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Inscription, Place, and Memory: Palimpsest Rock Art and the Evolution of Highland, Andean Social Landscapes in the Formative Period (1500 – 200 BC)

Inscripción, lugar y memoria: arte rupestre palimpsesto y la evolución de los paisajes sociales andinos en las tierras altas durante el Período Formativo (1500 - 200 a. C.)

Inscrição, local e memória: arte de uma roca palimpsesto e a evolução das paisagens sociais andinas durante o Período Formativo (1500 - 200 a. e. c.)

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Abstract

As more than a means of recalling, memory is an active cultural creation and landscape inscriptions construct memories by locating place-based historical narratives. To model memory in terms of engagement with a place through inscription, this study focuses on a complex palimpsest petroglyph panel at the site of Kiñan Tanka, which is situated in the highland north-central Andes. Photogrammetric modeling and vector renderings of Kiñan Tanka's panel are analyzed to identify the microstratigraphy of its motifs. These data are paired with recently-acquired excavation data from three nearby rock art sites to reveal a tradition of incised petroglyphs that covered approximately 1300 years (1500 - 200 BC). The spatio-temporal relationships of Kiñan Tanka's iconography are considered within its context as a venerated place and a threshold between distinct worlds during the Formative Period.

Key words

Formative Period, Palimpsest, Photogrammetry, North-Central Andes, Rock Art, Landscape.

Resumen

La memoria, más que simplemente un medio para recordar, es una creación cultural activa, y las inscripciones en piedra encontradas en algunos paisajes construyen memorias al situar narrativas arraigadas en lugares específicos. Para modelar la memoria en términos de conexión con un lugar a través de inscripciones, el presente estudio se enfoca en un complejo panel de petroglifos en palimpsesto en el sitio de Kiñan Tanka, en las tierras altas del centro-norte de los Andes. Examinamos datos adquiridos a través del modelado fotogramétrico y de las representaciones vectoriales de este panel junto con datos de excavaciones recientemente realizadas en tres sitios de arte rupestre cercanos, con el propósito de revelar una tradición de inscripciones que se extendió durante unos 1300 años (1500 - 200 a. C.). Las relaciones espacio-temporales de la iconografía de Kiñan Tanka se consideran dentro de su contexto como un lugar venerado y como un umbral entre mundos distintos durante el Período Formativo.

Palabras clave

Período Formativo, Palimpsesto, Fotogrametría, Norte-centro de los Andes, Arte rupestre, Paisaje.

Resumo

Mais que uma forma de lembrança, a memória é uma criação cultural ativa, e a inscrição da paisagem constrói assim memória a colocar narrativas baseadas no lugar onde é inscrita. Este estudo quer prover uma análise detalhada de estes processos, e assim concentra-se num painel complexo de palimpsestos e petróglifos na área do Kiñan Tanka, nas terras altas dos Andes do centro-norte. O painel contem muitos exemplos da micro estratigrafia dos motivos alto-andinos. As informações adquiridas através da modelação fotogramétrica e do desenho vetorial do painel são comparadas com a informação de escavação recentemente obtida de outras três áreas de arte rupestre pertas do Kiñan Tanka, para assim revelar uma tradição de inscrição que durou 1300 anos (1500 - 200 a. e. c.). Estas relações entre o local dos tipos específicos de iconografia e seu contexto geográfico provam que a arte rupestre do Kiñan Tanka serviu como uma atividade localizada para construir memórias baseadas na localização onde eram feitas, através do desenvolvimento de narrativas durante o Período Formativo.

Palavras chave

Período formativo, Palimpsesto, Fotogrametria, Centro norte dos Andes, Arte rupestre, Paisagem.

Introduction

The places that are located within, and which constitute, social landscapes actively link peoples to their pasts and serve as communicative bridges that facilitate dialogues with those who came before. Inscription at culturally significant landscape junctures over time offers perspectives for understanding when certain landscapes came to be incorporated into specific cosmologies, and for how long they remained active agents in co-creating histories. The accumulations of inscriptions at the same location frequently display iconographic and spatial relationships that include contact between motifs or even the superpositioning of motifs. These palimpsests are potentially sensitive indicators of how past peoples identified traces of more distant pasts and engaged with these traces to situate themselves in specific location-based histories. Following McDonagh,[1] Bailey,[2] and Lucas,[3] Sapwell[4] observes two types of rock art palimpsests. The first type, a single palimpsest, consists of the accumulation of a single image type at a specific place. In this instance, the uniformity of images reflects people engaging with a shared idea and the relational placement of these images, setting aside their association with a specific place, do not factor into a narrative that relates to other images. Alternatively, a multiple palimpsest is comprised of distinct image types at the same place which have observable spatial relationships to each other. In this instance, specific images are placed in relation to each other to construct individual ideas and narratives that transform and grow over time.

The Andean social landscape was–and often still is–centered on the concept of *patsa*, a realm that encompassed both the Earth and the cosmos and whose particular configurations have direct ancestral ties that link people in a relational web that stretches back to the dawn of creation. Within *patsa*, specific *huaca* rock formations are considered to be the bodies of ancestors who have lithified and are the embodiments of deities. *Huaca* are frequently associated with *pacarina*, or points of emergence that are manifested as water springs and which join the underworld of Ukhu Patsa with the Earth realm of Kay Patsa. As anchors for linking *patsa* realms, *huaca* are historically significant places that hold memories as they are associated with great mythic events. In light of the ethnohistoric accounts by Bernabé Cobo[5] we may single out the presence of two dimensions in the creation of *huaca*: continuity and transformation. This occurs, first, as *huaca* anchor ritual practice over multiple generations. Second, *huaca* are transformed as these associated activities evolve and as their meanings change through human practice.[6] According to Bray[7] the concept of *huaca* is generally believed to date as early as 1500 BC and in many places in the Andes, endures

1. Josephine McDonagh, "Writings on the Mind: Thomas de Quincey and the Importance of the Palimpsest in Nineteenth Century Thought." *Prose Studies* 10, nº 2 (1987): 207-224.

2. Geoff Bailey, "Time Perspectives, Palimpsests and the Archaeology of Time." *Journal of Anthropological Archaeology* 26 (2007): 198-223.

3. Gavin Lucas, "Time and the Archaeological Archive." *Rethinking History* 14, nº 3 (2010): 343-359.

4. Mark Sapwell, "Understanding Palimpsest Rock Art with the Art as Agency Approach: Gell, Morphy and Laxön, Nämforsen." *Journal of Archaeological Method and Theory* 24, nº 2 (2017): 352-376.

5. Bernabé Cobo, *Inca Religion and Customs*, translated by R. Hamilton (Austin: University of Texas Press, 1990[1653]).

6. Cf. Jerry D. Moore, "Making Huaca: Memory and Praxis in Pre-Hispanic Far Northern Peru". *Journal of Social Archaeology* 6 (2010): 538.

7. Tamara Bray, *The Archaeology of Wak'as: Explorations of the Sacred in the Pre-Columbian Andes* (Boulder: University of Colorado Press, 2015).

to this day; the modern current use of this term translates to "great grandfather" and, by extension, "ancestor".

Moore contends that the concept of memory has been ill-applied in archaeological analysis as its use often confuses recollection with active, cultural creation.[8] To examine the efficacy of rock art as a place-making endeavor, and as a lasting anchor for accessing and constructing location-based memories, this study follows Moore's critique of memory study by focusing on a dense petroglyph panel associated with Kiñan Tanka, a *huaca* rock formation that is situated at a *pacarina* spring that constitutes the first source of the Fortaleza River, a major waterway of the north-central Andes. Three-dimensional, structure-from-motion modeling is paired with vector drawings of this panel to identify the microstratigraphy of incised motifs, which are critical for placing in time specific rock art production events. These data are paired with recently defined occupational phases and rock art chronologies, informed by excavation data obtained from three nearby rock art sites, to answer the question of when these engravings were produced and for how long they were engaged with at a crucial landscape juncture that figured prominently within the pre-Columbian *patsa* worldview. Distinct episodes of inscription at Kiñan Tanka are defined and the nature of its palimpsests is reviewed. These inscription episodes support the hypothesis that the *patsa* worldview became anchored to Kiñan Tanka around 1500 BC and continued to be transformed and redefined through inscription over the course of approximately 1300 years. Moreover, these findings demonstrate that Kiñan Tanka's rock art is both the result and agent of a social landscape, as it contributed to place-making and promoted social relations through this span of time by encoding and transmitting location-based histories, both over time and at specific times.

The Formative Period in the North-Central Andes

The north-central Andes was the setting for some of the earliest occupations and some of the greatest social, political, and artistic developments in the pre-Hispanic Americas. The first known signs of human activity pertaining to this region have been found Guitarreros Cave, a rock shelter located in the middle Santa Valley, where evidence of human occupation dates to the Paleoindian period, approximately 10,000 BC.[9] The key chronological debate that is particularly relevant to this study deals with the Formative Period (3000 BC- AD 200). The most robust data for the Formative Period that applies to the north-central Andes comes from excavations at the sites of Kuntur Wasi, Jequetapaque, Cerro Blanco, and Pacopampa, Cumbemayo and from the sites of Kotosh,[10] Paucarbamba,[11] and Wairajirca,[12] which are located near present-day Huanuco. These data were

8. Moore, "Making Huaca", 532.

9. Thomas F. Lynch, *Guitarrero Cave: Early Man in the Andes* (New York: Academic Press, 1980).

10. Seichii Izumi and Toshihiko Sono, *Andes 2: Excavations at Kotosh, Peru, 1960*, translated by Shozo Masuda (Tokyo: Kadokawa Publishing, 1963).

11. Yoshio Onuki, "From Ritual to Ideology: Ritual Activity and Artistic Representations in the Northern Highlands of Peru in the Formative Period," in *Rituals of the Past: Prehispanic and Colonial Case Studies in Andean Archaeology*, edited by Silvana A. Rosenfeld y Stefanie L. Bautista (Boulder: University Press of Colorado, 2017).

12. Onuki, "From Ritual to Ideology."

employed to define four occupation phases for the region during the Formative Period, starting with the Kotosh Mito Phase (ca. 300 - 1600 BC), followed by the Kotosh Wairajirca Phase (ca. 1600 - 1200 BC), then by the Kotosh Kotosh Phase (ca. 1200 - 800 BC), and the following Kotosh Chavín Phase (ca.800 - 300 BC), terminating with the Kotosh Sajarapatac Phase (ca. 300 BC - 0).[13] Kaulicke synthesized data from these two regions to divide the Formative Period into five sections: Early (1500 - 1000 BC), Middle (1000 - 600 BC), Late (600 - 400 BC), Final (400 - 200 BC), and Epiformative (200 BC - AD 200),[14] eliminating the concept of the Early Horizon.

Distinct social and artistic developments characterized each phase according to Kaulicke's model for the Formative Period. The early Formative Period has some potential temporal overlap with the preceding Final Archaic Period, depending on the region, when ceramic technologies were first introduced. At this time, highland rock shelters continued to be utilized for functional purposes, but also began to be considered sacred places, as evidenced by likely ceremonial materials recovered from the shelter of Shacsha Machay, located approximately 2 km from Kiñan Tanka (Img. 1).[15] The ensuing Middle Formative period, ceramic technologies advanced in technique and design, as reflected in the Cupisnique visual corpus, which incorporated abstract, geometric, anthropomorphic, and zoomorphic motifs, and is widely considered synonymous with the Chavín cultural phenomenon Also at this time, unique highland rock formations show evidence of multiple rock art production events, like at the site of Cumbemayo, for example.[16] The Late, Final, and Epiformative periods experienced a gradual decline in artistic expressions and venerated landscape associations in the region, eventually giving way to the Early Intermediate Period, around AD 200. These transitions and their associated chronological contexts provide the basis for defining and placing Kiñan Tanka's petroglyph art in time, as explained below.

Landscapes: Memory, Place-making and Rock Art

Landscape refers to an area, as perceived by people, whose character is the result of the action of natural and/or human factors.[17] Given the nature of the action and interaction between people and their environments, landscape, as a "concept in between",[18] has become a central theme in debates about the relationships between nature and culture. Progressively, an account of landscapes as the expression of a collective idea over time has developed, and six primary research themes have gained traction: memory,[19] identity,[20] and territory,[21] understood as social structures, as well as the themes of space,[22] place,[23] and time.[24]These six key concepts have come to the forefront of landscape archaeology as landscapes are

13. Onuki, "From Ritual to Ideology."

14. Peter Kaulicke, "Perspectivas regionales del Periodo Formativo en el Perú: Una introduccion." *Boletín de Arqueología PUCP* 2 (1998): 9-13; "Espacio y tiempo en el Periodo Formativo: Una introduccion." *Boletín de Arqueología PUCP* 12 (2008): 9-23; *Las cronologías del Formativo: 50 años de investigaciones japonesas en perspectiva* (Lima: Fondo Editorial PUCP, 2010).

15. Gordon Ambrosino, "Rock Art, Water and Ancestors: The Semiotic Construction of Landscapes in the Pre-Hispanic Central Andes," PhD diss., (Universidad de los Andes, 2017).

16. Jean Guffroy, *El arte rupestre del antiguo Perú* (Lima: IFEA, 1999).

17. Ian Thompson, Peter Howard, and Emma Waterson, "Introduction," in *The Routledge Companion to Landscape Studies*, edited by Ian Thompson, Peter Howard, and Emma Waterson (New York: Routledge. 2013), 1.

18. Howard Morphy, "For the Motion (1)," in *Key Debates in Anthropology*, edited by Tim Ingold (New York: Routledge, 1993), 205.

19. E.g. Simon Schama, *Landscape and Memory* (London: Harper Collins. 1995); Ruth Van Dyke, "Memory, Place, and the Memorialization of Landscape," in *Handbook of Landscape Archaeology*, edited by Bruno David and Julian Thomas (Walnut Creek: Left Coast Press. 2008), 277-284.

20. E.g. Tamara Bray, "Rock Art, Historical Memory, and Ethnic Boundaries: A Study from the Northern Andes," in *Andean Archaeology II: Art, Landscape, and Society*, edited by H. Silverman and W. Isbell (New York: Plenum Press, 2002), 333-354.

21. E.g. Bray, "Rock Art."

22. E.g. Marcos Llobera, "Exploring the topography of mind: GIS, social space and Archaeology." *Antiquity* 70, nº 269 (1996): 612-622.

23. E.g. Christopher Tilley, *A Phenomenology of Landscape: Places, Paths, and Monuments* (Providence: Berg, 1994).

24. E.g. Graham Fairclough, ""The Long Chain:' Archaeology, Historical Landscape Characterization, and Time Depth in Landscape," in *Landscape Interfaces: Cultural Heritage in Changing Landscapes*, edited by Hannes Palang and Gary Fry (Dordrecht; Boston: Kluwer, 2003), 295-318.

increasingly being understood as products resulting from relationships between people, and between people and the land.

Indigenous histories in the Americas are understood and produced in relation to specific natural and cultural landscape features, and it is by engaging with such significant places that identities are solidified as these interactions facilitate and strengthen connections to the past. Because landscapes are the spatial manifestation of the historical relations between humans and their environment,[25] the spatial relationships of cultural and ecological features offers insights into how conceptual linkages are established between people and places and how social actors are identified.[26] Places within the landscape, therefore, are constructed with distinct intentions, and the nature of social engagement at specific places influences the process by which they are produced. Considering that past peoples observed and interpreted traces of more distant pasts to serve the needs and interests of their present lives,[27] rock art, given its fixed location and relative permanence, could serve as a lasting anchor to the past and to the actions of ancient people. In other words, rock art inscriptions, as instruments in place-making and as extensions of their creators, are themselves social agents, to the extent that they draw people to them and hold and communicate messages that last through time. The stratigraphy and relative positioning of specific motifs at specific locations offer insights regarding how long they remained important and how cosmological conceptions of these places developed over the course of centuries.

Landscape, then, rather than being just the setting for human activity, encodes histories as individual and collective memories aggregate in relation to specific landscape features. As the framework for how histories are understood and developed, the socialized landscape provides the setting for everyday memory-work and constitutes a geographical plane from which to place and narrate the past.[28] Physical landscapes, therefore, bear and convey levels of memory through human agency and perception,[29] and they do so not simply by acting as relays for messages, but in relation to how people interact with them. It follows, then, that since the landscape is a storehouse of private and collective memories, and embedded as it is in social and individual memories,[30] the landscape *is* itself memory.

At more refined levels, individual places within a total landscape provide insights regarding the ways in which humans relate to their pasts, and offer perspectives for understanding how long location-based histories figured into specific narratives. A key concern in analyzing place-based histories is the manner in which places constitute space as critical centers of meaning.[31] Because specific places often serve as anchors for recalling mythic events, or as structural markers,[32] the temporal scales of memory that they carry may vary according

25. Crumley, Carol and William H. Marquardt, "Landscape: A Unifying Concept in Regional Analysis. In Interpreting Space: GIS and Archaeology. Edited by Kathleen Allen, Stanton Green and Ezra Zubrow. (Taylor and Francis, London, 1990), 73.

26. Alexander Herrera, "Social Landscapes and Community Identity: The Social Organization of Space in the North-Central Andes of Peru," in *Defining Social Complexity: Approaches to Power and Interaction in the Archaeological Record*, edited by S. Kohring and S.Wynne-Jones (Oxford: Oxbow Books, 2007), 167.

27. Ruth Van Dyke and Susan Alcock, "Introduction," in *Archaeologies of Memory*, edited by Ruth Van Dyke and Susan Alcock (New York: Wiley-Blackwell, 2003), 1.

28. Divya P. Tolia-Kelly, "Landscape and Memory," in Howard, Thompson and Waterton (eds.), *Routledge Companion to Landscape Studies*, 323.

29. Schama, *Landscape and Memory*, 57.

30. Tilley, *Phenomenology of Landscape*, 27.

31. Tilley, *Phenomenology of Landscape*, 14.

32. Francis Harwood. "Myth, Memory and the Oral Tradition: Cicero in the Trobriands". *American Anthropologis* 78, nº 4 (1976), 783-796.

33. Aubrey Canon, "Spatial Narratives of Death, Memory and Transcendence," in *The Space and Place of Death*, edited by H. Silverman (New York: Wiley, 2002), 193.

to how long social engagements with specific places can be made meaningful and effective in relation to the passage of time and changing circumstances.[33] As actors, and as testaments to the activities of past peoples and their experience of space the landscape retain an enduring agency as it links people to their pasts and serves as a communicative bridge that facilitate dialogues with those who came before. Thus, the places and features that compose the landscape find increasing degrees of significance the longer they remain socially engaged, as they "gather"[34] memories through the histories and stories associated with them. Landscapes and their components, therefore, are always in process, since "landscape is time materializing, because landscapes, like time, never stand still".[35]

Rock art, as in-situ landscape art, derives its significance not just from its imagery, but from its location. A full evaluation of rock art, therefore, must consider the rock itself and the other associated landscape features that inform its context. In analyzing the surrounding aspects that provide inscriptions with their context, the *placeness* of rock art can be more easily apprehended. Further, it is by assessing rock art's placeness we can better understand it in terms of landscape[36] as well as in regard to non-places,[37] or places that are not considered socially significant enough to be considered a place. In other words, rock art is contextualized by the landscape and it is through its context as a place, and as a node in a network of places, that social interactions between people and art objects are better comprehended.

Place-making is, perhaps, the most fundamental motivation in rock art production. The moment certain rocks are inscribed, they become materially socialized. Specific locations were chosen for rock art production based on how those locations factored into specific ideologies. The location of rock art sites and rock art images, therefore, becomes a critical aspect in evaluating the intention behind their production as these places were never chosen randomly. Taçon defines the scale of rock art's location under three main categories: *general location*, which corresponds to large, regional landscape features; *specific location* refers to the actual rock feature which holds the art, such as boulders, cliffs and caves; and lastly, *location* in terms of the art's actual placement on the rock.[38] This structure for defining rock art's locationality facilitates the modeling of diachronic changes in rock art imagery and location through time and is, thus, applied here.

Synthetic, material symbols at distinct locations can be potentially active for long periods of time and across generations,[39] and the longer the life-span of an artifact the greater the possibility that the information it contains will be visually received.[40] Engravings were likely made with the intention to endure time and because of this durability; accordingly, their iconography became incorporated into lasting artistic traditions that fed from and into social memory.

34. William Dodge, *Black Rock: A Zuni Cultural Landscape and the Meaning of Place* (Birmingham: University Press of Mississippi, 2007), 9-10.

35. Barbara Bender, "Time and Landscape." *Current Anthropology* 43, nº S4 (2002): S103; cf. Andy Jones, "Animated Images: Images, Agency, and Landscape." *Journal of Material Culture* 11, nº 1/2 (2006): 211–225.

36. E.g. Inés Domingo Sanz, Dánae Fiore, and Sally K. May, "Archaeologies of Art: Time, Place, and Identity in Rock Art, Portable Art, and Body Art," in *Archaeologies of Art. Time, Place, and Identity*, edited by Inés Domingo Sanz, Dánae Fiore, and Sally K. May (Walnut Creek: Left Coast Press, 2008), 15-28.

37. E.g. Marc Augé, *Non-Places: Introduction to an Anthropology of Supermodernity*, translated by John Howe (London: Verso, 1992).

38. Paul Taçon, "Internal-External: A Re-Evaluation of the 'X-Ray' Concept in Western Arnhem Land Rock Art." *Rock Art Research* 4, nº 1 (1987): 36-50; "From the 'Dreamtime' to the Present: The Changing Role of Aboriginal Rock Paintings in Western Arnhem Land, Australia." *Canadian Journal of Native Studies* 9, nº 2 (1989): 317-339.

39. Ian Hodder, "Material Symbols," in *Theory and Practice in Archaeology*, edited by Ian Hodder and Robert Preucel (Malden: Blackwell. 1996), 300.

40. Martin H. Wobst, "Stylistic Behavior and Information Exchange," in *For the Director: Research Essays in Honor of James B. Griffin*, edited by C.E. Cleland (Ann Arbor: Michigan Museum of Anthropology, University of Michigan, 1977), 317-342; cf. Francisco Gallardo and Patricio De Souza, "Rock Art, Modes of Production, and Social Identities during the Early Formative Period in the Atacama Desert (Northern Chile)," in Domingo Sanz, Fiore, and May (eds.), *Archaeologies of Art*, 79-97.

Considering this durability, the accumulation of inscriptions at specific locations provides insights that allow us to model how traditions relate to place, and it is a sensitive indicator of how past peoples examined and deciphered traces of more distant pasts to serve their own interests and to situate themselves within specific histories. Because rock art is often permanent or temporally long-lasting in the landscape, it engages the viewer as a memory trigger[41] that serves to ground the present in the past. The longer inscriptions endure as a pole of social engagement the more likely it is that associations with particular symbols, and their derived meanings, will change as the people who interact with them change. An inscription that has endured in the landscape nourishes human experience. Rock art is thus inherently hegemonic.[42] In other words, inscribing rocks is not only a tool for place-making, since the symbols associated with particular places also draw attention to features of past and future significance,[43] feeding into a stable, although ever-changing ontology related to specific places.

Palimpsest Rock Art and Place-making

Rock art palimpsests present an opportunity to generate a more fine-grained analysis of how people used specific images to communicate specific ideas at specific times. Palimpsests are traditionally understood as resulting from the act of writing over, or erasing and then writing over a tablet or plaque, but the term can also refer to the accumulation of inscriptions that may only partially destroy previous ones.[44] Sapwell[45] identifies two general ways in which rock art palimpsests develop. One is a single palimpsest, where individuals place the same or similar images at the same location. In this instance, the placement of the image does not matter in relation that of the other potentially identical images. Rather, the meaning and significance of individual inscriptions lies simply in the icon's placement on, or relation to, a specific place. Single palimpsests engage the individuals who produced their motifs with a particular concept or ideal that relates to a specific (often socially significant) place. In this instance, the meaning of the image lies not so much in the image itself, but in the accumulation of the same image as the appearance of the place develops through iterated acts of inscription, signaling the fact that a shared idea is maintained. Unlike a single palimpsest, a multiple palimpsest consists of the accumulation of distinct image types at the same location. In this instance, additions are made selectively and in close relation to narratives that a person wishes to develop. The spatial relationships of the images that make up a multiple palimpsest are fundamentally important, as images are positioned in dialogue with each other to communicate ever-evolving messages. In a multiple palimpsest compound meaning is derived from and communicated by the spatial relationships among

41. Meredith Wilson and Bruno David, "Introduction," in *Inscribed Landscapes: Marking and Making Place*, edited by Meredith Wilson and Bruno David (Honolulu: University of Hawaii Press, 2002), 6.

42. Wilson and David, "Introduction", 5.

43. Jones, "Animated Images", 222.

44. Josephine McDonagh. "Writings on the Mind: Thomas de Quincey and the Importance of the Palimpsest in Nineteenth Century Thought." *Prose Studies* 10, nº 2 (1987): 207-224; cf. Sapwell, "Understanding Palimpsest Rock Art", 356.

45. Mark Sapwell, "Understanding Palimpsest Rock Art with the Art as Agency Approach: Gell, Morphy and Laxön, Nämforsen." *Journal of Archaeological Method and Theory* 24, nº 2 (2017): 352-376, 358-362.

motifs. Dialogues are maintained in both single and multiple palimpsests as people become involved in a continuing tradition and is centered on engagement with a place.

Cosmology, Art, Social Life, and Practice in the Ancient Andes

The control of water and the veneration of ancestors were critical aspects of the evolution of cultural landscapes in the pre-Hispanic central Andes. Social status in the region was affirmed by people's connections to ancestors and such affirmations of status were closely entwined with negotiations surrounding the allocation of water rights,[46] which extended from individuals to the greater cosmological order.[47] Negotiations related to water control were administered by ancestor cults, groups who served as mediums to the ancestors and invoked them through ceremony. Frequently produced within a ceremonial context, rock art established and solidified links between certain people and certain ancestral beings at specific landscape junctures, and it played a vital role not only in engaging these beings, but also in embodying and animating them. These inscribed places inspired movement across the landscape, and due to their permanence they served as pilgrimage destinations, sometimes for millennia. It is in these regards that the rock art of the central Andes was an agent in anchoring social memory, and, by extension, in the development of landscapes through the cultural engagement with, and development of, specific locations. As a tool for socializing the land, rock art played a fundamental role in communicating with the ancestors and in establishing the Andean *patsa* cosmological order, both physically and socially.

In the ancient Andes space and time were not experienced as homogeneous, and were home to numerous sacred places.[48] Dualistic ideologies were structured in the Andean world in relation to places and space-time as an undivided duality are unified in the concept of *patsa*. *Patsa* refers to the physical world as we know it, but it also includes the Andean cosmos. Manga Quispe[49] remarks that *patsa* may more accurately translate to "space-time" as it can, and often does, refer to a place's location in terms of its relationship(s) to both space and time. *Patsa* is divided into three main realms. At the most mundane level, Kay Patsa, refers to the earth plane, and also refers to the present and to one's center; it represents the struggle between past and future, as well as between the upper and lower worlds.[50] Ukhu Patsa, in turn, refers to the world below; it is associated with the past, and with one's left side.[51] Ukhu Patsa is the domain of prominent ancestral beings, subterranean waters and creatures, such as serpents. Landscape features, such as caves (*machay*) and springs (*pacarina*) are considered access points between Kay Patsa and Ukhu Patsa. Lastly, Hanan Patsa, the world above,

46. Herrera, "Social Landscapes," 163.

47. Frank Salomon, "Beautiful Grandparents: Andean Ancestor Shrines and Mortuary Ritual as seen through Colonial Records," in *Tombs for the Living: Andean Mortuary Practices*, edited by Tom D. Dillehay (Washington D.C.: Dumbarton Oaks Research Library and Collection, 1991), 321.

48. Mario Polia Meconi, *La cosmovisión religiosa andina en los documentos inéditos del Archivo Romano de La Compañía de Jesús (1581-1752)* (Lima: Editorial de la Pontificia Universidad Católica del Perú,1999), 158-159.

49. Atuq Eusebio Manga Quispe, "Pacha: un concepto andino de espacio y tiempo." *Revista española de antropología americana* 24 (1994): 155-189.

50. Polia Meconi, *La cosmovisión*, 158-167.

51. Polia Meconi, *La cosmovisión*, 159.

refers to the future and to one's right side; it is the domain of the wind and the animals that inhabit it (like birds), of rainbows, clouds, and even powerful gods. Sky phenomena, such as rainbows and lightning, are considered links between Kay Patsa and Hanan Patsa.[52] Although *patsa* exists as these three distinct facets, space and time in *patsa* are linked and essentially considered one and the same. It is through the space-time continuum that the *patsa* world distinctions are all connected and co-creative, promoting balance and harmony in the cosmos.

Specific points in the *patsa* landscape were considered to be closely associated with the ancestors as places of emergence, places that housed ancestors, and places regarded as the incarnation of specific ancestors. These individual landscape features were believed to be imbued with *camay,* which is the life force that exists in, and moves through, all things and permeates all realms of *patsa*. Features such as caves, odd rock outcrops and springs, for example, were considered origin places (or *pacarina)* of specific ancestors, and it was from these sites that ancestors were believed to have surfaced from the underworld to populate the world above it,[53] linking Ukhu Patsa with Kay Patsa. Often associated with *pacarina,* other places held sacred by Andean peoples were deities who had petrified. These *huaca* were remembered and associated with particular deeds or events,[54] they were worshiped at both local and regional scales and their histories were passed down through generations of worshipers. All *huaca*, no matter how big or small, are anchors to communication with Ukhu and Hanan Patsa, and certain types of *huaca* were also considered to be the *pacarina* of certain living peoples and their founding fathers.[55]

Ancestor Cult, Ceremony, and Water Control in the Andes

Ancestor cults were deeply entrenched in Andean cultures,[56] and their actions were intended to integrate ancestors into the lives and affairs of the living and to engage people with the past in order to create and perpetuate social memory.[57] The minimal element of ancestor cult was the veneration of at least one dead person as the source of entitlement among a group of people who shared rights or an identity.[58] The focus of ancestor cults was not limited to deceased people, as landscape features associated with the deceased were incorporated into the beliefs and activities of those who were part of it. As concentrated and directed acts of observation and attention, ceremonies administered by ancestor cults sought to engage and harmonize the three realms of *patsa* and were often centered on, specific access points, which linked these realms. *Pacarina*, in particular, were important places for ancestor cults, since they were not only regarded as offering a link to these worlds, but also considered prestigious and of primary social importance as representing the uterus of Mother Earth (Mama Patsa).[59]

52. See Polia Meconi, *La cosmovisión*, for full descriptions of the *patsa* worldview.

53. Carolyn Dean, *A Culture of Stone: Inka Perspectives on Rock* (Durham: Duke University Press, 2010), 34.

54. Dean, *Culture of Stone*, 26.

55. Mary Glowacki and Michael Malpass, "Water, Huacas, and Ancestor Worship: Traces of the Sacred Wari Landscape". *Latin American Antiquity* 14 (2003): 436.

56. Mary E. Doyle, "Ancestor Cult and Burial Ritual in the Seventeenth and Eighteenth Century Central Peru," PhD diss., (University of California, Los Angeles, 1988).

57. Canon, "Spatial Narratives," 193-194.

58. Salomon, "Beautiful Grandparents," 320.

Centered on *huaca*, ritual performances and the manipulation of ceremonial space by ancestor cults through inscription articulated differing political dispositions that shaped hierarchical socioeconomic units.[60] By controlling water, ancestor cults controlled agricultural cycles and solidified social hierarchies.

As the primary focus of ancestor cults,[61] marked *huaca* socialized rock by locating the land in a cosmological order. *Huaca* were, therefore, prized landscape features of ancestor cults that sought to control them in the interest of harnessing power over ancestral land and cosmological sources of water[62] by regulating lines of communication with the deceased. Thus, inscribed rock features found in association with *huaca,* at hydraulically significant points in the landscape, foreground the relationships between rock art production and concepts of ancestry in the region.

Art, Embodiment, and Animism in the Andes

Art production in the ancient Andes was a means of invoking ancestral figures into the present, often with the purpose of consulting them in order to maintain security in the present and prosperity in the future. Dualistic expressions in art reflected the prominence of symbolic dualism in religion, ritual performances, and the social order.[63] Artistic manifestations of concepts and beings associated with the three realms of *patsa* could serve not merely as representations of elements with established links to each of its realms, but may have also served as ways of invoking those elements in such a way as to create a physical association with dimension of *patsa*. Images (or depictions) of serpents, felines, birds, and rainbows are often considered to embody features of Ukhu Patsa, Kay Patsa, and Hanan Patsa, respectively.[64] Visual art in the Andes was not simply a means of capturing specific ancestors or deities, it was, and still is, a means for animating those beings. Bird-David's[65] notion of 'relational epistemology' describes the core values of animism as a belief in the ability of people, places, and things to communicate with each other. Andean art follows this model, as art objects are considered in terms of their relations with other beings and things, rather than as representations of particular aspects of the sensible realm. Further, animism in the Andes focuses on places, both constructed and natural, as well as objects.[66] A fundamental concept in this regard is *camay*. Since as early as 2000 BC[67] visual art was used in the Andes to transfer *camay* between realms of *patsa* in order to maintain harmony in the world.

Water played a central role in Andean ceremony and was often related to rock art. For example, the Inca's "culture of water" overlaps and intersects with their culture of stone,[68] and ceremonial libations for the dead were poured

59. Polia Meconi, *La cosmovisión*, 167-168.

60. Jerry D. Moore, *Architecture and Power in the Ancient Andes: The Archaeology of Public Buildings* (Cambridge: Cambridge University Press, 1996); cf. Edward R. Swenson, "Competitive Feasting, Religious Pluralism, and Decentralized Power in the Late Moche Period," in *Andean Archaeology III: North and South*, edited by William H. Isbell and Helaine Silverman (New York: Springer/Plenum Press, 2006).

61. Peter Gose, "Segmentary State Formation and the Ritual Control of Water under the Incas." *Comparative Studies of Society and History* 35, nº 3 (1993): 489.

62. Glowacki and Malpass, "Water, Huacas, and Ancestor Worship," 437.

63. Helene Bernier, "Dualism in Andean Art," *Heilbrunn Timeline of Art History*, accessed on 27 May 2019, http://www.metmuseum.org/toah/hd/dual/d_dual.htm.

64. Several indigenous c*ampesino* consultants involved in this research claim that these animals refer to these realms of *patsa.*

65. Nurit Bird-David, 'Animism' Revisited: Environment and Relational Epistemology." *Current Anthropology* 40, nº S1 (1999): S67-S91.

66. Bill Sillar, "The Social Agency of Things?: Animism and Materiality in the Andes." *Cambridge Archaeology* 19, nº 3 (2009): 376.

67. McKim J. Malville, "Cosmology in the Inca Empire: Huaca Sanctuaries, State-Supported Pilgrimage, and Astronomy." *Journal of Cosmology* 9 (2010): 2106.

through pierced or channeled stones[69] to emphasize and animate these relationships. These libations invoked *camay* from the landscape by certain ritual actions involving running water, blood, and other liquids.[70] Rock art, in association with water, was also an important aspect of mortuary practice in the pre-Hispanic Andes, since marked rocks were recognized as "both normal and numinous, existing and participating in diverse worlds simultaneously".[71]

The Setting: The Fortaleza Ignimbrite and Kiñan Tanka

To illustrate the way in which *huaca* were incorporated into the *patsa* worldview through ceremony and inscription, this study focuses on a particular *huaca* named Kiñan Tanka. Kiñan Tanka is located within a highland *puna* rock forest named Hatun Machay, an outcropping associated with the Fortaleza Ignimbrite (FI). The FI is a geological formation situated in the highest reaches of two major watersheds at the crest of the Cordillera Negra, at an altitude between 3420 and 4250 meters, and it sits at the nexus of several social, geological, and hydrological environments crosscutting the *suni* and *quechua* ecosystems at the highest reaches of cultivated lands and reaching into the *puna* steppe (Img. 1). The FI is comprised of 15 distinct outcrops, all of which are several kilometers in diameter and consist of a combination of caves, rock-shelters, boulders, rock spires, and cliff formations. Several dozen springs emerge from the FI, forming

68. Dean, *Culture of Stone*, 32.

69. Salomon, "Beautiful Grandparents", 316.

70. Malville, "Cosmology", 2110.

71. Dean, *Culture of Stone*, 35; cf. Gordon Ambrosino, "Rock Art", 12.

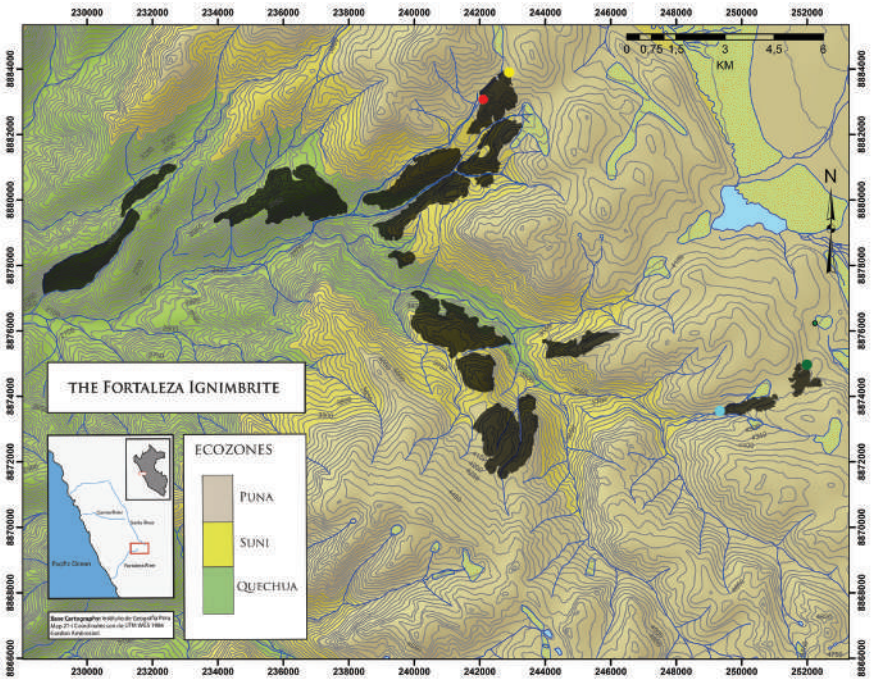

Image 1. The FI and relationships to the ecozones and watersheds, and the relative positions of Kiñan Tanka (red dot), Hatun Machay (gold dot), Diablo Retrato (turquoise dot) and Shacsha Machay (green dot) (Map © Gordon Ambrosino 2017).

the initial sources of the Fortaleza and Santa Rivers. The indigenous inhabitants of the surrounding pueblos of Ichoca, Pampas Chico, Huambo, Colquimarca, Sequespampa, Ichoca, and Santa Rosa refer to these outcroppings as c*erros*, each of which has an individual name, and they consider these c*erros* to be animated *huaca,* themselves*,* and also as containing *huaca* of lesser degrees of power.

Prior Research at the Fortaleza Ignimbrite

The highland Cordillera Negra, at the headwaters of the Fortaleza River, is, in archaeological terms, an understudied area, since most research in this watershed has focused primarily on its lower and mid portions.[72] A recent survey of the FI revealed 299 archaeological features associated with this formation, 192 of which held associated rock art.[73] GIS analysis of these data revealed that the FI's petroglyph art is generally concentrated at specific places in the *puna*, while the majority of its pictograph art lies in association with funerary architecture and agricultural fields at lower elevations[74] . Recent excavations of the three *puna* rock shelters of Hatun Machay, Shacsha Machay, and Diablo Retrato (Img. 1), and of the collective tomb of Palluta, revealed five distinct occupation phases relating to the FI.[75] Occupation Phase I was brief, occurring around the year 3000 BC, or the Late Archaic period. Occupation Phase II started at approximately 1800 BC and terminated at approximately 1200 BC, corresponding to the Final Archaic and Early Formative periods. The ensuing Occupation Phase III terminated approximately at 600 BCa nd corresponded to the Early and Middle Formative periods. Occupation Phase IV lasted from approximately 600 - 200 BC. After an approximate 800-year hiatus, the FI was occupied again around the year AD600, and the ensuing Occupation Phase V lasted until European contact. The diversity of the styles and production techniques of the rock art found on the FI correspond to these occupation phases. Of concern here are Occupation Phases II, III, and IV, corresponding to the production of incised petroglyph art at the FI during the Formative Period.

The Incising Tradition

The Formative Period petroglyph art on the FI is defined as the Incising Tradition (1500 - 200 BC)[76] and is comprised of three styles, which correspond to the phases of occupation outlined above. These types of petroglyphs are found primarily in the high *puna* region of the FI and on free-standing boulders or within rock shelters.

Style I of the Incising Tradition is associated with Occupation Phase II and spans from approximately 1500 BC to 1200 BC. A main characteristic of

72. E.g. Jonathan Haas and Winifred Creamer, "Crucible of Andean Civilization: The Peruvian Coast from 3000 to 1800 BC." *Current Anthropology* 47 (2006): S745-S775; Winifred Creamer, Alvaro Ruiz Rubio, Manuel Perales Munguia, Jonathan Haas, "The Fortaleza Valley, Peru: Archaeological Investigation of Late Archaic Sites (3000-1800 BC)," in *Fieldiana Anthropology* 44, nº 1 (2013): 1-108.

73. Alexander Herrera and Gordon Ambrosino, *El proyecto de investigación arqueológico, arte rupestre del Alto Fortaleza: Informe Final*, Ministry of Culture of Peru, 2017.

74. Ambrosino, "Rock Art", 105-110.

75. Ambrosino, "Rock Art", 151.

76. Ambrosino, "Rock Art", 154.

this style is that its motifs are carved with deep incisions that do not have polished borders. Style I imagery is defined by anthropomorph figures, generally carved in "stick figure" form, nearly always front-facing and with u-shaped legs and arms. Not all of the stick figures display face elements, but when they do, nose and eye features were produced using a drilling technique. Another prominent image from Style I are front-facing and bodiless anthropomorph faces, also with drilled facial features and which display the same width and depth of their incisions as the "stick figure" motifs. Nearly all of the incised figures of Style I are placed close to the ground, within 1 meter of the present ground surface.

Style II of the Incising Tradition is associated with Occupation Phase III, beginning at approximately 1200 BC and terminating at approximately 600 BC. Style II employed a distinct carving technique from that of Style I, displaying incisions of much greater width (nearly three to four times as wide), with instances in which the initial incisions appear to have been further chipped to make them wider. Style II incisions also display cleaner edges, indicating that these engravings required more time and care to produce and were possibly burnished after the incision was made. The imagery of Style II is comprised largely of zoomorph figures, depicted in profile, and which generally have curved lines that make up the body. The figures of Style II are often located at the same places as Style I and in close proximity to figures from Style I; in some cases, figures of Style II are superimposed over or touching parts of figures of Style I.

Style III of the incising tradition spans from approximately 600 - 200 BC and corresponds to Occupation Phase IV. Style III displays very cleanly carved, although relatively shallow, incisions with polished edges. The details present in these carvings indicate that the tools used in their production were possibly different from those used in Styles I and II. Imagery from Style III includes both front-facing and side-facing anthropomorphs, and side-facing zoomorphs. The face elements of Style III anthropomorph figures display detail to a degree that allows for, in some instances, the identification of eyelids, lips, and facial expressions. Distinctive image types of Style III incised art include clothed anthropomorphs, serpents emerging from holes in the FI, and bird, serpent, feline, and anthropomorph motifs appearing in combination and placed in close proximity to each other.

The Incised Petroglyph Art of Kiñan Tanka

Located on the rock forest of Hatun Machay's northern flank, Kiñan Tanka is a large boulder (measuring 6 m high × 9 m wide and 10 m deep) that is situated approximately 4 m from a natural water spring that feeds the Quebrada Huillca Pampa, a tributary of the Fortaleza River. Local indigenous *campesino*

informants identify Kiñan Tanka as a *huaca*. Kiñan Tanka is distinct, as it is a lone, free-standing boulder, and its eastern side is cleaved at 90 degrees, indicating a possible fracture. Gauging from its general form, this boulder appears to have been a pinnacle of a spire, from the rock forest. If this is the case, it likely fractured as the result of a lightning strike and migrated down slope. This scenario would support Arriaga's[77] report that places associated with lightning strikes were venerated as *huaca*. Kiñan Tanka has an associated stone-cut canal abutting its southern side. This canal originates within the rock forest, approximately 12 m above, and descends to the boulder, where it articulates with a canal that led into Quebrada Huillca Pampa (Img. 2). Kiñan Tanka is the only rock art site observed on the FI that has a stone-cut canal in close proximity.

Kiñan Tanka's petroglyph panel is located on the boulder's fractured eastern flank and faces northwest at 340 degrees. This panel measures 210

77. Arriaga, Pablo José de. Extirpación de la Idolatría en el Perú. [1920] 2002. Biblioteca Virtual Miguel de Cervantes: Lima.

Image 2. The stone-cut canal of Kiñan Tanka (upper right) with articulating, constructed canal where they meet the boulder that holds an associated rock art panel in red (upper left) and overhead orthophoto showing the relative positions of the boulder of Kiñan Tanka and the stone-cut canal (below). Photo © Gordon Ambrosino.

cm wide by 120 cm high and is comprised of 12 anthropomorph motifs, 10 zoomorph motifs, and four abstract motifs that are densely-packed together and which display distinct production techniques (Img. 3). The most conspicuous figures on Kiñan Tanka's panel are a series of front facing anthropomorph "stick figure" motifs, a serpent emerging from a natural hole in the boulder wall, several zoomorph motifs presented in profile, and four anthropomorph motifs also carved in profile and bearing what might be *Strombus* shell atop their heads (Img. 3).[78]

A series of methods were employed in the fieldwork undertaken at Kiñan Tanka in 2014 and 2016 to record its rock art panel and to accurately document its associated natural and cultural features. First, Kiñan Tanka's panel was photographed at various times during the day to capture differing intensities and angles of sunlight. These photos were then used to produce a high-resolution digital composite photo using Photoshop CS6. The same photos were then processed in Agisoft Photoscan to produce a 3-dimensional surrogate of the art panel, allowing for further manipulation of shading and light levels to identify production techniques, the width and depth of incisions, and possible microstratigraphy of rock art. The orthophoto produced through this process then served as the foundation for creating two-dimensional, vector renderings of Kiñan Tanka's petroglyph panel to capture subtle details, which were not be visible in 3-dimensional models.

Kiñan Tanka holds several motifs that correspond to Style I of the Incising Tradition (1500 - 1200 BC), which are similar to images found in

78. Several of Kiñan Tanka's motifs are either fully or partially painted in red pigment. Based on the apparent lack of fading or wear of the pigment, it appears that this pigment was possibly applied recently. The pigment on this panel is therefore not included in the present analysis and discussion.

79. Ambrosino, "Rock Art", 159-160.

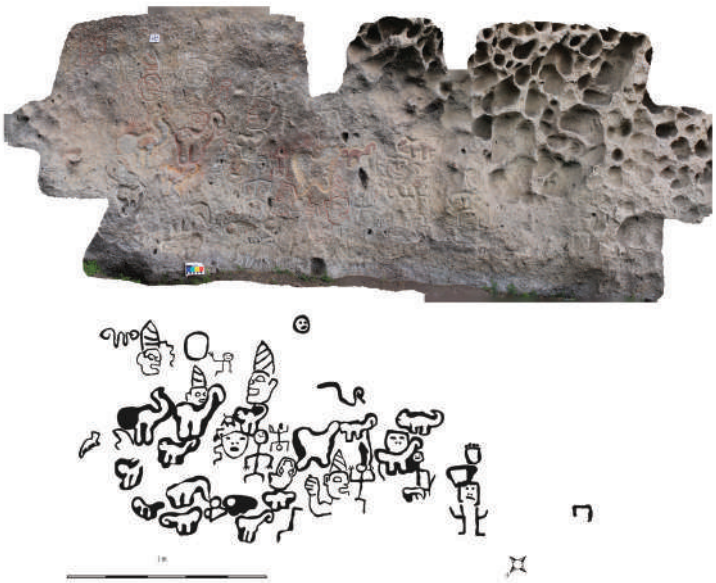

Image 3. Photo of Kiñan Tanka (above) with rendering displaying the "Shell head" "stick figure" and zoomorph images. Photo © Gordon Ambrosino.

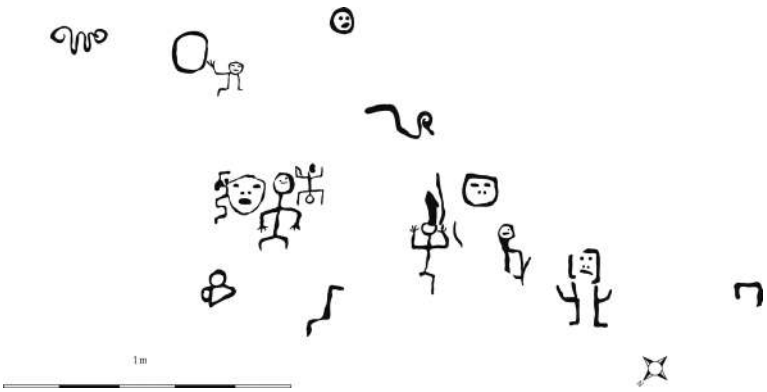

Image 4. Style I inscriptions at Kiñan Tanka (1500-1200 B.C.). Illustration © Gordon Ambrosino.

several other locations on the FI.[79] The 15 Style I figures at Kiñan Tanka consist of: five full-bodied and front-facing anthropomorphs, three front-facing anthropomorph heads, and seven abstract motifs (Img. 4). All of these motifs display similar width and depth of their incisions, and all of the anthropomorphs display facial features produced with a drilling technique. The Style I style motifs span the entire width and height of the panel and are generally positioned in relatively distant proximity to each other, with the exception of a cluster of four motifs (two stick figures, one front-facing head, and one abstract motif) located in the panel's center.

The 20 ensuing Style II motifs (1200 - 600 BC) on Kiñan Tanka consist of 19 side-facing zoomorph motifs (17 of which face the viewer's left) and one motif that resembles the underside of a human foot and which displays the same width and depth of its incisions as the zoomorphs (Img. 5). Eight of the Phase II zoomorph motifs are animals with downward-pointing tails, while one Phase II zoomorph has an upward pointing tail. The downward-pointing tails convey a prehensile nature, possibly referencing neotropical monkeys, while those with the upward-turned tails possibly reference felines. There are also four examples

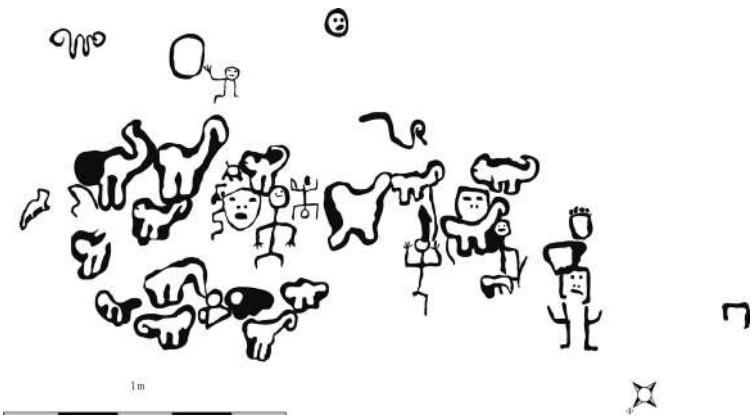

Image 5. Style I and II inscriptions at Kiñan Tanka (1500-600 B.C.). Illustration © Gordon Ambrosino.

80. Andrew M. Jones and Nicole Boivin, "The Malice of Inanimate Objects: Material Agency," in *The Oxford Handbook of Material Culture Studies*, edited by Dan Hicks and Mary C. Beaudry (Oxford: Oxford University Press, 2010), 184.

of Phase II motifs whose body parts have been obliterated, possibly intentionally. The Phase II motifs are largely clustered towards the panel's center, where there are five examples of Phase II motifs being in contact with each other and

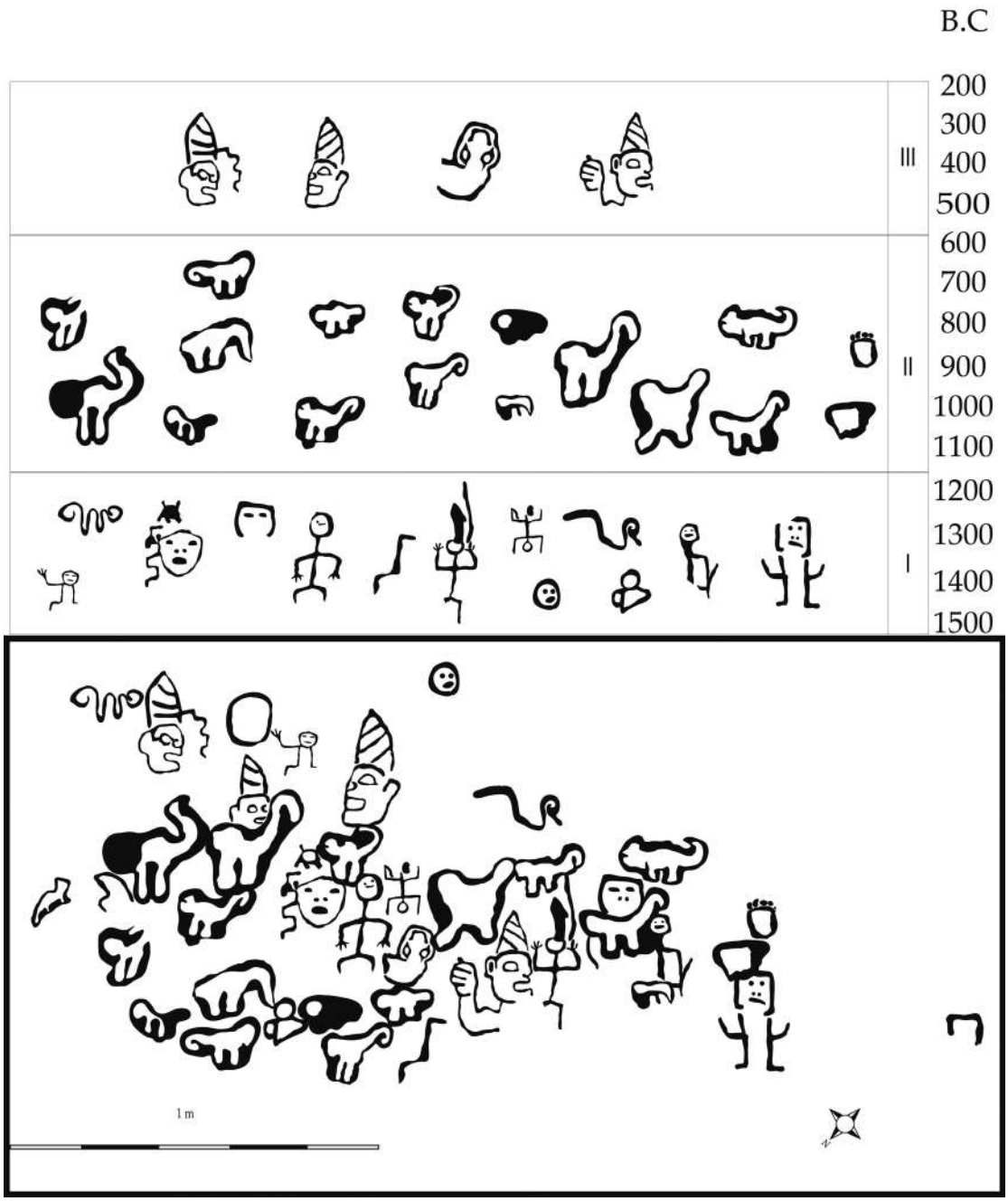

Image 6. Style I, II and III inscriptions and chronology of image types at Kiñan Tanka (1500 – 200 B.C.). Illustration © Gordon Ambrosino.

seven examples of Phase II motifs being in contact with and partially overlaying Phase I motifs.

The motifs corresponding to Style III (600 - 200 BC) at Kiñan Tanka consist of four side-facing anthropomprh heads (one of which has an arm) donning a possible *Strombus* shell atop their heads, and a serpent that is emerging from a hole in the boulder's east flank. *Strombus* iconography (especially in conjunction with isolated anthropomorph heads) is a clear, diagnostic indicator of the Cupisnique visual corpus.[80] Three of the Style III motifs are in contact with Phase II motifs, and two of the Phase III motifs are in contact with Phase I motifs (Img. 6).

Discussion: Memory and the Production of *Huaca* in the Andean *Patsa* Landscape During the Formative Period (1500 – 200 BC): The Case of Kiñan Tanka

Kiñan Tanka's petroglyph panel offers an exceptional opportunity for modeling how memory factored into place-making processes and allows for understanding the moments at which the *patsa* worldview emerged and became solidified as an anchor for ritual practice. With the temporal and stratigraphic relationships of Kiñan Tanka's motifs established, this discussion focuses on specific examples of image and feature relationships from this panel to demonstrate how inscribing at this particular place served to animate this rock feature and to embody specific cosmological concepts, and in doing so, allowed past peoples to establish links with their own pasts.

The density, complexity, and diversity of Kiñan Tanka's iconography and production techniques suggest that its motifs were produced over a long period of time and likely by diverse people. The spatial and stratigraphic relationships of its images potentially offer perspectives regarding the nature of palimpsest petroglyph art in building a place-based narrative. For a fine-grained analysis of these relationships, we will turn our attention to a cluster of rock art motifs at the panel's center that display several examples of microstratigraphy of distinct rock art images. Image 7 presents four image types from the upper-central portion of the panel that are vertically aligned. At the bottom-left of this image are two front-facing anthropomorph motifs with drilled eyes and mouths. Above these motifs lies a zoomorph image in profile, at the top of which lies one of the Style III anthropomorph motifs. A closer inspection of the microstratigraphy of these images reveals that the feet of the zoomorph figure obliterate a portion of both of the stick figures' heads, indicating that it was inscribed at a later time. Likewise, a portion of the zoomporph´s tail is obliterated by the jaw line of the overlying shell head figure that is located above it.

Zooming out to see the entire panel we can observe that with the exception of the cluster of motifs located in the panel's center, the images corresponding to Style I do not display spatial relationships that would suggest their being in conversation with each other, or contribute to a coherent narrative. Moreover, all of the anthropomorphs from this phase face outward, towards the viewer, indicating that these motifs were inscribed with the intent to engage the people visiting the site, rather than the other images on the panel. The Style I motifs at Kiñan Tanka, therefore, resemble more a single palimpsest, reflecting individuals who engaged in the tradition of visiting this place, rather than a multiple palimpsest where motifs would be positioned to communicate with each other.

The narrative changes significantly, however, around the year 1200 BC, when several examples of side-facing zoomorphs in Style II appear at Kiñan Tanka. Unlike the Style I motifs, which consist of distinct image types and are generally more distant from each other, the Style II motifs consist of almost all the same iconography and they consistently touch and/or superimpose both Style I and II motifs. The uniformity of the Style II images suggests that they were produced with the intention of supporting and continuing a shared idea, while their spatial relationships, their contact with previous inscriptions, and the fact that they are positioned in profile all indicate that these image types contributed to an on going narrative. When considered together, these relationships suggest that the Style II motifs at Kiñan Tanka constitute simultaneously a single

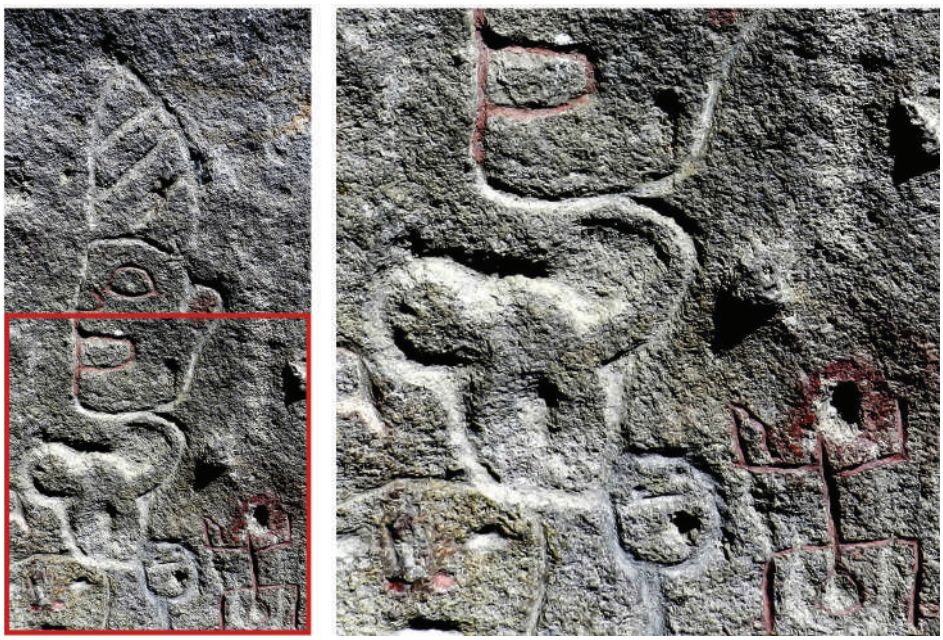

Image 7. Close-up of the superpositioning of rock art images at Kiñan Tanka. Photo © Gordon Ambrosino.

palimpsest (reflected in its uniformity of image types) and a multiple (double, or two-layered) palimpsest in which new image types are juxtaposed with those of Style I to develop an account that linked animals to people.

The engraved narratives become more complex yet with the arrival of Style III, where image types of all styles become linked. In this instance the motifs are visually similar, but do not appear to follow the same formulaic production method, like those of Style II. Additionally, the Style III images are significantly more detailed and complex, and their position in profile, with open mouth, puts them (perhaps literally) in conversation with other motifs on the panel, unlike those particularly of Style I which face the viewer. Like several examples of Style II, the Style III motifs are all in contact with motifs from previous styles. Unlike Style II, however, the various Style III images, by virtue of their individuality, appear to communicate distinct concepts. Therefore, the Style III images cannot be considered as having any elements of a single palimpsest, but rather their intimate relationships with both Style I and II images combine to produce an even more complex, triple palimpsest, which is a previously undefined category.

At this juncture it is important to recall Bernabé Cobo's seventeenth century observation that huaca anchor ritual practice over multiple generations (thereby establishing continuity) and that the activities and rituals associated with certain huaca transformed them. To illustrate these concepts, we now focus on two specific examples of palimpsest art at Kiñan Tanka that demonstrate how, two fundamental aspects of pre-Columbian, Andean art: embodiment and animation.

The first example consists of a Style II zoomorph that has a Style III anthropomorph engraved above it (Img. 8). A close examination of these motifs reveals that the Style III motif incorporates elements of the Style II motif into its design, as the upward-curved back of the zoomorph actually forms the jawline of the Style III anthropomorph. These two images are in contact, although care was taken so that in producing the Style III engravings none of its incisions superimpose those of the Style II engravings. Additionally, the combined structure of these two images appears to unite the two formerly individual motifs into a single motif, as the zoomorph's tail appears to now form the arm of the anthropomorph, and the legs of the zoomorph are now the legs of the anthropomorph. In this multiple palimpsest, two beings are now transformed into a single hybrid figure.

The second example is a Style III zoomorph that is articulated with a natural hole on Kiñan Tanka's east face (Img. 9). This engraving depicts an overhead view of the head of a serpent, whose body is connected to the hole, creating the effect that it is emerging from within the rock, thereby animating this image and

making it alive. The relationship of this particular inscription with this particular hole supports the interpretation that Kiñan Tanka was considered a link between the underworld of Ukhu Patsa and the world above of Kay Patsa. The fact that it appears to be moving suggests a fluid and open connection between these two worlds. In essence, the placement of a creature associated with Ukhu Patsa next to a hole in a rock feature that was considered a link between worlds actively conveys animation though emergence. Like the examples presented above, it is important to highlight that a portion of the serpent's head is carved over the edge of a Style II zoomorph figure.

The stone-cut canal abutting Kiñan Tanka's south flank indicates that this *huaca* was a probable ceremonial anchor and was likely created for pouring libations that would feed into the Quebrada Huillca Pampa and the Fortaleza River, delivering *camay* to the Pacific Ocean. This canal´s existence at this location strongly indicates that the engravings on Kiñan Tanka were produced in a ceremonial context that likely drew pilgrims from distant locales. This observation is

Image 8. Example of Style II zoomorph and Style III anthropomorph that unite to form a hybrid being. Photo © Gordon Ambrosino.

supported by the likely primate and feline figures associated with Style II, which suggest that the people who produced these images possibly traveled to Kiñan Tanka from lowland, tropical settings. The findings of non-local materials, such as marine shell, maize, and obsidian, recovered from excavations at the nearby rock shelters of Hatun Machay, Shacsha Machay, and Diablo Retrato back this interpretation.[81]

The contact and superpositioning of images at the Kiñan Tanka panel highlights how inscription linked past peoples with their ancestors in the Formative Period and positions us to better understand Moore's claim that memory is better considered in terms of active cultural creation, rather than as recollection. By placing images in direct contact with those of past peoples, the individuals responsible for producing Styles II and III directly, and literally, put themselves in contact with the ancestors. As these contacts developed over the course of approximately 1300 years, Kiñan Tanka gathered memories, becoming a storehouse for history and a critical center of meaning within a landscape that held numerous other memory-based agents in the *patsa* world. As a ceremonial locale that served as a destination for recalling mythic events, Kiñan Tanka developed over this period of time as a structural marker in the *patsa* landscape

Image 9. A Style III engraving of a serpent emerging from a natural hole, linking the two realms of patsa. Photo © Gordon Ambrosino.

that was meaningful and effective for at least as long as inscriptions continued to be added. As a portal that linked the present world of Kay Patsa with the underworld of Ukhu Patsa, Kiñan Tanka's rock art not only served to solidify social memory at a critical landscape juncture, but gave this landscape feature increasing meaning and meaningfulness as its stories developed. It is in light of these implications that inscription at Kiñan Tanka may be said to reflect not only the means through which past peoples constructed memories about their own pasts, but also that the images themselves constitute place-making activities that contributed to location-based histories. In other words, by animating a venerated landscape feature and by embodying relationships between *patsa* realms and between past peoples, Kiñan Tanka's rock art reveals the semiotic connections through which memory actively constructs places.

Conclusion

As a *huaca*, a likely ceremonial center, and a pilgrimage destination that attracted diverse peoples from distant locals, Kiñan Tanka was a critical locale for crystalizing the patsa world view during the Formative Period in the highland, north-central Andes. The people who visited Kiñan Tanka began inscribing it approximately around 1500 BC and for the first 300 years these images consisted of individual markings that do not appear to relate to each other. Over the ensuing 600 years, the pilgrims that followed engraved Kiñan Tanka to relate themselves with those who had previously visited this place by situating their motifs close to, or touching previous inscriptions. These images are relatively uniform, suggesting that their authors not only wished to associate themselves with those who came before, but were intent on supporting and continuing a shared idea through the production of a simultaneously single and multiple palimpsest. The images added during the following 400 years were further intended to animate and transform Kiñan Tanka by producing a multiple (triple) palimpsest that developed and diversified the continuing location-based, inscribed narrative that had been ongoing for nearly a millennium prior.

Through analyzing the diachronic changes in imagery and production techniques of Kiñan Tanka's inscribed narrative over the course of 1300 years we can come to a more fine-grained perspective of the moment at which this specific landscape feature became socialized and incorporated into an ancestor-based world view that linked the differing realms of a unified field. More specifically, the spatial and temporal relationships of Kiñan Tanka's motifs provide a visual reference for modeling the role of memory in the social construction of venerated landscape features. In this instance, the dialogues established in Kiñan Tanka's early stages of inscription engage the producer of the motif and the human viewers who came later. In the ensuing stages the motifs themselves were

82. Alexander Herrera and Gordon Ambrosino, *El proyecto de investigación"*, 65- 83.

put into dialogue in ever-increasing complexity, allowing subsequent human viewers (including modern-day peoples) to apprehend that they were, and still are, in direct conversation with their makers. Moreover, a detailed analysis of the relationships between Kiñan Tanka's motifs reveals that these inscriptions, and the dialogues that they were engaged in, were agents in constructing the *patsa* landscape through their ability to promote social relations at a venerated landscape feature. Kiñan Tanka, however, represents only a single example of this type of inscribing process on the FI. Future research will seek to decipher the FI's other numerous rock art palimpsests to link Kiñan Tanka´s rock art to other similar panels in the region.

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Bibliography

Ambrosino, Gordon. "Rock Art, Water and Ancestors: The Semiotic Construction of Landscapes in the Pre-Hispanic Central Andes." PhD diss. Universidad de los Andes, 2017.

Arriaga, Pablo José de. 2002 [1920]. La Extripación de la Idolatría en el Perú. Biblioteca Virtual Miguel Cervantes: Lima.

Augé, Marc. *Non-Places: Introduction to an Anthropology of Supermodernity*, translated by John Howe. London: Verso, 1992.

Bailey, Geoff. "Time Perspectives, Palimpsests and the Archaeology of Time." *Journal of Anthropological Archaeology* 26, nº 2 (2007): 198-223.

Bender, Barbara. "Time and Landscape." *Current Anthropology* 43, nº S4 (2002): S103-S112.

Bird-David, Nurit. " 'Animism' Revisited: Environment and Relational Epistemology." *Current Anthropology* 40, nº S1 (1999): S67-S91.

Bray, Tamara. "Rock Art, Historical Memory, and Ethnic Boundaries: A Study from the Northern Andes." In *Andean Archaeology II: Art, Landscape, and Society,* edited by H. Silverman and W. Isbell. New York: Plenum Press, 2002, 333-354.

Bray, Tamara. *The Archaeology of Wak'as: Explorations of the Sacred in the Pre-Columbian Ande*s. Boulder: University of Colorado Press, 2015.

Bernier, Helene. "Dualism in Andean Art." *Heilbrunn Timeline of Art History*, http://www.metmuseum.org/toah/hd/dual/d_dual.htm.

Canon, Aubrey. "Spatial Narratives of Death, Memory and Transcendence." In *The Space and Place of Death,* edited by H. Silverman. New York: Wiley, 2002.

Cobo, Bernabé. *Inca Religion and Customs,* translated by R. Hamilton. Austin: University of Texas Press, 1990[1653].

Cohen Suarez, Ananda, and Jeremy J. George. *Handbook to Life in the Inca World*. New York: Facts on File, 2011.

Creamer, Winifred, Alvaro Ruiz Rubio, Manuel Perales Munguia, Jonathan Haas. "The Fortaleza Valley, Peru: Archaeological Investigation of Late Archaic Sites (3000-1800 BC)." *Fieldiana Anthropology* 44, nº 1 (2013): 1-108.

Crumley, Carol and William H. Marquardt. 1990. "Landscape: A unifying Concept in Regional Analysis". In *Interpreting Space: GIS and Archaelogy*. Edited by Kathleen Allen, Stanton Green and Ezra Zubrow. Taylor and Francis, London. Pp. 73-79.

Dean, Carolyn. *Culture of Stone: Inka Perspectives on Rock*. Durham: Duke University Press, 2010.

Dodge, William. *Black Rock: A Zuni Cultural Landscape and the Meaning of Place.* Birmingham: University Press of Mississippi, 2007.

Domingo Sanz, Inés, Dánae Fiore, and Sally K. May. "Archaeologies of Art: Time, Place, and Identity in Rock Art, Portable Art, and Body Art." In *Archaeologies of Art. Time, Place, and Identity,* edited by Inés Domingo Sanz, Dánae Fiore, and Sally K. May.Walnut Creek: Left Coast Press, 2008, 15-28.

Doyle, Mary E. "Ancestor Cult and Burial Ritual in the Seventeenth and Eighteenth Century Central Peru." PhD diss. University of California, Los Angeles, 1988.

Fairclough, Graham. " 'The Long Chain': Archaeology, Historical Landscape Characterization, and Time Depth in Landscape." In *Landscape Interfaces: Cultural Heritage in Changing Landscapes,* edited by Hannes Palang and Gary Fry. Dordrecht; Boston: Kluwer Academic Publishers, 2003, 295-318.

Gallardo, Francisco, and Patricio De Souza. "Rock Art, Modes of Production, and Social Identities during the Early Formative Period in the Atacama Desert (Northern Chile)." In *Archaeologies of Art. Time, Place, and Identity,* edited by Inés Domingo Sanz, Dánae Fiore, and Sally K. May. Walnut Creek: Left Coast Press, 2008, 79-97.

Glowacki, Mary, and Michael Malpass. "Water, Huacas, and Ancestor Worship: Traces of the Sacred Wari Landscape." *Latin American Antiquity* 14 (2003): 431-448.

Gose, Peter. "Segmentary State Formation and the Ritual Control of Water Under the Incas." *Comparative Studies of Society and History* 35, nº 3 (1993): 480-514.

Guffroy, Jean. *El arte rupestre del antiguo Perú*. Lima: IFEA, 1999.

Haas, Jonathan, and Winifred Creamer. "Crucible of Andean Civilization: The Peruvian Coast from 3000 to 1800 BC." *Current Anthropology* 47, nº 5 (2006): 745-775.

Harwood, Frances. 1976. Myth, Memory, and the Oral Tradition: Cicero in the Trobriands. *American Anthropologist.* Vol. 78, Issue 4. Pp. 783-796.

Herrera, Alexander. "Territory and Identity in the pre-Columbian Andes of Northern Peru." PhD diss. University of Cambridge, 2005.

Herrera, Alexander . "Social Landscapes and Community Identity: The Social Organization of Space in the North-Central Andes of Peru." In *Defining Social Complexity: Approaches to Power and Interaction in*

the Archaeological Record, edited by S. Kohring and S. Wynne-Jones. Oxford: Oxbow Books, 2007, 161-185.

Herrera, Alexander, and Gordon Ambrosino. *El proyecto de investigación arqueológico, arte rupestre del Alto Fortaleza: Informe final.* Ministry of Culture of Peru, 2017.

Hodder, Ian. "Material Symbols." In *Theory and Practice in Archaeology*, edited by Ian Hodder and Robert Preucel. Malden: Blackwell, 1996, 299-314.

Ingold, Tim. *The Perception of the Environment: Essays in Livelihood, Dwelling, and Skill*. New York: Routledge, 2000.

Izumi, Seichii, and Toshihiko Sono. *Andes 2: Excavations at Kotosh, Peru, 1960*, translated by Shozo Masuda. Tokyo: Kadokawa Publishing, 1963.

Jones, Andy. "Animated Images: Images, Agency and Landscape." *Journal of Material Culture* 11, nº 1/2 (2006): 211–225.

Jones, Andrew M., and Nicole Boivin. "The Malice of Inanimate Objects: Material Agency." In *The Oxford Handbook of Material Culture Studies*, edited by Dan Hicks and Mary C. Beaudry. Oxford: Oxford University Press, 2010, 233-251.

Kaulicke, Peter. "Perspectivas regionales del Periodo Formativo en el Perú: Una introduccion." *Boletín de arqueología PUCP* 2 (1998): 9-13.

Kaulicke, Peter . "Espacio y tiempo en el Periodo Formativo: Una introduccion." *Boletín de Arqueología PUCP* 12 (2008): 9-23.

Kaulicke, Peter . *Las Cronologías del Formativo: 50 años de investigaciones japonesas en perspectiva.* Lima: Fondo Editorial PUCP, 2010.

Llobera, Marcos. "Exploring the Topography of Mind: GIS, Social Space and Archaeology." *Antiquity* 70, no 269 (1996): 612-622.

Lucas, Gavin. "Time and the Archaeological Archive." *Rethinking History* 14, nº 3 (2010): 343-359.

Lynch, Thomas F. *Guitarrero Cave: Early Man in the Andes*. New York: Academic Press, 1980.

Malville, McKim J. "Cosmology in the Inca Empire: Huaca Sanctuaries, State-Supported Pilgrimage, and Astronomy." *Journal of Cosmology* 9 (2010): 2106-2120.

Manga Quespi, Atuq Eusebio. "Pacha: un concepto andino de espacio y tiempo." *Revista española de antropología americana* 24 (1994): 155-189.

McDonagh, Josephine. "Writings on the Mind: Thomas de Quincey and the Importance of the Palimpsest in Nineteenth Century Thought." *Prose Studies* 10, nº 2 (1987): 207-224.

Moore, Jerry D. *Architecture and Power in the Ancient Andes: The Archaeology of Public Buildings.* Cambridge: Cambridge University Press, 1996.

Moore, Jerry D . "Making Huaca: Memory and Praxis in Pre-Hispanic Far Northern Peru." *Journal of Social Archaeology* 6 (2010): 531-555.

Morphy, Howard. "For the Motion (1)." In *Key Debates in Anthropology*, edited by Tim Ingold. New York: Routledge, 1993, 255-260.

Onuki, Yoshio. "From Ritual to Ideology: Ritual Activity and Artistic Representations in the Northern Highlands of Peru in the Formative Period." In *Rituals of the Past: Prehispanic and Colonial Case Studies in Andean Archaeology*, edited by Silvana A. Rosenfeld and Stefanie L. Bautista. Boulder: University Press of Colorado, 2017, 79-102.

Polia Meconi, Mario. *La cosmovisión religiosa andina en los documentos inéditos del Archivo Romano de La Compañía de Jesús (1581-1752).* Lima: Editorial de la Pontificia Universidad Católica del Perú, 1999.

Salomon, Frank. "Beautiful Grandparents: Andean Ancestor Shrines and Mortuary Ritual as Seen Through Colonial Records." In *Tombs for the Living: Andean Mortuary Practices*, edited by Tom D. Dillehay. Washington D.C.: Dumbarton Oaks Research Library and Collection, 1991, 315-353.

Sapwell, Mark. "Understanding Palimpsest Rock Art with the Art as Agency Approach: Gell, Morphy and Laxön, Nämforsen." *Journal of Archaeological Method and Theory* 24, nº 2 (2016): 352-376.

Schama, Simon. *Landscape and Memory*. London: Harper Collins, 1995.

Sillar, Bill. "The Social Agency of Things?: Animism and Materiality in the Andes." *Cambridge Archaeology* 19, nº 3 (2009): 367-377.

Swenson, Edward R. "Competitive Feasting, Religious Pluralism, and Decentralized Power in the Late Moche Period." In *Andean Archaeology III: North and South*, edited by William H. Isbell and Helaine Silverman. New York: Springer/Plenum Press, 2006.

Taçon, Paul. "Internal-external: A Re-Evaluation of the 'X-Ray' Concept in Western Arnhem Land Rock Art." *Rock Art Research* 4, nº 1 (1987): 36-50.

Taçon, Paul. "From the 'Dreamtime" to the Present: The Changing Role of Aboriginal Rock Paintings in Western Arnhem Land, Australia." *Canadian Journal of Native Studies* 9, nº 2 (1989): 317-339.

Taylor, Ken. "Landscape and Memory: Cultural Landscapes, Intangible Values, and Some Thoughts on Asia." In *16th ICOMOS General Assembly and International Symposium: 'Finding the Spirit of Place–Between the*

Tangible and Intangible.' 29 Sept.-4 Oct., Quebec, Canada, https://www.icomos.org/quebec2008/cd/toindex/77_pdf/77-wrVW-272.pdf.

Thompson, Ian, Peter Howard, and Emma Waterson. "Introduction". In *The Routledge Companion to Landscape Studies*, edited by Ian Thompson, Peter Howard, and Emma Waterson. New York: Routledge, 2013, 1-12.

Tilley, Christopher. *A Phenomenology of Landscape: Places, Paths, and Monuments.* Providence: Berg, 1994.

Tolia-Kelly, Divya P. "Landscape and Memory." In *The Routledge Companion to Landscape Studies*, edited by Peter Howard, Ian Thompson, and Emma. Waterson. London: Routledge, 2013, 322-334.

Van Dyke, Ruth, and Susan Alcock. "Introduction." In *Archaeologies of Memory*, edited by Ruth Van Dyke and Susan Alcock. New York: Wiley-Blackwell, 2003, 1-13.

Van Dyke, Ruth. "Memory, Place, and the Memorialization of Landscape." In *Handbook of Landscape Archaeology,* edited by Bruno David and Julian Thomas. Walnut Creek: Left Coast Press, 2008, 277-284.

Wilson, Meredith, and Bruno David. "Introduction." In *Inscribed Landscapes: Marking and Making Place,* edited by Meredith Wilson and Bruno David. Honolulu: University of Hawaii Press, 2002, 1-9.

Wobst, Martin H. "Stylistic Behavior and Information Exchange." In *For the Director: Research Essays in honor of James B. Griffin,* edited by Charles E. Cleland. Ann Arbor: Michigan Museum of Anthropology, University of Michigan, 1977, 317- 342.