (1965). Phase 7, apart from appearing on chronological charts (Menzel 1977) and in unpublished studies by Dorothy Menzel and Steven Wegner, has not been formally presented (see Proulx 2006:42-43). As matters stand, the record is spotty and what exists is long out of print. The last major contribution to the seriation was Wolfe's (1981) tracing of the Spotted Cat and Horrible Bird motifs. Carmichael (1998a) identified pottery from grave lots excavated by Alfred Kroeber according to the Dawson Seriation, which provide visual examples of the phases, but without descriptive explanation (see Kroeber and Collier 1998). It is incorrect to say the Nasca seriation has been done. On the contrary, it badly needs doing.

Very little on phase definitions has appeared in Spanish, German, Italian, French, or any language other than English. If North American researchers have trouble with the seriation, imagine the difficulties facing their foreign colleagues.

Providing comprehensive phase definitions for Dawson's sequence is a task beyond the current work. Here, I only draw attention to the deficit and need. Using ill defined style phases to designate the epochs (time units) of the EIP in a stacked chronology has also led to difficulties (Figure 2). In this article I propose a new conceptualization based on recent excavations and C-14 dates (Figure 3, and see Appendix: Revised Chronology). South coast researchers will grasp the logic immediately, but the details of this scheme must await separate publication. However, it should be noted here that, in their original formulation, Rowe and Dawson considered overlap between phases theoretically possible (Rowe 1956:147).

Variations in style may be due to the passage of time or to regional expression. When Dawson developed his phase sequence in the 1950s, no significant regional variation in Nasca pottery

was identified. Though noting a few local peculiarities, Rowe felt the Nasca style was sufficiently homogeneous to allow application of Dawson's seriation from Pisco to Acari, and that local variants were chronologically insignificant (Rowe 2010 [1960]:238). Accumulating data over the past fifty years now require reconsideration of this premise.

CONTRADICTIONARY EVIDENCE

Some vessel shapes, motifs, and individual design features appear and disappear rapidly within the sequence, making them useful as diagnostic phase markers. In the traditional Dawson Seriation, hair locks outlined in white are a marker for Phase 4 (Figure 4), while the "wedged head" motif is a marker for Phase 5 (Figure 5).

Dawson's seriation is contradicted by recoveries from the valleys of Santa Cruz, Grande, Palpa, and Viscas, herein referred to collectively as the Palpa region (see Figure 1). Johnny Isla Cuadrado's publication (2001) of a huge Nasca grave lot from Santa Cruz, and his excavations with Markus Reindel at Los Molinos and La Muña on the Río Grande (Reindel and Isla 2001), demonstrate that elements such as the outlined hair lock and wedged head can occur together on the same vessel (Figure 6). This is but one example of the mixing of traits formerly thought to be exclusive to one phase or the other. Additional examples from Palpa include what in the Nazca Valley are classic Phase 5 vessel shapes with Phase 4 painting (black ground and outlined hair locks), and Phase 4 shapes with Phase 5 motifs. Hecht (2009, 2013) provides a new Nasca pottery sequence for the Palpa region, one which refers to the original Dawson Seriation, but combines phases into Early, Middle, and Late divisions. A full listing of the stylistic variations between Nazca and Palpa is beyond the scope of this paper. My purpose here is simply to establish that these

two regions have different style histories. (The reader is referred to Reindel and Wagner 2009 for a full update on Palpa archaeology.)

Does the Palpa data invalidate the Dawson Seriation? To answer this question we must first consider the origins of the pottery used by Dawson to construct his sequence. His initial work was based on a collection of 584 unassociated vessels purchased by Max Uhle in 1905 along the Nazca Valley, plus another 102 from the valleys to the immediate south (Gayton and Kroeber 1927:4). Later, Dawson checked his findings against Nasca grave lots excavated by Alfred Kroeber (stored in Chicago), Duncan Strong (New York), and William Farabee (Philadelphia). These sources confirmed his original seriation based on the Uhle collection. Dawson later added specimens without provenience from other museums and from published sources, but the core data for his seriation came from the Uhle, Kroeber, Strong, and Farabee collections – *all of which derive from sites along the Nazca Valley* (Figure 7).

I have studied the same Nazca Valley collections that Dawson used, and confirmed to my satisfaction that Dawson's seriation holds true for these materials. However, in view of the Palpa data, it must now be stated that Dawson's seriation only applies to the Nazca Valley. Clearly, there is more regional variation in the Nasca style than previously recognized, and a seriation from a single valley can no longer be applied to the entire south coast.

In the first half of the twentieth century there was an assumption that the Nazca Valley was the center of the Nasca world—the font of all stylistic and cultural development throughout the EIP. The valley surely enjoyed a certain prestige during Early Nasca times when the great site of Cahuachi was in active use, but the main reason for the "dominance myth" is historical. In the early years of the twentieth century

North American researchers worked almost exclusively in the Nazca Valley, and their collections influenced subsequent generations. Joyce (1912) is credited with naming this ancient culture “Nasca” (Rowe 2010 [1960]:233). It is natural to identify the culture with the geographic place name, and therefore easy to assume this valley was the center of Nasca culture and hub of innovation throughout the EIP. This view is an artifact of early twentieth century collecting habits. The Nazca Valley was but one filter through which ideas flowed up and down the south coast. It may well have been the origin of certain elements in the Nasca tradition, while being the recipient and re-interpreter of others.

STYLE REGIONS OF THE NASCA HEARTLAND

The Ica Valley and Río Grande de Nazca Drainage Basin constitute the Nasca heartland, the territory in which the Nasca cultural tradition is most intensely expressed. Limited finds of Nasca pottery beyond this core indicate the extent of trade contacts and prestige influence without implying direct presence or control. While we may speak of a greater Nasca Style (produced throughout the heartland) as a unit for general comparison with other Andean ceramic traditions, there is much local variation. Hecht (2009, 2013) demonstrated that the Palpa region has a different style history from Nazca, and previously Proulx (1968:96-100) identified a number of similarities and differences in the EIP ceramics of the Ica and Nazca Valleys. Nasca art does not represent an entirely uniform style. Rather, it expresses a stylistic tradition composed of interacting regional varieties with independent histories. As an initial step, we should begin thinking in terms of three separate style regions as follows (Table 1):¹

¹ I first proposed the concept of three style regions in a paper delivered at the Institute of Andean Studies Annual Conference, Berkeley (Carmichael 2005). As these terms

Northern Nasca Region (NNR)	
Modern capital	Ica
Territory	Ica Valley and its oases
Central Nasca Region (CNR)	
Modern capital	Palpa
Territory	Valleys of Santa Cruz, Grande, Palpa, Viscas, Ingenio
Southern Nasca Region (SNR)	
Modern capital	Nazca
Territory	Valleys of Nazca, Aja, Tierras Blancas, Taruga, Chauchilla, Las Trancas

Table 1: Proposed Nasca style regions.

These three regions are shown in Figure 8. It must be emphasized that, in my usage, they are style regions. Correspondence to geography is secondary, and speculation about ethnic or political territories is premature.² At this junct

have gained some currency, it is past time I clarified my intended meaning. In naming these regions, I was inspired by Katharina Schreiber’s long-standing reference to the southern tributaries of the Río Grande de Nazca Drainage Basin (Nazca–Las Trancas Valleys) as Southern Nasca (e.g., Schreiber and Lancho 2003:8), which Kevin Vaughn later formalized as the Southern Nasca Region (Vaughn 2004: figure 1). However, where Schreiber and Vaughn are referring to a geographic region, here, I refer to style regions.

² Gary Urton has reconstructed the late pre-Hispanic and early colonial socio-political organization of the Río Grande de Nazca Drainage Basin into moiety, *suyu*, and *ayllu* territorial divisions (1990:196-197). As Ana Nieves points out in a review of the current article, Urton’s historic moiety and *suyu* territories are not dissimilar to the style areas proposed here for SNR and CNR. Of course, we do not know the full extent to which the Incas may have reorganized the south coast after its incorporation into their empire, and we must be cognizant of the tremendous social upheaval in the early historic period caused by plagues decimating populations, and the movement and scattering of peoples to meet labor quotas. Urton is sensitive to such considerations and has done a great service in documenting ethnohistoric sources on the

ture, I see no way of defining lineal boundaries between the regions (if such is ever possible, or desirable), and I do not know with which regions the lower Río Grande and lower Río Ica should be classified, or whether they represent a fourth region (Figure 8). These are questions for future research. For now, it is a start to recognize three broad style regions where previously only one was envisioned.

Ideally, each style region should have its own seriation conducted by fresh minds with fresh eyes, and undertaken independently. Comparison to other regions should await completion to ensure objectivity unencumbered by preconceptions.

It is assumed that, for the most part, the pottery found in each style region was produced there, though some allowance must be made for inter-regional exchange. It may be that, one day, we will be able to identify peculiarities of style for each river valley on the south coast, but for now we should think in terms of the regional groupings proposed above. For the SNR, Dawson's seriation needs to be fully described, and some adjustments made (Carmichael 2010). While the Nazca Valley sequence generally applies to its neighbors (Aja, Tierras Blancas,

Taruga, and Las Trancas), inter-valley variation is present. For example, in Las Trancas, a Kopara Style corresponding to Late Nasca can be defined (see Tello Archive 2002: Las Trancas Tombs 149, 162, 183; and Tello 1959: lámina XC and figures 119, 121, 128, 129, 130, 134, 136, and 137).

In the CNR, Río Grande sites provide a fair comparison for materials from Santa Cruz, Palpa, Viscas, and Ingenio. (Eventually, Ingenio might prove to be the maverick in this group.) In developing a revised chronology for the SNR, shown in Figure 3, I did not attempt to harmonize it with the new Palpa chronology (Hecht 2013; Unkel and Kromer 2009). My chart is derived from data gathered within the SNR. The reader will find similarities and differences between these two schemes. They should be allowed to stand separately for now, in order to underline local differences. At some future date, when both regions have had complete seriations published with comprehensive phase definitions, the two areas can be usefully compared. Once the regional culture histories have been established, we can more fruitfully examine questions of culture process in the Nasca heartland.

I suspect the situation in Ica will be different from the CNR and SNR. Ica presents a single river of greater length punctuated with major oases. The pottery of the preceding Early Horizon was regionally diverse. For example, Teojate (Juan Pablo), Ocucaje, and Callango produced contemporary but visually distinct styles (Figure 1). It may be that several local Ica styles co-existed during the EIP, and separate style histories will be required for each area. Pottery corresponding to Dawson's Phase 4 at the Ica Valley site of Santiago (located just to the north of Ocucaje; Figure 1) looks very different from the Ocucaje, Palpa, and Nazca Valley materials (Proulx 1968:5, 98, plates 16b, 26a, 28b). Influence from valleys to the north of Ica (Pisco, Chíncha, Cañete) in the form of Topará,

region. Because the Nasca are separated from these writings by a thousand years, it is a stretch to claim any direct correspondence. Urton does not. His data rich, comparative approach to Andean forms of organization for the construction and maintenance of ritual space is a landmark contribution to south coast studies and should be mined by generations of scholars. I strongly advocate using Andean models to interpret Andean data along with due caution in using the recent past to interpret the distant past. Ana Nieves does not suggest Urton's 1990 work can be applied directly. Her own studies of petroglyphs in the CNR and SNR dating to the Paracas/Nasca transition reveal stylistic differences between these regions as well as upper-valley/lower-valley variations (Nieves 2010). Her point (with which I agree) is that different types of evidence indicate similar subdivisions within the Río Grande de Nasca drainage.

Campana, Carmen, and Estrella ceramics is also much stronger in the NNR, and likely to play a role in local style developments (Proulx 1968: 96; 2006: 33, 45).

The style regions—all within a one day walk—surely influenced one another. Iconography demonstrates that, throughout the Nasca heartland, a common cult was practiced with the same supernatural creatures embellishing vessels from Ica to Las Trancas. However, while deity types were reproduced, the details of their rendering vary locally. This is the key to regional chronology, and ultimately should reveal the directions in which ideas flowed at different times. Did the “wedged head” and “outlined hair lock” begin in Palpa and diffuse to Nazca, or vice versa (Figures 4-6)? In this regard, consideration should also be given to pottery manufacturing techniques through space and time (Donnan 1992:43-44; Carmichael 1990, 1998b:218-219). There are several ways to construct a double-spout-and-bridge vessel. Did methods vary regionally? Compositional analyses of clay and mineral pigments may also be used to characterize style regions. For the SNR, compositional studies using neutron activation have been underway for some time (Vaughn and Neff 2000; Vaughn and Van Gijsegem 2007; Vaughn *et al.* 2006; 2011). Hopefully, comparable research will be undertaken in the CNR and NNR.

We must be alert also to style trends that may have originated outside of the Nasca heartland. Joerg Haeberli (2001, 2008) illustrates textiles from the Arequipa Region (Ocoña, Majes, and Sihuas Valleys near the city of Arequipa) that bear iconography which can only be described as “Proliferous”. The textile designs are instantly comparable to Late Nasca (Nazca Valley Phases 6 and 7), but are not in the pure Nasca style. Nonetheless, many details are strikingly similar and a connection is obvious. Did style developments originating in the Sihuas

area stimulate parallel trends in the Río Grande drainage, or was the flow in the opposite direction? Haeberli (2008) presents a sophisticated discussion of complex style exchanges, ultimately suggesting Arequipa as the region of origin for Proliferous elements. His numerous C-14 dates (run on samples taken directly from the textiles) place these garments in the A.D. 250-500 range. Some of the iconographic features on these Sihuas textiles also have analogies with SNR Phase 5. Haeberli’s Sihuas data challenge the assumption that the Nasca style was a purely internal development unique to the Nasca heartland. Here we should also note Lawrence Dawson’s observation (1973) that elements of warrior motifs in Phase 7 appear to derive from Moche influence (see also Proulx 1994:93-94, 2006:11).

CONCLUSIONS

The study of culture process is built on culture history, for which chronology provides the foundation. Nasca studies entered a new stage of intensive fieldwork in the new millennium, and Nasca chronology must evolve also. Traditionally, Nasca chronology was based on Dawson’s pottery seriation (developed from grave lots and whole vessels), and applied from Pisco to Acari. In recent years, mounting evidence from extensive settlement pattern surveys, site excavations, and radiocarbon dates challenges the original seriation. In this writer’s opinion, the Dawson Seriation remains valid for the Nazca Valley and its environs, but local stylistic differences to the north warrant separate treatment. As a start, I suggest the Nasca heartland be envisioned as composed of three stylistic regions. For each region, a new—and separate—pottery seriation should be established. Hecht (2013) has already accomplished this for the CNR. Ideally, new seriations for the NNR will proceed without reference to the Dawson Seriation to ensure conclusions that are independent and unbiased. These should be based

on large samples drawn from all sources, for a seriation based on potsherds alone, or on grave lots alone, will not be as useful as both sources combined. Over the last sixty years large collections of surface and excavated pottery from all parts of the NNR have been deposited at the Ica Regional Museum. There is ample material awaiting analysis. In terms of seriation, such studies will only be successful if their primary concern is documenting style history and generating comprehensive phase definitions. The discipline of archaeology must return to its roots and acknowledge the worthiness and necessity of sound chronology to frame culture history, from which culture process studies proceed.

REFERENCES CITED

- Carmichael, Patrick H.
 1990 Nasca Pottery Construction. *Ñawpa Pacha* 24:31-48.
 1998a Preface. In *The Archaeology and Pottery of Nazca, Peru* by Alfred L. Kroeber and Donald Collier, edited by Patrick Carmichael. Walnut Creek, California: Altamira Press.
 1998b Nasca Ceramics: Production and Social Context. In *Andean Ceramics: Technology, Organization, and Approaches* edited by Izumi Shimada, pp. 213-231. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology.
 2005 Nasca Chronology in the 21st Century: Old Problems and New Directions. Paper presented at the Institute of Andean Studies Annual Conference, University of California, Berkeley, January 7-8.
 2010 Nasca 1 and 2 Phase Markers: Adjustments to the Original Seriation. Poster presented at the Institute of Andean Studies Annual Conference, University of California, Berkeley, January 7-9.
 Dawson, Lawrence E.
 1973 The Representation of Human Activity in Moche IV and Nasca 7 Pottery. Paper presented at the Institute of Andean Studies Annual Conference, University of California, Berkeley, January 5-6.
 Donnan, Christopher B.
 1992 *Ceramics of Ancient Peru*. Fowler Museum of Cultural History, University of California, Los Angeles.

- Dwyer, Jane Powell
 1979 The Chronology and Iconography of Paracas-Style Textiles. In *The Junius B. Bird Pre-Columbian Textile Conference* edited by Ann Pollard Rowe, Elizabeth P. Benson, and Anne-Louise Schaffer, pp. 105-128. Washington, D.C.: Textile Museum and Dumbarton Oaks.
 Gayton, Anna H. and Alfred L. Kroeber
 1927 The Uhle Pottery Collections from Nazca. In *University of California Publications in American Ethnology and Archaeology* 24(1):1-46.
 Haeberli, Joerg
 2001 Tiempo y tradición en Arequipa, Perú, y el surgimiento de la cronología del tema de la deidad central. *Boletín de Arqueología PUCP* 5:89-137.
 2008 When and Where Did the Nasca Proliferous Style Emerge? *Andean Archaeology III* edited by William H. Isbell and Helaine Silverman, Chapter 15, pp. 401-434. New York: Kluwer/Plenum.
 Hecht, Niels
 2009 Of Layers of Sherds: A Context-Based Relative Chronology of the Nasca Style Pottery from Palpa. In *New Technologies For Archaeology: Multidisciplinary Investigations in Palpa and Nasca, Peru* edited by Markus Reindel and Günther A. Wagner. Berlin: Springer.
 2013 *A Relative Sequence of Nasca Style Pottery from Palpa, Peru*. 2 volumes. Inauguraldissertation (doctoral dissertation), Rheinische Friedrich-Wilhelms-Universität, Bonn. Published in Giessen, Germany by VVB Laufersweiler Verlag. Available on-line at: hss.ulb.uni-bonn.de/2013/2992/2992.htm Consulted 7 December 2013.
 Isla Cuadrado, Johnny
 2001 Una tumba nasca en Puente Gentil, valle de Santa Cruz, Perú. *Beiträge zur Allgemeinen und Vergleichenden Archäologie* 21.
 Joyce, Thomas A.
 1912 *South American Archaeology; An Introduction to the Archaeology of the South American Continent with Special Reference to the Early History of Peru*. New York: G. P. Putnam's Sons.
 Kroeber, Alfred L. and Donald Collier
 1998 *The Archaeology and Pottery of Nazca, Peru*. Walnut Creek, California: Altamira Press.
 Menzel, Dorothy
 1977 *The Archaeology of Ancient Peru and the Work of Max Uhle*. R. H. Lowie Museum of Anthropology, University of California, Berkeley.

- Menzel, Dorothy and John H. Rowe with Lawrence E. Dawson
1964 The Paracas Pottery of Ica: A Study in Style and Time. In *University of California Publications in American Archaeology and Ethnology* 50.
- Nieves, Ana
2010 Tipología y cronología del arte ruprestre del Valle de Nasca y la cuenca del Río Grande de Nasca, Departamento de Ica, Perú. *Quellca Rumi* 1(1):17-31.
- Orefici, Giuseppe
2012 *Cahuachi: Capital teocrática nasca*. Lima: Universidad de San Martín de Porres.
- Proulx, Donald
1968 Local Differences and Time Differences in Nasca Pottery. In *University of California Publications in Anthropology* 5.
1994 Stylistic Variation in Proliferous Nasca Pottery. *Andean Past* 4:91-107.
2006 *A Sourcebook of Nasca Ceramic Iconography*. Iowa City: University of Iowa Press.
2008 Paracas and Nasca: Regional Cultures on the South Coast of Peru. In *Handbook of South American Archaeology* edited by Helaine Silverman and William H. Isbell, pp. 563-585. New York: Springer.
- Reindel, Markus and Johnny Isla Cuadrado
2001 Los Molinos und La Muña: Zwei Siedlungszentren der Nasca-Kultur in Palpa, Südperu. *Beiträge zur Allgemeinen und Vergleichenden Archäologie* 21.
- Reindel, Markus and Günther A. Wagner, editors
2009 *New Technologies for Archaeology: Multidisciplinary Investigations in Palpa, Peru*. Berlin: Springer.
- Roark, Richard P.
1965 From Monumental to Proliferous in Nasca Pottery. *Ñawpa Pacha* 3:1-92.
- Rowe, John H.
1956 Archaeological Explorations in Southern Peru, 1954-1955. *American Antiquity* 22(2):135-151.
1962 Stages and Periods in Archaeological Interpretation. *Southwestern Journal of Anthropology* 18(1):40-54.
2010 On the History of the Nasca Sequence. Translated by Patricia J. Lyon. *Ñawpa Pacha* 30(2):231-241. [Originally published as "Nuevos datos relativos a la cronología del estilo Nasca" in *Antiguo Peru: Espacio y tiempo; trabajos presentados a la Semana de Arqueología Peruana (9-14 de noviembre de 1959)* edited by Ramiro Matos Mendieta, pp. 29-45. Lima: Librería-Editorial Juan Mejía Baca (1960)].
- Rowe, John H. and Dorothy Menzel, editors
1973 *Peruvian Archaeology: Selected Readings* (fifth edition; first edition 1967). Palo Alto, California: Peek Publications.
- Sawyer, Alan R.
1966 *Ancient Peruvian Ceramics: The Nathan Cummings Collection*. New York: Metropolitan Museum of Art.
- Schreiber, Katharina J.
1998 Afterword: Nasca Research Since 1926. In *The Archaeology and Pottery of Nazca, Peru* by Alfred L. Kroeber and Donald Collier, edited by Patrick H. Carmichael, pp. 261-270. Walnut Creek, California: AltaMira Press.
1999 Regional Approaches to the Study of Prehistoric Empires: Examples from Ayacucho and Nasca, Peru. In *Settlement Patterns in the Americas: Fifty Years Since Viru* edited by Brian R. Billman and Gary M. Feinman. Washington, D.C.: Smithsonian Institution Press.
- Schreiber, Katharina and Josué Lancho Rojas
2003 *Irrigation and Society in the Peruvian Desert: The Puquios of Nasca*. New York: Lexington Books.
- Silverman, Helaine
1993 *Cahuachi in the Ancient Nasca World*. Iowa City: University of Iowa Press.
- Tello, Julio C.
1959 *Paracas: Primera Parte*. Lima: Empresa Gráfica T. Scheuch S.A.
- Tello Archive
2002 *Arqueología de la cuenca del Río Grande de Nasca. Cuadernos de Investigación del Archivo Tello* 3. Lima: Museo de Arqueología y Antropología de la Universidad Nacional Mayor de San Marcos.
- Unkel, Ingmar and Bernd Kromer
2009 The Clock in the Corn Cob: On the Development of a Chronology of the Paracas and Nasca Period Based on Radiocarbon Dating. In *New Technologies for Archaeology: Multidisciplinary Investigations in Palpa and Nasca, Peru* edited by Markus Reindel and Günther A. Wagner. Berlin: Springer.
- Urton, Gary
1990 Andean Social Organization and the Maintenance of the Nazca Lines. In *The Lines of Nazca* edited by Anthony F. Aveni, pp. 173-206. Philadelphia: The American Philosophical Society.
- Van Gijsegem, Hendrik
2004 *Migration, Agency, and Social Change on a Prehistoric Frontier: The Paracas-Nasca Transition in the Southern Nasca Drainage, Peru*. Ph.D. dissertation, University of California, Santa Barbara.
2006 A Frontier Perspective On Paracas Society and Nasca Ethnogenesis. *Latin American Antiquity* 17(4):419-444.

- Van Gijsegheem, Hendrik and Kevin J. Vaughn
2008 Regional Integration and the Built Environment in Middle-range Societies: Paracas and Early Nasca Houses and Communities. *Journal of Anthropological Archaeology* 27(1):111-130.
- Vaughn, Kevin J.
2004 Households, Crafts, and Feasting in the Ancient Andes: The Village Context of Early Nasca Craft Consumption. *Latin American Antiquity* 15(1): 61-88.
- 2005 Household Approaches to Ethnicity on the South Coast of Peru: The Domestic Architecture of Early Nasca Society. In *Us and Them: The Assignment of Ethnicity in the Andes* edited by Richard Martin Reycraft, pp. 86-103. Monograph 53. Cotsen Institute of Archaeology, University of California, Los Angeles.
- 2009 *The Ancient Andean Village: Marcaya in Prehispanic Nasca*. Tucson: University of Arizona Press.
- Vaughn, Kevin J. and Hector Neff
2000 Moving Beyond Iconography: Neutron Activation Analysis of Ceramics from Marcaya, Peru, an Early Nasca Domestic Site. *Journal of Field Archaeology* 27(1):75-90.
- Vaughn, Kevin J. and Hendrik Van Gijsegheem
2007 A Compositional Perspective on the Origins of the "Nasca Cult" at Cahuachi. *Journal of Archaeological Science* 34:814-822. Vaughn, Kevin J., Laure Dussubieux, and P. Ryan Williams
- 2011 A Pilot Compositional Analysis of Nasca Ceramics from the Kroeber Collection. *Journal of Archaeological Science* 38:3560-3567.
- Vaughn, Kevin J., Hendrik van Gijsegheem, Verity H. Whalen, Jelmer W. Eerkens, and Moises Linares Grados
2013 The Organization of Mining in Nasca During the Early Intermediate Period: Recent Evidence from Mina Primavera. In *Mining and Quarrying in the Ancient Andes: Sociopolitical, Economic, and Symbolic Dimensions* edited by Nicholas Tripcevich and Kevin J. Vaughn. Interdisciplinary Contributions to Archaeology series, New York: Springer.
- Wolfe, Elizabeth F.
1981 The Spotted Cat and the Horrible Bird: Stylistic Change in Nasca 1-5 Ceramic Decoration. *Nawpa Pacha* 19:1-62.

APPENDIX - REVISED CHRONOLOGY

In the revised chronology shown in Figure 3, the beginning and end dates for the Nasca sequence (100 B.C.-A.D. 600) were selected for convenience. Timing undoubtedly varied between locations, and fieldwork should reveal early expressions and late survivals. Proulx estimated a similar span for the Nasca sequence (2008:575). In my work, the temporal range for the Proto-Nasca Epoch is estimated at 100 B.C.-A.D. 100 on the basis of C-14 dates representing sites on the Río Grande near Palpa (Unkel and Kromer 2009:236), the Ingenio Valley (Vaughn *et al.* 2013:168), and the lower Tierras Blancas Valley (Van Gijsegheem 2006:438). The very end of Late Nasca at circa A.D. 600 is based on C-14 dates from Los Molinos and nearby Parasmarca in the Río Grande Valley (Unkel and Kromer 2009:241) and Cocahuischo in the Tierras Blancas Valley near Marcaya (Verity Whalen, personal communication, 2012).

In Figure 3, epochs are units of time corresponding to shifts in cultural patterns, including factors such as inter- and intra-site settlement patterns (Schreiber 1999; Van Gijsegheem 2006; Van Gijsegheem and Vaughn 2008; Vaughn 2005), ceremonial centers (Orefici 2012; Silverman 1993), irrigation (Schreiber and Lancho 2003), and hematite mining (Vaughn *et al.* 2013). Ceramic style is an aspect of the cultural pattern in a given epoch, but does not define it. Epochs are most useful for fieldwork and reference to Nasca culture history. The dates suggested here for the beginning and end of epochs are approximations which may shift fifty years up or down as more data become available. The diagonal lines separating epochs on Figure 3 remind us that, like style phases, culture patterns do not begin or end at exactly the same time everywhere.

Pottery phases are units of style following the Dawson Seriation. They are based on grave lots, individual vessels with provenience, and, to a lesser extent, on excavated sherd collections, all of which derive from the Nazca Valley. As currently envisioned, there is direction in the sequence, but with considerable phase overlap. Nonetheless, each phase was generated by its predecessor in the sequence—Phase 5 does not derive from Phase 3; rather, it required the style developments in Phase 4 before it could emerge. However, when Phase 5 pottery began to be produced, ceramics in Phase 4 style were still being made and circulated. Thus, Phases 4 and 5 were contemporary for a limited time. Phase 3 appears to have been the longest of all phases, which allowed Proulx (1968) to identify four sub-phases (3a, 3b, 3c, 3d).

It is possible that the end of Phase 3 actually overlapped with the beginning of Phase 5 at some locales. At the Early Nasca village of Marcaya on the Tierras Blancas River, Kevin Vaughn excavated mixed sherds from Phase 3d and Phase 4, with C-14 dates bracketing the occupation at A.D. 370-420 (2009:83). Farther downstream at Agua Santa on the Nazca River, a few hours walk from Marcaya, a grave with three early Phase 5 vessels (Kroeber and Collier 1998:194-195, Grave 10) was found to have an associated C-14 date of A.D. 250-420 (2-sigma; Ryan Williams, personal communication, 2005). Overlapping dates such as these require us to re-envision the sequence to allow for two, and sometimes three, style phases to co-exist at the same point in time.

The revised chronology suggested in Figure 3 identifies the Montana Transition as a unit between the Early Horizon and Early Intermediate Period. This was a time of enormous change on the south coast, and especially in the Southern Nasca Region. Settlement patterns and ceramic styles were in a state of flux. The cultural traits of this time belong to neither the EH or EIP exclusively, yet it was from this vortex that the mature Nasca culture emerged. I take the term "Montana" from the work of Schreiber and Lancho (2003:13-14). Changes during the Transition are documented by Van Gijsegheem (2006) and Van Gijsegheem and Vaughn (2008).

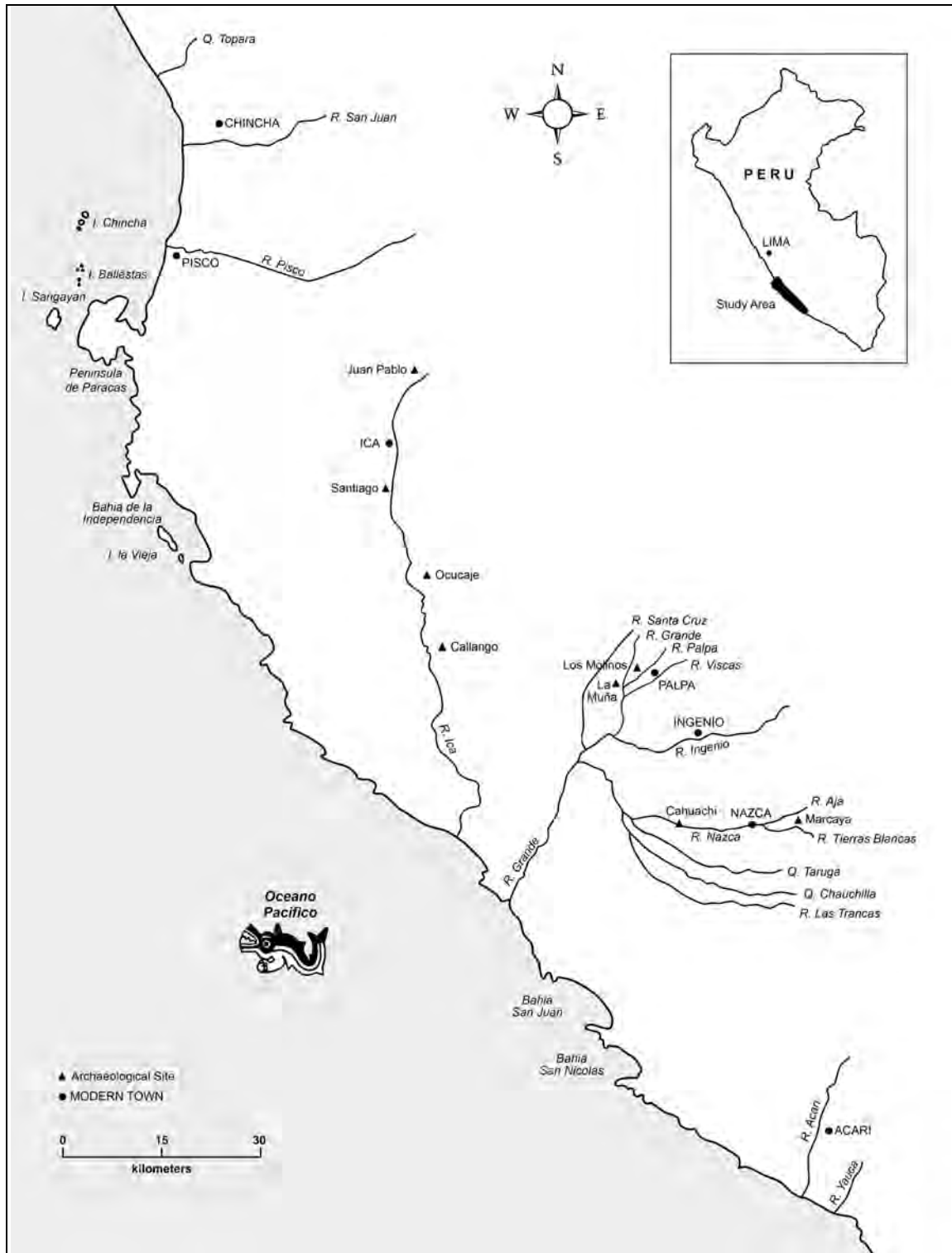


Figure 1: The south coast of Peru showing locations of archaeological sites, modern towns, and river valleys.

SOUTH COAST PISCO - ACARI VALLEYS			
EPOCHS Units of Time		CERAMIC PHASES Units of Style	STYLE MODES
8	EARLY INTERMEDIATE PERIOD	8	PROLIFEROUS
7		7	
6		6	
5		5	TRANSITIONAL
4		4	MONUMENTAL
3		3	
2		2	
1		1	

Figure 2: Based on the chart in the Introduction to Rowe and Menzel 1973. As originally conceived, the phases were not expected to be of uniform time length and, in theory, overlap between phases was possible (Rowe 1956:147). Practicalities of designing chronological charts, and their blunt application by other researchers, perpetuated the concept of a rigid, stacked chronology.

SOUTHERN NASCA REGION (SNR) NAZCA - LAS TRANCAS VALLEYS			
EPOCHS Units of Time & Cultural Patterns	ABSOLUTE TIME	CERAMIC PHASES Units of Style	PERIODS
LORO	AD 600	L O R O	MIDDLE HORIZON
LATE NASCA	AD 500	7	EARLY INTERMEDIATE PERIOD
MIDDLE NASCA	AD 400	6 5 4	
EARLY NASCA	AD 300	3	
	AD 200		
	AD 100	2	
PROTO-NASCA	AD 1	1	
	AD -100	L A T E P A R A C A S	

Figure
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3: Re-
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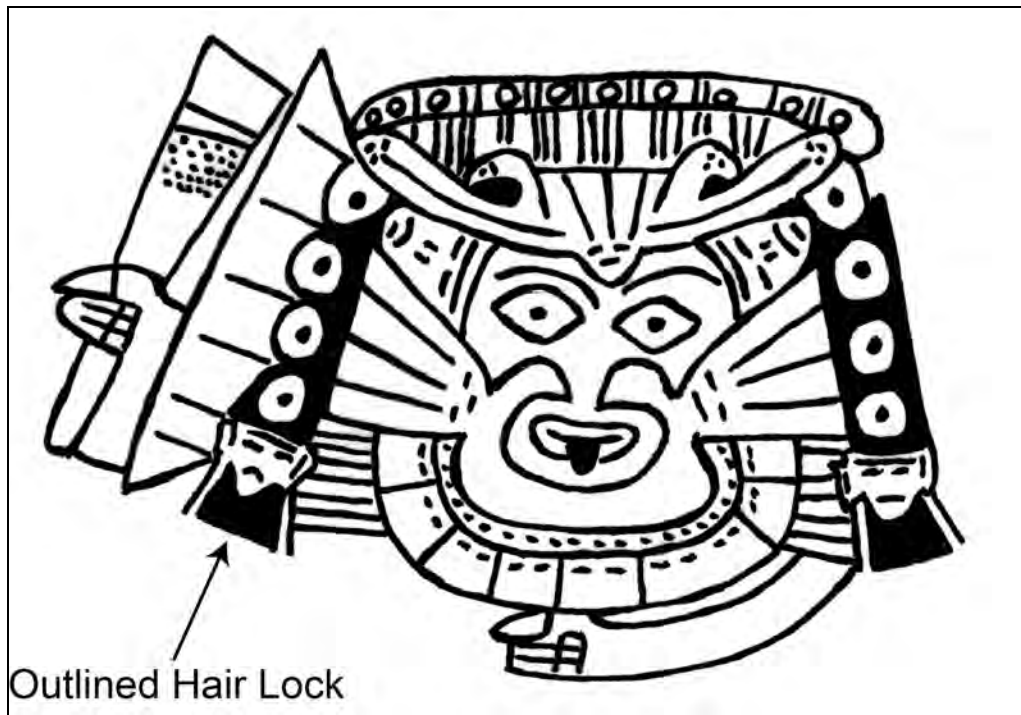


Figure 4: Detail from a Nazca Valley vessel (after Proulx 1968:144, figure 19). Note outlined hair lock, a diagnostic Phase 4 marker in the Dawson Seriation.

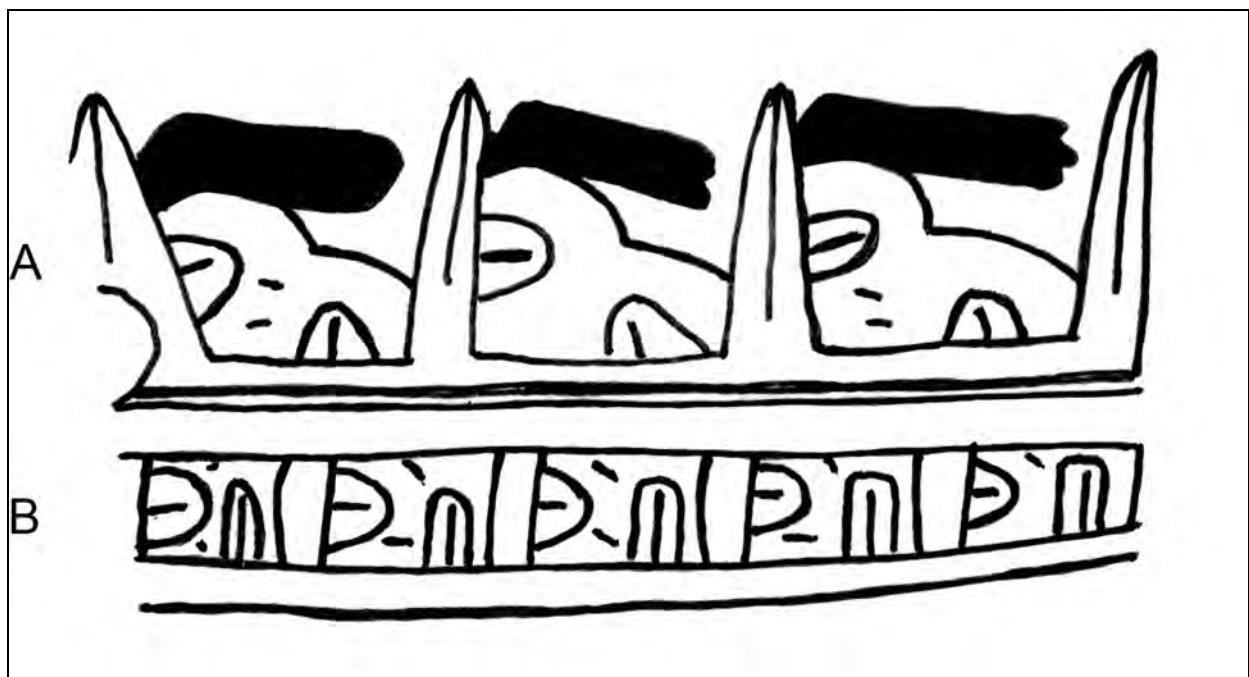


Figure 5: Detail from a Nazca Valley vessel (after Roark 1965: plate VII, figure 39). Two versions of the "wedged head" motif (A & B) are shown. These are diagnostic Phase 5 markers in the Dawson Seriation.



Figure 6: Line drawing of a motif on a cupbowl from the Santa Cruz Valley (after Isla 2001:228, figure 15[1]). While the outlined hair lock and wedged head are separate phase markers in the Nazca Valley, in the Palpa region they can appear together in the same design.

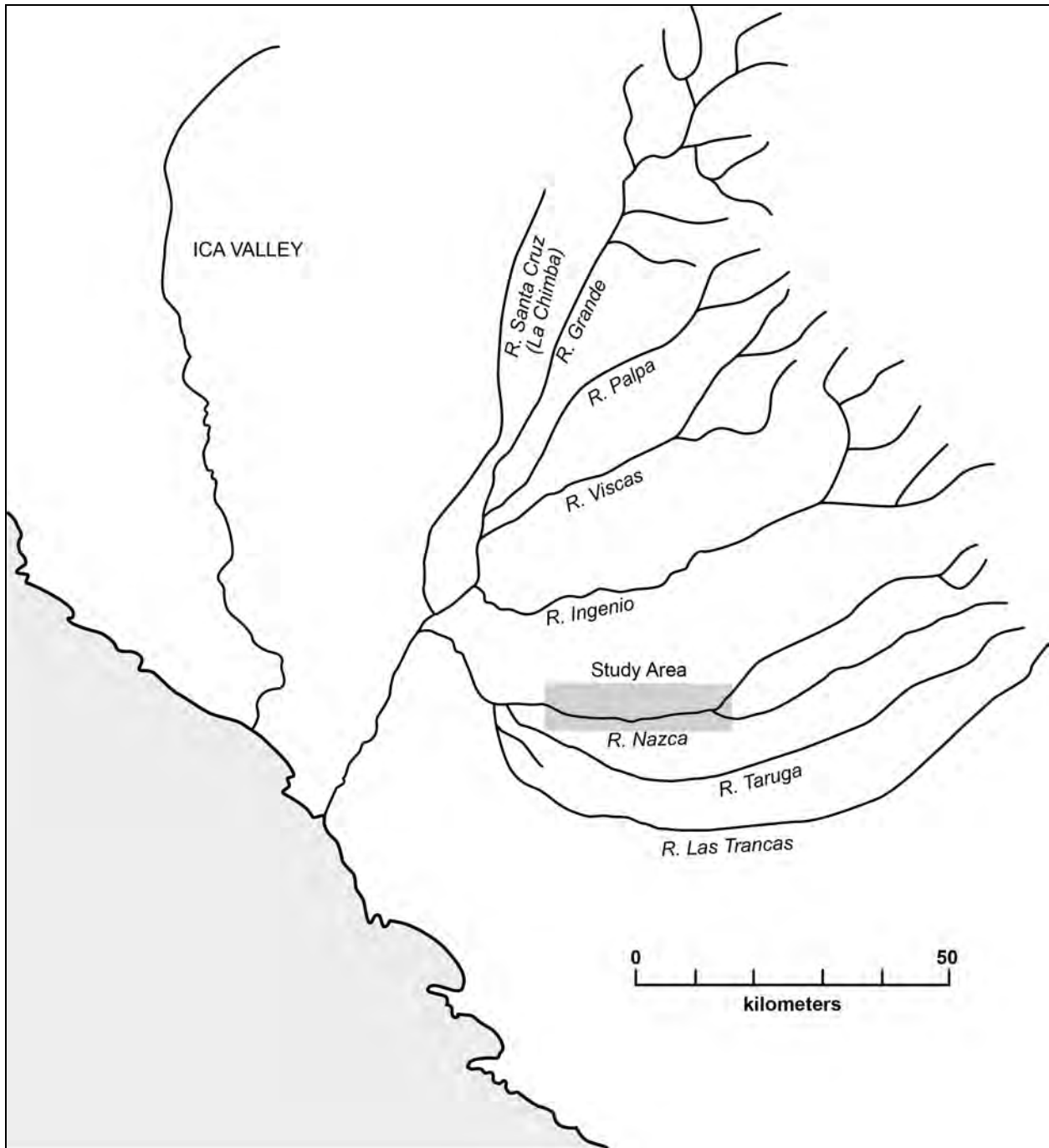


Figure 7: Location from which most of the collections used by Dawson derive (Uhle, Farabee, Kroeber, Strong; map after Schreiber 1998:261, figure A-1).

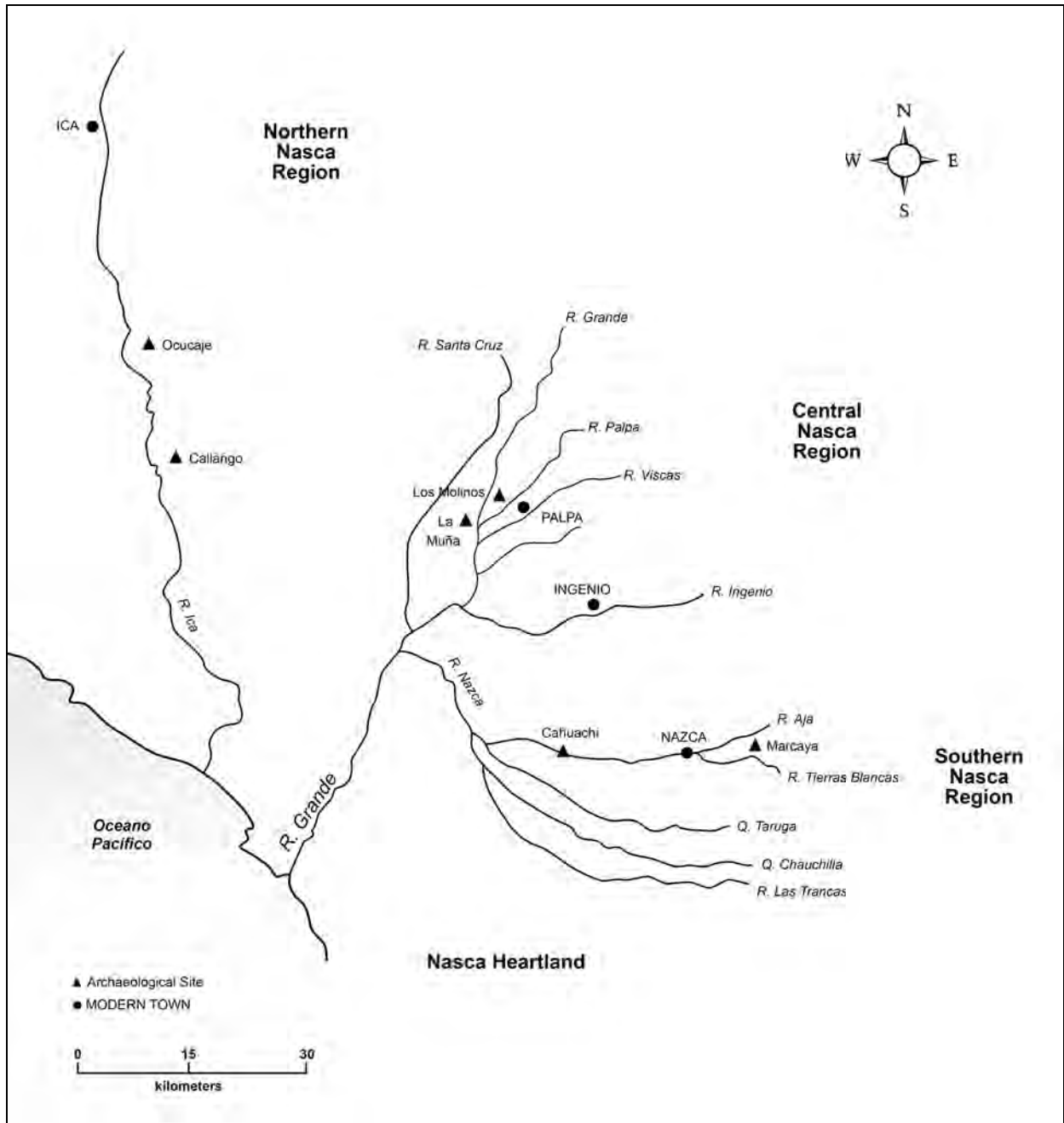


Figure 8: Style regions of the Nasca heartland.