



PROJECT MUSE®

---

## Rituals of the Past

Rosenfeld, Silvana, Bautista, Stefanie

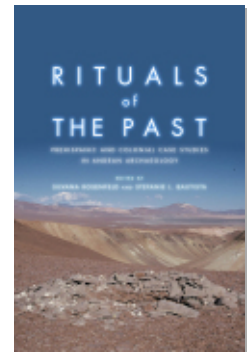
Published by University Press of Colorado

Rosenfeld, Silvana & Bautista, Stefanie.

Rituals of the Past: Prehispanic and Colonial Case Studies in Andean Archaeology.

Boulder: University Press of Colorado, 2017.

Project MUSE., <https://muse.jhu.edu/>.



➔ For additional information about this book

<https://muse.jhu.edu/book/51261>

# 3

---

An excavation west of the monumental core of Chavín de Huántar in 2005 exposed a portion of a Mito-style structure (Contreras 2010), remarkably similar in its configuration to well-known examples from Kotosh and La Galgada (Bonnier 1997; Grieder et al. 1988; Izumi and Terada 1972a, 1972b). The presence of such a structure at Chavín de Huántar reinforces Chavín's links to other Central Andean centers, including some of its contemporaries as well as sites dating back to the early third millennium BCE. Moreover, while Bonnier suggests that the Mito Tradition spans the period 2500–1800 BCE in the Central Andean highlands (Bonnier 1997), this example from Chavín de Huántar suggests the persistence of the Mito Tradition as late as 800 BCE. At Chavín at least, this implies the coexistence of the Mito Tradition with those new ritual practices developing at the site during the middle to late Formative period (as early as 1000 BCE; see Rick et al. 2009).

I have discussed the regional implications of the presence of a Mito-style structure at Chavín elsewhere (Contreras 2010), and in this chapter I focus on the location and role of the structure in Chavín's array of ritual architecture. The place of this structure in the site geography, I argue here, can shed light on the socio-political underpinnings of the monumental ceremonial architecture at Chavín de Huántar. Reconceptualizing the site as at least somewhat decentralized in its arrangement of sacred space—rather than entirely focused on the central, oldest, and presumably sanctified entity of

*Not Just a Pyramid Scheme?*

*Diversity in Ritual Architecture  
at Chavín de Huántar*

DANIEL A. CONTRERAS

---

DOI: 10.5876/9781607325963.co03

the Lanzón—suggests that the social sources of power and the political contributors to Chavín's existence may have been diverse. In other words, the political economy of the sacred was mapped onto the site's ritual architecture and may be read from it.

In considering Chavín's internal geography, I focus primarily on two areas: the monumental core and that portion of the protected area to the west of the modern road, referred to as the West Field (figure 3.1).

## THE WEST FIELD

The area west of the road has been recognized as part of the archaeological site since at least as early as Julio C. Tello's work at the site in the 1940s (Tello 1960). No sign of the West Field appears in such early maps as those of Heinrich Witt (from his 1842 visit; 1992:ilustración 5), Ernst Middendorf (1974:75), Charles Wiener (from his 1880 publication; admittedly it is not detailed [1880:200]), or Wendell Bennett (from his 1938 excavations; 1944:72). None of these omissions need indicate that the researchers were unaware of the presence of Chavín-style megalithic architecture in the West Field, but they are certainly evidence of its de-emphasis. This was probably a result of both the lure of the then largely undescribed monumental core—with its massive in situ lithic sculptures (the Lanzón and at least one tenoned head), tantalizingly unknown galleries, and largely buried structures—and the presence of the small community of Raku in the West Field, documented by Hans Kinzl during his 1936 visit as part of the Austrian Anden-Expeditionen des Alpenvereins (see Diessl 2004:512; Kinzl and Scheider 1950) but later destroyed by the 1945 *aluvión* (Indacochea and Iberico 1947).

Tello's site map (1960:figure 4) does note a few features in the area west of the road, but he, too, understandably concentrated his attention on the monumental core. Luis G. Lumbreras provides similarly focused maps (e.g., Lumbreras 1989:20), although his collaborator, Amat, excavated in the West Field (Amat's results remain unpublished, but see Diessl 2004:509–16 for a capsule description). In their case the restricted site map thus obviously reflects a focus on the monumental core rather than ignorance of or lack of interest in the West Field. Ultimately, with the exception of Richard Burger's work in the 1970s (Burger 1982, 1984) and work by the Stanford Project beginning in 2000, archaeological attention has generally focused on the monumental core itself, probably reflecting traditional interest in the monumental at the expense of the domestic.

Surprisingly, in light of this general lack of concern for the area, even the archaeological remains visible on the surface are substantial. Two megalithic

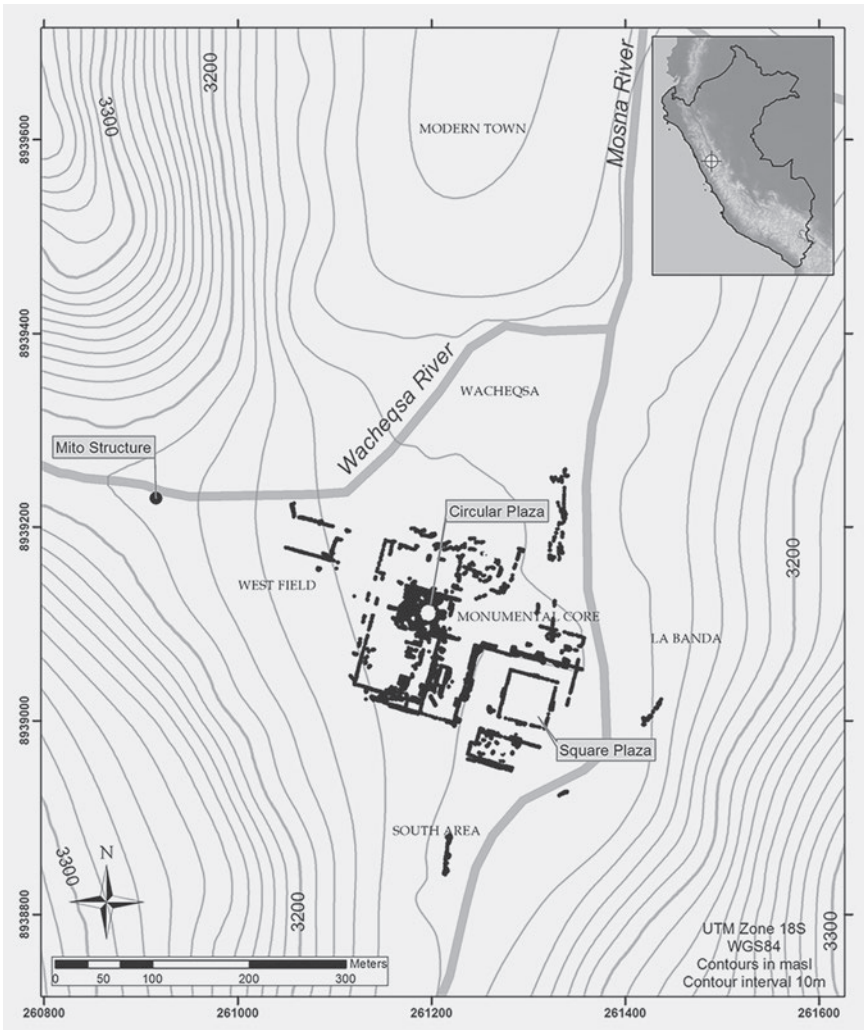


FIGURE 3.1. *Site sectors and major architectural features*

walls (apparently terrace facades), constructed of quartzite blocks in a style similar to that of the structures in the monumental core, are visible on the surface, as is one canal draining northward into the Río Wacheqsa (see figure 3.2). Until the construction in the 1970s of the road that currently separates the monumental core from the West Field, these east-west terraces were also associated with a north-south wall that was largely destroyed



FIGURE 3.2. *Visible architecture in the West Field*

by the road construction, suggesting a structure or structures in the West Field rather than simple megalithic terraces. This led Diessl—who stands out as the only researcher to make a point of including the West Field in his maps and reconstruction drawings—to describe a “West Temple” (Diessl 2004:510–16).

The history of archaeology in the West Field makes clear that the area—while recognized as containing archaeological remains—has generally been considered fairly marginal. The ceremonial core of the site has traditionally—if only implicitly—been defined by the Río Mosna to the east, the north edge of Structure D to the north, the south edge of Structure E to the south, and the west edge of Structures A, B, and C to the west (see figure 3.1).

This definition is at least in part a result of perceptions shaped by the local geomorphology. Colluvial and earth-flow deposition has obscured the West Field to a much greater degree than the monumental core, as I have discussed in detail elsewhere (Contreras 2007). The buried architecture is of similar style to, and appears to approach the scale of, the celebrated structures of the monumental core (see figure 3.2). The parallel upper and lower walls, both running east-west, are visible for stretches of 48 m and 37 m, respectively. Exploratory Stanford excavations carried out in 2000 and 2001 on the face of the visible terraces revealed deep Chavín deposits and suggested that the terrace walls continued downward for at least 2 m below the modern ground surface. Fragments of complementary north-south walls are also visible; like

the longer east-west segments, these walls share the monument's architectural orientation (13° east of north; see Rick et al. 1998:197).

The combined implication of these observations appears to be that the constructions visible on the surface in the West Field are not simply terrace walls retaining slope sediments but rather platform faces backed by cultural fill. This inference is supported by the sectional exposure provided by the cut of the Río Wacheqsa, where at least one wall of similar scale is visible in profile to significant depth, and by a 2005 test excavation in the central-eastern area of the West Field (WF-09) that encountered almost entirely cultural fills to a depth of 6 m (see Contreras 2007:189–90). Moreover, the unexpected find in 2005 of a Mito-style structure (Unit WF-07; see figure 3.1 and Contreras 2010) at the far western extreme of the West Field, 300 m west of Structure A/B/C, suggests that the religious focus of the site may not have been strictly on the monumental core.

### A MITO-STYLE STRUCTURE IN CHAVÍN'S WEST FIELD

The structure itself, excavated in 2005, is striking both for its similarity to the archetypal Mito structures from Kotosh (Bonnier 1997; Izumi and Terada 1972a, 1972b) and for its state of preservation. Although only the northeast quadrant of the structure was excavated, enough was exposed to clearly delimit a split-level room with a circular central hearth and north-facing entry (figure 3.3). Its full dimensions are estimated at approximately 3 m × 3 m; the entry opens ~21.3° east of north. My focus here, however, is not on the anatomy of this particular example of the Mito genre, except inasmuch as is necessary to identify it as such; a full description of the structure itself appears elsewhere (Contreras 2010).

The key features of the Mito Tradition, as defined by Elisabeth Bonnier, are the quadrangular room, central hearth, split-level floor, niches, and use of plaster (Bonnier 1997:137, figure III). Bonnier's definition of the Mito Tradition drew primarily on the well-published examples from Kotosh; she also explicitly sought to differentiate the Mito Tradition as a specific subset of the more broadly inclusive Kotosh Religious Tradition defined by Burger and Salazar-Burger (1980). All of the elements she defined—with, arguably, the exception of the niches—are present in the Chavín example.

The Mito-style structure in the West Field, at the end of its use-life, was carefully interred with a massive sterile fill, and a sequence of stone-faced terraces was subsequently built over it, ascending the slope from north to south (figure 3.4; Contreras 2010:figure 10). These terraces and the associated series of



FIGURE 3.3. *West Field Mito structure*

floor deposits all contain diagnostic Chavín period Janabarroid ceramics and do not contain any identifiably later material. Associated radiocarbon dates confirm the contemporaneity of at least the earlier of these terraces (810–420 BCE) and the Mito-style structure (900–800 BCE) with the monumental core (900–500 BCE) (for a full discussion of the dating of the Mito structure, see Contreras 2010; for the architectural chronology of the monumental core, see Kembel 2008; Kembel and Haas 2013; Rick et al. 2009).

### RITUAL DIVERSITY AT CHAVÍN

The contemporaneity of the Mito-style structure with the monumental ceremonial architecture of the site core makes it necessary to consider a role for this structure within the ritual life of Chavín. The broad consensus in the literature regarding Mito structures, at a variety of sites, is that they are foci of significant ritual activity (Bonnier 1997; Burger and Salazar-Burger 1986; Grieder and Bueno Mendoza 1985; Grieder et al. 1988; Onuki 1993; Pozorski and Pozorski 1996). At La Galgada, Grieder and Bueno Mendoza (1985) refer to the plastered rooms as “ritual chambers” and speculate about the fire-centered ceremonies they may have housed; Shady Solís and Machacuay have emphasized the centrality and ritual importance of one of the two Mito-style structures at Caral by terming it the “Altar del Fuego Sagrado”



**FIGURE 3.4.** *Stratigraphic context of the West Field Mito structure; note the layer of sterile fill sealing the structure, as well as the subsequent terraces*



(Shady Solís and Machacuay 2003). Bonnier (1997) even posits the existence of a “Mito religion.”

Given this prevailing agreement regarding the significance of the architectural form, it seems appropriate to consider the Mito-style structure at Chavín as similarly important. Moreover, the combination of the substantial labor investment the structure represents and its careful interment through the deposition of a massive sterile fill of soil and rock (Contreras 2010:8–9) further emphasizes the importance of the structure. Such sealing recalls the “temple entombment” described by Matsuzawa at Kotosh, where superposition of Mito structures was the norm (Izumi and Terada 1972b:176; see also Onuki 1993), and the associated focus on renewal (see Onuki, this volume). It may also perhaps be conceptually linked to the ritual practice of sealed offerings at Chavín. While no other examples of sealed architectural features are known, the deposits of ceramics in the Ofrendas Gallery (Lumbreras 1993) and *Strombus* shell trumpets in the Caracoles Gallery (Rick 2008:24–27) may represent comparable practices.

In fact, the specifics of ritual activity at Chavín remain only tentatively understood. In contrast to the richly explicit iconographic and material record of ritual activity for such later Central Andean civilizations as the Moche, at Chavín, ritual activity must be inferred from the layout and character of architectural spaces, excavations of occasional offering deposits, and abstracted iconographic representations. A few aspects stand out: processions, offerings of valued and/or exotic material, and manipulation of water were all apparently important elements of Chavín’s panoply of ritual activity (see Rick, this volume). Only the second of these—in the form of smashed obsidian fragments in the central hearth and fragments of anthracite mirror in the duct (see Contreras 2010:5–6)—can be associated with the Mito structure in the West Field, making this structure perhaps distinct in behavioral terms as well as spatial ones. As it can be discussed in somewhat more secure terms, I focus here on the latter: while, by analogy to such structures elsewhere and with reference to its careful interment, this Chavín period example of the Mito genre does appear to be a locus of important ceremonial activity, that activity is clearly spatially distinct from ritual in the site’s monumental core, where the Lanzón monolith, the Circular Plaza, the Black-and-White Portal, and the Square Plaza have commonly been taken to comprise the ceremonial focus of the site.

## SITUATING CHAVÍN RITUAL IN CENTRAL ANDEAN CONTEXT

As multiple researchers have suggested, Chavín represents an eclectic synthesis of preexisting Andean ritual traditions. Since Tello’s time, archaeologists

have recognized Chavín's iconographic links to both *selva* and *costa* (e.g., Lathrap 1971; Tello 1943), and its ritual architecture has often been tied to the U-shaped buildings and sunken circular plazas of the second millennium BCE on the Central Coast (Kembel 2001:226–30; Williams 1985). Burger has more recently rearticulated and clarified this argument for synthesis (Burger 1992, 1993), and Rick has reemphasized Chavín's adaptation of traditional elements of belief to a new context (Rick 2005:81, 2006a).

The presence of a Mito-style structure, apparently linked to antecedents in the Huallaga Valley and at other highland centers, reinforces this impression of ritual eclecticism and diversity. Chavín is not unique in this blending of elements, however. A similar juxtaposition of coastal (sunken plazas and large—though, interestingly, lacking the archetypal U-shape—structures) architectural elements with the characteristic structure of the apparently highland-centered Mito Tradition is present at Caral, where it has much greater antiquity (Shady Solís, Haas, and Creamer 2001; Shady Solís and Machacuay 2003), and may also be evident at El Paraíso (Guillen Hugo 2013). Mito-style structures themselves are proving to be remarkably widespread (Contreras 2010:figure 11),<sup>1</sup> and the tradition was apparently a long-lasting one (table 3.1).

The presence of a Mito-style structure at Chavín also reinforces the case for diversity in ritual practice by introducing a previously unknown element into the catalog of ceremonial architecture at the site. Kembel has argued that the earliest architectural forms at Chavín were rectangular, plastered chambers—including that which housed, or perhaps later came to house, the Lanzón—linked to (i.e., apparently derived from) the Kotosh Religious Tradition (Kembel 2001:226–27). The contemporaneous existence of a Mito-style chamber in the West Field does not speak directly to the derivation of these architectural forms from the Kotosh Religious Tradition, but it certainly bolsters the claim for strong links to that tradition. At Chavín, interestingly, there is no central hearth or central hearth analogue in either the Circular Plaza or the Square Plaza, and even the recognition of centrality in the latter (a construction offering [Rick, this volume]) was a hidden and singular, rather than communal or public and regular, event. However, the Lanzón originally occupied the central location in a rectangular chamber; Kembel explicitly characterizes this as an architectural analogue of the hearth in the ceremonial structures of the Kotosh Religious Tradition (Kembel 2001:227).

Connections to the Kotosh Religious Tradition, or more specifically the Mito Tradition, strengthen the argument for eclecticism at Chavín while also raising the possibility that ritual diversity may be indicated as much as

TABLE 3.1. Mito-style structures in the Central Andes and associated dates

<i>Site</i>	<i>Locus</i>	<i>Interior Dimensions</i>	<i>Orientation</i>	<i>Associated Dates and/or Calibrated 95% Range of Associated <sup>14</sup>C Dates<sup>a</sup></i>	<i>Associated <sup>14</sup>C Samples</i>	<i>Source</i>
La Galgada	C-11:I-3 (Square Chamber)	2.9 m × 2.5 m	west	2470–2060 BCE	Tx-3167 (3820±60), from adjacent chamberD-11:C-3	Grieder et al. 1988
Kotosh	ER-11 “Templo de los Nichitos”	7.5 m × 8 m	south	2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b
Kotosh	ER-19	7.5 m × 7 m	north	2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b
Kotosh	ER-23	6 m × 6 m	north	2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b
Kotosh	UR-22 “Templo de las Manos Cruzadas”	7 m × 7.5 m	south	2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b
Kotosh	ER-20	5 m × 4 m	north	2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b
Kotosh	ER-24	3.5 m × 3 m	north	2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b
Kotosh	ER-26	2.5 m × 2.5 m	north	3900 ± 900; 2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b
Kotosh	ER-28	3 m × 3 m	north	2000–1500 BC (Kotosh Mito phase dates)		Izumi and Terada 1972b

*continued on next page*

TABLE 3.1.—continued

Site	Locus	Interior Dimensions	Orientation	Associated Dates and/or Calibrated 95% Range of Associated <sup>14</sup> C Dates <sup>a</sup>		Associated <sup>14</sup> C Samples	Source
Kotosh	ER-27 "Templo Blanco"	3 m × 4 m (estimated)	north	2000–1500 BC (Kotosh Mitro phase dates)			Izumi and Terada 1972b
Huariquito <sup>b</sup>	Hearth XII			2875–2150 BCE	I-II,42 (3970 ± 110) (appears in Ziolkowski et al. n.d. with the number I-111.42)		Burger and Salazar-Burger 1985
Huariquito	Hearth XI			immediately postdates Hearth XII			Burger and Salazar-Burger 1985
Huariquito	Hearth XIII			3310–2465 BCE	PUCP 3#3 (4210 ± 120) <sup>c</sup>		Burger and Salazar-Burger 1985
Huariquito	Hearths IX, VIII, VII			Huariquito phase (~1400–700 BCE)			Burger and Salazar-Burger 1985; Burger 1992
Huariquito	Hearths IV, II, I	5.5 m diameter (Hearth IV): ~2 m × 2 m (Hearth II)		Capilla phase (~700–300 BCE)			Burger and Salazar-Burger 1985; Burger 1992
Caral	"Altar del Fuego Sagrado" (Templo Mayor)	2.81 m × 2.8 m	south	2400–1885 BCE	Beta-132593 and ISGS-4724 (3640 ± 50; 3730 ± 70); from "construction fill of atrium on top of Piramide Mayor"		Shady Solis and Machacuy 2003; Shady Solis, Haas, and Creamer 2001

continued on next page

TABLE 3.1.—continued

Site	Locus	Interior Dimensions	Orientation	Associated Dates and/or Calibrated 95% Range of Associated <sup>14</sup> C		Source
				Associated <sup>14</sup> C Dates <sup>a</sup>	Samples	
Caral	“Altar del Fuego Sagrado” (Templo de Anfiteatro)		west	Late Archaic (site date)		Shady Solis, Machacuay, and López 2003
El Silencio	Edificio Menor	3.3 m × 3.2 m	south	Late Preceramic		Montoya Vera 2007
El Silencio	Edificio Mayor	4.5 m × 5 m (1A) and 3.4 m × 4 m (1B)	south	Late Preceramic		Montoya Vera 2007
Keushu	Estructura EA-XII					Herrera 2010
Piruru	Templo P <sub>1</sub>	9 m × 9 m		2455–2020 BCE	GIF-7266 (3770 ± 60)	Bonnier and Rozenberg 1988; Bonnier 1997
Huacaloma	R-1	4.6 m × 3.2 m	northeast	early Huacaloma period (1500–255 BCE) <sup>d</sup>	TK-341a, TK-341b, Y TK-409 (3080 ± 1130, 2710 ± 240, 2840 ± 90)	Terada and Onuki 1982
Shillacoto	S-R 7	1.2 m × 1.2 m	north	2000–1000 BC (Shillacoto Mito and Wairajirca phase dates)		Izumi, Cuculiza, and Kano 1972
Huaynuna		3.0 m × 2.5 m		2460–2060 BCE	UGa-5612 (3810 ± 50)	Pozorski and Pozorski 1996

continued on next page

TABLE 3.1.—continued

<i>Site</i>	<i>Locus</i>	<i>Interior Dimensions</i>	<i>Orientation</i>	<i>Associated Dates and/or Calibrated 95% Range of Associated <sup>14</sup>C Dates<sup>a</sup></i>	<i>Associated <sup>14</sup>C Samples</i>	<i>Source</i>
Pampa de las Llamas—Moxeke		2.55 m × 2.45 m		1750–1435 BCE	UGa-5611(3310 ± 70)	Pozorski and Pozorski 1996
Pampa de las Llamas—Moxeke		3.2 m diameter		3550–3150 BP (general site dates)		Pozorski and Pozorski 1996
Pampa de las Llamas—Moxeke		7.0 m × 7.0 m		3550–3150 BP (general site dates)		Pozorski and Pozorski 1996
Bahía Seca		4.32 m diameter		1685–1440 BCE	UGa-6023 (3280 ± 55)	Pozorski and Pozorski 1996
Taukachi—Konkán		3.5 m diameter		1500–1270 BCE	UGa-7038 (3120 ± 45)	Pozorski and Pozorski 1996
Taukachi—Konkán		4.0 m diameter		3530–3000 BP (general site dates)		Pozorski and Pozorski 1996
Taukachi—Konkán		3.0 m diameter		3530–3000 BP (general site dates)		Pozorski and Pozorski 1996
Huariçanga				2450–2330 BCE		Piscitelli 2012
Chavín de Huántar	WF-07	3.0 m × 3.0 m (estimated)	north	900–800 BCE <sup>c</sup>	AA69446 and AA69447 (2644 ± 45; 2712 ± 42)	Contreras 2010

continued on next page

TABLE 3.1.—continued

<i>Site</i>	<i>Locus</i>	<i>Interior Dimensions</i>	<i>Orientation</i>	<i>Associated Dates and/or Calibrated 95% Range of Associated <sup>14</sup>C Dates<sup>a</sup></i>	<i>Associated <sup>14</sup>C Samples</i>	<i>Source</i>
El Paraíso		6.82 m × 8.04 m	northeast (44°)	Late Preceramic (3500–1800 BCE—general site dates)		Guillen Hugo 2013

Notes

- a. When associated dates are single radiocarbon determinations or multiple dates whose relationship is clear, they have been calibrated in OxCal 4.2 (Bronk Ramsey 2009) using IntCal13 (Reimer et al. 2013; see Rick et al. 2009:90–95 and Oghurn 2012:223–225 for discussions of calibration curve selection in Peru). These probability ranges may represent, depending on the specific sample and context, either construction dates or use-dates; it is worth emphasizing that they represent irregularly distributed ranges of probability rather than lapses of time.
- b. Hearth VIII at Huariquito apparently comes the closest to the conventions of the Mito Tradition, with a split-level floor and sub-floor flue. Hearths at the site vary in their shapes, sizes, and features; while by definition they all belong to the Kotosh Religious Tradition, not all (if any) conform to the more narrowly defined norms of the Mito Tradition (see Contreras 2010).
- c. This date appears in Ziolkowski et al. with the laboratory number PUCP-XXI, with a warning about that confusion (ANDES 14C; accessed 8 January 2017; <http://andes-cr4-arqueologia.pl/database/article/1799-pucp-xxi.html>).
- d. The imprecision of date TK-34 is such that it has not been included in the range.
- e. Dates have been combined, as both samples are from a hearth deposit representing a single depositional event.

synthesis. Might Chavín have been a multiethnic or ecumenical ceremonial center? Certainly, nothing like enclaves of non-local residents have been found, but neither has anything other than a tiny fraction of the residential architecture at Chavín been explored. It may be that the diversity of ritual architecture—and, similarly, the diverse origins of materials and offerings at the site (Contreras 2011; Druc 2004; Lumbreras 1993; Lumbreras et al. 2003; Sayre, Miller, and Rosenfeld 2016)—is representative not just of pilgrimage but of a diversity of ceremonial practice. Heterarchy<sup>2</sup> may be reflected not just in the *number* of dispersed areas of ceremonial significance but also in the variety of practices apparently associated with those areas.

Heterarchical arrangements may have been typical of the Mito Tradition. At Kotosh, La Galgada, and Huaricoto, three of the sites key to defining the ritual tradition, multiple contemporaneous ceremonial chambers seem to have been the norm. However, at Huaricoto at least, the existence of multiple sacred hearths has been used to argue for their construction by diverse social entities (probably kin groups), using the modern *cargo* system as a model (Burger and Salazar-Burger 1986). Burger and Salazar-Burger contrast this situation with that at Kotosh, where they see, in the uniformity of construction, evidence for corporate organization of labor under a permanent authority: “The regularity and conservatism in the design of the Kotosh temples over several centuries, along with the standardized orientation of these buildings to the cardinal directions, is consistent with the notion that the undertakings were organized and directed by recognized leaders capable of subordinating the will of individual households in order to ensure the continuity of ritual patterns” (ibid.:77).

The former situation might be construed as heterarchical, but the latter clearly implies hierarchy. Onuki’s suggestion (this volume) that the Mito Tradition was associated with a regional pattern in the Huallaga Basin of an evolution from ritual to ideology has a similar logic.

Where might Chavín—particularly in light of the new evidence provided by the excavation of a Mito-style structure—fall in such a typology? The dramatic diversity in ritual architecture at Chavín seems less to represent diverse means of—or capacities for—labor organization related to different components of the site than to reflect diverse ritual practices, as discussed below. The variability in ritual architecture at Chavín seems to be ordered rather than chaotic; at Huaricoto, it was the unordered variability that Burger and Salazar-Burger used to argue for diverse contributions of labor—and resulting architecture—without a central authority. They also argued that, relatively late in the Huaricoto sequence, the visible diversity came to consist not just of variations on the Kotosh Religious Tradition theme but also



of variability in cult practice: “The Kotosh Religious Tradition was not disrupted at Huaricoto with the appearance of the alien Chavín cult. Instead, the two religious traditions coexisted in a syncretistic relationship” (Burger and Salazar-Burger 1980:27).

The eclecticism in ritual practice at Chavín, in contrast, appears to fit well within the model of site by design that Kembel and Rick (2004) outline. If Chavín was indeed actively seeking more followers and more effective means of social integration and establishment of authority, not to mention more effective means of influencing the natural world (Lumbreras 1989), then such an ecumenical, inclusive approach would make a great deal of sense. This is compatible with Kembel and Rick’s model (2004) of Chavín as one ceremonial center among many, competing widely with its contemporaries for adherents.

Such intra-site heterogeneity also complicates a model positing a trajectory of increased sociopolitical differentiation—reinforced and legitimized by ritual—during the middle and late Formative period (~1500–500 BCE). Moore (among others; see, for instance, Lumbreras 1989; Rick 2006b) describes the developmental changes of that time period explicitly in terms of ritual practice and legitimized hierarchy: “In a sharp departure from previous patterns, the Formative period was marked by the development of public vs. private religion, by an increasing social distance between participants and observers in public ceremony, and the development of complex social institutions that relied on the legitimacy imparted by highly visible, public ritual” (Moore 1996:226).

The persistence of the Mito Tradition alongside these later developments—not, apparently, as a marginalized survivor among a population resisting the changes but rather incorporated into institutionalized ceremonial practices—suggests that the change was perhaps not so abrupt. Moreover, those developing the rituals associated with sociopolitical difference found it either necessary or expedient to appeal to ancient practices (by the time the Mito-style chamber in the West Field was abandoned, the Mito Tradition had an antiquity of nearly two millennia).

The question of the continuity of the Mito Tradition is complex. Even if the radiocarbon dates from the West Field Mito-style structure represent terminal dates and we liberally estimate the use-life of the structure at a century, there remains a gap of at least 800 years between the latest of the Mito chamber dates Bonnier considers and this appearance of the type at Chavín. While architectural and ceremonial archaism or revival cannot be ruled out, the simplest explanation would seem to be that the Mito Tradition persisted through the beginnings of the Early Horizon. If that is the case, more research is very much needed to shed light on how and where the tradition

survived the intervening centuries. Of course, inasmuch as the Mito-style chamber at Chavín may also be described as belonging to the broader category of the Kotosh Religious Tradition, its existence also reinforces Burger and Salazar-Burger's (1985:118) contention that that tradition persisted into the Early Horizon.

## READING RITUAL ARCHITECTURE AT CHAVÍN

The Lanzón itself, and more broadly the galleries, structures, and plazas that surround it, has generally been understood as the focus of the site. Rowe posited that the Lanzón "was probably the principal cult object of the original temple at Chavín" (Rowe 1967:75), while Kembel (2001, 2008) argues that the Lanzón is associated with the oldest area of monumental architecture (the NEA)<sup>3</sup> and that the design of subsequent architecture in the area went to great lengths to maintain access to that ancient sacred focus (Kembel's emphasis on the continued importance of the icon is in contrast to Rowe's argument that the Lanzón declined in importance over time). Rowe's contention was a result of his architectural chronology, with its shift in emphasis over time from Old Temple to New Temple, while Rick and Kembel (Kembel 2001, 2008; Rick et al. 1998) emphasize the contemporaneity of the Circular Plaza and the Square Plaza.

This centrality of the Lanzón and the Circular Plaza, coupled with the apparent importance of the Square Plaza and the supposed bounded-ness of the monumental core, is suggestive of the sort of "concentric cline of the sacred" proposed by Kolata (1996) for Tiwanaku. At Tiwanaku, Kolata argues, the ceremonial architecture recapitulates a social order, in the process legitimizing that order by aligning it with sacred principles. The result was that progress "toward the civic-ceremonial core of the city . . . entailed passage across a nested, hierarchical series of socially and ritually distinct spaces" (ibid.:230). This architectural and civic layout mirrored, reinforced, and legitimized conceptions of both cosmic and social order.

The possibility that a similar cline may have existed at Chavín is implicit in arguments for the centrality of the Lanzón (and the NEA complex). The contrast between the open spaces of the plazas and the smaller, restricted-access spaces of the galleries offers a similar argument for a relatively linear gradient, a progression from the relatively open and publicly visible plaza spaces to the restricted-access and private galleries. The primacy of the latter is suggested both directly—by their housing of such features as the Lanzón—and theoretically—by the model of ritual practice elaborated by Rick and Kembel (Kembel and Rick 2004; Rick 2005, 2006a, 2008). Rick highlights the centrality of the

gallery spaces in his argument for the nature of Chavín ritual practice: “If they were indeed creating a convincing system based on elaborate and impressive ritual action within a created architectural world, they would have faced intrinsic limitations. If the effects of contexts and ritual are related to the intimacy and exclusivity of the experience, then the groups gaining experience must necessarily be limited in size . . . to be truly convincing, Chavín needed to work in small settings for the most effective rituals” (Rick 2006a:110).

The presence of a contemporary ceremonially important feature—the Mito-style structure—well outside the monumental core (~300 m to the west) suggests a contrasting interpretation. If a concentric cline focused on a central area reflects and reinforces hierarchy, then a dispersed and diverse array of ritually significant areas may conversely be indicative of pluralism and heterarchy.

Inasmuch as political economy can be read from ritual geography, the coexistence of a Mito-style structure in the West Field with the NEA complex (and the Square Plaza and the many galleries) suggests just such a heterarchical arrangement by providing an indication of multiple ceremonial foci. Chavín displays not a concentric cline of the sacred so much as a dispersed array of sacred foci (as might also be suggested, even within the ceremonial core, by the number and heterogeneity of the galleries, as well as by the diversity and spatial dispersion of identifiable locations of ritual activity; see Rick, this volume).<sup>4</sup>

Plurality and heterarchy are suggested not just by the spatial dispersion of ritual foci but also by their inferred use. Although an argument can be made for the increasingly restricted character of access to the spaces within the monumental core (i.e., from the large Square Plaza to the smaller Circular Plaza to still smaller interior galleries; see Burger 1992:179; Rick 2006b:207, 2008:20–24), it is also possible to focus on the difficulty of stitching the entire architectural complex of the monumental core into one processional sequence.

The corpus of lithic art (e.g., on cornice fragments from Structure A [Rick 2008] and on the plaques of the Circular Plaza [Lumbreras 1977]) testifies to the importance of processions at the site. Moore, reviewing the architectural evidence for the use of plazas in the prehispanic Andes, infers an important role for processions, describing “constructed spaces . . . arranged actually to disrupt visual impact” (Moore 1996:224)—that is, spaces designed to be experienced rather than viewed. Rick’s recent characterization of Chavín’s architectural spaces recalls this focus on procession: “The architectural placement of individuals in sunken plazas, where much of the outside world is blocked . . . or in underground galleries in which all the external world is annulled, would be a way of definitively altering situational experience” (Rick 2006a, 110).

TABLE 3.2. Estimated areas and capacities of selected ritual spaces at Chavín

	<i>Area (m<sup>2</sup>)</i>	<i>Capacity (at 0.46 m<sup>2</sup>/person)</i>	<i>Capacity (at 2 m<sup>2</sup>/person)</i>
Square Plaza	2,401	5,220	1,200
Circular Plaza	284	617	142
Inner Lanzón Gallery	7	15	3
Mito structure	9	20	4

The contrasting sizes of the spaces involved limit the potential numbers of participants in any ritual activity. These range from the Square Plaza, which might have accommodated as many as approximately 5,200 participants,<sup>5</sup> to the Circular Plaza, which could have held ~600, while the internal spaces would have been limited to only handfuls of participants. Open-air ceremony might have been witnessed by much larger numbers in the spaces surrounding the plazas, but activity in interior spaces would have necessarily been much more limited (e.g., to approximately 15 people in the inner portion of the Lanzón Gallery and not more than 2–4 in the canal entries). The West Field Mito structure, though it may not have been the only one, is similar to the gallery spaces—able to accommodate only 20 persons in relatively intimate activities. The narrow entry steps suggest the ability to tightly restrict access.

Evidence for *where* processions would have taken place is ambiguous. The progression described above—from public plazas to private galleries—combined with the identification of the NEA Complex and Structure A as sacred foci may be an indication of the directionality of processions. It may be telling, moreover, that the figures sculpted in relief on the plaques surrounding the Circular Plaza are all processing—converging, if a mirror-image southern arc is inferred to match the partially preserved northern one—on the stair that leads to the Lanzón Gallery. Such an argument for directionality and the cline of the sacred it implies, however, is complicated by the fact that there is not *one* clear processional pathway through the site.

In fact, as Rick (2006b, 2008) has pointed out, two obvious paths exist: (1) through the Plaza Mayor from east to west, ascending the Black-and-White Staircase, crossing the Plaza Menor, and reaching the Black-and-White Portal; and (2) through the Plaza Mayor from east to west, across the Plaza Mayor terrace to the northwest, up the Middendorf Staircase, through the Circular Plaza Atrium and its approach, into the Circular Plaza, and up the Structure B staircase to enter the Lanzón/Laberintos Gallery complex (figure 3.5; also Rick 2006b:207–9, 2008:23–24). The existence of these paths in parallel rather

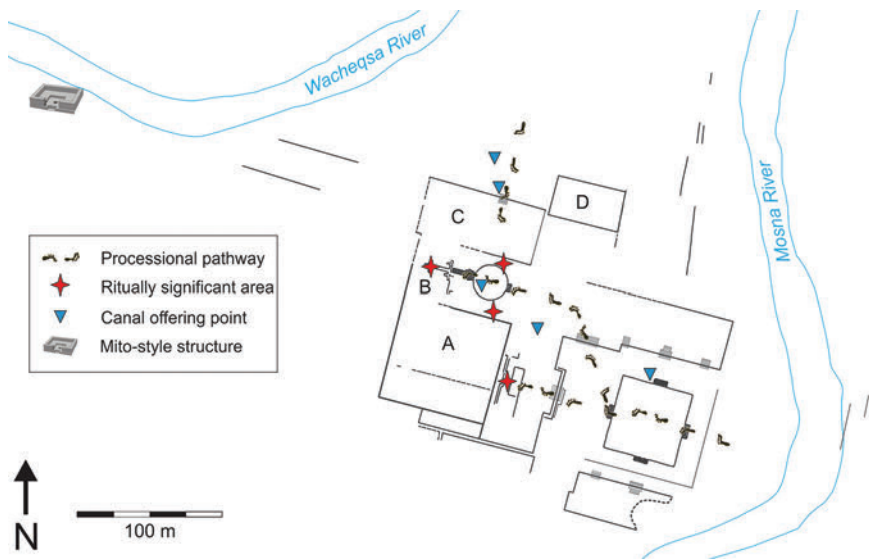


FIGURE 3.5. Hypothesized processional pathways through the monument, a selection of ritually significant locations (e.g., the Lanzón and Ofrendas Galleries), and a selection of canal access ways where evidence for ritual activity has been found. For a more comprehensive discussion of ritual spaces in the monumental core, see Rick, *this volume*. Note that the Mito-style structure in the West Field is intended to illustrate location only and is not to scale.

than in sequence may have been a significant contributor to Rowe's definition of Old and New Temples. Rowe postulated worship of distinct deities in the north and south wings of the site, by which he meant the smaller U-shaped complex composed of part of Structure A and Structures B and C, and the larger U-shaped complex composed of Structures E, A, and F; he saw the latter largely supplanting the former over time (Rowe 1967). Kembel's (2001, 2008) demonstration of the contemporaneity of the Old and New Temples thus begs the question of why multiple processional paths should coexist.

The presence of a Mito-style structure in the West Field suggests an answer: rather than a holy-of-holies on which the site was focused, there existed multiple ritual foci. Moreover, the coexistence of the NEA complex and the Black-and-White Portal, as well as the profusion of galleries (see Kembel 2008:figure 2.9), argues for a dispersal of ritual significance among several loci. Furthermore, the record of diversity of ritual foci continues to increase, as recent work by the Stanford Project has demonstrated that subsurface canals outside of the major structures were locations of ritual practice. Ritual activity

focused on these subsurface canals included both access to them through formal entryways and the deposition of artifact offerings (pot-smashes) through small vertical shafts. In addition, recent excavation has revealed a major staircase on the north side of Structure C, indicating a third likely processional path and suggesting that processions were not necessarily limited to the interior of the site's U-shape (see Rick, this volume).

## CONCLUSION

The evidence discussed here for ritual practice at Chavín raises questions about the nature and function of the site as a ritual center, suggesting heterarchical as well as hierarchical patterns. Ritual activity of various kinds taking place in diverse locations throughout the site, as well as a diversity of potential pathways for publicly visible procession (both internal and external to the site's U-shape), suggest a site that was a hive of ritual activity—various practices in various places, perhaps occurring simultaneously, perhaps each at its distinct time.

The multiple sacred foci, profusion of galleries and plazas, and absence of a strict processional or increasingly restricted-access sequence might be seen as difficult to reconcile with Kembel and Rick's arguments for the importance and centrality of deliberate, top-down, and long-term planning at the site. Can a model of Chavín as *designed* (Kembel and Rick 2004:64–68; Rick 2005:78–80)—implying a hierarchical, top-down approach to its construction and a central authority—be reconciled with a diversity of ritual practice that suggests heterarchy?

A distinction between heterarchy and egalitarianism is vital—heterarchy may incorporate a significant degree of sociopolitical differentiation even while it implies social tension that mandates against strict ordering. The implication is of inclusiveness but not independence, of diverse ritual practices subsumed to the authority of the polity, of heterarchy nested within hierarchy. This suggests an avenue for further research at Chavín and indeed into the sociopolitical processes of the Formative period more generally: how did ceremonial centers both incorporate diverse ritual practices (implying perhaps diverse practitioners, or adherents and pilgrims attentive to some aspects of centers but not others) and maintain (or develop) a centralized authority that could command tribute and was capable of strategic and long-term planning?

The existence of a Mito-style structure at Chavín does not necessarily call into question the importance of procession or restriction of access in ritual

practice at the site, but the presence of ceremonial architecture in an otherwise relatively marginal area suggests that ritual space was diverse rather than singular and that authority at Chavín was perhaps heterarchical as well as hierarchical. The Mito structure in the West Field—almost literally in the shadow of the temple complex, certainly sanctioned and included rather than in any way clandestine—suggests that ritual practice at Chavín was at least inclusive and perhaps actively syncretic.

## ACKNOWLEDGMENTS

The excavation of the Mito-style structure at Chavín was funded by a National Science Foundation Doctoral Dissertation Improvement Grant (#0532350), with additional support from a Stanford School of Humanities and Sciences Graduate Research Opportunity Grant, an Amherst College Memorial Fellowship, and the Lynford Family Foundation. The work was carried out as part of the Stanford Project directed by John Rick, thanks to the permission of the Peruvian Instituto Nacional de Cultura. My fieldwork was carried out with the invaluable help of Parker van Valkenburgh, Verónica Castro Neves, and Jose Luis Nuñez; priceless logistical support came from Maria Mendoza, Christian Mesia, and the people of the town of Chavín.

## NOTES

1. The map does not include Mito-style structures recently described at Huari-canga in the Fortaleza Valley (Piscitelli 2012), Qeushu in the lower Callejón de Conchucos (Herrera 2010), or El Paraíso in the Chillón Valley (Guillen Hugo 2013). For an updated version, see Contreras (2016:figure 9).

2. Heterarchy refers to a situation wherein the individuals or groups involved are either unranked or have rankings that are fluid rather than fixed, changing depending on context (Crumley 1995).

3. The NEA designation refers to the northeastern portion of Structure A, which is among the oldest pieces in the construction sequence that Kembel was able to identify. I here refer to the Lanzón and the gallery that houses it, in combination with the Circular Plaza, as the NEA Complex; this elides significant architectural change over time but emphasizes the persistent ceremonial focus on this area.

4. Moreover, the small scale of the excavations in the West Field bears emphasizing—only just under 18 m<sup>2</sup> were excavated, and only about 6 m<sup>2</sup> of that reached the level of the Mito-style structure. Stratigraphic evidence from the river cut a scant 5 m to the north demonstrates that construction at the level of the chamber—and

below—extended at least that far, but we simply have no idea about the horizontal extent of construction related to this feature. The substantial later deposits may hide an array of contemporary Mito-style structures, as at Kotosh, or this example may be solitary.

5. Using the most liberal of Moore's (1996) estimates for architectural capacities—0.46 m<sup>2</sup>/person. For areas and more conservative calculations, see table 3.2.

## REFERENCES CITED

- Bennett, W. C. 1944. *The North Highlands of Peru: Excavations in the Callejón de Huaylas and at Chavín de Huántar*. Anthropological Papers of the American Museum of Natural History Vol. 39. New York: American Museum of Natural History.
- Bonnier, E. 1997. "Pre-ceramic Architecture in the Andes: The Mito Tradition." *Archaeologica Peruana* 2: 120–44.
- Bonnier, E., and C. Rozenberg. 1988. "Del Santuario al Caserío: Acerca de la Neolitización en la Cordillera de los Andes Centrales." *Bulletin de l'Institut Français d'Études Andines* 17: 1–12.
- Bronk Ramsey, C. 2009. "Bayesian Analysis of Radiocarbon Dates." *Radiocarbon* 51 (1): 337–60. <http://dx.doi.org/10.1017/S0033822200033865>.
- Burger, R. L. 1982. "'Pojoyc and Waman Wain: Two Early Horizon Villages in the Chavín Heartland.'" *Ñawpa Pacha: Journal of Andean Archaeology* 20 (1): 3–40. <http://dx.doi.org/10.1179/naw.1982.20.1.002>.
- Burger, R. L. 1984. *The Prehistoric Occupation of Chavín de Huántar, Peru*. Berkeley: University of California Press.
- Burger, R. L. 1992. *Chavín and the Origins of Andean Civilization*. New York: Thames and Hudson.
- Burger, R. L. 1993. "The Chavín Horizon: Stylistic Chimera or Socioeconomic Metamorphosis?" In *Latin American Horizons*, ed. D. S. Rice, 41–82. Washington, DC: Dumbarton Oaks.
- Burger, R. L., and L. Salazar-Burger. 1980. "Ritual and Religion at Huaricoto." *Archaeology* 33 (6): 26–32.
- Burger, R. L., and L. Salazar-Burger. 1985. "The Early Ceremonial Center of Huaricoto." In *Early Ceremonial Architecture in the Andes: A Conference at Dumbarton Oaks, 8th to 10th October 1982*, ed. C. Donnan, 111–35. Washington, DC: Dumbarton Oaks.
- Burger, R. L., and L. Salazar-Burger. 1986. "Early Organizational Diversity in the Peruvian Highlands: Huaricoto and Kotosh." In *Andean Archaeology: Papers in Memory of Clifford Evans*, ed. R. Matos Mendieta, S. A. Turpin, and H. H. Eling



- Jr., 65–82. Monograph 27. Los Angeles: Institute of Archaeology, University of California.
- Contreras, D. A. 2007. “Sociopolitical and Geomorphologic Dynamism at Chavín de Huántar, Peru.” PhD dissertation, Department of Anthropological Sciences, Stanford University, Stanford, CA.
- Contreras, D. A. 2010. “A Mito-Style Structure at Chavín de Huántar: Dating and Implications.” *Latin American Antiquity* 21 (1): 3–21. <http://dx.doi.org/10.7183/1045-6635.21.1.3>.
- Contreras, D. A. 2011. “How Far to Conchucos? A GIS Approach to Assessing the Implications of Exotic Materials at Chavín de Huántar.” *World Archaeology* 43 (3): 380–97. <http://dx.doi.org/10.1080/00438243.2011.605841>.
- Contreras, D. A. 2016. “La Incorporación de la Tradición Mito en el Ámbito Ritual de Chavín de Huántar.” In *Arqueología de la Sierra de Ancash 2: Ensayos y Reportes*, ed. B. Ibarra, 21–44. Lima: Instituto de Estudios Huarinos.
- Crumley, C. L. 1995. “Heterarchy and the Analysis of Complex Societies.” *Archaeological Papers of the American Anthropological Association* 6 (1): 1–5. <http://dx.doi.org/10.1525/ap3a.1995.6.1.1>.
- Diessl, W. 2004. *Huantar, San Marcos, Chavín: Sitios Arqueológicos en la Sierra de Ancash*. Lima: Instituto Cultural Runa.
- Druc, I. C. 2004. “Ceramic Diversity in Chavín de Huántar, Peru.” *Latin American Antiquity* 15 (3): 344–63. <http://dx.doi.org/10.2307/4141578>.
- Grieder, T., and A. Bueno Mendoza. 1985. “Ceremonial Architecture at La Galgada.” In *Early Ceremonial Architecture in the Andes: A Conference at Dumbarton Oaks, 8th to 10th October 1982*, ed. C. Donnan, 93–110. Washington, DC: Dumbarton Oaks.
- Grieder, T., A. Bueno Mendoza, C. Earl Smith Jr., and R. M. Malina. 1988. *La Galgada, Peru: A Pre-ceramic Culture in Transition*. Austin: University of Texas Press.
- Guillen Hugo, M. A. 2013. *Templo del Fuego y la Tradición Mito en el Paraíso*. Accessed 8 January 2017. <http://paraisoarqueologico.wordpress.com/2013/02/09/templo-del-fuego-y-la-tradicion-mito-en-el-paraiso/>.
- Herrera, A. 2010. “Informe Final de Labores del Proyecto de Investigación Arqueológico Wanduy, Temporada 2008.” Informe presentado al Instituto Nacional de Cultura, Lima.
- Indacochea, G. A., and M. Iberico. 1947. “Aluvionamiento de Chavín de Huántar el 17 de Enero de 1945.” *Boletín de la Sociedad Geológica del Perú* 20: 21–28.
- Izumi, S., P. J. Cuculiza, and C. Kano. 1972. *Excavations at Shillacoto, Huanuco, Peru*. Bulletin 3. Tokyo: University Museum, University of Tokyo.
- Izumi, S., and K. Terada, eds. 1972a. *Andes 4: Excavations at Kotosh, Peru, 1963 and 1966*. Tokyo: University of Tokyo Press.

- Izumi, S., and K. Terada, eds. 1972b. *Excavations at Kotosh, Peru: A Report on the Third and Fourth Expeditions*. Tokyo: University of Tokyo Press.
- Kembel, S. R. 2001. "Architectural Sequence and Chronology at Chavín de Huántar, Perú." PhD dissertation, Department of Anthropological Sciences, Stanford University, Stanford, CA.
- Kembel, S. R. 2008. "The Architecture at the Monumental Center of Chavín de Huántar: Sequence, Transformations, and Chronology." In *Chavín: Art, Architecture, and Culture*, ed. W. J. Conklin and J. Quilter, 35–84. Monograph 61. Los Angeles: Cotsen Institute of Archaeology, University of California.
- Kembel, S. R., and H. Haas. 2013. "Radiocarbon Dates from the Monumental Architecture at Chavín de Huántar, Perú." *Journal of Archaeological Method and Theory* 22 (2): 345–427. <http://dx.doi.org/10.1007/s10816-013-9180-9>.
- Kembel, S. R., and J. W. Rick. 2004. "Building Authority at Chavín de Huántar: Models of Social Organization and Development in the Initial Period and Early Horizon." In *Andean Archaeology*, ed. H. Silverman, 51–76. Malden, MA: Blackwell.
- Kinzl, H., and E. Scheider. 1950. *Cordillera Blanca (Perú)*. Innsbruck: Universitäts-Verlag Wagner.
- Kolata, A. 1996. "Mimesis and Monumentalism in Native Andean Cities." *RES: Anthropology and Aesthetics* 29 (1): 223–36.
- Lathrap, D. W. 1971. "The Tropical Forest and the Cultural Context of Chavín." In *Dumbarton Oaks Conference on Chavín*, ed. E. P. Benson, 73–100. Washington, DC: Dumbarton Oaks.
- Lumbreras, L. G. 1977. "Excavaciones en el Templo Antiguo de Chavín (Sector R); Informe de la Sexta Campaña." *Ñawpa Pacha: Journal of Andean Archaeology* 15 (1): 1–38. <http://dx.doi.org/10.1179/naw.1977.15.1.001>.
- Lumbreras, L. G. 1989. *Chavín de Huántar en el Nacimiento de la Civilización Andina*. Lima: Instituto Andino de Estudios Arqueológicos.
- Lumbreras, L. G. 1993. *Chavín de Huántar: Excavaciones en la Galería de las Ofrendas*. Materialien zur Allgemeinen und Vergleichenden Archäologie, Bd. 51. Mainz am Rhein: P. von Zabern.
- Lumbreras, L. G., R. Gebhard, W. Häusler, F. Kauffmann-Doig, J. Riederer, G. Sieben, and U. Wagner. 2003. "Mössbauer Study of Ceramic Finds from the Galería de las Ofrendas, Chavín de Huántar." *Hyperfine Interactions* 150 (1–4): 51–72. <http://dx.doi.org/10.1023/B:HYPE.0000007214.89534.37>.
- Middendorf, E. W. 1974. *Peru: Observaciones y Estudios del País y sus Habitantes Durante una Permanencia de 25 Años*. Lima: Universidad Nacional Mayor de San Marcos.

- Montoya Vera, M. 2007. "Arquitectura de la 'Tradición Mito' en el Valle Medio del Santa: Sitio 'El Silencio.'" *Bulletin de l'Institut Français d'Études Andines* 36 (2): 199–220. <http://dx.doi.org/10.4000/bifea.3795>.
- Moore, J. D. 1996. *Architecture and Power in the Ancient Andes: The Archaeology of Public Buildings*. New Studies in Archaeology. Cambridge: Cambridge University Press. <http://dx.doi.org/10.1017/CBO9780511521201>.
- Ogburn, D. 2012. "Reconceiving the Chronology of Inca Imperial Expansion." *Radiocarbon* 54 (2): 219–37. <http://dx.doi.org/10.1017/S0033822200046944>.
- Onuki, Y. 1993. "Las Actividades Ceremoniales Tempranas en la Cuenca del Alto Huallaga y Algunos Problemas Generales." In *El Mundo Ceremonial Andino*, ed. L. Millones and Y. Onuki, 69–96. *Senri Ethnological Studies* 37. Osaka: National Museum of Ethnology.
- Piscitelli, M. 2012. *Ritual Is Power: An Exploration of Ceremonial Architecture at Huaricanga*. Accessed 8 January 2017. <http://diggingperu.wordpress.com/context/huaricanga/>.
- Pozorski, T., and S. Pozorski. 1996. "Ventilated Hearth Structures in the Casma Valley, Peru." *Latin American Antiquity* 7 (4): 341–53. <http://dx.doi.org/10.2307/972263>.
- Reimer, P. J., E. Bard, A. Bayliss, J. W. Beck, P. G. Blackwell, C. B. Ramsey, C. E. Buck, H. Cheng, R. L. Edwards, M. Friedrich et al. 2013. "IntCal13 and Marine13 Radiocarbon Age Calibration Curves 0–50,000 Years Cal BP." *Radiocarbon* 55 (4): 1869–87. [http://dx.doi.org/10.2458/azu\\_js\\_rc.55.16947](http://dx.doi.org/10.2458/azu_js_rc.55.16947).
- Rick, J. W. 2005. "The Evolution of Authority and Power at Chavín de Huántar, Peru." In *Foundations of Power in the Prehispanic Andes*, ed. K. J. Vaughn, D. Ogburn, and C. A. Conlee, 71–89. *Archeological Papers of the American Anthropological Association*. Arlington, VA: American Anthropological Association. <http://dx.doi.org/10.1525/ap3a.2005.14.071>.
- Rick, J. W. 2006a. "Chavín de Huántar: Evidence for an Evolved Shamanism." In *Mesas and Cosmologies in the Central Andes*, ed. D. Sharon, 101–12. San Diego Museum Papers 44. San Diego: San Diego Museum of Man.
- Rick, J. W. 2006b. "Un Análisis de los Centros Ceremoniales del Período Formativo a Partir de los Estudios en Chavín de Huántar." *Boletín de Arqueología PUCP* 10: 201–14.
- Rick, J. W. 2008. "Context, Construction, and Ritual in the Development of Authority at Chavín de Huántar." In *Chavín: Art, Architecture, and Culture*, ed. W. J. Conklin and J. Quilter, 3–34. Monograph 61. Los Angeles: Cotsen Institute of Archaeology, University of California.
- Rick, J. W., S. Kembel, R. Rick, and J. A. Kembel. 1998. "La Arquitectura del Complejo Ceremonial de Chavín de Huántar: Documentación Tridimensional y sus Implicancias." *Boletín de Arqueología PUCP* 2: 181–214.

- Rick, J. W., C. Mesía, D. A. Contreras, S. Kembel, R. Rick, M. Sayre, and J. Wolf. 2009. "La Cronología de Chavín de Huántar y sus Implicancias para el Período Formativo." *Boletín de Arqueología PUCP* 13: 87–132.
- Rowe, J. H. 1967. "Form and Meaning in Chavín Art." In *Peruvian Archaeology: Selected Readings*, ed. J. H. Rowe and D. Menzel, 72–103. Palo Alto: Peek.
- Sayre, M., M. J. Miller, and S. A. Rosenfeld. 2016. "Isotopic Evidence for the Trade and Production of Exotic Marine Mammal Bone Artifacts at Chavín de Huántar." *Archaeological and Anthropological Sciences* 8 (2): 403–417.
- Shady Solís, R., J. Haas, and W. Creamer. 2001. "Dating Caral, a Preceramic Site in the Supe Valley on the Central Coast of Peru." *Science* 292 (5517): 723–26.
- Shady Solís, R., and M. Machacuay. 2003. "El Altar del Fuego Sagrado del Templo Mayor de la Ciudad Sagrada de Caral-Supe." In *La Ciudad Sagrada de Caral-Supe: Los Orígenes de la Civilización Andina y la Formación del Estado Prístino en el Antiguo Perú*, ed. R. Shady and C. Leyva, 169–85. Lima: Instituto Nacional de Cultura.
- Shady Solís, R., M. Machacuay, and S. López. 2003. "Recuperando la Historia del Altar del Fuego Sagrado." In *La Ciudad Sagrada de Caral-Supe: Los Orígenes de la Civilización Andina y la Formación del Estado Prístino en el Antiguo Perú*, ed. R. Shady Solís and C. Leyva, 237–54. Lima: Instituto Nacional de Cultura.
- Tello, J. C. 1943. "Discovery of the Chavín Culture in Perú." *American Antiquity* 9 (1): 135–60. <http://dx.doi.org/10.2307/275457>.
- Tello, J. C. 1960. *Chavín Cultura Matriz de la Civilización Andina*. Lima: University of San Marcos.
- Terada, K., and Y. Onuki, eds. 1982. *Excavations at Huacaloma in the Cajamarca Valley, Peru, 1979*. Tokyo: University of Tokyo Press.
- Wiener, C. 1880. *Pérou et Bolivie: Récit de Voyage Suivi d'études Aarchéologiques et Ethnographiques et de Notes sur L'écriture et les Langues des Populations Indiennes*. Paris: Librairie Hachette.
- Williams, C. 1985. "A Scheme for the Early Monumental Architecture of the Central Coast of Peru." In *Early Ceremonial Architecture in the Andes: A Conference at Dumbarton Oaks, 26 and 27 October 1982*, ed. C. Donnan, 227–40. Washington, DC: Dumbarton Oaks.
- Witt, H. 1992. *Diario 1824–1890: Un Testimonio Personal Sobre el Peru del Siglo XIX*. Lima: Banco Mercantil.
- Ziółkowski, M. S., M. F. Pazdur, A. Krzanowski, and A. Michczyński. n.d. *Radiocarbon Database for Bolivia, Ecuador, and Peru*. Accessed 8 January 2017. <http://andes-ci4.arqueologia.pl/component/content/article/9-uncategorised/72-overview.html>.

