

# みんなくりポジトリ

国立民族学博物館学術情報リポジトリ National Museum of Ethnology

## Accessing the Ancestor Architecture : An Examination of the Galleries of Chavín' s Building C Vicinity

メタデータ	言語: eng 出版者: 公開日: 2023-04-11 キーワード (Ja): キーワード (En): 作成者: Rick, John W., Ortíz, Miguel メールアドレス: 所属:
URL	<a href="https://doi.org/10.15021/00010044">https://doi.org/10.15021/00010044</a>

## 2. Accessing the Ancestor Architecture: An Examination of the Galleries of Chavín's Building C Vicinity

**John W. Rick**

*Stanford University*

**Miguel Ortíz**

*Programa de Investigación Arqueológica y Conservación de Chavín de Huántar*

### 1. Introduction

Galleries are a trademark feature of Chavín de Huántar, especially in their quantity, extension, and complexity. While other Formative sites are increasingly noted to have the presence of stone-lined subsurface structures, none thus far have shown the degree of development of Chavín, and thus it is possible that galleries were one of Chavín's specialties—features that set the site apart from contemporary Formative centers. Here we will examine a combination of previously known and recently discovered galleries related to Building C that form a focus of ritual activity on the outside of the traditionally recognized plaza-focused structures forming the core of monumental Chavín. These galleries show a diversity of form and a long time span of use.

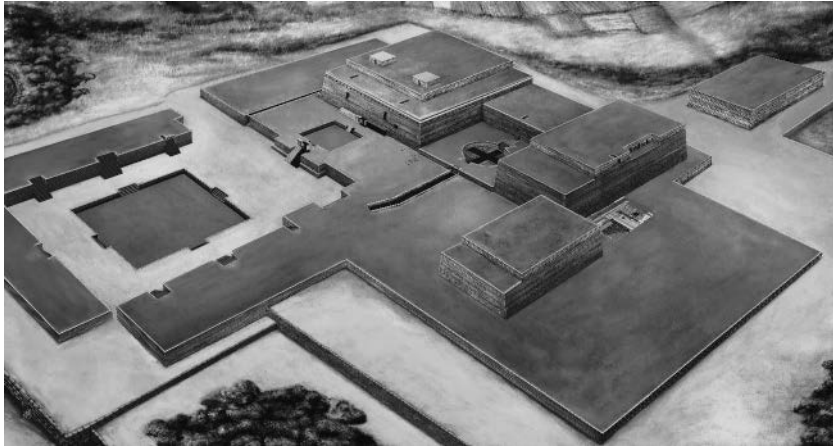
Galleries at Chavín have probably been known continuously since their construction and original use in the middle and late Formative Period, roughly 1200–500 BC cal. Lumbreras (1989) and others have documented early colonial observations on Chavín galleries, and historical travelers in the 19th century were able to enter and comment on several galleries identifiable among those known today (Middendorf 1974[1893–1895]; Raimondi 1873, among others). The onset of serious Chavín archaeology by Julio C. Tello in 1919 led to the first coherent observations on the galleries (Tello 1960), and by the 1960's Lumbreras was both clarifying the general nature of the galleries (Lumbreras and Amat 1965–1966) and also excavating an unprecedented collection of in situ Chavín ceramics in the Ofrendas Gallery (Lumbreras 1993). Burger's general treatment of Chavín gives an accessible, description of some major galleries (1992: 135–140, 178–180). Kembel's comprehensive analysis of gallery architecture and her clearly reasoned chronological arguments brought the galleries into the world of scientific, data-driven archaeology (2001, 2008). Rick has recently written on the definitions and features of galleries, as well as a newly discovered gallery series close to the site's Circular Plaza (2013, 2023 in press).

This article attempts to describe and understand the importance of a series of galleries from Chavín de Huántar's Building C and the esplanade lying immediately

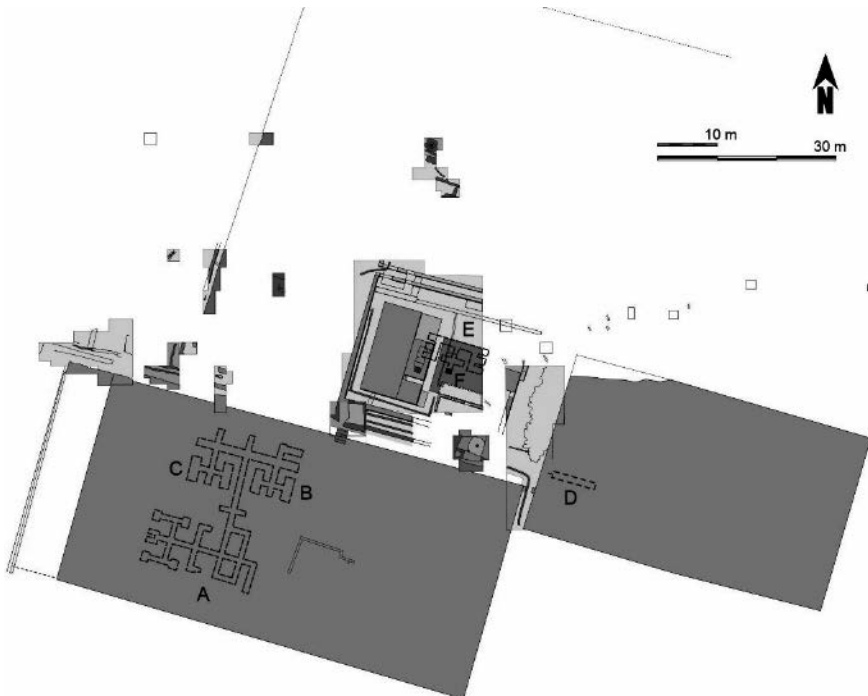
north of it (Figures 2-1 and 2-2). These are a combination of previously known galleries and those that have been discovered in major investigations undertaken from 2009 to 2022 as a major subproject of our Programa de Investigación Arqueológica y Conservación de Chavín de Huántar (PIACCH). This long-term archaeological effort, established in 1995, eventually made a major commitment to understand Building C and its vicinity in a multi-pronged effort that included comprehensive attention to a specific space within the site that was representative of the monumental core of Chavín's ceremonial center, and the development of archaeological and conservation protocols specifically adapted to the archaeological and environmental characteristics of Chavín. We planned to pay attention to the known galleries of the building but did not expect to encounter additional galleries. The discovery of at least three unanticipated galleries, together with the known ones, provides not only additional architectural, chronological, and artifactual data about Chavín's uniquely extensive gallery systems, but also a perspective on their construction and use as well as the intrinsic relationship between galleries and the logic and intent of the growth of Chavín during the Formative period.

Chavín's emphasis on galleries can be understood within the context of a peer-polity model for the Central Andean Formative (Kembel and Rick 2004), which proposes that the multiple independent centers through the Central Andes probably had competitive relationships, contending for the attentions, contributions, and self-reinforcing renown that would have been generated by having unique, somewhat inimitable features that figured prominently in impactful rituals experienced by cult members. Even today entering a complex, labyrinthine gallery is a memorable venture even in the absence of planned 'gallery experiences' of the type we and others have been able to credibly infer (Kembel 2001, 2008; Kolar 2013; Kolar et al. 2012; Rick 2013, 2017). Most Formative centers probably were developing content – style, experience, liturgy, etc. – that could set them apart within the available matrix of options. Galleries fit this description well, as expensive-to-build, highly engineered, exotic, mysterious, experiential, low visibility, and potentially manipulable settings for a small number of individuals to have highly tailored exclusive experiences.

Galleries are good places for secrets – the secrets of possible ordeal, revelation, ecstasy, insight, etc. – secrets of both what was experienced and how the experience was orchestrated. Entities like Chavín had strong interests in reducing the possibility of imitation by competing centers. Thus, galleries might have functioned, in part, as trademarked features that set Chavín apart. An obviously applicable concept is that of secret societies, in which control of information constitutes power, and the roles and ranks taken on or achieved within their proceedings constitute a major development in the establishment of authority. The literature relevant to this issue is immense, and not the direct topic of this paper, but Hayden's recent summary of secret societies draws out many of the issues I mention here (2018). While it is hard to conclusively demonstrate what happened in Chavín galleries, as the Chavín planners intended it to be, and although some galleries were probably more mundane in function, the number and complex ambience of galleries is not particularly appropriate for non-cultic activities easily carried out in relatively inexpensive surface settings.



**Figure 2-1** Perspective recreation of Chavín de Huántar in the Black and White Stage, ca 850–550 BC cal, looking to the SSW; the large square plaza is 49 m on a side. The excavation area in the north esplanade of Building C is visible in the right central area, Building C is up and left, and Building D is down and left from the excavation area. ©Programa de Investigación Arqueológico y Conservación de Chavín de Huántar (PIACCH), drawing by Miguel Ortíz.



**Figure 2-2** Plan view of Building C (lower left), esplanade area (center), Building D (lower right). 2009–2019 PIACCH test and area excavations are shown by cardinal-direction-oriented rectangular areas. Letters indicate galleries: A, Loco; B, Mirador; C, Capilla; D, Early D; E, Esplanade; and F is Black and White Stage plaza. ©PIACCH

As we have made clear (Kembel 2001; Rick 2008, 2023 in press; Rick et al. 1999), the galleries put site growth and modification in a different perspective. When an otherwise solid building has internal spaces, many modifications of the buildings' forms will complicate the access, function, and structural viability of gallery-like features. Several choices will have to be made with architectural growth. Much as some galleries' origins may represent a choice to maintain usable space and access to particular locations, presumably because of their significance, further growth may obstruct entrances, complicate ventilation or use of light (reflected or otherwise) and threaten stability due to the weight of constructed overburden. In the context of the apparent Chavín construction principle that galleries are built into new segments of architecture as the building mass is accumulated, a further implied principle is that new architectural segments must have the volume necessary to include a new or extended gallery. Correspondingly, new projected architectural mass offered an opportunity to accommodate one or more galleries within the space available. Given the diversity of known gallery form in Chavín, many solutions to 'gallery-fitting' may be possible in terms of a horizontal layout, but with the almost universal gallery height (internally around 2–2.5 m of ceiling height with a few notable exceptions), it is reasonable to think that the inclusion of galleries in a new construction will impose a modular pattern on vertical growth – that is, a minimum of 2.5 m of vertical rise will be necessary to construct a gallery-inclusive segment. Consequently, if new segments greater than this modular vertical increase are built, there will be opportunities for varying gallery height, or possibly multiple levels. It is within this framework that we will examine new aspects of known galleries, and new galleries in Building C and its proximities. Content of the galleries will be of importance, but as will be seen, not a major source of information for these galleries.

Our intention is to give a clear summary of the nature of the Building C vicinity galleries and their content, outline their complex chronology, and then summarize what has been learned thus far from them. Galleries are characteristic of Chavín's Formative monumental architecture, and seem to have been incorporated in many, if not all phases of construction (Kembel 2008). Their functions are far from fully known, but their diversity in layout, form and placement suggests that they likely were not for a single, narrow purpose. The relatively great cost of this construction, especially for the rather small floor space and useful volume they provided, makes it likely that they were heavily planned and designed, at least as much as other major categories of construction in the center. The continued access they provided to former above ground features, and the clear intent to maintain access to them as the buildings grew around and above them tells us that they represent, perhaps more than any other architectural feature, the clear desire to maintain continuity and even contact with previous incarnations of Chavín buildings and spaces.

## **2. The Galleries of the Building C Vicinity**

The key to understanding Chavín's galleries lies in their history, and the history is largely accessible through detailed features within, and relationships between galleries. For that

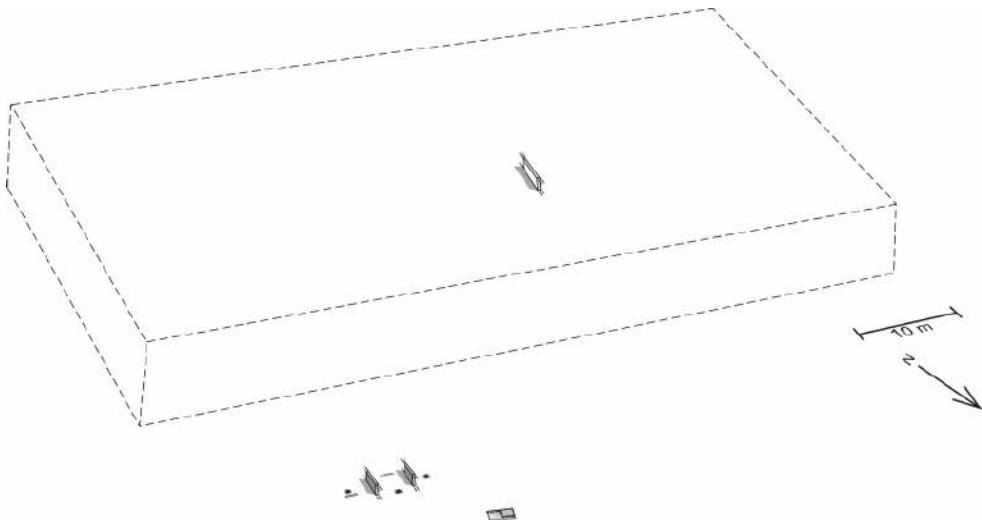
reason, it is necessary to go to some lengths to describe the characteristics of each gallery as revealed by excavations and architectural surveys.

### 2.1 Galleries of the Loco Complex

All galleries thus far known specifically from Building C are from the Loco Complex, located just below the highest part of the building (Figure 2-1). Like most of the galleries of Chavín, the Loco Complex is a group of galleries that are physically and logically linked, yet arguably separable as modules that have their own distinctive layout. In the Loco Complex, there are three galleries: Loco, Mirador, and Capilla (Figure 2-2). The Complex takes the name of Loco because that gallery is central to the other two, it shows signs of having parts that are early, and it is the largest and most complex. This arrangement of ‘galleries in a complex’ was recognized implicitly by Tello (1960: 88–89), in his representation of the galleries of Chavín in an elaborate map that projected several unknown galleries based on presupposed bilaterally symmetrical layout in conjunction with a known gallery. One newly discovered gallery of the Loco Complex, Gallery of the Capilla, shows that in cases Tello and his team were correct in this assumption.

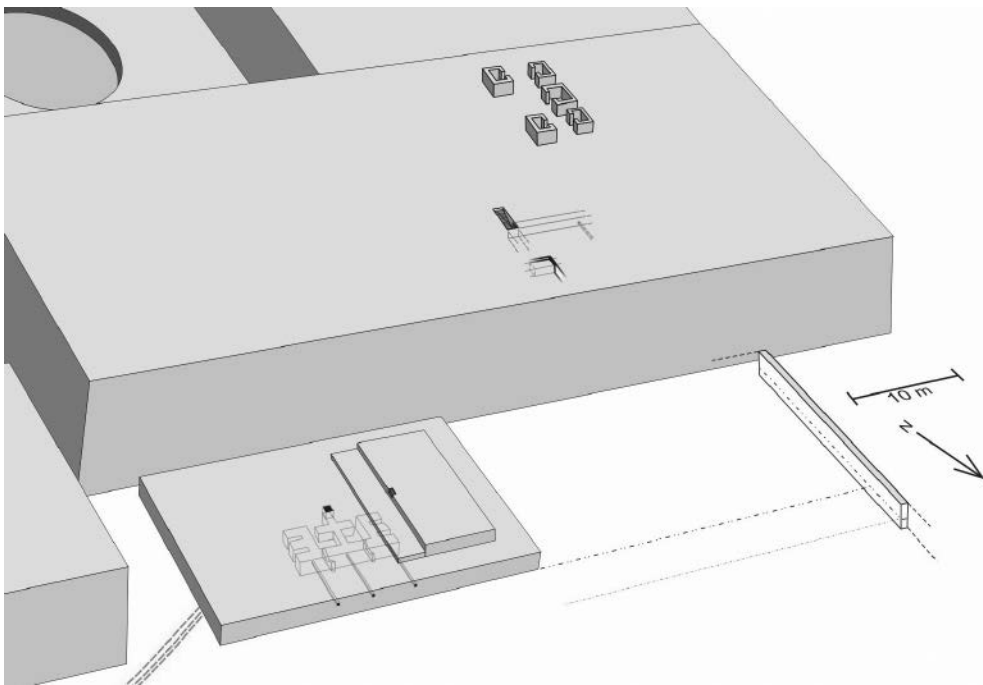
### 2.2 Loco Gallery

Kemmel (2001) has carried out an extensive analysis of the construction history of Loco Gallery by examining growth seams in the context of construction techniques and other information. She distinguishes four episodes of construction, represented by easily distinguishable gallery segments (Figures 2-3 to 2-7). It should be kept in mind that Loco



**Figure 2-3** Earliest moment of gallery-related architecture in Building C environs. Surface level walls, canals and pits represent surficial architecture that will be incorporated into later gallery construction. Approximate  $^{14}\text{C}$  age of architecture is set by date AA103665 in Figure 2-9, ~1300–1100 BC cal. © PIACCH, drawing by Miguel Ortiz.

Gallery has the most complex construction and post-construction history of the galleries reviewed here, with modifications continuing until the present day. The gallery has evidence of an early phase of construction at a level below that of the later gallery, possibly contemporaneous with surface rooms (“Loco Rooms”) which are later integrated into Loco as the western end of the gallery incorporated into Building C’s vertical growth (Figures 2-4 and 2-5). A southern complex is added, followed by a northern one (Figures 2-5 and 2-6) that includes the other two galleries of the Complex. Some final modifications are made to the common area from which all three galleries are entered, probably in the final short Support Construction Stage (Figure 2-7). A limitation, however, is that Loco Gallery has been altered at least three times in recent decades in the process of (sometimes radically) conserving areas of collapsing stone gallery walls; some documentation of this exists in unpublished reports and videotape interviews. Even though these modifications have probably not altered the gallery’s floorplan, they hamper a full understanding of the gallery. Perhaps more problematic is the very limited record of excavation in Loco; although the majority of the gallery has been cleared down to or near a floor-like surface, excavation data only exists for a small area of the main E-W gallery segment excavated in 2013 by the PIACCH program; a thin Chavín period over-

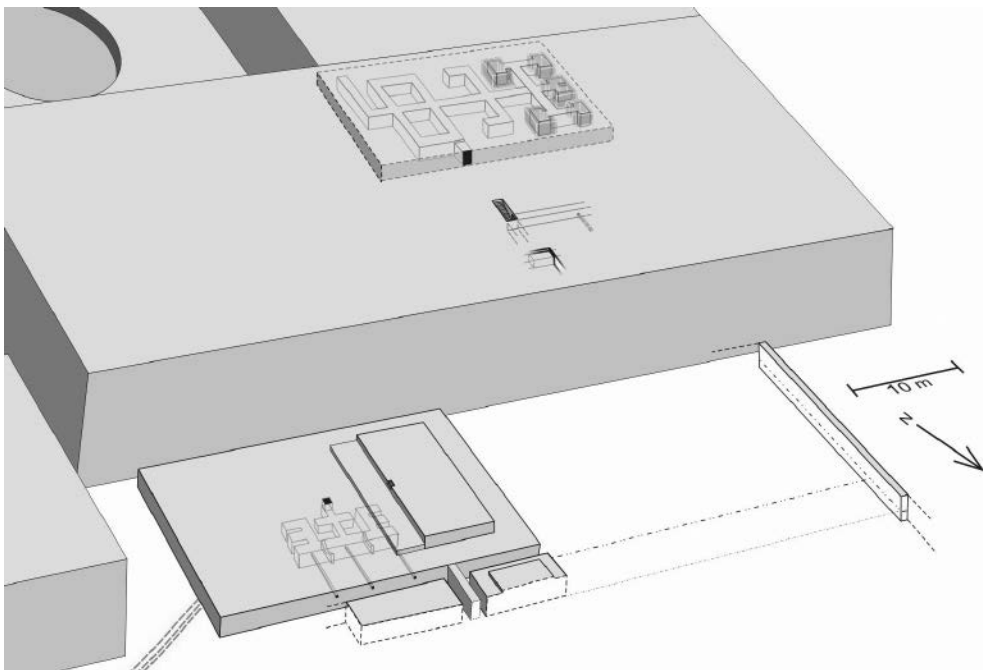


**Figure 2-4** The earliest evidence of gallery construction known from Building C and esplanade area: Loco Rooms and early gallery corridors and descending stairs visible on top of Building C; Esplanade Gallery installed in esplanade platform. Approximate building date, especially for the Esplanade Gallery may start in the 1200–1000 BC cal range, as determined by preceding structure dates, use date AA103664 (approximately 1000–770 BC cal) and use termination (fill) dates AA103669 and AA103670 for early Loco corridor (approximately 1050–800 BC cal). ©PIACCH, drawing by Miguel Ortíz.



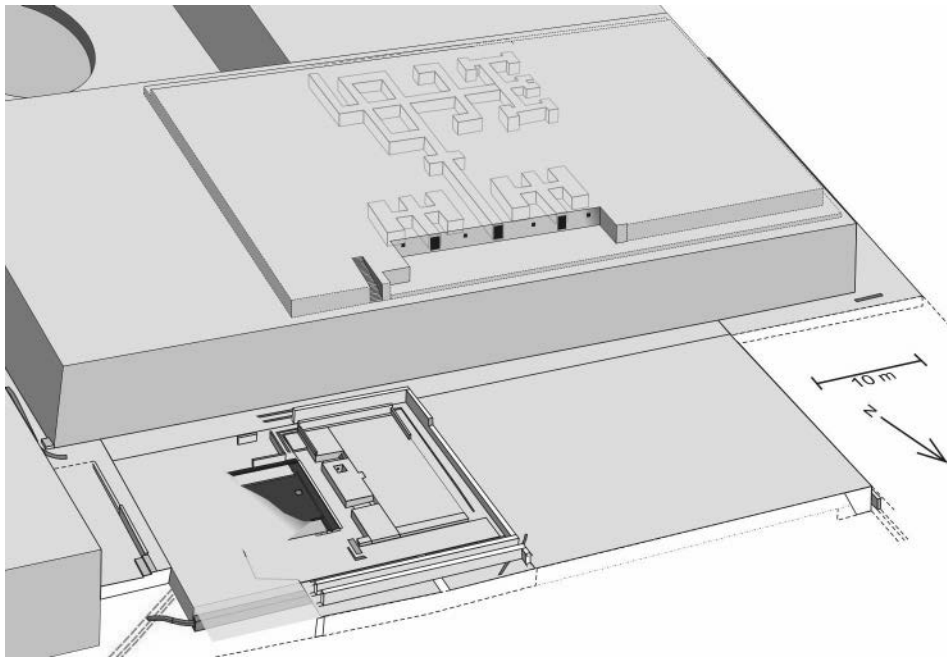
floor deposit was encountered with sparse cultural material, little of which was conformably lying on floor surfaces. The most notable object recovered was a fragment of black slate with Chavín-style engraving, a common class of object in Black and White Stage (850–550 BC cal) Chavín. These are fragments of platelike stone, very reminiscent of the small tread backing slabs found behind the primary stair stones of many formal Chavín staircases in the monumental center. They have not yet been found complete to our knowledge but typically show the same trimming techniques as used on the stair elements. This small excavation showed that the gallery floor had been perforated frequently by small intrusions that may represent extensive looting. It may also represent gallery use activity circa 1940–1950, given that the gallery was named for an insane resident (alternatively described as anti-social) of that time.

Excavations in the Loco Complex entranceway patio encountered a gallery corridor segment entirely below the level of the patio with plastered walls and evidence of having been originally roofed. Only a short segment of this “Lower Loco” corridor could be excavated because it does not exactly conform to the ground plan of the overlying gallery patio features, but it had a clear clay floor typical of a gallery, and a typical gallery corridor width. The excavation produced a number of charcoal samples (Figure 2-9) from what was a uniform clayey intentional fill placed to create a solid substrate for the later Loco features of the patio area.



**Figure 2-5** An increase in Building C height allows incorporation of Loco Rooms as parts of the new Loco Gallery, with corridors to the south. Esplanade Gallery likely remains in use, probably relates to early Black and White Stage times around ~850 BC cal. ©PIACCH, drawing by Miguel Ortíz.





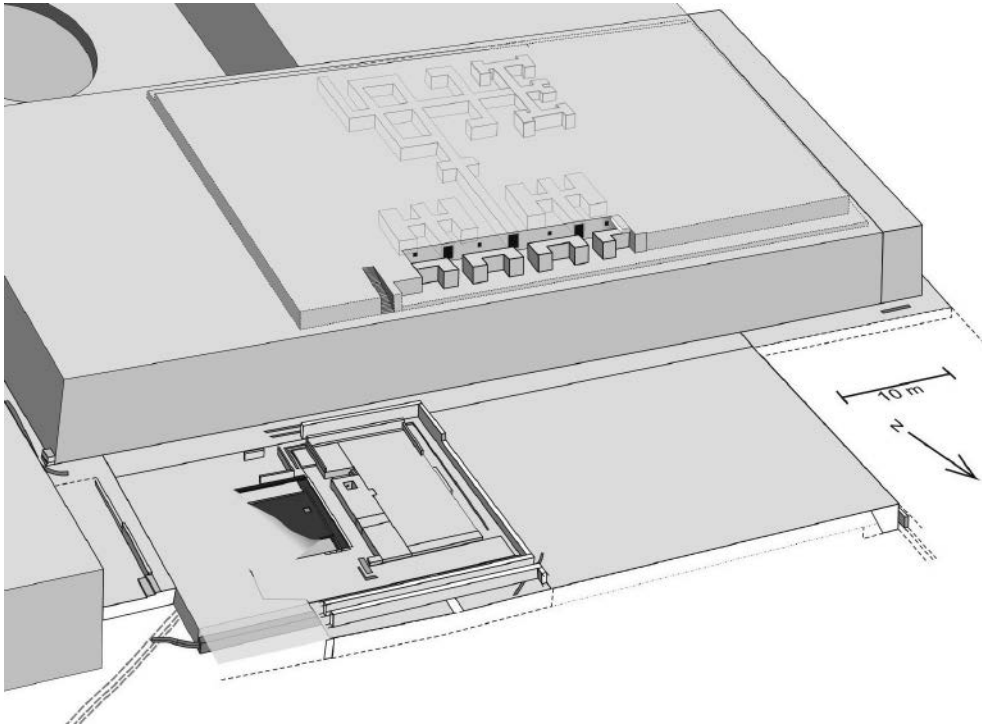
**Figure 2-6** Full extension of Loco to east and north; additions of bracketing Capilla and Mirador galleries, entombment of lower Loco and Capilla, gives a no-earlier-than-date of end-use dates of 1050–800 BC cal. Esplanade Gallery may be accumulating filtration sediments, having occasional visitation. Probably on the earlier side of 850–550 BC cal, date AA62773 (Figure 2-9) may be a construction date for northern Loco at about 900–800 BC cal., suggesting most Loco construction over in earlier Black and White Stage. ©PIACCH, drawing by Miguel Ortíz.

### 2.3 Mirador Gallery

Mirador is a much smaller gallery, evidently constructed in the last major construction phase of the Loco Series (Figure 2-6). Kembel's analysis of construction phases suggests it was built in one construction event, leaving no telltale seams. The gallery appears to be completely clean of deposits, although there is no record of its excavation nor materials encountered within it. It does appear to be relatively intact and free of reconstruction.

### 2.4 Capilla Gallery

The history and discovery of the Capilla Gallery are intimately connected to the major *alluvión* mass wasting event that struck Chavín de Huántar on the 13th of January 1945 (Indacochea and Iberico 1947; Spann 1947). This huge mass of sediment, rock, and water descended and overflowed from the Wacheqsa drainage on the north edge of the site of Chavín, and heavily impacted the northern part of the monumental center, first encountering substantially elevated Chavín-period architecture precisely in the northwest corner of Building C. The movement's mass had sufficient volume and velocity to override Building C, sweeping away the aged historical chapel on the top of the building

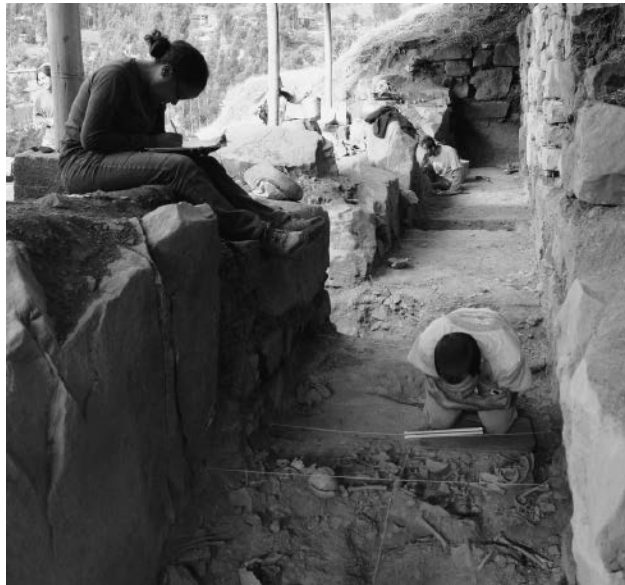


**Figure 2-7** Last Chavín construction events in Building C, including building blocks that form Loco's entranceway E-W corridor and fill most of Loco's gallery patio; Building C extended westward in response to western façade collapse linked to ~550 BC cal widespread likely seismic damage in Chavín. © PIACCH, drawing by Miguel Ortíz.

that Tello had adopted as a storage 'museum' for the lithic sculpture he had accumulated over 26 years of interventions in Chavín (Tello 1960). The Capilla Gallery takes its name from underlying rather closely the location of that destroyed structure.

While at the very least Tello (1960) and Kembel (2001) both anticipated the possibility of a gallery symmetric to Mirador lying west of the N-S axis of Loco, I am unaware of any eyewitness documentation of the actual gallery prior to our explorations. Important hints of the existence of a structure in this space include typical Chavín ducts intruding westward from the Loco entrance corridor, and southward from the east-west corridor running in front of the present-day gallery entrances (Figure 2-8), and also from a small internal corner of architecture in line with that same corridor that was visible on the surface of Building C. In 2011 PIACCH decided to investigate that corner as the possible remnant of the west end of the mentioned corridor. Neither the slope of Building C nor the ground contour remotely suggested that a gallery entrance might be present.

Upon opening units within the clearly defined corridor space, the corners of a southward-running corridor appeared, which quickly revealed a passage full of easily identifiable 1945 *alluvión* sediments that had filled what now was defined as a gallery entrance, parallel to those of Loco and Mirador. The stone walls of the corridor were



**Figure 2-8** View down the Loco Complex entranceway E-W corridor, looking eastward from the entranceway to Capilla Gallery. Mixed human and animal bone concentration visible in the foreground, stratigraphically highest of a number of over-floor bone layers. ©PIACCH

partially destroyed, and the *alluvión* material contained major amounts of building stone sheared off wall tops as the *alluvión* overwhelmed, partially de-roofed, and injected itself into the internal spaces of the gallery. The gallery turned out to have the same layout as that of Mirador, but its western chamber was mostly collapsed, with heavy stone roofing beams and megalithic wall stones randomly heaved into its collapsed space. The western chamber was defined, but no attempt was made to clear it. The eastern chamber of Capilla was essentially intact, although partially filled with intruded *alluvión* material. The central N-S axis of Capilla was in an intermediate state of preservation, with roofing beams remaining in place at its south end, unstably supported beams and buckling walls in the middle section, but the northern end was missing beams and had walls descending with the erosion contour toward the north façade of Building C.

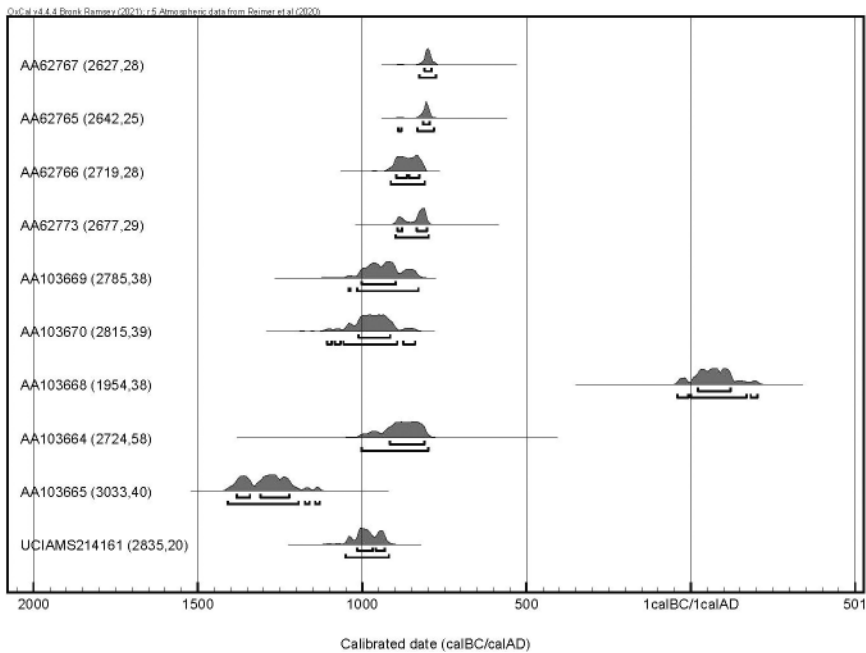
Any hope of safely clearing and investigating the available gallery spaces depended on stabilizing the central corridor structure. To permanently deconstruct the unstable part of the gallery would sacrifice the architecture still in or close to the original location. To avoid this loss, we carefully dismantled the threatened beams and unstable walls after considerable total station, photographic, and photogrammetric documentation of the original stones' locations. Many lessons were learned in the methodology and security of moving beams, often well in excess of a ton. We were able to reassemble the structure successfully in the exact original construction positions and orientations but stabilized with new clay mortar. In the case of the SW corner of the crossing between the N-S axis

and the corridor connecting the E and W chambers, the structure required dismantling down to its foundations at the original floor level, and it became apparent there was substantial slumping of the corner down into a compressible substrate. To provide a consolidated surface capable of again supporting the weight of the corner we had to remove uncompacted sediments filling a post-Chavín hollow going below floor level in this area. This hollow contained a very small amount of historic material apparently predating the 20th century AD – the only such find made in the gallery; part of that material included a child burial placed into the hollow. The child's body had been severely compacted but apparently was interred in articulated condition, and covered with a European grain, probably barley, that appears to have been charred in situ. The depression it occupied did not conform to historic graves we have encountered in Chavín – it was very irregular and opportunistic, even undercutting the de-stabilized corner. I suspect it may have been a rapidly made looter's pit; the presence of a buried child in this location and architectural space could be due to many imaginable circumstances.

Fortuitously, the clearing of the pit led to yet another discovery. The base of the Capilla gallery walls lay above a highly compacted gravelly clay sediment commonly associated with gallery floor construction, but the sub-floor of the gallery outside of the mentioned depression was a much less compact, perfectly clean clayey fill. The vertical contact between the clayey fill and sub-wall sediments was pursued a short distance, and to our surprise consolidated into a clearly plastered wall whose top was about 20 cm below the Capilla E-W gallery wall, and in perfect vertical alignment with it. With careful stabilization, it was possible to open a small segment of this sub-corridor structure, which turned out to be another full-height gallery corridor lying directly below Capilla (Figure 2-4). Both north and south walls were fully plastered and in good condition, clearly showing the lower corridor had been de-roofed and intentionally filled prior to any weathering of the plaster. A single horizontal duct was found, directed to the north from the north wall; similar ducts are present in both Mirador and Capilla galleries, albeit one 'story' above. The several cubic meters of fill produced virtually nothing other than sterile, clean clayey sediments, apparently a single intentional filling event. The floor of this gallery segment was similarly devoid of any cultural material; despite considerable effort, no datable materials could be recovered from the fill.

We backfilled and packed the lower Capilla corridor segment to promote stability, restored the Capilla wall corner, and after partial re-roofing with original beams the gallery was secure for excavation. The floor of the gallery had not been revealed or approached prior to the restoration work, and the eastern chamber remained full of *alluvión* sediment. This was removed and the eastern chamber's floor was revealed, although it had been badly damaged, apparently by looters digging a broad and deep trench at the southern end. Immediately above-floor and on-floor sediments included dense depositions of large bone fragments in several portions of the gallery and the western end of the E-W corridor outside the Capilla entranceway (Figure 2-8). In some areas this deposit could be separated into relatively thin layers by stratigraphic definition, in others, the deposit was too consolidated to distinguish any strata.

These bone-laden deposits contained little in the way of ceramics; what was present

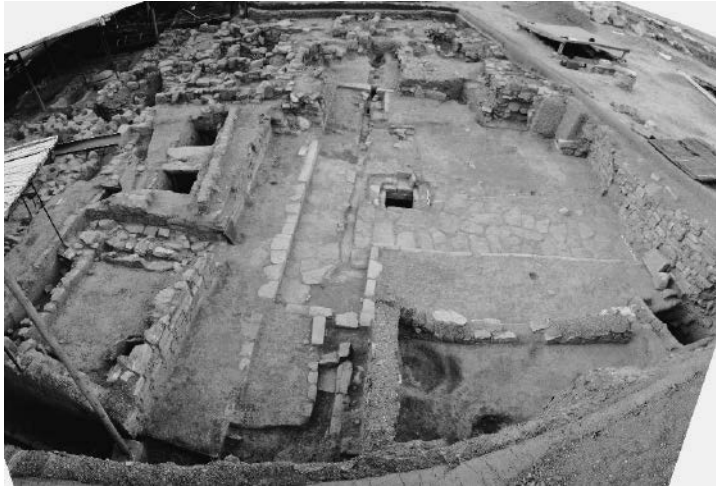


**Figure 2-9** Radiocarbon determinations from relevant contexts in Building C environs galleries. The top four dates from building mortar in Loco; the first three are considered renovation dates from re-mortaring of walls at some unknown time after construction. The fourth date (62773) may be a construction date for the northern Loco Gallery. 103669 and 103670 are dates from the massive fill of the lower Loco corridor. 103668 is from charcoal in the post-Chavín bone layer in Loco entranceway E-W corridor. The lowest three dates are Esplanade Gallery: 103664 is gallery use deposit, 103665 is deep subfloor deposit, 214161 is a less deep pre-Esplanade deposit. Upper brackets are 1 sigma ranges, lower brackets are 2 sigma ranges. ©PIACCH, graphic by Daniel Contreras.

suggested that the uppermost of these deposits were of post-Chavín age, while the layers nearest the gallery/corridor floors contain some pottery of Chavín age. A single radiocarbon date of  $1954 \pm 38$  (Figure 2-9: Lab no. AA103668) was obtained for these deposits, which seems to indicate that there was post-Chavín usage of the gallery in the 41 BC cal-203 AD cal. 2 sigma range. This would probably indicate a Mariash-Recuay (~ 0 AD/BC-AD 750 cal) presence, although there is also pottery present also suggesting the ca. 500 BC-0 BC/AD Huaraz period. Most distinguishing for these bone concentrations is that they are a mixture of human and camelid remains which had all been very similarly slightly fragmented, and with notable articulated bone groups. The human remains were predominantly of subadults, many of which were of similar age. The bones do not seem to show evidence of burning, and cut marks were not commonly seen.

## 2.5 The Esplanade Gallery

The surface architecture of the north esplanade of Building C in the Chavín epoch has proved to be exceedingly complex, and its discussion is beyond the purposes of this



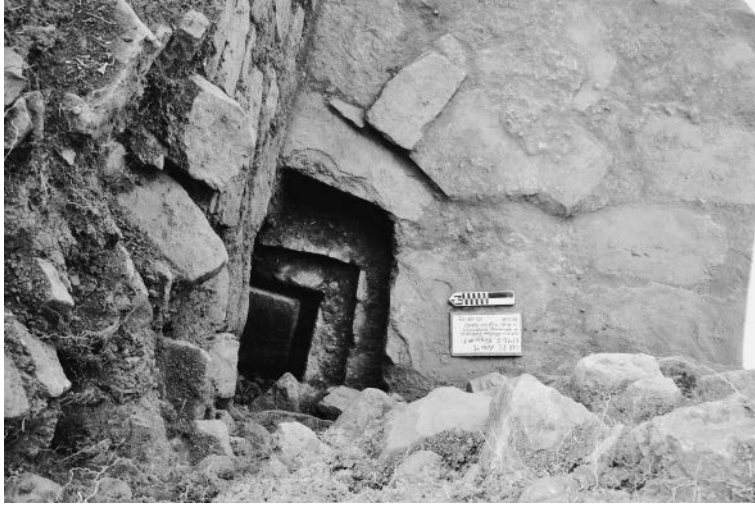
**Figure 2-10** Overview of complex, mostly Chavín age esplanade architecture including the stone-floored plaza, the entrance to Esplanade Gallery in center, curbs and lateral plaza structures. The small surface canal in the center of the image is running immediately above the beams of the Esplanade Gallery. ©PIACCH

article. But to set the architectural context for the Esplanade Gallery, it is important to realize that our excavations in this area were aimed, in part, at determining the character of site use in spaces to the outside of the major platforms and enclosed plaza-like spaces in Chavín's monumental center. Major area excavations, as well as specifically focused smaller units have been able to demonstrate that in the case of Building C, at least, the outside space was intensively constructed, used, and rebuilt many times with architecture that almost without exception was not for domestic purposes, nor any other use that would have left significant quantities of artifactual remains (Figure 2-10, see also Figures 2-5~2-7). While there are concentrations of cultural materials in layers immediately overlying architectural floors, and to some degree in fills between such surfaces, most sizeable objects or fragments represented intentional deposition of ritual material, often in apparent sacrificial contexts, such as pit fill or in below-surface contexts such as underground canals. The architecture itself consists of low platforms ranging from a few up to more than 100 m on a side, passageway-like corridors frequently encircling the platforms, open, plaza-like spaces, large rooms, small surface canals, sizeable underground canals, and a subsurface gallery. The diversity and distributional complexity of this architecture were much greater than generally acknowledged for Chavín, and show that spaces in the esplanade were transformed greatly over the Chavín occupation. The overwhelming majority of architecture extensively revealed to date comes from the Black-and-White Stage (850–550 BC cal.) along with the latter part of the preceding Consolidation Stage and some evidence from the final Support Stage. The policy of the PIACCH program has been to not remove or destroy any substantially complete Chavín-period structures, resulting in a lack of extensive exposure of earlier architecture,



although small sounding units scattered throughout the esplanade area have revealed a long sequence of earlier structures.

Thus far one clear plaza has been found in the esplanade, located well to the east of the E-W centerline of Building C (Figures 2-2 and 2-9). It has a history that may span most of the Black-and-White Stage, and may have been accessible through the brief



**Figure 2-11** Entranceway to Esplanade Gallery as found, with double insets, and one large offset stone slab still present as a remnant seal in the entrance. ©PIACCH



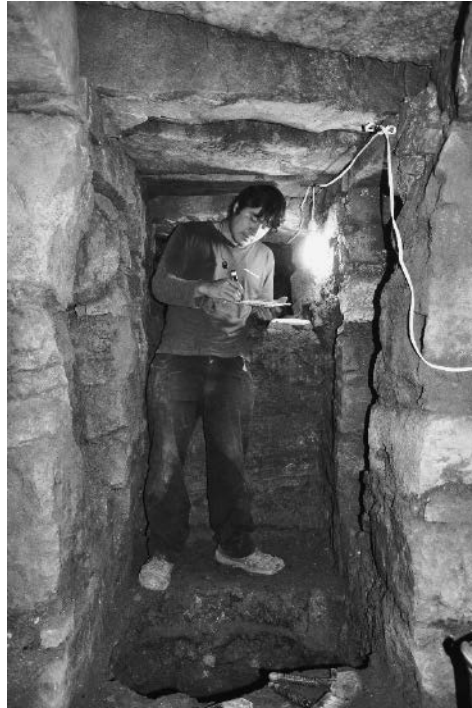
**Figure 2-12** Interior of Esplanade Gallery during excavation, with entranceway and high steps descending on the right. The clear architectural seam of abutted gallery and the prior surface wall behind right excavator. ©PIACCH



Support Stage that abruptly ends the Chavín Epoch at or near 500 BC cal. In the following Huaraz Epoch, structures were built close on top of the plaza's floor in a radical reorganization of space that informalized and partially secularized space usage in the area. The plaza during one phase of Chavín usage boasted a black-slate-flagged floor with worked curb stones of clear black and white patterning that define a step that leads up to buildings on at least the plaza's south and west sides; the eastern side has not been excavated yet, and the northern side is rather incomplete because of both natural and cultural destruction of plaza-contemporary structures. In tracing the plaza floor laterally in 2013, excavation uncovered a double-inset framing of stone set within the plaza floor, clearly an entrance to a below-plaza space. It retained a slightly displaced large flat stone that appears to have occupied the lower inset of the frame to seal the entrance along with one or more now-missing stones (Figure 2-11). After the gallery had been sealed, apparently for the final time, a

small square stone-lined pit was constructed along and immediately overlying the northern edge of the entrance's frame (visible in Figures 2-10 and 2-14), a feature reminiscent of square and circular stone-lined pits frequently observed in the Esplanade area that appear to mark, or reach stratigraphically backward to important earlier structures. Still later, a post-Chavín wall had been built directly above the entrance, which together with the cover stone and a lack of post-Chavín materials other than those slightly slumping into the entrance strongly suggests that the gallery had remained sealed since Chavín times. The gallery was found with silty/clayey sediments filling most of the gallery's height, lying very flat and clearly water deposited. Again, the sediments bore no suggestion of disturbance of any type.

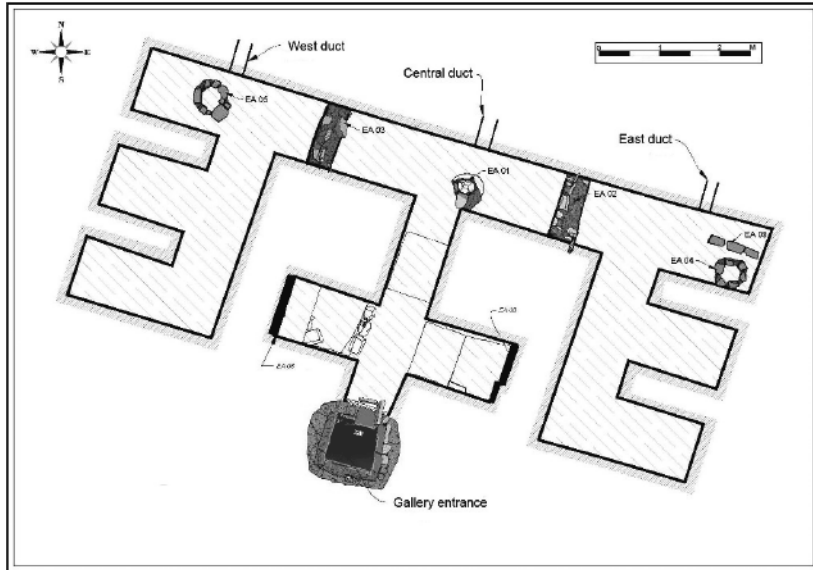
As eventually revealed through further seasons of careful excavations, the entrance we discovered appears to have been the gallery's only access, and it consists of a short vertical shaft leading down to two high stone steps (Figure 2-12) somewhat facilitating entry. As it was found the entrance is negotiable, but the vertical drop does not allow a gracious or comfortable entry or exit, suggesting that entry into the gallery was not meant to be processional or dignified. This impression is furthered by the low ceiling of



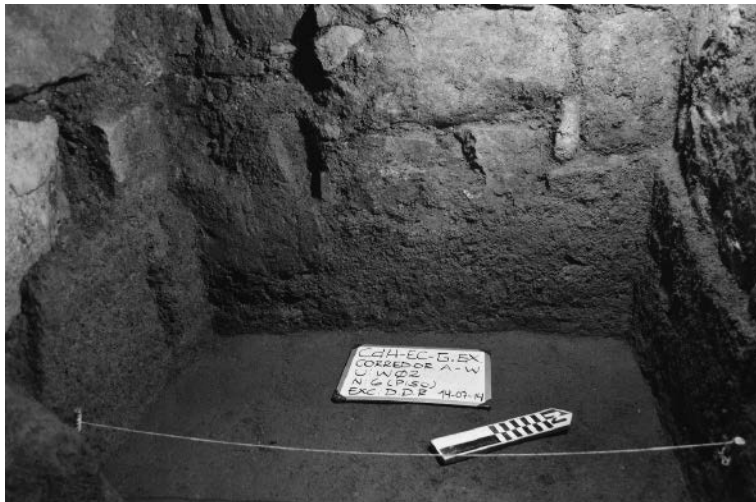
**Figure 2-13** Miguel Ortiz standing on the Esplanade Gallery floor, showing limited gallery height. Excavation in the foreground is an exploration of the pre-gallery canal and sub-canal deposits that produced date AA103665. (Figure 2-9) © PIACCH

the gallery – it is by far the lowest-roofed gallery in Chavín, and only the shortest adults in Chavín times could have negotiated its passages without stooping (Figure 2-13).

The layout of the gallery involves familiar elements yet is unique in their combination (Figure 2-14). The gallery incorporates in its modest size eight cells or



**Figure 2-14** Plan view of the Esplanade Gallery. Shaded walls EA 02 and EA 03, and bold black walls are surface walls pre-dating gallery construction. EA 01, EA 04, and EA 05 are cylindrical stone-lined pits. ©PIACCH, drawing by Miguel Ortiz.



**Figure 2-15** Original plaster in the cell of the Esplanade Gallery ©PIACCH

alcoves and maintains bilateral symmetry around its entrance passage. The size of its footprint suggests that this gallery has achieved about the maximum number of cells possible while still retaining the wall thickness necessary for long-term stability in subsurface mud-and-stone construction – and some observed tendency toward collapse in the west ‘wing’ of the gallery suggests that it was running close to the limit on this factor. There is good evidence, in the form of preserved surfaces at the base of the walls, that the gallery passages were fully mud-plastered in a uniform yellow clay color (Figure 2-15), although the ceiling beams may have been left visible. Like Chavín galleries in general, Esplanade has stone-lined ducts running outward from the gallery – three such shafts run in near symmetry horizontally north from the northern gallery wall, apparently exiting through a northern platform wall that existed at the time. With the gallery entrance open, a significant air current would have been present with any north-south wind

movement. These ducts have been termed ‘ventilation shafts’ and would have not only provided fresh air for gallery occupants but would have been a key feature for flushing overly humid air out of the galleries. We have noted elsewhere (Rick et al. 2012) that the most likely source of gallery failure at Chavín is high humidity weakening the mud construction mortar, leading to wall buckling and collapse. Also notable in this gallery are three narrow, vertical, cylindrical stone-lined pits ranging downward from the gallery floor (Figure 2-16), in approximate correspondence to the ducts just mentioned. These pits are of a type known from surface contexts in the esplanade, but unknown thus far in other parts of the site or its galleries.

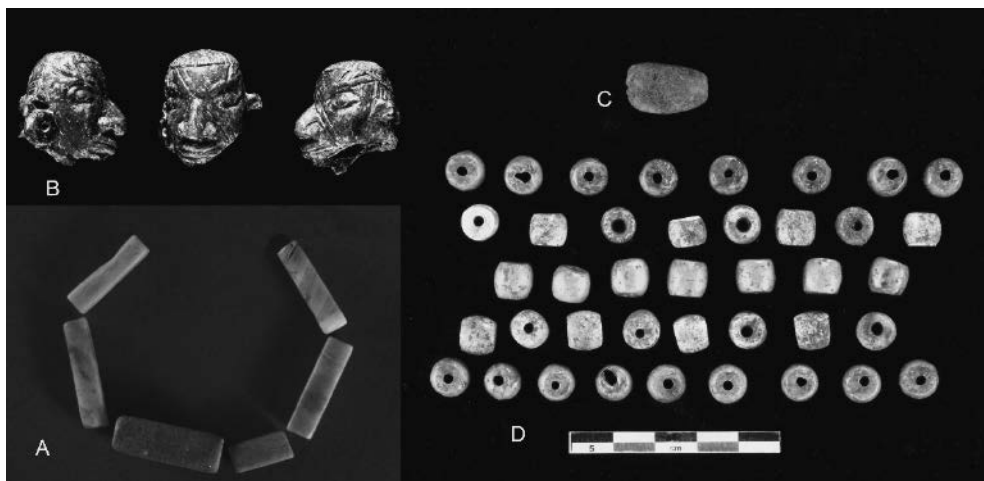
The gallery sediments were a deep over-floor accumulation of fine silts and clays with very little cultural content. Surprisingly, the ceramics found very occasionally in these filtration deposits were of later Chavín age, suggesting that there was a significant amount of time between the start of deposition and the end of the Chavín Epoch, followed by a longer time in which little if any water lain sediments accumulated. A feature of the overlying Chavín-period plaza is a small volume surface canal that was installed in the late Blank and White Stage, and its base was located directly on top of the ceiling beams of the western gallery wing. This placement must have led to a



**Figure 2-16** Cylindrical stone-lined pit EA 05 in the Esplanade Gallery. The gallery floor has been removed and is shown at a lower level, highlighting the pit’s stone construction. © PIACCH

considerable volume of water entering the gallery and may have been responsible for much of the filtration deposits and for the degraded condition of the west wing walls. Chavín monumental construction usually goes to great lengths to avoid the conjunction of canals and galleries, leading us to speculate that the gallery might have been used as a filtration drain to dispose of surface canal water, or alternatively that the presence of water within the gallery might have been an intended consequence of the use of the canal.

While it is possible that some small Chavín artifactual material entered the gallery along with the fine filtered sediments, a number of finds of special items indicated that intentional offerings were left in the accumulating gallery sediments when the already low gallery was diminished to a crawl height. The most notable include a necklace-like series of hollow gold and *Strombus* shell beads, together with a turquoise pendant that might have all been part of a single adornment (Figure 2-17). A smaller number of *Spondylus* and lapis lazuli beads were found separately, but in the same filtration clays and silts. In another case, a small ceramic human head with Chavín features, separated from a larger ceramic vessel it had adorned had been deposited in otherwise sterile sediments near the gallery entrance. Similar human heads or faces are common offerings in the esplanade area; these carefully curated, striking images retained from otherwise disappeared ceramic vessels we refer to as ‘medallions,’ strongly suggesting a degree of cultural significance.

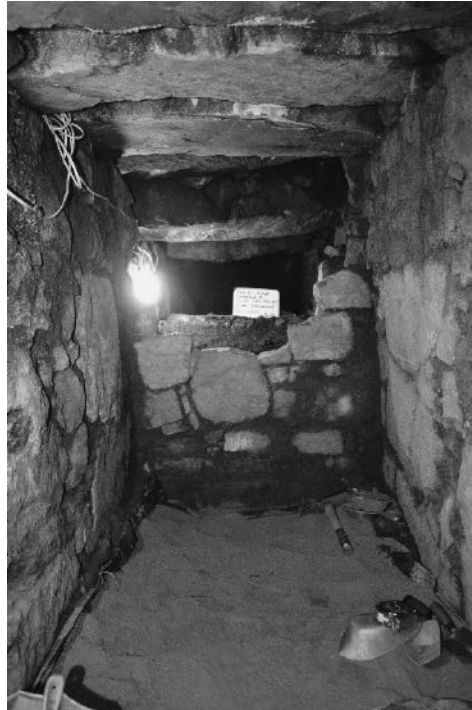


**Figure 2-17** Esplanade Gallery offering from filtration sediments well above the floor deposits. A. Six beads with rounded square cross-section; four are lighter colored *Spondylus* shell, two darker beads are lapis lazuli. B. Three views of ceramic head adornment, apparently a remnant medallion from a ceramic vessel. Note characteristic diagonal stripe across the face and enlarged nose typical of Chavín human faces. C. Turquoise bead perforated through long dimension, found with D. 24 hollow gold beads (First, third, and fifth lines of beads) and 16 shell beads (probably *Strombus*—second and fourth rows), most with remnants of red cinnabar adhering. Some gold beads show wear on perforation resembling stringing effects from long use. One gold bead tested at two locations averaged 95% gold, 5% silver, and <1% copper, by weight; red colorant adhering to gold bead was positively identified as cinnabar. © PIACCH



Although at first, we believed that this gallery was constructed late in the Black-and-White Stage, lines of evidence suggest otherwise. First, careful examination of the contact between the entranceway frame and a number of floorings of the plaza surrounding it demonstrates that the gallery was in use primarily with the earlier plaza floors. That the gallery had fallen out of use fits well with the accumulation of above-floor sediments within Chavín times; the few and notable items recovered within those sediments hints that the gallery probably was only entered on rare occasions in these late phases, perhaps for placing small dedicatory offerings. The gallery deposits were dated with three  $^{14}\text{C}$  determinations, one of which is a sample closely related to the primary gallery floor with a segmented 2-sigma range of 993–775 BC cal, during which time the gallery was already in use, and probably soon to start accumulating filtration sediments (Figure 2-9 Lab no. AA103664). It is notable that the gallery floor contact yielded effectively no artifactual material at all. The gallery had been re-floored several times, following the Chavín gallery tradition of forming an underfloor substrate of clay and fine, granular gravel, followed by compacted and dense clay overlying floors. Shallow probes of the floor throughout the gallery revealed a small number of locally distinguishable floors in most locations, but no consistent trans-gallery definitions nor vertical spacing. The total accumulation of clay floors was only a few centimeters in depth.

We took advantage of two opportunities to make a more substantial subfloor incursion. In the first case, the gallery seemed to have been built on top of a typical small-scale surface canal crossing the entranceway corridor, whose apparent intentional fill we cleaned out (Figure 2-13). There was enough space in this canal that we could excavate under its floor, eventually encountering a dark artifact-bearing layer running below the canal and thus well below the gallery floor. Although only a few cultural items were found, we obtained a  $^{14}\text{C}$  sample which dated to a segmented 2-sigma range of 1391–1078 BC cal (Figure 2-9: Lab no. AA103665). Once the gallery was excavated, we chose the northeast cell of the gallery to do a second test for subfloor features. With a larger exposure of more than 1 m square, we were able to identify numerous closely overlaid layers of the architecture underlying and clearly predating the gallery's walls.



**Figure 2-18** West side of eastern blocking or sealing wall EA 02 originally built prior to the Esplanade Gallery, possibly rebuilt during gallery use. ©PIACCH

The probe was terminated due to the congestion of these architectural features we chose not to remove, and cultural deposits continued below. Although reliable material for dating was scarce, we did obtain a date of 1046–837 BC cal (Figure 2-9: Lab no UCIAMS214161) from well below the gallery floor.

Several features of the gallery help clarify its origin and evolution in addition to the above clear evidence of underlying architecture and occupation layers. The walls of the gallery do show construction seams in limited locations, most notably related to two walls which cross the gallery's E-W corridor in symmetric position, effectively limiting access to the lateral wings and cells of the gallery (Figure 2-18, see also Figures 2-3, 2-4 and 2-14). At first, these narrow but double-sided walls were taken to be sealing or closure walls from late in the gallery's use, but this proved incorrect. Both walls clearly continue well beyond the gallery walls that abut them on both the north and south sides of the gallery. Similarly, the crossing walls extend down to, and below the floor of the gallery, giving the walls temporal priority to the construction of the gallery. They did not extend to the gallery roof as we encountered them, and it was possible, if uncomfortable to pass over them during the gallery excavation. The walls are of simple and relatively light stonework that might have been dismantled and then rebuilt at a later point, respecting the original walls' positions. No evidence for this was seen, but the relatively informal stonework could easily have been closely matched.

A rather different situation was found in the alcove lying to the right (east) of the entry corridor. Here seaming and different styles and fineness of stonework clearly defined abutted, vertical wall segments (Figure 2-12). The situation was inadvertently clarified by an excavation carried out within the post-Chavín structure that overlay the gallery's entrance. A moderate-sized intrusion below that structure's floor was in evidence, and on the removal of the fill within it we came down on a wall which proved to be the backside of one of the above-mentioned abutted gallery wall segments. Most striking is that the wall is double-sided, and thus quite clearly is an old surface wall adopted as a gallery wall when the massive platform fill was added, raising the surface approximately 2 m, and accommodating the new gallery in its volume. It is possible that some or all these seams are related to continuations of the crossing walls previously discussed. Thus, there is clear evidence that the Esplanade Gallery was constructed in relation to pre-existing surface architecture, incorporating some walls, but undoubtedly dismantling others that did not fit the complicated gallery layout.

## 2.6 Early Building D Gallery

Although not formally related to Building C or its esplanade, the 2019 discovery of a clearly early gallery in an adjacent part of Building D is worth including here, given that it will further clarify the architectural relationships of galleries and associated surface architecture. During prior excavations in the furthest southeast corner of the esplanade of Building C, a corridor was revealed formed by the relatively well-preserved east façade of Building C, and the west façade of Building D (Figure 2-2). Parts of the façades, particularly that of Building D, had fallen catastrophically, with many of the larger stones still lying in fall position on top of late Black and White Stage architecture and deposits.

In a short segment of the D wall, a second, inner and prior façade was revealed, with a distinct stone coursing. The outer façade reflected the pattern of alternating one relatively thick stone course with two relatively thin courses (the ABB pattern of Kembel 2001), well-known from the Black-and-White Stage and possibly from earlier stages, continuously over the height of the façade. The inner facade, at least in the main group of lower courses, had a much less formal variation, but a weakly defined one thicker, one thinner alternation (the AB pattern of Kembel 2001), and known from the earliest Chavin construction stages, was apparent. This intermediate degree of patterning formality has been seen on façades that seem to pre-date the Black-and-White stage elsewhere in the monumental center.

A clearly finished exterior duct exit was found in the earlier façade (Figure 2-19), indicating that the duct had been built into the earlier façade during its construction; the packing of clay mortar in the outermost part of the duct suggests that the duct was blocked, and probably covered by the now-fallen outer façade. Although the duct clearance was small, we were able to introduce a tiny video camera into the duct, and after more than a meter of duct, the camera emerged into a much-enlarged duct running architectural E-W (Figure 2-20). After many attempts, the camera could reach a total of 9 m to the east, expanding into a gallery-like space of multiple meter width more than 3 m before encountering the gallery's east wall. The gallery-like space involves a meter lower floor level, and the ceiling height seems to jump upwards at the same time the floor



**Figure 2-19** Artist's reconstruction of the passage between Building C (right) and Building D (left). "A" designates the duct in the earlier façade of Build D which leads into the Early D Gallery. ©PIACCH, drawing by Miguel Ortíz.





**Figure 2-20** Interior of Early D Gallery, showing westernmost part of its central corridor. The angle of roof and walls due to tilt in remote camera. ©PIACCH



**Figure 2-21** View of doorway-like constriction midway along main Early D Gallery passage, with a centrally placed stone vessel, left. ©PIACCH

drops. This expanded space may be related to an otherwise unknown entrance into the gallery, but this is not clear from the unscaled video alone. The vertical position of the gallery in Building D, 6–8 m below the crest of the building, and the lack of an at-level lateral façade entrance (which are rare at Chavín), suggests that the gallery may date to a period of Building D construction several vertical growth episodes before the building's final Chavín-period additions. Although there is a considerable accumulation of sediment sloping in from some parts of the corridor walls, a relatively large amount of bone and ceramic fragments are also visible in the video documentation. About halfway across the final enlarged segment, a seemingly decorated large stone vessel appears, upright and full of water (Figure 2-21).

The general impression is that this space conforms to a Chavín-style gallery in terms of cross-section, ducting, and content, but is significantly different in having large wall stone size, varying construction technique, and other subtleties. Given that the gallery's age and period of use likely predate the Black-and-White Stage and may be from the first known construction stages, it may be among the earliest galleries known at Chavín and its varied elements could reflect an earlier design or usage pattern that was not modified by continued use or expansion in late Chavín times.

### 3. Overview

The galleries described here constitute three very different entities, constructed in different architectural settings, over different segments of time, and probably with different ranges of function during their lifetimes. Fundamentally, the Loco-Mirador-Capilla galleries really represent a single complex that grew organically as one; they have been separable only due to late architectural damage caused by both gradual and violent erosive processes that erased much of their northern unifying corridor. Esplanade and Early D galleries seem to be stand-alone galleries, more clearly for the former than the latter due to a lack of knowledge of the Early D entrance. Gallery complexes most commonly are joined at their entrances, but the process may involve either the joining of prior galleries in a common entrance space (as in the case of Lanzón and Labyrinth galleries), or the addition of new, arguably separable units at the entrance end of a prior gallery (as with Loco, Mirador, and Capilla galleries), or a combination of these processes. The Loco complex is clearly a process of progressive lateral expansion, albeit in the more intrinsically segmentary floor-like process of vertical growth illustrated by lower Loco and Capilla segments. As I will discuss, this is in many ways the synthesis of Chavín monumental growth, and in that growth pattern lies the understanding of much of the architectural motivation that we believe lies behind architectural expansion and change at Chavín.

The chronology of the three galleries is clear in a general sense, although uncertain in many details. Esplanade and Early D galleries are quite intact, both having been sealed during ancient times, and apparently not modified by recent processes prior to our intervention. The Loco complex is intrinsically different, with rather intense modern impacts and usages. Thus, the records in these galleries have different inferential bases.

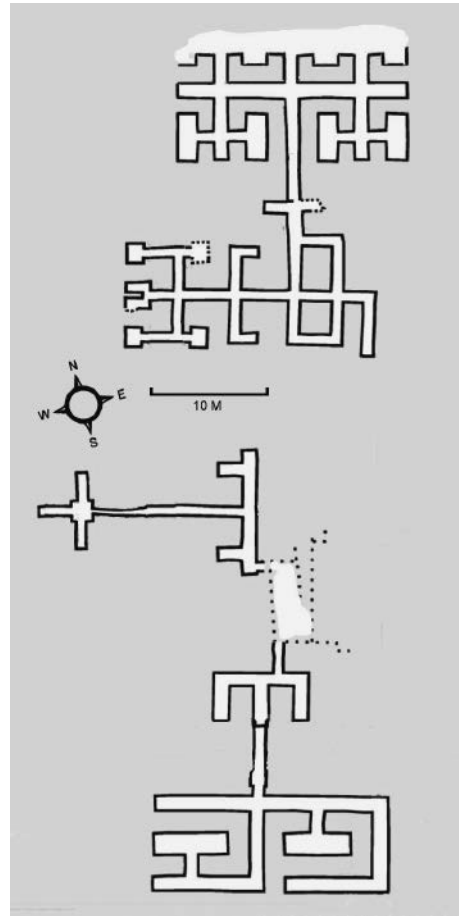
Early D contents are known only from low-quality exploratory imagery with no radiometric dating sample recovery possible, Esplanade contents are known down to a millimetric detail due to fine-grained recovery techniques employed in the gallery's excavation and with tightly context-controlled dating samples, and the Loco complex seems to 1) have been cleared out non-archaeologically, perhaps in early historic times, but possibly in post-Chavín Precolumbian or late historic periods and there may have been episodes of looting of various intensities; 2) have had unreported archaeological excavations and architectural restorations which we know primarily through oral accounts; 3) have seen very modest controlled excavations in archaeological contexts unlikely to produce archaeological materials reflecting the gallery's function or reliable dating samples related primarily to major architectural transformations.

We suspect that the Early D gallery may be the earliest in construction due to its position within the likely vertical growth of Building D. It lay behind an early façade of D, one that probably later would be raised higher than the vertical growth that encapsulated Early D. This entirely pre-dated the later, outer façade, itself dating no later than the early Black-and-White phase, and quite possibly notably earlier. In all, based on the eventual height of Building D, there may have been 2–4 height-raising construction programs after the installation of the Early D gallery. There is an abundant possibility that there are wall seams within Early D that could represent the incorporation of mound-top architecture into the later gallery construction, and thus a remnant of a pre-gallery phase of the building. At this time the assignment of an absolute date would be speculative, although Kembel and Haas (2015) did run six <sup>14</sup>C samples from architectural mortar from two higher and apparently later galleries on the opposite side of the building. Five of the dates have ranged in the 800–1000 BC cal range, with a sixth's range shifted about 100 years earlier. They might be dating the construction of these upper galleries, but the arguments of relevance for mortar dates are complex; Kembel and Haas classify all six dates as “unclear”; and they are for contexts relatively remote vertically and horizontally from Early D. The façade association and vertical placement suggests that Early D gallery is as old, and quite possibly older than the earliest parts of the Loco Complex.

The Loco Complex, following Kembel's intricate and insightful analysis (Kembel 2001, 2008) starts with five surface rooms in a symmetric arrangement, the largest and most central of which is reminiscent in orientation, configuration, wall thickness, and within-building placement to the central chamber of the Lanzón Gallery, in adjacent Building B. The distance and varying orientation (3 Loco Rooms are entered from architectural east, two from architectural west, while the only known entrance to lower Loco/Capilla, is from the architectural south) could indicate that their above- and below-ground conditions were involved with behaviorally and spatially separate functions. These rooms are probably built on the same upper mound surface that would have immediately overlain the beams of lower Capilla segments, and thus were probably approximately contemporary. The intentional fill of the previously mentioned “Lower Loco” corridor produced two near-identical dates with ranges of about 1050–800 BC cal (dates 103669 and 103670 in Figure 2-9), which likely provide a termination date for the

use of the Lower Loco structure, and also may well date the filling of the Lower Capilla corridor which was found in an identical vertical relationship with Capilla Gallery. If Loco Rooms were in use as above-ground architecture at the same time as the lower Loco Complex gallery segments were functioning, their construction and surface architectural usage almost assuredly predate the 850–550 BC cal Black and White Stage. In addition, the extension of some lower Loco walls beyond the gallery limits may indicate that the lower galleries incorporated parts of the previous surface architecture. The use of those surface walls, predating lower Loco Complex gallery corridors, and possibly the Loco Rooms, would represent a still earlier use of Building C, likely dating well into the second millennium BC cal.

The Kembel and Haas architectural dating project (2015) produced a series of four dates from the Loco Gallery – three from the Loco Rooms (Lab nos. AA62765, AA62766, AA62767) and one from the lower story predecessor of the main S-N corridor (AA62773) (Figure 2-9). All four dates’ ranges overlap and fall within a period of about 916–776 BC cal, leading Kembel to classify them as “renovation” dates reflecting later mortar additions in already existing walls. It seems quite likely that the three Loco Rooms would have been upgraded and possibly re-mortared at the time they were transformed and integrated into an emerging gallery structure (refer to Figures 2-4~2-6). The single lower corridor date of 916–811 BC cal could represent a similar re-mortaring of the lower gallery during its later use life, and shortly before the upper version of the gallery replaced the lower one. The lower Loco fill dates’ slightly earlier ranges – noting that these are fill, and thus termination dates -- would argue that the Loco S-N corridor could not have been built much earlier than the date Kembel and Haas obtained. The growth of the Loco Complex clearly depends on raising the height of Building C, incorporating the Loco rooms, but replacing and extensively supplementing the lower Loco and Capilla gallery segments but at the same level as the Loco rooms. In total these dates and architectural relationships point to a series of pre-Black and White



**Figure 2-22** Same scale comparison of floor plans of Loco Gallery (above) and Lanzón/Labyrinth Galleries (below). Adapted from Kembel (2008), courtesy of Silvia Rodriguez Kembel

Stage structures transformed and replaced into a single Black and White gallery complex, suggesting a long history not only of gallery formation, but also of Building C growth.

The connection between the rooms and the gallery when complete forms a continuous, and now at-level gallery system undoubtedly united in overall function, even if some segregation of activities might still have existed between gallery subdivisions. In an interesting way, the three merged galleries of the Loco Complex (Loco, Mirador, Capilla) resemble, in a structural way, the outcome of Lanzón and Labyrinth Galleries' merge, probably at about the same time. The overall configurations look rather different in plan, but together they contain all the same elements: long corridors leading to prominent, older, originally-surface room(s), a labyrinthine layout including paired rectangular rooms, and lateral alcoves (Figure 2-22). Kembel also notes (pers. comm., 2001: 223, 2008: 45) that the entrance of both complexes was early-on through a rectangular 'gallery patio', also inferred for a third gallery complex in Building A. Kembel feels that these gallery complexes not only consist of already-ancient spaces (rooms), complex interconnected spaces, and long passageways, but from the fronting gallery patios they may pointedly overlook lower surface areas with ritual connection to the gallery complex – allowing coordination between major spaces. These patios are covered toward the end of Chavín times in the late Black-and-White Stage, decreasing the intervisibility between gallery entrances and lower areas and effectively enhancing the secrecy afforded by galleries. Interestingly, the parallel changes suggest that the significance and change of functions were replicated between gallery complexes in all three major central buildings of ceremonial Chavín, and was also repeated on the exterior face of Building C.

The Esplanade Gallery is unique within Chavín in having an entry from a low-lying plaza surface, and unusual in apparently having been built in a single construction event. It may have had a modest use life, and apparently was closed and allowed to accumulate major sediments during Chavín times. Its use of prior, surface structures incorporated in its construction is shared with both Loco and Lanzón galleries, but its selective use of just a few walls from structures with apparently very different layouts, even walls that had blocked parts of the gallery layout is apparently unique at Chavín. It is alone among the galleries in having a quite low roof, perhaps in part due to its low-lying plaza surface above. If our small series of dates are accurate, it probably was not constructed before 950–1000 BC cal, was in use some time in the range of 950–750 BC cal, and its usage ended significantly before the end of the Black and White Stage around 550 BC cal. Given that filtration sediments probably accumulated slowly after its primary use ceased, the best estimate of its primary use period would be about 950–700 BC cal., probably overlapping heavily with the Loco Complex, whose growth and use probably spanned the Black and White Stage, and probably earlier and later stages.

The Esplanade Gallery is the only of the three whose function is apparent, due to the limitations its form, location, and content impose on possible utility. Most suggestive is the lack of cultural material on the gallery floor. Sterility extends to the very fine mesh screening of its contained sediments and immediate above-floor layers, and even to fine flotation heavy fractions. Given the lack of drains and at-level exits, galleries capture

material well, as witnessed in the easy reconstructability of highly fractured vessels in Ofrendas Gallery (Lumbreras 1993). The Esplanade Gallery does appear to be finished, with evidence of smooth and uniform wall plastering, and it shows evidence of multiple thinly laid use floors. The lack of floor content rules out the original abundance of materials that could be fractured or lost, even in small fragments. Even under concerted artificial lighting, shadows can easily hide small objects and an occasionally damp clay floor would even incorporate some materials under material-abundant use. As mentioned, the gallery as found was never designed for comfortable entry, circulation, active use, or easy or dignified exit. To the contrary, the gallery shows attention to restrictive features, especially in the form of the triple-jamb entrance frame capable of a tight and lightproof seal, and the blocking walls that reduce access to the lateral cell corridors. The latter, a selectively preserved part of a pre-gallery wall distribution, may have been rebuilt more than just at the end of active gallery use. The only similar feature in a gallery of which we are aware is extended lateral coursing stones systematically used at segment transitions and room entranceways in the Labyrinth Gallery, which both physically and psychologically restrict entry or exit in the already narrow passages.

It is hard to imagine a gallery constructed to not be used, in that there is nothing conspicuous or useful in a non-visited underground gallery. Gallery spaces do both fascinate and create anxiety in visits, judging from personal experience and witnessing the reaction of visitors of diverse origin to Chavín today. Could some of the galleries have been useful for the conditions they so palpably generate? Over the years that Esplanade was in excavation, we noticed several outstanding experiential conditions in the gallery. Most salient is that all galleries, but particularly Esplanade, are sound- and light-buffered. Unless ducts or entrances allow light or sound in, as they have been shown to do in cases (Kolar et al. 2012), a gallery is quiet and dark. In particular, no sound or light reaches the lateral cell sectors of Esplanade, even with excavation in process in nearby aboveground areas. Smoothly plastered walls leave little potential for touch sensing, and outside of a level of mustiness, galleries are lacking in strong odors. Temperature and humidity fluctuations are brought to a minimum in galleries. Nothingness is an apt description of the sensory experience in a closed gallery.

As should be evident, we are suggesting the potential of sensory deprivation. The small cells in corridors removed from the entrance by right angle turn, an easily sealable entrance, and potentially quickly reconstructible internal sealing walls that could further isolate occupants, looks like a design with the intent of isolation. Problems of air availability may have been alleviated by the long, non-light-transmissive ducts that independently come into the gallery's lateral corridors from an exterior surface well-removed from the plaza, and arguably outside the primary area of esplanade activity, and thus not a likely source of outside sounds. For the sake of illustration, one can imagine a cult novice, catechized to focus their mind on certain relevant issues, taken on a dark night down a vertical entrance into space, feeling their way into a cell, given instructions on how to proceed in the upcoming internal mental void and perhaps delivered psychotropic substances to guide and heighten their internal experience, and then be left as the muffled sounds of a wall being quickly built somewhere in this unknown space

form the end of sensory experience until the isolation ordeal is over. While this is obviously a 'shot in the dark' as to what really might have taken place, there is an extraordinary convergence of physical elements that in the case of the Esplanade Gallery enable such a scenario.

Ritual isolation, sensory deprivation, and vision or dream questing are effects not infrequently sought in rites de passage or other transformative processes involved in ritualized societies. Sensory deprivation is an ethnographically known method of generating a state of mind conducive to ritual in secret societies (Hayden 2018: 339). Van Gennep's (1960) stages of ritual involve removing subjects from their normal world and condition into a state of liminality, installing new identity and knowledge, and eventually reintegrating them as new, transformed people. Chavín ritual is unlikely to have been purely based on life stages, but it would likely have concentrated on meaning and transformation at times of cult entry or status change. Ingraining new information and belief, not to mention the credibility of Chavín precepts and cosmology may have been a complex, exclusive process. Orchestration and reinforcement of certain knowledge may well have been part of Chavín ritual involving visual, auditory, olfactory, and perhaps tactile stimuli (or the lack thereof), but also preparation of participants to achieve an appropriate state for effective internalization of new perceptions. The literature on the effects of visual and other sensory deprivation on humans is vast (e.g., Boroojerdi et al. 2000; Goodman 1982; Merabet et al. 2004; Siegel 1984; Sireteanu et al. 2008), but there seems to be a common understanding that sensory isolation does not suppress, but after a time leads to the excitement of brain activity due to intrinsic reactions to a lack of immediate stimuli and possibly to predispositions set up by prior experiences or suggestions. Many of the excitements lead to hallucinations of various sorts, but which are often felt to be exceptionally vivid and transformative (Sacks 2012). If Chavín was in the business of not only transforming key individuals, but through them the very structure of Formative society as we have suggested (Rick 2005, 2006, 2008, 2014, 2016, 2017), then having a particularly effective way of transforming individuals through a deeply internalized, perceptually self-generated experience would be needed. The Esplanade Gallery and quite possibly other similar spaces in Chavín may well have played a major role in such a calculated or at least facilitated process.

It is worth noting that other factors beyond the subject matter of this article also reinforce the possibility that the Esplanade area may have functioned in ritual preparation for entrance into the core spaces of monumental Chavín. The gallery is appropriately outside of, and in access terms, prior to reaching the core of Chavín. Individuals or groups arriving to Chavín from the west and north (not to exclude other directions) would have likely passed through the extensive and intensively ritual-utilized Esplanade area. The gallery is adjacent to the Building C-D corridor, the only known and designed entranceway to areas like the Greater Plaza or the more restricted Circular Plaza and the platform tops that give access to the most elaborate of the galleries, including Lanzón, Labyrinth, or Doble Mensula. The constant rebuilding of the Esplanade and circum-Esplanade area, involving the most complex, diverse, and innovative architecture known in Chavín could well be part of a constantly tested 'processing' facility, well-used for



ritual preparation and individual transitions.

#### 4. Conclusions

Our initial view of the galleries of Chavín saw them as a methodological boon, offering an X-ray-like vision of site growth to supplement and correct the sequencing of the external architecture (Rick et al. 1999), as well as a unique feature of Chavín architecture that begs explanation. Kembel's work at Chavín (2001, 2008) as part of the emergent PIACCH Program vastly improved and corrected this view and included a comprehensive analysis of the galleries, from chronological through architectural and cultural implications. Perhaps most important was the transcendent realization that the galleries were not separately understandable nor supplementary to the surface architecture, but that the linkages between the two were structured, and often evolutionary – antecedent surface architecture morphed to become gallery architecture across the vertical and horizontal growth of the site. This article is a modest further contribution, adding new data to Kembel's vision. After 20 years her analysis remains overwhelmingly cogent, especially in the demanding task to fully comprehend Chavín's dismaying architectural complexity and its implications.

The last 10 years have led us to appreciate that galleries are not unique to Chavín, as discoveries of subsurface spaces that can be legitimately called galleries have become relatively common in contemporary Formative sites in the central Andes (Matsumoto 2010: 424–425; Munro 2018, to mention a few). What has yet to be found, or at least described outside of Chavín is the number and incredibly complex formation of galleries and particularly the near-regulatory structured relationship with surface architecture. Our recent work with the newly discovered galleries of the Caracolas series added the possibility of understanding how ritual distinctiveness was apportioned between four galleries of identical dimensions and features in a single moment of architectural planning together with the Ofrendas and Campamento galleries and the Circular Plaza, all as a single, simultaneous megaproject (Rick 2023 in press). The idea that galleries were so functionally and elaborately planned no longer was a surprise, but the vision of how Chavín structured their ritual activities within these spaces was breathtaking and led to an initial comprehension of Chavín beliefs that still needs to be fully fleshed out. It is possible to observe that gallery functionality sometimes corresponds to the form of the gallery, but conversely galleries of the same or similar forms can have very different initial functions. In most situations gallery function may change over time, and most galleries have long histories of use that encompass these changes. Contemporaneous gallery components in gallery complexes seem to differ widely in ceramic style, and certainly in ceramic functional forms. Galleries in numerous cases began as distinctive, very thick-walled surface structures and later became the focal part of gallery systems. Although most galleries did grow and transform over time, not all seem to have started as surface structures, suggesting that there are different trajectories for the evolution of gallery forms, not only distinguishing individual galleries but also classes of galleries. These and many other observations point toward complex rules and structural orderliness

that should eventually yield insights into the rationale and ritual practice behind gallery evolution.

The galleries of Building C and its vicinity are useful in a complementary way. The galleries do not seem to have been planned in relation to each other (excepting the artificially separated Loco, Mirador, and Capilla Galleries within the Loco Complex), nor are they likely to have been simultaneously planned – the Loco Complex alone probably evolved over more than 500 years. The lack of defined contents for any of these galleries hampers functional interpretations for the complex as a whole, although the absence of cultural material in the Esplanade Gallery probably is significant as we have mentioned. But our vision with these galleries is time-transgressive, and illustrates some details of how, and perhaps why the galleries were formed and changed over time.

Some basic rules seem to govern Chavín architectural structure, notwithstanding the diversity of architectural forms. The first and most basic is that nothing, or as little as possible of Chavín prior architecture should be left behind without a trace, if left behind at all. The galleries in good part are a direct result of this rule. It seems very likely that the origins of many of the galleries have to do with keeping access to spaces and big and/or important objects as architecture expands horizontally, and particularly, vertically. To some degree, both Lanzón and Loco Galleries can be conceived of as ‘pathways to the sacred’ – ways of accessing former surface structures of great significance. This is undoubtedly a gross simplification, but we suspect that lower Loco/Capilla could be deroofed, carefully backfilled, and rebuilt at a higher level because there was nothing so deeply important about keeping access to the exact place or level, but it was important to make the later mimic the earlier form. Perhaps the lower Capilla corridor, which was very perfectly matched by parts of upper Capilla one ‘story’ above, had somewhat greater horizontal importance than the lower Loco segment, which was not at all perfectly matched by upper Loco. But Loco Rooms’ chambers were indeed conserved in their original form and must have been of great significance to strain Chavín standards of architectural linearity and symmetry within the somewhat awkward evolution of Loco Gallery. Alternatively, it may be quite intentional that both Lanzón and Loco have ‘blind’ entrances that cannot initially view the focal, gallery-ending original surface chambers, perhaps to avoid outsiders viewing highly restricted rituals in those innermost contexts. The acoustic connection made through a duct’s restricted frequency amplification, in the case of the Lanzón Gallery and the Circular Plaza (Kolar et al. 2012) might be indicating that while outside observation of Lanzón chamber ritual might not have been in keeping with appropriate ritual rules, some auditory accessibility might have been considered necessary. It would have been one way of guarding secrets about high-level cult rituals, while still maintaining credibility that major ritual was occurring to those outside of the inner circle. Multiple competing rules may have been needed to make internal connections appropriately, while an overlook relationship between gallery patios and areas below – the space later occupied by the Circular Plaza, the esplanade buildings, or its plazas -- seems to have been of value.

The Esplanade Gallery seems to maintain an odd assortment of prior walls whose claim to preservation *cannot* be based on any particular structural value to the walls

themselves – they could have been as easily replaced as re-used in functional terms. At the same time, to achieve the symmetrical location of the sealing walls within the newly built and differently designed gallery strongly hints that some aspect of the layout of existing surface walls was taken into account to achieve this match. Could it be that there was something ‘sealing’ about those walls to begin with? Did they originally capture something in the same way that we believe they confined cell occupants in the gallery? We may never know what exactly Chavín wanted to achieve with the respectful and often-times costly preservation and reincorporation of certain architecture, but we strongly believe it was not an arbitrary or meaningless decision.

Was there an ancestor relationship in architecture analogous to that frequently observed between human generations in the Andes? It is worth mentioning that the esplanade area is replete with cases of later architecture marking the location of former structures, even when there is no direct connection and the little resemblance between the design of the two. In one case an earlier concrete-like floor was used as the base of many stone-lined vertical shafts, which in their multiplicity marked the outline of an earlier structure associated with the floor, making its form readily apparent to those using a later structure that did not conform to the earlier one. These ‘mandatory memories’ seem like architectural tombstones marking the location of deceased structures. Some examples of direct inclusion of former structures or their segments might be analogous to mummification or reliquary treatment of ancestral or venerated human remains.

A second major rule is that in Chavín horizontal growth can occur in seemingly continuously variable increments, but vertical growth mostly happens in a tight mode around 2.5 m. As Rick has mentioned previously (Rick 2023 in press), this seems non-coincidentally related to the amount of vertical growth needed to incorporate galleries within the new building matrix, whether or not prior walls are incorporated. There are some notably higher or lower galleries in the Chavín corpus, but they mostly seem to involve multi-story additions made in a single moment, and that is rare. The Building C situation adds the valuable stipulation that in multiple locations and in sequences not only does the 2.5 m rule apply, but in combination with rule 1, a new event is usually added to the sequences – the building of surface architecture that seems an essential part of what is more a cycle than a one-time event. Building C seems to have at least two reiterations of the ‘build and use surface architecture → build and use gallery spaces incorporating surface-wall → fill galleries and create a new floor for surface architecture’ cycle. We have difficulty in estimating the length of the cycles, although 150–300 years seems to encompass the known durations.

It is becoming increasingly clear that galleries are pervasive in the Chavín center, and possibly in surrounding areas. They seem to start early in the monumental construction sequence and represent a long-lived and highly invested tradition. We have estimated that currently known galleries number around 30–36, depending on what is being counted as a gallery and how the complexes are divided. In the last decade, the PIACCH Program has discovered around a gallery per year of active fieldwork, with no sign of exhausting galleries yet undiscovered. The inferred function of the galleries includes idol/oracle ritualism, long-term holding of major offerings, scenarios of

acoustically enhanced ritual activity, and now, likely isolation contexts. Undoubtedly there are many more functions that overlaid other activities in given galleries or drove the dedication of specialized galleries. Gallery ritual activity involved relatively few individuals and may have been particularly designed to meet the needs or requirements of the ritual leaders, their followers, or initiates. This represents a low-volume, high investment, highly tunable, potentially multistage, if not life-long activity pattern that would by its nature maximize effective transitions between statuses, states of being, transfers of knowledge, and I would argue, mutual commitment of planners, officiators, actors, and receivers, if such differentiations existed. Gallery actions gave access to the roots of traditions, in a literal architectural sense. They go back in time, as well as away from the accustomed world. It is evident that they were involved with psychoactive substances (as contexts discussed here, and objects found in other galleries imply (Rick 2023 in press), and probably an aspect of the experiences and achieved statuses that Chavín directly or indirectly offered. They represented privilege and restriction, they offered potential differentiation – galleries may diverge, perhaps converge, but you are either in or out; the worlds are unambiguously differentiated spatially, but with lines of reason and belief connecting those worlds.

A serious, full commitment to the cult(s) of Chavín must have involved galleries, and deeper involvement was just that. The cult or the secret societies of Chavín were ideas provoked by intentionalities, credibilities, and ultimately ideas and models about how things work, presumably with an emphasis on the less obvious, the esoteric. As such Chavín was and is galleries; there is more, but the other parts are more broadly shared both within Chavín and outside of it. Galleries are thus an essence, and an exclusivity; a trademark and a centering, a playing field for serious creativity (Rick 2016). The constructions we know must be only hints of their intricacy and involvement. The whole knowledge volume would astound, and perhaps was never meant to be perceived, held, understood, and manipulated by anyone alone.

## **Acknowledgments**

We are indebted to Rick's wife, Program coordinator and archaeological partner Rosa M. Rick, our co-directors Luis G. Lumbreras and Christian Mesía Montenegro, resident archaeologists Augusto Bazan and Lisseth Rojas Pelayo, and many Peruvian and US students for their help with doing and thinking gallery archaeology. Peru's Instituto Nacional de Cultura and Ministry of Culture provided us with permission and facilities to carry out the fieldwork reported here. The people of the town of Chavín de Huántar and its environs, and the municipal government of Chavín have been a warm source of hospitality and workforce that have fostered this research. Financial support for this work has been provided by Antamina Mining Company, the Patronato Cultural del Peru, Barrick Gold Corporation, the Homestead Foundation. The Historical Society for the Templeton Foundation, National Science Foundation, Global Heritage Foundation, Harbor Lights Foundation, Stanford University, the National Geographic Society, the Wiese Foundation, and the United States Embassy in Peru. Many of our ideas have been sparked by conversations with our close colleagues Christian

Mesía Montenegro, John Wolf, Matt Sayre, Silvana Rosenfeld, Stefanie Bautista, Julio Vargas N., and Luis Lumbreras. Specifically, we received detailed and immensely useful comments from Dan Contreras and Silvia Rodriguez Kembel; although we have not followed all their suggestions, they contributed heroically to creating whatever this article may contribute to Chavin knowledge. We want to thank Yuji Seki for his great generosity in hosting meetings in which this paper originated, and his greater patience in the slow maturation of its tangible expression.

## References

- Boroojerdi, Babak, Khalaf O. Bushara, Brian Corwell, Ilka Immish, Fortunato Battaglia, Wolf Muellbacher, and Leonardo G. Cohen  
 2000 Enhanced Excitability of the Human Visual Cortex Induced by Short-Term Light Deprivation. *Cerebral Cortex* 10(5): 529–534.
- Burger, Richard L.  
 1992 *Chavín and the Origins of Andean Civilization*. London: Thames and Hudson.
- Goodman, Aviel Li  
 1982 Neurophysiological and Psychopharmacological Approaches to Sensory Deprivation Phenomena. *Progress in Neuro-Psychopharmacology and Biological Psychiatry* 6(2): 95–110.
- Hayden, Brian  
 2018 *The Power of Ritual in Prehistory: Secret Societies and Origins of Social Complexity*. Cambridge: Cambridge University Press.
- Indacochea, G. Angel J. and Mariano Iberico M.  
 1947 Aluvionamiento de Chavín de Huántar el 17 de enero de 1945. *Boletín de la Sociedad Geológica del Perú* 20: 21–30.
- Kembel, Silvia R.  
 2001 Architectural Sequence and Chronology at Chavín de Huántar, Perú. Ph.D. Dissertation, Stanford University, Stanford.  
 2008 The Architecture at the Monumental Center of Chavín de Huántar: Sequence, Transformations, and Chronology. In W. J. Conklin and J. Quilter (eds.) *Chavín: Art, Architecture, and Culture* (Monograph 61), pp. 35–81. Los Angeles: Cotsen Institute of Archaeology, University of California, Los Angeles.
- Kembel, Silvia R. and Herbert Haas  
 2015 Radiocarbon Dates from the Monumental Architecture at Chavín de Huántar, Perú. *Journal of Archaeological Method and Theory* 22(2): 345–427.
- Kembel, Silvia R. and John W. Rick  
 2004 Building Authority at Chavín de Huántar: Models of Social Organization and Development in the Initial Period and Early Horizon. In H. Silverman (ed.) *Andean Archaeology*, pp. 51–76. Malden, MA: Blackwell.
- Kolar, Miriam A.  
 2013 Acoustics, Architecture, and Instruments in Ancient Chavín de Huántar, Peru: An Integrative, Anthropological Approach to Archaeoacoustics and Music Archaeology. In

- R. Jimenez, R. Till, and M. Howell (eds.) *Music & Ritual: Bridging Material & Living Cultures* (Publications of the ICTM Study Group on Music Archaeology, Vol. 1), pp. 147–162. Berlin: Ekho Verlag.
- Kolar, Miriam A., John W. Rick, Perry R. Cook, and Jonathan S. Abel  
 2012 Ancient Pututus Contextualized: Integrative Archaeoacoustics at Chavín de Huántar, Peru. In M. Stöckli and A. Adje Both (eds.) *Flower World: Music Archaeology of the Americas*, Vol. 1, pp. 23–54. Berlin: Ekho Verlag.
- Lumbreras, Luis G.  
 1989 *Chavín de Huántar en el nacimiento de la civilización andina*. Lima: Ediciones INDEA, Instituto Andino de Estudios Arqueológicos.  
 1993 *Chavín de Huántar: Excavaciones en la Galería de las Ofrendas*. Mainz: Verlag Philipp von Zabern.
- Lumbreras, Luis G. and Hernán Amat  
 1965–1966 Informe preliminar sobre las galerías interiores de Chavín (Primera temporada de trabajos). *Revista del Museo Nacional* 34: 143–197.
- Matsumoto, Yuichi  
 2010 The Prehistoric Ceremonial Center of Campanayuc Rumi: Interregional Interactions in the Peruvian South-central Highlands. Ph.D. Dissertation, Yale University, New Haven.
- Merabet, Lofti, Denise Maguire, Aisling Warde, Karin Alterescu, Robert Stickgold, and Alvaro Pascual-Leone  
 2004 Visual Hallucinations during Prolonged Blindfolding in Sighted Subjects. *Journal of Neuro-Ophthalmology* 24(2): 109–113.
- Middendorf, Ernst  
 1974[1893–1895] *Perú: Observaciones y estudios del país y sus habitantes durante una permanencia de 25 Años*. Translation of German original by Ernesto More. Lima: Universidad Nacional Mayor de San Marcos.
- Munro, Kimberly E.  
 2018 Landscapes of Persistence and Ritual Architecture at the Cosma Complex, Upper Nepeña Valley, Peru. Ph.D. Dissertation, Louisiana State University, Baton Rouge.
- Raimondi, Antonio  
 1873 *El Departamento de Ancash y sus riquezas minerales*. Lima: Enrique Meiggs.
- Rick, John W.  
 2005 The Evolution of Authority and Power at Chavín de Huántar, Peru. In K. J. Vaughn, D. Ogburn, and C. A. Conlee (eds.) *Foundations of Power in the Prehispanic Andes* (Archaeological Papers of the American Anthropological Association, Vol. 14), pp. 71–89. Arlington: The American Anthropological Association.  
 2006 Chavín de Huántar: Evidence for an Evolved Shamanism. In D. Sharon (ed.) *Mesas & Cosmologies in the Central Andes* (San Diego Museum Papers 44), pp. 101–112. San Diego: San Diego Museum of Man.  
 2008 Context, Construction, and Ritual in the Development of Authority at Chavín de Huántar. In W. J. Conklin and J. Quilter (eds.) *Chavín: Art, Architecture, and Culture* (Monograph 61), pp. 3–34. Los Angeles: Cotsen Institute of Archaeology, University of California, Los Angeles.



- 2013 Architecture and Ritual Space at Chavín de Huántar. In P. Fux (ed.) *Chavin: Peru's Enigmatic Temple in the Andes*, pp. 151–166. Zurich: Verlag Scheidegger & Spiess AG.
- 2014 Cambio y continuidad, diversidad y coherencia: Perspectivas sobre variabilidad en Chavín de Huántar y el período Formativo. In Y. Seki (ed.) *El centro ceremonial andino: Nuevas perspectivas para los períodos Arcaico y Formativo* (Senri Ethnological Studies 89), pp. 261–289. Osaka: National Museum of Ethnology.
- 2016 Innovation, Religion and Authority at the Formative Period Andean Cult Centre of Chavín de Huántar. In D. A. Yerxa (ed.) *Religion and Innovation: Antagonists or Partners?*, pp. 11–26. London: Bloomsbury.
- 2017 The Nature of Ritual Space at Chavín de Huántar. In S. A. Rosenfeld and S. L. Bautista (eds.) *Rituals of the Past: Prehispanic and Colonial Case Studies in Andean Archaeology*, pp. 21–50. Boulder: University Press of Colorado.
- 2023 (in press) New Galleries at Chavín de Huántar: An Exploration of Chavín Underground Architecture and Organization. In R. L. Burger and J. Nesbitt (eds.) *Reconsidering the Chavín Phenomenon in the 21st Century*. Washington DC: Dumbarton Oaks Research Library.
- Rick, John W., Silvia R. Kembel, Rosa M. Rick, and John A. Kembel  
 1999 La arquitectura del complejo ceremonial de Chavín de Huántar: Documentación tridimensional y sus implicancias. *Boletín de Arqueología PUCP* 2: 181–214.
- Rick, John W., John Hurd, and Julio Vargas Neumann  
 2012 Chavín de Huántar, A Past Challenge to Nature, a Current Challenge to Archaeological Conservation. Paper presented at Terra XI (International Conference on the Study and Conservation of Earthen Architectural Heritage). Lima: Pontificia Universidad Católica del Perú.
- Sacks, Oliver  
 2012 *Hallucinations*. New York: Alfred A. Knopf.
- Siegel, Ronald K.  
 1984 Hostage Hallucinations: Visual Imagery Induced by Isolation and Life-Threatening Stress. *Journal of Nervous and Mental Disease* 172(5): 264–272.
- Sireteanu, Ruxandra, Viola Oertel, Harald Mohr, David Linden, and Wolf Singer  
 2008 Graphical Illustration and Functional Neuroimaging of Visual Hallucinations during Prolonged Blindfolding: A Comparison to Visual Imagery. *Perception* 37(12): 1805–1821.
- Spann, Hans J.  
 1947 Informe sobre el origen de la catástrofe de Chavín de Huántar. *Boletín de la Sociedad Geológica del Perú* 20: 29–33.
- Tello, Julio C.  
 1960 *Chavín: Cultura matriz de la civilización andina* (Publicación Antropológica del Archivo “Julio C. Tello” 2). Lima: Universidad Nacional Mayor de San Marcos.
- Van Gennep, Arnold  
 1960 *The Rites of Passage*. Hove: Psychology Press.