

Politics, infrastructure and non-human subjects:  
The Inka occupation of the Amaybamba cloud forests

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## ABSTRACT

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This dissertation presents the results of an archaeological study of the Inka occupation and transformation of the Amaybamba Valley, Peru, during the Late Horizon, just prior to the Spanish Conquest. This region lies among the dense cloud forests of the eastern Andes, and was situated at the northwestern edges of the Inka heartland centered around the former imperial capital of Cuzco. The main interest for the Inkas in the Amaybamba lay in its capacity to produce large amounts of coca, a plant which was the foundation of a great many exchange relationships across the Andes. Not only was it central to exchanges between humans, but also with the most important non-human powers of the Inka world. These powers included major landscape entities, such as the mountains (*apukuna*) and other kinds of earth beings (often in the form of rock outcrops, or lakes, known as *wak'as*). The main focus of this dissertation is the question of how these entities were made subjects of the Inka polity.

The broader theoretical framework that underpins my thesis is what I refer to as 'political ontology', from which I argue for taking a 'step-back' from more traditional (post-Enlightenment) accounts of politics which assume the state is a set of relationships between human actors only, and thereby consider the possibility of non-modern states in which other-than-human beings could be made into political subjects. The Amaybamba is thus presented as a case-study through which we can examine the empirical, archaeological traces of just such processes of subjectification. The Inka presence in the Amaybamba mainly took the form of a series of royal landholdings, which were associated with a number of aristocratic lineages within the empire. My arguments therefore have broader implications for how we understand the royal estate system more generally. In particular, I suggest that the royal estates - which appear from our Western perspective to resemble a series of elite-owned plantations - were in Inka eyes seen more as a means to discipline and control the productive capacities of a potent community of non-humans.

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Dedicated to the memory of Helen Boyd

## Chapter One: Introduction

This dissertation began as a project to investigate the crafting of political subjectivity in the Inka Empire. And in a sense, that is also where it ended. Yet the way in which I conceptualized that basic research aim changed considerably in the intervening time between the initial project design and the post-fieldwork analysis. To put it succinctly, the location where I had once thought to seek out 'Inka political subjects' was not the same as where I eventually found them. Many of the foundational assumptions that I held when I started were jettisoned by the end, and so in the background of my writing are numerous, albeit implicit critiques of my original research design. Because these critiques are implicit, they may not be so obvious to the reader - since dissertations (and most other scholarly genres) are usually presented as a *fait accompli*. They are intended to provide a convincing argument, and so the about-turns and revisions that almost always take place along the way are rendered largely invisible in the final representation

Admittedly, I will follow in that firmly established scholarly convention. So the subsequent chapters will present the final, considered arguments - rather than all the false-starts, early dead-ends and unproductive avenues of enquiry that abound in any archaeological research. However, I do wish to take this initial opportunity to briefly indicate how my understanding evolved between the beginning and end of the project. This step is important, in part because such 'reflexivity' seems a valuable exercise in terms of situating oneself with respect to the research carried out - and at least partially mitigates the detached, and apparently objective 'voice' that inevitably seems to dominate in most scholarly writing. But my

more specific reason is that I think my initial assumptions were fairly normative ones that are not uncommon in anthropology and archaeology. They reflected a certain kind of commonsense, and if science (in the broadest sense) is the effort to show how commonsense is a deeply insufficient source of explanation for the world, then it is our own unexamined premises that should be challenged first.

Moreover, my arguments throughout are clearly influenced by theory developed within anthropology and associated humanities disciplines. This engagement with global theoretical concerns that extend beyond the Andes – and in some cases beyond purely archaeological debates – is a quite open and explicit aim of this dissertation. However, with the deployment of theory there is often the risk that the theory constrains the evidence (rather than vice versa) and can predetermine the nature of the conclusions. In that sense, it is important to be explicit about how the initial theoretical propositions proved inadequate to account for the empirical evidence - and so illustrate how the theory had to be revised along the way. The theory was not unnecessary however, and in the end I do not believe I could have made the same kind of sense of the data without such a framework for its analysis. The following section will therefore briefly explain something of how the initial theoretical framework shifted as a consequence of the fieldwork carried out, as a background explanation to the broader arguments presented within the dissertation as a whole.



In my early desire to examine the nature of Inka political subjectivity, I had assumed that this exclusively meant the subjectivity of human beings. This assumption was not a conscious decision – rather it had simply not occurred to me (at that stage) that my study might be better served if I were to be open to the possibility that some political subjects might not necessarily be human, at least in the Inka world. Probably, it is the unconscious assumptions we make that are the most pernicious and most difficult to take apart. In thinking through the kind of political subjects that might have existed in the pre-colonial Andes, I was influenced by a variety of theoretical perspectives that have had considerable impact in the humanities and social sciences. Michel Foucault's (1995) notions of biopower, discipline and panopticism were particularly important in this respect.

Rather than conceiving of power (and subjectification) through beliefs, ideology and other abstractions, Foucault's approach centers on the human body as the locus for politics. He emphasizes how in such modern, Western contexts such as the prison, the hospital, the school and the asylum, individuals are collectively controlled through the manipulation of their everyday routines, bodily practices and activities. Over time these regulated behaviors become so deeply instantiated in the subject that they no longer require any external authority to generate them – the subject comes to govern itself, watch itself and even punish itself if it should deviate from the proscribed norms. The contrast with other influential approaches to power, such as Gramsci's (1992) notion of hegemony is marked here. Hegemony in a Gramscian sense is largely about power through the manipulation of values and ideas (in terms of their content) - rather than bodies and their ordinary, everyday spaces of activity.

For the archaeologist, one of the core attractions of Foucault's discussion of disciplinary regimes is that they rely on institutional frameworks that are materially very 'heavy'. We cannot conceive of the discipline imbued through the prison or the asylum without such things as wards, cells, walls, guard towers, gates and so on. Such shaping of the material spaces in highly organized ways is basic to the constitution of disciplinary power – and thus unlike, say, ephemeral ideologies, it seems to provide a much more archaeologically accessible framework for thinking about power in contexts with limited documentary evidence. Indeed, Foucauldian models of power have been deployed to useful effect by a range of archaeologists: Mark Leone (1995), for example, has considered panoptic manifestations of control based on observing people and their movements in contexts such as colonial Annapolis in the Eighteenth Century. Similarly, with respect to prehistoric North America, Graves and van Keuren (2011) have interpreted Southwestern Pueblo villages of the Fourteenth Century as deploying a 'panoptic gaze' as a means of materializing certain forms of power. Of course, the establishment of the infrastructures and institutions that make such modes of power concretely realizable requires powerful actors who can command considerable material resources and organized labor. In which case, the Inka State offers an ideal candidate for a prehistoric polity that could have potentially deployed such disciplinary forms of power.

Yet eventually I came to question the idea that I could locate the traces of such 'disciplined' human subjects in the context of Inka landscapes. In part this was simply an empirical problem: I could not locate convincing 'panoptic' settlements or institutions for regulating human bodies in the way that Foucauldian models predicted – or that some archaeologists have located in other contexts. I also realized that within the area of my survey,

the most intensive efforts of material control seemed to be directed at landscape features such as rock outcrops and hillsides. This observation precipitated a shift in my thinking, whereby I began to question if the 'disciplined subjects' in the context of an Andean empire might not be found in the kind of topographic entities that were core components of past Inka landscapes. The Spanish chronicles - which despite their many limitations remain an invaluable source of information on pre-colonial Andean societies - speak of many non-human actors that took central place on the Inka political stage. Mountains, rock outcrops and mummified bodies are ascribed speech, sentience and will no less than the many human characters in these early written narratives. That being so, surely it is far from inconceivable that the Inkas might have sought to control, regulate and order the bodies of these non-humans just as much as those of their human subjects. The final argument that I present in this dissertation still draws some inspiration from Foucauldian ideas of power and subjectification - in particular the centrality of regulated spaces and materially heavy infrastructure. However, it is the bodies of non-humans that are presented most directly in this dissertation as the focus of material (and hence political) manipulation. Elements that from a Western perspective might seem merely to be part of a merely physical landscape – entities such as mountains and rocks – were in Andean terms quite different things altogether. *Apukuna* and *wak'as* were powerful 'earth beings'<sup>1</sup> who needed to be assuaged, feted, fed and cajoled in order for the Inkas to attain their political goals.

The central questions that this study seeks to address are: how did the Inkas go about manipulating such non-human components of the landscape and how did they attempt to make them willing subjects within their empire? What do such efforts look like on the ground -

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<sup>1</sup> This apt phrase is one I take from the work of the Andean ethnographer Marisol de la Cadena (2010, 2012).

that is to say, archaeologically? Of course, it is not my intention to claim that the Inkas were unconcerned with the manipulation and control of human subjects - far from it. However, we would *assume* that the statecraft necessary to build and maintain a vast empire such as Tawantinsuyu would require complex and sophisticated means of drawing *human* subjects into its political sphere. Indeed, several generations of in-depth archaeological and ethnohistorical scholarship on the Inka Empire have offered deep insights into the nature of its politics and power machinations (e.g. Alconini 2008; Acuto 2005; Bauer 1996; Bray 2003; Coben 2012; Costin and Earle 1989; D'Altroy 1992, 2001; Dean 2010, Dillehay 1975; Gose 1996; Kosiba 2010; Kosiba and Bauer 2012; Morris 1995, 1998; Niles 1999; Rostworowski 1999; Schreiber 1987). Thus my goal here is to momentarily turn the spotlight on the relatively neglected non-human subjects, beings that within an Andean ontological framework were much more than mere geological masses or even places ascribed symbolic, religious significances. Doing so will require a certain artificial separation of humans from non-humans that is in itself not without problems. However, I think this a necessary, albeit temporary, step since the case yet needs to be made for integrating non-human actors into archaeological narratives of the polity and its operation. Thus my final aim is to demonstrate the literal reality of non-human political actors – as *subjects* and not simply objects or even agents – in the Inka world. The archaeological study of politics as an enquiry into how some humans came to dominate other humans is, in my view, still dominant and quite basic to the discipline – and so it is a self-conscious counter-narrative which I ultimately wish to offer. Political domination in the ancient Andes went far beyond the human equation. Indeed, the ‘anthropocentric’ understanding of politics I critique was present

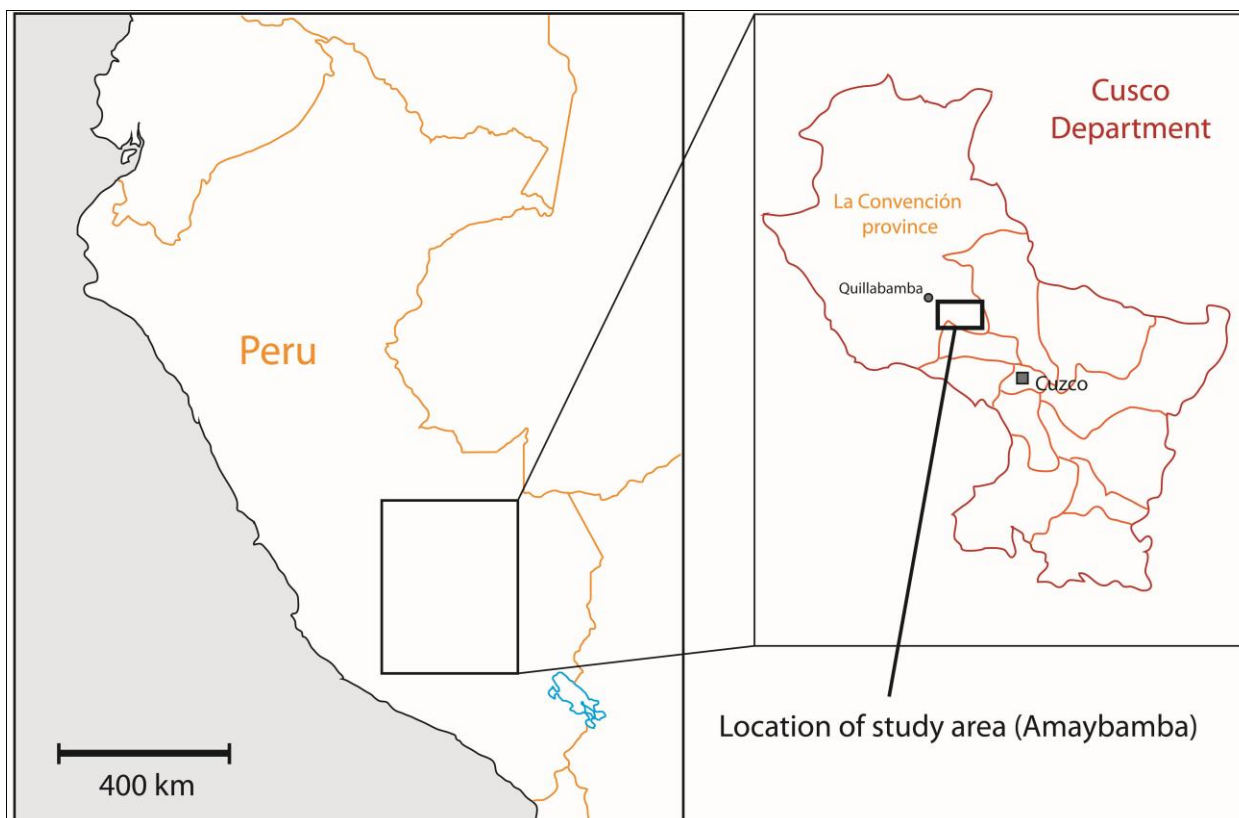
my own initial framework for approaching my fieldwork – in which sense, many of my arguments here are a counter to my earlier views as much as anyone else's.

### I. The Amaybamba: The Survey Zone and its Archaeology

The geographical focus of this research and the primary case-study through which the aforementioned themes are examined is the Amaybamba Valley - lying in the Peruvian province of La Convención and a part of the administrative subdivision of the Department of Cusco. The area is ecologically part of the eastern slopes of the central Andes, an ecozone known by various names: *montaña*, *Yungas*, *ceja de selva*, cloud forest and so on. In terms of elevation the Amaybamba valley floor runs between 1,900 and 1,300 meters above sea level and the immediately adjacent slopes mostly run to around 2,800 meters and beyond.

Prior archaeological reconnaissance (and parallel ethnohistoric research) has indicated that this region was substantively integrated into the Inka Heartland zone – more so than previously recognized. Despite being relatively 'remote' and inaccessible at certain points in the colonial and historic eras, it is now clear that it was extensively incorporated into the Inka Empire and partook of the heartland's infrastructural system. The character of that imperial occupation will be discussed in the following chapters; however it primarily reflects the fact that the Amaybamba Valley was extensively developed for coca leaf production by a range of royal lineages during the final decades of the pre-Conquest era. It was also an area (like many





**Figure 1.1.** *The general location of the study zone within Peru and the Department of Cusco.*

others in the Andes) which saw the large-scale transplanted of its population in favor of imperial state colonists, known as *mitmaqkuna*<sup>2</sup>.

The program of field research upon which this dissertation is based was known as the Amaybamba Archaeological Project (AAP), with the primary fieldwork having taken place during the dry seasons of 2010 and 2011. The course cut by the main river of the Amaybamba (running in a roughly east-west direction) and its surrounding watershed were the primary foci for the project itself – delimiting an area approximately 20 by 11 kilometers in extent (i.e. 220 square kilometers). The western limits of the survey zone are found where the main river of the

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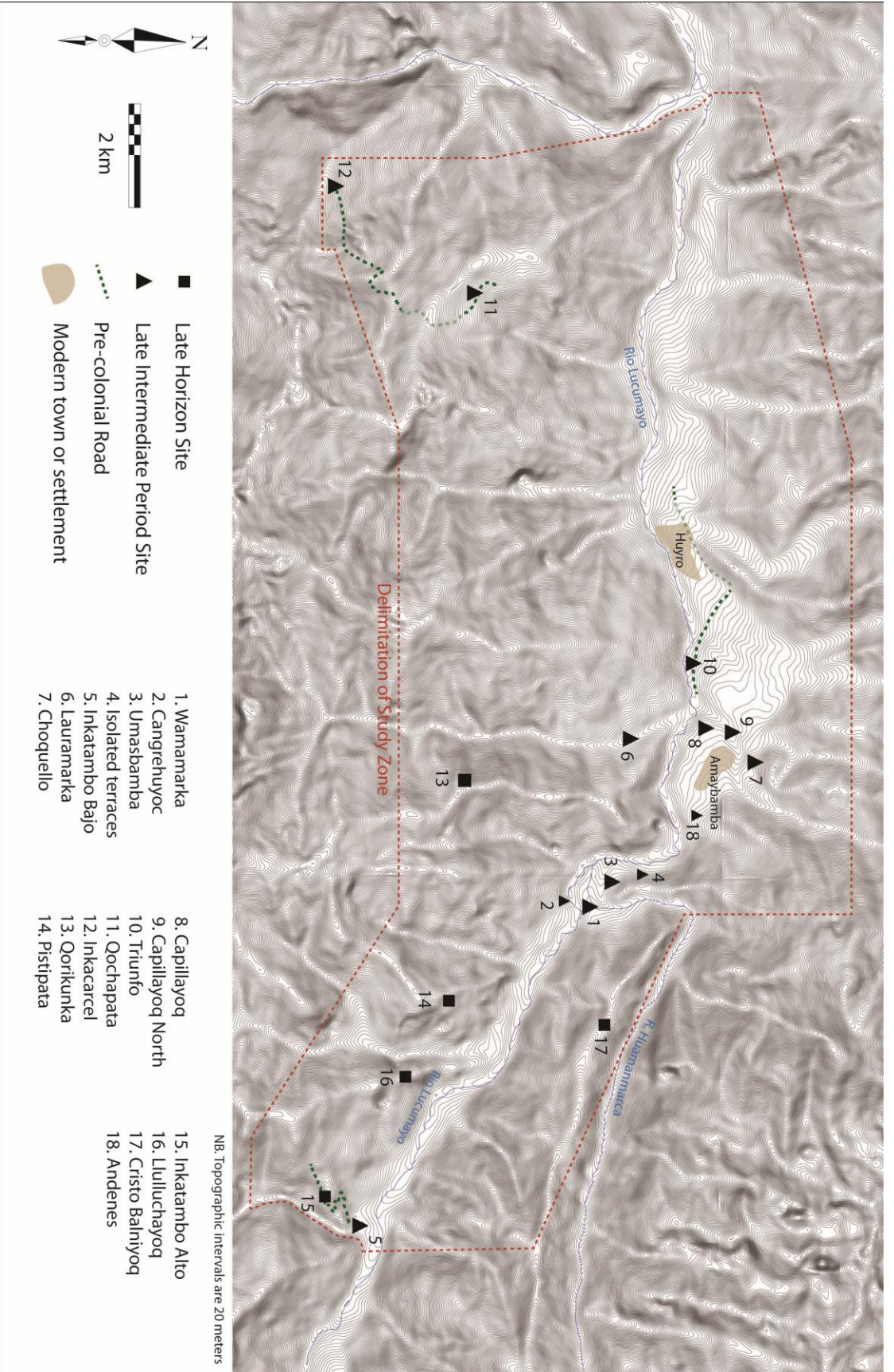
<sup>2</sup> In the case of the Amaybamba, these colonists came from the Chachapoyas region (see chapter four)..

Amaybamba reaches its confluence with the Río Urubamba. Thus the project was organized in spatial terms around a coherent geographical area, defined by topographical features and watercourses, rather than by its association with a discrete cluster of archaeological remains. The boundaries of the survey zone do not therefore necessarily reflect boundaries that are archaeologically meaningful, except insofar as pre-colonial populations would have had to engage with the same topographical features as exist today.

There has been very limited archaeological research carried out within the Amaybamba – and this is generally true for the wider Vilcabamba Archaeological Park that incorporates much of the province of La Convención (including the Amaybamba Valley). I am aware of two prior projects that have carried out archaeological reconnaissance in the region. As part of the Cusichaca<sup>3</sup> Project directed by Ann Kendall in the 1970s and 1980s, archaeological reconnaissance was conducted in the Amaybamba Valley. Data obtained from this research has been published by David Drew (1984) and four sites were located and partially recorded during this work: Wamanmarka, Inkatambo, Umasbamba and Cangrehuyoc. In the period 1997 to 2003, a regional archaeological reconnaissance project was carried out under Robert von Kaupp and Octavio Fernández Carrasco (2007) that identified a number of significant new sites throughout the broader Vilcabamba Region. Within the Amaybamba drainage specifically, the sites of Qorikunka, Cedroyoq, Qochapata (with the latter subdivided into two sectors) and Inkacarcel were noted by this more recent study. In addition to these eight sites, the AAP recognizes a further 10 locales with significant standing architecture of pre-colonial date. Thus

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<sup>3</sup> A site located in the Sacred Valley, some 58 kilometers northwest of Cuzco.



**Figure 1.2.** A map of the Amymbamba Valley, indicating the study zone and known site locations. Note also the areas of modern day settlement.. NB. Information on sites 16 and 17 was obtained from INC..

at present there is a total of 18 more-or-less discrete archaeological sites identifiable within the survey zone. I suspect this number will rise as future areas are cleared of vegetation and more archaeological research is carried out in the area. Only a quarter of these sites have been officially registered by the Peruvian National Institute of Culture (INC), however local INC workers are aware of most of the sites in the region despite their lack of official status as such.

## II. Methodological Note

The AAP was primarily conceived as an architectural and infrastructural survey, which sought to identify and record the extant pre-colonial archaeological remains within the study zone of the Amaybamba. However, unlike archaeological surveys carried out in the adjacent highlands, full coverage ground survey based on the traditional method of walking parallel transects is not a practical option in such an environment. Archaeological survey in tropical lowland conditions is often fraught with a range of logistical limitations that necessitate the use of what Aikens (1976: 11, cited Schiffer et al. 1978: 2) has described as 'methodologically unlovely techniques'. Full coverage survey is often economically unfeasible leading to a unavoidable reliance on 'biased' or 'purposive' methods such as interviews, perusing aerial or satellite imagery and the opportunistic targeting of zones of recent burning and clearance (Schiffer et al. 1978: 5). Predicting site locations based on prior knowledge is often more efficient than full ground coverage (Erickson 1995: 80), although this of course runs the inevitable risk of atypical sites or types of occupation being systematically missed. Given the dense vegetation and foliage at both the canopy and sub-canopy levels, the only sites that are readily locatable in such contexts are those with standing architecture and the kind of remains that one can literally stumble

across. Moreover, in the absence of large-scale anthropogenic disturbance which leads to the clearing of vegetation, adequate surface collections are usually impossible (Erickson 1995: 81).

Certain safety issues also require consideration while engaging in survey in the eastern Andes especially. There is, for example, the hazard of poisonous snakes which can lie in the surface vegetation and have been known to attack plantation workers who have accidentally disturbed them. Two potentially lethal species reside in the Amaybamba region – *Micruris spixii*, a type of Elapid and *Bothrox atrox* a kind of pit viper. Local agricultural workers recommend against entering certain areas of dense scrubland in the *ceja de selva* due to the tendency of these species to sleep in such locations. Additionally, illegal coca growing is still carried out in areas of La Convención and so moving across landscapes without due care and advice from locals can be dangerous – necessitating enquiries and consultations before seeking to survey unknown locales.

Consequently, field survey during the AAP proceeded via a mixture of informal and formal survey methods, depending on the exigencies of the environment in any given area. Informal survey methods deployed in the AAP followed those used by various other archaeological projects based in the heavily forested *ceja de selva* or *montaña* zones of the eastern slopes. Examples of this include the Chuquibamba Archaeological Project, which was a study of the pre-colonial occupations of the Chachapoyas region of northeastern Peru and relied primarily on interviews with local informants as a source of information. In the Chuquibamba Project, farmers and herders familiar with the region and its paths were the best guides with respect to locating standing architectural remains and other kinds of sites (Schjellerup 1997: 111). As Schjellerup points out, within the *ceja de selva* sites were only

locatable through the knowledge of local informants, and the vegetation was otherwise 'impenetrable' from an archaeological point of view. The reliability of such methods is largely dependent on a confluence of two factors: the degree to which local informants have traversed the surrounding landscape and their desire to communicate that information to outsiders with clipboards. Naturally, both of these factors can vary greatly depending on the context. It should be noted in this context that survey primarily focused on the valley floor, where the majority of the present population resides and where their agricultural lands are located. In general, the valley sides are too steep for crops of any kind, although grazing of livestock does occur on the slopes.

Once sites were successfully identified through informal methods, it was possible to shift to full coverage ground survey in order to determine the extent of those sites; it being the case that many complexes were extended across relatively large areas and not always densely aggregated or composed of intervisible structures. Formal transect survey was carried out around areas with known architecture in order to locate associated structures that were nearby. Transect widths varied depending on local vegetation conditions, but 3-5 meters was the usual standard employed where possible. Once no new structures were noted within a zone of 30-50 meters (or a topographic barrier was reached) around a group of structures, it was possible to 'bound' an area (for the purposes of classification) as a single site complex. However, given that much of the occupation of the Amaybamba valley floor during the Late Horizon was associated with an integrated set of royal coca lands, these 'sites' may reflect more of convenient archaeological label rather than being discrete settlements from the perspective of their inhabitants.

Following the categorization of particular sectors or architectural clusters as sites, these were mapped using a traditional Brunton compass and tape method. Often, the dense vegetation and consequent lack of intervisibility between structures necessitated the mapping of several groups of buildings separately, and then reconstructing their wider spatial relationships afterwards using GPS datums. In order to minimize errors, GPS datums with respect to each site were plotted during the same day, and with as small an intervening time interval as possible.<sup>4</sup> Lacking a detailed topographic base map or equipment such as a total station, it was not possible to produce digital elevation models on-site. A more 'low-tech' method was therefore utilized to produce topographic data. Transects were set up around architectural clusters and a line-level was attached to a string along each transect line to maintain horizontality. Using a Brunton compass and tape, it was noted where an elevation change of one meter occurred along each transect. This permitted a series of topographic points to be plotted, that could then be connected in order to create topographic lines. In effect, this technique mimics the construction of topographic maps as generated via three-dimensional total station points within an XYZ-grid, although obviously tape and compass measurements cannot achieve the accuracy afforded by a laser theodolite.

Following the mapping of architectural groups and sites, further documentation was then carried out at each location. Structures were assigned an alphanumeric code of the form S-xxx. These designations refer to built interior spaces which may or may not have internal subdivisions, and were classed as a single architectural unit. In most cases, each rectilinear structure (these comprising the vast majority) was assigned an individual S-number. Structures

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<sup>4</sup> Due to shifting satellite positions, GPS points taken around the same time will normally exhibit less error relative to each other than points taken on different days.

that were likely enclosed, roofed buildings and those that appeared more like open-air enclosures were in both cases assigned unique S-numbers. Each structure was documented through photographs, quantitative measurements of dimensions and qualitative observations with respect to construction techniques, alterations, environmental and preservation conditions, architectonic features and so on. In some cases profiles were drawn of selected portions of a structure to document particular features or masonry styles.

The survey of the roads system proceeded along different lines due to their being much more spatially extended archaeological features than architectural groups. Identification of potential pre-Columbian highways primarily relied on satellite imagery showing paths and lines cut through areas of modern vegetation. The fact that such linear traces are visible today indicates that they remain in use to some degree by contemporary populations – as the vegetation would quickly obscure an unused and unmaintained path. Indeed, if an Inka road in the region saw no present-day usage, then it would almost certainly be invisible without large-scale clearing of vegetation and surface soil. The AAP followed potential pre-Columbian pathways and sought to confirm their antiquity by associating them with Inka-style construction features and infrastructure, or through their direct association with pre-colonial sites. Such roads and their incorporated features were mapped using GPS devices, and individual portions were cleaned and gridded-off, to be planned and finally photographed.

### III. Outline of the Argument and its Structure

In terms of the structure of this dissertation, it seems useful to point out from the very beginning that the presentation here takes the form of a *thesis* in the classic sense of the term.



That is to say, the dissertation offers a particular argument - albeit one that has multiple overlapping and interweaving threads - and provides my personal views on how we might productively think about Inka material culture insofar as we are able to access it archaeologically. Archaeological materials derived from the AAP survey will be deployed throughout to substantiate and illustrate the claims that are made within the dissertation – and these will be contextualized with frequent reference to other archaeological studies and ethnohistoric and ethnographic research pertaining to other regions. For reasons of lucidity and clarity, a full account of the data obtained from the AAP is not therefore summarized in the main body of the text.

Chapter Two is intended to introduce the Amaybamba landscape as a socio-ecological and historical actor. The chapter is also presented – deliberately - in reverse chronological order, beginning with the contemporary past, and moving backwards into the pre-Inka era. However, the Late Horizon (Inka) period is not dealt with in this chapter, as this is the primary concern of all the ones that follow it. The aim of Chapter Two is to present the Amaybamba landscape as dynamic and changing actor in both its ecological and historical character. Indeed, I suggest attempts to draw a sharp distinction between these social and natural facets is largely futile and a task necessarily dependent on a certain degree of reductionism. What we might perceive as the environmental ‘setting’ or ‘background’ of the Amaybamba landscape is fully emergent within and through its socio-historical context, and vice versa. So, with respect to its environment and its history, neither can truly be said to precede or foreshadow the other. Two main sources are drawn upon in this chapter: the ethnographic and historical research that has been carried out there (to elucidate the historical-era occupations) and the archaeological

research conducted under the AAP (to address the nature of the Late Intermediate Period settlement).

Chapter Three is primarily a presentation of the theoretical framework of the dissertation, and outlines the core themes which it seeks to address. It centers on what I call 'political ontology', dealing with the question of what actors constitute the polity at the most elementary level. For our modern nation-states this elementary actor is the liberal human subject – a being idealized, crafted and sustained by post-Enlightenment political philosophy and post-Enlightenment institutions. Of course we would not expect such an entity to be the basic political foundation of a non-modern Andean empire – and so this entails a discussion of the second major theme: alterity, that is to say radical difference. Building on the arguments of a number of scholars, such as Bruno Latour and Eduardo Viveiros de Castro, among others, I outline in this chapter the use of moments of alterity – where we encounter things that do not make sense from our modern perspective - as the basis for framing the overall analysis. Put another way, I suggest that the elements of Inka politics that strike us as most alter are key signposts in the effort to reconstruct Inka politics in new ways.

Chapter Four is the longest chapter by some margin, and presents the core arguments of the dissertation. It considers the Inka occupation of the Amaybamba as part of the royal estate system, comparing its more and less monumental sectors that are arrayed across the landscape. Broadly speaking, the chapter seeks to answer two questions: how were non-human subjects subordinated in the Amaybamba Valley? And what was an Inka royal estate? In my analysis, the second question emerges as the primary answer to the first. Chapter Six therefore presents a revisionist interpretation of the royal estate system of the imperial heartland. In it, I

suggest that rather than emphasizing the aristocratic landholdings as either an economic phenomenon with religious and political elements, or a politico-religious phenomenon with economic facets – we should seek to more fully recover the ways in which the estates operated in the Inka world and within indigenous Andean ontological frameworks. My argument is that the royal estates both instantiated and regulated a core political relationship between two potent groups: the *apukuna* and the *panaqas*. The *apukuna* were the powerful earth beings or mountains of the Cuzco area and the *panaqas* were the key royal lineages and highest elites of the empire. One was a set of humans and the other a community of non-humans, and the fates of both sets were intertwined in terms of their political roles. The material remains of the Amaybamba are thus presented as a material means of manipulating, controlling and disciplining the bodies of the mountains: a key set of political constituents of the Inka domain. Through the architectural and infrastructural traces we read as a royal estate, the Inkas sought to regulate the productive capacities of the earth beings, and thereby realign their labor so as to further their imperial project.

Chapter Five presents the data obtained from the survey of the pre-colonial road network of the Amaybamba, focusing on the three surviving highway segments that were recorded in detail. This chapter also addresses the political dimensions of such road networks, and so considers some of the more idiosyncratic aspects of the Inka highway in the region – especially is adaptation to a lowland, forested environment. It is argued that even in the apparently mundane tasks of road cleaning and road maintenance we can see the microcosmic practices that constituted the power of the Inka Empire. This aspect of power dynamics, I

suggest, requires just as much attention as the ‘big picture’ perspective on road networks which integrate the polity (and further its political goals) on a macrocosmic, empire-wide level.

Chapter Six addresses the phenomenon of what I call ‘lithic subjects’ and so introduces one of the major non-human inhabitants of the Amaybamba, and considers the means through which they were materially manipulated under the Inkas. Two rock outcrops, housed within architectural compounds are dealt with in this chapter as examples of Inka interactions with landscape entities that were most likely *wak’as*. Within the chapter, I look at practices of housing rocks as a phenomenon common in a range of Inka contexts and consider how we might think through such material traces in terms of engaging with and producing non-human subjects.

Chapter Seven focuses on a particular site in the Amaybamba study region called Qochapata, and presents this Late Horizon installation as a likely example of a coca distribution center tied into the broader infrastructure of the empire. The material in this chapter offers some of the most direct evidence available for coca production and processing in the Amaybamba, drawing links with coca-production zones elsewhere in the pre-colonial Andes. Chapter Seven therefore places the Inka occupation of the study region in its wider context and frames the claims put forward in a number of the earlier sections of the dissertation, particularly chapters Four and Five.

Chapter Eight concludes the dissertation by seeking to frame its central claims within the larger context of the Inka Empire and Andean history and prehistory. In this vein, two wider contextualizations are offered in the final portion of the dissertation. One contrasts the way earth beings were treated in the heartland of the empire with those around Cuzco, while

the other takes a deep time perspective and charts changes in the treatment of mountains from the Middle Horizon to the modern era. In part, this is intended to indicate the value of the claims made in the previous chapters by showing their relevance to the interpretation of Andean prehistory more generally – beyond their originary case study. However, one final point is also worth emphasizing here: the task of drawing out the role of non-human actors in their Andean ontological frameworks necessitates drawing contrasts between ‘modern’ perspectives and ‘Andean’ ones. This is an inevitable product of an analytical mode which draws on moments of sharp alterity – a set of contrasts than tends towards binary representation. It also tends to produce idealized and even somewhat monolithic representations of the two sides of the binary coin; that is the basic *comparanda* of ‘modernity’ and the ‘indigenous Andes’.

While I am aware of the ways in which this binary mode is problematic, it is, I think a necessary and even productive analytical step along the road. That said, it also important (vital even) to disrupt that binary comparison in the final analysis, so that it remains a useful analytical *stepping-stone* and therefore avoids slipping into a reification that even more deeply inscribes an unsubtle divide between the modern and the pre-modern. This is precisely why the emphasis on alterity across time and space *within* the Andes is the final and necessary concluding component of the argument. To those readers who may think that at certain times throughout I am using a too facile conception of a monolithic ‘Andes’ as a counterpoint to an equally monolithic account of ‘modern’ ideas, I would only ask: bear with me until the end.

## Chapter Two: The Amaybamba in Time and Space

### I. The Amaybamba Now...

The Amaybamba Valley today lies in the Province of La Convención, which is the largest administrative subdivision in the Department of Cusco by some measure, covering some 48% of its total area. It is mostly made up of rainforests and cloud forests, unlike the remainder of the department, which is much more sparsely vegetated. The southern portion of La Convención includes the mountains and foothills of the Cordillera de Vilcabamba, while the northern half of the province consists of warm and humid tropical lowlands, much of which runs at elevations below 600 meters. Although the north of the province is relatively flat and topographically uniform, its southern reaches offer dramatic jagged summits interspersed with deep and balmy valleys. These are the last pinnacles of the Cordillera Blanca - the great eastern spine of the Andes - before it gives way to the vast forests of the Amazon that run all the way to the ocean. The Amaybamba is one of these deep clefts set in the eastern Andean foothills where the montane cloud forests shift rapidly into true rainforest. In Peru this ecological zone is known by the term *yungas*, a Quechua word meaning 'warm valley'. Temperatures along the floor of the valley vary little throughout the year, usually ranging between 20° and 24° Celsius during the day. There are two distinct seasons – wet and dry; the dry season is nearly uniformly so and typically runs from late April through to early November. For the remaining part of the year heavy rains are the norm and often a daily occurrence, leading to high levels of run-off that can

often be highly destructive to the local infrastructure – especially the highways that run through the region, whether ancient or modern.



**Figure 2.1.** *The Amaybamba Valley, looking northwest towards the Cordillera de Vilcabamba.*

Unlike the often much wider intermontane valleys of the central Peruvian highlands, the Amaybamba Valley is steep-sided - and its bottom is relatively narrow. This is especially the case along its eastern half where the valley floor seldom extends more than three to four hundred meters in width. There is a bend in the river almost midway along the valley, near the hamlet of Huamanmarca, after which point it widens out somewhat. Still, it is never more than two kilometers in width at most, and is often closer to one. The western half of the valley, due

to the greater areas of cultivable land found there, is the most populous and is today where all of its major settlements are located. The principal drainage of the Amaybamba is the Río Lucumayo which runs more-or-less in an east-west line; its name is a Quechua-Spanish hybrid that means 'crazy river'. In official documents and maps it is sometimes referred to as the Río Amaybamba, although that name tends not to be used very much by locals. Its waters are cold and carry glacial melt from the mountains lying only a few kilometers to the south and east. The headwaters of the Lucumayo arise in the nearby mountain range that separates the Amaybamba from the Urubamba Valley to the south, crowned by the snowy and windswept 5,882 metre peak of the Nevado Verónica. Standing at the edges of the riverbank, in several places it is possible to see the glacier that is its source lying only a few kilometers away. The course of the Lucumayo is not particularly long and runs for only thirty kilometers or so until it joins the more substantial Río Urubamba in the west.

The passage of the Lucumayo cuts a small, but steep gorge through the floor of the Amaybamba which is joined by a variety of tributaries that have produced a series of *quebradas* or side canyons. Due to the depth of the gorge the Amaybamba does not normally overflow its banks and so there is no alluvial soil development. The hillslopes above the Lucumayo and its tributaries are subject to intense erosion during the heavy rains and so underlying bedrock formations are often visible on the slopes where soils can be particularly thin. There are today four primary land use zones in the region:

- I) The gently sloping natural terraces of the warm valley bottom that overlook the course of the Río Lucumayo (1,300 – 2,000 meters above sea level). This area is



- primarily given over to cash-crop agriculture (tea, especially, and also coffee) and is interspersed with small towns and hamlets where the majority of the current population reside. The main dirt highway connects all the major settlements, running along the north bank of the river.
- II) The small and steep tributary *quebradas*, where topographically feasible, are also used for intensive crop production (1,300 – 2,000 meters above sea level). Compared with the valley floor, few people permanently reside in these areas; although temporary lodgings often exist to house people during harvest periods.
  - III) The steeper slopes directly above the valley floor which are not suitable for intense cultivation (1,900 – 3,500 meters above sea level). Originally dense montane forests, these areas are now subject to frequent and deliberate burning to encourage the growth of grasses suitable for livestock grazing. Only very small pockets of forest vegetation now remain.
  - IV) The highest slopes that are unsuitable for grazing due to the cold and sparse vegetation (altitudes above 3,500 meters). These are seldom visited by humans.

The main agricultural focus of the Amaybamba, and the region's primary livelihood and source of employment is the production of cash-crops for domestic and foreign export. The most important crop grown there (by some margin) is tea and the district capital of Huyro is a major centre for tea processing. In fact, the region is among Peru's most important tea growing zones and its products are consumed by people throughout the country. Often the most efficient means of conveying the exact location of the Amaybamba to friends and colleagues in Lima is to simply say: *Huyro; de donde viene el té...* ('Huyro; where the tea comes from'). The Huyro

brand is one of the oldest and most prestigious in the country, having been well-established for over a century and so is widely recognized by Peruvians. Tea is not the only agricultural product grown in the Amaybamba of course, and coffee, plantains and citrus fruits are also frequently seen - especially in the lower and warmer parts of the valley. In the dry season, it is also quite common to see pastel-coloured mats of coffee beans sitting out in the sun. Agriculture seems the central activity that concerns people on a daily basis in the Amaybamba – and so is a basic frame of reference for understanding difference. Generally when people there ask me about my own country, and the place I come from, the majority of their questions center on what kind of crops we grow.

The present population of the Amaybamba is just under 6,000 people (according to the 2005 Peruvian national census). It would be a stretch to describe any part of the valley as 'urban' and the only settlement of any size is the aforementioned small town of Huyro, which houses the seat of the municipal government (for the District of Huayopata) and its various offices. There is also an ATM-less bank, a local church and the bustling Sunday market. The Inka past is still a source of much civic pride in the area and the town plaza contains a series of well-kept flower beds surrounding a statue of an Inka emperor in full battle dress. It offers by far the most visible and imposing civic monument to be found in the region. Many of the older locals will speak Quechua when talking among themselves, while Spanish is more commonly heard among teenagers. In the Amaybamba Valley the majority of the population consists of families that have migrated from the adjacent highlands in the last half-century or so, and so their Quechua dialect is similar to that found in the environs of Cuzco. My Peruvian colleagues from the city who speak Quechua find the local version reasonably familiar and easy to understand. A few of

the wealthier residents – descendants of the old *hacendado* class - maintain permanent Cuzco addresses and often make a point to convey the depth of their European ancestry in casual conversations.



**Figure 2.2.** *A platform used for drying coffee beans, near Huyro.*

The Amaybamba valley is currently undergoing some fairly substantial changes in terms of its economy and infrastructure. Much of this has been precipitated by the construction of a major new highway running through the Amaybamba, the aim of which is to connect the cities of Cuzco and Quillabamba with a paved road suitable for the movement of land goods on a much larger scale. The projected level of financial investment in this project is 295 million Nuevos

Soles (approximately 115 million United States dollars), mostly underwritten by the national government. The destruction of archaeological remains in the process of this development is likely to be unavoidable. The lowland terminus of the new road is Quillabamba, the self-styled 'city of eternal summer': it is a budding jungle metropolis of some 30,000 inhabitants, increasingly awash with money from coffee, chocolate, tea and less openly, narcotrafficking in coca. Its agricultural hinterland is considerable and highly productive, sustaining a population of some 200,000 people<sup>1</sup>. And it is increasing all the time as migrants from both the central Andes and Amazonia converge on the area in search of work.

Relative wealth and growing prosperity are certainly the surface impression one gets working in the region. And of course the new highway represents, among other things, a desire to increase the flow of lowland agricultural produce into the much more urbanized southern half of the Cusco Department, not to mention the rest of Peru. Today, then, the Amaybamba serves as one of the main conduits between the Peruvian highlands around Cuzco and the rainforests, just as it did in pre-colonial times. The occasional transport strikes which close the highway to all ground traffic are a reminder that without the Amaybamba road, there are few other means of overland passage into the Cuzco area (and none that are easy). Yet, the present state of rapid economic development in the province of La Convención masks some very recent memories of land disputes, social tumult and at times quite horrific episodes of violence. The middle and later Twentieth Century was a time of much socio-political transformation in this part of the

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<sup>1</sup> Population sizes are taken from the city of Quillabamba's official website (Quillabamba, la Ciudad del Eterno Verano..., <http://www.quillabamba.weboficial.com/>, accessed March 12 2013).

Andes, and the forces that were set in motion have still not passed fully into the realm of history.

Starting in the late Nineteenth Century the broader La Convención region was a significant frontier for increased economic development under the direction of the (at that time) long-dominant social stratum of the *hacendados* – the quasi-aristocratic class of landowners that were primarily of European descent. From the early 1800s, various new haciendas (plantations) were established throughout the province, concentrating originally on coca and sugar cane as the primary cash crops. At the behest of the *hacendados*, the national government constructed a mule-path in the 1890s that served as the primary conduit for travel between the highlands and lowlands - and in the 1930s a railway connection to Cuzco was added, leading to a rapidly rising population throughout the region. Under the haciendas the socio-economic system was one which Hobsbawm (1969) has described as a mode of 'neo-feudalism'. The *hacendados*, as the nominal landowners, rented land to a tenant class known as *arrendires* who were required to pay a contracted amount of labor service in exchange for access to the land. The Amaybamba Valley was fairly typical in this respect and was home to two significant *haciendas* (Huyro and Huayopata), which in the early 1900s primarily grew coca and sugar, while also investing to a high degree in cattle ranching (Hobsbawm 1969).

By the middle of the Twentieth Century however, the agrarian economy had already started to move down a markedly different path, shifting away from the traditional sugar and coca regimes to produce the modern cash crops of tea and coffee. This was particularly true in the Amaybamba, where tea production very rapidly became dominant. This alteration in the basic

crop regime was to feed into a complex set of socio-economic transformations by the early 1950s. It was also a significant change in a valley that since the beginning of the Fifteenth Century had been primarily associated with the production of coca leaf above all other crops - a development representing (among other things) its increasing entanglement in a global economic system of commodity exchange that would extend well beyond the Andes. In the 1960s widespread activism by the peasant class, and a rise in leftwing, Trotskyite ideology, led to an organized resistance movement against the dominant *hacendado* class (Hobsbawm 1969). This was frequently met by considerable violence by state authorities. The events in La Convención received national (and international) attention and helped provoke the agrarian reforms of the 1960s and 1970s. Consequently, much of the hacienda lands of La Convención were transferred to their tenants, the *arrendires*, including those located in the Amaybamba. In 1970, the production of tea, the Amaybamba's major cash crop, fell under the organization of the newly-formed Huyro tea co-operative, an organization which by 1979 had some 1,509 individual members (Huizer 1983).

Even though the production of coca leaf no longer dominates the Amaybamba itself, it continues to have a considerable impact on the Province of La Convención (and, as many would argue, the entire socio-political climate of Latin America). Coca production remains legal in Peru of course, although since the 1980s the context of the United States' War on Drugs has rendered it a politically complex aspect of the national economy. The present-day growing of coca leaf in La Convención (as it is everywhere) is entirely under the direct supervision of ENACO (Empresa Nacional de Coca) - at least in theory. This company is the only Peruvian

organization that is permitted to engage in the commercial production and distribution of coca and coca-based derivatives. Growing coca outside the auspices of ENACO is therefore illegal.

There is in practice, however, a huge amount of 'unofficial' coca growing and trafficking, especially in more remote regions. It was coca that first attracted the Inkas to the La Convención lowlands five centuries ago, and the light aircraft that occasionally buzz overhead (in part of the world that has no commercial airports) serve as a reminder that the leaf has from ancient to modern times always been central in the wider region's political economy<sup>2</sup>. Just as it was in the days of the Inka and the Spanish after them, the Amaybamba lies within, but still near the always fuzzy edges of the state's effective control. While my fieldwork was ongoing, an archaeological colleague emailed me to say that he had been forced to suspend his project only a few kilometers deeper into the lowlands (in the Vilcabamba area). Despite his having all the necessary permits, the threat from narcotraffickers was too great. Sometimes it is hard to tell, if that lawlessness is a product of the coca or whether the coca flourishes in the absence of the law.

At one point during my survey in the Amaybamba, a landowner appeared and while speaking to us, demanded we leave his land immediately and not return. All the necessary permits we had obtained from the National Institute of Culture (which in the eyes of the state allowed us unrestricted access to the land) were of little use, and so it was necessary to abandon that particular tract of the survey. Discreet enquiries indicated that coca was being grown without the permission of ENACO in that area, and so this was the probable source of the landowner's

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<sup>2</sup> Light aircraft are used by narcotraffickers to evade the government searches for illegal coca at road checkpoints. One such checkpoint is located at the western entrance to the Malaga Pass, as one departs the Amaybamba in order to enter the highlands around Cuzco.

concern. Outsiders, especially ones carrying clipboards and GPS units were not welcome where the leaf was being cultivated without appropriate permission and oversight. Although in this context it was probably for personal use, rather than wider sale, the illegality of unsupervised coca production in Peru rendered our archaeological research potentially dangerous and so left the notional state support for our activities effectively void. This is but one minor example of the ways in which the presence of coca can generate localized lacunae in the effective exercise of central authority. A much greater case is that of the revolutionary Maoist guerrilla group, *El Sendero Luminoso* ('The Shining Path') that sought the overthrow of the Peruvian government in the 1980s and 1990s, and for a time, was in effective control of much of the central highlands – especially the more rural areas. In the 1980s, illegal coca production was much more profitable than growing other cash crops, and as a result provided the basic funding that fueled the Shining Path (Kay 2008).

In such a context, it is interesting to reflect on the fact that the coca plant itself (*Erythroxylum coca*) has not changed to any great degree in terms of its physical properties over recent centuries. Its botanical characteristics remain for the most part similar; for example in terms of the climatic conditions that favor its growth and the production of its main pharmacological and psychoactive element – the alkaloid compound Benzoyllecgonine – in its leaves. Under the Inkas it has been claimed that coca was essentially a royal monopoly, forbidden to non-elite communities within the empire. This purported monopoly has been shown to be a false claim by Parkerson (1983), but regardless of how controlled its consumption and production may have been during that time, it is certain that coca was a central element of Inka statecraft – perhaps greater in importance than any other crop, save maize.



Today it is quite different. As one follows the modern road back to Cuzco, tracing almost the precise route that the Inka highway took over the Malaga pass, the customs officer who searches your *combi* for coca leaf underscores that you are once again re-entering the highlands, *la sierra*, and the tighter embrace of the state. As one continues on the journey over the pass, excellently preserved Inka structures and storehouses suggest that such checkpoints on this road are nothing new. And yet it seems strange that the coca plants in the Amaybamba were once one of the fundamental resources that bolstered and sustained the pre-colonial state in Peru, while in the twenty-first century they instead actively generate the limits of the contemporary state's control. I did just suggest that coca, as a physical entity, has not changed much over the centuries – even if its relationship to the state had altered dramatically. But even that is not strictly true. Now that coca has shifted from being a staunch ally of the state in the central Andes, to a much more uncertain actor and indeed a frequent enemy of central authority, its physical properties are shifting to accommodate this new role. For example, recent news reports offer rumors that new strains of coca have emerged in Bolivia, apparently resistant to the traditional herbicides used in government eradication programmes (based on aerial crop spraying).

## II. The Amaybamba in the Wake of the Inka Collapse

If we take the relationship between coca and the state as our primary lens, the Twentieth Century was undoubtedly a time of major change. Another moment that was similarly transformative (and we might say catastrophic) was the period following the disintegration of

the pre-colonial Inka Empire and the emergence of the first (European) colonial order in Peru. The Amaybamba is of particular interest in this context because it was caught in the space between the Spanish Empire in South America and the last redoubt of Inka resistance in the Vilcabamba lowlands.

In 1536 a major confederation of indigenous warriors led by the disaffected Manqo Inka – a puppet ruler of Inka aristocratic descent that the Spanish had installed in Cuzco a few years before – laid siege to the two centers of European power in the Andes: Cuzco and Lima. Both attacks failed, and in retrospect were probably the last attempt to expel the *conquistadores* from the Andes that held any real hope of success. With the greater part of the former Inka Empire now firmly in Spanish hands, large-scale Inka resistance to their European usurpers had finally been broken. As a result, the complex social and economic system sustained by the Inka State that had rapidly started to unravel from 1533 onwards, was replaced by the increasingly formalized colonial order of the Spanish Americas (see Hemming 2003). Although there was now little possibility of the Inkas reforming their empire on the scale it once occupied, their resistance to Spanish rule did not end. Manqo Inka and his surviving band of followers fled the highlands around Cuzco and re-established a small, but independent Inka kingdom in the rainforest lowlands some 200 kilometers to the northwest of their former imperial capital. This ‘neo-Inca’ state lay just beyond the edges of the Amaybamba Valley, and indeed the western limits of the region, where the Lucumayo joins the Río Urubamba, emerged as the accepted frontier of the surviving Inka polity (Nowack 2006: 66).

The post-conquest era represents a major shift in the geopolitical situation of the Amaybamba as compared with its pre-colonial status. Under the Inka regime, it had hosted a considerable body of Inka royal landholdings and was simultaneously the gateway to the lowlands that lay beyond it. It was thus a frontier of imperial expansion in a zone where Inka power became increasingly diffuse as distance from the highlands increased. After the arrival of the conquistadores however, it became instead a sort of buffer territory that divided two intermittently hostile polities – namely the Spanish regime in Cuzco to the southeast and Manqo Inka's indigenous guerilla kingdom to the northwest. Nominally of course, the Amaybamba was claimed by the Spanish, but the degree to which the area was actually under their control may have been variable, especially in comparison to the adjacent highlands. For example there are several reports of raids being carried out on the Amaybamba by natives from the Neo-Inca Kingdom during the 1540s, and that there was likely ongoing sporadic conflict between the inhabitants of the Amaybamba and Vilcabamba valleys (with apparently limited Spanish involvement, or even knowledge) into the 1550s and 1560s (Nowack 2006: 64).

The historical study of the Pizarro family carried out by Rafael Varón Gabai (1997) also offers some interesting insights into the situation in the Amaybamba, especially in the decades following the collapse of the empire. From the mid 1530s onwards, Cuzco passed under the direct rule of the two junior half-brothers of Francisco Pizarro, Juan and Gonzalo, who jointly led the Spanish defence of the city against the 1536 uprising of Manqo Inka. Although Juan did not survive the events of 1536, the Pizarros oversaw the first efforts to develop a colonial system of land grants throughout the former Inka domain, much to their own personal gain. In 1539 the Amaybamba Valley and the labor of its indigenous inhabitants was given to Hernando

Pizarro as part of his personal *encomienda*<sup>3</sup>, along with the adjacent Vilcabamba region (Varón Gabai 1997: 245). Coca was almost immediately recognized by the Spanish as a valuable agricultural product and it is reported that Hernando Pizarro himself sought to develop the production of coca within his *encomienda* by forcibly removing natives resident at Ollantaytambo (also part of his personal grant) to the Amaybamba (Varón Gabai 1997: 249). With the fall of the Pizarros in 1548 after the failed conquistador-led rebellion against royal authority, the new representative of the Spanish Crown in Cuzco, Pedro de la Gasca, initiated a census of the now vacant *encomienda* of the Amaybamba Valley. This was to determine the appropriate levels of tribute required from its population. At that time, this was set at two hundred *cestos* (baskets of approximately 8 kgs) per *mita*<sup>4</sup>. Subsequent censuses set the tribute levels at 160 *cestos* in 1559 and then 144 *cestos* in 1561.

Since Spanish taxation obligations were based on the census count of the tribute-paying households in any given region, the steadily decreasing tax revenues obtained from the Amaybamba inhabitants between the 1840s and 1860s can almost certainly be attributed to a rapid post-Conquest decline in its population. This fits the overall picture we have available of the southern Peruvian highlands in the first century of colonial rule, a time of widespread

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<sup>3</sup> The *encomienda* ('entrustment') was the colonial system of labor extraction that emerged throughout the early Spanish Empire in the Americas. Originally arising in New Spain (Mesoamerica) and then spreading to Peru, it entailed the Crown granting rights to a nominated individual to extract labor tribute from the native inhabitants of a particular community and area. Under this system, the grantee or *encomendero* did not own the land directly, but rather had exclusive rights to the labor of its population. The holder of the grant was theoretically also required to instruct the native populations of his *encomienda* in the Roman Catholic faith.

<sup>4</sup> The Quechua term *mit'a* means 'turn' and refers to the labor draft instituted under the Inka Empire. It was revived under Spanish rule and developed to suit the needs of the colonial economy during the centuries following the Conquest. The period of labor service per *mit'a* could vary, but it was normally in the range of several months.

demographic collapse due to the introduction of Old World diseases, and the horrific consumption of human life in the Spanish extraction of indigenous labor. As Cook (1981: 226) indicates, the coca-producing regions of Gualla, Paucartambo, Amaybamba and Matinga were notable for their unusually rapid population decline in the early years of the colonial era, faster even than other regions undergoing such depopulation. In part this seems to have reflected the dangers of working in the coca-growing zones, which some contemporary authors estimated that roughly six out of every ten workers sent to the coca fields died (Cook 1981: 225). The proximate causes of this high mortality level was likely the lack of resistance the highland Andeans had to lowland diseases, particularly Leishmaniasis (Gade 1979). The primary pathogen vector of the disease is the sandfly and it is endemic to the lower slopes of the eastern Andes at altitudes below 2,400 meters. Based on the early colonial reports of the kind of symptoms that were manifested in coca workers in the *Yungas* of the central highlands, Leishmaniasis appears the most likely explanation for the larger part of the mortality associated with coca workers subject to forced labor (Gade 1979).

The Neo-Inca state disintegrated in 1572 when a Spanish army at the behest of the new viceroy, Francisco de Toledo, entered the Vilcabamba and crushed the last remaining pocket of independent Inka authority. Thus ended the various diplomatic overtures and exchanges that had been ongoing between the Spanish and Neo-Inca regimes (Julien 2007) for several decades. With the fall of the Inka kingdom in Vilcabamba, the Amaybamba ceased therefore to be a buffer zone between two radically different polities and became the lowland frontier of effective Spanish authority, as it had once been for the Inkas. However, by that time it had largely ceased to be a region for coca production. Indeed, the 1579 and 1586 census visits to

the Amaybamba reported that there were hardly any human inhabitants left and thus it had become, for the most part, a human desert.

Due to a combination of its proximity to Cuzco and Ollantaytambo and its agricultural potential, it seems efforts to repopulate the Amaybamba were already underway in the late sixteenth and early seventeenth centuries. Notably, in the 1610 account of Baltasar de Ocampo there is mention of an African slave revolt in the Amaybamba and adjacent parts of the Vilcabamba region (De Ocampo 1999: 26-7). African slaves had been a part of colonial society in the Viceroyalty of Peru since the very beginning, even arriving with the first conquistadores under Pizarro. By the later 1500s, the import of slaves had grown considerably and it was an explicit policy of the Spanish *encomenderos* to replace indigenous workers with African slaves in lowland regions, due to the aforementioned extreme mortality rates of highland natives engaged in forced labor at the lower altitudes (Bowser 1974: 19-21). As a subtropical coca-producing region, with sufficient numbers of African slaves to stage a major revolt, it appears that the Amaybamba was likely subjected to precisely this policy by the early 1600s – and so the Spanish sought to mitigate the labor shortages arising from the demographic collapse discussed above by replacing native labor there with that of enslaved Africans.

### III. The Late Intermediate Period Occupation of the Amaybamba

The earliest evidence for a sedentary population in the Amaybamba dates to the Late Intermediate Period (LIP) (c. 1000-1400 A.D.). However, the use of the label 'sedentary' should be understood as reflecting assumptions with respect to the degree of permanence signified by

the presence of stone-built architecture. Architectural traces of more ephemeral materials such as adobe or wood are unlikely to be visible to the archaeologist working in humid subtropical environments - unless they are relatively recent in origin. Similarly, the kind of evidence we might find in relation to much earlier periods of occupation - such as lithics dating to the Archaic period - are often extremely difficult to locate in a heavily forested environment. Ground survey in a tropical forest might reveal the presence of land modification, canals and structures (and even then not easily), but surface artifact scatters are almost always lost amid the dense sub-canopy plant growth. However, the lack of evidence for such things can hardly be taken to indicate that the Amaybamba was not inhabited or visited in the millennia prior to the Middle Horizon (c. 600 – 1000 A.D.); rather it should be understood that the exigencies of field survey in such an environment mean that only occupations leaving stone architecture are likely to show up archaeologically (at least without excavations).

The Late Intermediate Period in the central Peruvian highlands is traditionally the era that archaeologists associate with relative political disunity and the rise of small-scale polities that followed in the wake of the collapse of the great Middle Horizon empires of the Wari and Tiwanaku, and preceded the rise of the Inka state. For many Andean archaeologists, especially those who specialize in the periods prior to and following the LIP, it has been characterized as a time of 'balkanization' and 'incessant warfare' (Covey 2008: 289). Although these themes still feature heavily in the study of the LIP, present research priorities are shifting towards a stronger emphasis on regional variations and local trajectories (Bauer and Kellett 2010; Covey 2008). One of the major lines of differentiation that underlie regional transformations in the Late Intermediate Period is the variable impact of the preceding Wari Empire, and by extension,

the degree to which the LIP in any given region represents a 'post-collapse' moment (see Zovar 2012). For example in the Andahuaylas region (associated with the Chanka peoples) the earlier Wari presence appears to have been quite considerable, while with respect to the Late Intermediate cultures of the Jauja region it was much more limited (Bauer and Kellett 2010: 91; D'Altroy 1987, 1992).

With such variation in mind, the very recent discovery of Wari mortuary remains in the Vilcabamba region near Espiritu Pampa places our understanding of the Amaybamba's pre-Inka character in a state of uncertainty (Brian Bauer, personal communication 2011). It seems likely that just as the Amaybamba was the main route into the forested lowlands during the Inka period, so too would it have been a major axis of highland-lowland interactions during the Middle Horizon. Although Wari influence in the forest immediately beyond the Amaybamba has now been confirmed, the extent and permanence of their impact there remains an open question – one that will only be answered through future research. So, although I am unable to address the Middle Horizon developments in the Amaybamba (to the extent that they may have existed), preliminary indications with respect to the subsequent Late Intermediate Period occupation are available as a result of the AAP survey. In a number of respects the evidence for the pre-Inka occupation of the Amaybamba Valley indicates a fairly typical LIP settlement pattern and material culture, one which bears much comparison with the contemporary inhabitants of the higher elevation zones of the Cuzco Basin and Urubamba drainage.

Despite the increasing recognition that the LIP label covers much regional diversity, several core patterns are still widely accepted as broadly characteristic of the period and its material



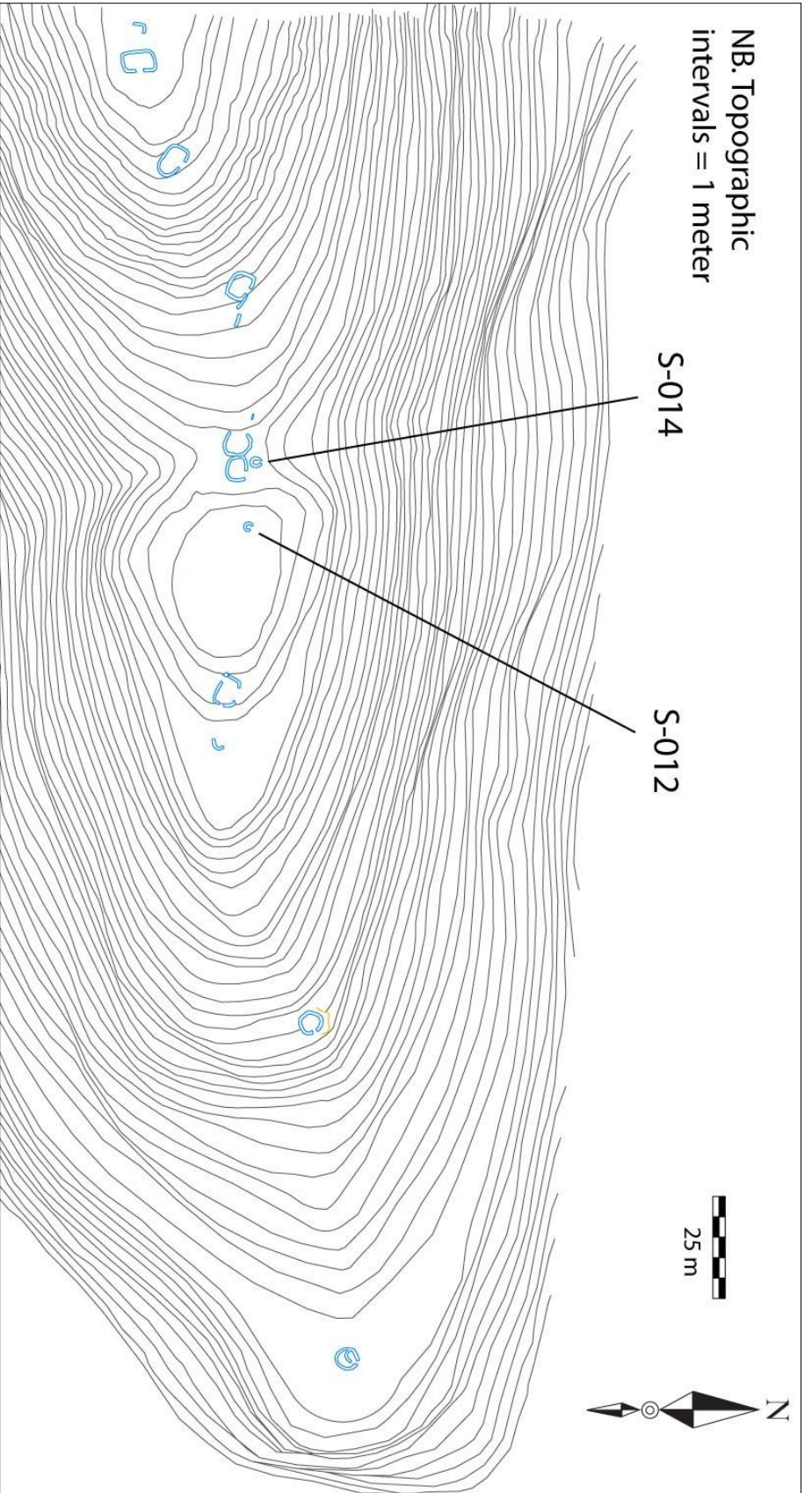
remains (see Covey 2008). These include **I**) a broad-scale shift in settlement away from valley bottoms towards higher elevations, with ridge-tops being the primary foci for settlements, **II**) a related move towards the cultivation of crops suitable for high-erosion, high-elevation agricultural zones on mountainsides and a decline in the use of deeper alluvial soils at lower altitudes, **III**) the emergence of a widespread mortuary tradition entailing interment of human remains in above-ground (or partially subterranean) circular tombs called *chullpas*; and **IV**) a general preference for circular and curvilinear residential structures. Additional commonalities might be suggested, such as the increase in fortified hilltop sites seen during the later LIP - however, this is a more regionally variable phenomenon than characteristics I-IV noted above.

It is possible for relatively secure LIP date ranges to be assigned to a number of sites in the Cuzco region based on architectural signatures alone, given the sharp and regularly observed contrasts between Late Horizon settlements and those from pre-Inka contexts. Circular architecture that appears to have fulfilled non-elite residential functions is virtually unknown in Inka contexts for the Urubamba drainage and Cuzco Basin areas. Indeed, the shift from circular to rectilinear residential buildings has been widely accepted as characteristic of the LIP to Late Horizon transition in the pre-imperial highlands around Cuzco (Kendall 1976, 1984). Thus sites with predominantly circular residential architecture can be strongly associated with the local LIP. Another corroborating LIP signature is seen in the aforementioned *chullpas* or burial towers. *Chullpas* of various types are a widespread development commonly attributed to the Late Intermediate Period throughout the central highlands, and have been associated with increased efforts to facilitate ongoing ritual exchanges between living members of human lineages and mummified ancestral figures (e.g. Isbell 1997). Using these positive indicators of LIP material

traditions and coupled with the negative evidence of absent Inka architectural canons (e.g. trapezoidal niches, rectangular architecture, and highly planned settlements), it is possible to consider a certain number of sites within the Amaybamba as representing the immediately pre-Inka occupation of the valley.

All known LIP sites within the study zone (a total of five) are clustered toward the eastern end of the Amaybamba drainage. Given the present impracticality of full-coverage ground survey, it is unclear if this concentration of LIP habitation in the eastern portion of the valley reflects a true preference for pre-Inka settlement locations, or is an artifact of the modern inaccessibility of certain areas in the landscape. However, the eastern end of the Amaybamba is more closely articulated with the Abra Malaga pass – the main avenue of communication between the Amaybamba and the Sacred Valley region – so it may well reflect a deliberate orientation towards the nearby LIP communities living closer to Cuzco. Additionally, all these sites are located within a similar and quite narrow elevational range (c. 2,400 – 2,600 m.a.s.l.) - on ridgetops overlooking the valley floor. Although there are several Late Horizon sites at similar elevations to these ridgetop settlements, no LIP sites are known from the relatively flat and warmer valley bottom.

Two ridge-top sites of Late Intermediate Period date were fully recorded and mapped in the survey. The first is Inkatambo Alto, so named to distinguish it from Inkatambo Bajo - the later Inka installation which lies at the base of the same ridge. The site is relatively small and



**Figure 2.3.** A plan of the structures at the LLP site of Inkatambo Bajo, and background topographic map. Topographic intervals are all one meter. Note the two smaller circular structures that conform to the chullpa type, indicated by the labels S-084 and S-086.

scattered, consisting of perhaps no more than thirteen individual structures in total. The structures either stand alone or are found in clusters of two or three, and are quite widely spaced along the ridge-top – with the distance between each group of structures ranging between 75 and 20 meters (see fig. 2.3). In plan, the structures are either roughly circular or appear as heavily rounded rectangles. The second Late Intermediate Period site noted in the survey is more extensive and is located on the east-facing side of a ridge that lies approximately four kilometers to the northwest of Inkatambo Alto. The area (and site) is locally known as Pistipata and it is located at an altitude of around 2,500 meters above sea level – an elevation consistent with other LIP ridge-top sites known in the area. It is comprised by at least twenty-five structures, all of which are similar to either the larger circular structures or the rounded-rectangular structures noted at Inkatambo Alto.

Among the more circular edifices present at these sites, two distinct variants can be distinguished. The smaller circular type is represented by two individual structures at the Inkatambo Alto, one of which (S-012) is considerably better preserved than the other (S-014). They appear to have been nearly identical in their construction and dimensions: made from locally-acquired pieces of unworked schist between 0.20 and 0.40 meters in length for the most part, and bonded with mud mortar. The better-preserved structure still has its roofing intact, which overhangs the structure's wall by 0.15 to 0.28 meters (see figure 2.4). The roofing of S-012 is a corbelled stone 'dome', although a relatively simple one – and is constructed from local blocks of schist, thereby taking advantage of naturally-occurring shape of the large and flat pieces of stone. Given the similarities between the two structures in all other respects, it seems a reasonable assumption that S-014 was originally roofed in a similar fashion. Measurements

taken of both structures indicate that they would have each offered a relatively cramped internal chamber, circular in plan and with internal diameters between 0.80 and 0.90 meters and a ceiling height of 1.04 meters. Both structures have north-facing entrances; the surviving entrance in S-012 is 0.95 meters in width and sufficiently large to have provided relatively easy access for an adult human. The roofed interior space afforded by these structures is clearly far too cramped for ordinary residential use and they fall within the range of characteristics seen in typical Late Intermediate Period mortuary architecture (*chullpas*), intended for interment of human remains. No human (or other such) remains were visible in these structures, although looting is not uncommon in such contexts.



**Figure 2.4.** *Tower-tomb (S-012) at Inkatambo Alto; seen looking south (left) and north (right). Scale is one meter with intervals of 0.1 meters indicated.*

Kendall (1984: 263) notes fieldstone funerary structures with corbelled dome roofs, generally circular in shape and roughly a meter in diameter at LIP sites in the Urubamba Valley, lying immediately to the south of the Amaybamba. These burial towers from the Sacred Valley area described by Kendall thus appear very similar in construction, form and dimensions to those

noted at Inkatambo Alto. No *chullpas* (or any other architecture that suggested a mortuary function) were noted at Pistipata, despite it being a larger settlement than Inkatambo Alto. The absence of funerary architecture at Pistipata seems telling, and raises the question of where the dead from that particular site would have been interred. It may have well been the case that the tower tombs at Inkatambo Alto were not intended solely for the deceased inhabitants of that site alone. In that case, these distinct settlements may have formed part of a wider community, where certain activities (such as burial and by implication, ongoing interactions between living humans and ancestral beings) were focused in specific locales.

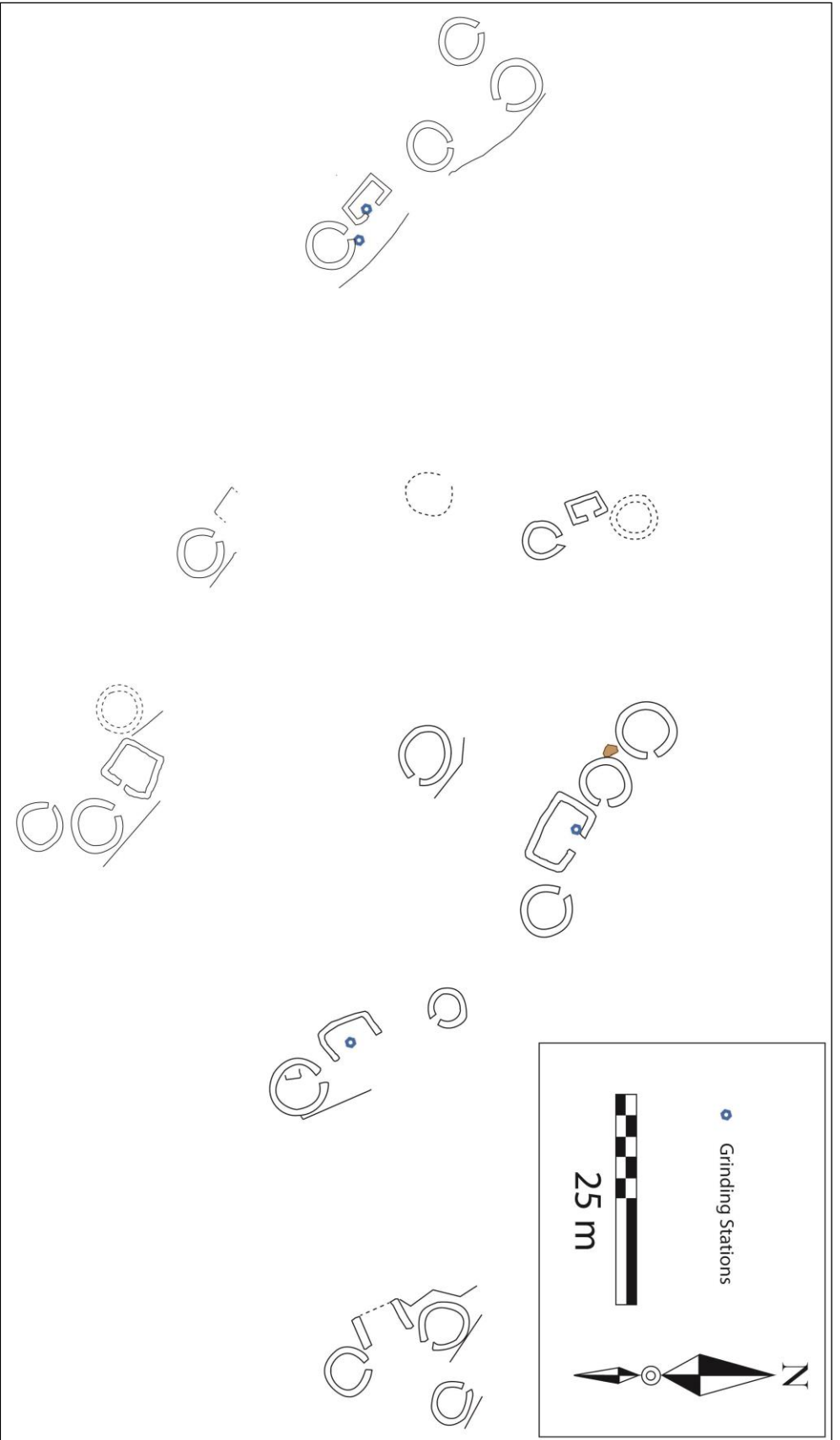
With respect to LIP mortuary architecture of the Amaybamba, the obvious comparison to draw is with the LIP settlements in the nearby Ollantaytambo area<sup>5</sup>. Kosiba's (2010) detailed analysis of mortuary traditions there indicates some significant differences from what we see in the Amaybamba. In the Ollantaytambo area there is a marked tendency for mortuary constructions to be clustered in discrete areas, separate and sometime physically walled-off from residential sectors (Kosiba 2010: 159-69). Kosiba interprets this as an attempt to control access to the dead as a basis for claims to local political authority by the living. The fact that the dead were spatially segregated, and thus not equally accessible or visible to all, implies that there were potentially social distinctions between the individuals who might make such claims to ancestor-derived authority. Yet at Inkatambo Alto in the Amaybamba, we see no such efforts to distinguish between residential sectors and mortuary sectors. The tower tombs sit side-by-side

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<sup>5</sup> The Wat'a Archaeological Project led by Kosiba (2010) offers the geographical area closest to the Amaybamba where the LIP occupation has been studied in-depth. The material cultural remains covered by the 'Ollanta Phase', a term which Kosiba uses to cover the local LIP presence in the Ollantaytambo region is probably the best contextual comparison for the Amaybamba LIP – being both spatially proximate and temporally related.

with residential structures and lack any evidence of being either spatially or visually sequestered with respect to other kinds of structure. How we ought to read this difference in the material evidence between these regions is unclear. However, if Kosiba (2010: 171) is correct in considering the *chullpa* phenomenon to represent an 'evocation of an essential relationship between people and the land, blood and soil... crucial to the contestation of both ancestral places and the authority that they manifested' – then in the Amaybamba these relationships appear to have been less tightly circumscribed by social elites. Here we must move onto somewhat more speculative ground; nonetheless it is tempting to wonder how the LIP inhabitants of the Ollantaytambo region might have viewed the admixture of mortuary and residential architecture found in a settlement such as Inkatambo Alto. Indeed, given their quite different and much more controlled approach to the spatial instantiation of the ancestors it may have seemed a radically more open, perhaps even distinctly 'egalitarian' way of sustaining the necessary bonds between across living and deceased generations. This leads us to consider whether or not the LIP communities in the Amaybamba consciously sought to sustain a different mode of interacting with their ancestors – one less based on restricted access.

The majority of circular structures at these LIP sites are not *chullpas* however. The much larger circular and presumably residential structures at Pistipata and Inkatambo Alto show some degree of variability in terms of their size - the smallest having an external diameter of 4.9 meters, while the largest measuring 7.3 meters in diameter. The various structures at Pistipata show a greater degree of (obvious) spatial patterning as compared with those seen at Inkatambo Alto. In particular, there seems to be a repeating architectural unit at the site consisting of between one to three circular structures in association with a single rectilinear



**Figure 2.5.** A plan of the LIP site of Pistipata, indicating the locations of structures and retention walls forming architectural terraces. Note also the presence of grinding stations. As indicated in the plan, there are at least six distinct architectural groups at the site, in the form of a group of circular buildings associated with a single rectilinear structure and a shared patio area.



structure, often sharing the same architectural terrace retained by masonry walls. This organizational pattern is not dissimilar to residential compounds that have been noted in other LIP contexts. For example, D'Altroy (1992) has recorded multiple circular residences oriented around central patio areas as a typical feature of both elite and commoner residences at sites associated with the Wanka II (1350 – 1460 AD) phase occupation in the Jauja region. However, unlike the Jauja LIP residential compounds, those in the Amaybamba were not formally delineated with walls.



**Figure 2.6.** *Typical masonry in the interior wall of a large circular structure at Pistipata. Note the use of the natural cleavage in the schist to give a 'faced' appearance.*

The larger type of circular structures at the Inkatambo Alto and Pistipata are constructed from blocks of locally-acquired and unworked schist, all bonded with mud mortar. Unlike the *chullpas* however, these structures show no evidence of having been roofed over with stone masonry. The flat edges of the schist, a consequence of its natural breakage pattern, seem to have been used deliberately in certain places to give the interior walls of the structures a 'faced' appearance without the necessity of having to actually work the stones with tools. One of these structures (S-089 at Inkatambo Alto) has a curved internal wall that subdivides its interior; however this is atypical of these circular buildings, and it is the only example of internal subdivision within any LIP structure surveyed by the AAP. In size and shape, these circular edifices are all fairly typical of Late Intermediate Period residential architecture. Almost all have a single north-facing entrance – the entranceway in S-089 is typical, with a width of 1.02 meters. At Pistipata, the entrances generally open onto the interior of the patio spaces that lie between the various structures, indicating that these were likely central spatial foci for the inhabitants of the adjacent houses. The walls appear to have ranged from 0.40 to 0.80 meters in height for most of these residential structures. Given that the heights of the extant structures appear fairly uniform, these walls are probably close to their original size and have not collapsed substantially since abandonment. The upper portions of the structures would therefore have likely been constructed from ephemeral materials that have not survived – presumably adobe or wood.

The available artifactual evidence also suggests that within the 'patio groups', there may have been a functional distinction between the rectilinear and circular structures. Four *mano y metate* stations (i.e. a grinding stone and a grinding surface) were noted at Pistipata, and so

provide evidence of on-site processing of plant materials (see figs. 2.5 and 2.6). The fact that these were used as grinding stations is evidenced by the slick surfaces of the base rocks, clearly a product of long-term abrasion with another stone. Of the four grinding stations, three were located inside separate rectilinear structures, near their entrances (the fourth was not inside a building, but between a paired circular and rectilinear structure). One likely interpretation of



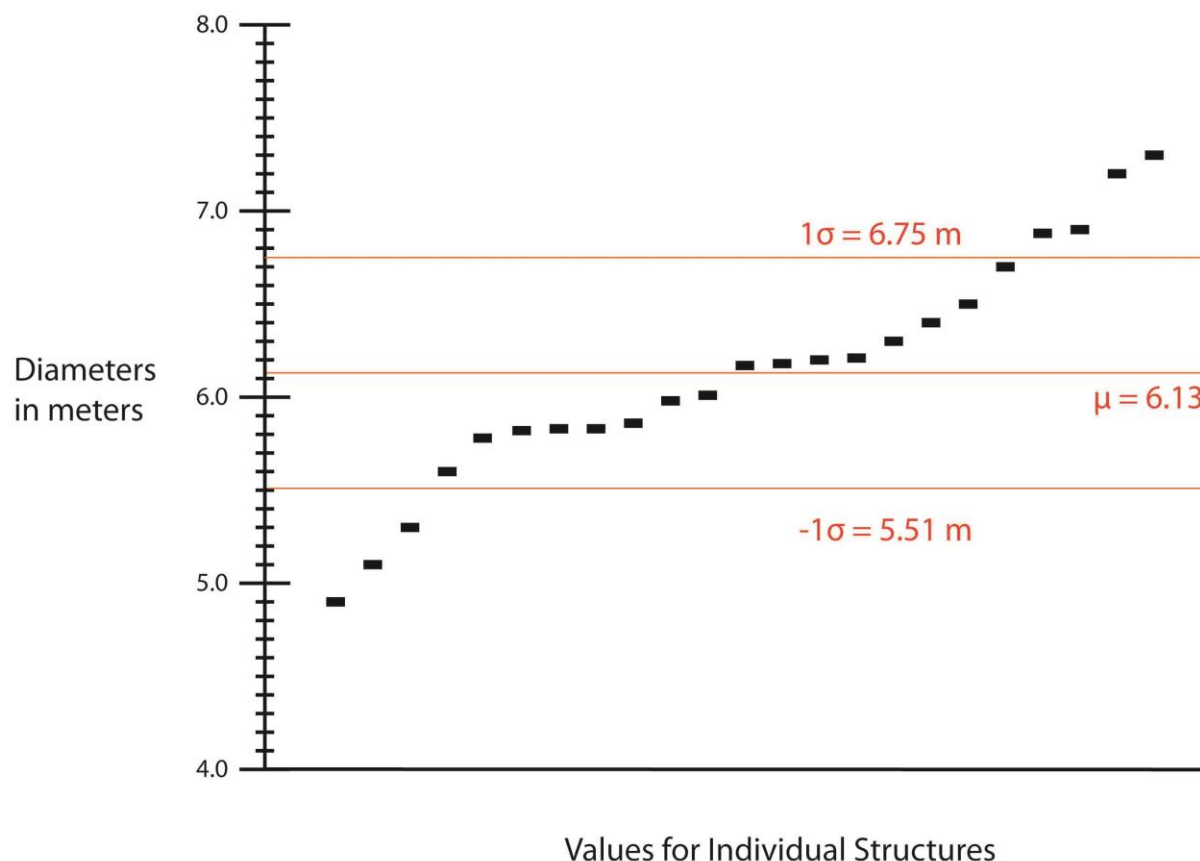
**Figure 2.7.** *Manos y metates from the LIP site of Pistipata. All scales are one meter with 0.1 meter intervals.*

this patterning is that each cluster of between one and three circular structures represents a set of residences for a particular group of associated individuals, perhaps several closely-related

families – or different generations within a single family unit. Each of these residential clusters seems to have shared a single rectilinear space that was located at the centre of their living area, possibly for processing grain and other shared work activities to do with foodstuffs. An analysis of excavated materials would be necessary to explore this issue in greater detail; however it is interesting to note that the smallest unit of residence (as defined by each individual circular buildings) and certain forms of labor (as seen in artifacts associated with plant processing within the shared rectilinear structures and patio spaces) appear to have been organized at different scales. In other words, multiple units of residence (i.e. houses) appear to have shared a single space associated with a particular kind of labor or subsistence activity throughout the site. This might be taken as evidence then that certain forms of labor were shared across groups of people larger than the residential units identified by each individual house structure.

As indicated in figure 2.7, despite some variation in the size of the circular residential structures, there appear limited grounds for attributing any marked status differentiation to the populations living within either Pistipata or Inkatambo Alto, at least on architectural grounds. The diameters of the larger circular structures were shown to be quite tightly clustered around the mean (6.13 m), with a standard deviation of 0.62 m. Moreover, despite being clearly discrete entities, the architectural ‘patio groups’ at Pistipata show limited variation in terms of their elaboration or scale – and thus presumably reflect sub-communities all of fairly equal status. Set alongside the seemingly ‘open’ emplacement of ancestral beings at the nearby site of Inkatambo Alto, the balance of the available data suggests that the LIP communities in the Amaybamba existed within relatively non-hierarchical communities. Certainly there is no

reason to suggest that the Amaybamba communities were substantially embroiled in the developing polities emerging in the Cuzco region and which foreshadowed the rise of the Inka Empire. Indeed, the Late Intermediate Period presence in the Amaybamba appears to have been fairly typical in terms of what is known for the adjacent highland region around Cuzco,



**Figure 2.8.** Graph showing the diameter values for all large circular structures recorded at the sites of Inkatambo Alto and Pistipata.

except for the lack any evidence for communities that were hierarchically organized. The settlements at Pistipata and Inkatambo Alto are small and relatively dispersed, and although there are clear patio sub-units at Pistipata, these are not distributed according to any

discernible higher-order plan or layout. Nor is there any evidence of defensive structures such as walls, suggesting that the supposedly frequent warfare of the LIP was not a local concern for the inhabitants of the Amaybamba.

We are fortunate in that the Late Intermediate Period of the greater Cuzco region is now much better understood by archaeologists than it was even a decade or so ago. This is mainly a result of the recent field surveys led by Brian Bauer, Alan Covey and Stephen Kosiba<sup>6</sup> in the region – all of which have revealed much about the pre-Inka patterns and variations in material culture across (what was to become) the Inka heartland. The presence of *chullpas* in the eastern Amaybamba Valley is interesting therefore in light of the wider LIP context of the Cuzco area. Covey (2006: 96-8) has shown that in the Sacred Valley region immediately to the north of the Cuzco Basin, the above-ground mortuary complexes of the *chullpa* type are almost exclusively found to the north of the Río Vilcanota. The north of the drainage was also distinctive in terms of its LIP ceramic assemblages, with Killke<sup>7</sup> wares being much less common there. As a result, Covey (2006: 99) suggests the Vilcanota Valley should be regarded as ‘a major cultural divide prior to Inca state formation’, which he understands primarily in terms of ‘ethnic’ differences correlated with patterns in material culture.

Kosiba’s (2011: 133) survey evidence from the region around Ollantaytambo, (approximately 25 kilometers further to the west along the Vilcanota-Urubamba drainage) confirms this pattern of an apparent divide in mortuary practices on the north and south sides of the river. So, for the

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<sup>6</sup> For results of those surveys, see Brian Bauer (1992, 2004), Alan Covey (2003, 2006) and Steven Kosiba (2010, 2011).

<sup>7</sup> Killke ceramics are those of several types produced in the Cuzco region during the LIP and are generally considered to have been made by the pre-imperial or proto-Inka communities living in what was to become the imperial heartland (see: Bauer 1999; Bauer and Stanish 1990).

portion of the Urubamba drainage around Ollantaytambo, *chullpas* predominate on the northern side also. Kosiba's evidence is of particular relevance to the present study because it relates to the highland area that is geographically closest to the Amaybamba. Ollantaytambo lies just to the east of the Abra Malaga, via which one enters the Amaybamba on the way to the Vilcabamba lowlands to the north and west. The *chullpas* or tower-tombs that Kosiba (2011: 133) has noted in the Ollantaytambo area are architecturally similar to those at the site of Inkatambo Alto – that is, they generally stand from 1.00 to 1.15 meters in height, are constructed from unworked fieldstone and are capped with corbelled roofs. The residential architecture patterns in the Ollantaytambo region are also similar to those on the other side of the Abra Malaga, consisting of structures that are either circular or rounded-rectangular in shape (Kosiba 2011: 129-130).

Broadly speaking then, the Late Intermediate Period occupation of the Amaybamba appears to have been continuous (in terms of material culture) with the contemporary populations living to the south and east along the northern drainage of the Urubamba-Vilcanota river. It does however represent a seemingly less dense occupation, with more dispersed settlements hosting populations that were less tightly aggregated. It is also interesting to note that the Amaybamba was evidently not a 'remote' region with respect to the Cuzco and Sacred Valley areas during the LIP, and that contacts were well-established between the Amaybamba and its adjacent highlands in the centuries prior to the Inka conquest of the area. Thus the Inkas may have been moving into a frontier zone when they conquered the lowlands near Ollantaytambo, but it was not an *unknown* frontier. Certainly they were intensifying the movements and

communications between the central highlands and the nearby cloud forests of the *Yungas* zone – but these links were already old by the time they did so.

The Amaybamba as a marginal space that lay at the liminal transition zone between the highlands and the lowlands is a theme that will be explored in the subsequent chapters in some detail. In such light it is difficult not to reflect upon how much of an ‘edge’ it represented with respect to the world of the Late Intermediate Period highlands. Certainly the mortuary traditions and other patterns that are associated with the highland LIP do not continue into the rainforests beyond, where quite different societies existed. As has been noted, the LIP occupation of the Amaybamba is typified by a hilltop and ridge crest settlement pattern, with the lower elevations left vacant. While the lower reaches of the valley did have a considerable Inka occupation, it seems the pre-Inka inhabitants had no interest in permanently occupying the valley floor, choosing to inhabit a fairly narrow elevation range between 2,300 and 2,500 meters above sea level.

At least two factors may have contributed to the choice to settle within this altitudinal range. Although elevations above 2,300 meters lie outside the optimum coca-growing range, it does offer excellent conditions for maize production. The presence of *manos y metates* in multiple sectors of the Pistipata site indicates that processing grains such as maize was likely a core element of the subsistence strategies deployed by its inhabitants. The second factor is the fact that highland Andeans regarded the lowlands of the eastern Andes as a dangerous region, which carried much risk of disease. Gade’s (1979) argument that during the colonial period endemic Leishmaniasis was responsible for devastating highland laborers working at attitudes



below 2,400 meters may be of relevance here. If we assume similar attitudes to the 'unhealthiness' of life in the lower valleys were held in the centuries before the Inkas rose to power, then the valley floor of the Amaybamba may not have been a very attractive prospect for the LIP populations. Lacking an elaborate state apparatus that relied heavily on coca-based exchanges and rituals, there may have been little need to attempt to cultivate the lower altitudes that were to be of such value to the Inkas in later centuries.

In such light, the pre-Inka settlers of the Amaybamba Valley might be interpreted as standing at the edge of the LIP world of the central highlands – both along the horizontal and vertical spatial axes. Yet, another kind of edge might be of import here also. Kosiba has critiqued the tendency to present the Late Intermediate Period as a time of historical passivity and limited agency, simply waiting for hierarchy and civilization to be restored (as 'naturally' they should) in the wake of the Middle Horizon collapses. A lack of hierarchy and an absence of centralized political integration are seen therefore as mere lacunae in state development, rather than an active choice of the communities involved. By contrast, Kosiba (2011) emphasizes the importance of 'locality', where 'local organization' and 'non-state institutional practices' can be regarded as positive phenomena that are deliberately sustained, rather than people simply waiting around for civilization to be restored. Covey's (2006) new account of the development of the Inka state in the Cuzco region has pushed back the development of complex polities there by some way, in contrast to the much more constricted chronology of the traditional account of Inka state origins based on the chronicles. So, if the later LIP of Cuzco and its environs was a time of increasingly centralized political activity, going back earlier than we had previously realized, then we may need to be wary of how older archaeological accounts have

framed the immediately pre-Inka developments in the area. Perhaps, rather than a set of communities waiting on the margins for the next cultural horizon to sweep over them, the groups living in the LIP Amaybamba were quite deliberately seeking to avoid living in the emerging 'centers' to the south and east. Life on the 'ecological' margins may have also been a choice to live on the political margins as well.

With this possibility in mind, we can potentially think about certain aspects of the LIP material culture within the Amaybamba in a different vein. The open admixture of residential and mortuary architecture, along with the absence of size variation in residential structures that indicates intra-group status distinctions, may not be best viewed as a simple 'lack' of hierarchy. In the context of North American prehistory, Severin Fowles (2010, 2013) has recently argued for the presence of voluntary non-complexity among certain groups living at the edges of the Chaco phenomenon, suggesting that these societies were not merely non-complex societies, but ones which actively avoided the adoption of Chacoan material culture so as to not be drawn into its political orbit. A core element of Fowles' argument is that in such cases, conspicuous absences (of certain architectural forms, ceramics, iconographic styles and so on) are often highly significant and in a sense, no less 'material'. Following Fowles' and Kosiba's views, it seems archaeologists have not been sufficiently attuned to seeing non-hierarchy as a deliberate choice that communities may seek to sustain and actively produce through their material practices. Egalitarian or relatively non-complex communities are much more frequently interpreted in passive terms: sitting, as it were, on the edge of more dynamic political developments taking place elsewhere. This figures non-complexity in passive terms, a function

of a lack of cosmopolitanism – with peripheral societies simply waiting on the margins for the state (and thus history) to catch up with them.

It will require a much more programmatic and concerted effort on the part of archaeologists to flesh out the strategies of deliberate non-complexity that may have been deployed throughout Andean prehistory. In particular, we need to produce as robust a set of material correlates for conscious non-complexity (i.e. figured in *positive* terms) as we currently possess for states and hierarchical polities. I suspect that some of the material remains discussed here with respect to the Amaybamba LIP may well be relevant to developing such correlates, and we must begin to consider the implications of such patterns more fully in future research. Finally, it also raises the issue of the intertwined ecological and political factors at play. Indeed, the Amaybamba context would suggest that ‘marginality’ is a difficult condition to define in purely political or ecological terms – for in this case the two are clearly difficult to meaningfully disentangle.

#### IV. Conclusion: the Problem with the Longue Durée

The primary aim of this chapter has been to introduce the geopolitical context within which the Amaybamba Valley must be understood. It has been quite explicitly a presentation that ranges over the *longue durée*, seeking to convey as succinctly as possible a flavor of the last one thousand years of transformations that have occurred there. As a geopolitical entity, its character has always been changing and multiple - and so easy characterizations must be avoided. Often, if not always, it has been a major conduit for movements of goods and people along the highland-lowland axis, while sometimes a significant production zone in its own right.

And yet at other times it was a frontier for the expansion of empire, of capital – or of both - and also a zone of radical resistance and violence, a lawless outpost at the edge of the state's authority and a buffer zone between worlds in collision.

Although I have deliberately presented this 'introduction' to the study region in a very particular way - describing centuries of shifts and transformations in the Amaybamba – I have done so because I ultimately wish to consider the limits of this temporally longitudinal view. It is traditional to open archaeological surveys (in the Andes and elsewhere), with a discussion of the environmental and ecological context. And this is particularly true for surveys that claim some sort of orientation towards 'landscape'. Once the environmental lay of the land has been established, from it proceeds a consideration of the economic aspects of its past occupation, and from that, in turn, its religious and/or political elements. An early example of such is seen in the work of the noted pioneer of the archaeological landscape survey, Gordon Willey (1953) who begins his volume on the Virú Valley in Peru with a discussion of 'the natural setting' before then going on to elucidate 'the human setting'. The implied logic is similar to Hawkes' (1954) ladder of inference, whereby economic data offers a more empirically grounded arena, before we allow ourselves to shift into the 'speculative' realms beyond. It also rests on a kind of vulgar Marxism or normatively materialist approach to human societies. That is, we begin with matters of environment because that is where our narrative *ought to* start. In other words the analysis proceeds from environment to society - and then onto the airy realm of belief - because this is the direction in which explanation flows. The environment explains the society which exploits its resources, which then explains the socio-political ideology that sustains the exploiting social structure. If one imagines society to be a set of hierarchically nested sub-

systems, then naturally the structural flow of the anthropological analysis and explanation recapitulates the structure of the society being analyzed.

Perhaps the most influential statement of this sort, at least in terms of an explicit model is John Murra's (1972, 1985) notion of 'vertical archipelagoes'. This concept rests on using a feature of the Andean environment – namely its very high ecological variability across the east-west spatial axis – as a means to explain ancient and enduring aspects of the social structures, settlement patterns and ideological tenets of *lo Andino* ('the Andean'). Ecology and environment thus are the primary substratum from which society emerges. This is not to say that many have sought to avoid precisely such environmental determinism in their explanations. Mary van Buren's (1996) critique of Murra is very much in this vein. Based on archaeological evidence from the Moquegua Valley, van Buren argues that the verticality seen in historic times is in fact a product of changes wrought via colonialism, and does not reflect an ancient and enduring aspect of Andean society that goes deep into prehistory – and is not therefore a product of Andean environmental conditions, or even Andean culture, so much as a consequence of more recent socio-political factors.

It should be emphasized here that van Buren's critique does not seek to collapse the traditional explanatory hierarchy so much as invert it. Now the environment no longer explains society which in turn explains the economy; rather the explanation flows back in the opposite direction. Instead we start with a social context (i.e. colonialism) and then move on to environment, which takes on a subsidiary causative role. This of course is common to many 'post-processual' approaches to landscape studies, which sought to diverge from the emphasis on ecological and

environmentally grounded accounts, to socially determined or humanistic accounts. Such tendencies reflected the post-processualist's frequent concern for the particular rather than the universal in seeking to understand the past and its inhabitants. As Eduardo Viveiros de Castro (2004) has so forcefully argued: within normative Western understandings of difference it is always the social that is the form of the particular, while the natural is the form of the universal. It follows then that the post-processual critique of landscape studies was not so much a rejection of Western ontological commitments, nor an attempt to undo the nature-society divide – as it was a critique of the sterility of scientific as opposed to humanist modes of interpretation. While scientific and humanist intellectual traditions are often seen to stand in mutual opposition, neither one could hardly be thought to exist more 'outside' of a normative Western ontology than the other.

My aim in this dissertation is not to introduce the study region with *either* environment *or* society as primary basis for discussion; indeed the goal is to seek to move beyond the dichotomy altogether. In that vein, neither a traditional processual nor post-processual description seems adequate to me, because these alternative perspectives (despite their real and substantive disagreements) both pivot around the nature-society distinction, albeit from different directions. My interest in the Amaybamba is clearly temporally circumscribed, limited to the century-or-so of the Inka occupation that ended in 1533. In this chapter I have presented information on its 'modern' (that is most recent century) of occupation, along with the first century following the collapse of the Inka Empire, while both of these have been set alongside a discussion of its pre-Inka occupation during the Late Intermediate Period. During that longue

durée of a millennium, the Amaybamba, as an actor within a complex and changing set of geopolitical formations, has undergone major transformations.

Yet it has hopefully been made clear that neither the natural environment of the Amaybamba, nor its shifting socio-political contexts really explain all these transformations and complex geopolitical forms through which it has passed. A description of its hydrology, geological relief, biota and climate patterns seems a rather arbitrary set of factors to extract from all the others – and place in some form of primary position. And similarly, the vague and all-encompassing social frameworks of colonialism, empire, capitalism and archaeological cultural horizons appear little better. So a classically humanist account (post-processualism) seems no less inadequate than a classically materialist (processual) one, insofar as we wish to understand the archaeological traces that are presented by the Amaybamba Valley.

The impact of Bruno Latour's arguments on modernity have been widely felt in the humanities over the last decade – and readers familiar with his writing will no doubt see echoes of his approach in how I have presented the narrative on the Amaybamba in this chapter. As Latour (1993) argues, modernity is distinctive for the proliferation of *hybrids*. Hybrids are those things that are neither natural nor cultural - that seem to break down these fundamental categorical poles of modernity (as he sees it) and thus threaten to undermine its fundamental ontological separation. Modernity therefore engages in unceasing efforts to purify hybrids, to sustain the nature-culture divide, a process which, ironically, only produces ever more hybrids. Latour is not a writer of history (or prehistory) *per se*, but his critical accounts of modernity's purification projects are clearly relevant to how we narrate change over time.

One of the most influential works that explicitly draws on Latour's arguments is Timothy Mitchell's (2002) historical narrative of early twentieth-century Egypt. As Mitchell discusses, Egypt was invaded by two forces in 1942. One of those forces was human and the other was not. The human force was Rommel's *Afrikakorps*, part of the German military that engaged with the assembled Allied forces at the famous battle of al-Alamein. The non-human force, albeit much less familiar to students of Egyptian history, was the mosquito species *Anopheles gambiae*. This particular insect was significant because it was a vector for an exotic malarial pathogen for which Egyptians has no developed immunity. As Mitchell points out, the resultant deaths from the mosquito invasion was around three times the number killed in the human one. According to Mitchell (2002: 27), both the human and non-human invasions must be considered together to understand the course of Egyptian history at this time – in his words: 'The linkages among them were hydraulic, chemical, military, political, etiological and mechanical. No one writing about Egypt in this period describes this interaction.'

Mitchell thus offers a powerful new vein of history-writing that, following Latour, seeks to consider the hybrids as hybrids, rather than purify them into 'social' and 'biological' elements. He presents this narrative in a chapter entitled 'Can the Mosquito Speak' – an obvious play on Spivak's (1988) famous essay on the subaltern. However, in a very Latourian style, the formerly human subaltern is now replaced by a non-human one. Archaeology has also begun to feel the influence of Latour in terms of how long-term change is presented. Perhaps the most notable recent work in this mode is Ian Hodder's (2012) discussion of 'entanglement' with respect to the prehistoric Anatolian site of Çatal Höyük. Like Mitchell, Hodder seeks to break down ontological distinctions between human and non-human actors in his discussion of long-term



change – but unlike Mitchell, Hodder is an archaeologist and so his time-scales are measured in millennia rather than mere decades. For Hodder, humans and things are bound up in mutually dependent relations with each other. As such, their trajectories are necessarily entwined, and this fact is central to the analysis of very long term changes – such as the emergence of sedentism or agriculture. Following Latour, Hodder presents us with a way of writing (pre)history that does not engage in the purification of social and natural forces, nor seeks to give causal primacy to one over the other.

Thus at one level, these transformations around a particular thing (i.e. coca) in a particular place (i.e. the Amaybamba) during a particular time frame (i.e. the past millennium) could clearly be presented so as to follow this contemporary theoretical *Zeitgeist* for symmetrical accounts of human-thing entanglements. Indeed, the potential for constructing just such a narrative seems obvious. The development of the Amaybamba as a coca production zone under the *encomienda* system of the colonial Viceroyalty of Peru is a case in point. Andean coca, prior to the middle of the Nineteenth Century, was a rather unusual example of a cash crop. A marked contrast with the normal colonial plantation commodity, it was not actually produced so that it could be exported to metropolitan markets and thereby consumed by the growing European middle and upper classes. So, unlike sugar, coffee, tea and so on, coca was not grown by indigenous and enslaved laborers so as to be consumed by Western elites, rather it was grown by indigenous laborers to be consumed by other indigenous laborers.

The profit derived from coca in the early colonial Andes lay in its relationship to the production of another commodity altogether – namely silver bullion. The discovery of the Cerro Rico at

Potosí in Bolivia in 1545, the richest silver mine of the early modern world, led to a massive export trade in silver between the Spanish Empire in the Americas and Europe. The colonial Spanish rulers of Peru directed vast amounts of indigenous labor to the task of extracting silver from the mines there. The Potosí *mita*, along with the mercury mines at Huancavelica, was the most dreaded and feared labor tax in the colonial Andes due to the difficulty of the work and the mortality rates involved. Contemporary accounts claimed that in provinces subject to such *mita* obligations, indigenous women would often amputate their sons' arms to spare them from being forced into the mines (Wightman 1990: 50). The production of coca was primarily gained towards supplying the miners at Potosí with a means to alleviate the difficult and high-altitude conditions while working underground at the Cerro Rico. By the late 1500s, the value of the coca market at Potosí was around 500,000 pesos per annum, with the supply of coca unable to meet the demand produced by the miners (Cook 1981: 223). For the Spanish and their profit margins, the problem was exacerbated by the simultaneously high mortality rates of both the production of coca and of the mining of silver. In other words, coca-growing and the silver-mining it fuelled, were both consuming the lives of indigenous laborers faster than they could be replaced.

So, to use Hodderian (2012) terms of entanglement, we can see how Europeans were, over time, more and more dependent on imports of silver bullion from the New World to enable their increasing participation in the precious metals-based systems of market exchange of the early modern period. The production of such silver was, for the Spanish colonists of course, dependent on their mobilizing large amounts of indigenous labor. Thus the Spanish were entirely dependent on other humans (indigenous Andeans) and their work to participate in the

global exchange networks that sustained their wealth. Yet those same humans were dependent on the pharmacological properties of the coca plant to meet the labor demands placed upon them by the Spanish. By extension then, the production of one kind of thing (silver bullion) was dependent on the production of another kind of thing (coca leaf), and both were dependent on indigenous human labor that itself relied on the production of certain things in order to be sustained (such as maize).

Hodder's approach is perhaps most interesting for the temporal scale he adopts in his analysis – unsurprisingly, given he is a professional prehistorian. As he points out, some entanglements we experience today in the modern world are the consequences of linkages formed millennia ago, which may not have even seemed particularly significant until changes in the present brought them to the fore in new ways (Hodder 2012: 98-101). The adaption of Andean highland populations to the high-altitude conditions of the Potosí mines (the peak of the Cerro Rico stands at 4,824 meters) was the product of millennia of interactions between human populations and their environment in the mountains. The death toll of the highland Andeans among the lowland, coca-producing valleys was a product of the lack of resistance high-altitude groups had to the pathogens endemic at lower altitudes. The Spanish might have sought to replace the coca workers with laborers from the lowland indigenous populations of Amazonia, so as to preserve the highlanders for the mines – but the dense vegetation and dispersed settlements of the rainforest zones confounded the Spanish attempts to extend their government (and thus pool of labor extraction) over the lowland societies just as much as these things had frustrated the Inkas before them. Thus the specific human-thing entanglements of

lowlanders and highlanders forged during the millennia before the Spanish arrived, massively structured their labor relations under the colonial systems of more recent centuries.

The chains and networks of human–thing, human-human and thing-thing entanglements operating here could be traced almost *ad infinitum*. And of course, there is clearly no particular set of actors that could be ascribed primacy in such an approach. Do the pharmacological properties of the alkaloids in coca leaf deserve primary agency for the account of the rise of the Spanish silver trade? Or is the paramount factor the ideology held by the Spanish colonials, who imagined that they had the right to extract (unpaid) labor from the indigenous population of the Andes in exchange for their nominal Christianization? Here, any attempt to describe an *a priori* distinction between ‘human’ and ‘non-human’ elements in terms of their relative agency, would seem hard to justify on empirical grounds alone. Such is the degree of interdependence between all the actors within what is obviously a very tangled web, making it difficult to assign agentive priority to one set of actors over another.

Moreover, it seems that many of the great transformations that we perceive in context of the Amaybamba arise from moments when particular (spatially clustered) sets of entanglements are brought into more frequent and more intense interaction with other sets. In other words, two sets of meshworks that had largely been internally entangled are in the process of becoming increasingly entangled with each other. The much more intensive entanglements between the Old World and New – between their peoples, diseases, social structures, animals, minerals, ideas and so on – certainly help us understand the dramatic transformations in the Amaybamba in the colonial era. Similarly, we can hardly understand the shift to a tea economy,

the subsequent peasant uprisings and the emergence of the Shining Path without attention to the increased interaction of the region within the global market economy where tea was a major cash crop and coca was an illegal narcotic whose commerce was internationally suppressed by state actors. Nor is this any less true for the entanglements we see during the pre-colonial era. The shift from a sparsely populated region on the edge of the Late Intermediate Period world in the central highlands, to a highly-productive and densely inhabited imperial frontier under the Inkas, is similarly bound up with the pan-Andean networks into which the Inkas pulled the Amaybamba.

The distinction (between these moments) that Ian Hodder might elucidate, is that as the scale and intensity of entanglements increase, so too does the rate of change. There is a clear 'directionality' and even a telos to his perspective, where he suggests,

...that entanglements have increased through time since the Neolithic both in particular countries and globally. Some individuals, countries, nations are more densely entangled than others but particularly since the industrial revolution we have all become increasingly entangled in one global web. And yet it is apparent to most of us that the rates of change have increased exponentially over the same time period (Hodder 2012: 175-6).

I wish to set aside the empirical question of whether or not the world is getting more and more 'entangled' with the passage of time, in part because I am unsure as to how we might seek to measure or quantify such a phenomenon. Although I have introduced the Amaybamba in a largely Latourian vein – seeking to undermine divisions between the social and the natural in

terms of how historical change is narrated - I do not intend to present the chronological slice that has not yet been accounted for here in this way: that is, the Inka period itself. This is not because I feel such entangled perspectives on history are not enormously valuable. As I hope to have conveyed above, the approaches offered by Hodder and Mitchell allow us to rethink traditional, 'modernist' narratives in very productive ways. Yet, for me, the question of *alterity* remains unaddressed in such Latourian histories.

If I were simply to present the Inka occupation of the Amaybamba as another set of entanglements, in a long history of such relationships, then it would be in danger of losing any distinctiveness or indeed, radical difference. Perhaps this is the inevitable consequence of writing prehistory and the millennial scale. If we look in terms of thousands of years, how can we give consideration to the 'fleeting' ontological frameworks of groups such as the Inkas? Or to any other group for that matter? Whether we seek to account for Andean prehistory in terms of states and chiefdoms, agricultural and urban revolutions – or more lately, exponentially increasing entanglements – we are not engaging with understandings of reality that were meaningful to the Inkas themselves. There is ultimately, then, no serious consideration of alterity. In terms of the theoretical aims of this dissertation, the basic criterion for success is this: the reader will have been convinced that in order to account for the Amaybamba of the Late Horizon, it was necessary, in the end, to work with Inka ontological perspectives. The theoretical basis of this argument, and its implications, will be presented in detail in the following chapter.

## Chapter Three: An Archaeology of Political Ontology

### I. Questions of Ontology

Ontology, according to one of its most basic definitions, is simply the question of *what there is*. Thus it deals in elementary accounts of reality and the fundamental premises upon which such accounts depend. The idea of the chemical elements and their organization within the Periodic Table, for example, was central to the development of a scientific ontology of matter in recent centuries. The *elements* were so called, because it was once thought that they were the ultimate and irreducible constituents of all matter, entities which could not be broken down further into simpler forms. That is, the chemical elements were the most fundamental species of thing from which the diversity of the material world was derived<sup>1</sup>. This modern and scientific ontology of matter replaced the much older, Hellenistic ontology which posited the four classical elements of earth, fire, air and water.

When speaking of *political* ontology, we are similarly dealing with the most primary basis of the political realm. What is the irreducible reality upon which political structures, political events, political ideologies, political actions and so on, all depend? If chemical elements are the foundational constituents of matter, what then are the elemental<sup>2</sup> constituents of politics?

There is an important difference to be related here, between political ontology and political

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<sup>1</sup> Eventually, of course, sub-atomic particles and sub-sub-atomic particles were hypothesized and empirically identified, thus the idea that the elements are elementary is no longer widely held as a scientific theory.

<sup>2</sup> It is important to underscore that when I use the terms 'element' and its derivatives, I am using it in the strict sense only to refer to the *simplest* and absolutely foundational components of something.

philosophy. Robert Nozick (1974: 4) suggests that, '(t)he fundamental question of political philosophy, one that precedes questions of how the state should be organized, is whether there should be any state at all?'. If that is so, then political ontology relates to more foundational questions: not how should the political realm be organized, but in what basic reality does it consist? What *is there* that provides the basic foundation of matters political? Of course, one could not deal with questions of political philosophy without addressing the matter of political ontology, though the two remain nonetheless distinct. Working within the Western and European traditions, there have been a range of political 'ontologies' sustained and articulated over centuries and millennia – with varying degrees of explicitness.

The work of historian Edmund Morgan (1989) traces in detail the emergence of a new and increasingly dominant political ontology during the European Enlightenment that replaced its older, medieval predecessors. Just as Christian theology of the Middle Ages offered an anthropomorphic God, so the politics of medieval Christendom called for a 'theomorphic' king (Morgan 1989: 17-8). In other words, the model on which earthly monarchy was based was a divine one, with God ruling the universe in the same way as the king ruled his kingdom. At the same time, the laws and justice that flowed naturally from the monarch were identical in kind to the laws and justice that flowed from God, their source differing only in that the human sovereign was a delegate of the divine one. Thus political formations in the European Middle Ages were largely modelled on one basic and idealized form of relationship, that of a paternal deity and his obedient children.



Morgan's work discusses how this dominant political ontology was challenged with the advent of the Enlightenment - and ultimately replaced across much of the Western world by a radically different one. The ontological foundation of these new modern polities was not a sovereign-subject relationship that was theomorphic in character, but instead a new entity called 'The People'. In other words, the concept of popular sovereignty emerged as the dominant basis for what would become the modern nation-state. As Morgan (1989) argues, The People did not simply exist as a primordial fact that was always there, but had to be invented over time. Central to Morgan's work is the idea that assertions of popular sovereignty do not (and cannot) consider The People to be a constructed entity, since their moral demands rest upon its naturalness – just as Medieval notions of theomorphic sovereignty also presented it as equally natural and given. In this respect, consider perhaps the most famous discursive debut of popular sovereignty in the opening words of the American Constitution: 'We the people'. It is this entity that is the primary ontological foundation of the new republic being proclaimed, and thus the basis for all else that flows from it. The system of government that arose in the American Republic, called 'democracy' was defined and justified through repeated reference to this underpinning ontological entity – famously seen when Abraham Lincoln described democracy explicitly as 'government of the people, by the people, for the people' in the Gettysburg Address of 1863.

Yet this entity called The People that underwrites politics in today's liberal democracies relies on the acceptance of a very specific set of *things that are* - in other words, it rests upon a specific ontological framework. If the chemical elements were once thought the fundamental constituents of matter, then it is the humanistic, liberal, individual subject that is the

ontological 'element' that forms the basis of the modern liberal state. Many entities take part in modern politics - parties, labor unions, think tanks, individual families, lobbying organizations, political action committees – but none of these is *elementary*. Just as there are many different chemical compounds all composed of different elements, all these political actors are composed of individual human subjects. The human subject is the irreducible foundation in liberal understandings of politics<sup>3</sup>.

The early intellectual foundations of popular sovereignty are located in the work of writers such as Jean-Jacques Rousseau, Thomas Hobbes and John Locke, through whom the notions of the state as a social contract among individual human actors came to be established and valorised in the Western tradition. Hobbes (1994) argued for a radically different source of legitimacy for the absolute sovereign. Rather than the ruler's authority being legitimated via his status as a delegate of the divine will (as it had been in the Middle Ages), submission to the absolute authority of the sovereign was justified through the reasoned self-interest of the body politic. So, if the rule of the sovereign is not accepted by the ruled, there can be no law - and without law, there is only the violent and brutal 'State of Nature'. Hobbes' arguments were intended as a defence of absolutism and monarchy of course, but were still revolutionary in that they justified such political forms in a very different way from the medieval, Christian understandings of kingship. In other words, sovereignty was a rational collective decision rather

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<sup>3</sup> Perhaps the surest sign of membership in The People is access to the right to vote. Obviously, in various states this right has been extended in recent centuries to groups previously denied it (African-Americans in the United States, Catholics in Britain, women in most countries etc.). The point, however, is that The People has remained the ontological foundation of liberal nation-states, even if its membership has been extended over the years. Note also that even corporations, despite their fictive legal status as persons, do not have a right to vote in any Western country, nor do any other collective entities such as unions or even families.

than a thing divinely mandated. For other writers such as John Locke (1660), absolutism was not necessarily to be defended in all cases. Rather it was possible under some circumstances for the sovereign, who ought to ideally be an instrument of the collective good, to fall into tyranny and corruption. If that occurred, then The People were justified in overthrowing their government and instituting a new one.

These ideas – democracy, representative government, legitimacy through the consent of the governed, popular sovereignty – have become dominant in Western politics over the last few centuries. Today they still underpin the political structures of all Western nation-states - at least as ideals that are broadly valorised - and have been deeply established in many other parts of the world also. But like any political ontology, it relies on the acceptance of certain *elements* with particular properties or characteristics. Most fundamentally it is the modern, humanistic, rational, individual subject upon which all social contract theories depend - as do the political philosophies and modes of politics derived from those theories. It is probably no longer very controversial in anthropological circles to argue that the modern, liberal human subject is not a universally recognized entity, but rather a product of a particular time and place – and thus the outcome of a very specific historical trajectory. There have been multiple critiques of the humanistic individual and its purported liberalism in a range of scholarly disciplines throughout the twentieth and twenty-first centuries – and I cannot rehearse them all here. Within archaeology, probably Julian Thomas' (2004) critical discussion of the search for 'individuals' in prehistory is the most influential text in such a vein.

The main idea that I wish to convey here is that the notion of political subjects ‘just like us’ - the political subject we imagine to constitute the modern body politic, of the twentieth and twenty-first century bureaucratic nation-state - has a genealogy, one that various scholars have sought to draw out. Nina Power (2006), for example, discusses how it is possible to trace the fusion of the agentive, thinking human subject, derived from the Cartesian ontological framework, with the much older notion of the *subjectus* (‘that-which-is-kept-beneath’) defined by its obedience to a central authority. As she puts it, the political subject typical of modernity is ‘largely a “collectivizing” of an idea of the Cartesian, human “self-subject” in the realm of politics’ (Power 2006). She places this emergence of the modern notion of the political subject in the writings of Enlightenment philosophers who through the *contrat social* imagine not just the political subject who is obedient to the ruler in a passive sense, but who actively accepts such authority through a rational and self-interested decision leading to the emergence of a body politic that is contractarian in nature, a voluntary yielding of personal and individual freedom for the collective good.

Such a view assumes a great deal about the nature of the political subject *a priori*. Building from an Enlightenment model of individual liberty, it imagines that the political subject emerges from a primordial state of ‘freedom’, and thus chooses to enter the realm of the social, which is of a secondary order to that of the individual - a choice that is fundamentally rational in character, because it is self-interested, and somewhat tautologically, self-interested because it is rational. More profoundly, the political subject arises from what Descartes understood as *res cogitans*; the realm of the mind. It is within the immaterial sphere of thought that agency resides and if the post-Enlightenment, contractarian political subject is defined as inherently agentive, then it

is from pure thought that we must explain the origins and structure of the body politic in which it engages. The liberal theory of the political subject thus posits a social contract arising out of the self-interested and rationalist choices of a collectivity of individual minds. Althusser (1970: 157) explicitly critiques this liberal (and for him, bourgeois) conception of political subjectivity which he characterizes as entailing a,

'subject' endowed with a 'consciousness' and believing in the 'ideas' that his 'consciousness' inspires in him and freely accepts, [who] must *act* according to his ideas", [and who] must therefore inscribe his own ideas as a free subject in the actions of his material practice

Thus the political subject that a modern political ontology takes to be the elemental constituent of the polity has a number of key characteristics:

1. The scale at which the subject is fixed is that of the individual human being. Nothing larger or smaller than this enters into the social contract from which society and the state come to emerge. In other words, more expansive entities such as families, tribes, clans, nations, guilds or other such assemblies do not participate in the social contract and are not therefore political subjects. These social collectivities are made up of individual political subjects, but they are not themselves constituents of the polity and nor are they political subjects in their own right. At the smaller-than-human scale, things that make up human subjects cannot enter into the social contract either; limbs, organs, cells, atoms and so on. The political subject is coterminous with the single human individual.

2. The political subject is humanistic in the post-Enlightenment sense. That is, the social contract inheres between human minds and is constituted at the immaterial level of what Descartes called *res cogitans*. The social contract and thus the polity are not derived from relations between bodies, nor indeed between any material things (that is, the *res extensa*). In this vein, consider that at certain times, specific groups (such as Black people or women) have been excluded from full the participation in the body politic through the denial of the franchise and other political rights. It was not doubted that non-Whites and non-males had bodies of course, rather the justification for their exclusion was stated in terms of their lacking rational minds that approximated the humanistic ideal – a fact which confirms the contention that the social contract inheres in relations between minds, not bodies. The social contract that emerges from the collectivized modern political subject is therefore an entirely immaterial and transcendent phenomenon - a contract between minds, not bodies. Note here that it was generally accepted that women and non-Whites had souls too; however this was insufficient to permit their participation in the social contract, indicating ensoulment and possessing a rational mind were distinct (albeit related) conditions.
3. Although the social contract and its individual constituents are transcendent, its instantiation must be earthbound. Put another way, the dead (and the yet to be born) are excluded from the body politic. Former participants in the social contract are removed to the afterlife, and no longer possess any political rights, all of which are

inherited by their nominated successors. Somewhat paradoxically then, although the social contract inheres only in relations between minds, those minds must be encapsulated within a bodily vessel in order to be able to participate in it as such.

4. The moral unity of the body politic transcends its individual parts, as well as history. The specific individuals that make it up at any given moment are not essential to it. Given enough time, every individual member will die and be entirely replaced by new ones, yet it remains the *same entity*. The body politic constituted by the United States is the same in the year 2000 A.D. as it was in 1900 A.D., despite the replacement of virtually all its individual human contractees during the intervening century.

More could undoubtedly be said on this, but at this stage it seems clear that our understanding of the body politic and the kind of political subject that generates it is utterly dependent on a wide range of modernist ontological commitments -- from mind-body duality, to the divide between life and death and the distinction between humans and objects, among various others.

From my own perspective on the Inka Empire, a number of divergences are immediately apparent. Whatever the Inka State was composed of, the dead were certainly not outside the frame of its power plays and political dynamics. As widely recorded in a variety of historical sources, although Inka rulers were typically mummified after death, they were still expected to remain active in governing the affairs of their descendants; to which end their desiccated bodies would still hold regular audiences with courtiers, host great feasts and deliberate on weighty matters of state (e.g. Pizarro 1986, 89-90). I suspect readers working with other non-

Western polities will see their own diverges from the key characteristics outlined above. In the following section, my aim is to consider in more detail some of the evidence which indicates how exactly the Inka 'political ontology' does not conform to the modern one that dominates Western political formations. In particular, it is the idea of political subjects that were not human that I wish to consider, and this will be an important starting point for the subsequent chapters of this dissertation.



Five centuries ago in the land we now know as Peru, a king was engaged in a battle for the succession to the throne of a vast domain. Atawallpa was the last individual to rule the Inka Empire independently of European colonial control, with the Spanish conquistadors arriving just as he was still seeking to eliminate his rival pretender and half-brother Waskar. It was likely that this bloody struggle for dynastic succession was not unusual in Inka terms, but was just the latest in a long line of struggles for power among the empire's cut-throat elites. However, their dispute is one we are fortunate to know somewhat more about because memories of it were still fresh when the first Spanish chroniclers began to record their initial histories of the Inka realm. In his 1557 text *Suma y Narración* the writer Juan Diez de Betanzos describes the war between Atawallpa and Waskar in some depth, as seen primarily from the perspective of Atawallpa's surviving kin.



In Diez de Betanzos' narrative, one episode stands out as particularly compelling. It is told that at a certain juncture in the conflict Atawallpa sent some of his servants to consult and make sacrifices to an important *wak'a* (usually glossed as 'shrine' or 'idol') in a region called Guamachuco (Huamachuco) in northern Peru. The *wak'a* is described as being in the form of a rock outcrop on top of a hill and on speaking with it, the Inka's messengers were told that their master's warring and killing had displeased the creator being Wiraqocha and would eventually lead to a disastrous defeat (Diez de Betanzos 1996: 231). Following this rebuke of their lord, the

...messengers then left there and went to Guamachuco, where Atawallpa was, and told him the answer they had had from the idol. When Atawallpa heard it, he was very angry at these words and said: 'This *guaca* [*wak'a*] is also as much an enemy *auca* ['traitor'] as Huascar [Waskar]' (Diez de Betanzos 1996: 232).

Atawallpa's response was to order his lieutenant Cuxi Yupanque to take a selection of his finest warriors and prepare to march on the *wak'a*. The warriors eventually reached the hill just as the sun was setting and flanked it on all sides in order to prevent it from escaping. In the tale that follows, Atawallpa himself came forth and struck down the *wak'a* along with its human attendant, killing them both. The *wak'a* and the old man were then ground to dust and the entire area put to the torch at the Inka's command. More than that, the entire summit of the hill was levelled leaving no trace of the stone outcrop that once stood there. This may have been no small labor, for Diez de Betanzos (1996: 235) goes on to claim that the group of

warriors responsible for the killing of the *wak'a* were encamped there for a period of three months as they carried out the dramatic execution<sup>4</sup>.

This story seems quite bizarre from our modern perspective and so we cannot help but wonder what exactly to make of it. The events narrated simply do not accord with our modernist ontological frameworks, and thus seem representative of an alien rationality. Especially when one considers that Atawallpa was engaged in a bitter war for succession, the decision to invest a large group of his most experienced warriors in the task of levelling a mountain for three months because it had committed 'treason' must surely have been an unfathomable waste of military resources. Here we might wonder if Atawallpa and his troops really believed that the rock outcrop at Guamachuco was a rebellious *auca*, or there is some deeper metaphor that we are not capturing with our literal reading of the narrative. According to Harris and Robb (2012: 668) these seemed like the only two options until fairly recently – either they (i.e. non-Western peoples) were sincere in their strange (and surely erroneous) beliefs, or were being disingenuous for some reason as yet to be determined. The Quechua term that Atawallpa uses of the mountaintop – *auca* - implies both an enemy combatant and a treasonous individual. Interestingly, the word is used elsewhere by Waskar to refer to Atawallpa himself, indicating that it was applied equally to seditious humans as well traitorous rocks. We are left then to ponder the Inka's quite emphatic final words on the matter, saying after the mountaintop's

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<sup>4</sup> The destruction of the *wak'a* at Guamachuco is independently detailed in a number of different chronicles, although they all generally concur that the hilltop was destroyed by Atawallpa in retaliation for the unfavorable divinations offered by the *wak'a*. The *wak'a* is named in several of these sources as Catequil and seems to have been regionally known as an important and powerful being, rivaling, but perhaps not quite approaching the dominance of Pachacamac. It seems that seeking the support of this (and other) major *wak'as* in the Andean highlands was a central aim for both sides in the dynastic warfare that preceded the arrival of the Spanish. For detailed ethnohistoric reviews of the episode see MacCormack (1991: 62-3) and Topic et al. (2002).

execution that, 'no man could insult him, not even his idols and *guacas* [*wak'as*]' (Diez de Betanzos 1996: 232).

This story forces us to engage with a fairly radical kind of alterity, where the actions of a non-Western people seem profoundly irrational in the light of our scientific, modern and secular views of the world. And here I am happy to follow Martin Holbraad in defining alterity in quite straightforward terms as an awareness of 'phenomena that do not "make sense" to us' (Holbraad 2007: 191). I think most modern, secular scholars would agree that rocks are not like people; they do not possess sentience and they certainly cannot engage in acts that are treasonous. Certainly one option is to simply leave the matter at that. We could, for example, dismiss the execution of the rock outcrop at Guamachuco as a reflection of the Inka's pre-modern worldview, in which religious ideologies invested inanimate entities like rocks or mountains with sentient will. It is a view that has a long intellectual pedigree and even dominated anthropological theorizing of non-modern peoples during the early Twentieth Century. After all, this assumption of pre-modern epistemological error as the basic *explanans* of human difference underpinned Levy-Bruhl's (1922) notion of 'primitive mentalities' and E. B. Tylor's (1871) influential concept of animism, to name but two of the most influential.

This episode involving Atawallpa and the execution of the *wak'a* at Guamachuco, provokes the central question with which this dissertation begins. In his actions at Guamachuco, Atawallpa was punishing in dramatic fashion one of his rebellious subjects. Yet if we accept the sincerity of the Inka informants cited in the chronicles, then we must grapple with the assertion that here,

the subject<sup>5</sup> who was executed was a mountaintop, not a human being. How is it that there can be a state where rocks and mountains were treated in a way that we would consider only meaningful if applied to human political subjects? Whatever kind of political ontology permits such a thing, it is not the one upon which modern nation-states are built. The laws of no modern state would be capable of considering a mountain as a treasonous subject, after all. This dissertation is thus an attempt to reconsider our political ontology and its basic propositions, so as to 'make sense' of the execution of rocks and the punishment of mountains. If our modern political ontology rests upon a 'society' that emerges from the collective contract of self-interested human agents, then what kinds of beings constituted the ontological (i.e. elementary) basis of Inka politics? What sort of politics was possible in a state which arose from this very different political ontology? Doing so however will require a reconsideration of much of what we as archaeologists have said and thought about the pre-modern state - an entity that has been too frequently constructed in the image of our own political ontology, that is, as a collective that was composed exclusively of humans.

## II. Political Agents and Political Subjects

It is worth taking a moment to clarify in more detail what I mean by political ontology, for the coinage is not mine and has already been used in a number of anthropological contexts as part of the recent surge in attempts to theorize matters of ontology more generally. Mario Blaser

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<sup>5</sup> Within Western political ontologies, committing treason is predicated upon being a political subject. To engage in treasonous action is, by definition, the failure of a political subject to show requisite loyalty to their sovereign.

(2009:11), for example, describes political ontology as consisting in ‘the power-laden negotiations involved in bringing into being the entities that make up a particular world or ontology’. I do not disagree with this particular usage *per se*; however I do regard the appending of the word ‘political’ here as somewhat redundant, insofar as we might expect the relations which bring entities into being to always be ‘power-laden’. If we cannot imagine a context in which the bringing into being of entities had no dimension of power to it, then the term *political ontology* is not really referencing anything more than does the term *ontology*, except maybe to underscore that ontology is never divorced from power. Thus in using the term *political ontology*, I am seeking to be rather more specific and do not simply intend to convey that ‘ontologies’ as a product of relations will always involve relations that are power-laden, even if this may well be perfectly true.

For me, political ontology relates to the elementary constituents of a given political order. What kinds of political entities can and do exist within any given polity? What exactly is it that the polity seeks to ‘govern’ and what is the nature of those things that are seen as governable? What does governance entail and what are the qualities of the relationship it brings into being? What is the nature of the political entities that are constituted through the very power relationships that also constitute the polity itself? It is important therefore to distinguish between the political subject and the realm of politics generally. Post-Latour, it is less easy to suggest that the ontological emergence of say, the bacterium, in nineteenth-century France was a process devoid of politics (Latour 1993a), even if the realm of the political is purified from matters bacteriological through the techno-practices of laboratory science (Latour 1993b). But that is not at all the same thing as saying that the bacterium acts as a political subject of the

modern bureaucratic French state. It is the very work of purification that renders bacteria as non-constituents (in every sense) of the French Republic. It is the scientists and researchers that the state seeks to govern, not the bacteria themselves. Similarly it is the human actors for whom the state legislates and around whom it constructs its political and bureaucratic apparatus – not the non-humans they might manipulate.

Having purified non-human bio-organisms from the realm of the political, the French state does not construe such things as bacteria as a governable subject and thus their role in politics *must always be mediated by the citizen-scientist* - a fact which makes all the difference. This is what I mean by saying that bacteria are not political subjects, which is a very different claim from saying that bacteria are apolitical entities. It is not then the first order politics or power relations that suffuse all ontological emergences that I wish to address, so much as the second order politics of explicit political orders and their ontological field of governance – in other words an examination of what in a given context are the things that come to exist as governable entities, and by extension, the ontological limits, horizons and contours of governance within a particular polity.

Although in a very real sense everything is political (i.e. emergent from, within and through power-laden relations) and thus a political agent<sup>6</sup>, the point that not everything is a political subject is key to my argument. In seeking to convey the distinction between political agency and political subjectivity, we might take the recent intervention of Hurricane Sandy in the 2012

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<sup>6</sup> Agency is an increasingly complex term, used in a variety of ways by different writers. Here I use it to describe something which has effects in the world beyond itself. Thus a political agent is simply construed as something which impacts on politics. Political agents need not be conscious or willful with respect to the effects they bring about.

presidential election in the United States as an illustrative case. Although commonsensically viewed as a 'natural' phenomenon, much media commentary in the United States at the time dwelt on how the damage wrought by Sandy might alter the outcome of the ballot that followed. The fact that President Obama as the incumbent candidate was given an opportunity to appear masterful in managing the ensuing crisis and was praised by many, including the governor of New Jersey (a member of the rival party) was widely seen as boosting his electoral chances by the commentariat. Thus the hurricane was not only a natural phenomenon, but a political one also. Whether Hurricane Sandy had any 'real' impact on the US election in terms of voting behaviour is not so much the point – rather I want to underscore the idea that a natural phenomenon (climate change notwithstanding) intervening in human politics is not an unusual or strange one. That a storm can be a political *agent*, albeit an unconscious one, that effects changes in politics needs little justification.

A Latourian analysis would normally seek to refigure our understanding of politics in 'symmetrical' terms. In other words, the discussion of politics would not privilege the agency of human actors, and discount the non-human participants. Instead it would seek to show that all are potentially equal actants in the network, and that drawing *a priori* distinctions between them is part of modernity's project of purifying the natural from the social. However, this does not quite get us to the question of alterity. While initially it is a valuable exercise to break down modernist assumptions about what constitutes the realm of political actors, this move only sets us up for the next question: if the modern humanistic subject is not universal, then what was the basis of politics in any given non-modern polity? In particular, what was its basis within the Inka Empire. Such a question, I suggest, can only be answered in local terms.

Within a modernist political ontology a storm cannot be a political *subject*. It is not a human individual and not a member of The People. Hurricane Sandy or any other non-human entity cannot vote, cannot be appealed to for political support, cannot be a citizen, cannot enter into the social contract and is fundamentally not therefore a constituent of the body politic. It is an external agent that can have important effects upon the body politic, but it is absolutely not a part of it. Although we might imagine other contexts where a storm could be a political subject, such could certainly not fall within the bounds of modernity – where this status is reserved to humans alone. Hurricanes as political subjects would strike us as an example of alterity that lacks sense, much as the notion of rocks as political subjects does. Thus all political subjects are also political agents, but not all political agents are political subjects.

It is important at this juncture to make a further crucial point with respect to the task I have called political ontology. The political ontology that is to be reworked in the present study is *not* that of the Inka state. Rather it is the modern political ontology that I described in the beginning of this chapter that is to be deconstructed and then reconstructed in new ways. This modern political ontology is the foundation upon which archaeological (and anthropological) theories of the state rest, and so the goal is to attempt to reconfigure *that* political ontology through an engagement with the Inka world, insofar as its material traces are available to us. Put slightly differently, our modern political ontology is a poor description of the Inka polity, which does not seem to have resembled a social contract between self-interested rational and exclusively human actors. The ways in which we have to rework this ontology, so that it better approximates the Inka Empire are themselves revealing – it is the sum of the non-correspondences (i.e. the alterity) that directs our analytical frame towards what is most



important. When I say that the Inka Empire appears to have consisted of human and non-human subjects, I am not really describing it (the human/non-human division is a modern one, after all) – I am outlining the starting point for what needs to be explained. In other words, what was the nature of politics in the Inka world that makes it appear so alter to us?

As I have said, the concern with alterity is the underlying concern of this body of work. Alterity is not simply ‘out there’ in the world. Although we often talk of *encountering* alterity as if it were something that exists before we ever meet it, what we always mean is more akin to the bringing of alterity into existence. It is an inherently relational concept; that is, difference must always lie between two things and nothing can simply be different on its own. Colonial encounters are moments where radical alterity emerges because sets of relations and entities that were previously quite remote are brought into new proximity. This proximity produces overlaps, realignments, innovative connections and new kinds of friction. These are the ‘stuff’ of which alterity is constituted and what I mean when we speaking of its analysis. This is why the notion of ontology (as deployed as a form of ‘theory’) is distinguishable in some key senses from the idea of culture.

The culture concept as a pluralizable object of enquiry has long been seen as foundational to anthropology as a discipline (including all its subfields). Archaeologists have, for example, used it in a distinct way, to refer to an artifactual horizon with an accepted degree of coherency within certain spatial and temporal limits<sup>7</sup>. Cultures imply reifications, coherent things that exist

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<sup>7</sup> The classic archaeological use of the term ‘culture’ derives largely from the work of V. G. Childe in the 1920s, although contemporary archaeologies have largely adopted socio-cultural anthropology’s understandings of the term. Post-processual archaeology (in its classic Hodderian form, at least) used a concept of culture that was basically Geertzian in formulation.

in of themselves that might be studied by anthropologists and practitioners of allied disciplines. However since at least the 1980s, the concept of culture has been opened to a sustained critique as an indefensible parcelling up of the world into discrete packets for analysis. This rejection of culture as anthropology's subject matter is probably most commonly associated with postmodern anthropology and especially participants in the 'Writing Culture' group. As Gupta and Ferguson (1992: 7) have put it, 'the fiction of cultures as discrete, object-like phenomena occupying discrete spaces... [is] implausible'. The so-called 'ontological turn' in anthropology can be viewed then as an attempt to recover from the collapse of any faith in an agreed disciplinary object following in the wake of the Writing Culture 'crisis'. Henare et al. (2007) for example, describe their project of ontography as an explicit move away from the study of culture (or, more specifically of material culture). This has then led in turn to a number of debates, claims and counter-claims with respect to whether or not the interest in ontology is simply a cover for the desire to avoid using the contentious word culture, despite ultimately referring to the same 'thing' as culture (e.g. Carrithers et al. 2010).

My aim here is to avoid reproducing ontology as a place-marker for what we used to mean by culture – the pitfall that worries many. Throughout this dissertation I will describe Inka politics as situated within a state that incorporated both human and non-human subjects. Yet as will be made clear in subsequent chapters, the distinction we (as moderns) draw between humans and non-humans is a divide that the Inkas themselves would not have recognized. When we see imputations of seditious behaviour to 'things' we imagine to be mere rocks or mountains, we are observing the limitations of our modern political ontology in its capacity to account for the activities of the Inkas. The analytical method being presented is thus 'ontological' in that it

takes this failure as its beginning point. Our (modern) political ontology must be altered through its confrontation with the empirical evidence for Inka power practices – and so the move to claim that the Inka Empire was composed of a mixture of human and non-human subjects is not what it was from their perspective, but a better description of the ways in which our political ontology is inadequate. Tracing the failures of our own political ontology as a means to account for Inka politics is a necessary analytic step before attempting to make a more ‘positive’ set of claims with respect to what politics and the political subject actually were within the Inka Empire. My point is not simply that modern political ontology is anachronistic in an Inka context and so should be avoided; rather the *specific* ways in which it fails to fit into the pre-colonial Andes are actually revealing in of themselves and so offer a productive foundation for the subsequent analysis.

The analytical process I have outlined here can be summarized as follows:

A. Dominant Western and modern political ontologies are derived from a post-Enlightenment conceptualization of the social realm and its participants. Politics entails interaction between self-interested, individual human beings. The ‘state’ is a particular way of organizing that set of interactions under a central, sovereign authority.

B. Within the Inka Empire, it seems that certain non-humans were treated as if they were political subjects. They could be executed for treason, for example, which implies they were attributed with both sentience and wilfulness. This does not ‘make sense’ within a modernist political ontology – within which only human beings can be political subjects. This is the identification of *alterity* that focuses the subsequent analysis.

C. This awareness of alterity leads us to reconfigure our (idealized) modernist political ontology so as to describe the Inka case. The Inka Empire was thus a state that (unlike modern nation-states) we described as comprised by both human and non-human subjects. However this is not a positive description of an Inka 'political ontology'. Rather it describes the non-correspondence between modernist and Inka ontological frameworks in explicit terms. We should not assume that the Inkas treated non-humans as political subjects, because the categorical distinction between humans and non-humans is ours to begin with.

D. The project then is to determine what entities were the elementary participants in, and constituents of, Inka political orders. It would be probably be quite wrong to assume that every non-human was equally a political subject for the Inkas. What kinds of beings did the Inkas seek to govern then, bearing in mind that some of them might look (in our eyes) like humans and others like mere objects?

### III. *Wak'as* and other Andean Entities

In this section my aim will be to discuss what some of these aforementioned participants in Inka politics were, albeit in more positive terms than the Western placemaker term 'non-human'. In a new epilogue to her ethnography of the Quechua-speaking community of Sonqo, Catherine Allen discusses how things have changed there in the twenty years since she conducted her original fieldwork. In that epilogue she quotes one of her friends from the community who, speaking of the people of Sonqo in general, states that '*no somos indios ahora*' (Allen 2002: 205). The phrase translates as 'we are not Indians now'. Elsewhere in her account, Allen

describes how there are a variety of reasons why the people of Sonqo are ceasing to consider themselves as Indians and she also quotes one Don Luis in this respect, who says:

If there were still Incas, as there should have been, then we really would be *Runa*.  
But instead they're all turning *Misti*. They're filled with desire to be *Misti*, not Inca.  
We were like Incas, chewing coca, drinking coca, drinking chicha, drinking it from  
(ceremonial) tumblers... That's how we were, but no longer – now we're Spanish  
*Mistis*... (Allen 2002: 205)

The term *Misti* derives from *mestizo* and often signals what some might call 'assimilation' into Spanish and urban life in the highland Andes. The term *Runa* (or *Runakuna* in the plural) is generally used in opposition to *Misti*, and means 'human' in Quechua. So what exactly does it mean when members of the Sonqo community claim that they are ceasing to be Indians and *Runa*; that they are no longer in fact humans? A plain reading of these statements might even be troubling to many Western eyes. It seems like humanity is being presented as the exclusive preserve of Quechua-speakers and is somehow lost as one adopts Spanish and Christian lifeways. It might even be read as a kind of dehumanizing gesture towards members outside the community, or members within it not keeping 'traditional' ways.

This would be a profound misreading however. Although we generally translate *Runa* as person or human, our use of these terms implies that we are referring to a universal kind of thing. In Western (and several other) ontological frameworks humanity is a global entity. After all, this was the point of contention of so many Papal Bulls, treatises and sermons on the New World leading up to the Valladolid *disputatio* of the 1550s; Europeans were seeking to ascertain

whether or not Native Americans were soul-bearing humans and thus whether they qualified for membership in what Christians understood as mankind. The eventual outcome of such discussions was that natives did have souls (which needed to be saved of course) and so were in fact humans, despite living in a 'degenerate' state, or what we would later call 'primitiveness' with the advent of social evolutionism. The Western notion of universal humanity lives on today, although always transforming through the practices of human rights, global heritage, human genomics and many other such things.

This is not what is often meant by the Quechua term *Runa* however, which although it is approximated in some senses by the term 'human', is ultimately quite a different thing to the universal human of Western thought. Thus the Sonqueños claim that certain people are not, or are no longer *Runakuna*, is not a dehumanizing claim in the vein of ostensibly similar statements from Western race ideologies. The latter relies on distancing individuals from full participation in a notion of humanity that is assumed to be universal, while the former is not dependent on a universal notion of the human being at all. Being *Runa* is a thoroughly local and specific condition.

If we consider the reasons why the *Runakuna* are ceasing to be so, as outlined in Allen's (2002) account, then it becomes clear that the *Runa* concept is not (unsurprisingly) underpinned by a Western ontology of the human. It is the failure to maintain certain kinds of circulations and exchanges of specific materials and fluids that is necessary to sustain oneself as *Runa*, particularly in terms of *chicha*, coca leaves and so on. Also, these exchanges are a vital part of one's everyday relationships to potent earth-beings such as mountains (*apukuna* or *tirakuna*)

with whom having certain kinds of reciprocal exchanges is another necessary precondition for being *Runa*. If we wish to draw the matter in terms of a contrast with Western views, we might say that beings such as *Runa* are constituted through present material practice rather than being possessors of a prior essence constituted through millions of years of deep time transformations (i.e. naturalistic evolution) or as a result of their divine creation in the image of a deity (i.e. the Christian narrative). In other words, whether one is or is not among the *Runakuna* depends on the appropriately ordered and ongoing constitution of one's person through the correct set of material exchanges and ritualized activities. In varying contexts, the participants in these exchanges might be other people, earth beings, ancestors and so on.

Following Allen's account, for a Sonqueño being 'human' is a non-essential condition produced through ongoing practices and exchanges of material in the present – especially pertaining to certain local earth-beings. If the appropriate practices are not performed, then Indian-ness falls away and one becomes something else (i.e. *Misti*). In that sense when Sonqueños use the term Indian (*indio*) they are not actually referring to the same thing as when a Westerner or a non-indigenous Peruvian uses the same word. And when we translate the term *Runa* as human, we are actually talking about two things that are quite distinct at an ontological level.

My point here is not to project the contemporary *Runakuna* of Sonqo onto the Inka past, although one suspects it would be a more reliable model than the essential construct of personhood used by Westerners derived from evolutionary phylogenies and Christian theology. Rather it serves as a cautionary example of the ways in which Western ontologies are likely to be highly inappropriate when applied in the pre-colonial Andes. These lead us directly to the

idea of the *wak'a* (or *huaca* in its Hispanicized form). The treasonous non-human at Guamachuco is identified in all the Spanish chronicles that relate the story as an entity of this type, and more of them will be encountered later in the discussion of the Amaybamba and its political incorporation into the Inka Empire. The *wak'a* is a fundamental concept in Andean scholarship and also one that is very difficult to satisfactorily define. The term is often glossed in English as 'shrine', and to some extent this captures the fact that they are entities of considerable importance and centres of significant ritualized activities. However, translating *wak'a* as 'shrine' obviously misses a great deal. Van de Guchte (1999: 155) defines them as any 'material object or location which received ritual attention, and the "force" which inhabited that object or location'. This approach is common, although a number of ethnohistorical and anthropological scholars have sought to push the term away from its association with 'objecthood' in seeking to explain its significance for past and present Andean peoples.

Frank Salomon in particular has emphasized the attribution of qualities to *wak'as* that go beyond the kind of things Westerners would normally attribute to mere objects. As he puts it, *wak'as* 'had vibrantly individual personalities' and 'clearly... are living beings, persons in fact' (Salomon 1991: 18-19). Elsewhere, Salomon (2004: 68) has called *wak'as* 'shrines embodying superhuman beings'. I am more sympathetic to such views which emphasize the person-like aspects of *wak'as* as opposed to those which present them as more object-like. Nonetheless, as the above discussion of the distinction between the terms *Runa* and human will hopefully have demonstrated, describing *wak'as* as 'persons' is more akin to a better translation of the ways in which we do not understand them from our Western perspective, rather than a positive account of what they 'really' are. Thus both 'person' and 'shrine' are less than ideal translations



of *wak'a*, since neither English concept captures the essence of the Andean one. However, person is a better translation since (when applied to rocks) it forces a more immediate confrontation with the alterity of the Andean context. It is easier for us as Westerners to imagine a rock as a shine than as a person, and because it is easier (I would contend that) it is analytically less productive.

For now, what is important to emphasize is that, like the *Runakuna* of the Twentieth Century, *wak'as* do not appear to conform to the logic of Western ontologies of either persons or rocks. Van de Guchte's (1999: 155) ethnohistoric analysis of Inka *wak'as* reveals a number of their key facets in this respect, in particular,

[A] *huaca* could become a non-*huaca*. An itinerant official in the Inca empire was in charge of determining which *huacas* were still in force and which ones were *atisqa*, that is, 'conquered *huacas*' or *huacas* that had lost their power.

A number of points are worth underscoring here. First, the status of *wak'a* appears to have largely dependent on the judgments of specialists working on behalf of the state. Second, it was not an essential status of any entity, but something that could be lost (and possibly regained, depending on the appropriate circumstance). In that regard the status of being a *wak'a* is not altogether different from being among the *Runakuna* at Sonqo – in other terms it is a status that depends on certain kinds of practices (particularly ritual exchanges) and relationships being maintained.

*Wak'as* (like *Runakuna*) appear to have been involved in a wide variety of such exchanges involving receipt of meats, shell, coca leaf, *chicha* libations (Salomon 1991: 17) and in some

cases human children were given to them also (Dean 2011: 2). Van de Guchte (1999: 155) points out that there is no clear account of what occurred when a *wak'a* became *atisqa* or 'powerless', but given wider Andean principles with respect to how the vitality of things is maintained, it seems almost certain that denial of the appropriate libations and offerings were among the necessary steps required to defeat a *wak'a* in this manner. This of course does not preclude the more violent destruction described in the account of the *wak'a* at Guamachuco that was ground to dust by Atawallpa, perhaps representing a more final or total defeat of a *wak'a* than the normal process of rendering them *atisqa*.

Following from these arguments, it seems best to consider the array of person-like non-human beings that the Inka Empire sought to govern, as constituted by certain practices and material exchanges – interactions that were necessary for them to continue their existence as such. Things like *wak'as* are not things that *are*, so much as things that are in a constant and always-present state of *happening*; the mutable products of ongoing practices rather than the fixed outcomes of deep histories. Understanding this character of such non-human entities is a prerequisite for thinking about the ways in which the Inka Empire might have sought to govern such beings - to coerce, conscript or placate them so as to pull them in line with their wider political project. Moreover, thinking about the kinds of practices that constitute such things in Andean contexts is necessary when attuning ourselves to the sorts of archaeological signatures that their political manipulation might have left behind. Here we have arrived at a beginning point for what we might mean when saying that the Inka Empire comprised non-human subjects. In the remainder of the dissertation, I will discuss certain *wak'as* (or at least similar

entities) in the Amaybamba, to illustrate with greater specificity how such beings were made into obedient subjects of the Inka polity.

#### IV. Materiality, Ontology and Archaeological Theory

The fact that the non-human realm and its position *vis-à-vis* sovereign powers (represented by Atawallpa's mountaintop) is the starting point of this dissertation is obviously bound up in wider shifts within the humanities. Archaeology (along with several other disciplines) is in the middle of a new theoretical wave where much is being made of a resurgent interest in materiality and the non-human. Much like the earlier theoretical projects called 'processualism', 'postprocessualism', 'social archaeology' and 'the new archaeology', it is difficult to find much agreement on what we should call this shifting ground within the disciplinary scene. In general, scholars tend to feel uncomfortable about labels, no doubt because it feels like a slight to imply they are following any kind of school or moving with broader intellectual fashions. But whatever it is called, the wave of the 1990s that treated with the search for meaning in artifacts and tried to see material culture 'as text' is increasingly being presented as old hat. The current *Zeitgeist* instead lies in a return to things, in grappling with materiality and in considering the agency of non-humans. The shift is undoubtedly driven in large part by a reaction to the textual paradigms of post-structuralism, as seen in Meskell's (2008: 4) desire to get 'beyond the representational economy'.

A number of scholars and their works can be considered foundational in this respect, chiefly those of Bruno Latour (1993a, 1993b, 2004, 2005), Eduardo Viveiros de Castro (1998, 2002

2003, 2004a, 2004b), Alfred Gell (1998), Graham Harman (2005, 2009, 2010), Bill Brown (2004), Tim Ingold (2007) and Marilyn Strathern (1988), among several others. This literature is now vast and spans the humanities and beyond; so I will not attempt a complete review. However, its reception within anthropology and archaeology particularly requires some general commentary. Thus far, perhaps the most visible and prolific sub-group have been those calling for a symmetrical archaeology, which is explicitly framed as a critique of (and movement away from) the tendency to see material culture 'as-text' (e.g. Olsen 2003, 2007, 2010; Webmoor 2007; Witmore 2007; Shanks 2007). Through their work, these authors offer a reasonably programmatic effort to shift archaeological theory in particular directions, seen in their collective participation within the Symmetrical Archaeology Forum at the Stanford Humanities Lab and their (Olsen et al. 2012) recent co-authorship of *Archaeology: The Discipline of Things*.

The appeal to symmetry made by these scholars draws mostly from the work of Latour and references an analytical stance in which humans are given no ontological priority over non-humans in the study of the social. As Fowles (in Alberti et al. 2011: 898-9) has argued, Latour's project is primarily grounded in a reworking of modernity's self-narrative of origins (i.e. its cosmogony) so as to effect a critique of its fundamental ontological commitments. Thus the dualisms that underpin modernist ontologies such as subject-object, representation-represented, things-humans and nature-culture are the main targets to be undermined within Latour's (1993a) reworked origins story, and so by extension dualistic divides are the targets of the critical fire of the symmetrical archaeologists.

With respect to the long-running archaeological debates over agency, the symmetrists are particularly keen to reject any *a priori* distinction between a primary agency attributed to humans, and a secondary agency imputed to artifacts – this being the traditional hinge around which the subject-object distinction has always turned. As Witmore (2007: 552) puts it, if ‘we hope to understand how things push back and have a stake, we... [cannot] start with “subjects” and “objects” at the end of a long process of purification associated with the Enlightenment’. In this they appear unsatisfied with the object-agency school of thought as developed mainly by Alfred Gell (1998). Whereas anthropological scholars following Gell have considered the co-constitution of objects and humans and argued for the extension of cognition into the material realm of artifacts, for the symmetrists this kind of anti-Cartesianism is insufficiently radical. Humans remain the wellspring of social agency in such studies, and thus for symmetrists the priority of the human subject over the non-human object is not abolished, even if the boundary between the two has become a little fuzzier.

Common to the symmetrists is a particular rhetorical style through which they seek to promote their project, where they frequently cast their efforts as a sort of political intervention on behalf of things. This is undoubtedly inspired by Latour’s own radical-reformist presentational style, where the move to symmetry he advocates often takes on a kind of emancipatory flavour. Just as certain classes of humans such as women, slaves and Catholics were once disenfranchised and excluded from full participation in the body politic, so too will things be admitted into a new non-modern ‘cosmopolitics’ (e.g. Latour 2004)<sup>8</sup>. One of Latour’s most

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<sup>8</sup> Of course this gesture is itself very typical of modernity, which is always awaiting the next emancipation.

provocative and evocative phrases that conveys this search for a new politics is the 'Parliament of Things'. As he puts it,

Half of our politics is constructed in science and technology. The other half of Nature is constructed in societies. Let us patch the two back together, and the political task can begin again (Latour 2004: 144).

Within the ranks of archaeology, the symmetrists have adopted a similar emancipatory style of political argument. Witmore (2007) for example, explicitly writes in terms of a 'manifesto' while Olsen (2010) struggles 'in defense' of things and elsewhere uses terms like 'marginalized' (Olsen 2007) and 'subaltern' (Olsen 2003: 100) to describe the position of things in the twentieth-century academy. In this line, we might also consider his statement that: '[t]o the extent that things are allowed to speak it is largely to bear witness to those human intentions and actions from which they themselves are believed to originate' (Olsen 2007: 580). *Allowed to speak* - the rhetoric here with regards to things could hardly be more reminiscent of classic texts in subaltern studies. Here, it is also difficult not to be reminded of Timothy Mitchell's (2002) Latourian turn of phrase: 'Can the Mosquito Speak?' as discussed in the previous chapter.

In contrast with the symmetrists, the 'ontological archaeologists' (or the ontologists as they will be called here) have a somewhat different emphasis with respect to their theoretical commitments, although it should be noted that there is much overlap and participants in either camp are seldom far from each other's conversations (or conference sessions). If Latour is the core theoretical inspiration for the symmetrical crowd, the ontologists have a somewhat more cautious engagement with the notion of radical symmetry between humans and non-humans -

although they too have undoubtedly been heavily influenced by Latour in a variety of ways. Alberti and Marshall (2009: 345) worry explicitly about the ‘globalizing tendency’ of some of their colleagues’ symmetrical approaches, while elsewhere Severin Fowles (2008) has drawn on Graham Harman’s (2005) notion of the object-world as a ‘perpetual Orient’ to argue that the resurgent fascination with material culture now permits anthropology to make the kind of objectifying claims over objects it no longer feels comfortable making over actual people.

If what unites the symmetrists and the ontologists is their desire to challenge modernity’s basic ontological assumptions and dualisms, their divisions lie in how they might seek to go about this. In my reading, the problem of *alterity* is the driving issue for the ontologists, an issue that, by contrast, seems largely sidelined in the writing of the symmetrists<sup>9</sup>. In this respect it may not be coincidental that Latour’s empirical studies have been focused on the practice of laboratory science in France, while one of the core theoretical influences on the ontologists, Eduardo Viveiros de Castro, is an ethnographer of Amazonian hunter-gatherers. By extension we might note that among the major symmetrists, Shanks and Witmore are classicists and Webmoor is primarily situated within Science and Technology Studies. By contrast the scholarship of Alberti, Marshall, Bray, Fowles and Haber are all framed through the study of non-Western peoples - i.e. those who are indigenous in the sense of being once-and-still colonized. Benjamin Alberti (in Alberti et al. 2011: 905) is especially wary of symmetrical archaeology becoming the basis for a new meta-ontology of humans and things that can be applied to all times and places, *even*

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<sup>9</sup> If the crude calculus might be forgiven, it is worth noting that in *Archaeology: The Discipline of Things* (Olsen et al. 2012) and in the collection of papers Webmoor (2007), Witmore (2007), Shanks (2007) and Olsen (2007), the word alterity appears zero times. Whereas taking together the papers Alberti et al. (2012), Alberti and Marshall (2009) and Harris and Robb (2012), it occurs on a total of seventy-three occasions.

*though* that meta-ontology might explicitly be intended as a critique of Cartesianism and its reigning dualisms. Yvonne Marshall (in Alberti et al. 2011: 900) also seems to be voicing a similar concern in her desire to ‘hold alterity open’ in our archaeological analyses.

As I have said, the symmetrists follow a Latourian aim to promote a neither-modern-nor-postmodern cosmopolitics, in which things are emancipated from their subaltern status. By contrast the ontologists are engaged in a somewhat more traditional postcolonial endeavour. The subaltern figures that they are concerned with are still the ‘original subalterns’, such as Native Americans, Amazonians, indigenous Andeans, Pacific Islanders and so on. In this respect consider Alberti’s (2008: 3) concern that through such generalizing accounts of materiality theory, ‘other peoples’ voices (and hence, they themselves, their say and stake in the world) are appropriated’. For him it is the silencing of people, not of subaltern things, that remains the focus of political and ethical considerations insofar as it relates to the production of knowledge.

How we think about alterity, and the ever-unfolding politics that emerge from the colonial encounter, is a matter that is deeply present in the work of Eduardo Viveiros de Castro, and so here I wish to consider his writings in more detail. This is both because he has been influential with respect to several major ontologists in archaeology (e.g. Alberti and Marshall 2009; Alberti and Bray 2009) and ethnography (e.g. Henare et al. 2007; Holbraad 2007) – and also because his ideas have had a significant impact on the line of argument offered in this dissertation. Like Latour, Descola and others, Viveiros de Castro (1998, 2004) is much exercised by modernity’s ontological separation between nature and culture and through his work with Amazonian groups he has suggested that moderns rely not only on a nature-culture great divide (cf. Latour



2003), but a simultaneous pluralization of culture and singularization of nature. That is to say, we in the west imagine there to be a potential infinity of different cultures, each with their own views on the world and their own interpretative lenses and their own systems of knowledge (i.e. epistemes). Whereas by contrast, nature, or physical reality, is one. Every culture might have its own worldview, perceiving reality in its own terms, but reality itself stands outside of this pluralism and remains essentially indivisible and universal. There are many worldviews, but in the end there can only be one world.

Within this framework, people from other cultures live in the same reality, the same 'ontology' as do we modern Westerners, but they see it and understand it differently. This singular world inhabited by all was subsumed into the category of nature, while the problem of difference was framed in terms of the 'epistemological'. This was the realm of culture, which unlike nature, *is* subject to pluralization. One nature, shared by many cultures - one world, represented in many different ways. Traditionally, this was how it was explained that people from different cultures might not agree on the nature of reality, because we all see that reality through our cultural means of representing it, which are not everywhere the same. Thus for Viveiros de Castro and those building directly from his work, the problem of alterity has been fundamentally figured in terms that are epistemological (how reality is known), not ontological (what reality is) (see: Henare et al. 2007: 7-12).

Amazonian cosmological theory, according to Viveiros de Castro (2004a: 464-467), inverts the origins narrative of the modern west. Rather than humanity emerging from a base state of animality (i.e. the emergence of the genus *Homo* within the primate order), for Amazonians the

primordial condition was the human being, from which animality was later derived. Thus he argues that in the Amazon, 'animals are ex-humans' (whereas for westerners, humans are ex-animals) and inhabit a subject position identical to ourselves. Animals in fact see themselves as human, and see us (humans) as being animals. In his words,

[T]he Amerindian conception presumes a spiritual unity and a corporeal diversity.

For them, culture or the subject is the form of the universal, while nature or the object is the form of the particular (Viveiros de Castro 2004a: 467).

For Amazonians, animals and humans are identical at the level of the subject, but differ in their bodies. Viveiros de Castro (2004a: 467) terms this cosmology 'multinaturalist' in contradistinction to the 'multiculturalist'<sup>10</sup> western view.

He goes on to suggest that anthropology has largely engaged itself with the task of 'massive conversion of ontological into epistemological questions' (Viveiros de Castro 2004a: 483). By this he means, it has taken the alterity of non-modern peoples and construed it as merely representational, while abdicating the realm of nature (that is of ontology) to the hard sciences (Henare et al. 2007: 9). It thereby posits many cultures, all of them differing in how they represent the world while assuming a singular underlying reality that is not, nor can ever be, alter. It is for this reason that anthropologists do not study nature *per se*, they study the social and by extension, how the social represents nature. It follows from this that it is only in the realm of the social that difference (alterity) is even possible, and to speak of alterity with

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<sup>10</sup> Note that this refers to the idea that cultures exist in the plural, while nature is unitary – it is distinct from the everyday use of the term 'multiculturalism' in the sense of political pluralism with respect to cultural differences encapsulated within a polity. Of course, the latter sense would be logically impossible without presupposing the former.

respect to the natural world is inherently nonsensical. Different cultures are inevitable, but different natures are impossible.

With Viveiros de Castro, it is the problem of the colonial encounter with alterity that underlies his theoretical production – and here can be seen the quite different sort of politics as compared with that found in the work of the symmetrical archaeologists and other cosmopoliticians. In his writings, the colonial encounter between Europeans and Amazonians drives the analysis and it is impossible to imagine his accounts being the same if they were not emergent from the deep ruptures that colonial engagements generate. On several occasions, for example, he has made significant use of an anthropological parable detailing an encounter between Amazonians and sixteenth Spaniards based on the Valladolid *disputatio* of 1550-1551 – that is the Catholic Church’s learned debate between the opposing figures of Las Casas and Sepúlveda, on the question of whether or not the denizens of the New World actually possessed souls<sup>11</sup>.

The parable is taken from Levi-Strauss’ (1973) own reflections on Amazonia, where he describes the parallel experimentation and investigation that both Amerindians and Europeans performed on the other to find out what manner of beings it was that they faced. It runs that in

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<sup>11</sup> The question of whether or not native peoples in the Americas has souls was certainly one much debated within the Catholic Church during the early colonial era. However, by the time of the Valladolid *disputatio* the matter had (officially at least) been resolved by a series of Papal Bulls in favor of ascribing Amerindians the status of ensouled humans. Thus to summarize Valladolid as a dispute over the existence of natives’ souls simplifies the matter somewhat. The specifics of the Valladolid debate resolved more around the issue of whether or not native peoples were ‘natural slaves’ and whether they possessed the capacity for rational thought, rather than their ontological categorization as either humans or animals. The arguments presented by Las Casas and Sepulveda were therefore more an extension and development of the earlier debates on the souls (or lack thereof) of colonized peoples, rather than the main venue in which that particular issue was assessed (see discussion in Huxley 1980, for example) .

the Greater Antilles, some years after the discovery of America, while the Spanish were dispatching inquisitorial commissions to investigate whether the natives had souls or not, these very natives were busy drowning the White people they had captured in order to find out, after lengthy observation, whether or not their corpses were subject to putrefaction (1973: 384, cited in Viveiros de Castro 1998: 475). It was assumed by the Amazonians that the Europeans possessed souls; the question for them however, was whether or not they also possessed bodies. In Viveiros de Castro's exegesis on this tale, we are therefore offered a paradigmatic case of the contrast between the multinaturalism of the indigenous Americans, as held against the mononaturalism of the incoming Europeans.

My own analysis seeks to operate from a similar logic, by taking moments of alterity and ontological ruptures that emerge from within colonial encounters as a starting point. The juxtaposition of the pre-modern sovereign Atawallpa with our modernist political ontologies offered in the present chapter was just such an effort, where alterity was brought into relief through a kind of analytical encounter<sup>13</sup>. This kind of analytical step is one I see as offering much potential for the production of new questions, which also might challenge our assumptions about how things are. Alberti and Marshall (2009) discuss this kind of methodological-analytical procedure in the ways they seek to use Viveiros de Castro's writing as a basis for a new kind of 'ontological' archaeology. As they put it, the purpose of seriously engaging with other people's accounts of reality is not to rescue us from the alienation and

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<sup>13</sup> The encounter between Amazonians and Iberian colonists was an historical one that is used by Viveiros de Castro as an analytical starting point. My encounter between Atawallpa's execution of Catequil and modern Western political ontologies is not a historical one, but rather is brought into being via the analysis itself. However, I believe as a methodological step, such 'constructed' encounters can be insightful in a similar fashion to the historical one discussed by Viveiros de Castro.

disconnectedness we feel under hypermodernity, by offering a more 'authentically truthful' narrative of how the world can be – rather their goal is to challenge the 'the notion of "a world as it really is", whether relational or otherwise' (Alberti and Marshall 2009: 347). As they go on to say,

...the answer [is not] to privilege other peoples' accounts of the world, as in nativism... but rather to engage other peoples' ontological or conceptual work as 'procedurally equivalent' to what we do as anthropologists; properly speaking, their theories are anthropologies too... (Alberti and Marshall 2009: 347)

It is often said that anthropology is an intellectual product of the European colonial encounter (e.g. Asad 1973; Fabian 1983). Older disciplines like history, theology, classics and philosophy seemed quite adequate to describe the human world and all its variability until Europeans started to encounter Native Americans, Aborigines, Melanesians and the inhabitants of all the other New Worlds that came into relief following the so-called 'voyages of discovery'. Moreover, anthropology's heyday and emergence as a profession is intimately tied up in the desire of European powers to know more about the colonized peoples they were at that time seeking to directly govern. Anthropology as a discipline was therefore born in this moment of the encounter with alterity and it seems fitting that it has most to say when it takes those meetings of difference not only as its historical point of origin, but also as its method. This to me is the greatest value in Alberti and Marshall's call for procedural equivalence in the interaction of Western and non-Western ontologies (defined here as theories of reality). It is

also important that their entails a desire to level the epistemological hierarchy that goes along with mononaturalism, facilitating a theoretical space in which indigenous theories can ‘act back’.

#### V. Materiality without Alterity

Despite this complex field of overlapping conversations, one recent publication in particular has done much to draw into sharp relief some of the major internal divergences with respect to the aims of this new theoretical wave, namely Ian Hodder’s (2012) *Entangled: An Archaeology of the Relationships Between People and Things*. In this text Hodder outlines a new and far-reaching framework for how archaeologists should conceptualize their discipline and its subject matter. Particularly, he understands the archaeological record in markedly Latourian terms, as speaking to a dynamic set of interdependent relations between humans and other humans (HH), things and humans (HT and TH) and things and other things (TT). These four sets of interacting dependencies are what Hodder understands as a process of ‘entanglement’ – as he puts it,

The defining aspect of entanglements with things is that humans get caught in a double bind, depending on things that depend on humans. Put another way, things as we want them have limited ability to reproduce themselves, so in our dependence on them we become entrapped in their dependence on us (Hodder 2012: 88).

Hodder’s views seem to very much in accord with contemporary trends in the discipline, seen in his desire to examine the agency of non-humans, to embrace materiality and sideline questions of meaning. However, most striking to me is not what concerns Hodder, but what he does not mention – that is the problem of alterity. Otherness, radical incommensurability and difference

are not Hodder's concern in his discussion of material entanglements. In this respect, Hodder's text is quite an important study for my purposes, as it demonstrates that it is possible to offer an archaeological account that is very much situated within the materiality literature, but which is not an attempt to engage with the problem of alterity directly.

Indeed, while reading Hodder's text, I could not help but notice its resemblances to 1960s systems theory. It is unclear to me what the differences may be, between a process of increasing material entanglements (such as those offered by Hodder) and the sort of positive feedback loops described by Robert Carneiro (1970) or Karl Wittfogel (1956) over forty years ago. For example, one could easily imagine reframing Wittfogel's hydraulic hypothesis in the language of this new materialism. Water depends on human redirection and infrastructure in arid climes for its appropriate dispersal, as do the crop regimes it sustains (TH), and at the same time humans also depend on the water and the crops for the expansion of their own increasingly sedentary populations (HT). All the while certain groups of humans are required to devote time and intellectual labor to the maintenance of the irrigation canals that feed the broader population (HH), forming a specialist class who depend on the work of others to sustain them through surplus production (HH again). The maintenance of the crops regimes and irrigation canals relies on the sophisticated calendrics and recording systems to monitor the whole system (TT) and the emergent elite requires the calendrics to bolster its authority *vis-à-vis* the masses (HT again). And on and on it goes. Over time we see the kinds of ever-increasing dependencies that tie humans and things together, creating an entangled and progressively more intermeshed system; something we have come to know retrospectively as the 'archaic state'. It seems legitimate then to wonder how much difference actually lies between

entanglement theory and old-fashioned positive feedback analyses, beyond superficial variations in vocabulary and presentation.

Entanglement is offered as an approach that is explicitly 'not a return to materialism' (Hodder 2012: 59) because its 'aim has not been to talk of things shorn of humans. Humans and things are tied together from the start' (Hodder 2012: 59). Yet the idea that the New Archaeology ever posited a world in which humans and things were 'shorn' of each other has little foundation. For example, ecological approaches to human cultural systems were a core interest in classic processual accounts, and it would be a bizarre representation of human ecology that did not assume complex interdependencies between human and non-human elements. In this respect Hodder seems to be constructing a straw man in his suggestion that materialist archaeologies ever sought to separate humans and non-humans in their explanatory accounts of past societies. Perhaps some contributors to the New Archaeology operated on the implicit idea that there was an essential ontological divide between humans and non-humans in terms of their respective capacities and inherent properties – a reflection of Cartesian intellectual inheritances, but this is quite different from an *analytical* segregation of humans and things. An asymmetrical analysis (humans as agents, non-humans as objects) is not necessarily a segregated one (Humans and non-humans kept apart).

Thus it is often quite difficult to see where the new materialism as presented in the form of entanglement theory is distinct to any great degree from the old materialism. Consider Hodder's statement that,



Things are not inert. They are involved in complex flows of matter, energy and information. They need each other, depend on the presence and timing of each other. They are chained together (Hodder 2012: 59).

And then we have the claim by Kent Flannery and Joyce Marcus that,

Human ecosystems are characterized by exchanges of *matter, energy* and *information* among their components (Flannery and Marcus 1976: 374-5, emphasis in original).

Webs of dependency between humans and non-humans and enchainments are fairly fundamental to ecological approaches and I doubt Flannery or Marcus (or other processualists) ever intended archaeological studies informed by human ecology to entail a separation of human components and thingly components with respect to the analysis of such exchanges.

My critiques here should not imply that I reject Hodder's take on materiality *in toto* – much value lies in his discussion of different temporalities in particular, where transformations occurring at the timescale of human lives and intentions are not identical with those that take place over centuries or even millennia of unfolding entanglements. But I do suspect that some of the greatest strengths of Hodder's entanglement theory are not entirely distinct from some of the core strengths that ran through the best iterations of processual archaeology and the reason why it was (and for many remains) a compelling tradition.

Arguably, processualism was not repudiated by many in the discipline because it had been proven wrong as a paradigm, but rather because we had reached the explanatory limits of

prime mover models and environmental-economic determinism. The New Archaeology gave us much, but in the end there were simply other things to say about past societies, such as the construction of meaning and the role of ideology – alternative approaches whose time had come. As Marshall Sahlins suggests, partly in jest and partly in seriousness: in fields such as anthropology ‘paradigms are not outmoded because they explain less and less, but rather because they explain more and more—until, all too soon, they are explaining just about everything’ (Sahlins 2002: 73 ). It was hardly new data or new methods that ushered in post-processualism, so much as archaeology having exhausted the kinds of innovative interpretations that could be garnered from the New Archaeology and its methods and assumptions. Hodder’s entanglement theory therefore seeks to overcome the weaknesses of post-processualism by going back to the New Archaeology that post-processualism sought to critique. This however seems to tie us into a circular theory loop that does little to move conversations on in more productive directions.

With that in mind, I am unconvinced that much is to be achieved in the (re)turn to entanglements of human-things and their growing interdependencies that was not already gleaned from the decades of human ecological systems analysis and positive feedback loop. At the very least it would be interesting to read an explicit account of how entanglement differs from more traditional systems models offered by past scholars.

Hodder’s fourfold analytical framework of humans-humans, human-things, things-humans and things-things is presented as a kind of universal rubric under which archaeologists can consider

the relations through which the world is composed and maintained. However, he does not examine whether the categories of 'things' and 'humans' held any relevance for the inhabitants of Çatal Höyük eight millennia ago. Did the people living at the site, who set in place the plastered bucrania and buried their dead under the floors of the houses, understand themselves to live in interdependent webs of human and things? Answering questions of this sort does not appear to be Hodder's project. This seems a sharp contrast to the Hodder's (e.g. 1991) older writings where the search for meanings that must always be culture-bound and historically specific was very much an effort that engaged with human difference with the stated aim of getting beyond universalisms. Entanglement, by contrast, accounts for both Hodder's wristwatch and the plastered walls of Çatal Höyük. In that sense, entanglement seems a lot like the kind of post-Cartesian meta-ontology favoured by the symmetrists, and which troubles Alberti, Marshall and many of the other ontologists.

By contrast, in thinking about the Inka Empire I find myself repeatedly running into the kinds of alterity described in the execution of the treasonous *wak'a* at Guamachuco. Entities which I understand to be things, the Inkas apparently treated as persons; while in other contexts they dealt with persons in a way I see as more appropriate to a thing. And this is but one of the many moments where it seems that some fairly radical incommensurabilities are coming into play. We might then need to begin by questioning just how useful are such categorical distinctions such as humans and things. To my mind, this is evidence that the 'ontological turn' within archaeological theory is not identical with the broader shift towards materiality, despite the many overlaps. In that respect Hodder's recent discussion of entanglement has done a lot to

clarify the stark divergences in the intellectual projects that are being pursued by different archaeologists within the contemporary scene – despite perhaps superficial congruencies insofar as they tend to cite similar literatures and often use similar vocabulary.

This provides an opportunity to outline in clear terms the approach that will *not* be taken within this remainder of this dissertation. It would, for example, be possible to produce an account of how the Inka imperial expansion into the Amaybamba Valley entailed increasing entanglements between humans and a range of non-human actants. This might involve a discussion of how coca, as a central component in the material entanglements of the empire, required certain actions of humans to expand in range and grow. While at the same time, the economic, political and social systems of the empire were fuelled through ever more frequent and voluminous coca exchanges, between humans and between humans and certain politically potent non-humans. By the end it would probably be possible to appreciate something of the complexities of many human-thing dependencies that underwrote the Inka imperial project, as well as the more traditional human-human dependencies that we normally consider in the analyses of archaic polities. We could also place coca-growing in its historical context, tracing its manipulation *by* humans – and *of* humans in turn – over the millennia; demonstrating that the dependencies Hodder describes have real-world and material effects across time spans far-exceeding human cognition and planning.

And such an analysis would likely be an insightful one in many respects. But it would also make the Inka Empire and its expansion into the Amaybamba sound a lot like the emergence of sedentism and urbanism in prehistoric Anatolia. The ontological ruptures and

incommensurabilities would be left unexplored and our commonsense understandings of the world, of politics, of political subjectivity and what the state and body politic are; all would be left largely untroubled. Having situated my project loosely within the emerging tradition of ontological archaeology, my aim in the following chapters is therefore to outline, via the case study of Amaybamba Valley, what the project of political ontology entails. Moreover, before we can even begin to talk about politics in a context such as the pre-colonial Andes, my argument is that we need to take a 'step back', and consider what the elements of such politics were in local ontological terms.

## Chapter Four: The Amaybamba Royal Estates

### I. Introduction

This chapter is about royal estates. Yet the term 'estate' should not be taken too literally. It is not, for example, a term that the Inka used themselves, nor a translation of an indigenous Quechua or Aymara concept that has been reproduced in European languages. That said, it is a 'fact' that Inka rulers and other notable aristocrats possessed things now understood to be estates, things which were a central part of their private wealth holdings and patrimony. Obviously the entities we call royal estates did exist in some form and were an important part of the internal machinery of the Inka Empire. Taking this observation as a starting point, my aim here is to offer a revisionist account of what these phenomena actually were. The basic argument I will elaborate is that there has perhaps been a tendency to take the Spanish colonial perceptions of the Inka landholdings too literally – insofar as we imagine the royal estate system as a thing comparable to the landed aristocratic holdings of late Medieval Europe, or the hacienda and plantation economies of the tropical New World, or even the *latifundia* of the Roman Empire. In other words we have rendered them as something overly commensurable with our own world, and our underlying perceptions of rationality and commonsense.

Modern audiences encounter much in the way of alterity when reading accounts of the Inkas and life in the pre-colonial Andes. The execution of rebellious mountains for example, or the mass child-sacrifices in the ritual of the *Qhapaq hucha* strike us as quite classic forms of anthropological Otherness. By comparison, the royal estates are often an anchor of familiarity

in a sea of difference. With them, we read of extensive parcels of privately held lands, given over to the large-scale production of commodity wealth. Moreover, the things of value produced by the Inka royal estates are things we still value today. *Concrete things*. Things like maize and coca leaf and chili peppers. They are the sort of things which are still bought and sold in contemporary commodity markets and whose ever-fluctuating exchange-values you could check online if you so wished. Even if (like coca products) they are sometimes illicit commodities, they are still no more immune to the logics of the market than their legal counterparts; and with a little research you could no doubt quickly determine their current street value per kilo. Not only were Inka royal estates centers for the production of agricultural commodities, they were also triumphs of rationalization and technological efficiency. The irrigation systems, storage systems and land improvement projects of the royal estates are frequently presented as marvels of Inka civic and technological engineering prowess. So for an otherwise alien empire of talking rocks, living corpses and human sacrifices, the royal estates were perhaps one of the most *familiar* things in it.

Yet this seeming familiarity can be deceptive. In part this is because it allows our own (modern and Western) assumptions and beliefs to become too easily naturalized and universalized without their critical interrogation. It is commonplace for Andean ethnohistorians to urge great caution when reading Spanish accounts of the native Andean religion encountered in the New World. And we are frequently told that the colonial reading of the rituals and ceremonies of Andean peoples was inevitably done through the lens of late medieval Roman Catholicism, seeking to extirpate idolatries and win souls for the greater glory of Christ and His Church. The Spanish kingdoms had just succeeded in a centuries-long struggle to drive Muslim rule from the

Iberian Peninsula, a process known as the *Reconquista*, and so it is not surprising that many Spanish chroniclers in Peru described Inka temples as ‘mosques’<sup>1</sup> and looked on them with the same intolerant eyes.

In such cases it is obvious to us that something Andean is being refigured into categories that were immediately legible to sixteenth-century Iberians; there were of course no actual mosques in the New World in the 1530s. And so to use mosques as a model for thinking about the sites the conquistadores referred to as such seems self-evidently incorrect. Similarly, Karen Graubart (2000) has discussed how the early chroniclers’ represented the *mamaconas*, or ‘chosen women’, as a Peruvian version of the ‘vestal virgins’ of ancient Rome. This frequent translation of indigenous Andean concepts and social institutions into familiar medieval and classical terms is widely understood as problematic. Or at least, it is thought problematic when it is the translation of *religious* phenomena. However, Spanish representations of other things, like landed estates and other matters deemed more ‘economic’ in character do not seem to attract the same explicit concern vis-à-vis problems of translation.

But it is important to remember that the Inka royal estates were not haciendas; they *became* haciendas<sup>2</sup>. None of our colonial-era accounts of aristocratic estates are actual representations of a pre-colonial economy in operation. Rather they were renderings of a system in the process of being (radically) transformed into a set of aristocratic estates for the use of the nascent

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<sup>1</sup> See Graubart (2000: 218) for a fuller discussion of what she calls ‘proto-Orientalist’ vocabulary in early Spanish accounts of the New World, including the use of the term mosque to describe indigenous religious structures.

<sup>2</sup> Some royal estates at least passed directly into colonial ownership, such as Ollantaytambo and Chinchero. Others, such as Machu Picchu were too remote from Cuzco and so were abandoned and eventually forgotten.



colonial gentry of the Spanish Americas. Thus there is no written description of the Inka royal foundations in existence; there are only accounts of Spanish estates that were derived from them during the colonial era. And the fact that the Spanish may have perceived them to have been aristocratic estates does not mean they actually were so. There are no grounds to assume that the Spanish were more reliable in their descriptions of things they perceived as familiar, as compared to the things that imagined to be alter. Thus the basic analytical starting position I am advocating here is this: we ought to consider the category of the 'royal estates' as no less problematic a translation of indigenous Andean ontologies as the use of terms like 'mosque'.

Seeing Inka royal estates as precursors to the Spanish hacienda system (or colonial plantation economies in general) is thus the stance that this chapter seeks to move away from. This, for the sake of brevity, I will call the 'crypto-capitalist' model of the royal estates. It is defined as the assumption that Inka royal estates were basically a form of private aristocratic patrimony that was geared to the maximal production of commodity wealth for their elite owners. Under such a model the only major difference between Inka royal estates and the Spanish haciendas many of them eventually became, is that the former served a native aristocracy while the latter served a colonial one. Fundamentally, the crypto-capitalist model is an account of the royal estates that entails a much limited encounter with alterity – or at least with a form of alterity that does not challenge our modern ontological frameworks.

It is important then not to equate crypto-capitalism with being pro-capitalist in the ordinary political sense. My argument is certainly not that the use of crypto-capitalist logic in archaeology is part of a project of consciously seeking to justify capitalist ideologies. In fact

capitalist logics are perhaps most frequently imported into Andean archaeology through critiques of ancient social elites as exploiters of the masses. This is especially so where the explanatory reflex casts them as cynical extractors of surplus labor from a peasant class burdened and cowed by ideological false consciousness - for this is precisely how Marxist critiques portray the capitalist bourgeoisie and its relationship vis-à-vis the proletariat. The point here is not that ancient or non-modern social elites were benevolent of course. Rather it is better to understand exploitation in ways that emerge from ancient worlds themselves and their own realities, instead of transplanting a colonial paradigm of class conflict and economic production to explain non-modern contexts.

The notion that the conquests directed by early Inka elites were motivated by a desire to acquire new productive lands (and the goods that could be obtained from them) is often represented in accounts of the emergence of the imperial state. Alan Covey (whose work offers the most up-to-date synthetic treatment of the origins of the Inka polity), argues that,

The chronicles describe major projects of resource intensification and redistribution beginning during the reign of the sixth ruler... [From this time] each ruler is said to have established one or more personal estates and built palaces... The extension of Inca political control into the Sacred Valley – where productive lands could be developed – would be a logical decision for a polity seeking additional resources... The chronicles suggest that early territorial conquests were made to establish direct access to exotic and wealth goods, including cloth, feathers, precious metals, and coca leaf... (Covey 2006: 116-7)

My argument here is not that this picture is wrong; rather it translates Inka motivations and priorities into terms that seem entirely rational and logical from the perspectives common to modern Westerners. Resource acquisition and intensification, land improvement and development, access to new forms of exotic goods – all these ideas sound not too dissimilar to the goals of the archetypical modern capitalist. My concern then is that Inka rulers come to sound too much like the proprietors of sugar or coffee plantations in a modern capitalist-colonial economic system, rather than actors living in a non-modern world who held to a very different set of ontological frameworks. In my view we need to think more critically about how we *translate* Inka motivations, especially when the terms used would not have been recognizable to the Inkas themselves. For example, the Inkas had no conception of land that was an inanimate, resource-bearing entity as is implied in some accounts. For the Inkas, the Cuzco region was quite literally filled with an array of animate, conscious and powerful beings that were negotiated with and manipulated in all Inka interactions with the landscape. It therefore seems to me that it is quite problematic to avoid directly addressing these views when explaining Inka motivations for imperial expansion and ‘land acquisitions’ in and around the heartland.

Obviously in some sense the Inkas did conquer and take over large tracts of land and ‘develop’ them, but that is an *etic* view of the process. We tend to feel that when we describe Inka ‘religion’ we must explain how radically different their views of reality were. Thus the dead were powerful political actors, the mountains were deities who needed to be offered sacrifices and rocks could be oracles whose loyalty was open to questioning – and so on. Yet can we

assume that when talking about Inka 'economics' there is any less alterity to be addressed? The aim of this chapter is to convince the reader that we cannot.

Here it is important to be clear. My argument is not that Andean archaeologists have failed to address the 'non-economic' aspects of Inka royal estates and their material infrastructures. There are in fact many examples of such work. Royal estates as an instantiation of Inka ideology, as fora for political performances, and as concretizations of religious priorities have all been widely considered by a variety of writers (e.g. Gasparini and Margolies 1980; Hyslop 1990; Niles 1987). The point, rather, is that these kinds of analyses do not address alterity in the sense which I advocate. To explain what I mean here, we might ask: what similar things could be said about the non-economic aspects of other kinds of archaeologically-known aristocratic estates, outside the context of the pre-colonial Andes? How similar, for example, does Ollantaytambo or Machu Picchu seem in comparison with the William Paca garden and house at Annapolis as studied by Mark Leone (2005)? After all, the latter was also a landed estate that offered a site for the performance of elite ideology, the materialization of (in this case Protestant) religious convictions and expressing the architecture of power. It is hardly the case that the traditional analyses offer *no* differences when comparing William Paca's garden and the Inka royal estates – the question is: are the differences, different enough? I would contend that unless the analysis of Inka estates offers an account that appears radically different from a description of an estate such as William Paca's foundation, then we have not sufficiently engaged with the alterity presented through indigenous Andean ontologies.

Offering an alternative view of royal estates - the revisionist account offered in this chapter - will entail an initial consideration of what we know about the phenomenon itself. This approach is informed throughout by the theoretical concept I described earlier as political ontology; where I argued for a need to take a 'step backwards' in analyzing the constituents of non-modern polities. In other words, we cannot assume that humans, especially the archetype of the human represented by post-Enlightenment individual, is the universal subject of governance. Instead we must begin by asking what entities non-modern polities sought to govern, and what they construed as their political subjects without assuming any *a priori* limitations on that question. As will become clear, the non-human political subjects discussed here consist of what we Westerners would ordinarily call mountains, although in the Andes there are many different words for them. The argument that follows will present mountains as one of the core groups of subjects that the Inka state sought to govern, and the royal estate system will be understood (in large part at least) as an apparatus for achieving that end.

## II. The Inka royal estate defined in sociological terms

The necessary starting point for this discussion of royal estates as a sociological phenomenon is the *ayllu*. Familiar to most scholars as the (supposedly) quintessential kinship structure of the Andes, the *ayllu* has had a long-running and much debated role in anthropological accounts of the ancient and contemporary Andes. The influence of John Rowe here is considerable and his definition of the *ayllu* as 'a kin group with theoretical endogamy, with descent in the male line, and without totemism' (Rowe 1946: 255) has cast long shadows. Yet Rowe's concern was not

only to precisely define what the *ayllu* was, but also to set Andean social structures within the universal conceptual vocabulary of mid-twentieth century anthropology. In this respect, he was at pains to demonstrate two essential characteristics of the Andean *ayllu* - it was not a species of clan in the classical anthropological definition of that term, and nor did it exhibit totemism. Thus, for example, Rowe (1946: 254-6) outlines the lack of historical evidence for food taboos around certain animal species in order to demonstrate that Andean *ayllus* lacked totems and their associated marking practices.

This kind of project should be quite familiar; that is the effort to place kinship structures within a global set of exclusive categories that would further the goals of the grand comparative project of modernist twentieth-century anthropology<sup>3</sup>. Was the *ayllu* corporate or non-corporate? Matrilineal or patrilineal? Endogamous or exogamous? Totemically organized, or not? This approach to the *ayllu* would allow for its definition with respect to the kinship systems of Australian Aborigines and of Native North American tribes and the descent groups of African pastoralists alongside many others. Given this intellectual history, it is hardly surprising that the 1980s and 1990s saw a growing unease about the use of the *ayllu* as a concept on the part of some scholars, and in some cases a complete rejection of it. As Mary Weismantel (2006) suggests, this anxiety arose from the fact that ‘not only does it smell of fusty antiquarianism, the *ayllu* carries the taint of colonialist exoticism’. Perhaps the most strident critique in such vein was offered by Orin Starn (1991, 1994), who characterized the anthropological concept of the *ayllu* as among the classic essentialisms of *Lo Andino*, a Western scholarly construct similar in form and function to ‘the Oriental’ described by Edward Said. Yet as Weismantel (2006)

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<sup>3</sup> This project, in the mid-Twentieth Century at least, was most sharply expressed in kinship studies.

points out, the *ayllu* cannot be so easily dismissed as an artifact of colonial knowledge, not least because it remains an important analytical lens (and many might argue, an ethnographic reality) for many indigenous scholars of the Andes. As Choque and Mamani's (2001) essay makes clear, *ayllus* remain foundational to much Andean life, past and present and cannot be so easily set aside.

Certain elements of Starn's critique are well-taken, and he is doubtless correct in saying that there has been a pernicious and long-running tradition of romanticized 'Andeanism' which seeks to contrast the harmonious and grounded lives of indigenous Andean peoples with the alienated, modern existences of Western, urban populations – a tendency he finds in the work of ethnographers as diverse as Enrique Mayer and Michael Taussig (Starn 1991: 68-9). There is, however, the problem that unlike the figure of 'the Oriental', the *ayllu* was not a conceptual invention of Western scholarship – but something that centuries of inhabitants of the Andes have described as central to their everyday lives. In that regard, the politics entailed in a dismissal of the *ayllu* category is not quite the same as the rejection of the idea of the Oriental – because it potentially devalues Andeans' accounts of their own lives as well as those of Western scholars who have made use (however imperfect) of the same indigenous categories.

The question then is: can we make productive anthropological use of the *ayllu* concept without slipping into some form of essentialism? Is there a 'non-Andeanist' understanding of the *ayllu* which archaeologists might deploy? In that respect, it is worth noting that a great deal of (more recent) ethnographic and ethnohistorical research considers the *ayllu* in ways that are both sophisticated and nuanced. In this respect, I have found the work of the anthropologist

Catherine Allen a valuable guide, which takes careful account of colonial descriptions of *ayllus* as well as ethnographic experiences of *ayllus* as lived realities for many Andean communities in recent times. Allen (2002: 87) suggests that the concept of the *ayllu*,

...refers to the collection of several individuals into a group that is distinct from and thus potentially opposed to other groups that might be formed in the same context. *Ayllu*-mates are united by a common focus - and this focus may be an ancestor, a Sacred Place claiming their common allegiance, an individual claiming their common allegiance, an individual claiming them as kinsmen, a common specialization or even a shared task... The common focus, whatever it is, directs and provides for the sharing, storage and transfer of energy.

What interests me most in Allen's use of the term *ayllu* is its liberation from any classic anthropological 'types' such as the lineage or the sodality. In particular, I see great value in the notion that the *ayllu* provides the basic social framework for the regulation of energetic transfers and exchanges – coupled with the assumption that each set of circulations has its own proper (and exclusive) group. This is equally true for a lineage as a work party, both of which simply involve different kinds of energetic displacements that take place between different entities – and are therefore different manifestations of *ayllus*. Thus the kinds of exchanges one might have with a common ancestor offers one set of energetic transfers appropriate to a given group, which we read in etic fashion as 'kinship', while a temporary association of workers offers another quite different set of transfers, which we read as something other than kinship, such as a labor sodality or class grouping. Such an approach to the *ayllu* (in contrast to seeing it



as an endogamous, corporate patrilineal kin-group) emphasizes its flexibility and variability in time and space, rather than portraying it as a rigidly fixed entity defined in classically anthropological terms. Irene Silverblatt also underscores the sheer diversity and scale of the range of forms that could be understood as *ayllus*;

*Ayllu*, then can refer to an extended family, to a larger descent group within a *señorio*, to a local “ethnic” community or political group... and, as the Incas would have it, to an empire (Silverblatt 1987: 217).

Marisol de la Cadena’s (2012) recent discussions of the *ayllu* I have also found compelling, not least because she touches directly upon the centrality of non-humans to *ayllu* life. In her words, the,

*Ayllu* is the socio-natural collective of *tirakuna* (the sentient beings made of earth and water) as well as of humans, animals and plants, *inherently* connected to each other, so pervasively that nobody within it escapes such relations... *the substance of the humans and other-than-humans that make an ayllu is their place-making co-emergence with others.* (de la Cadena 2012; emphases in original)

In the language of classic anthropological texts, *ayllus* are endogamous patrilineal. But in Andean terms, they are an utterly integrated group of human and non-human actors that mutually constitute the other through their relationships and material exchanges. This can sometimes be reasonably translated into kinship in the Western sense, but often it is not a particularly good translation – and so loses a great deal in the process. Frank Salomon (1991: 22) offers another cognate definition, saying that an *ayllu* is ‘a mode of relatedness, and not an

entity with specific dimensions'. Combining the insights from these different approaches, we might suggest that in an Andean context it is virtually impossible to conceive of such relatedness without incorporating relations with the non-human world as a fundamental element. The non-humans that were most commonly the foci of such relations (according to most accounts) seem to have been mummified ancestors and landscape elements that were regarded as *wak'as*.

Moreover, it seems this more wide-ranging understanding of the *ayllu* cannot be regarded as a product of its meaning having shifted in recent times. Indeed, the earliest definitions of the concept are perhaps the most general of all. Gonzáles-Holguín in his 1608 Quechua lexicon describes an *ayllu* as referring to 'classes or kinds of things'. He gives several specific examples; including the trees of a particular species, a lineage and a factional grouping. In which case, it appears the more restrictive conception of the *ayllu* is perhaps more an artifact of anthropological definition-seeking in the mid-Twentieth Century than anything else.

The reason I am particularly interested in prefacing this discussion of Inka royal estates with a consideration of the *ayllu*, is that the royal estate phenomenon is intimately bound up with a particular historic manifestation of the *ayllu* – that is the *panaqa* (Niles 2004). The *panaqa* is probably best understood as a royal or aristocratic elaboration of the more generic *ayllu*. Classically defined, a *panaqa* was a royal lineage composed of all the individuals who could bilaterally trace descent from a specific deceased ruler, with the exception of his regnant heir. There is also widespread agreement in the Spanish chronicles that perhaps the most important function of the *panaqas* was for each to sustain the cult of the mummified ruler (called a *mallki*)

who was their ancestral founder (Rostworowski 1983: 138). Just as with many *ayllus*, it would appear that *panaqas* were also corporate landholding bodies and so each of the *panaqas* within the imperial heartland are described as holding significant territories and resources, as well as possessing large numbers of hereditary sets of human retainers (called *yanakuna*) to serve its members and work its fields. It seems that by the time of the late empire, the *panaqas* had become the fundamental political institution of the Inka heartland, and so the primary vehicle through which its internal politics were performed, contested and played out (D'Altroy 2001).

How exactly the conceptual relationship between *panaqas* and *ayllus* should be understood is open to debate, and the matter is complicated by the fact that a number of the major Cuzco *panaqas* are in fact explicitly named as *ayllus* in the chronicles (specifically *Hatun Ayllu* and *Qhapaq Ayllu* - the royal lineages of Pachakuti Inka Yupanqui and Topa Yupanqui respectively). Zuidema (1964), for example, has suggested that rather than a patrilineal endogamous kin-group (the classically defined *ayllu*), the *panaqa* connotes a matrilineal exogamous group since it incorporates a deceased ruler's brothers, but excludes his male heir. Similarly, Rostworowski (1999: 19) has argued that at least some *panaqas* were matrilineal (giving the example of Iñaca Panaqa) in comparison with the general *ayllu* that was normally a patriline. This however seems a continuation of the same thinking that seeks to plug indigenous concepts into universal classificatory schema. As with the previous discussion of the *ayllu*, the more expansive uses of the term as advocated by Allen, Salomon, de la Cadena, Silverblatt and others would seem to better reflect its local use. In that sense, my discussion of *panaqas* will move away from seeing them as a lineage designed to regulate genetic relationships between biological kin. Instead, my preference then is to treat the *panaqa* as a species of *ayllu* in its fundamentals; that is a

particular community of humans and non-humans – what de la Cadena calls a ‘socio-natural collective’<sup>4</sup> - organized around a specific set of tasks and oriented towards a unifying purpose. In that vein, the question becomes: what kinds of non-humans were bound up with the human members of the Inka *panaqas*, and what beings were among their central foci for exchange interactions?

The *ayllu* is distinct from the *panaqa* insofar as the latter is more exclusive, restricted version of the former, specialized towards performing a set of tasks that are appropriate to the royal and aristocratic communities of the imperial heartland. If the *panaqas* were a royal version of a collective of human and non-human interactants, perhaps the most important non-human entity to which each *panaqa* oriented itself was the *mallki*, or ancestral mummy of the *panaqa*’s royal founder. However, there were certainly other important non-humans intertwined with the socio-natural collective constituted by each *panaqa*. To each *ayllu* was its proper set of shrines and *wak’as* - and so too to each *panaqa*. In fact, the imperial heartland was filled with individual *wak’as* that were under the direct care and ritual ordinance of an assigned *panaqa*. The characteristics of *panaqa* socio-natural collectivities will be considered in the following section, so as to underscore some of the peculiarities of this particular historical manifestation of the *ayllu*.

### III. Known manifestations of *panaqa* socio-natural collectives

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<sup>4</sup> It is worth noting here that de la Cadena is using the term socio-natural in an explicitly Latourian (1993) sense. It is not meant to imply a mixing of the social and natural spheres, but rather to signify a context in which there is simply no such distinction in effect.

There is in fact no need to speculate about how the Inkas might have systematized relationships between royal *ayllus* and the powerful non-human entities of the imperial heartland; we already have a well-documented example of such in the form of the *zeq'ë* system of ancient Cuzco. A *zeq'ë* is an imaginary radial line running across the landscape that is defined by a series of nodes or shrines manifest as *wak'as*. A set of these lines is known to have extended outward from the center of the Inka capital and into the surrounding Cuzco Basin. The most widely used account of the *zeq'ë* system is that offered by the chronicler Bernabé Cobo (1979b) in his 1653 text: *Historia del Nuevo Mundo*. Such early accounts of Inka shrines are noteworthy for being highly detailed - a reflection of the desire of the colonial Church to fully document native idolatries, if only to more readily extinguish them. According to Cobo the *zeq'ë* system of Cuzco consisted of forty-one or forty-two radial lines which were marked by at least 338 individual *wak'as*. The *zeq'ë* lines also reflect the constitution of the empire from its four parts or *suyus*. So, each *zeq'ë* line and its constituent *wak'as* were apportioned to one of the four *suyus* as they radiated outwards from Cuzco. According to several chroniclers there was a group of specialists whose task was to monitor the offerings made to the individual *wak'as* (Albornoz 1984: 200), and these were known as *wak'amayuqs* (Molina 1989: 127-8).

The *zeq'ë* system is a topic of great complexity and it is not my aim here to engage in a detailed exploration of how we should think about it. The phenomenon has generated much scholarship and debate, both from ethnohistorical studies (e.g. Zuidema 1964) and archaeological surveys (e.g. Bauer 1992, 1998; Sherbondy 1986). However, I do wish to emphasize a few central principles that bear directly on my interest in the *panaqas* as a socio-natural collective involving human and non-human participants. Although there was certainly a complicated 'sacred

geography' of the city of Cuzco, there was nothing haphazard about it. The *zeq'ë* lines and *wak'as* around the imperial capital was highly organized, highly systematized and highly regulated. Through the *zeq'ë* lines, the primary set of non-human powers and earth entities that were located in the immediate vicinity of Cuzco were managed, maintained and interacted with via the various *panaqa* and a parallel set of non-royal *ayllus* of the Cuzco region. Not only is the relationship with potent non-humans in the Cuzco landscape one of the primary provinces of the various *panaqas*, the system appears to also reflect a desire to distribute the responsibilities and rewards of the system across all the *panaqa* groups simultaneously.

This *panaqa*-wide distribution of responsibility and reward does not imply that such distribution was *equal* – some *wak'as* were certainly more important and more potent than others, while the spatial division of the *zeq'ë* lines along the fourfold partition of the *suyus* also reflects the internal hierarchy between the four *suyus* themselves. However, despite the internal hierarchies of the *zeq'ë* system, the system as a whole was the collective responsibility and prerogative of the entire *panaqa* system, alongside the other elite *ayllus*. By extension, we might note that the exchanges with the main autochthonous powers of the Cuzco region were also distributed throughout the entire *panaqa* system. This system might be characterized as one of 'balanced hierarchy'. It is balanced because the participation of all the groups (that made up the heartland elite) is essential and none are excluded, but also hierarchical because the nature of that shared participation is not based on an egalitarian distribution of responsibility or reward. This is not atypical of *ayllus* of course, which often combine elements of reciprocity and shared community obligation as well as forms of hierarchy simultaneously.

I emphasize the specificity of these arrangements because we can certainly imagine it being otherwise. The *zeq'ë* system, rather than falling under the domain of the entire collectivity of royal kin-groups and high-status non-royal *ayllus*, might instead have been reserved to the notionally superior *panaaqs* that composed the *hanan* ('upper') moiety of Cuzco. Or alternatively, the relationship between the *zeq'ë wak'as* might have been the exclusive preserve of the Sapa Inka<sup>5</sup> himself, who may have sought to monopolize the flow of exchanges with the non-human powers for his own aggrandizement. It appears that the relationship between the celestial power of the Sun, Inti and the Sapa Inka did involve a degree of exclusivity and so contrasts with the *zeq'ë* system in that respect. Furthermore, we could imagine placing the management of the *zeq'ë* system outside the royal sphere altogether, making it the preserve of a professional priestly caste whose members were defined through their access to secret knowledge and initiations, rather than the lineages from which they sprang. Or we could envisage the entire population of greater Cuzco area taking part in large-scale public ceremonies that involved libations to the *wak'as*. And so on. The point then is that the way in which the *zeq'ë* system was managed was quite particular, and this specificity reflects certain general principles about the political organization of non-human entities in the Inka heartland.

A further example of this principle is seen through Zuidema's (1990: 14-22) study of the *chapa* districts of the Cuzco Valley. These were the administrative sectors of the area immediately adjacent to the capital itself, focused particularly on the management and canalization of the tributary streams of the Río Huatanay. As with the *zeq'ë* system, the *chapa* system was

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<sup>5</sup> Literally the 'Unique Inka', that is, the regnant emperor.

distributed throughout the various royal *ayllus* of Cuzco, the first of the *chapas* being under the overall direction of *Qhapaq Ayllu* (Zuidema 1990: 19). To us, and no doubt to the conquistadores, this seems like an economic and political phenomenon - because it deals with the distribution and infrastructural enhancement of essential natural resources such as water. It is therefore unlike the *zeq'ë* system which is a religious and ritual entity, geared towards shrines and sacred beings. Of course, for the Inkas, no such division would have been meaningful and the management of watercourses and non-human entities were entirely integrated tasks that could not be considered as separate. Thus the *zeq'ë* and *chapa* systems were not so much representative of parallel economic and religious divisions of the landscape, but rather a fully intermeshed network. However, in both cases, it appears that the political organization of the heartland rested upon the hierarchically balanced distribution of such matters across the dominant *ayllu* groups.

If interactions between the *zeq'ë wak'as* in the immediate vicinity of Cuzco were the distributed responsibility of the various *panaqas* and dominant *ayllus*, then a similar logic may have held true for other sets of non-humans slightly further afield. There were of course other *wak'as* throughout the Cuzco region, beyond those enumerated in the chronicles as lying within the *zeq'ë* system - and in general it seems that the *zeq'ë* system did not extend much beyond a 20 kilometer radius around Cuzco in any direction. However there were certainly (non-*zeq'ë* related) *wak'as* in the Amaybamba and all along the Urubamba-Vilcanota drainage. In particular, one set of very important non-humans was constituted by the major mountains of the heartland, many of which were in fact explicitly described as *wak'as* by the Inkas. Although *wak'as* seem to have been manifest in a wide range of forms, including caves, rock outcrops,



important buildings, quarries and canals - mountains were a particularly common form of *wak'a* – and perhaps among the most powerful. Besom (2009: 74) suggests that beyond Cuzco (and the *zeq'ë* system), *wak'as* were more likely to exist in the form of mountain peaks. At least we might say the *wak'as* farther afield from the capital (which were of direct interest to the Inkas) seem more likely to have been prominent peaks, while the *wak'as* close to the heartland were more variable in form (although still often mountains in any case).

This discussion therefore sets up the revisionist account of the royal estate system which I am offering. Just as the *zeq'ë* system functioned as the *panaqas'* collective means of interacting with the non-human powers of the inner heartland, the royal estate system was the way in which the *panaqas* sought to manage their relationship with the preeminent non-human powers of the outer heartland, particularly the mountains. When we look at the royal estates as a collectivity, it is clear how strong is the mountain-orientation of such sites. Thus the royal estates were less a body of private landholdings designed to maximize the productive wealth of the Inka aristocracy, and more core set of infrastructures connecting the humans and major earth beings (with a special regard to the productive powers of the latter) within the socio-natural collectives that constituted the royal *ayllus* of the empire. In archaeological terms therefore, the remains we identify in the Amaybamba and elsewhere as belonging to the royal estate type are not best understood as the ruins of plantations or estates, but as an apparatus used to regulate the activities of non-humans such as mountains, to ensure that their actions (especially productive ones) accorded with the wide-ranging priorities of the Inka elites.

This, crucially, is not then a claim that the royal estates were either purely symbolic or religious in their function. Controlling non-human actors such as mountains is utterly bound up with the production of valuable material resources that were essential to the running of the Inka State – such as growing coca. But the productive capacity of these non-humans was not in the object form of inert, inanimate matter to be gathered and exploited by humans. Rather it was the productive labor of non-humans that were willful political subjects that was being harnessed by state agents. In such a context, calling this phenomenon religious is as equally meaningless as calling it economic – and nor is it of any emic value to suggest that it entailed a mixture of the two, since neither sphere can be imposed upon the Inka context.

Summarizing from this discussion, I wish to outline in explicit terms the initial re-conceptualization of the royal estates and *panaaqs*, which provides the basis for the analysis that will follow:

*Panaaqs were socio-natural collectives in which elite groups of humans and powerful non-human entities were co-constituted through their mutual relationships and material exchanges. Panaaqs are therefore a typical Andean ayllu in the most general sense. However, as a type of ayllu they had some exclusive and definitive characteristics. By the time of the late empire, the most important non-human powers of the heartland were the distributed responsibility of the ten panaaqs and certain high-status ayllus; each was given the charge of a particular set of non-humans, and derived part of their political and material power from that relationship. The best-known examples of this are the zeq'e and chapa systems near Cuzco. What we call royal estates were under the collective management of the panaaqs, each panaaqa having at least one estate*

*(in theory). One of the core functions of these estates was they were a practical means by which the panaqas managed their relationships to third set of powerful non-humans, namely the great mountains beings that were found in and around Cuzco. Much of what we see as the economic wealth (agricultural products, including coca and maize) of the Inka panaqas were thought to be owned and controlled by such mountains. Therefore controlling exchanges with the mountains (and the products they offered) was one of the fundamental bases for Inka power.*

#### IV. The Inka royal estate defined in archaeological terms

When Machu Picchu was first brought to the attention of Western publics, it was clear it was probably a royal estate long before documentary evidence had been located to verify the location of such a complex at that location. Although each site is unique and offers its own idiosyncrasies, the royal estate can be seen as a patterned archaeological phenomenon that has coherent material signatures. In other words, even if the Inka Empire were a 'purely' prehistoric polity, we would likely still have identified the royal estate as a type of site even without the evidence from the chronicles corroborating the fact that such foundations were established in the heartland by various Inka nobles and emperors.

The last three decades or so have seen a considerable expansion in our knowledge of heartland royal estates, based on field studies of their extant remains and also newly recovered documents. In particular, detailed information is now available for a range of landholdings in Cuzco region associated with specific *panaqas* and/or individual rulers. These include work on the high-altitude estate at Chinchero (Alcina Franch 1976; Nair 2003), studies of the

Ollantaytambo complex (Protzen 1993) and examinations of royal sites along the western Urubamba drainage between Cusichaca and Macchu Picchu (Kendall 1985; MacLean 1986), in the Vilcabamba range beyond Machu Picchu to the west (Lee 1997, 2000) and at sites closer to Cuzco including Tipón (Wright 2006), Yucay (Niles 1999) and Callachaca (Niles 1987). Unsurprisingly, the best-known of all the estate centers, Machu Picchu, has also been the focus of numerous recent studies (e.g. Reinhard 2007; Burger et al. 2004; Salazar 2004; Verano 2003; Wright and Zegarra 2000) based on archaeological research. There is also a growing body of in-depth studies that draw on written sources to elaborate on the functioning of the estate system (e.g. Covey and González 2008; Glave and Remy 1983; Rowe 1990; Villaneuva 1970). Consequently, we have access to an increasingly detailed sense of the character of the estate phenomenon, both in terms of its diversity and ultimate coherency.

Salazar (2004: 25) enumerates six categories of settlement within the Inka Empire. These include **I)** the capital of Cuzco itself, a unique entity, **II)** major state administrative centers such as Huánuco Pampa and Hatun Xauxa, **III)** *tampu* or state way-stations on the highway network, **IV)** indigenous settlements with an Inka sector and **V)** non-Inka villages with tributary relationships to nearby Inka centers. Salazar suggests that these sites made up 99 per cent of those in the Inka domain, and that the sixth and least common type was the royal estates of the Cuzco region. We might question this six-fold division of imperial sites in several ways. For example, certain omissions are notable, such as the frontier fortifications, or *pukaras*, that are found in regions such as Ecuador, Bolivia and Argentina (Hyslop 1990: 164-90). However, my interest here is not the range of site types found across the Inka Empire, so much as thinking of the royal estate as a coherent archaeological phenomenon – and the implications of that

observation. Indeed as Stella Nair (2003: 30) has observed, Inka royal estates are 'unique architectural products'.

Hyslop (1990: 298-300) suggests that the royal estates are not replicated in their totality beyond the heartland, although they may have inspired some architectural elements of state centers farther afield. Thus the particular constellation of high-style terraces, waterworks and especially fountains, fine ashlar masonry and integrated rock outcrops is peculiar to them, even if some of these features are noted at non-royal complexes far from Cuzco as well. They might also be defined by what they lack, particularly *ushnus* – a form of (normally rectangular and stepped) ceremonial platform, typically found in the plazas of large Inka administrative centers (Hyslop 1990: 300; Morris and Thompson 1970; Staller 2008). The absence of *ushnus* may in itself be indicative of the kind of sociological functions the royal estates were *not* intended to perform. State administrative centers with their *ushnus* and plazas, fronted by the *kallanka* feasting-halls, are widely understood to have been important sites for entertaining communities of non-Inka notables in provincial regions that were incorporated into the Inka State. Craig Morris and colleagues' (Morris 1985; Morris, Covey and Stein 2011) work at Huánuco Pampa (located around 590 kilometers northwest of Cuzco) has illustrated how such administrative cities were heavily geared towards sustaining relationships between Inka and non-Inka elites in the non-heartland portions of the empire. By contrast, royal estates seem to have been suited much more to the needs of the Inka *panaaqs*, rather than outsiders or non-Inka subject populations (Hyslop 1990: 300).

As several archaeologists have pointed out, most Inka estates, while often best known through such oft-visited monumental sites such as Machu Picchu, Písaq and Ollantaytambo, were probably sprawling and non-contiguous entities (Covey and Elson 2007: 303-4; D'Altroy 2001: 220; Niles 2004: 52-3). Thus the much photographed and trodden places seen in postcards with which many people are familiar are best conceived as core complexes at the heart of much larger, networked landholdings. Niles (2004: 53) suggests that royal estates, as far as may be gathered from written and archaeological sources, likely consisted of discrete and named parcels of land connected by an infrastructural matrix of highways, bridges, terraces and settlements. These various satellite installations are unlikely to have displayed the same monumental architecture as seen at the core complexes; however they were no less a part of the estate system for all that.

The royal estate is therefore both a coherent archaeological entity that can be related (through ethnohistoric research) to a particular sociological form in the late pre-colonial Andes, namely the royal *ayllus* or *panaqas* of the heartland. The sites that we identify as estates are an archaeological trace of the activities associated with the latter. They are also a tightly clustered entity in geographical terms, restricted in their range to the imperial heartland (Niles 2004: 52). None, for example, have been conclusively identified more than 115 kilometers from Cuzco, even though each imperial ruler ostensibly established estates in each subject province. My efforts here to convey the coherency of the royal estate as a category is not without purpose, because it is a basic pillar of the arguments that follow in the remainder of the chapter. The logic of the royal estates – where they manage the relationship between *panaqas* and mountains – is reflected at a range of estate sites, not only in the Amaybamba.

## V. A Description of the Amaybamba Royal Estate(s)

The main focus of this chapter is the Inka royal estate complex that was located in the Amaybamba Valley; the remains of which likely account for the considerable majority (if not all) of the Late Horizon occupation there. It will serve as a case-study for the arguments I have made up to this point, and so demonstrate an application of the revisionist account of the royal estates presented in this chapter. The existence of series of royal estate installations in the Amaybamba Valley has not been widely discussed or dealt with in significant detail in archaeological accounts of the wider Cuzco region. This is primarily due to the limited extent of the archaeological research that has been conducted there, in comparison with the much better studied higher-elevation regions of the heartland. However, the possibility of there being such an entity in the Amaybamba has been noted by several scholars since a number of colonial documents make mention of there being royal landholdings in the vicinity. Susan Niles (2008: 51) for example, lists the Amaybamba as the probable location of a royal estate based on descriptions of royal landholdings described in the chronicles.

Documentary evidence discussed by Rostworowski (1963: 155) indicates that the Amaybamba Valley was conquered by the emperor Pachakuti (Inka Yupanqui) who established a palace there known as Guaman Marca (Wamanmarka). A few other significant pieces of information about the Inka occupation of the Amaybamba have been made known through Rostworowski's (1963, 2001: 318) work, including the claim that the area was settled by *mitmaqkuna* from the Chachapoyas region, over a thousand kilometers to the northwest of Cuzco. *Mitmaqkuna* were typically subject communities who were transplanted en masse to new areas, although

normally they still were counted on the census lists of their places of origin (see D'Altroy 2005). Approximately 1,500 *mitmaq* colonists were emplaced in the Amaybamba, supposedly to cultivate coca in the royal landholdings of Pachakuti. This transfer is recorded as having taken place several years after the foundation of Wamanmarka, by which time Topa Inka Yupanqui (Pachakuti's son and successor) had been busy extending the empire into the northern Andes near modern-day Ecuador. His conquest included the Chachapoyas region, whence the *mitmaqkuna* in the Amaybamba were derived. In addition to Pachakuti, Topa Inka Yupanqui and his *coya* (principal wife), Mama Ocllo, are both noted as owning plots of land in the Amaybamba (Rostworowski 1963). Thus the documentary evidence available indicates the Amaybamba was not a single estate, so much as several discrete royal landholdings associated with different individuals or *panaaqs*.

In 1980 archaeological reconnaissance of the Amaybamba region was carried out under the Cusichaca Project and the site of Wamanmarka was relocated and partially documented. A courtyard with seven associated structures was noted, as was a small but impressively constructed sector of terraces (called Chilcachaca) on the far side of the río Lucumayo, similar in style to those found in the Urubamba drainage (Drew 1984: 349-350) at the major Inka royal estates. According to the documentary sources located by Rostworowski, there was also a town called Yanayacu constructed in the Amaybamba (2001: 318) by Topa Inka Yupanqui after he installed the *mitmaqkuna* there. It is described as being high above the valley floor; however its precise location has not yet been identified archaeologically.



Based on the fieldwork carried out as part of this dissertation, one of the basic empirical claims I make is that the Amaybamba should certainly be numbered among the principal royal estates centers of the imperial heartland. Tentative claims that there may have been a royal estate (or estates) there (e.g. Niles 2008: 51) should now be considered as more firmly established. This claim is also central to the theoretical arguments that will follow, and so at this stage I wish to present a description of the Amaybamba royal complex, and several associated sites in the valley. This is intended to more fully justify the royal estate label, and to offer a grounding for the theoretical arguments to come – arguments for which the Amaybamba will offer a primary case-study.

As a royal estate complex (albeit incorporating landholdings associated with different *panaaqs*)<sup>6</sup>, the Amaybamba is distinct (and therefore of especial interest) for a number of reasons. Firstly, it is quite likely the lowest lying royal estate to exist in the Inka heartland. Depending on where you draw its boundaries, much of the complex is situated along a montane valley floor in the *Yungas* cloud forest zone – at an altitude of around 1,500 to 1,700 meters above sea level. To put this in perspective, most of the major royal estates in the Sacred Valley and Cuzco Basin are situated between 2,900 and 3,800 meters, while Machu Picchu itself is actually one of the lowest - ranging from its lower terraces at 2,100 meters to its summit at 2,450 meters. Second, the Amaybamba estate was distinctive in that it was rather small. Or, at least the core sector that exhibits classically royal architectural signatures was very limited in its scale; although as I

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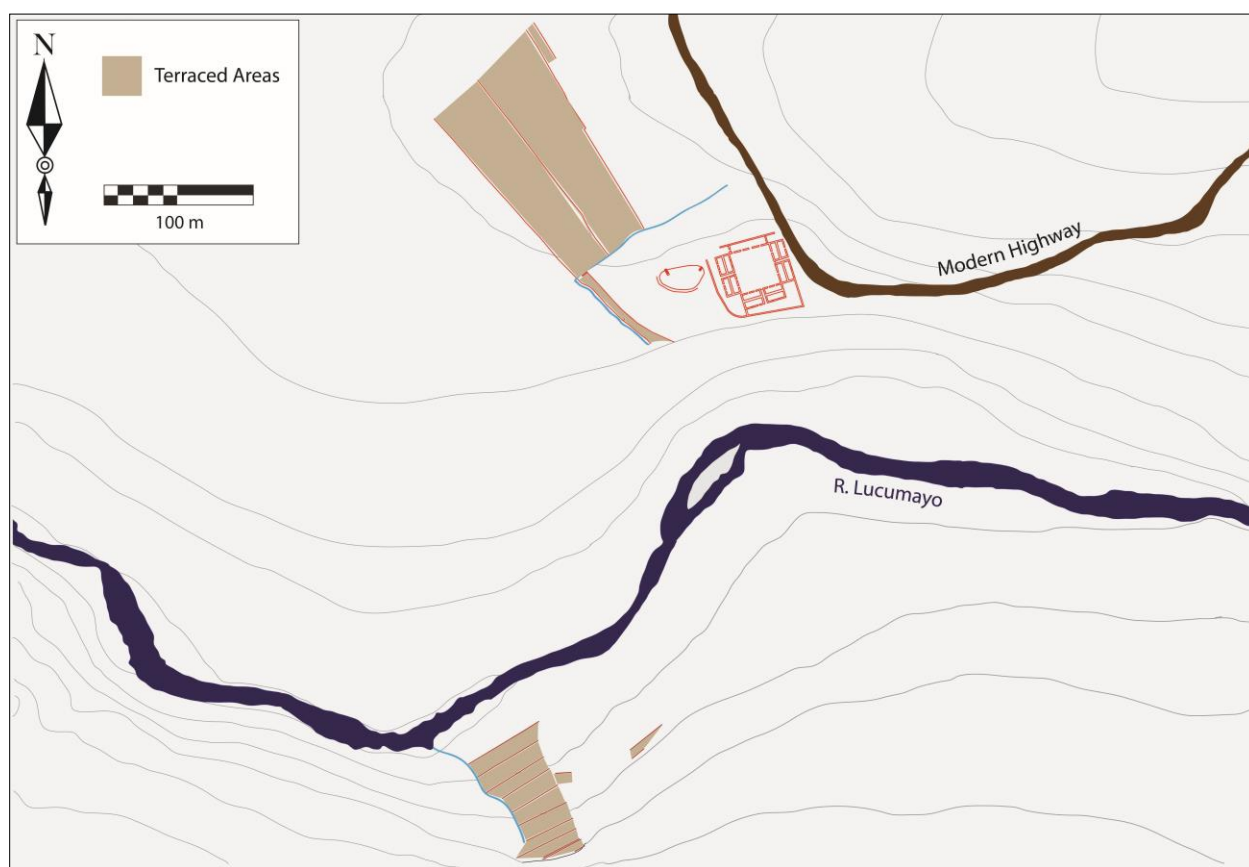
<sup>6</sup> Archaeologically, it is not possible to distinguish multiple estates in the Amaybamba, despite the documentary evidence which indicates there were several landholders with interests there. I shall therefore generally refer to the Amaybamba 'estate' in the singular, meaning the integrated archaeological estate complex. However, this should not be taken to imply there was a single owner of Amaybamba landholdings.

will go on to discuss, the full extent of the 'estate' was likely somewhat more expansive. No other royal center in the Cuzco region was so modest. As such, Wamanmarka can potentially be taken as a case through which we can examine the broader concept of the Inka royal estate, as an archaeological type. If the Amaybamba contained royal architecture relatively modest in scale and at some distance from the core areas of the heartland, it might be understood as offering a potential 'distillation' of the royal estate form – allowing us to determine its more essential components. Moreover, given that most estates known to us were situated in the highlands, it might be useful as an example of how the estate form was adapted to more low-lying contexts where conditions were considerably different from those found in the Urubamba drainage and Cuzco Basin.

#### VI. Wamanmarka: the Core Monumental Sector of the Amaybamba Estate.

Wamanmarka is located at a bend in the Río Lucumayo where the valley floor is particularly narrow and framed by the steep slopes of the flanking mountain ranges. At the heart of the Wamanmarka sector is a series of thirteen rectangular rooms (or seven buildings) that together form a courtyard precinct. Twelve of those rooms are of identical dimensions, measuring 4 by 14 meters internally. It is evident from the standing architectural remains that the complex was planned as a single, unified entity. Its masonry construction is uniform throughout and the rectilinear layout of the entire complex is clearly intended to show symmetry and regularity. The walls consist of blocks mostly between 0.2 and 0.4 meters in length which have been laid down in semi-regular courses. The level of preservation of the buildings is insufficient to

determine the original height of their walls, but one surviving structure (S-045) has standing masonry that stands to 2.36 meters. There is a large amount of collapsed masonry at the site, which considered alongside the height of some of the extant walls, suggests that the structures were primarily built in stone with little or no adobe superstructure resting on top of the masonry. No side walls survive to a sufficient degree to determine if they were originally gabled, although there is certainly a sufficient volume of collapsed masonry present for this to have



**Figure 4.1.** *The palatial complex at Wamanmarka and its associated terraces. The terraced sector known as Cangrehuyoc is the group situated on the southern bank of the Río Lucumayo. Topographic intervals are 10 meters.*

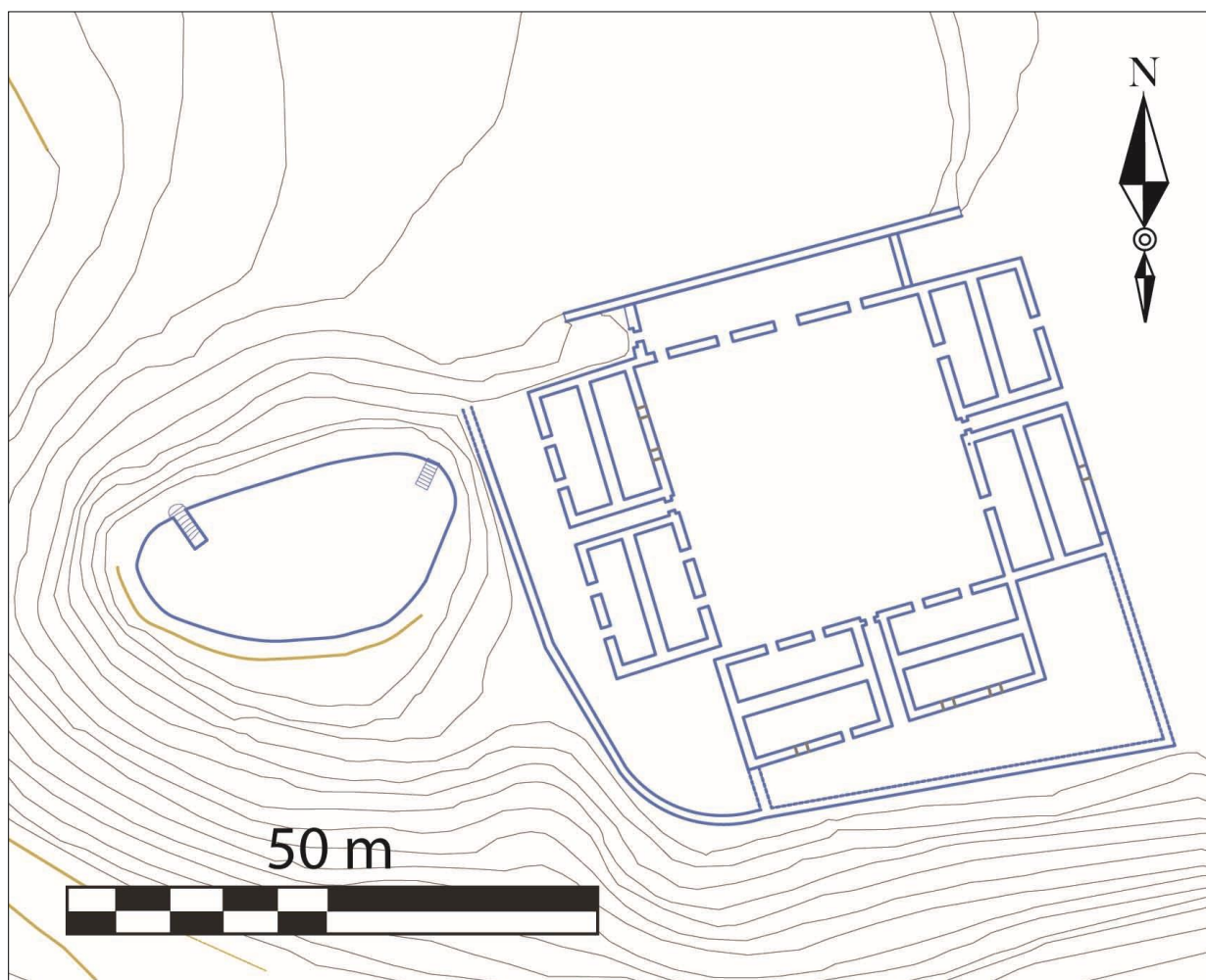
been the case. This level of investment in stone construction is typical of Inka royal estates, and is also seen at sites such as Machu Picchu and Choquek'iraw, where multiple sets of buildings were constructed entirely of stone and then topped with thatched roofs.

The six identical structures that form the southern, eastern and western sides of the plaza at Wamanmarka conform closely to the architectural signatures that have been observed at royal and other high-status sites in the imperial heartland. As Gasparini and Margolies (2001: 165-166) discuss, a classic type of Inka 'house' is the rectangular building with a central partitioning wall designed to support the roof structure and which allows no communication between the two spaces. Entrances (of which there may be one or two) are found on each side of the partition, in the longitudinal walls. A typical length-width proportion for this type of structure is approximately 7 : 5. All these features are evident in the buildings at Wamanmarka, indicating that it was built by workers familiar with the norms of high-status Inka residences.

#### Vla. The Architectural Layout of the Complex

Most readers familiar with Inka imperial architecture will probably recognize the central part of the Wamanmarka complex immediately as a *kancha* (see figure 4.2). The *kancha* (a Quechua term meaning 'enclosure') is one of the most frequently repeated architectural units found at imperial sites within the Inka heartland. Its most basic manifestation is a shared, roughly square courtyard space flanked on all four sides by rooms that open onto the central courtyard only. The number of rooms is variable - minimally four, although eight or more is not unusual in larger *kancha*. Often, these rooms are all contained within an enclosing outer wall that

delineates them as a related group. In most cases a *kancha* has only one entrance in its outer enclosing wall, although this is not a universal feature (Hyslop 1990: 17). Gasparini and Margolies (1980: 186) suggest that the simplest manifestation of the *kancha* is any set of four or more buildings oriented around a shared patio space, with or without an enclosing wall. However, most *kanchas* which have strong monumental or royal architectural signatures do



**Figure 4.2.** *The architectural core of the Wamanmarka complex, showing its kancha-like layout. Topographic intervals are one meter.*

seem to have a shared enclosing wall. A number of examples of Inka ceramic vessels exist that appear to be miniature models of *kancha* (including enclosing walls), which suggests that the form was understood as something of a conceptual unity.

The Wamanmarka complex appears then to offer a fairly typical example of the *kancha* form. It has seven rooms that open onto an internal courtyard space and the complex is bounded by a shared wall; while also demonstrating the symmetry and regularity one expects to find in such planned compounds. *Kanchas* are often thought of principally as residential blocks, with each one providing dwellings for related groups of people, perhaps subdivided into four or more sub-groups or families (Hyslop 1990: 17; Gasparini and Margolies 1980: 181.). That said however, the *kancha* was clearly a highly adaptable form and there are numerous examples of its elaboration or modification to suit a range of different purposes, including in some cases monumental temple architecture (the Qorikancha in Cuzco is an obvious case).

One particular kind of elaboration is the palatial *kancha*, used as an elite or royal residence at Inka heartland sites. Most of the various city blocks that make up the central portions of Cuzco are in fact large *kanchas* (Hyslop 1990: 17) that functioned as the monumental residences of Cuzco's royal kin-groups or *panaaqs*. The presence of double-jamb doorways is perhaps one of the key architectonic elements used to indicate relative high-status and probable royal occupation in Inka contexts. In which case, it is notable that the Wamanmarka *kancha*-complex includes four double-jamb entranceways, three being located at the interior thresholds of the passageways that allowed access to the central courtyard. Such doorways are very rare in Inka architecture - mainly located in heartland royal estates, the palatial and temple sectors of Cuzco and at certain buildings found in major provincial centers beyond the heartland. Even at

impressively monumental sites such as Machu Picchu, double-jamb doorways are not the norm, but rather seem to have been reserved for the more important buildings or sectors. The presence of multiple double-jamb doorways means that the Wamanmarka complex is very likely one of the palatial *kanchas* that are found throughout the Inka heartland – and strong evidence of a direct association between Wamanmarka and the Cuzco *panaqas*.

In this respect it is worth noting the altitude of the Wamanmarka complex, situated at roughly 1,900 meters above sea level. Although other sectors of the Amaybamba estate along the Lucumayo drainage are more low-lying, Wamanmarka is the lowest elevation example of a royal *kancha* known to exist in the imperial heartland. Various chroniclers suggest that the Inka elites were not particularly comfortable in the warmer tropical lowlands of the Andes, while Diez de Betanzos (1996: 127) for example, points out that highlanders from Cuzco frequently fell ill while travelling in the eastern forests. Indeed, Wamanmarka is noticeably cooler than areas of the Amaybamba only a few kilometers further along the river course. Its location might then be taken as indicative of the lower altitudinal threshold for royal palaces in the heartland, beyond which the Inka elites generally preferred not to reside.

Yet those familiar with Inka *kanchas* at heartland sites will find Wamanmarka unusual in that it contains only one of them. Most *kanchas* are found in adjacent groups, in some cases forming ‘city blocks’ on a grid pattern (such as at the Qozqo Sector of Ollantayambo) or simply clustered as at Machu Picchu. As a *kancha*, the Wamanmarka complex is also distinctive in that it appears to contain another ‘classic’ Inka architectural form: a *kallanka*. These are long, internally undivided, rectangular buildings that have multiple entrances running along one longitudinal

wall that typically open onto a plaza or other flat space. No clear function can be assigned to the *kallanka* in general, although one of the more common uses associated with them is the feasting and ceremonial feting of large groups of people at the behest of the state. They also may have been used to temporarily house large numbers of people on state business.

The *kallanka* (S-039) at Wamanmarka is not a large example of such structures - its internal measurements are thirty meters by six meters, providing a total floor space of 180m<sup>2</sup>. By way of comparison, the largest extant *kallanka* known is at Raqchi and has an internal area of 2,028m<sup>2</sup>



**Figure 4.3.** A surviving portion of a double-jamb doorway, located on the southern flank of the courtyard. Note the finely carved ashlar masonry.



(Gasparini and Margolies 1980: 208). Along the southern wall (which opens onto the courtyard area) are four doorways set at regular intervals of approximately six meters apart. Each doorway features a stone-built threshold that steps down into the courtyard space, measuring a relatively uniform 1.23 – 1.25 meters in each case. The fifth entrance to S-039 is located in the western wall and is somewhat more 'monumental' in character. It is a trapezoidal aperture flanked by a double-jamb on its external façade and is constructed from finely-cut ashlar masonry blocks of up to 0.6 meters in length. The width of the threshold is 1.06 meters.

One additional feature located inside S-039 is worthy of note. In the eastern wall of the structure is a small carved stone protuberance, jutting approximately 0.15 meters from the interior façade. Two 'eyes' have been carved into either side of the protuberance, giving it the appearance of a head. Although anthropomorphic carving is unknown at Inka sites, zoomorphic representations are occasionally found – the serpentine motifs carved into the walls of a number of palatial *kancha* compounds in Cuzco are a good example of such. Although little more can be said about this unusual feature, it further indicates that the Wamanmarka complex was an unusual structure and exhibits unique features associated with high-prestige or royal occupation.

Yet as noted above, the incorporation of *kallankas* into *kanchas* is typical of neither of these architectural forms. Although there are several examples of royal estate complexes that integrate *kallanka* halls and *kancha* compounds into their overall plan, it is not normally as part of the same structure. *Kanchas* in particular are typically associated with residential sectors, while *kallankas* tend to flank large plazas or more 'public' open spaces, as is consistent with

their likely use for the feasting large numbers of people, or hosting transient populations. Ollantaytambo is a good example of this, where the large, open square of Manyaraki is defined on its southern side by two adjacent *kallankas*, each with six entrances onto the plaza (Protzen 1993: 66-8). Nearby and quite distinct, lies the clearly residential Qozqo Sector with its orthogonally gridded blocks of *kancha* compounds. This unusual integration of a *kallanka* into a *kancha*-like compound at Wamanmarka might then be seen as a 'hybridization' of both forms in order to perform a more variable array of functions than those typically associated with *kancha* seen in some of the more elaborate estate complexes. Further evidence of this is perhaps offered in the fact that the Wamanmarka courtyard has four entrances, three of which were formal passageways. This is unusual for a palatial or residential compound, where restricting access was often an apparent concern, yet it is much more consistent with an Inka urban plaza, most of which tended to afford multiple access points from different vectors.

In general terms then, although the Wamanmarka complex draws upon 'classic' Inka architectural forms and modular units (such as the *kallanka* and *kancha*), it also indicates the adaptability of those models and shows how they can be amalgamated and modified in order to meet the needs of any given situation or context where they might be required. In the specific case of the Amaybamba, given the very small scale of its architecture relative to other Inka royal estates, this apparent hybridization may indicate a desire to replicate a number of the core features of the general royal estate pattern, but using a minimal degree of architectural investment and construction labor. It is in this sense that I think one possible approach to the Wamanmarka complex is to regard it as a kind of *distillation* of the royal estate, one which has been pared down to its most fundamental components.

Perhaps the most distinctive feature of the Wamanmarka sector is its associated curvilinear platform, which lies immediately to the east of the *kancha*-plaza complex<sup>7</sup>. This platform is roughly ovaloid in shape and measures approximately 33 meters on its longest axis (east-west) and 18 meters on its shortest axis (north-south). It was built by flattening the top of a natural promontory and is retained by a masonry wall, constructed from large river cobbles similar to those used elsewhere at the site. The height of this retaining wall is variable depending on the adjacent topography, but ranges from a minimum of 1.15 meters to a maximum of 1.70 meters. The platform has been reconstructed by the INC, and so architectural details beyond its size, shape and masonry source (if not masonry construction style) are not necessarily reliable. However, two stepped entrances up to the platform are evident, both 1.16 meters in width. These entrances have also been reconstructed, but the use of long pieces of dressed stone in this process indicates there very were likely steps such as these incorporated into the original structure<sup>8</sup>. No other architectural features were noted at the platform, save a few buried stones in its center of no great size. Evidence of a structure having once sat atop the platform was not found.

The modification of hilltops into ovaloid platforms in such fashion is not a particularly common feature of Inka architecture. Indeed, as discussed in chapter six, curvilinear architecture is unusual for the Inkas in general and typically seen as a sign of great specialness. That said, the Inka royal estate at Choqek'iraw in the Apurímac region has a very similar platform and it is the

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<sup>7</sup> This curved platform was not noted in Drew's (1984) survey of the site; however, due to the rarity of curvilinear architectural forms in the Inka world, it is vital element in understanding the significance of the complex.

<sup>8</sup> Typical INC reconstruction practices make use of the collapsed or ruined masonry already existing at a site, although the techniques used in reconstruction are not necessarily representative of the original edifice, outside masonry is not generally used.

only other example of such a structure of which I am aware. The platform at Choque'iraw was originally described by Hiram Bingham as a 'truncated hilltop' and lies around 200 meters to the south of the site's lower plaza. Its scale is somewhat larger than that at Wamanmarka, measuring some 30 by 55 meters (Lee 1997: 5-6). In most other respects the Choque'iraw platform seems to represent an identical structure. Like the Wamanmarka platform it too lacks any evidence of having supported structures or buildings. In this lack of any architectural embellishment, both seem to have been quite distinct from the elliptical building at Ingapirca in Ecuador, which by contrast was built around a significant central temple structure.

It is quite possible that the oval platforms at both Wamanmarka and Choque'iraw were constructed according to a similar conceptual framework and perhaps even with conscious reference to each other. Even though the Choque'iraw platform is the larger of the two, it is essentially the same shape as that at Wamanmarka. In other words the ratio of length to width is identical for both structures<sup>9</sup>. Standardized length-width ratios are often observed in Inka rectilinear structures, and so this may also be a feature of curvilinear buildings and platforms. However in the absence of more than two examples of such ovaloid platforms, it is not possible to say with certainty if this shared ratio was a conscious element of the design. Beyond their dimensions however, both platforms are clearly associated with a nearby plaza of a royal estate compound, and both are situated on promontories directly overlooking a major river course.

Another similarity between the two sites is seen in the fact that both exhibit *kallankas* adjacent to their plazas. As was mentioned above, the long hall structures known as *kallankas* are

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<sup>9</sup> The dimensions of the Choque'iraw and Wamanmarka ovaloid platforms are 30 by 55 meters, and 33 by 18 meters respectively. Dividing the length of either platform by the width of either platform gives a quotient of 1.83 in both cases.

generally thought to have fulfilled a public-ceremonial role with respect to outside groups who were subject communities of the Inka state, acting as venues for feasting occasions underwritten by the empire. For that reason they are unusual in heartland royal estates, which tend (in theory) to be focused more towards the exclusive use of the *panaaqs* and less on the public functions of the great administrative centers found throughout the empire. Yet, like Wamanmarka, Choquek'iraw has a small *kallanka* with four entrances opening onto its lower plaza measuring 24 meters in length. It also has a second, larger *kallanka* adjoining the same plaza, but not opening directly onto it, measuring approximately 35 meters in length. At Choquek'iraw, Vincent Lee (1997: 5) notes that the passageways between the various buildings around the lower plaza have double-jamb entrances, although the entrances to the buildings themselves are only single-jamb doorways. This same pattern is seen around the plaza at Wamanmarka, where the side-passageways each have double-jamb entryways, in contrast with the structures themselves which are all single-jamb.

This additional set of similarities is worth further commentary, especially as royal estates do not generally employ *kallankas*. One possible explanation for the shared architectural idiosyncrasies of the Wamanmarka and Choquek'iraw royal compounds relates to the fact that they are both located in the relatively remote Antisuyu region of the empire, to the northwest of Cuzco. Interestingly, the 73-meter long, multi-chambered hall at Vitcos-Rosaspata is identified by Gasparini and Margolies (1980: 212-14) as a *kallanka* also. This site is another royal estate complex located in Antisuyu, and was probably built under the reign of the emperor Pachakuti (Duffait 2005: 192). No large administrative settlements such as the great highland centers of Huánuco Pampa and Hatun Xauxa are known to have existed in the lower-

lying areas northwest of Cuzco. These non-estate sites are well-known for the impressive *kallankas*, presumably intended to host large gatherings of local notables and part of what Gasparini and Margolies (1980) have termed 'the architecture of power' that underpinned the imperial system. However, reciprocal feasting and entertainments for lowland communities may have been no less important than for highland populations. In that case, the presence of *kallankas* at several estates in Antisuyu may indicate that these sites fulfilled some of the public ceremonial roles of the non-royal administrative centers found elsewhere in the empire, and in that respect differed from the larger estates nearer to Cuzco.

#### VIb. Monumental Terracing associated with the Complex

Another significant aspect of the Wamanmarka complex is its associated terraces. Agricultural terracing is, of course, a ubiquitous feature of the central Andean highlands. In the pre-colonial period, both during and prior to the rise of the Inkas, vast swathes of hillside were terraced and planted with crops – although most fell into disuse under the Spanish. However a particularly elaborate form of terracing was developed at the Inka royal estates in the Cuzco heartland region. Susan Niles in particular attributes considerable significance to this mode of landscape modification, which she refers to as 'high-style' in contrast with ordinary 'production' terraces (Niles 1982; 1987: 135). High-style terracing according to Niles (1987: 135-141) is defined by several architectural features, including **I)** sweeps of terraces that were conceived of as a planned unity, exhibiting symmetry in many cases, **II)** unusually high walls, designed to evoke grandeur and monumentality - often between 3 and 9 meters in height, **III)** high-quality



**Figure 4.4.** *Sector of monumental or 'high-style' terraces at Cangrehuyoc, on the south bank of the Río Lucumayo.*

masonry construction, in places using carefully fitted stone blocks that rendered the bonding matrix invisible, **IV**) the incorporation of diagonal flights of tenon steps into the retaining walls of the terraces to facilitate pedestrian access, **V**) the incorporation of stone-built water channels into terraces to facilitate irrigation and **VI**) the creation of larger terraced fields than is the norm elsewhere (i.e. high-style terraces are typically wider than production terraces, often to a quite considerable degree). Hyslop (1990: 283-4) also notes a strong association with such high-style terracing and Inka royal estates.

The Wamanmarka complex includes two sectors of terracing that are very similar to those found at other royal estates within the Cuzco Basin and Urubamba Valley. In addition, the terraces at Wamanmarka constitute almost the only major blocks of terraced agricultural land in the Amaybamba. One terraced sector is contiguous with the palatial *kancha* discussed above, and consists of four slightly divergent retaining walls that run north-northwest from Wamanmarka for approximately 160 meters. The fields created by the terraces range in width between 26 and 47 meters. There are two additional retaining walls below the ovaloid platform, although the terraced area created between them is much narrower. Along the southeastern end of the main sweep of terraces in this sector is a water channel which appears to have been modified in ancient times due to the fact that a portion of it has been artificially modified by lining it with stone masonry. The masonry and plan of these terraces clearly indicates that they were a part of the Inka complex at Wamanmarka and are contemporary with it. The water has been channeled so as to turn southeast at a near right-angle at the base of the terraces (see figure 4.1).

The second sector of terraces at Wamanmarka is found on the opposite bank of the Río Lucumayo, some 270 meters south-southwest of the architectural core of the complex. These terraces are not as long as those on the opposing bank, mostly running between 25 and 45 meters in length. However, their architectural character is distinctly more monumental and very typical of the 'high-style' terraces discussed by Susan Niles. These terraces form a tightly clustered sweep that runs down a steep slope, terminating just at the river's edge. Significant portions of the terraces have now collapsed, and the area appears to be subject to considerable downslope runoff and erosion; however there appears to have been ten individual retaining



walls aligned from top to bottom. These walls are fairly uniform in height, standing around 3.5 meters (consistent with the monumental stature Niles attributes to terraces found at royal estates). Their most characteristically 'Inka' feature noted in this terrace group is seen in the diagonal flights of tenon steps found at either end of the terrace walls (see figure 4.5). The style and location of these steps is very consistent with royal estate terraces in the Urubamba drainage.



**Figure 4.5.** *Detail of well-preserved set of tenon-steps running diagonally along a terrace wall at Cangrehuyoc.*

The setting of tightly defined and isolated sweeps of highly monumental terracing into hillsides is a fairly typical feature of royal estates. At Machu Picchu, for example, the most extensive area of terracing is the southern block that extends to the south of the site and is contiguous with the main architectural complex. On the lower slopes of Wayna Picchu several smaller runs of isolated monumental terracing have also been located. A similar pattern is notable at the royal estate at Choqueki'raw in the nearby Apurímac region. In both cases, a large set of terraces is associated with the main portion of the site; nonetheless, several additional and non-contiguous runs of terraces are located on the lower slopes of the same peak. It is not clear why the Inkas chose to build isolated and non-contiguous terrace-runs on the slopes of royal estates, or why different sectors were sometimes placed on opposite sides of the same mountain. In part this seems to have been down to reasons we would deem 'aesthetic'. The sector of terraces at Choqueki'raw that are laid out in the shape of a hummingbird are a good example of this. This issue will be returned to later on in the chapter.

## VII. Choquello Sector

The sector of Inka structures at Choquello is located on the north bank of the Rio Lucumayo, less than 2 kilometers downriver of the Wamanmarka complex. It is situated on a low ridge that projects across the valley floor in a southwesterly direction, a short hike up from the present-day dirt road, which would have closely followed the route of the Inka highway. It can be reached in less than ten minutes if travelling on foot. The view from the site commands a good prospect of the widest part of the Amaybamba Valley, with the town of Huyro clearly visible to

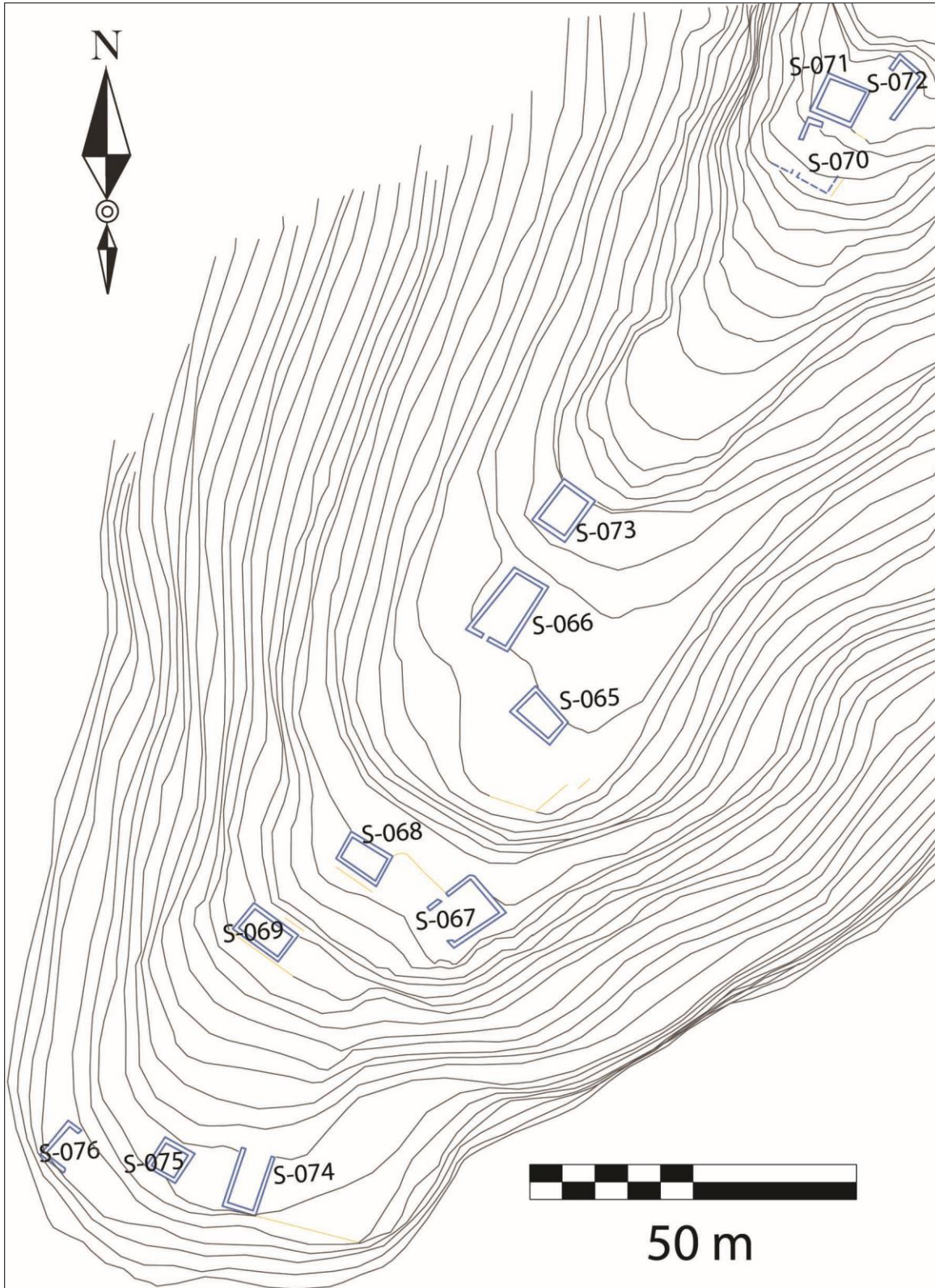


Figure 4.6. The architectural group at Choquello. Topographic intervals are one meter.

the west. The tributary stream of the Choquellohuanca runs at the base of the ridge, on its southern side, and is the nearest source of water.



**Figure 4.7.** *A view of the interior of S-066, looking northeast.*

The architectural group at Choquello consists of twelve individual structures, all rectilinear or slightly trapezoidal in plan. They are situated in what appears to be four groups of three buildings, with each of the four groups set at a different elevations running along the ridge. The groups are relatively close together and the maximum change in elevation from the lowest group to the highest group in less than 45 meters. Three of the four groups have been constructed on an area of ground that has been artificially leveled to form architectural terraces,

while one group is split across two separate levels. These architectural terraces on which the structures rest are retained in multiple areas by stone walls. In two cases, the architectural terraces are considerably larger than the space taken up by the footprints of the structures and so may have also offered potential activity spaces or work patios.



**Figure 4.8.** *A view of the northeastern wall of S-065. Note the retention of the earth upslope of the wall, the relatively faced interior surface and the niche-like feature in the wall.*

The level of preservation varies by structure, but S-066 survives in the best condition. It is also the largest structure at the site, measuring approximately 6 by 11 meters (internally) and is trapezoidal in shape. Of the remaining buildings, most are between 6 and 9 meters in length. S-

066 is partially set into the slope itself, and so its northern walls and eastern walls retain the slope above the structure. These walls survive to a height of 1.59 meters, and are considerably taller than the non-retaining walls on the southern and western sides that face downslope. The structure has one entrance in the southern wall measuring 0.58 meters in width. Only one other structure has clear signs of an entrance (S-068), which measures 0.65 meters across. The rest of the structures are not sufficiently well-preserved to say if they each had an entranceway, or multiple entrances. None of the structures show any evidence of internal subdivisions.

The masonry construction of the structures is fairly uniform throughout. Local schist blocks were used in all structures, although S-074 and S-070 both exhibit use of large rounded river cobbles as well. A mud mortar has been used to bond the stone masonry together and the blocks have been laid in semi-formal courses in some parts, while in others they appear uncoursed. Effort has been made throughout the site to make use of the natural breakage pattern of the schist blocks, with their flat surfaces placed so as to give a faced appearance to the interior walls of the structures. This is seen in S-065, S-066, S-068, S-072 and S-074, while S-067 showed evidence of having been faced on the interior and exterior sides of its walls. Whether or not facing was deployed in the other structures is difficult to say given the poor levels of preservation. The size and layout of the structures, along with the effort geared towards facing their interiors strongly indicates that the Choquello sector was a small residential site within the broader Amaybamba estate complex. The only surviving architectural element of note (other than the two entrances) is a rectangular niche seen in the northeast wall of S-065, measuring 0.31 in length by 0.15 meters in height and 0.3 meters deep. The purpose of this feature is not clear however. Few of the walls in the various structures at Choquello

exceed a meter in height, except for some instances where the structures are built into the slope on one side, and so the walls act to retain the upslope mass of earth. The limited amount of masonry collapse visible around the structures implies that their upper walls were constructed of more perishable materials such as adobe - no evidence of which now survives. There is no direct evidence of the kind of roofing that would have been used at the site.



**Figure 4.9.** *The retaining wall of the architectural terrace that abuts S-074, seen looking towards the east. Note the unfaced wall surface in comparison with the residential structures.*

A least six individual sections of the retaining for the architectural terraces now survive, and in most respects they are similar to the structures themselves, using local schist blocks and

coursed in a similar fashion. The longest section of retaining wall abuts the southeast corner of S-074 and runs perpendicular to the structure for almost 16.5 meters. Most of the retaining walls support the edges of the platforms below each group of structures, with the exception of the wall that connects S-067 and S-068, which supports the slope above the structures. This wall is continuous with the wall of S-067 (not abutting) and represents the same construction episode. None of these terraces include tenon-steps, or other means of facilitating easier access to the platforms they retain.

This type of site, a small cluster of rectilinear houses set on architecturally terraced low ridge, seems typical of what might be expected in terms of a lower status residential sector within an Inka royal estate. It bears comparison with the kinds of non-elite residential complexes that have been noted by Susan Niles (1987) at the royal estate complex of Callachaca, associated with Amaro Topa Inca and lying just a few kilometers east of Cuzco along the Rio Huatanay. The complex of buildings Niles (1987: 24-9) calls Callachaca A, is very similar to Choquello –

consisting of thirteen rectilinear structures, all with a single entrance and situated on a group of terraced architectural platforms. These kinds of sites likely represent the housing complexes of the laborers working in the fields of royal estates, a clear contrast with the monumental and elite-oriented architecture at Wamanmarka. Given the documentary evidence that the Amaybamba estate was mainly worked by *mitmaqkuna* colonists from Chachapoyas, this site is the best candidate for the kinds of residential sectors where such laborers would have been housed. Since the Choquello Sector is situated just above the eastern end of widest expanse of the Amaybamba Valley floor, and therefore overlooks the area that offered the greatest



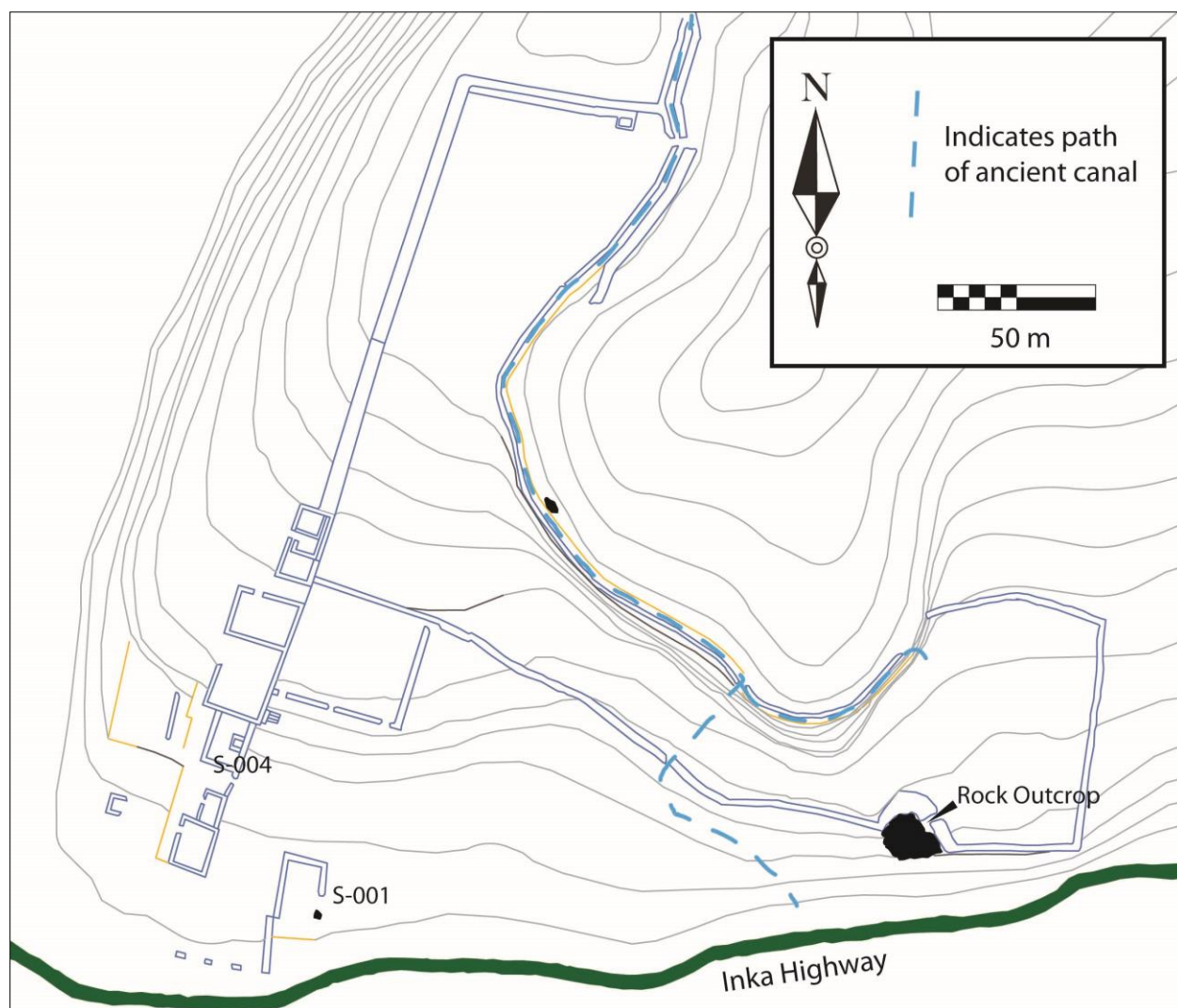
amount of cultivatable land in region, it seems an ideally-suited location for housing groups allocated to working in the coca fields below.

#### VIII. Triunfo Sector

The complex of buildings known as Triunfo is located almost in the center of the widest expanse of the Amaybamba; that is amid the greatest area of agricultural land found in the drainage. It lies approximately 2.2 kilometers east of the town of Huyro and is situated on a gentle slope just above the course of the Lucumayo, overlooking the river from its northern bank. The complex consists of several buildings (S-01 to S-08); although they are distinctive in that rather than being a set of standalone structures (as with Choquello), the architectural remains form an integrated complex. The structures run longitudinally up the hillslope, although the change in elevation is no more than 8 meters from the lowest to the highest structure. The site was clearly planned as a unified entity. Traces of the paved surface of the Inka road are visible at the southern end of the site, passing within a few meters of several structures, indicating that Triunfo was sited with a direct orientation towards the Inka highway network in the valley.

The quality of the masonry construction at Triunfo is high, and the level of architectural investment appears greater than any other site in the study region, save the palatial complex at Wamanmarka. The variety of local schist that is common in the Amaybamba and which dominates the pre-colonial architecture throughout the region has not been used at Triunfo, and more care has been taken in selecting and (where applicable) dressing the masonry blocks. The wall thickness varies from structure to structure (between 0.5 and 0.85 meters) although it is uniform within each individual building. One of the best preserved buildings is S-01, which is

only major structure that is not connected with the others in the complex. It lies approximately 11 meters to the east of S-02, and overlooks the course of the Inka road. It is rectilinear in plan and encloses an internal space of 7 by 4 meters, without apparent subdivision. The walls of the structure are well-faced on both the interior and exterior sides, and the masonry blocks run in



**Figure 4.10.** *The Triunfo site. The architectural complex is situated in the southwest corner of the map. Note the ancient canal which runs through the walled-off portion of the sector. Topographic intervals are one meter.*

well defined courses. The courses are patterned to a degree, and in certain parts of the structure care seems to have been taken to select runs of masonry blocks of similar size and shape. Despite the high-quality of the wall construction, it is not of the same order as that found at Wamanmarka or other royal complexes elsewhere in the heartland.



**Figure 4.11.** *Interior wall face of S-001, seen looking west. Note the patterned masonry and the extruding ledge below it.*

An unusual feature of S-01, not replicated at the other structures at the site is an interior ledge in the north, east and west walls (see figure 4.11). In the east and west walls the width of the ledge is 0.15 meters and it stands at 0.7 meters above current ground level (which is higher

than the original floor surface would have been). In the northern wall, the ledge is much wider and extends 1.33 meters into the interior of the structure. The purpose of this feature is unclear, although it may have supported an upper floor level made of wood. However, despite the change in ground level since abandonment, the interior ledge still seems too low and its northern portion too wide to have accommodated an upper storey. The standing height of the east and west walls varies between 2 and 2.5 meters, while the north wall is gabled to a height 3 meters. The southern wall does not survive, but was likely gabled in a similar way to the opposing wall on the north side of the structure. There is a window visible in the west wall, measuring 0.7 meters wide at the base and tapering towards the top. It appears to have formed a slightly trapezoidal shape, although the upper portion of the window has been lost due to the collapse of the higher sections of wall masonry.

The remaining structures are similar to S-001, except that they are all integrated into a combined architectural unit that is built on several architectural terraces at different levels of the slope. Their masonry construction is of similar quality, although evidence of patterned coursing techniques is more limited than in the other structures. There is also no evidence that any of the other structures once possessed gabled ends as does S-001. All the structures of the complex have been built with interleaving corners and a general preference for larger stones for use in corner construction is evident throughout. No evidence for windows was found in the other structures, however a large amount of wall collapse is visible and so this may simply reflect a preservation bias. Four structures had remains indicating the possible presence of entrances; one in the western wall of S-003, two on the eastern walls of S-004 and S-010, and another in the northern wall of S-007. None of these were well-preserved however.



**Figure 4.12.** *A series of steps along the eastern side of S-004. These steps would have facilitated exterior movement up and down the various architectural terraces that the complex rests upon*

It is difficult to assign a clear function to the structures in the Triunfo complex. It is worth noting initially that there are not many structures all told, and a number of them appear to have been too large to have been roofed over and lacking in architectural remains indicating a roof was part of their design (especially S-005 and S-006). These structures therefore fall more into the category of 'enclosure' rather than 'building'. The remaining structures are few in number, and given their unusual architectural features it seems unlikely that they housed a permanent population or acted as residences. The complex might tentatively be labeled a small

administrative center in the midst of one of the major agricultural and productive zones of the valley; perhaps it was a point where harvested crops were processed in some way, or quantified, prior to removal to another location. Alternatively, overseers might have used such locations as points from which to organize planting and harvesting work at particular times. The absence of repository structures suggests that whatever activities occurred at the site, long-term storage was not among them.

The architectural remains at Triunfo extend beyond the complex of buildings and architectural terraces already discussed, and a series of walls connected with the site and running to the north and east of the complex are worth some detailed discussion. Two walls, around 1 meter in width, abut the eastern ends of structures S-005 and S-007 and extend perpendicularly across the slope adjacent to the complex. These walls run parallel to each other creating an open, rectilinear space that is enclosed by a further wall that connects to both of them. The space enclosed by these walls is too large to have been a roofed structure (40 by 34 meters) and so its purpose is not immediately clear. Crops may have been grown inside the structure for some special reason, or it may have fulfilled a corral-like function, used to contain small groups of camelids.

A further and significantly larger enclosure is formed by a wall that abuts the northern end of S-007 and runs north-northeast upslope for 143 meters before turning at a near right-angle to run horizontally along for another 64 meters. This wall is of considerable mass and in parts reaches a width of 2.5 meters. The portion of the wall running roughly east-west is built at two levels and so steps down on the southern (downslope) side. In this lower level of the wall is a stone-

built basin, less than 2 meters in length. It is not clear what the function of this feature is, or if it was designed to be filled with water.

A substantial portion of the Triunfo complex appears to be devoted to water management and manipulation in some way. A canal (now dry) runs from the north of the site along the eastern margin of the space enclosed by the large wall mentioned above. Its course skirts the base of the small hill overlooking the architectural sector and its lower run is retained on the



**Figure 4.13.** *The drainage aperture in the eastern wall of S-004 (seen from the exterior of the structure).*

downslope side by a stone wall, while the upper portions of the canal are retained by masonry on both sides. Around 140 meters east of the main architectural complex, the canal splits and runs down towards the Inka highway below the site. The most eastern area of the site (where the canal terminates) forms another large open space enclosed by a dry stone masonry wall. This space is somewhat rectangular in shape, although the western end is not fully closed. The most prominent feature of this space is a large stone outcrop that the southern part of the wall circuit wraps around. This outcrop is the most prominent bedrock feature in the area and may have been a focus for the water manipulation at the site, since the canal drains into the space bounded by the enclosure adjacent to the outcrop.

An internal feature of S-004 also seems primarily geared towards the control of water flow. Extending from the east wall is a rectangular basin of stone masonry construction. Inside this basin, lower down on eastern side of main wall of S-004 is an aperture that drains out onto the exterior of the building. This aperture is well-constructed and supported by a substantial stone lintel that is a single dressed block of masonry of 0.65 meters in length. The shape of the aperture is a trapezoid measuring 0.43 meters (top) by 0.49 meters (base) by 0.6 meters (vertical height).

The purpose of these water management systems is not immediately clear. Irrigation is one possible answer, but artificial watering systems are generally unnecessary in the region today. The Triunfo site is set in a citrus plantation and citrus trees grow throughout the area without need for such irrigation projects. Alternatively such water management infrastructure may have been a response to excess water which can be quite damaging to structures if not properly



controlled and directed. The canal may therefore have been intended to shield the architectural sector from heavy run-off during the rainy season. However, even if we are able to explain the canal (partially) in terms of diverting damaging water run-off, we still have no means to account for the basin feature and drainage aperture found inside S-004. If the canal diverted water away from the structures, then there seems little reason to construct a 0.28 meter<sup>2</sup> drainage opening inside one of the buildings. Presumably whatever liquids flowed through the drainage feature, they were deliberately poured into the basin via human action. In general terms, the Triunfo site is best seen as a small facility that potentially fulfilled a range of administrative functions; even so the greater part of the complex was given over to manipulating flows of water for reasons that are at present not altogether clear and not self-evidently 'functional'.

## IX. Capillayoq Sector

The complex of structures referred to as Capillayoq has already been mentioned in chapter six in the context of the discussion on its notable enclosed rock outcrop (located inside S-076). In this section I focus on describing the remaining portion of the site. The ruins at Capillayoq are distributed across a relatively flat terrace that overlooks the Río Lucumayo from its north bank. Today it is an excellent location for tea growing and the extant archaeological remains are all set within modern tea plantation. It lies no more than 500 meters to the west of the modern town of Amaybamba and is in the middle of what is today the largest expanse of prime agricultural land along the valley floor.

The architectural elaboration seen at the site is relatively modest, at least with respect to buildings. It is difficult to say the precise number of individual structures as the preservation in many cases is extremely poor. The town of Amaybamba was the major settlement in valley



**Figure 4.14.** Map of Capillayoq. The large walls are rendered in block colour to contrast with the architectural remains.

during the colonial era (until it was later eclipsed by Huyro) and I suspect the Inka remains at Capillayoq were used as a source of building stone throughout that period. There are a number of stone-built (although now abandoned) structures in the town that are of historical/colonial date and could well have re-used pieces of Inka masonry during their construction. Despite this likely use of the Capillayoq site as source of *spolia* during the colonial era, I estimate the number of structures present as either eight or nine, based on the surviving footprints that can be discerned. These structures are all relatively small and rectilinear in shape. The best-preserved structure is S-080 which measures approximately 9 by 4 meters internally (the walls are partially collapsed, so more precise dimensions cannot be determined). The wall width is generally around 0.95 meters and the extant wall height is 0.9 meters at the highest section. No entrances, internal subdivisions or other architectural features were noted. Although badly preserved, the remaining structures at the site, appear to all have similar characteristics, and none exhibit evidence of specialized functions (such as *kallankas*).

The most unusual feature of the complex is not the buildings it contains, but rather the set of walls that were constructed in association with them. To the north and northeast of S-076 are five individual segments of a stone-built feature that were noted in the ground survey. These different segments appear related, since they mostly run parallel with each other in a northeast-southwest direction. These linear features generally only consist of only one course of masonry, and so stand no more than 0.2 to 0.3 meters above the ground for the most part. Several segments are non-continuous, but may once have been so, since they are aligned with each other. Given the likelihood of the site having been used as a source of building stone in

the colonial era, it is possible that the walls were once of greater height and the various aligned sections were all once part of the same structure.

It seems very unlikely that the walls are either modern, or date to the colonial period. Apart from the fact that they are associated with a set of Inka buildings, they do not reflect any spatial division of the land that is meaningful to the present inhabitants of the area (such as property lines)<sup>10</sup>. Moreover, the scale of the construction is far too great for them to be viewed as recent features built with the intention of demarcating ownership. For example the easternmost segment has an average width of 2.2 meters, while the longest segment running northeast of S-076 an average width of 3.1 meters. No modern property wall in the region, even if made of stone, would normally exceed one meter in width at the most. Indeed it is difficult to imagine why a boundary marking wall would be over three meters in width if its only purpose was to mark the edge of a field or property line.

Just over 100 meters to the east of S-076 is a second set of wall features. Unlike those discussed above, these do not stand alone on relatively horizontal terrain. Instead they are retaining the eastern and western sides a small, naturally-formed gully that drains into the Río Lucumayo running at the foot of the gorge below the site. No water was flowing through this drainage at the time of survey, but since the gully is clearly a water-cut formation it must run at times of high run-off; or at least did so at some point in the past. These walls are quite substantial in terms of the labor investment they represent. The longest segment runs for over a hundred meters and curves round the northern end of the gully, terminating just south of S-080. Its

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<sup>10</sup> This observation is based on conversations with the local farmers who work on the contemporary tea plantation.

width is approximately 3.50 meters, and is fairly uniform throughout. When walking along the upper portion of the wall it is not unlike following a paved roadbed in appearance. The height of the wall is more variable than its width, depending on the portion of the drainage it is retaining, but much of its western extent is between 1.9 and 2.35 meters. It has been constructed with a fairly uniform cant of between 21° and 22° along the eastern run.



**Figure 4.15.** *A portion of the large retaining wall at Capillayoq.*

In one portion of this retaining wall there was a segment of recent collapse, providing an opportunity to note some aspects of its internal composition. The wall consists of a rubble fill with irregularly shaped blocks of mostly 0.12 to 0.35 meters in length, with larger blocks having

been used in the lower levels (greater than 0.6 meters in length). The top of the wall, and its outer face, have been constructed with masonry bonded with mud mortar. These visible blocks do not appear to have been dressed in any way, although more rounded stones have been chosen as compared with those used in the interior fill.



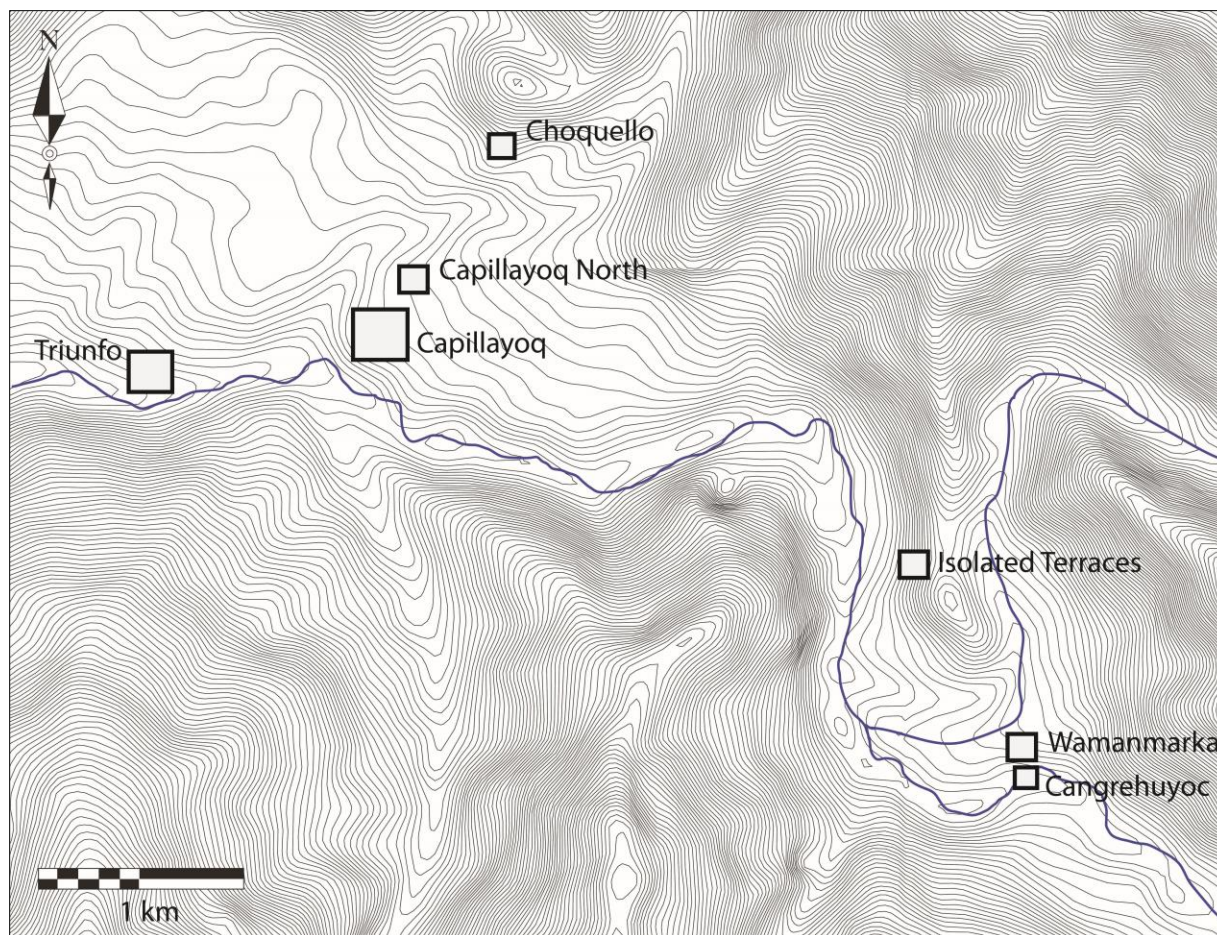
**Figure 4.16.** *The upper portion of one the large wall segments at Capillayoq. Note the drop-off down to the gully on the right of the picture.*

No obvious 'functional' explanation for these walls can be given. It is also worth noting that Capillayoq continues further north on the other side of the modern road which evidently cut through the site at the time of its construction. The northern extension of the site (Capillayoq

North) exhibits components similar to those already discussed – large walls interspersed with occasional rectilinear structures. However the owners of this property were unwilling to provide access to the area for mapping and survey to be carried out. As such it has not been fully recorded. However the fact that the site extends further north indicates that the large and fertile expanse of valley bottom west of Wamanmarka was criss-crossed by substantial wall features during the Late Horizon. The modern town of Amaybamba lying just to the east may well site on top of further remains also. Since these remains were not buildings, it is likely that the various traces that constitute the Capillayoq site are indicate of the central growing sectors of the Inka coca fields that were established. Nonetheless, the reasons that may explain the subdivision of such a space through the building of large walls are unclear. The fact that a small gully was retained by the walls may indicate a desire to shape the already existing features of the landscape, accentuating and enhancing them with masonry. Certainly a desire to both modify and simultaneously respect the pre-existing topography of a site has widely been noted as a quintessential feature of Inka architecture (e.g. Hyslop 1990: 300; van de Guchte 1999: 151-3). In that case, the coca fields of the Amaybamba may have reflected a similar, albeit distinctive manifestation of this broader principle.

#### X. Summary: the central portion of the Amaybamba royal estate lands

The various occupation sectors discussed above represent the densest concentration of Late Horizon sites in the Amaybamba Valley. Only Choquello has a clearly residential function, while Wamanmarka is distinctive for the elite nature of its architecture and its association with areas



**Figure 4.17.** *Topographic map indicating the relative positions of the sites mentioned in this chapter.*

of monumental terracing. One additional set of potentially Late Horizon remains was noted in the survey, consisting of an isolated sector of terracing that lies 1.1 kilometers north-northwest of the Wamanmarka complex. It is located in the narrowest portion of the bend in the Río Lucumayo, just north of its confluence with the Río Huamanmarca. The terrace consists of a single retaining wall that runs for 145 meters in a roughly north-south direction. Two secondary portions of retaining wall running parallel to the main wall, but much shorter in length were noted on its downslope side. The construction of these terraces exhibits none of the high-style



features seen at the Wamanmarka complex and although retained by stone masonry, they otherwise appear to conform to the patterns associated with ordinary 'production' terraces.

Although some structures are evident at the sites of Capillayoq and Triunfo, they do not appear to have functioned either as significant residential sites or as palatial compounds. Their location indicates that they were in the heart of the major coca-growing lands of the Amaybamba Valley during both the pre-colonial and post-Conquest eras. From present evidence, it seems the reported 1,500 *mitmaqkuna* who farmed the valley floor were not housed at any of these sectors. It is possible that the archaeological remains of the residences of those laborers lie underneath the modern towns of Huyro and Amaybamba, and that the colonial era settlement continued on top of the major Late horizon residential zones. Indeed this would not be an unexpected pattern when compared with the rest of the imperial heartland. Alternatively, the *mitmaq* colonists may have been located elsewhere in the valley, perhaps at higher altitudes above the prime coca-growing zones.

In broad terms, the Inka remains located in the Amaybamba Valley conform to what has been recorded at other heartland royal estates – in terms of the character of the elite and the non-elite sectors. It also suggests forms of architectural elaboration that may be distinct to lowland or coca-growing royal centers, particularly in the unusual walls seen at Capillayoq and Triunfo. At the beginning of this chapter, I indicated that Wamanmarka offers an opportunity to archaeologically examine an Inka royal estate that was quite limited in scale. Although it exhibits many of the features associated with the estate type of site, the overall degree of monumental labor investment is much less than what we see at comparable locales in the

Urubamba drainage. In that sense I have suggested it might be best understood as a 'distillation' of the royal estate phenomenon, representing only its most fundamental elements. If this is so, then it appears two features frequently associated with the royal estates were emphasized at Wamanmarka.

The first of these is the palatial *kancha* similar to those noted at all high-status occupation sites in the heartland, including the other aristocratic estates and Cuzco itself. The double-jamb doorways and adjacent elliptical platform seem the strongest signatures of its royal status, along with its high-quality masonry. Given the previous discussion about the direct association between royal estates and *panaqas*, this is unsurprising. If royal estates were a material manifestation of the *panaqa* groups then it makes sense that a palatial *kancha* would be one of the most vital components to be included in a condensed royal estate. The second feature is seen in the sweeps of high-style terraces, with their imposing walls, tenon-steps and integrated water management channels. Although these do appear at Wamanmarka, they are some of the smallest sectors of such terracing known anywhere in the Inka Empire. In some cases, entire mountainsides and valley floors were terraced in such a fashion, making the Wamanmarka examples seem almost 'tokenistic' by comparison. However these terraces are I think, key to understanding what the royal estate phenomenon represented in the Inka world, not only in of themselves, but also due to the fact that they are paired with a palatial *kancha*. This pairing of high-style terraces and *kancha*, and *the particular relationship it sustained* will be crucial in the arguments that will be given in the remaining portion of the chapter.

## XI. Production and the Royal Estates

The basis for much of our understanding of production, use and exchange in the Inka Empire comes from the foundational work by John Murra (1962, 1980, 1982), which is derived primarily through an examination of historical sources. As Murra (1982: 92) argues, the form of tribute or taxation that was central to the maintenance of the Inka Empire was one that relied on prestations of labor to the state, not goods in kind. In other words, it was neither the volume nor value of the goods that determined the level of tribute exacted from subject communities under the Inkas – rather it was the time spent in state-orientated labor activities that mattered. Even if the harvest in a given area failed, and no tribute was actually payable in terms of produced things, the tribute was nonetheless considered received in terms of the requisite amount of labor having already been performed.

As Murra's (1980) argument goes, the economic system of the empire was in many ways an elaboration of the more local exchange obligations between *ayllu*-mates. It took place on a much grander scale, certainly, but the logic and ethos that drove it was not all that different in its fundamentals. *Chicha* and other hospitality-related products within *ayllu* contexts are often provided for laborers by the household for which the labor is performed, and archaeological evidence from the prehistoric Andes indicates that beer was central to reciprocal interactions within larger political units also, with the 'state' taking on a moral role similar to the household (Moore 1989; Morris 1979). For Murra then, one of the primary pillars of Inka statecraft (and a basis of the empire's stability) inhered in the fact that the Inkas represented subject-to-state

tribute obligations as morally similar to the reciprocal movement of goods and labor within local kin networks (i.e. *ayllus*). Drawing on Murra's arguments, Irene Silverblatt suggests that

All resources – lands, rivers, llama herds – were declared to be property of the empire... [which] enabled the elite to claim that any utilization of resources by the *ayllu* came by virtue of a “gift” from Cuzco. The Inca elite thus phrased its exploitative relations with conquered provinces in terms of the norms of mutual obligation... (Silverblatt 1987: 223-4).

Murra's analysis is important, but for my purposes it requires some modification and extension before I move on with the discussion. Firstly, if the state's tribute-gathering systems were an elaboration of labor exchanges found within *ayllus*, then it is worth asking if it might not in fact be better to represent the economic system of the Inka Empire as a very large and very complex system of gift exchanges. Since anthropological research has indicated that the distinction between gift and commodity exchange is an important one<sup>11</sup>, it seems better not to use the word commodity in a context where gift is a more appropriate descriptor. We tend not to think of gift exchanges as occurring on such a scale, since in modern economies gift prestations are largely relegated to private and domestic spheres. Or at the very least, take on a subordinate role to market exchange within the capitalist economy (Carrier 1994). After all gift-giving is classically the politico-economic foundation of small-scale societies, while in imperial

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<sup>11</sup> It is nonetheless important to recognize that the distinction between gifts and commodities is not an absolute one. Things are not either gifts or commodities in themselves; rather moments of exchange are governed more by the logic of the commodity or the gift logics in any given moment of transaction. Specific objects can and frequently do move back and forth between these two idealized exchange arenas, acting at times as gifts and at others as commodities. However, the general absence of markets in the pre-colonial Andes means that the potential for any transaction to move into a commodity-like transaction is extremely limited in comparative terms.

economies we expect a more marketized logic of exchange and production. However, there is nothing about gift-giving that requires it to be limited to small-scale polities in terms of having a dominant economic role. Moreover, I think that Inka economics appears contrary to gift-exchange as we commonsensically understand it because it entails *mass-production*. Yet mass-production is not a definitive feature of the commodity form according to any accepted definition. There is no logical reason why the Inka state could not have mass-produced gifts (such as *chicha* or coca leaf) and provided them to subject communities, nor is there any impediment to seeing the large-scale labor contributions of subject populations as gifts offered to the state (or perhaps more precisely, the Inkas).

The second amendment to Murra's thesis entails a more direct consideration of the role of non-human actors in such exchange systems (see Godelier 1999). Rather than thinking exclusively in terms of humans giving tribute and hospitality to other humans, we also need to account for the fact that a large amount of exchange recorded in the Spanish chronicles entails exchanges with *wak'as*, particularly those that were mountains. The traditional distinction between 'sacrifice' (gift exchange from human to non-human actors) and 'economic' transactions (exchange between human actors) is not necessarily useful in the pre-colonial Andes – and so I will proceed without such a distinction in the remainder of the chapter.

Modern plantations and factories produce commodities, as they are phenomena which are intimately bound up with global exchange networks that rely on capitalist, marketized logics of interrelation. The question then is what did Inka royal estates produce? For if they were part of a non-capitalist world – a world that did not even permit proto-capitalist market exchange -

then by definition they could not have produced commodities. In some non-modern contexts, such as the Roman Empire, it might have been possible to express the value of one species of thing, like wheat, in terms of another species, such as wine. The respective values of both could certainly be expressed in terms of *denarii* or other appropriate currency units<sup>12</sup>. However, in that particular case, mechanisms such as markets and money existed, providing a context through which such acts of commensuration could occur. What we know about the Inka Empire, and the circulations of materials within it, suggests that questions such as ‘how many storehouses of maize was a storehouse of coca worth?’ would simply have been meaningless. Lacking an abstract means of measuring value, such as currency, there would have been no way to commensurate these things in the pre-colonial Andes. This is not simply because the concepts themselves were alien to the pre-colonial Andes, but also because the systems of production and circulation that produce commodity exchange-values were non-existent. Lacking currency or a conceptualization of object-value based on abstracted quantities of human labor, there would simply have been no means available to relate different kinds of goods in the way commodity markets do. As Murra’s work demonstrates, the Inkas sought labor tribute rather than goods, precisely because labor exchange obligations were the foundation of traditional systems of reciprocity within *ayllus*. Even at the grand scale of imperial tribute gathering mechanisms, there was simply no concept of abstract labor (such as a person-hour) as a means of measuring values.

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<sup>12</sup> Although we should not take this to imply the Roman ‘economy’ was identical to the modern, capitalist one, despite the potential for certain comparisons such as these to be drawn.

This returns us to the matter of coca and maize as products of Inka royal estates in the pre-colonial Andes. Coca as a cultigen exists today in two forms, *Erythroxylum coca* and *Erythroxylum novogranatense*, two species of cash crop that are widely cultivated throughout the present-day Andes – particularly in the nation-states of Peru, Bolivia and Colombia (where their cultivation is legal, although restricted in various ways). Maize exists as a variety of subspecies of *Zea mays* and is a staple crop of enormous global importance, consumed by vast numbers of people on a daily basis. Both coca and maize are commodities *par excellence*; one an example of an illicit or black market narcotic (after refinement) and the other a major source of calories for billions. Coca and maize are commodities ultimately as a product of their commensurability (internal and external), and it is this global commensurability that is the most basic definition of the commodity and from which is derived its fundamental logic.

In particular, Westerners are often inclined to draw a distinction between the ‘real’ properties of these plants (e.g. pharmacological, nutritional, physical) and their symbolic role in ritual and ceremony for Andean communities<sup>13</sup>. While virtually all archaeologists would acknowledge that maize and coca are deeply invested with significance in the Andes ‘beyond’ their caloric and pharmacological values, the analysis ultimately hinges on these real properties, which are precisely the same properties from which they draw their use-value and thus exchange-values on contemporary commodity markets. In other words one leaf of coca is considered to be basically the same substance as any other (from a modernist perspective). It contains the same

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<sup>13</sup> Such distinctions hinge on the divide between universal (natural) and local (cultural) properties – again following Viveiros de Castro. Their pharmacological and nutritional characteristics are thought to be relevant globally, hence they are not simply cultural, while the ritual efficacy of coca and maize are Andes-specific and so cultural in origin.

alkaloids that provide for its pharmacological effects, and thus distinctions are meaningless as long as the crop is not spoiled or blighted. Similarly one can easily substitute an ear of corn for another with little *consequence*. This however is precisely the sense in which neither maize nor coca (as we now understand them) existed in the ancient Andes. We cannot assume that in the pre-colonial Andes, any coca leaf was considered equally potent or efficacious as any other.

In their study of pilgrimage centers in the pre-colonial Andes, Bauer and Stanish (2001) discuss the import attached to the area around the Copacabana Peninsula and the islands of the Sun and Moon towards the southern side of Lake Titicaca. Stanish and Bauer (2007: 66) cite Garcilasco de la Vega who says of the maize that was grown there, that 'any Indian that could get a grain... or any seed to cast in his barn thought he could never want for bread for his whole life'. As discussed in chapter six the area around Lake Titicaca is the place where Wiraqocha's journey began in Andean origins narratives and was a focus of creative force and potency. Thus maize cobs grown there were not commensurate with maize grown elsewhere. Despite being the same biological species and having identical use-value to any other maize (from a Western point of view), all maize was not the 'same thing' in the Andes. The value of the maize grown at the Island of the Sun on Titicaca was not identical with the maize produced elsewhere in the empire, and cannot be understood apart from its particular geographical source and its 'closeness' to Wiraqocha at that location. Similarly, there was a *chakra* ('field') on the slopes of Saqsaywaman in Cuzco which produced maize of especial significance. The first breaking of the earth in the annual agricultural cycle always took place at this location, amidst much ceremony and pomp (Bauer 1996: 327-8). Not only can commensuration not be assumed between all maize cobs, neither can it be taken as a given between all maize-producing fields.



Yet I think it would be a mistake to think that maize produced at the Island of the Sun, at Saqsaywaman, or anywhere else in the empire was especially 'sacred'. In anthropological terms the concept of the sacred is entirely bound up in its dichotomous relationship with the profane. As Durkheim (2001: 36) put it,

The division of the world into two comprehensive domains, one sacred, the other profane, is the hallmark of religious thought.

Jack Goody (1961) notably critiqued Durkheim's universalizing of the sacred-profane dichotomy, finding no evidence for it during his fieldwork in Ghana, as did Evans-Pritchard (1965) with respect to the Azande of South Sudan. Few scholars are now willing to universalize the relevance of the divide and it is widely understood as a product of Western intellectual history and theological tradition that is (at best) applied elsewhere with great caution.

Certainly, the indigenous Andes recognizes no such divide, at least beyond its more recent engagement with the Roman Catholic tradition. So, unless it is being used in a context where a fundamental emic distinction between sacred and profane is empirically demonstrable, the term means little more than 'important' and 'special'. Such specialist vocabulary should therefore be avoided in contexts where its more analytical use is not being explicitly evoked. In part the problem with much archaeological use of terms such as 'religious' 'sacred' or 'ideological' is that they are primarily placeholders for perceived non-functionality in economic terms. The idea of sacred maize at first glance appears to describe an emic perception of that maize, but instead only masks an etic evaluation. So, 'sacred maize' is corn which is valued for non-economic reasons (e.g. its association with Wiraqocha) as opposed to unmarked maize

which is valued for reasons that conform to a Western sense of rational use (e.g. as a source of calories). The distinction tells us nothing about the Inkas understanding of either type of maize, and ultimately it may even hinder our attempts to recover it.

If in the pre-colonial Andes there was no 'sacred' maize, in the strict sense of the term, then logically there can have been no profane maize either. Consider for example that for the Inkas agriculture was considered a form of warfare. In early colonial sources, plowing is described as 'disemboweling' the earth and the *haylli*, the 'song of triumph', was often sung following both military victories and after agricultural fields had been 'defeated' - that is, after they had been ploughed and planted (Bauer 1996). In the Andes, both ancient and modern, the earth is usually described as *Pacha mama* - the 'world-mother' or 'All-mother'. The significance of *Pacha mama* still remains considerable today - the new Constitution of Ecuador in 2008 for example, introduced a clause guaranteeing the inalienable rights of 'Nature or *Pachamama*, where life becomes real and reproduces itself' (cited in de la Cadena 2010: 335).

The practice of acknowledging *Pacha mama* and providing her with offerings prefigures most plantings and other agricultural endeavors in the contemporary Andean highlands, as it did in the past. In fact, acknowledgement of *Pacha mama* via the appropriate offerings (a *pago* or 'payment' performed by a ritual specialist) is generally a necessary prerequisite for carrying out archaeological excavations in the central highlands today. It is particularly important to make the correct gestures of respect to *Pacha mama* before digging into her and the necessary violence this entails in Andean thought. *All* agricultural production is, at some level, an exchange with *Pachamama* - hence the ever-recurring obligation to give back as one receives.

Some corn may have been more special or more powerful, as a consequence of its individual history and origins, or the source from which it was derived - but no corn was 'just food' or understood in 'secular' terms.

Furthermore, Andean agricultural products are often considered to have been 'owned' by the mountains on whose slopes they were grown (Isbell 1978), and there is often a direct association between the mountains whose waters irrigated the products and the products themselves. A part of the mountain and its material potency is therefore contained within harvested maize and coca. In which case, to grow coca on a mountainside, or perhaps more accurately within in its watershed, is to exchange material and energy with the mountain itself. In the eastern slopes northeast of Cuzco for example, lowland agricultural products are today strongly linked with the snowcapped mountains of the adjacent Cordillera Blanca (Reinhard 2007: 27). And like exchanges in the Andes in general, this ties all actors (human and non-human) into a long-term set of obligations and moral imperatives to adhere to such relationships and respect their rules of reciprocal engagement. So as the mountain gives, the humans must also give back through libations and other offerings. At a more general or often more mediated level, this may also be entail higher order exchanges with other, more senior mountains that are elsewhere, or even with *Pacha mama* herself. Different kinds of earth-beings often subsume each other at different scales in Andean contexts, and the distinctions drawn are therefore not always absolute.

The distinction that emerges from this is between seeking to grow coca as a commodity and coca as a powerfully-charged product of certain non-human actors labor. In the former case, all

coca is commensurable and so it does not matter where the coca comes from or who grew it or how they did so. As long as it is coca it will still contain the alkaloid substances that provide the desired stimulant effect. One coca leaf is as good as any other, provided it has not spoiled. If the aim is produce large quantities of coca as a commodity (as a means to underwrite wealth) then one would seek out optimal coca growing lands that are likely to produce the highest yields. However, if the aim was to control the material products produced by certain powerful earth beings, including coca, then the logic would be quite different. In such a scenario, the focus would be on manipulating the mountains that are most important actors and finding ways to encourage them to produce coca for the needs of the Inka elites. The goal would be to make them compliant, docile and more productive. Coca-as-commodity is a very different thing from coca as an emanation from the body and waters of earth beings – and it this key distinction which will be elaborated upon in the following set of arguments.

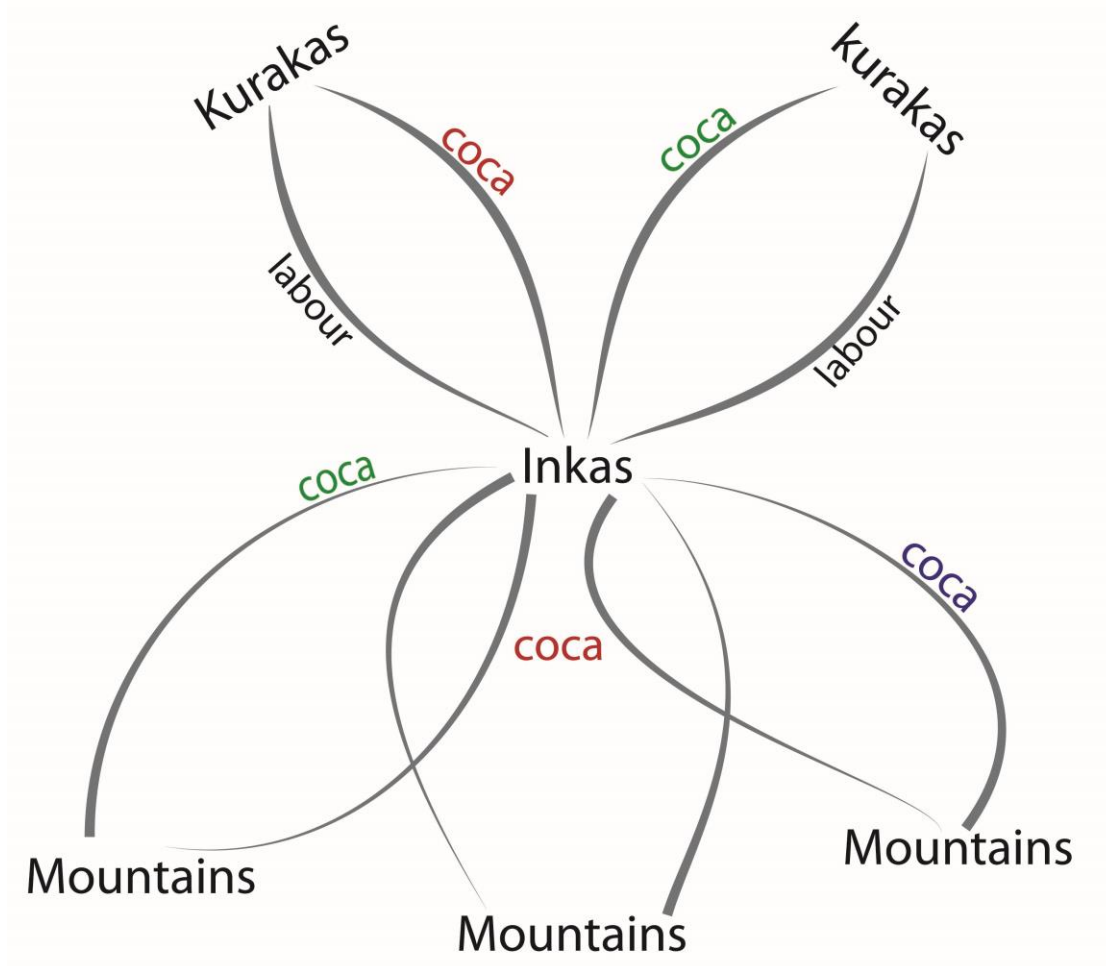
Although it has been claimed that the Inkas held a monopoly on coca production, this seems a dubious proposition (see Parkerson 1979). However, they certainly did seek to produce it in considerable quantities and it is interesting to consider the uses to which it was put. In one account it is claimed that,

This prized herb that we call coca was used and harvested in the whole region of the Andes, and it was a delicacy... of the lords and chiefs and not for the common people, *except when they wanted to make them a gift...* he [the Inka] distributed it and gave it to those who looked after the mummies... and to the Sun, and to whomever he wished.

(Juan de Matienzo 1567; cited in Parkerson 1979: 109; my emphasis)

Among other uses, it seems that coca was distributed as a gift to certain individuals or groups as per the emperor's pleasure. A likely target for such gifts of coca were the provincial elites or nobles (called *kuraka*), who were not Inkas themselves, but were still important in organizing local labor tribute obligations to the state. Maize-beer (*chicha*) was certainly a staple of state hospitality directed at such elites, and so it was very likely that coca was similarly deployed. However, rather than the logic of the commodity form, where values are produced through markets, such a system would have relied on a wide variety of reciprocal relationships and exchanges. This would have included exchanges between the Inkas and their subject *kurakas*, as well as been the Inkas and the mountain owners from which the coca was extracted. As discussed above, exchange with non-human earth beings entails no less a set of reciprocal obligations than it does with humans (e.g. Abercrombie 1998: 348-350; Allen 2002; Gose 2000).

This intertwining of human and non-human participants in exchange relationships is summarized (in simplified and idealized form) in figure 4.18. Note that all the circulating products are bound up in a series of discrete relationships which follow Andean norms of reciprocity, with both flows of goods and flows of labor. The Inkas offer coca and other libations to particularly important mountains, from which they also receive coca (as well as other agricultural products). Having access to these mountains and their products permits the Inkas to then re-circulate the potent and highly charged coca within their parallel reciprocal relationships with the provincial *kurakas*. In return for the gifts of coca and other such goods, the *kurakas* then meet their labor obligations to the state. And on the cycles go. Two further aspects of this model should be noted in particular. The Inkas lie at the nexus of all these cycles



**Figure 4.18.** A schematic representation of coca-exchanges between its mountain owners-producers and the local elites who consumed it. Note the (theoretical) mediating role the Inkas sought to establish for themselves across all these reciprocal networks.

of reciprocal exchange, and by dominating access to the most important mountains and their products, they are inserted into a position to circumvent any direct avenues subject communities might have once had to them. The charged products grown in particularly potent places, or associated with powerful and well-known earth beings, are therefore only available via parallel exchanges with the Inkas. Non-Inka subject communities were therefore unable to

access them directly, or develop reciprocal exchange relationships with the mountains themselves (at least in theory<sup>14</sup>).

The second thing to note here is that all these circulating materials such as coca leaves only have value within the particular exchange cycles that are occurring. One cannot extract coca from one relationship and relate it to coca produced under a different mountain in terms of exchange-value. The values of the coca leaf emerge from the mountains that produce them and so they cannot exist in abstraction from this relationship. Such a thing would require something more like the modes of commensuration through which capitalist commodities are produced, which in this case are entirely absent. The values of the products emerge within and through these cycles of reciprocal exchange; therefore it is impossible to express those same values outside of them. The relationships run from mountains to the Inkas to *kurakas* and the coca flows within these cycles of reciprocity. Within this system there are no means, however, to independently relate coca to coca that is produced elsewhere, or for that matter, coca to maize – as found within the logic of commodity exchange.

## XII. The Mountain Orientation of Inka Royal Estates

Mountains are the key actors in this narrative - and as I have suggested were probably the main foci of the Inka royal estates. It is important then to consider Andean relationships with mountains in more general terms, as well as in the context of royal installations. For as long as

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<sup>14</sup> This should be understood as a representation of the Inka's goals with respect to coca exchange, not the actual reality which would likely have been resisted or circumvented by local communities in many cases.

Europeans have been present in the Andes, the prevalence of ‘mountain worship’ there has been noted as a basic part of everyday life and ritual practice, and it remains as prominent a feature of recent ethnographic accounts as it was in the writings of the early Spanish chroniclers. Besom (2009: 65) notes in his in-depth ethnohistorical study of Inka mountain worship that there was a dispute in the early colonial era, between authors like Arriaga and Avila who argued that the Inka saw mountains as deities, and others such as Valera and Garcilaso who considered them more akin to indigenous places of worship. In other words, the Spanish chroniclers were trying to fit them into categories that they were familiar with in terms of their own religious sensibilities. Either Andean peoples perceived mountains as ‘deities’, that is beings that were objects of veneration and adulation - or they were more like churches – that is places for worship, *but not directly the objects of worship*<sup>15</sup>. Most Andean scholars today come down more on the side of Arriaga and Avila, and the idea that mountains were a form of god or deity is now widely accepted in scholarly accounts of the ancient Andes. For my part, I am more skeptical of the notion that any set of categorical distinctions derived from sixteenth-century Europe are likely to provide much insight in understanding ancient Andean peoples commitments towards mountains. The aim of the current section is therefore to outline some alternative ways of conceptualizing them.

In the central highlands today<sup>16</sup>, mountains are known by a variety of terms, including *apu*, *mallku* and *wamani*. Interestingly, the terms *apu* (in Quechua) and *mallku* (in Aymara) have a

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<sup>15</sup> Put another way, Christians do not worship churches, they worship *in* them. The distinction then is between the medium of veneration and its object. Similarly, the question that confronted the first European clerics in the Andes was whether the indigenous peoples worshipped mountains, or simply worshipped *on* them.

<sup>16</sup> Or at least, in the ‘ethnographic present’ of the middle and late Twentieth Century.



more general meaning of ‘lord’ or an ‘aristocrat’ – and were widely used in pre-colonial times to refer to local rulers or individuals invested with special authority. González-Holguín’s (1608) Quechua-Castilian lexicon defines the term *apu* as a ‘great lord or chief judge’ or alternatively as ‘king’<sup>17</sup>. These terms certainly imply great power and status, but seem to have been interchangeably applicable to either humans or non-humans depending on the context. In other words they are not actually words for mountains, at least as we would understand it. In that sense, the concept of ‘lord’ seems comparable to ‘traitor-warrior’ (*auca*) as deployed by Atawallpa in Diez de Betanzos’ (1996: 232) account, where both the emperor’s brother Waskar and the mountaintop Guamachuco were described by him as being enemy *aucas*. These words describe actions or a particular status, but are not exclusively associated with human beings. We might find it remarkable to apply such terms ‘indiscriminately’ to humans and non-humans, but in Andean contexts, this is clearly not a contradiction or perhaps was even worthy of much comment.

An interesting variation on this theme is noted in Paul Gelles’ (2000) ethnographic study of Quechua-speakers in the Colca Valley. There the mountains are known as *cabildos*, which is a Castilian word rather than a Quechua one. Yet the term has similar connotations to indigenous words such as *apu* and *mallku*, and originates in an early colonial name for a kind of Spanish municipal authority, not unlike a town council (Gelles 2000: 83). It is notable that the people of the Colca Valley (in a time long before living memory) chose to use a term that denoted a political authority to convey their understanding of the local mountains and their capacities. At the same time, it also seems significant that the colonial *cabildo* was not a singular entity (like a

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<sup>17</sup> ‘Señor grande o juez superior ... Rey’.

lord), but more akin to a collective body of rulers. It may be the case, at least in certain contexts, that although mountains are near-universally regarded as politically potent beings by indigenous Andeans, they are not necessarily construed as a singular, indivisible entity.

Peter Gose's (1986) ethnographic study of Quechua-speaking communities in the region of Apurímac provides much information on the kind of logics that often govern relationships between people and mountains in the central highlands today. The most basic and ordinary kind of interaction is the *t'inka*, a libation or offering made to the nearby mountains, usually in the form of alcohol or coca – although sometimes more elaborate sacrifices such as llamas may be required. Material exchanges between mountains are fairly ubiquitous and everyday occurrences in most rural regions. These exchange relationships are perceived as vital since mountains govern such things as rainfall and animal fertility, and so their good will is always to be sought. Thus, like so much else in the Andes, the relationship is thought to be sustained by, and hinge upon, its reciprocal ethos.

Gose (1986: 301) likens the relationship between people and mountains as one of *mink'a* (a reciprocal, although hierarchical, exchange of labor for food and hospitality), whereby the *apukuna* perform work that is to the benefit of local communities, and thus must be repaid by feeding them. The mountains of the Apurímac do not simply interact with humans on an individual basis however; they have an entire parallel society which entails their own internal kinship relations, making payments to each other in silver and gold and so on. While humans might (historically at least) have used llamas as pack animals for moving goods around, the

mountains of the Apurímac today make use of vicuñas<sup>18</sup> to carry out their various interpersonal tributes (see also Sánchez Garaffa 1999: 143). As Besom (2009: 65) indicates, early documentary sources from the colonial era elaborate on the kinds of exchanges that mountains could engage in. For example, they usually possessed gendered identities, and so would frequently have sex with each other as well. Moreover their interpersonal relationships would often be described in kinship terms - such as wife, husband, brother and so on.

In most ethnographic accounts, mountains seem to possess highly individualized personalities and are motivated by their own complex desires and goals. Catherine Allen's (2002) study of the Sonqo community aptly conveys the complexities of the mountain-human relationships sustained there. The mountains are nurturers and guides certainly, but also punishers of misdeeds – and so potentially to be feared. They can be capricious and violent when angered or insulted. For the Sonqo community, the *apu* known as Pachatusan (near Cuzco) is a source of some considerable fear and the people there are not willing to openly speak of him (Allen 2002: 28).

My aim in this chapter is to refigure our ontology of mountains so as to better understand the Inka interaction with them particularly vis-à-vis the phenomenon of the royal estates. The basic modernist approach to mountains would assume they are geological masses which are physically imposing elements of the natural environment. Surrounding this material 'reality' of mountains, we might also imagine there to be a series of cultural beliefs and ideologically-inflected practices; whereby mountain peaks are considered to be either deities or sacred

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<sup>18</sup> A small, undomesticated species of camelid indigenous to the Andes.

places (or a mixture of both). These beliefs are thought to be quite fundamentally Andean, and so are both spatially widespread and also have considerable time-depth.

As an alternative, my analysis begins by taking seriously the roles mountains played in past Andean worlds - as sentient, willful, agentic, powerful, unpredictable and individualized actors. Humans in the Andes have relationships with mountains on those terms (indeed they are often defined by them), and the mountains had relationships with each other also. If the mountains were a form of person, or non-human sentient in the ancient Andes, they were no less material than humans. In other words they possessed *bodies*. Marisol de la Cadena (2012: 4) defines the mountains, the *tirakuna* ('fathers') as the 'sentient beings made of earth and water'. While humans possess bodies of flesh, blood, fat and bone; the mountains' bodies are composed of a different set of solids and liquids. The idea that mountain waters are the bodily fluids of the mountain-bodies is explicitly stated in a range of ethnographic accounts from the Andes. For example the waters that flow from the mountain of Azanques near Condo, Bolivia and which are central to the agricultural projects of the local community are described as his urine. In other contexts, often dependent on the gender of the mountain concerned, water flowing across the landscape can be akin to semen, breast-milk, blood or tears (Sikkink and Choque 1999).

Gose's work is illuminating here also. In the town of Haquirca, he describes how the local *apu* called Utupara has been mined for mineral resources for centuries. Sometimes, according to local tales, the mountain manifests himself in the form of an old man, who is limping and hunched over, due to the mining that has crippled him (Gose 1986: 303). Just as the waters are

bodily fluids of the mountain, the earth is its bones and tissues. The point to underscore here is that physical transformations of the mountain impact the *apu*, in which case the *apu* cannot be considered an immaterial being such as a 'spirit' in the Western sense. It also is significant for my own interest in analyzing the mountains as political subjects, for it seems that *apukuna*, like humans, have bodies that are subject to physical manipulation and even injury. In principle then, a mountain subject is open to embodied forms of political control (and punishment) in the same fashion as we typically imagine human subjects to be.

Here I am strongly in accord with Allen who rejects the idea that mountain *apu* are to be regarded as the homes of mountain-dwelling numina. As she puts it 'they are not spirits who inhabit the places, but the Places themselves...' (Allen 2002: 26). Although *Apukuna*, *wamani* and similar beings are often described in the anthropological literature as mountain spirits, this necessarily implies a distinction between mountain bodies and mountain souls. That division however hangs on oppositions between matter and flesh and the material and immaterial; and so has deep roots in Christian thought (as well as other monotheist traditions). In which case I suspect simply saying 'mountains' offers a better translation than using compound words such as mountain-spirit or mountain-god, which only introduce further incommensurable Western-derived religious concepts into the analytical mix. It is also an example of the ways in which the analytical language used by anthropologists can be deployed (whether consciously or not) to undermine the validity of any ontological commitments not shared by the anthropologist himself or herself. Thus mountains get presented as sacred sites and religiously significant topographic features; a representation familiar to Westerners and in accordance with their commitments with respect to what is real and what is not. And yet the fact remains that this is

manifestly *not* how most Andean peoples who have close relationships with mountains actually talk about them. They describe them as lords (*apukuna*) or fathers (*tirakuna*), not as if they were churches/temples or spiritually possessed landforms and places.

So if mountains are a kind of embodied sentient, that might potentially be dominated in physical ways and who perform essential labor that benefits humans (provided they are appropriately engaged with) then they seem ideal candidates for the kinds of non-humans that the Inkas would have sought to create as political subjects. They were central to life in the Andes in pre-colonial times, and their importance remains great in the present also. Thus they seem likely to have been core foci for Inka governance. Indeed, it is hard to imagine that the Inkas would have ignored such powerful figures that existed within the orbit of their empire. And since they evidently regarded them as sentient beings; it would perhaps be more remarkable if the *apukuna* were not an important set of political 'constituents' for the Inkas. Indeed, the idea that mountains were a form of political subject is not one that is all that speculative on my part, since it has already been ethnographically documented in the Andes. Earls (1969) for example has highlighted how mountains are thought to extract tribute which is circulated through a variety of subterranean networks that culminate in Lima, the modern capital. Thus the kind of silver and gold exchanges that take place between mountains also directs mineral wealth from the mountains to the present-day nation-state of Peru. In some cases the *apukuna* therefore underwrite the financial resources deployed by the contemporary Peruvian nation-state. They are in fact a (rather wealthy) group of taxpayers.

It is fairly clear that in the Andes of past and present, mountains are members of what in classic anthropological terms we would call a *socio-economic elite*. This is at any rate I think a better anthropological translation of their status than calling them 'sacred places'. The traditional insistence on regarding them as such is largely a result of the fact within typical Western ontologies only humans can be social elites and non-humans must be either things or places. For the remainder of this chapter, I will therefore take indigenous Andean statements with respect to mountains seriously and treat them in analytical terms as high-status individuals, rather than 'sacred sites'. Although the appeal to the Western concept of religiosity (i.e. the concept of mountain worship or mountain gods) seems a superficially positive claim about the role of mountains in indigenous Andean society, I am unconvinced that these provide particularly good translations of pre-colonial treatments of such earth-beings. In particular, it leads us to think about material interactions and exchanges with *apukuna* in religious rather than economic or political terms, a set of conceptual divisions that indigenous ontological frameworks in the pre-colonial Andes would not have recognized.

The next question to be considered then is this: if mountains were embodied, malleable social elites, what are the archaeological traces of their political subjectification? The scholar who has probably done most to advance our understanding of Inka-*apukuna* relationships in archaeological terms is Johan Reinhard; at least insofar as such relationships are considered via the material traces and artifactual patterns they left behind. The following section will develop and build upon Reinhard's (1985, 1991, 1995) arguments in a variety of respects, although I will in the end offer some critical interpretative differences with respect to his account of Inka-mountain relationships. As discussed by Reinhard (1985), the southern Andes (and particularly

Chile and Argentina) exhibit a widespread pattern of high-altitude artifact caches on mountains with permanent snowcaps. These represent some of the highest archaeological sites in the world, with many lying above 5,200 meters. Some fieldstone architecture is often noted at such sites, but in general the scale of these constructions is limited. The high-altitude sites are primarily associated with various forms of sacrificial deposit, including small statues of gold, silver and textile, coca leaves, spondylus shell, camelids and in some cases, human children or adolescents. Reinhard argues that there is a consistent symbolism at these sites, particularly in terms of male-female dualism that is represented in both the humans and non-humans that have been found.

It is interesting to consider other targets of 'sacrificial' offerings as described in the Spanish chronicles. Diez de Betanzos (1996: 132), for example, makes mention of a practice of sacrificing children so that they would be able to act as servants to deceased (and mummified) Inka rulers.

All these children should be from five to six years of age. Some of them should be the children of caciques. They should be very well dressed, paired up male and female... it would be said that they were going where the Inca was in order to serve him (Diez de Betanzos 1996: 132).

This seems very similar to the kinds of offerings that are known (from archaeological and documentary evidence) to have been made at high-altitude peaks as well. In particular, the shared gender dualism and focus on juveniles is striking in both cases.



Stepping back from our Western boundaries between humans and things, and considering both mummified rulers and mountains as species of social elite we might consider that child sacrifice in the name of individual *lords* (whether they are mummified rulers or *apukuna*) is best understood as a form of labor tribute to elite individuals, partaking in a very similar logic in both cases. Again, we need to be careful about the distinctions we draw analytically when we consider such sacrifices, in contrast to say, the living individuals who were placed on permanent work assignment to human elite (such as the *yanakuna* who served on royal estates). When it involves the labor of living individuals, it appears to us as a political and economic phenomenon. Conversely, when it applies to immolated individuals in the service of mountains, or sacrifices to dead rulers, it takes on a religious character and is 'sacrifice'. In other words, when the labor obligations are seen to be 'real' (i.e. between living humans and living humans) it is a politico-economic relationship. When the labor obligations are seen as 'fictive' (i.e. between dead humans and dead humans, or inert things) it is a religious phenomenon. Yet as should be clear at this stage, such parsing of phenomena into economic, political and religious spheres is a purely etic frame and offers no description of Inka practices that would have been recognized by them. In fact, it probably obscures our understanding of Inka practices in unhelpful ways. Hence my suggestion that we will gain much greater analytical purchase on Inka-mountain relationships if we contextualize them within the broader nexus of state-elite-commoner labor relations of the empire, rather than as approaching them as ritualistic sacrifices – or engagements with the 'supernatural'.

The kinds of traces of 'sacrifice' to mountains that have been found in the southern Andes are therefore one kind of clear artifactual imprint that can be associated with understanding the

*apukuna* as subjects of Inka rule. However, such deposits are geographically clustered in the southern Andes, and based on our present knowledge, the distribution reflects a real distinction in Inka practices (as opposed to investigatory biases with respect to where fieldwork has been carried out). What then of the mountains in the central and northern Andes? Reinhard's (2007) study of the sacred landscape associated with Machu Picchu is therefore a particularly important stepping stone for this discussion. In his conceptualization of the royal estate as a 'sacred center', Reinhard argues that its relatively inaccessible location can be understood in terms of it being sited with respect to its sacred geography, and particularly the nearby peaks or mountains that held significant sacred import for the Inkas.

However, if we reconfigure our conception of the royal estates so that we no longer see them as landed estates which incorporated sacred sites and temples, we can open up new possibilities for understanding the Inka interactions with them. Instead, we might emphasize the fact that certain mountains were (via the royal estates) embodied entities whose material forms were subject to quite substantial manipulations. If, as described above, *apukuna* are earth-beings possessing bodies of rock, soil and water; then the reorganization of these elements in the architectural and engineering projects we see at the estates provides an excellent starting point for our discussion. Thinking about what royal estates offer in archaeological terms, we could quite accurately represent them as large scale projects to reorganize, regulate and manipulate the bodies of earth-beings. By far the greatest investment in labor seen at the royal estates was in terracing and irrigation constructions, and the labor represented in the architecture (i.e. buildings) is often quite limited by comparison.

At this point it is worth emphasizing that my approach is intended as a critique of post-processual accounts of sacred landscapes as much as of processual accounts of economic land use and development. While largely processualist (economic) views tend to dominate the interpretation of royal estates in the literature, some archaeologists have presented recognizably post-processualist counter-arguments to these. An excellent example of this is Reinhard's (2007) account of Machu Picchu which he regards as primarily intended to facilitate an engagement with nearby sacred peaks (especially mount Salkantay), and is heavily oriented with respect to certain celestial phenomena. Rather than seeing the site as an estate geared towards agricultural production and wealth creation with a ritual veneer, Reinhard regards Machu Picchu as pre-eminent 'Sacred Center' that was mainly constructed to fulfill ritual and ceremonial obligations, alongside a secondary economic component. As he puts it,

...a materialist (or "processual") interpretation of landscape stresses the practical importance of the resources it supplies and therefore is that it is a commodity to be exploited... the interpretative approach would take this into account *but would focus more* on the ways that landscape is perceived... (Reinhard 2007: 139; my emphasis)

For me, the aim is not to emphasize either economic or religious explanations, but rather to break down the analytical value of drawing such a distinction in the first place. This highlights one of the primary contradictions within post-processual landscape studies. It is an oft-stated aim of post-processualists to understand archaeological landscapes as they would be perceived within the cultures that produced them; a desire that often leads to an emphasis on religious aspects of landscape or descriptions of sacred geographies, and a downplaying of economic

elements (see Knapp and Ashmore 1999: 1). The contradiction arises however in the fact that many of the non-modern cultures in question would not have recognized the religious or the sacred as distinctive spheres of action - a fact that undermines the claim that these concepts are a viable means for generating more emic accounts.

Across the Amaybamba estate (including its monumental and non-monumental sectors), we can see obvious avenues for dividing its spaces into rationally explicable (and thus economically functional) components and other components that 'must' reflect some ideological or religious purpose. In this respect, perhaps the most complex case to consider is the sectors of terraces associated with the palatial *kancha* at Wamanmarka, including the classically 'high-style' terraces on the opposite side of the river Lucumayo at Cangrehuyoc. When discussing the logics that underlay pre-colonial landscape modification in the Americas (particularly terracing and raised-field systems), there is a strong emphasis on the rational and economically productive ends that such technologies were thought to engender. Donkin (1979), for example, argues that terracing projects were primarily intended to promote deeper soils and facilitate irrigation in climates marked by a pronounced dry season. In such a view terraces are a means to overcome the limitations imposed by a particular climatic regime through an adaptive technological response. In contrast, Guillet's (1987) in-depth study of terracing systems in Peru's Colca Valley underscores how they improve water retention in planting soils, allowing slopes that would normally be uncultivable to be brought into the ordinary agricultural regime. Another major cited benefit of terracing is that (through water retention and soil conservation) it generates microclimates with a higher ambient temperature than would normally be found at a given elevation. This permits the cultivation of crops that require certain minimum temperature

conditions to be grown at higher altitudes than normal, thereby maximizing the land area available for the production of certain cultigens that are in high demand (Guillet 1987).

Most Andean archaeologists accept such 'rational' reasons as the basic explanation for why terracing systems were widely-constructed in the ancient Andes. However, the 'additional' symbolic aspects of terraces are frequently commented upon by scholars of Inka architecture.

As one researcher puts it,

...one must consider the high-prestige terraces as highly symbolic, places where maize and other crops could be grown, where agricultural rituals could be carried out... the symbolic nature of high-prestige terraces is [evidenced in] the energies invested in their construction [which] went far beyond that necessary to terrace slopes by simpler means (Hyslop 1990: 285).

Similar sentiments are expressed by Donkin (1979: 33), who states that,

Inca terracing appears to overstep the bounds of mere utility and to take on symbolic significance.

Note here that it is on reaching the limits of rational explanation that we find the beginnings of symbolic interpretation (stated in explicit terms). This is similar to Nile's (1982) distinction between 'productive' and 'high-style' terracing - from which it is assumed that terrace systems constructed of rough fieldstone masonry and which exhibit little monumentality or fine details are less symbolic or meaningful. The opposition being presented then is between productivity and meaningful expression, the assumption being that these are somewhat mutually exclusive

aspects. However, this seems like a moment where we might be inclined to wonder if this is really the emic perception of such phenomena.

Were the terraces at Wamanmarka more productive or symbolic, for example? Since royal estates are often considered the foundation of the private wealth of the *panaqas*, their terracing systems are frequently open to being interpreted as a means to maximize production, despite their 'extra' symbolic functions. However, this nominal functionality often breaks down under empirical examination. For example, according to a surviving piece of testimony given before the royal *Audiencia* of Lima in 1579 pertaining to a land dispute between one Geronimo de Genares and a Diego Lopez de Olvarez, the farmlands around the site of Wamanmarka – the main subject of the proceedings – were some three hundred *hanegadas* in extent. The *hanegada* is archaic unit of land once used in hispanophone parts of the world, which in early colonial Peru was roughly equivalent to 0.64 hectares. In other words an area of land at the site of Wamanmarka, which the 1579 document describes as a former possession of the emperor Pachakuti, is described as being 1.92 square kilometers in size. Yet if we consider the sum of the actual area of land terraced (based on the archaeological survey around the site – as shown in figure 4.1) it comes out to only 0.095 square kilometers. So, in a nutshell, the historical documents suggest that the parcel of the royal landholdings attached to the Wamanmarka site were more than twenty times larger than the area that was terraced. Why only terrace a tiny fraction of the land that was being brought under agricultural production? They are certainly too small to have produced anything more than a minimal amount of the coca that was cultivated in the Amaybamba Valley.

Yet herein lies the frequent contradiction found in the archaeological literature. Andean archaeologists are often well aware that the distinction between religious/symbolic and practical functions is not a valid line to draw in non-Western contexts – and yet they still habitually construe the motivations, actions and logics of non-modern actors along precisely this dichotomy. Glowacki and Malpass (2003: 431), for example, open their recent discussion of Wari sacred landscapes with the claim that for, ‘non-Western societies, decisions about many aspects of life are frequently based on both practical and religious considerations, with no clear distinction made between the two’. And yet following this they immediately go on to say that ‘religious beliefs and places integral to them... are harder to identify archaeologically’ (Glowacki and Malpass 2003: 431). It is worth unpacking these statements for a moment: 1) Andean peoples did not distinguish between sacred and profane action and 2) the sacred actions of Andean peoples leave behind archaeological traces that are less evident than other kinds of action. In which case it is worth asking: whose category of the sacred are we talking about here? Presumably not a category relevant to ancient Andeans themselves, because we have already been told that they recognized no such thing. And yet if Andean religion leaves weaker artifactual traces then it must have an empirical reality, otherwise how could it be distinguishable from more ‘materially heavy’ forms of action? It becomes clear on closer examination that the only category of the ‘religious’ that is being deployed here is an etic (i.e. Western) one – and therefore we must be careful about assuming it represents an empirical presence in the archaeological record.

So returning to the terraces at royal estates such as Wamanmarka, it appears hard to defend them as essential economic components of the Amaybamba coca lands – and yet reframing

them as 'religious' is probably not a better alternative either. That being the case, how about some of the more elaborate terracing projects found elsewhere in the imperial heartland? The recent and meticulous investigations at Machu Picchu by Wright and Valencia Zegara (2000) have provided some interesting data in this respect. Great admiration has always been paid to the elaborate system of (sixteen) fountains at the Machu Picchu site, and the various canals that channel water from the perennial spring located a short distance to the southeast of the core monumental sector. Yet, as Wright and Valencia Zegara (2000: 47-53) demonstrate, this complex water management system was not actually designed to irrigate the terraces used for crop production. Indeed, cores from the Quelccaya ice cap (a glacier 250 kilometers located southeast of the site) indicate that rainfall was more than sufficient during the Late Horizon for the terraced field to be productive without additional water being required. Here it might be suggested then that the terraces were the primary manifestation of the site's rational function and the fountains and canals possessed a more ideological role; say as an expression of the Inka's architectural and engineering mastery, as well as access to a likely sacred source of subterranean water.

The overall levels of productivity that could have been sustained by Machu Picchu's terraces is also important to consider. Wright and Valencia Zegara's (2000: 58) study of the terraces - given their likely levels of evapotranspiration and potential agricultural yields - indicates that at most they could have provided adequate food for around fifty-five people at any given time. The human population of monumental sector at Machu Picchu, based on its architectural characteristics (i.e. the size and number of its residential structures) is generally estimated to have been around 300 people in total (Burger 2004). This figure does not take into account any



animals that may have been present, such as llamas, which would have had additional caloric needs. Thus the terraces of Machu Picchu were capable of sustaining only a sixth (maximally) of the population thought to be permanently resident at the site. Little profit could be derived from an estate that only produced enough calories to feed a sixth of its own population. Indeed, it seems that estates such as Machu Picchu required substantial and continuous external underwriting, without which they could not be sustained.

To this economic inefficiency we might add the location of the site itself. Following the Inka road, Machu Picchu is just over 30 kilometers from the nearest major settlement at Ollantaytambo, and around 110 kilometers from the city of Cuzco. Bearing in mind that the Inkas made little use of riverine transport or wheeled vehicles for moving staple goods, the efficiency of situating a production center at Machu Picchu must be evaluated alongside a consideration of the costs of moving goods to nearby storage or consumption centers. D'Altroy's (1992: 86) calculations in this respect are useful. He estimates that a llama train composed of twenty animals and accompanied by five human attendants would be limited to a distance of 168 kilometers if it was necessary to arrive at the intended destination with at least 50% of the foodstuffs not having been consumed during transport. The energetic limitations of pre-colonial transport networks in the Andes cannot therefore be ignored, given that most rivers in the central highlands were not navigable and maritime transport was not a viable option. Comparisons with Old World empires are also instructive. Duncan-Jones' (1982: 368) estimates of the variable energetic costs of different methods of moving goods in the Roman Empire (based on documentary evidence of late Third Century AD prices for various goods) suggest a general cost ratio of maritime : riverine : terrestrial methods on the order of 1 : 5 : 34.

And here it should be remembered that for the Romans, terrestrial transport would have been calculated on the assumed use of wheeled vehicles being pulled by Old World draft animals – which would have been considerably more efficient than Andean llama trains.

In other words, the energetic costs of placing Machu Picchu where it is located – and the limitations of its productive capacity - make any interpretation based on the pursuit of agricultural wealth or profit on the part of the Inka *panaqas* impossible to sustain. We might seek to sustain the economic model by suggesting that Inka estates *in general* (i.e. those closer to the main storage and consumption venues around Cuzco) were based on a logic of rational production – but some estates were exceptions to this. Machu Picchu might then become a ‘symbolic’ or ‘ideological’ estate, sited for religious reasons rather than the more economic rationale of other estates such as Tipón or Ollantaytambo<sup>19</sup>. Of course the problem with this view is that we have already established that the Inkas (and pre-colonial Andean peoples generally) had no conceptual division of the world into economic and religious spheres. Thus to posit empirical patterns based on such a division can only be justified if we assume that it operated at a subliminal level, governing the actions of the Inkas without their awareness.

### XIII. Disciplining the Apukuna

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<sup>19</sup> Alternatively, one might argue that the documentary evidence indicates that the main estate lands of Machu Picchu were found in the untterraced fields in the valley below, not the monumental sector that is so well-known today (Rowe 1990). Thus it was a very economically productive site, even if its economic productivity was not derived from its most architecturally elaborate components. However, such an explanation would require us to break down estates into primarily economic and more symbolic-religious sectors, a conceptual division that (as I have discussed) did not exist within Inka thought.

Central to my revisionist analysis of the Inka royal estate system is the concept of 'discipline' which I draw from the work of Michel Foucault (1973, 1995). In his major text *Discipline and Punish*, Foucault (1995) discusses how a disciplinary mode of power emerged in Europe during the eighteenth and nineteenth centuries, and was a marked contrast to the systems of domination which preceded it. This newly elaborated form of power, still with us today, is manifested in a series of institutions such as the penitentiary, the public school, the hospital, the factory and the military barracks. These institutions, or disciplinary regimes, are distinctive (for Foucault) in that they take the body as a *continuous* object of power. Rather than seeking obedience and punishing recalcitrance, the disciplinary regime orders the everyday habits and activities of the body at a level of extreme minutiae. This micro-regulation has no immediate aim, except to produce a body that is more docile, more consistent in its actions and consequently, more efficient. As Foucault (1995: 138; my emphasis) describes, discipline permits,

...a hold over others' bodies, not only so that one may do as one wishes, but so as they may *operate* as one wishes, with the techniques, the speed and the efficiency that one determines. Thus discipline produces subjected and practiced bodies, 'docile' bodies. Discipline increases the forces of the body (in economic terms of utility) and diminishes these same forces (in political terms of obedience).

In this vein, the classic (and idealized) contrast often drawn is between the modern prison and the medieval dungeon. In the Middle Ages, strictly speaking, there were no penitentiaries as we understand it. People were locked up in cells certainly; but there they languished until their punishment was carried out. It was not the being imprisoned that was considered a punishment:

this was simply a temporary arrangement prior to being executed, tortured or otherwise chastised for one's crimes. The prison was merely the space in which one was detained while the exact nature of the punishment was being determined. The modern prison however is quite a different animal. Most obviously it is different in that it is not the prelude to punishment, but incarceration actually constitutes the punishment in of itself. However modern imprisonment also reaches beyond punitive goals and often aims to produce individual 'reform' and continuous behaviour modification. Unlike the dungeon, the prison operates on an elaborate and complicated timetable of eating times, sleeping times, work times, exercise times and so on. Bodily actions are strictly monitored, regulated and controlled. And of course, we see similar logics at play in allied disciplinary institutions such as schools, hospitals and factories.

My basic argument is that the Inka royal estate system can be understood (in part) as a disciplinary regime that was intended to produce docile bodies, in a manner not entirely unlike that which Foucault describes; where everyday actions and habits are regulated at a minute level. However, it was not a mode of disciplinary power which took the human body as its object. That is not to say that human bodies were not involved of course, or to suggest that the human inhabitants of such estates were not monitored or regulated in a variety of ways; rather this was not the primary object of the royal estate apparatus. The bodies made more docile *and* more productive through this apparatus were instead the 'bodies' of the *apukuna*, the mountain powers and earth-beings of the Cuzco region.

The value I find in the notion of discipline mainly rests on the following set of interrelated factors:

I) It emphasizes a notion of power that is fundamentally material in the sense of relating to what we classically call 'material culture'. Foucault's understanding of disciplinary power does not deal in mental representations, immaterial beliefs or the workings of inner minds. Rather it is bodily practices, habits and activities which drive its explanatory potential.

II) The interior space of the mind (as discussed in chapter six) is an essential construct of modern notions of subjectivity. Thus the creation of political subjects through the manipulation of bodily habits and capacities provides a better lens for studying pre-colonial Andean subject formation, as opposed to accounts which rely on ideological domination or hegemonic belief systems.

III) It is impossible to conceive of disciplinary power without the kinds of large-scale apparatus that archaeologists would recognize as materially 'heavy'. Foucauldian discipline relies on such things as factories, schools, hospitals and prisons – and each of these things leave highly visible archaeological traces that archaeological methods are well-suited to document. Of course, these institutions are specific to certain times and places, however it is assumed that the disciplinary apparatus found in the ancient Andes would be similarly evident, even if they were very different in the forms they took.



By considering the problem on a larger regional scale certain patterns come into focus with respect to the relationship between *apukuna* and known traces of royal estate infrastructure.

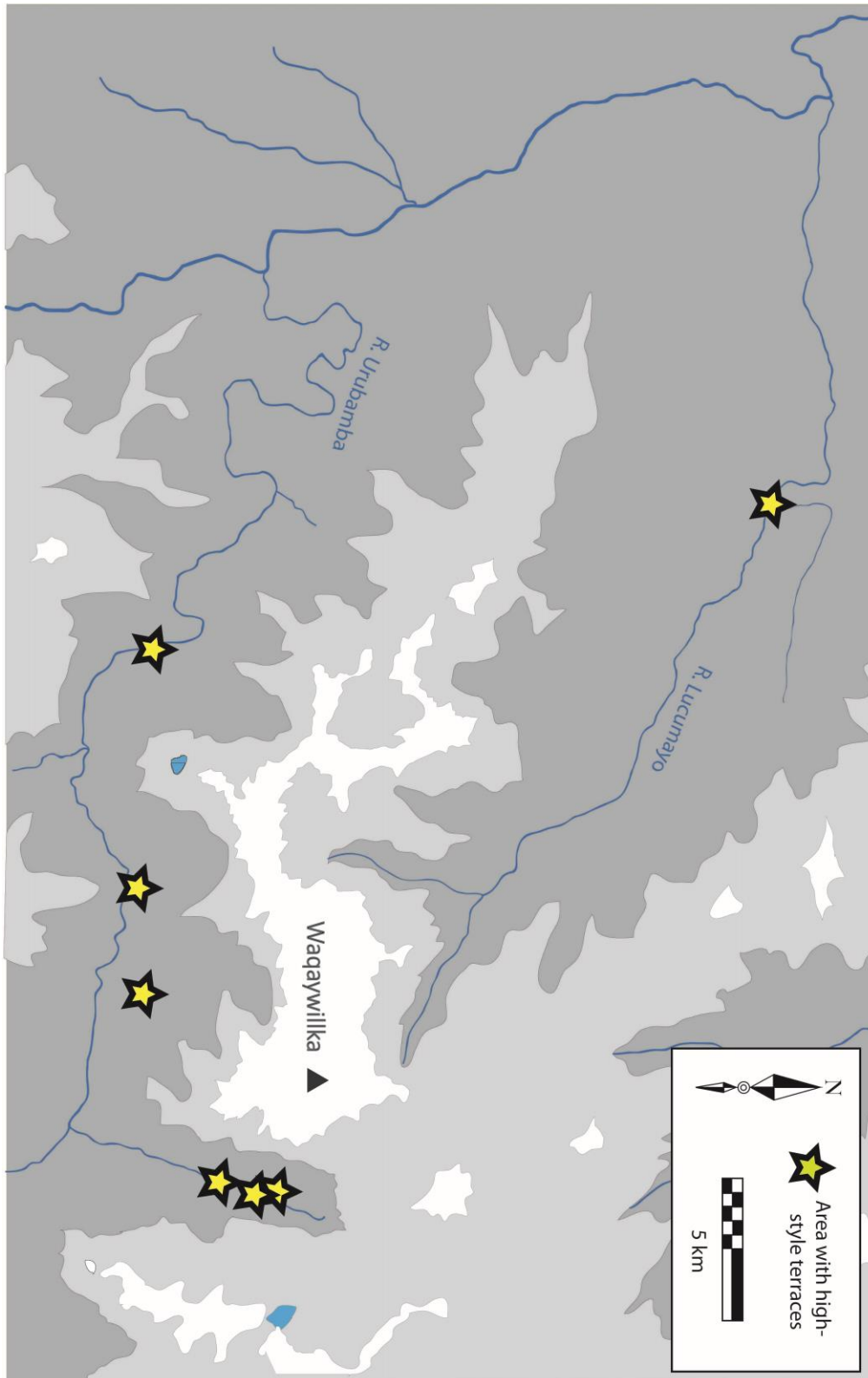
The two most important mountains in the area to the northeast of Cuzco are the *nevados*<sup>20</sup> Salkantay and Verónica. These mountains are prominent and dramatic snowcapped peaks, whose summits respectively stand at 6,271 meters and 5,682 meters above sea level. Salkantay is one of the highest mountains in Peru and is known and revered far from Cuzco itself. He is usually described as the brother of Ausangate, also a mountain peak of pre-eminent importance (Dean 2011: 94). The connotations of the name Salkantay are 'wild' or 'uncivilized' and he is thought to be a temperamental and easily angered mountain (Reinhard 2007: 21-2). Recent evidence of his dangerous character was seen in 1998 when a large portion of the Salkantay glacier broke off, resulting in a landslide that destroyed a hydroelectric power plant and led to much flood damage near Machu Picchu. He is currently the principal patron of the shamans and ritual specialists in the Cuzco area, and is important in the Apurímac region also.

The Nevado Verónica lies 30 kilometers in a straight line to the northeast of the pinnacle of Salkantay. Although widely called Verónica today, the older Quechua term for the mountain is Waqaywillka, a name attested in documents from at least the mid-Sixteenth Century. The meaning of the term is unclear however. The term *waqay* usually relates to tears or the act of crying, which accords with the view offered by a contemporary local shaman that the streams flowing from the Waqaywillka glacier are in fact her tears (Reinhard 2007: 37). This idea agrees with the conceptualization of mountain waters as the bodily fluids of the earth beings from which they flow. The second component of the name, *willka*, is a common element in Quechua place names and harder to pin down. In various contexts it can be understood to mean

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<sup>20</sup> A *nevado* is a glaciated mountain peak.

'ancestor' or 'sacred thing' or 'priest', although these meanings may well be folded into each



**Figure 4.19.** A map showing the glaciated portions of the Waqaywillka (Verónica) range and associated areas with high-style terracing within its watershed. Note the terraces near Wamanmarka, on the northern side of the glacier.

other in the Andean usage. Waqaywillka is female and is in fact the spouse of nearby Salkantay, and so the two are generally regarded as partners in most of what they do. They often speak to each other through thunderclaps and collectively govern the animals and plants in their domains. The glaciated peak and associated cordillera of Waqaywillka are of central import to my interpretation of the Amaybamba royal estate. It is the most proximate *apu* earth-being to my study area and its waters are the source of the Río Lucumayo and its various tributaries on the southern side of the river's course. Most significantly, the small stream that feeds the set of high-style terraces on the opposite bank to the Wamanmarka palatial complex is glacial melt that runs down directly from Waqaywillka far above. Thus the Amaybamba estate offers direct evidence of an attempt to manipulate the bodily constitution (i.e. the soil and water) of a potent earth being that resided in the imperial heartland.

If we consider the broader regional distribution of sites like Cangrehuyoc (the southern terraced sector at Wamanmarka), we can also note that the only other known examples of high-style Inka terracing in the immediate region are situated around the edges of the lower watershed of the Waqaywillka glacier<sup>21</sup>. In addition to the Cangrehuyoc terraces, high-style field systems are evident in the Urubamba drainage on the southern side of the glacier's watershed and in the entrance to the Abra Malaga pass on its eastern flank. This is represented in figure 4.20 which indicates the spatial relationships between known high-style terracing projects and the Waqaywillka watershed. Although (as noted above) there is some terracing on the north bank of the Lucumayo in association with the Wamanmarka complex, the classically high-style terraces (i.e. possessing tenon-steps and the most monumental aspect) are located only on the

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<sup>21</sup> Identified through satellite imagery available from GoogleEarth.



southern side of the river. That is, they are only found directly in the watershed of Waqaywillka, as defined by the courses of the ríos Lucumayo and Urubamba to the north and south.

It is difficult to account for the high-style terraces of the Amaybamba through the normal 'rational' justifications that are given for pre-colonial terraces in the ancient Andes. The eastern slopes of the Andean *Yungas* are well-watered and given the likelihood of heavier rainfall during the Late Horizon, they were likely to have been even more so in the past. Moreover, none of the normal advantages that terracing is supposed to entail, such as the maintenance of micro-climates due to higher moisture and heat retention, seem relevant in this case. The local ecological conditions of the Amaybamba are already optimal for the growing of coca, not to mention tea, coffee and other lowland agricultural crops. Today such agriculture proceeds in the region without the need for major irrigation systems, or terracing projects. The kinds of land improvements associated with terracing in highland contexts cease to have any obvious relevance when transported to the lower altitudes. In which case one option is to see the Cangrehuyoc sector as merely symbolic; that is a sign of Inka power and of their presence, and of the empire's engineering and architectural skills generally. Given that the amount of high-style terracing in the Amaybamba was too small to have been particularly important in terms of the quantities of goods it could have produced, such interpretations offer a superficial attraction. However, as I have tried to demonstrate we must break beyond the economic-ideological divide in thinking about such ancient landscapes.

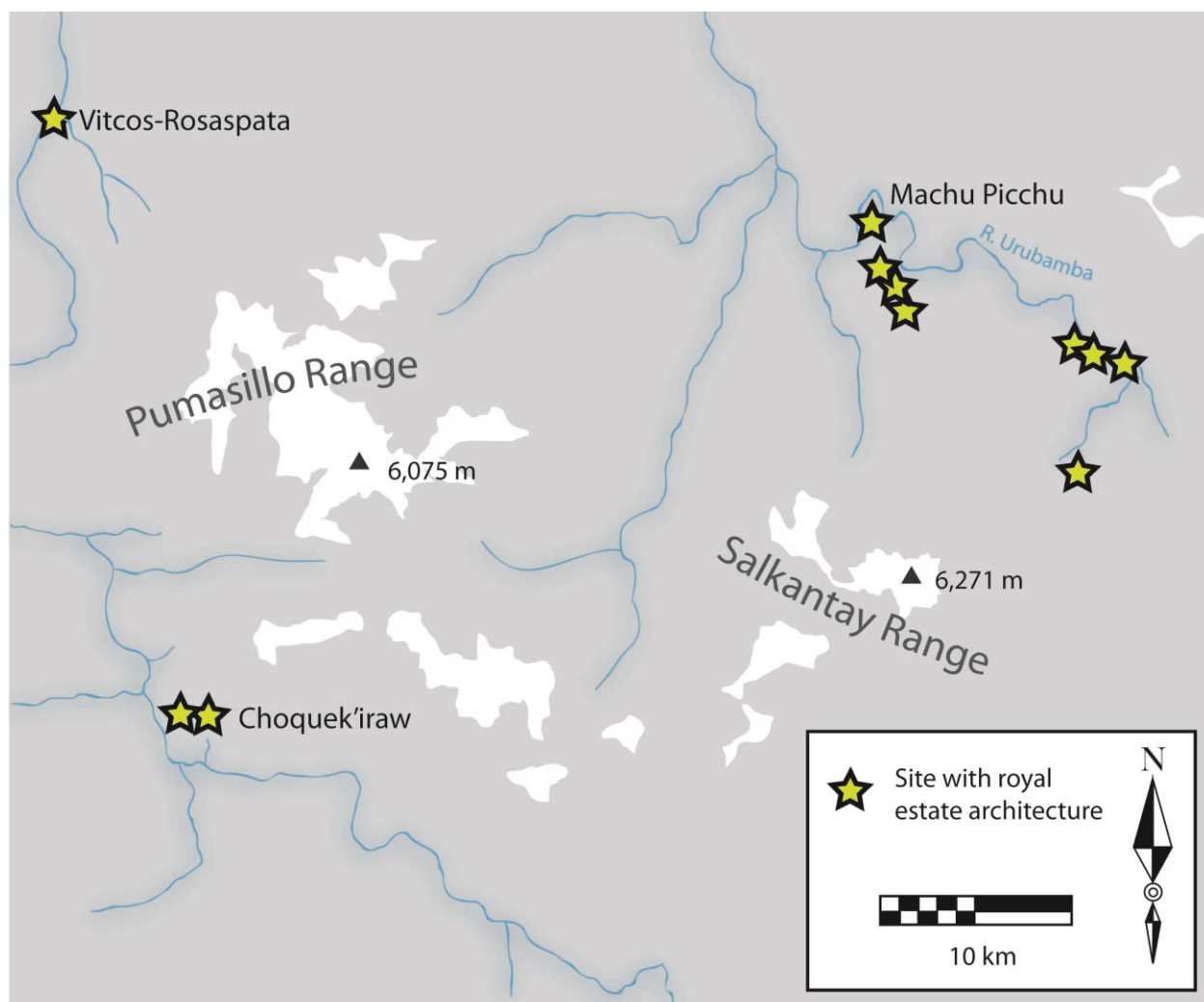
The alternative is to recast the 'sacred mountains' of the Cuzco region, and entities such as the Waqaywillka glacier specifically, as a kind of elite non-human subject. Beings associated with

the control of local weather conditions and fertility, and also the crops that could be grown within their spheres of influence. It is certain that the Inkas would not have considered reshaping the slopes and redirecting the waters of such a being as a purely economic affair. From their perspective they were interacting with the body of a potent *apu*, and I suspect that this was forefront in their minds. From what we know about Andean understandings of mountain beings generally, it is difficult to imagine them seeing things in any other way.



**Figure 4.20.** *The peak of Waqaywillka as seen looking southeast from the former Inka coca fields of the Amaybamba Valley.*

But neither is this symbolism, or ideology – at least insofar as such things are contrasted with pragmatic or economic concerns. The mountain is a real entity, with real water and real earth. Its waters do nourish crops in the valleys below and its earth does sustain the plants that grow in its soil. If religion is generally conceived as the realm of the non-physical, the numinous, the supernatural, the unseen and so on – then this is hardly a relevant case. The Inkas did not merely *believe* they were shaping the body of an earth-being in the Amaybamba Valley.



**Figure 4.21.** A map showing the glaciated portions of the Salkantay-Pumasillo range, along with nearby major rivers. Inka royal estates are shown in relation to the peaks.

We can also broaden the examination of this regional pattern to consider the Salkantay and Pumasillo mountain ranges that lies to the south and southwest of Waqaywillka, respectively. These two sets of peaks are connected and constitute a line of snowcapped summits that runs for some 55 to 60 kilometers in a roughly c-shaped formation; almost cloven in two by the valley of the río Santa Teresa as it flows down to its confluence with the Urubamba. Many of the archaeologically (and historically) known Inka royal estates are found in the lower and mid-level slopes of the two connected massifs (see figure 4.21). Machu Picchu is one of these, as are the various other smaller sites such as Wiñay Wayna and Intipata that are commonly associated with the 'Inka trail' route. These sites form a cluster along the northern slopes of the Salkantay massif and show some of the most characteristic examples of high-style terracing known from the Inka heartland.

Here, it is worth noting a general pattern seen in such high-style sectors at the royal estates. There are often multiple sectors of terraces spread across the landscape, and each one is generally small and relatively dispersed with respect to the other. So the Intipata sector lies approximately 0.8 kilometers north-northwest of Wiñay Wayna, and 2.5 kilometers south of Machu Picchu proper. Although both these sites have monumental and impressively-constructed terraces, the total area covered in each individual sector is actually very limited – between 1.40 and 1.75 hectares in extent respectively for Intipata and Wiñay Wayna. For comparison, the high-style terraces near Wamanmarka cover a similarly limited area - less than 0.45 hectares.

It is very difficult to explain these small units of monumental terracing that are widely dispersed across mountain slopes in terms of the kind of rationalized production one finds in colonial plantation economies. Normally in a plantation context one consolidates productive lands in order to more efficiently work them and distribute both labor and harvested goods. And yet there is no appreciable difference between these sectors that could make sense in such terms. For example, they both sit on the same east-facing slope at roughly the same elevation. Therefore their separation cannot be accounted for as an attempt to exploit different ecological conditions. We find similar breakdowns in rational explanation at Wamanmarka. Why place the vast majority of the terraces adjacent to the site (a total of 9.05 hectares) on the north bank of the Lucumayo, and then establish another, very small (but more monumental) set of terraces (0.45 hectares) at Cangrehuyoc? The Cangrehuyoc sector can only be accessed from the Wamanmarka palace by descending the river canyon to cross to the other side. My argument is that the construction of the high-style terraces on the south bank was a very specific project aimed at manipulating the *apu* into whose body those terraces were set, and so it is best viewed as a distinct entity in comparison with the other, less monumental, terracing projects on the north bank.

In this discussion it is worth considering the fact that many of these royal terracing complexes are clearly situated with respect to or directly incorporated sources of water. The famous fountains and canals at Machu Picchu are fed by an underground spring that lies just southeast of the core architectural sector. Wiñay Wayna is built next to a waterfall, which is fed from another spring lying upslope and associated with the Inka site of Phuyupatamarca. In particular, Wiñay Wayna is notable for its nineteen very fine stone baths arranged in a descending

sequence - three more than are found at the much larger site of Machu Picchu. Similarly, streams intersect with the terraces on both sides of the Lucumayo at Wamanmarka, indicating that these sectors too were sited with respect to local water sources and flows. This might all seem more rational if this water were required to irrigate the terraces so that they were sufficiently productive in agricultural terms. Yet as mentioned above, the palaeoclimate data from regional ice-core studies indicates that there was adequate rainfall in the Machu Picchu area so as to render such irrigation unnecessary (Wright and Valencia Zegara 2000: 47-53).

However, if the underlying logic was not the maximization of production as a basis of wealth, but rather to regulate and control the bodily fluids of earth beings, the pattern becomes rapidly more explicable. Springs, waterfalls and streams emerging from glaciated mountain peaks would be an ideal target for those seeking to manipulate such powerful, elite actors. These mountain fluids, like the fluids of human bodies, were both media for and repositories of the vitality of the *apu* – as well as conduits through which energies could be exchanged between different actors.

Bastien's (1985) ethnographic study of how the Qollahuaya communities of highland Bolivia tend to conceptualize illness and fluid exchanges within and between bodies offer some interesting interpretive possibilities here. As Bastien explains, human bodies and mountain bodies are thought similar in a wide range of respects. The hydraulic processes occurring in both are regarded as following the same logics, while identical linguistic terms are used to describe geographical and corporeal topographies depending on context (e.g. the word *muqu* means both hill and knee). Yet, perhaps most relevant here is the notion among the

Qollahuayas that illness is essentially a form of corporeal disintegration, where the wholeness of the body is somehow compromised through an improper cycling of fluids. Indeed, a mountain landslide precipitated by water-induced erosion is explicitly perceived in terms of sickness in the mountain body, just like a loss of bodily integrity would produce sickness in a human (Bastien 1985: 597-8). For archaeologists, agricultural terracing is of course often thought of in terms of its stabilizing effects with respect to hillslopes, since not only is soil more effectively retained, but water management also leads to more controlled hydraulic flow and so less potential for landslides. In which case, if we think of the terracing practices associated with royal estates as manipulations of non-human bodies, we can easily see that within the indigenous cosmologies explored by Bastien, these would have the effect of strengthening the hydraulic and terrestrial integrity of the *apukuna*. Terracing practices would then make such earth beings more vital and 'healthier', as it were, with respect to Andean conceptions of illness.

The location of the land modifications in the Amaybamba are also worthy of some commentary. The terraces at Cangrehuyoc lie in the watershed of the Waqaywillka glacier, on the southern bank of the Lucumayo. However in general the majority of cultivatable land lies on the north bank of the Lucumayo, outside of this watershed. The Late Horizon sites such as Triunfo, Choquello and Capillayoq – which seem to offer the most direct evidence for the coca lands of the pre-colonial Amaybamba – are all on the north bank as well. Thus the major fertile expanses of land are found on the opposite side of the river to the only sector of high-style terraces. Why construct the most impressive terraces on the side of the valley that was least open to cultivation? Again, the area terraced was so small that it can hardly be seen as an attempt to maximize production by improving marginal lands. In order to make sense of such

evidence, it is important to place it within the logics that guided Inka attempts to manipulate the earth-beings. As described above, *Apukuna* such as Waqywillka are today thought to own the products of the lowland regions near Cuzco, even those grown in the wider area beyond their slopes. In other words, ensuring that the local *apukuna* were docile and subjected to Inka rule was the means for controlling the productivity of the lands that although farther afield, were still under the mountains' general domain. The high-style terraces might be seen as focused on the *apukuna* directly, even if the most fertile expanses of land were somewhere else. Within the logic of the Inka world, manipulating the body of the Waqaywillka glacier would have furthered their control over the entire productive landscape of the region. It is for this reason that I suspect we find high-style terraces where we do, below the glacier, and not directly within the largest coca-growing expanses to the northwest.

Constructing relatively small and isolated sectors of terracing in different and often quite distant locations on the slopes of a potent earth-being makes rational sense if your goal is to order the bodily actions of such an entity. It makes much less sense if you are seeking to produce the greatest volume of crops through the least energetic expenditure possible. But once again, this is not symbolic production in any kind of ideational or non-concrete sense. The crops are real; the control over earth and water is real, and the production too is all quite real. The logic however is one of manipulating the water-and-earth bodies of non-human subjects, rather than economic extraction of inanimate natural resources from the ground. The logic is also one where things like coca are valued within the context of the exchange relationships constituted between humans and earth-beings, not as a form of wealth in a market economy. So the wealth that is produced is quite real as well, but as the substance underwriting potent



gift exchanges rather than a commodity. Contrary to Reinhard's (2007) suggestion that Machu Picchu be viewed as a pilgrimage site oriented towards sacra and ritual action, because it was situated in a less than practical locale, I prefer to think of it as an altogether very pragmatic entity. But its pragmatism inhered in the manipulation of very different kinds of wealth, power and political subjects than those we are familiar with in our world.

As Foucault (1995) discusses, discipline relies on habituated and repeated gestures of obedience. These gestures not only situate the subject in a position of political subordination with respect to an external authority, but also increase the productivity of the subject's actions. The soldier who takes apart his rifle, only to reassemble it and then disassemble it once more – over and over again – is conditioned via his or her body to perform such gestures of obedience. This instantiates political subjectification at the bodily level, but also makes the body more efficient at its task in a very literal sense. A well-trained soldier who can take apart a rifle and rebuild in a few seconds is not 'symbolically' more powerful, for the power we are talking about here is very real. It is not then something that operates in the representational or ideological realm, but rather power that is embodied and physical. Just so with the terraces built into the bodies of the *apukuna*. The reshaped and retained earth at such sites permits the *apukuna* to perform gestures of obedience again and again, the gestures that have been determined by the Inka state. Every litre of water that flows as it was directed to do so, every cubic meter of soil that continues to rest were the Inkas placed it; each is demonstrating the habitual and continuous obedience of the earth-beings to their will. Not only does the manipulation produce the obedient body, but the *apu* body is more potent through the terracing projects as well. Its

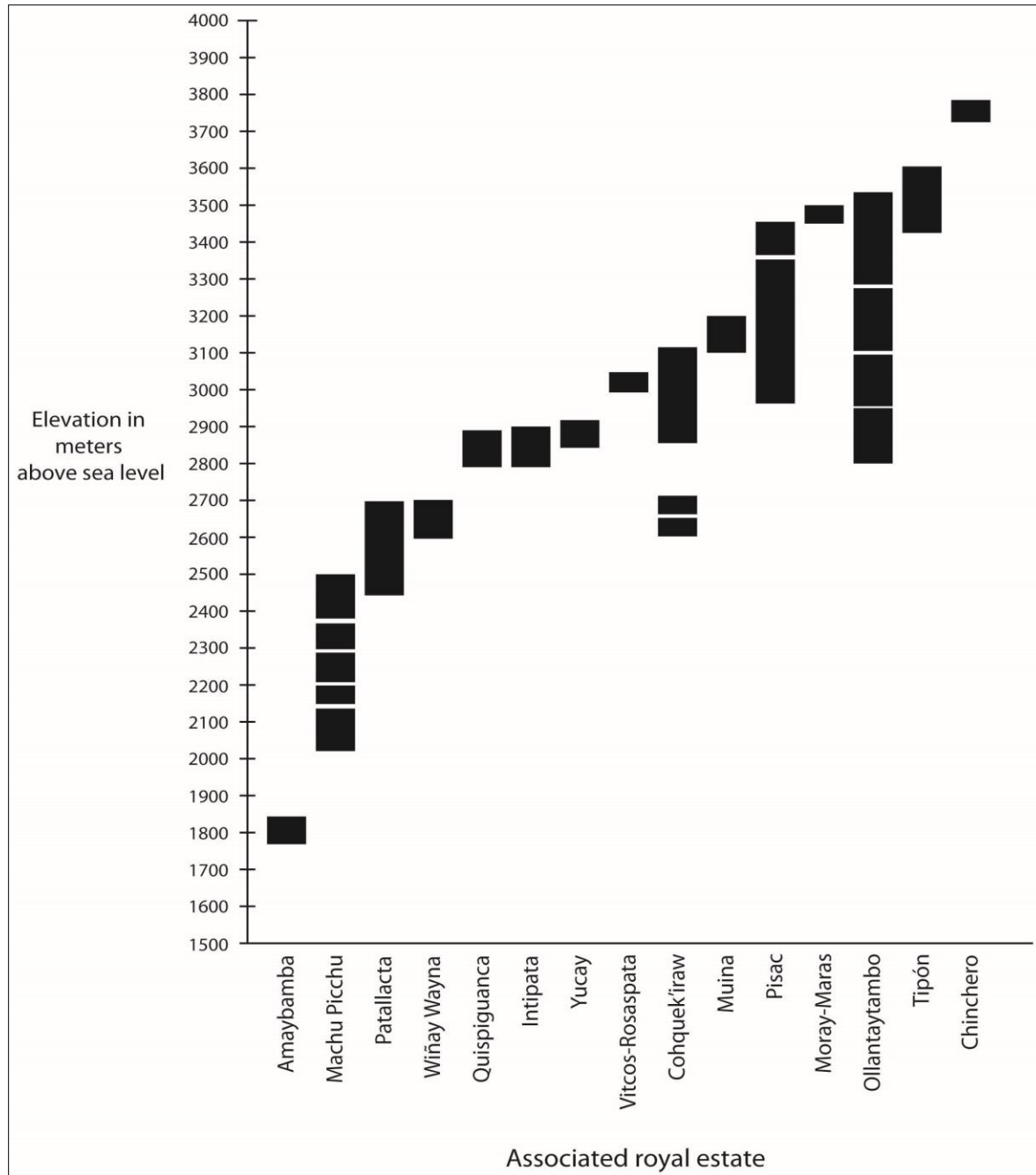
waters and earths bring forth more bountiful crops as a consequence of terracing projects, just as the soldier becomes a more formidable marksman.

It might be argued that these two cases (of the disciplined soldier and the disciplined *apu*) are not comparable because the soldier has intentionality and conscious agency, whereas the mountain does. Of course mountains are perceived as willful and sentient in many Andean contexts – and as discussed in chapter six, there are no empirical grounds upon which we can prove the existence of the interior life of a human subject as opposed to a non-human one. Yet even if we were to take a leap of faith and argue that the attribution of sentience to mountains was a form of false consciousness, this would still miss the point. Discipline is not a matter of thought or cognitive content. A modern army does not train a soldier to think about how to put together his rifle; it trains him to put his rifle together *without thinking*. That is the very foundation of disciplinary power and why it is so effective. It is power at the level of material bodies, not at the level of immaterial minds. It does not rely on the manipulation of conscious thoughts, ideas or beliefs, but instead on the manipulation and habituation of bodies to highly refined and specific actions. Thus even if we were to insist that mountains do not really have minds, it would not be relevant to a mode of power which does not rely on mindedness or conscious action for its reproduction.

Elsewhere, where we have major *apukuna*, we find other Inka royal estates and their associated manipulation of mountain bodies through terracing and canal system. To the west of the Salkantay and Waqaywillka ranges lies the Pumasillo massif. The highest peak of this group reaches 6,075 meters above sea level, just a couple of hundred meters shy of the pinnacle of

Salkantay. Two major royal estates are associated with this region, and utilize waters from the melting runoff of Pumasillo – namely Vitcos-Rosaspata and Choquek'iraw. Similar to Wamanmarka, both these centers have palatial architecture, and associated areas of terracing in the high-style that are, despite their monumentality, relatively limited in extent. They would not have produced a great deal in the way of agricultural stuffs, but they would have very effectively regulated and re-ordered the bodies of the nearby *apukuna*. And in so doing they would be made into more docile bodies, entities whose labor outputs (favourable weather, fertility and so on) could be made amenable to the wishes of the Inka elites and work more productively in pursuit of those goals.

Indeed, it is hard to explain the location of these sites otherwise. It does not for example, accord well with any rational criteria we might have for situating an aristocratic plantation or palace. As already discussed Machu Picchu is relatively far from Cuzco. Choquek'iraw and Vitcos-Rosaspata were even more remote, and this raises one of the key puzzles of the Inka royal estates in terms of their skewed geographical distribution. Respectively, the sites of Vitcos and Choquek'iraw are 114 kilometers and 99 kilometers from the city of Cuzco, and reached via very mountainous and difficult terrain. They, along with Machu Picchu and Amaybamba, lie roughly to the west and northwest of the Inka capital. By contrast the farthest lying estate to the east (from Cuzco) is at Muina in the Lucre Basin. However this estate lies less than 30 kilometers from Cuzco. Moreover, travel from Cuzco to the estates lying to the east would have been much easier, simply achieved by following the Huatanay Valley. If one were situating estates with a view to producing goods that were to be circulated and stored throughout the



**Figure 4.22.** A graph showing the elevation ranges of monumental terraces at the major royal estates of the Inka heartland. Note the low altitude of the Amaybamba, on the far left side.

heartland, placing them in remote locations in the Vilcabamba region would have been fairly inefficient<sup>22</sup>.

Moreover, the terraces at Vitcos and Choquek'iraw were so limited in extent that they would likely have taken more resources to maintain than they would have produced for consumption elsewhere. And this was not due to a lack of good land elsewhere. Presumably the well-watered and fertile regions such as around Urcos or Anta to the southeast and west respectively would have provided excellent location for large-scale agricultural development. And no doubt the Inkas would have developed such places as estates if their interest had been in the production of *commodities*. However, if their primary goal was to access the products (and achieve the docile co-operation) of pre-eminent *apukuna*, then the pattern would look quite different. Royal estates (or rather the high-style terraces we associate with them) would be situated within the watersheds and waterflows of major peaks around Cuzco - irrespective of how accessible these locations were, and what volumes of agricultural material they were able to produce. And this, of course, is exactly where we find them.

One other factor worth considering here is John Murra's (1972, 1985) concept of vertical archipelagoes – the idea that Andean communities generally construct vertical social ties between groups lying at different altitudes and thus with immediate access to different ecozones and their products. This allows for the flow of different kinds of goods in vertical directions, with complementary exchanges taking place with respect to the core animal and

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<sup>22</sup> Here, note also that Vitcos-Rosaspatha and Choquek'iraw are not in fact lowland estates. As figure 4.25 indicates, their elevation range is comfortably within the middle of that for royal estates in general, and similar to those in the Sacred Valley. In other words, although they may be in the 'lowland' region, they are not low-lying.

plant products native to different elevations. Murra in his analysis was particularly keen to show that Inka economic systems were derived from deeper and fundamental Andean adaptations, even if they may have been much more elaborate and on a grander scale. We therefore need to consider that the royal estate system was distributed across multiple elevations so as to articulate the holdings of the Inka *panaqas* within a form of vertical archipelago.

As figure 4.22 illustrates there are certainly grounds for seeing the royal estate system as widely distributed across a range of eco-altitudinal zones. Wamanmarka is also notable as the only major royal estate to be located below 2000 meters above sea level. Moreover, it is interesting that monumental high-style terraces are found across the entire elevation range of the royal estate system, even in contexts lower-lying contexts where the artificial altitude adjustments that terracing allows would not have been relevant. This would seem to corroborate the idea that high-style terraces are an essential feature of the royal estate system in a way that goes beyond the economic rationales that can be adduced for such features. It seems that royal estates were constructed on the slopes of the major *apukuna* all along the Cusco Basin, Sacred Valley and Vilcabamba drainages. It was a vertical archipelago of sorts, but the aim was not the exploitation of different ecological zones in terms of accessing productive lands, but rather the control of different earth beings along a chain from the highlands to the lowlands. Of course, the vertical changes still matter, but it is the different *apukuna* and the variety of products they govern and produce that is essential within the world of the pre-colonial Andes.

My final point here returns us to the essential elements of the Amaybamba royal estate I discussed earlier in the chapter – the palatial *kancha* and the high-style terraces of Wamanmarka. These two archaeological entities represent two related things. Such palaces are associated with the royal *panaqas* of Cuzco and in this case, historical documents lead us to believe it was specifically under the domain of Pachakuti's lineage – Pachakuti being responsible for the conquest of the Amaybamba initially. The high-style terraces have been discussed as a technology for the bodily disciplining of mountainous earth-beings, of regulating their waters, soils and the valued products they produced. The royal estate at Amaybamba therefore brings these two things into relation. They draw together the *panaqas* and the earth-beings, the *apukuna*, into a relationship of obedience, subjectification and reciprocal exchanges. This is why we still find these two elements (palace and terraces) in the smallest and most pared-down of royal estates. This is the essence of the relationship they represented, the complicated dance of the *panaqas* and the *apukuna*. This I suggest, rather than plantation-like economic production, was what the royal estates as we call them, were all about. Marisol de la Cadena's (2012) understanding of the *ayllu* is more apt than ever: 'the socio-natural collective', where humans and non-humans are so bound up that they each constitute the other. At the Amaybamba, and the heartland estates more generally, we therefore see one of its most elaborate manifestations.

#### XIV. Conclusions

As I argued in the beginning of this chapter, Inka *panaqas* – the corporate owners of the royal estates – are best understood as socio-natural collectives in the way that some ethnographic accounts have sought to define the Andean *ayllu* more generally. If this is the case then it is difficult to see the estate lands they held as merely property or wealth-generating landholdings in the vein of European aristocratic territories. Such ideas are somewhat alien to the pre-colonial Andes, and rest on a range of assumptions and categories that are difficult to sustain outside of a modern, capitalist world with all its various productive apparatus and mechanisms of exchange. Instead, the ‘wealth’ of the *panaqas* – the material things whose circulation they sought to benefit from – was tied up in an elaborate series of parallel exchanges across the empire, between both humans and non-humans. The things we know as royal estates were therefore more akin to the material means by which the Inka aristocracy sought to regulate their interactions with a particular set of earth beings, namely the great *apukuna* of the Cuzco heartland. As appears to have been generally the case with autochthonous beings and non-human powers at the center of the empire, access to the *apukuna* was distributed across the entire body of *panaqa* groups. Similar to the *zeq’*e** system closer to Cuzco, the relationships with the *apukuna* and the products that they produced were collectively managed by all of the *panaqas*, rather than the preserve of only a few of them. Hence the need for each *panaqa* to possess royal estate lands.

The physical remains that we as archaeologists see in the royal estates are a distinctive material signature that can be contrasted with other kinds of Inka site – and is a form peculiar to the Cuzco region itself. The prestige architecture represented in the form of the palatial *kancha* compounds offers the most obvious material trace of the human side of the socio-natural



collectives constituted by the *panaaqs*. The Amaybamba, like other royal estates, exhibits such a structure at Wamanmarka and so highlights the importance of appropriately accommodating the Inka aristocracy within the estate system. Conversely, the non-human side of the *panaaqs* – the *wak'as*, and particularly the heartland *apukuna* – are represented in the terrestrial and hydraulic modifications that appear in the form of terraces, canals and fountains. Ethnohistoric and ethnographic accounts makes clear that such infrastructures are best seen as interventions in the bodies of such entities. These infrastructures too are signature features of the royal estates and we see them represented in the Amaybamba. Tellingly, the palatial *kancha* and the prestige terraces are explicitly paired in this context. The palace at Wamanmarka sits directly opposite the high-style terraces at Cangrehuyoc, both sectors easily visible from the other – as if to emphasize the absolute centrality of the Inka-*apukuna* relationship for the royal estate system.

Making the *apukuna* docile subjects was not a question of belief. It was productive in a very real and material sense, and the bodies of the *apukuna* were genuinely made more efficient in the process. But the logic can only be understood if we take seriously the idea that mountains were laboring elites rather than the homes of spirits to be worshipped, or merely the inanimate basis of private landholdings. We can translate this into a European-style estate system, so that the Inkas appear like native *hacendados* – but only at the cost of carving up the estates according to divisions that would have made little sense to the Inkas. Alternatively, we might see them as primarily religious phenomenon, geared towards the propitiation of mountain spirits. But that too would fail to grasp the very profound ways in which for Andeans all these exchanges with mountains and rocks were quite straightforwardly pragmatic. These were not actions that took

place within a sacred sphere away from the mundane concerns of managing food, water resources and material matters. Religion then appears to offer just as fraught a translation as economics. The best solution seems to be to reject the economic/religious binary altogether.

Here, I would like to return to the 'test' I posited at the beginning of this chapter – where I raised the question of how different Inka and colonial estates of the Americas appear in our analyses. If I were to describe a phenomenon as a 1) major infrastructural undertaking that was a vehicle for expressing elite values and ideologies, 2) a way of encoding the naturalness of a given socio-economic order and 3) a monumentalized expression of power in a combined architectural-landscape idiom – would such descriptive characteristics refer to William Paca's garden estate or Pachakuti's palace at Wamanmarka? I do not think from the description it would be possible to tell. All three points would seem to be equally applicable to a royal estate from the pre-colonial Andes and an aristocratic estate from colonial Maryland insofar as social theory traditionally understands such things. Alternatively, the economic elements could be foregrounded and we could say they were both 1) enclosures of land that provided a fixed source of alienable resources to be exploited and developed, 2) centers for the management of production activities so that surplus could be extracted by elite actors and 3) means for congealing and transmitting the material patrimony of high-status kin groups between generations. Again, I do not think it would be possible to distinguish between the entity from the pre-colonial Andes and the counterpart from historical North America from these characteristics as given. It is not that such descriptions are not valid, rather that they entail no engagement with alterity. Alternatively, describing the Inka royal estates as a material apparatus for disciplining the bodies of a mountainous earth beings really cannot be translated

into another context – and certainly not to plantations in colonial North America. This is what I meant at the beginning of the chapter by saying that the analysis must proceed from, and ultimately produce, an encounter with alterity. The theoretical goal is not to produce a general model, but to generate a theoretical account that is consciously intended to be non-applicable to other times and places. It is a theory with only one case-study, and is intended to remain so.

Finally I wish to return to the points I made in the introduction about the genesis of the arguments made in this dissertation – since they are particularly apropos of the ideas offered in the present chapter. As I said at the start, I had once thought to apply a Foucauldian notion of the disciplined political subject to the Andes – but eventually abandoned that approach because it did not seem to apply on empirical grounds. I could not find the ancient Andean equivalent of the regulatory institutions for the production of docile and productive human bodies like modern hospitals, prisons and schools. Or at least, I could not find such things with respect to *human* bodies. Instead, I have argued that the disciplined subjects of the Amaybamba were mountains - the *apukuna* - rather than people.

Yet it is important to conclude this portion of the argument with an explicit discussion of how the Foucauldian concept of discipline is being used in this particular context, since it is, after all, an approach developed in and for a modern European case study. Obviously I am aware that I am drawing an analogy between Western Europe during the last three centuries, and the pre-colonial the Andes is potentially very fraught with pitfalls, given how different are the contexts being compared. To a degree then, it is a heuristic exercise and works only as far as it is instructive and illuminating. This is quite different from a non-heuristic deployment of Western-

derived categories to explain non-modern contexts: for example the belief in ‘the sacred’ as a universal phenomenon with some kind of deep psychological basis in the evolution of human cognition and which therefore can be found in all cultural contexts. In my view, heuristic analytical frameworks need to be justified through their demonstrated applicability to the evidence – they cannot ever be assumed to have relevance *a priori*.

But even then the point is not simply that discipline is ‘only a heuristic’ and that this makes its deployment justifiable. I think that would be too easy an answer. Such an approach would mean that we could also justify dividing ancient Andean worlds into economic and religious components on the grounds that the exercise was purely a heuristic one – a binary I have sought to critique here. With this in mind, a better way to frame what I am attempting to do in this chapter might be to call it a sort of ‘anti-analogy’. Put another way, my argument is *not* that Foucault’s highly influential concept of discipline is applicable to the ancient Andes. Rather, if we attempt to apply such a model, we find that it is empirically more justifiable for mountains than for humans. Reading discipline onto the *human* subjects of the Inkas would be an analogical use of Foucault’s idea of discipline - however, to say instead that it *works better* for a particular set of non-human things than it does for humans in the Inka case, is not so much an analogy, but an inversion of the normal premises of analogical ethnographic comparison. Typically, archaeological use of ethnographic analogy follows the form:

*Phenomenon X is observed in a particular ethnographic context and leaves particular material traces. Finding the similar material traces in another context can be taken as evidence that something similar to phenomenon X is operating there also.*

Contrastingly, in my use of anti-analogy the logic is different:

*Phenomenon X is observed in a particular ethnographic context and leaves particular material traces. In another context, the most comparable material traces are found in entirely the opposite situation than was expected (e.g. associated with things rather than humans). This empirical inversion, rather than a simply absence, indicates just how different are the two contexts being compared – and also tells us something about the ways in which they are different.*

Thus the fact that on evidentiary grounds discipline is more defensible interpretive lens for mountains in the Amaybamba tells us something important about the profound differences between Inka and Western ontological frameworks and this is not the same as saying that discipline is a universally relevant category. The point is not that something similar to Foucauldian discipline can be adduced for the pre-colonial Andes, but that its closest analog is encountered in precisely the opposite location than originally expected. It is this inversion of expectations that makes all the difference in terms of the analytical process.

## Chapter Five: the Empire seen from the side of the road

### I. The Inka Road System

No ancient road network is quite as renowned for its scale and technical achievement as that of Tawantinsuyu, save perhaps the one built by Rome. The Spanish chroniclers were the first Europeans to record how deeply impressed they were by the transport system constructed and maintained by the Inkas. Cieza de León (2005: 65-6) was one its most forthcoming early admirers, saying,

The roads pass over rugged mountains, over snow covered ridges, over stony wildernesses, and forests full of thorny thickets, in such sort that it may be taken as quite certain that the news could not have been conveyed with greater speed on swift horses or on mules, than by these foot posts... And it must be understood that neither storms nor anything else prevent the due service of the posts in the wildest parts... In this way the lords were kept informed of all that happened in every part of the empire, and they arranged all that was need for the ordering of the government... In no other part of the world do we read of any such invention...

It is understandable then that the highways of Inkas were a core concern for twentieth-century scholars writing about the ancient Andes (e.g. Regal 1936, Strothert-Stockman 1967, Strube

1963, Von Hagen 1975). The entire road system was vast and spanned most of the Andes, connecting the north of present-day Ecuador with as far south as the 34<sup>th</sup> parallel near Santiago de Chile – and was organized around two primary axes running north-south along the opposing sides of the central highlands. John Hyslop's (1984) study of the Inka roadways still represents by far the most comprehensive and in-depth attempt to empirically describe the imperial transport system in its totality. He calculates that the total length of the network exceeded 23,000 kilometers, and may have been substantially longer still (Hyslop 1984: xiii). Hyslop's work is particularly valuable because it seeks to consider the road system as an empire-wide unity, rather than on a piecemeal basis – and so is the basic foundation for all present-day archaeological research on the Inka roads. Accordingly, the last two decades have seen a considerable expansion of the data available for local portions of the imperial road network as a product of regionally oriented surveys – thereby building on Hyslop's more general picture. For example, there has been a great quantity of new data published on Inka highways in Chile and particularly the Atacama region (e.g. Castro et al. 2004; Hyslop and Rivera 1985; Sanhueza 2004; Stehberg and Carvajal 1986), along with other regions including Huarochirí (Coello 2000), the Sacred Valley (Kendall 2000), northern Ecuador (Sistrunk 2010) and portions of Bolivia (e.g. Avilés 2008; Raffino 1993). Yet the regional coverage of Inka roads remains somewhat 'patchy' in archaeological terms, with some parts of the Andes studied in far greater detail than others. As in most other things, the eastern Andes and the forested lowlands remain among the least investigated and so the least understood with respect to the imperial highway system.

As Hyslop (1984: 341) discusses, the road network was not only a means to come and go, and move material goods, but it was also a conceptual tool central to the ways in which the Inkas

comprehended and recorded information about their domain. That being said, it has primarily been understood by most scholars as a vehicle for realizing the empire's economic and military goals (e.g. Jenkins 2001). Even in Hyslop's own account, 'ideology' remains a mostly secondary factor in the analysis. Similarly, most considerations of Inka roadbuilding in provincial contexts have emphasized its centrality in integrating various locales into the imperial economic and political system (e.g. D'Altroy 1992: 116-122; Schreiber 1984: 82-6), rather than its meaningful associations or symbolic importance. Perhaps not surprisingly, the greatest attention paid to ideological or ritual significance for Inka roads is generally seen in archaeological studies based not in the provinces, but at the political center. Bauer's (1998) study of Cuzco's sacred landscape, for example, deals with the articulation of the road system with the central shrines of the Inka capital – with the four principal roads emanating from the Qorikancha temple at the empire's heart. Additionally, there has been a long-running concern to place the Inka road system within a deeper historical context, particularly in terms of its Wari antecedents, which provided both a material and conceptual foundation for the Inkas' later elaborations (see Lumbreras 1974; Schreiber 1984, 1991).

There are several more recent examples of research on the Inka road system that have moved away from its traditionally 'pragmatic' aspects and instead sought to more strongly emphasize its cosmological importance. The work of Castro et al. (2004) in the Atacama Desert appraises the local Inka highway there within the theoretical context of culturally constructed landscapes – that is, places that are replete with meaning and signification. In their analysis, visibility is a central factor, and they note the degree to which particular landscape features may be observed as one moves along the road. As such, they argue that studies of road systems are



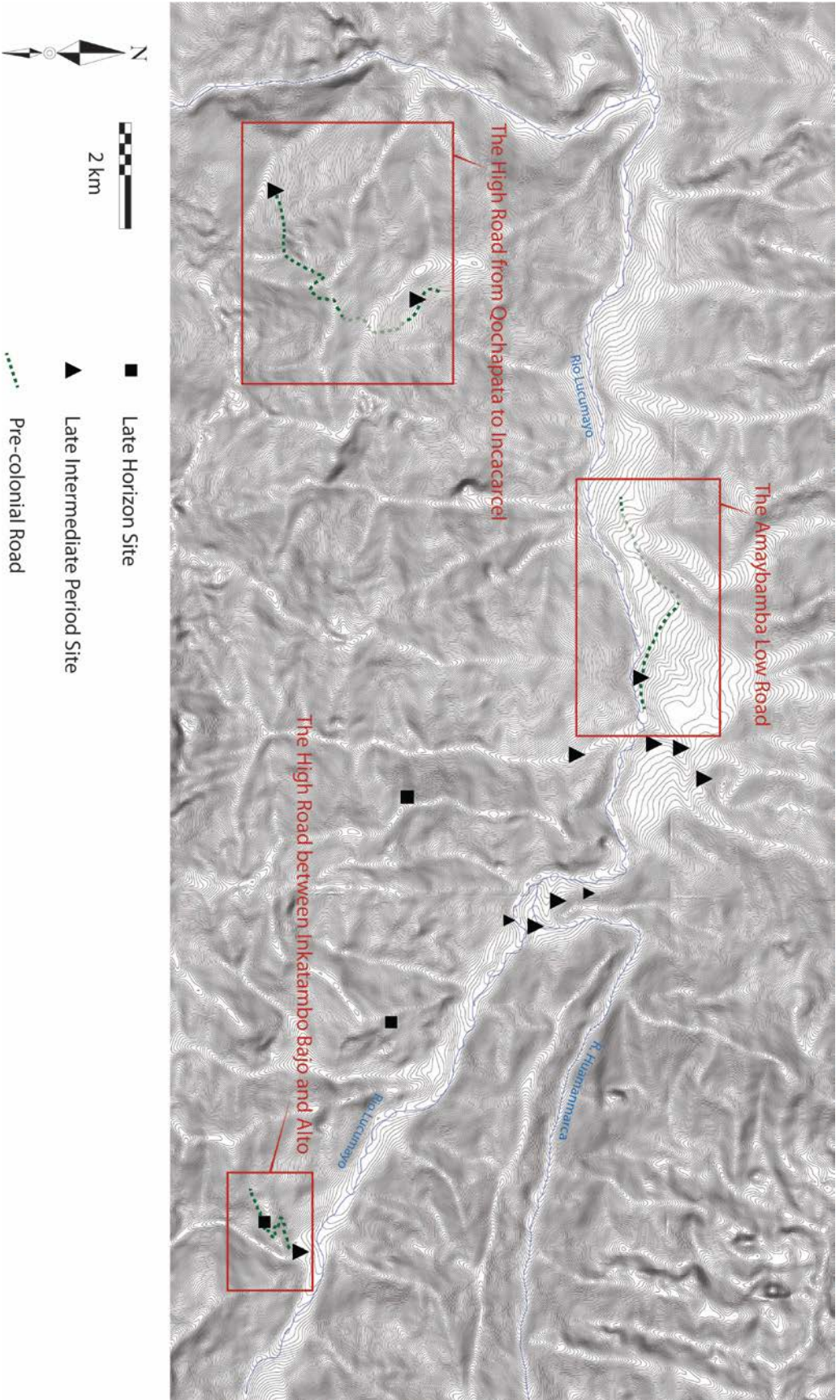
often aided considerably through parallel research into local toponyms as a means to better understand the landscape as a cultural artifact. In the terms of Castro et al. (2004: 474),

*Para la cultura andina los caminos no solamente unen lugares, no se transitan solo para llegar de un lugar o otro. Todo su recorrido está lleno de significados... el paisaje es un verdadero discurso.*

In Andean culture, roads do not only unite places, nor do they run just so as to arrive at one place or another. Their whole route is filled with significance... the landscape is a veritable discourse.

The archaeological survey of the Amaybamba indicated significant infrastructural investment in terms of the valley's pre-colonial road network. Although there were potentially traces of the road found at occasional points in the valley, often these ran for no more than a few meters before being cut by the modern vehicle highway – or other forms of recent development. As discussed in chapter One, unless it is paved it can be difficult to determine if a path is of Inka, or more recent origin. Moreover, without associated Inka structures - such as steps or bridges - or without a path running through an Inka settlement, it is often difficult to make any reliable determination as to a route's antiquity. Nonetheless, three significant portions were verified as pre-colonial in date and studied in detail. The following section of the chapter will describe the Inka roads present in the Amaybamba and convey something of their character - as well as indicate their relationship to other features of the imperial landscape. After doing so, I will also offer a more 'interpretive' account of the Amaybamba highways – casting them in particular as

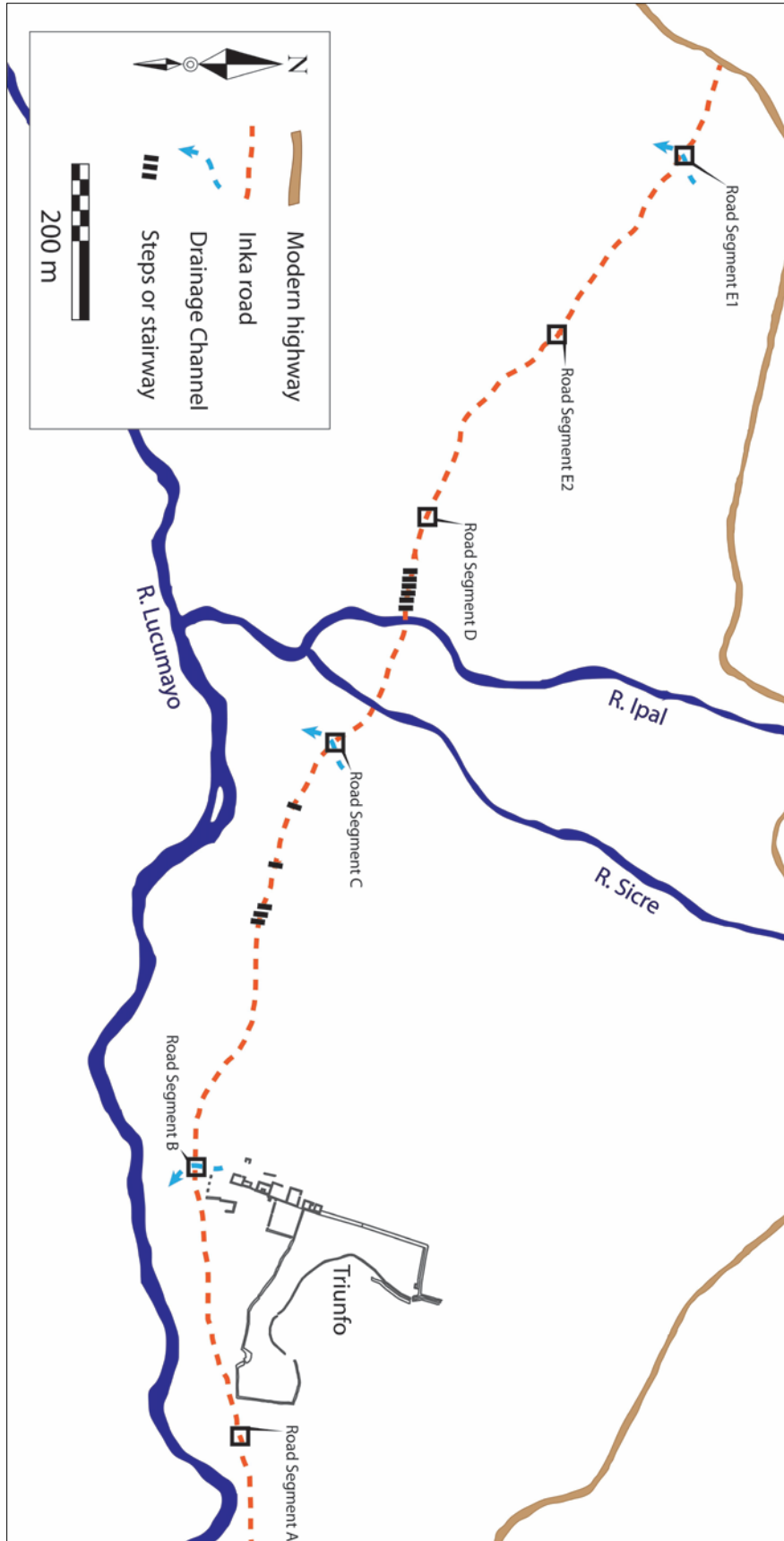
**Figure 5.1.** A topographic map of the Amaybamba, indicating the known portions of the Inka road network and also (in more translucent color) the probable connections between those known portions. It is likely that in the narrower valley floor to the eastern end of the drainage, the pre-colonial road has been obscured or destroyed by the construction of the modern highway.



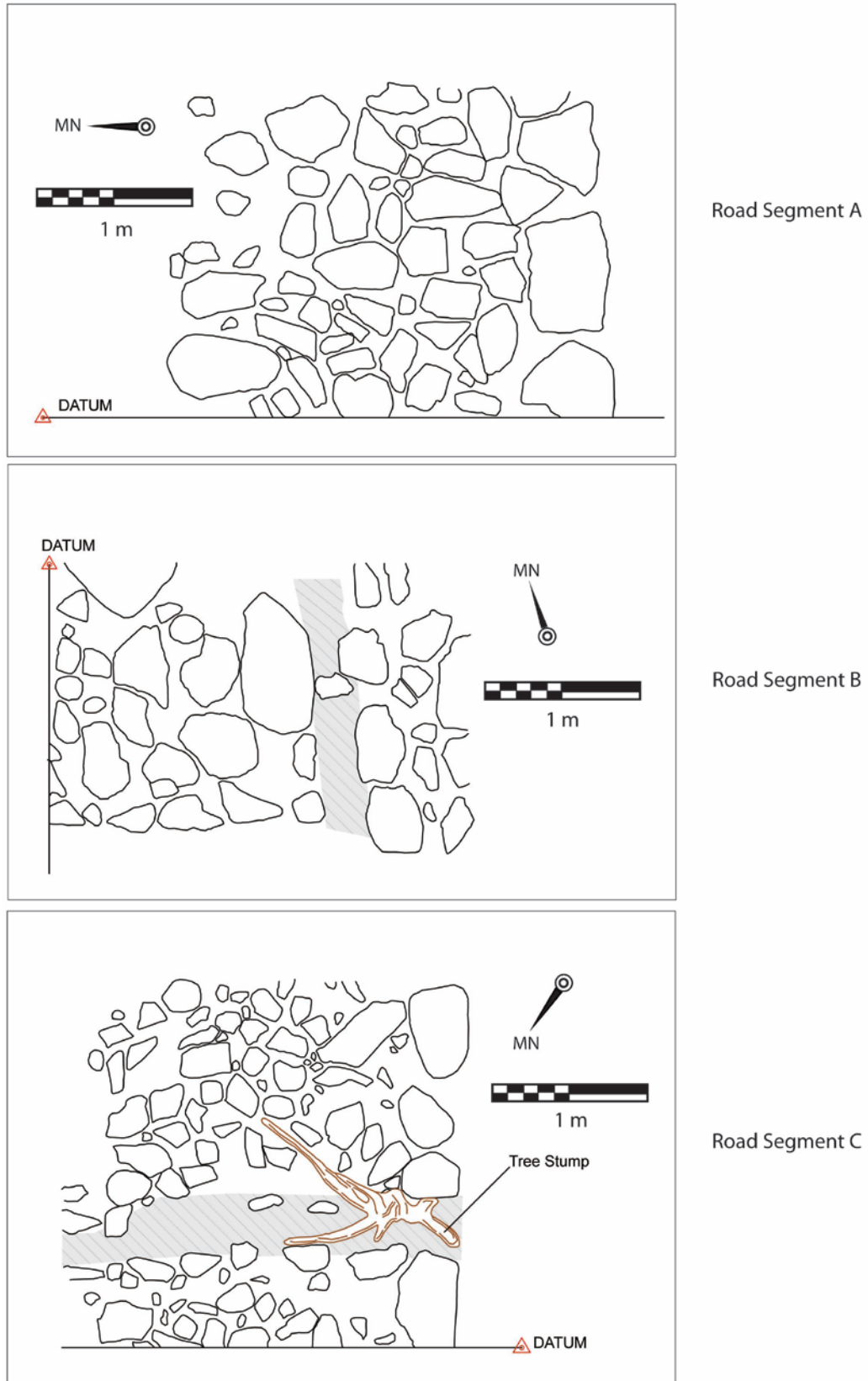
an *infrastructural* project, and thereby explore how the roads were a core means through which imperial and colonial forms of power were locally generated. This is intended to build on other archaeological accounts of roads as devices for facilitating/controlling movement within past landscapes, but also to shift some of the emphasis away from questions of movement – which I will suggest is not the only thing, or even always the most important thing, that roads do with respect to politics.

## II. The low road across the floor of the Amaybamba Valley

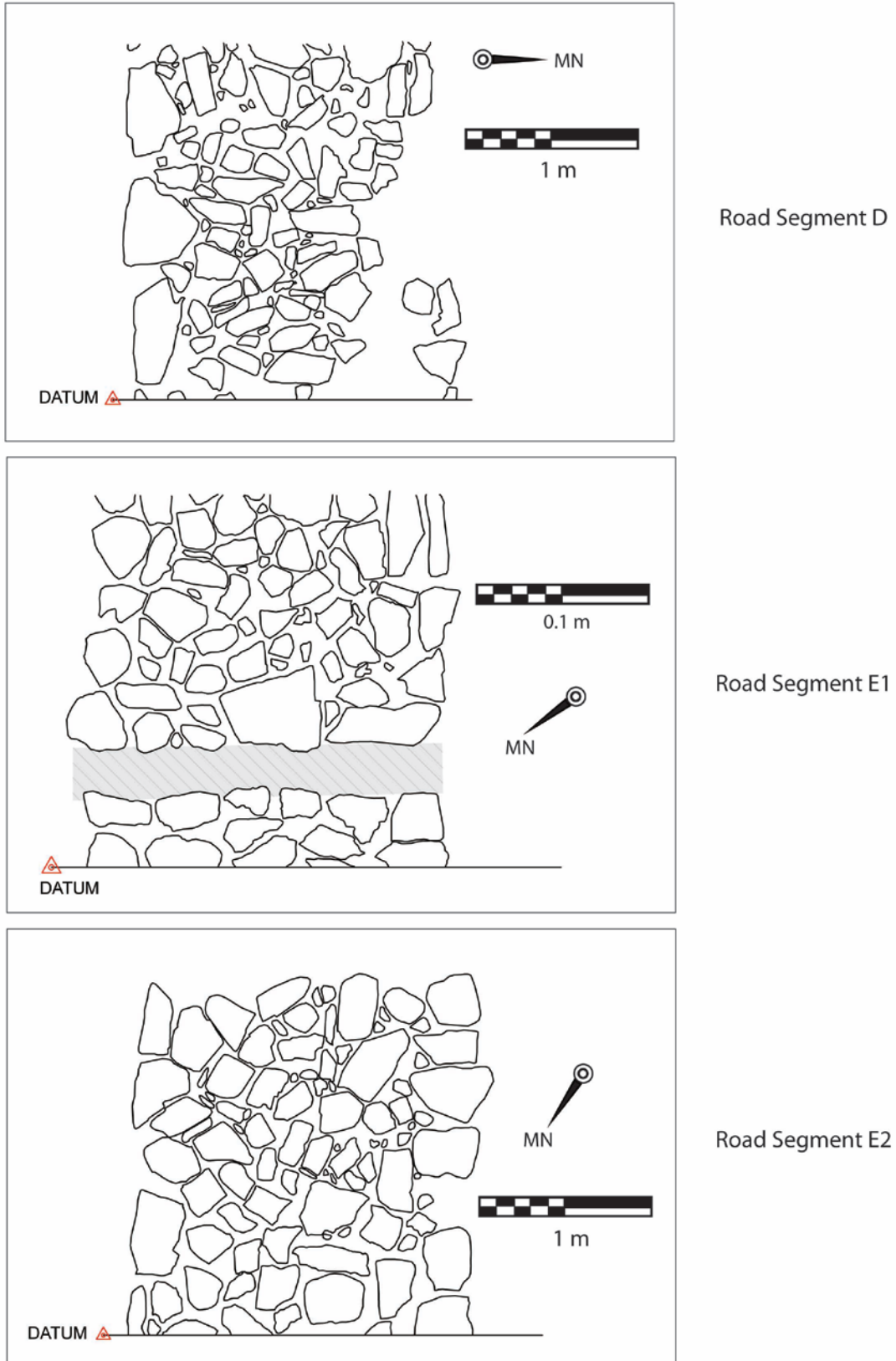
One major section of the surviving Inka road network runs along the floor of the Amaybamba Valley, connecting the modern hamlet of Huamanmarca to the east and the town of Huyro in the west. Although the route is still in use today as a pedestrian thoroughfare, several sections showed marked evidence of Inka-type construction and after further study it was possible to confirm the route's pre-colonial antiquity. Six individual segments along this portion of the road were recorded in detail (Segments A, B, C, D E1 and E2), so as to provide data on its general construction characteristics. In all likelihood the road originally extended west of Huyro to the bridge at Chuqichaka, where the Lucumayo meets the Urubamba. However, fewer traces of the road were located in the western portion of the valley making it difficult to recover its route there – at least in its specificities. Several general features were noted from the study of the low road:



**Figure 5.2.** The Amaybamba low road and associated sites and features. Note the close association with the Triunfo site.



**Figure 5.3.** Plan views of road segments A, B and C.



**Figure 5.4.** Plan views of road segments D, E1 and E2.

I. The quality of construction along this section of the road was consistently high, and it probably had a fully paved stone surface for the entirety of the 1.9 kilometres of the surveyed route. The six road segments were deliberately located at points showing surface indications of paving. However, during the survey small sections were informally cleaned at distances of approximately 30-40 metres between these segments – and in each location stone masonry was also located a few centimeters beneath the vegetation and accumulated soil. The size of masonry blocks used varied from 0.1 to 0.5 metres, depending on the portion of the road surface in question. At least four of the recorded segments showed a preference for using larger blocks on one or both margins of the roadbed. This has the effect of making the roadbed more durable, as the higher mass of the edge stones would counteract the greater tendency of such blocks to be dislodged since they lack the stabilizing matrix of the lateral masonry on all sides.

II. Some variation was noted in the width of the road surface, ranging from 2 to 2.8 metres in most parts. Hyslop's study of the imperial road system did not extend into the Antisuyu region, but he notes that the Antisuyu road as it left Cuzco ranged in width from 3-5 metres (Hyslop 1984: 265). He also points out that Inka roads studied along the eastern Andes of Bolivia where rainfall and water run-off are more substantial tend to be narrower than other parts of the empire (such as the coast and central highlands), and are generally 2- 4 meters in width (Hyslop 1984: 255). The main road to Machu Picchu from Ollantaytambo (the 'Inka trail') is often quite narrow, despite being associated with a significant royal estate - sometimes being only a metre wide depending on the terrain. In general terms, the

width of the Amaybamba low road is consistent with these observations from other parts of the network located along the eastern slopes and *yungas* ecozone.

**III.** Stone steps were noted at several locations along the roadway. A cluster of five relatively dispersed steps were located on the southeast-east of Road Segment C. However, a more discrete stairway consisting of six (or possibly seven) steps was noted just above and overlooking the west bank of the Río Ipal. This stairway sits on a slope with a gradient of 13.5°. Hyslop (1984:238-9) suggests that Inka roads with slopes at a gradient of 10° or less tended to have ramps without steps, while steeper slopes either had occasional steps or full stairways.

**IV.** No obvious remains of bridges were noted in the survey; however given that the route of the road is cut at two points by the courses of the ríos Ipal and Sicre, it seems almost certain that some kind of formal crossings would have been built. As noted in Figure 5.2 the road immediately picks up on the western side of the Ipal drainage, opposite the point where it terminates on the eastern side of the Sicre drainage. The fact that a stairway was recorded descending to the banks of the Ipal just a few meters west of Road Segment D, strongly indicates the likely presence of former bridge in this location. Elsewhere in the study zone (such as at Inkatambo Bajo), Inka river crossing points are reached by a set of steps descending from the road above.

**V.** Road Segments B, C and E1 showed evidence of transverse drainage channels incorporated into the roadbed in order (presumably) to manage water run-off. The best-preserved example is seen in segment E1 which exhibits a channel that is fairly uniform in



width, varying between 0.27 and 0.30 metres along its length. The base of the channel was not paved, only the sides, and this observation also holds true for the other drainage features noted in segments B and C. All three segments with channels were located in portions of the road route where the underlying topography dips slightly, indicating these features were constructed in areas where run-off would have been concentrated during the wet season.



**Figure 5.5.** *Photographs of paved surface of Road Segment A (left) and of well-preserved drainage channel in Road Segment E1 (right).*

It is worth noting that the channels were not sought out when selecting portions of the road for detailed survey. They are in fact almost impossible to see under ordinary conditions, since they are filled in with accumulated soil and other debris, only becoming apparent after the roadbeds have been cleaned for recording. Given that out of six segments recorded, three had evidence of drainage channels, this indicates that these are likely a common feature throughout the Amaybamba low road. This is not an unusual

aspect of Inka roads found in the upper Yungas zones generally. For example in Bolivia, Avilés' (2008: 198-200) noted seventeen such drainage channels along the stretch of Inka road between Apacheta-Chucura and Challapampa. These are of similar width (around 0.2 metres) to those noted in the Amaybamba survey, although the Bolivian channels differ in that they were usually constructed diagonally across the roadbed (at a 45° angle) whereas those in the Amaybamba which are all perpendicular to the road route.

VI. It is not uncommon for Inka roads to have walls - of ether stone or adobe - marking their edges. Such demarcating features tend to be seen in areas where roads run across relatively flat, open expanses. For obvious reasons, building freestanding (as opposed to retaining) walls alongside roads is difficult on sloping terrain, and unlikely to be particularly stable. Such constructions are therefore most common along the coastal desert, in wide valleys of the central highlands and on the high plateaux of the Altiplano. Hyslop (1984: 227) suggests that since they rarely exceed one meter in height, these walls primarily serve a boundary-marking function rather than acting as a physical barrier. A portion of the low road near Triunfo shows just such a boundary, composed of a line of boulders set on its northern (upslope) side. These boulders are generally up to a meter in length and appear to have been unworked. It is possible they are a post-Conquest addition to the Inka road, however colonial-era walls are normally made of dry stone or bonded masonry lain in courses - so this seems unlikely.

In terms of the route taken by the low road, it is clear that it closely follows alongside the immediate north bank of the Río Lucumayo for most of its route across the valley bottom. The

river is often visible, and almost always audible, while travelling along the route of the road. More will be said about the location and placement of the low road shortly. As is evident in



**Figure 5.6.** *Photographs of the stepped road surface leading down to the Río Ipal (left) and of an uncleaned portion of the road running near Road Segment E2 (right).*

figure 5.2, the road is clearly articulated with the Triunfo Sector of the Amaybamba royal estate (discussed in chapter four) and passes within a few meters of the site's southern flank. It almost certainly passed through the Capillayoq and Capillayoq North Sectors also<sup>1</sup>. Given the narrowness of the valley bottom around the Umasbamba and Wamanmarka sectors, the route of the low road has probably been destroyed as a result of the construction of the modern

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<sup>1</sup> Indeed, it would have been difficult to avoid doing so, since these two sectors span almost the entire width of the valley floor on the north side of the Lucumayo.

vehicle highway<sup>2</sup>. However, assuming it was more-or-less contiguous with the modern road, it would have passed directly within reach of these sectors as well. By contrast, Choquello and Cangrehuyoc (the latter being on the southern bank of the Lucumayo) were apparently not integrated directly with the road network. The residential sector at Choquello may well have once had a lateral trunk line connecting it with the low road, but the intense modern agriculture and development in that area is likely to have obscured or destroyed its remains if it existed.

### III. The high road from Qochapata to Inkacarcel

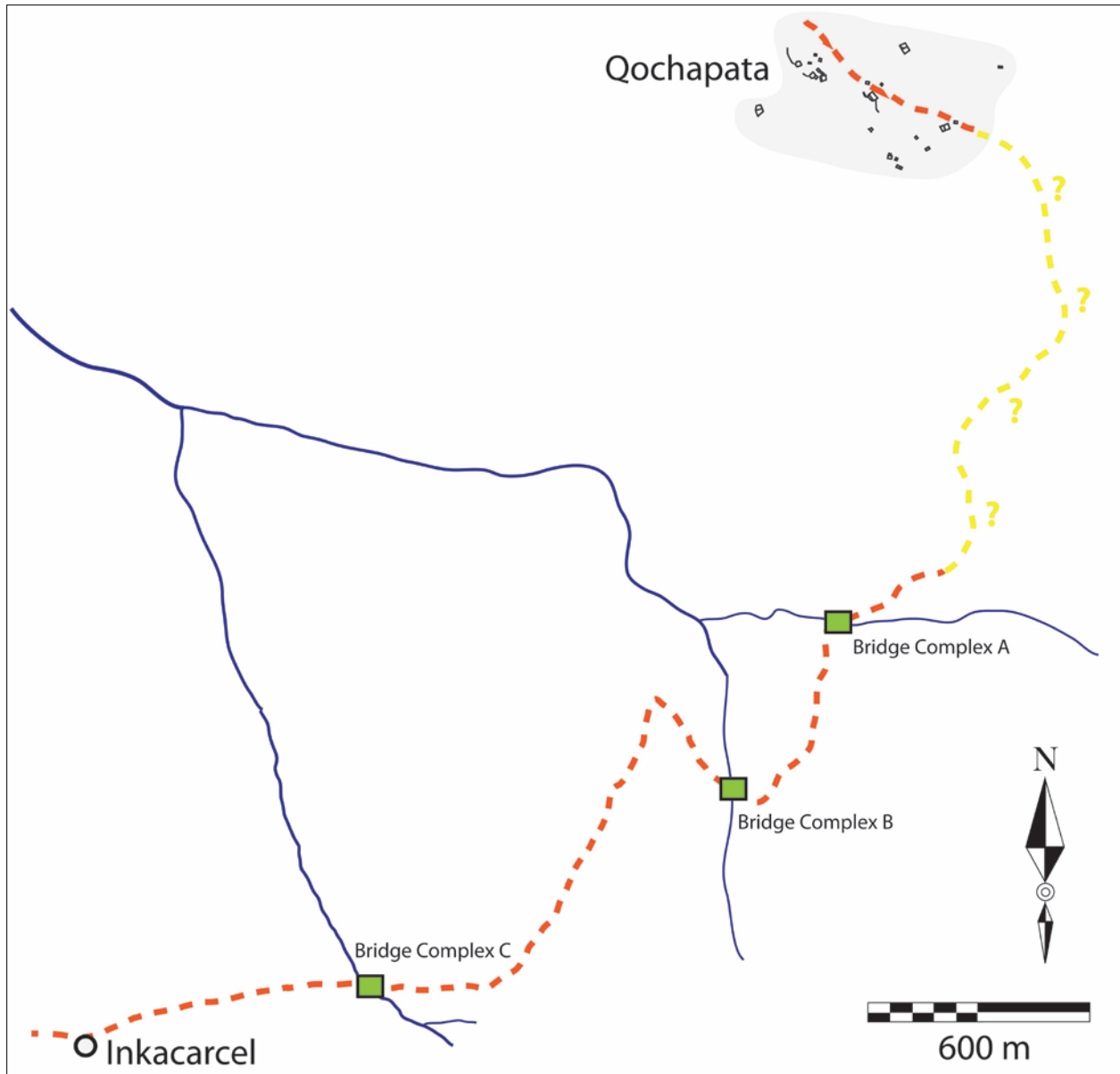
A significant section of the Inka road was also located in the western portion of the survey zone. This portion of the road, unlike the one discussed above, runs atop the western end of the Verónica range and the same line of peaks where the glacier and *apu* of Waqaywillka glacier (discussed in chapter four) is located. It does not therefore run along a flat valley bottom, but along strongly sloping terrain for most of its route. The western terminus of this route is the site of Inkacarcel, which was discussed in chapter three with respect to its enclosed autochtolith housed inside a curvilinear building. This site is not associated with any evidence for settlement activities and appears to have been entirely focused on the rock outcrop and its attendant architecture. The eastern terminus of the road is the major Late Horizon site of Qochapata. This site is one of the more unusual locations surveyed, in part because it is considerably larger and more dispersed than the other Inka sites, and also sits on a high slope perched above the valley

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<sup>2</sup> The width of the valley floor at Umasbamba, for example, is only around 90 meters.

floor. Qochapata is situated mostly between 2,280 and 2,400 meters above sea level (at this point along the course of the Lucumayo, the elevation of the adjacent valley floor is only 1,300 meters), while Inkacarcel is similarly positioned at an altitude of 2,310 meters. There are several points along the roadway in between Inkacarcel and Qochapata where the route descends several hundred meters to cross through a number of small *quebradas* - cut by several tributary streams that flow into the Urubamba at a point upstream of its confluence with the Lucumayo.

The Qochapata-Inkacarcel high road shows no evidence of the kind of stone paving and boundary walls that were noted in the survey of the low road. Today the route is as an occasionally trod footpath, used by local people moving between the tea fields that are found in some of the larger tributary *quebradas* of the main valley. However, the fact that the route passes through two Inka sites, and at multiple points intermediary points shows evidence of pre-colonial constructions, confirms it is indeed of Inka date originally. These evidences include masonry-built retention walls, stone steps, formal stairways and bridges. Bridges are in fact the principal foci of the various architectural embellishments along the road, and almost all the other formal constructions are near to or directly associated with them. The road passes over three tributary streams between Inkacarcel and Qochapata, and each watercourse has an Inka bridge complex associated with the crossing point. These have been labeled bridge complexes A, B and C (see figure 5.7).



**Figure 5.7.** *The high road between Inkacarcel and the site of Qochapata.*

Bridge complex A is now the least-well preserved of the three, and was severely damaged by the inundation and flooding that took place during the 2010-11 wet season. During the first survey of the area, a substantial stone stairway was noted on the western side of the river-crossing that ascended towards the ridge where Qochapata is located. However this feature

was completely swept away by the time of the return visit and so could not be recorded in detail. No remains of a bridge are currently visible on either side of the river, although a portion of the road on the opposite side to the former stairway has been retained by stone masonry. The fact that there are two areas of Inka construction directly opposite each other, on opposing sides of the watercourse, makes it extremely likely that a formal bridge structure once existed there.



**Figure 5.8.** *Crossing at Bridge Complex B, seen looking east. Note the wall of the associated enclosure in the background.*

Bridge Complex B consists in quite an elaborate set of structures when considering that the stream it crosses is rather small - only around 2 meters wide and 0.2 meters in depth. Even lacking a bridge, it could be forded on foot with little difficulty. Approaching from the west (and from the direction of Bridge Complex A) there is a series of eleven stone steps at a relatively gentle gradient before reaching a retained section of the road. This retention wall runs for an additional 13.5 meters past the portion that is stepped, before reaching the bridge proper. It is difficult to give a precise width for the road since it is not paved; however in the segment with the stone steps it averages around 2.10 meters. Although the Inkas are widely known for their impressive suspension bridges, there are no deep gorges in the Amaybamba that would require such constructions – and the bridges there are all fairly simple and small-scale. The bridge structure at complex B is typical in this respect and consists of two stone abutments that are spanned by a simple wooden superstructure. There is evidence of a retaining wingwall on the southern ends of the abutment on the eastern side of the stream, although not on its counterpart. There are no visible remains, of either steps or retention walls, where the road picks up again on the western side of the stream.

Setting aside the bridge proper and the construction features associated with the road itself, Bridge Complex B is notable in that there are several related structures on the southern side of the road in the vicinity of the crossing point. One of these is some form of dry-stone walled 'enclosure', although it is difficult to classify further. It is trapezoidal in shape and measures 6.7 by 18.1 meters, with no discernible entrances. The eastern side of the enclosure has no stone wall bounding it, although the terrain is strongly sloping on this side forming a 'natural' wall to close off the interior space. The thickness of the wall averages between 0.65 and 0.75 meters.



On the eastern side of the bridge is a second enclosure that is similar in construction, although it is more irregular in shape. This enclosure does have an entrance on its eastern side.

The enclosure with an entrance incorporates a large bedrock outcrop on one of its sides, measuring over 12.8 meters in length. At the base of this outcrop, near ground level on its northern side is a small rectilinear niche which shows signs of modification/construction. The niche appears to have been a natural cavity that has been augmented by blocks of schist, which have possibly been worked, to form a more regular, rectilinear shape. It is up to 0.4 meters in height and 0.35 in width. The depth of the niche was difficult to measure, but it extends at least a meter under the outcrop. Additional modification was noted on top of the rock outcrop, in the form of a 0.9 meter high 'monolith' that juts out from the top of the otherwise flat upper surface. This angular piece of rock appears to have been deliberately inserted into the outcrop.



**Figure 5.9.** *Photos of modified alcove in the base of rock outcrop at Bridge Complex B (left) and of stone monolith inserted into the upper surface of the same outcrop (right). A modern plastic barrel has been wedged into the alcove.*

Bridge Complex C exhibits a similar dry stone masonry enclosure that is bisected by a small stream, although at present the flow of water is little more than a trickle. The 'bridge' is less of a formal crossing, so much as a stone construction with an open culvert that modifies the course of the water flow. There were no rock outcrops associated with Bridge Complex C, or formalized sections of road with either steps or retention walls.



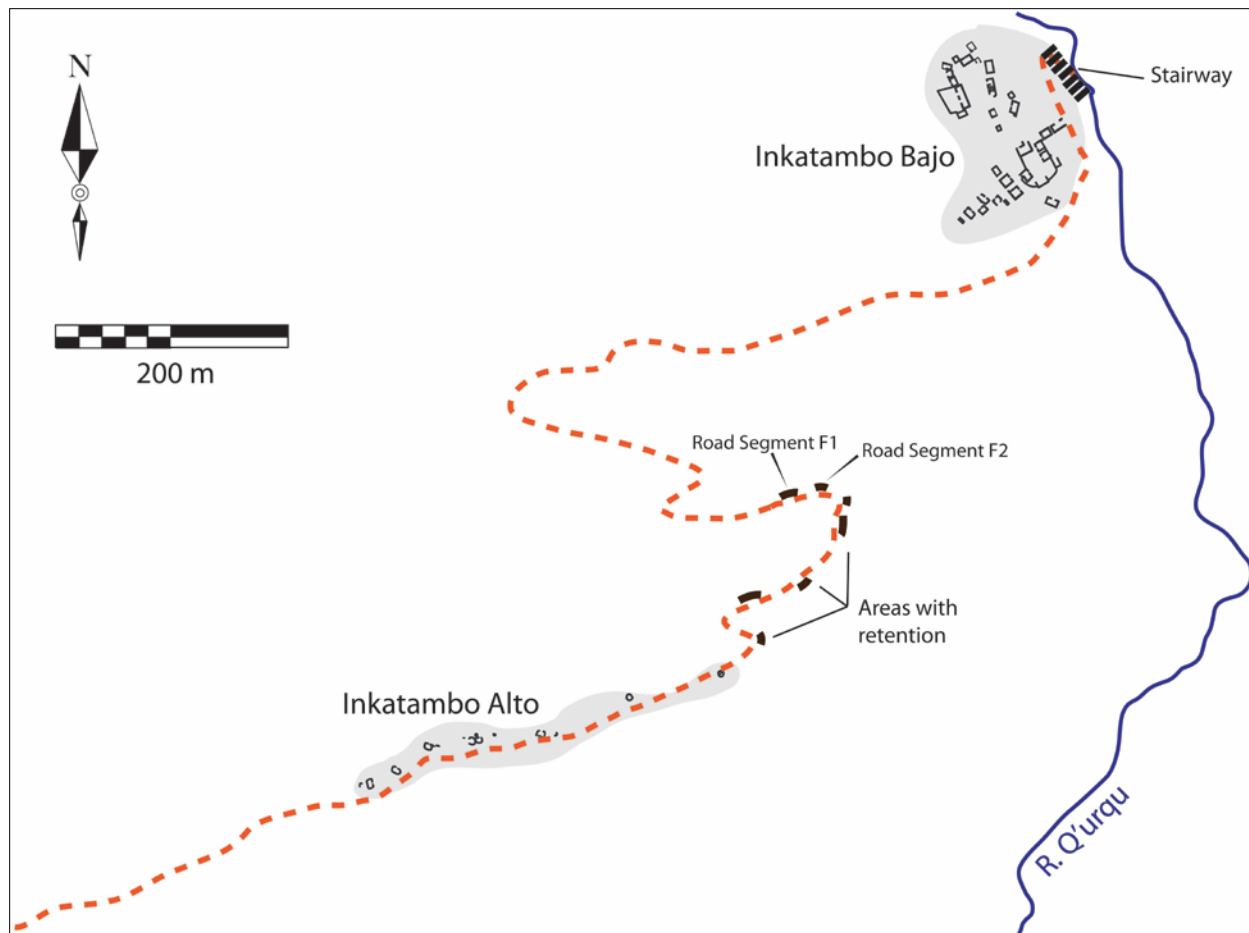
**Figure 5.10.** *Portion of retained wall along road at Qochapata, seen looking southwest.*

The portion of the road which runs through Qochapata itself shows evidence of partial retention along a section that runs northwest-southeast for 95 meters. The construction of these walls is (like the architecture of the site itself) of local schist masonry blocks. The height of the retention varies, but is often over a meter. Along the aforementioned 95 meter stretch of road, at least five individual portions of retention were noted; however it is unclear if any of

these were connected by walls that have since collapsed. With the exception of Bridge Complex B, no other areas of retention were noted along the Qochapata-Inkacarcel high road.

#### IV. The high road between Inkatambo Bajo and Alto

The third portion of road surveyed is located in the eastern edge of the survey zone, approximately 6.5 kilometers southeast of the Wamanmarka complex. This section of the highway ascends from the Late Horizon site of Inkatambo Bajo and runs through the earlier LIP site of Inkatambo Alto as it climbs along the ridge. Like the high road near Inkacarcel in the western end of the survey zone, this portion of the Inka road was also unpaved and only identifiable on the ground through its continued use as a foot trail up to the present. However, seven possible sections of stone retaining wall were noted along the route between the two sites, confirming its pre-colonial origins. Three of these sections were well-preserved, while the remaining four are more tentatively identified since they appear to have degraded significantly. Some of these now separate sections may have been originally connected, but have since fragmented due to erosion and collapse. The areas of retention are situated on a pronounced ridge and are heavily exposed to the elements.

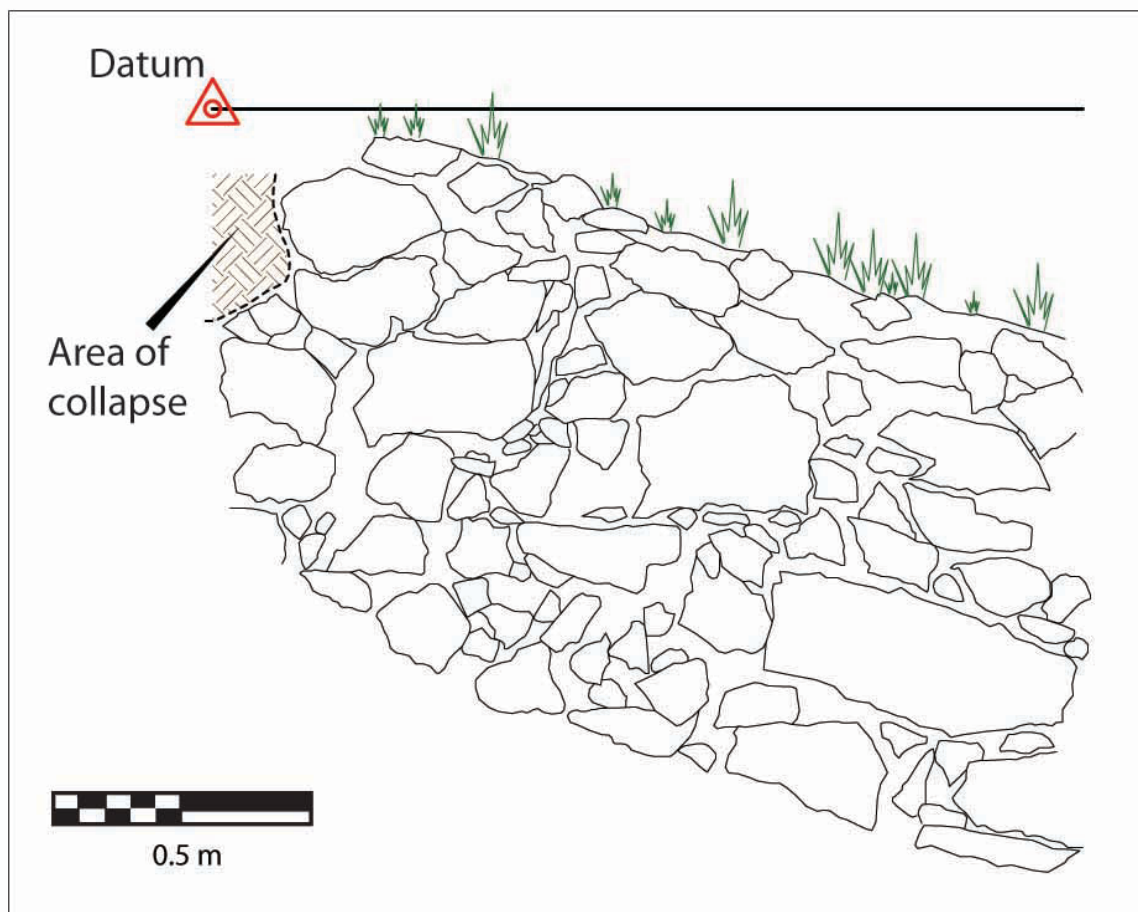


**Figure 5.11.** *The Inkatambo Bajo to Inkatambo Alto high road.*

The height of the retaining wall varied, and was in most cases fairly limited (i.e. less than 0.15 meters in height), which may reflect collapse since the road fell out of regular maintenance. However, the two lowest retained sections are well-preserved and provide a sense of the original construction. These portions of the route (labeled Road Segment F1 and F2) run diagonally along the slope below Inkatambo Bajo - both are similar in length with the upper (F2) and lower (F1) sections of retention measuring 8.0 and 8.10 metres respectively. The thickness of the retaining wall in Road Segment F1 was easily determined due to a portion of it that had

collapsed, and is 0.42 meters in width. The height of the retaining walls in both segments varied, and was greatest in the middle portion of each, where it ranged between 1.8 and 1.85 meters.

The gradient of the slope in Segment F1 was  $15^\circ$  and because of the surviving retaining wall it was possible to measure the width of the surface created by the original road cut, which was approximately 2.7 meters. There was no evidence for steps along the road surface. The construction of the retaining walls was of fieldstone masonry (locally acquired and unworked blocks of schist identical to that used in the architecture at sites of Inkatambo Alto and Bajo) bonded with a mud mortar.



**Figure 5.12.** Profile view of the retaining wall in Road Segment F1, seen looking south.

Although the road runs through both an LIP site and a Late Horizon site, it seems more likely that its origins as a formalized route (with retaining walls and measuring over 2 meters in width) are best placed within the latter time period. Although Middle Horizon precursors to Inka roads are well-known, the kind of small-scale Late Intermediate Period communities such as that represented by the remains at Inkatambo Alto (see chapter two) are unlikely to have engaged in such formal road-building projects. That said, the style of construction of the retaining walls is similar to that found in the nearby LIP residential structures, so the possibility of a temporal as well as spatial association cannot be ruled out on the available evidence. Given the impressive Inka stairway built along the road, just below the Inkatambo Bajo site, it is certain the route was in formal use while the Amaybamba was incorporated into the Inka Empire. It remains unclear just how meaningful the choice to run the road through the (presumably then abandoned) LIP site was. It may have simply reflected the fact that this was a long-established route that the Inkas wished to formalize. Alternatively, the association between the road and a ruined settlement belonging to the valley's conquered population may have been a quite deliberate gesture with political implications. However, I am hesitant to read too much into the association without further lines of evidence in this respect.

## V. Roadside Subjects

...it is not enough to regard the surface as a taken-for-granted backdrop for the lines that are inscribed upon it (Ingold 2007: 39).

Roads are a growing area of anthropological interest, both as ethnographic and archaeological artifacts. And they are extraordinarily complicated artifacts, rich and multi-faceted in what they 'mean' and what they 'do'. As DiNovelli-Lang (2010: 71-2) points out in her ethnography of roads in contemporary Alaska, the physicality of the road offers an almost paradigmatic example of non-human agency. How it is experienced and how it orders the world around it varies from species to species, and depends on whether one wishes to cross it, travel upon it or evade it. As DiNovelli-Lang (2010: 72) puts it, 'the road produces, mediates and gathers equally well'.

I agree that roads offer an excellent site from which to consider non-human forms of agency, however in my analysis the road is a different sort of non-human from the mountains and rock outcrops that have been the foci of other chapters. Unlike *wak'as*, I do not necessarily think the Inka roads in the Amaybamba are best understood as a form of non-human subject. On empirical grounds, there is no evidence of person-like qualities (as understood from a Western perspective) being attributed to highways by indigenous Andeans<sup>3</sup>. While we might, from the perspective of a symmetrical ontology, desire to break down distinctions between roads and human actors insofar as we attempt to assign agency – if our aim is to pay attention to Inka alterity, then we must also take account of the fact that roads do not appear within Inka practices as non-human persons. Indeed, within Tawantinsuyu, roads seem to have been more like a means to government, rather than its object. This fact underscores the importance of not collapsing too broad a range of things into the (Western) category of the non-human, at least in

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<sup>3</sup> This point also relates to the discussion in chapter one on the distinction between political agency and political subjectivity. Roads do not seem to have been constituents of the Inka polity.

the final analysis. The Inka Empire was a state which incorporated non-human subjects, it is true, but still only *very specific* communities of non-humans were involved. Distinguishing between these different sets of non-humans in terms of Inka ontology is thus one of the central aims of my analysis.

Instead of being ‘persons’ then, roads might be better thought of as places - but if so they are of an unusual kind; for they are the places that connect other places. For archaeologists particularly, they are not generally sites in themselves, but the lines that join them together. Moreover, roads seem to lend themselves to distinctive modes of description; as illustrated in my own account in the first part of this chapter. In other words, we seldom locate roads spatially by saying where roads are - like we do with sites - instead we say where they *go*.

The renewed anthropological interest in roads seems tied to current questions and anxieties about modernity itself. For example, modernity (or supermodernity<sup>4</sup>) is typified by the ‘non-place’, according to Marc Augé. These are the places, ever-proliferating in the contemporary world, that fail to acquire the status of full places. They lack the meaningfulness that other places might have (such as the personal intimacy of the home, or the historic depth and sanctity of a church). In particular, the ‘traveler’s space may thus be the archetype of [the] *non-place*’ (Augé 1995: 86; emphasis in original). The most prominent examples of non-places we

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<sup>4</sup> The term ‘supermodernity’ as used to describe the late(est) phase of the modern condition is becoming increasingly common in humanities scholarship. Marc Augé (1995) deploys it to frame his discussion of ‘non-places’, and most subsequent uses of the term loosely follow his coinage. Archaeologists of the contemporary past have also found it a productive notion. González-Ruibal (2008) defines it as the post-World War I period in the globalized West, typified by the increased marking of space with the remnants of material destruction. This includes the ostensibly exceptional destruction of battlefields and post-industrial decay, as well as the banal destruction of everyday consumption that continuously builds up around us in our overflowing landfills. Under supermodernity there are more and more ruins and they are getting younger and younger.



encounter are therefore the airports and motorways that are the paths and nodes as we move between full places. Therefore, as we inhabitants of modernity think about roads and what they represent, the potential danger is that our own experiences of roads as archetypal non-places is potentially skewing. There is something strikingly modern about the idea of the lone driver on the contemporary interstate highway, rendered bored and exhausted by the continuous, monotonous and unbroken motion - an experience so anodyne that he or she needs to load his or her body with stimulants of varying strengths simply to sustain consciousness.

Moreover, it is difficult not to immediately sense the deep contrast between Augé's account of the modern road as a non-place and Castro et al.'s (2004: 474) evocative description of Inka roads cited above, as 'lleno de signifiados' (filled with significances). Certainly, it would seem that the modern and exhaustingly 'empty' roads of modernity<sup>5</sup> are not a good lens from which to view the Inka experience of the highways that sustained their empire, nor that of the subject communities of humans the road network inevitably pulled in. Roads were very much *places* (rather than non-places) in the ancient Andes and filled with significance. The architectural elaborations and modified rock outcrops that we see at the crossing points along the Qochapata-Inkacarcel high road seem to attest to this basic fact. Rocks and the earth were

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<sup>5</sup> I do not mean to suggest here that the non-place understanding of roads fully encapsulates the modern experience. There is also the opposing 'romantic' ideal of road travel, perhaps most fully expressed in Kerouac's 1957 novel *On the Road*. That being said, the romantic road of modernity is necessarily a marginal place. We look for that experience along paths such as *historic* Route 66 and specially marked 'scenic' drives. The freeways and the interstate system that dominate ordinary and everyday travel, for truckers and commuters alike, lack this romance. These set-aside romantic roads are not unlike ruins. No longer fulfilling the primary economic function for which they were originally designed, they are now partially 'relict', allowing the traveler to experience the spaces that modern capital once inhabited, and from which it has since moved on to fresher frontiers.

being deliberately sculpted at these crossing points along the Inka road. Thus, the alienation often associated with the road-space seems a very modern trope that we need to carefully think about as we seek to interpret roads that were clearly non-modern in their logics.

Ingold offers a related perspective with respect to the alienating experience of the modern road, distinguishing between two basic modes of moving around which he calls 'wayfaring' and 'transport'. According to Ingold (2006: 26) the,

...wayfarer wends hither and thither, and may even pause here and there before moving on. But it has no beginning or end. While on the trail the wayfarer is always somewhere, yet every 'somewhere' is on the way to somewhere else.

Whereas 'transport' for him is something quite different, reflecting a mode of travel that is,

...tied to specific locations. Every move serves the purpose of relocating persons and their effects, and is oriented to a specific destination. The traveler who departs from one location and arrives at another is, in between, *nowhere at all*. (Ingold 2006: 26-27; my emphasis)

Transport in Ingold's description seems not unlike the kind of movement that produces the experience of non-places for Marc Augé; it involves the airports and highways that are never the point of the journey, but simply the undifferentiated and 'barren' transit points along the way. Ingold's notion of wayfaring by contrast appears to be a condition in which the journey matters more than the destinations. If that sounds like the clichéd advertising slogan of an

alternative travel company, I am not sure the resemblance is entirely co-incidental. Theorists of modernity are often exhausted by the alienation and disenchantment they feel it generates, leading to a tendency to romanticize the imagined 'alternative'. So while the Inka road is not necessarily the modern road of the alienated non-place, it would be wise to avoid compensating for this by making it sound like the site of some more authentic engagement with the landscape-in-motion and the specificities of place. I am not convinced that the subjects of the Inka Empire were any more wayfarers than they were transportees, to use Ingoldian terms.

Most archaeological studies of roads generally assume a largely functional rationale, whereby roads are primarily conceived as important insofar as they connect places. Such approaches tend to emphasize rationalist purposes, particularly their perceived economic and military uses. Monica Smith (2005: 839-40; see also Jenkins 2001) for example, uses the Inka road system to argue that Tawantinsuyu was a networked (as opposed to territorially contiguous) polity that connected populations and areas with important resources. Thus the efficient movement of goods for trade and the rapid movement of soldiers for conquest are seen as the basic reasons why roads were constructed and why they were so important in ancient contexts such as the Inka Empire. Symbolic or ideological functions, while acknowledged to be present, tend to be 'additional' to the primary rationalistic functions. For example, Coben (2010: 59) uses the case of a double Inka road that runs to Incallacta in Boliva as an example of a ritual highway, since *contra* Hyslop (1984) there is no rational explanation for the road's doubling (as a response to seasonal drainage requirements, for example).

When archaeologists do consider roads beyond the questions of their 'functionality', the scale is usually a grand one. It is the view from the center that animates the interest, because centers are of course hyper-meaningful places, by definition - overloaded with significance and so very unlike non-places. Laurence's (1999) account of the Roman road system is a good example of this emphasis on the political center, where he argues that Roman ideological hegemony was furthered through everyday experiences of the pan-imperial network of highways. The Inka view as seen from Cuzco was not dissimilar; the roads they built were the tendrils of their dominion and so also the conceptual and practical foundation of their power. This claim is explicitly made by Cieza de León (1553; cited in Hyslop 1984: 341) who states that, 'the Indians, to keep track of what they have in such a great land, comprehend it by means of their roads'. Given our modernist biases it is easier to think about the politics of the pan-imperial network that unites the center and the periphery and orders the world; for its 'symbolism' is obvious to us in certain respects. But the idea that 'all roads lead to Rome' tells us more about Rome than it does about the roads themselves. This is the road simultaneously as cosmos and cosmogram - the spokes of the world-wheel. It is both a generator of cosmic order as well as an icon of it. Yet the meaning of a water channel that crosses a provincial road running through the forests seems less obvious, and more likely to be classed as 'just' a drainage feature. The meaning of roads seem easier to elucidate at the grander scales.

In general, archaeological studies of roads, especially whether the focus is on function or ideology, tend to see the road from the travelers' point of view. Roads as artifacts are assumed to primarily be about movement and shifting of individuals or groups in space. This is clearly

seen in one recently published set of synthetic essays on roads and paths, which was introduced with the claim,

...the rising influence of landscape archaeology has provided the opportunity for a revolution in the study of trails, paths and roads... Movement is a central component of many of the influential landscape studies of the past two decades. Landscapes of movement imply a focus on pattern, scale, context and association incorporating the fabric of the features themselves. (Snead et al. 2011: 3)

Of course I do not wish to suggest that it is an error to focus on movement when talking about such things as roads, for that is surely an important element – however, the experience of roads is not always that of the traveler. In particular, a different set of questions are raised when we ask not what the road was for those who go on it, but rather for those who live beside it. This is particularly relevant in the Inka case where the *mitmaqkuna* who worked in the coca fields of the Amaybamba may very seldom have travelled any distance on the road that ran through their valley. Inka highways were not akin to public infrastructures which could be used by all for their own private purposes. Instead they were technologies of state power and (at least in theory) and were only to be used by authorized individuals or groups acting at the behest of the empire (Hyslop 1984: 2).

Anthropologists of place have tended to focus on movement from the perspective of the movers themselves - on the passers-by, rather than the passed-by. Perhaps this focus on movement is (at least in part) because anthropologists tend to be a fairly mobile group themselves, spending much of their time literally *on* the road. That is how I have often thought

of my personal movements within the Amaybamba, sitting in an overloaded *combi* and tracing the path of the modern vehicle highway that closely follows the route of the pre-colonial road. While moving along the valley floor during fieldwork, or heading back to Cuzco at the season's end, I have often wondered what it would have been like to travel this road in Inka times - considering how the landscape might have looked different, or how it might have looked the same. It only occurred to me later on to wonder what it would have been like to *not travel* on this road - to live life at the side of the road rather than on it. Anthropologists are classic cosmopolitans for whom the road is a means to visit exotic locations around the globe and so they habitually think of such artifacts in terms of long distance connections. It sometimes requires conscious effort to resituate the idea of the road as not a technology for movement, but rather something quite different.

One means to reconsider roads is to shift the emphasis away from seeing them as pathways and lines of movement within a landscape, and instead think of them in terms of fixed *material infrastructure*. Anthropological interest in infrastructure as a category of study has grown in recent years, and in many ways it has proven a fruitful lens for thinking about transformed landscapes, particularly in contexts of colonial or imperial expansion. Infrastructure has thus emerged as a dominant theme in a number of recent ethnographic works (e.g. Dalakoglou 2012; Humphrey 2005) particularly with respect to urban and postcolonial environments. It has also been of some considerable interest to archaeologists of the contemporary past – seen in Victor Buchli's (2000) work on Soviet and post-Soviet material culture in Central Asia and Harrison's (2009) archaeology of the British welfare state. A groundbreaking anthropological study of infrastructure in the context of imperialism is seen in Brian Larkin's (2008) analysis of media

infrastructures in British colonial Nigeria. Central to Larkin's work is the question: what kinds of subjects are produced by particular infrastructural projects in imperial contexts? This is a question that seems quite relevant to my own efforts to understand the Inka transport infrastructure in the Amaybamba.

My interest in seeing roads as infrastructure rather than pathways, arises from the fact that it shifts the analysis away from engagements based on movement and towards acts of maintenance. The distinction then is between the road as a means of conveyance (people, goods, ideas and so on) and roads as something that demands to be curated on a daily basis. This bias toward movement is particularly evident I think in phenomenological accounts in landscape archaeology, where analysis nearly always proceeds from the perspective of the ego-in-motion (e.g. Tilley 1994). Thus paths and roadways have generally been interpreted as social artifacts from the perspective of the (imagined) traveler, who would have walked or rode along them. Yet for many people in the Inka Empire, the roads were not primarily used by them, but by others. One sixteenth-century account describes a procession of the Inka emperor through Cajamarca, saying 'there were in front of him... many Indians who cleaned the road in spite of the fact that it was rather clean and there was nothing to pick up' (cited in Hyslop 1984: 341). If cleaning roads was a duty which was of concern to the Inkas, it seems worthwhile to consider the road system from the perspective of those whose primary relationship with it was one of maintenance and curation, rather than travel. The road is of course still a central presence in the daily lives of such workers, but the analytical frame is a very different to the dominant concern with movement found in many archaeological studies.

Roads need to be materially perpetuated, and the Amaybamba roads in particular required certain kinds of ongoing maintenance. The regrowth of vegetation and brush in the Amaybamba is striking for the rapidity at which it occurs. Inka road surfaces that were fully cleaned and cleared during the survey project, were entirely covered over by grasses when revisited a few months later. Encroachments of vegetation upon the surface would therefore have had to have been regularly controlled by cleaning. Moreover, the frequent inundations produced by the rains would have generated a constant need for repair and maintenance with respect to the drainage channels, steps and bridges that were part of the highway infrastructure. Thus it seems likely that many in the Amaybamba would have spent more time on the upkeep of the road than using it to reach far off locations.

The locations for the roads in the Amaybamba are also worth some commentary in this vein. Although the two high roads in the Amaybamba are situated with respect to the local topography in a way typical of Inka roads elsewhere, the low road is unusual in this respect. It is rare to have the main transport artery for an area run through a valley bottom in the eastern Andes. Inka roads tend to run on slopes, often around the mid-way point, at a more-or-less horizontal keel, except for areas where the topography itself descends or ascends. This pattern is seen throughout the near-Cuzco portions of Antisuyu in general, including the valleys adjacent to the Amaybamba. For example the Inka roads that are associated with Machu Picchu run along the upper slopes of the mountains that flank the Urubamba Valley on its southern side. Similarly the known roads that run to the west of the bridge at Chuqichaka toward Vitcos-Rosaspata, and from there to the surrounding areas, are predominantly found on the slopes rather than along the valley floor (von Kaupp and Carrasco 2010: 15, 149-61) .





**Figure 5.13.** *Photograph of a cleaned portion of the Amaybamba low road, with vegetation visible in the background.*

Situating the road directly above the course of the river (as see with the Amaybamba low road) considerably increases the amount of labour that must be devoted to its maintenance, especially in the eastern slopes of Antisuyu where the rainfall and run-off volumes are higher than elsewhere. A rivercourse (by definition) is the point in any watershed which experiences

the maximum degree of inundation and the greatest levels of accumulated run-off. The impact of situating a roadway in such a position may be relatively minimal in the more arid highland valleys of the Andes (and utterly inconsequential on the coastal desert), but in the cloud forest zone it considerably increases labor costs associated with road upkeep. In part, this explains the high frequency of drainage features noted along the low road. The question then is: what logic explains the decision to build the Inka road in a location that would have required much greater effort to maintain; especially when this was not the normal practice observed throughout the empire or even within the Cuzco-Vilcabamba region?

In this context it is worth thinking about the general Inka view of their imperial project and the situation of the Amaybamba within that broader framework. Tawantinsuyu, the Inka name of their empire translates as ‘the four parts made whole’. These parts of empire were the four *suyus* that expanded outwards from the cosmic center of Cuzco – Antisuyu, Kuntisuyu, Kollasuyu and Chinchaysuyu. However as Urton’s (1997) important study of Quechua numerical and mathematical ontology makes clear, the fact that the Inka Empire was made up of four provinces was far from incidental. Tawantinsuyu was not simply composed of four different territories in the same way the Roman Empire *happened to be* organized into between thirty and forty separate provinces. The concept of Tawantinsuyu not only implies four elements brought together as expressed in the linguistic components *tawa* (‘four’) and *suyu* (‘part’) - the linking notion of *-ntin* incorporates the sense of a part-to-whole relationship that is brought back into a condition of harmonious order and natural balance (Urton 1997: 63-5). In more general terms, the related concept of *tawantinman* refers to the idea of four peripheral points of reference that converge, forming a fifth central point – an example of which might be seen in

how the four *suyus* of Tawantinsuyu converged on the capital of Cuzco (Urton 1997: 226). The grouping of five frequently appears in Quechua numerical ontology as the epitome of order and natural harmony, as seen in the five fingers of the hand or the five components of the idealized family unit (Urton 1997: 80-1).

We might compare this Inka understanding of their imperial project with the very common notion of the *mission civilisatrice*, the idea commonly held by empires across time and space that they are the unique font of civilization and proper order in the world. Certainly Tawantinsuyu entailed something like this, but its version of the civilizing burden had very specific contours bound up with Andean concepts of mathematical integration. Moreover, the Inka's roads were fundamental to this process of engendering the order they sought to bring to the world. The road system of the empire originated in Cuzco, which had four principal roads that began (or ended, depending on one's point of view) in its central plaza and each was associated with one of the four *suyus* (Bauer 1998; Covey 2006: 210-1).

The Inkas sought to impose order on the world and the roads of the empire both expressed and actualized this harmonious unity they claimed to offer. This notion is a classic view from the center, as I discussed above. But it is worth remembering that cosmic order must be energetically sustained at both the microcosmic as well as macrocosmic levels. The Antisuyu road, the line which runs through the eastern forests and of which the Amaybamba low road is a part was an element in this general process of *tawantinman*. It was also the path to and through the most chaotic and disordered space in the Inka world, the eastern forests. Cleaning and repairing the drains of the Amaybamba low road was no less a battleground in the struggle

of order over chaos than the great campaigns of the Inkas against the rebellious Cañaris or Caranqui peoples. Nor was the task of keeping the plants at bay any less an instantiation of empire-building, despite the apparently mundane scale.

The instantiation of imperial order we are talking about here is less the grand design that is dropped down on the landscape from on high, but more the small-scale struggle against the ever-present threat of decay and engulfment that such material infrastructure materializes. Archaeological studies of power have tended to emphasize the macrocosmic scale - in other words, the hegemonic beliefs of the center and the grand strategies of imperialism. But power resides no less at the level of the people whose job it is to keep the roads clean. Perhaps this might explain to some degree why the Amaybamba low road runs across the frequently inundated valley floor, where it would have required more exertion to maintain than had it been built elsewhere. It certainly was not a non-place, that is a merely empty line of conveyance that connected sites, but neither was it a wayfarer's path, so many nodes in a line of authentic and place-bound travels. Rather it was a battleground of (Incaic) order against lowland chaos. In that struggle both the road and its maintainers were necessary recruits.

Moreover, such microcosmic power also further reminds us of the weaknesses of ideology alone as a basis for explaining how exactly ancient elites managed to perpetuate belief systems among the masses they governed. While archaeologists are often good at describing the content of state ideologies, the explanation of how the beliefs are practically disseminated and how they are internalized is usually much weaker. Indeed, the supposed existence of such beliefs is usually sufficient explanation for the effectiveness of such beliefs. However the simple

demand of the road to be cleaned and maintained allows some avenues away from overt ideology as a form of archaeological explanation. Such a task as cleaning requires no elaborate indoctrination or ideological manipulation (the mechanisms for which seem unclear in the Amaybamba anyway). Without constant maintenance, infrastructure will decay and degrade. Thus its upkeep must be incorporated into daily routines and activities. So something as basic as cleaning the drains on the Amaybamba low road can become a means of furthering the Inka imperial project, even though it is hardly an elaborate ideological manifestation of Inka authority such as might be seen in state-sponsored iconography or public displays. And perhaps as a mode of power, that makes it all the more effective - for it can be done without thinking.

Questions of power and politics have never been very far from archaeological studies of roads, but this concern has tended to be manifest in one of two forms. The first is roads provide a basic technological device for achieving economic, military and governmental ends. And in the context of the Inka Empire I would certainly not wish to downplay the central importance of these factors. This approach to roads emphasizes their role in moving people and things – as the connective tissue that binds vast sprawling polities together, and thus makes the entire system cohere. Equally relevant to the Inka Empire is the road as an icon of power and as the representation which defines the center. This too is a central aspect of the ways in which Inka roads were tied into Inka statecraft. However it has been my goal in this chapter to demonstrate that these twin interpretive approaches do not exhaust the political dimensions of roadbuilding projects. Moreover, they both rely on a bias towards movement which, although obviously very important, is not the totality of how one might experience roads.

These two basic interpretive approaches to roads are also seen beyond the Inka context. Take for comparative purposes the most famous transport network of ancient North America – the Chacoan roads. These pathways have been an object of detailed archaeological research for some time and have attracted almost as much interest as their South American counterpart (e.g. Kantner 1997; Stein 1983; Stein and McKenna 1988). Similarly, the Chacoan roads have been seen in two distinct lights. Mathien (1991), for example, considers them in terms of the movement of goods and people, and as facilitators of economic integration and long-distance communication. Roads are energetically more efficient for travelers and thus are a technology which makes certain connections more feasible. Alternatively, and more recently there is the emphasis on the roads as defining a cosmological center (e.g. Gabriel 1991; Marshall 1997), which for some has included an explicitly phenomenological framework (esp. Van Dyke 2008). Yet neither approach really devotes much attention to roads beyond questions of movement and transport – something that we must do if we seek to conceptualize such artifacts as instantiations of material infrastructure. For phenomenologists, the subjective experience of roads is almost universally one of moving on them, not maintaining them. While other approaches have considered maintenance of Chacoan roads (e.g. Mathien 1991) this is only as a proxy for quantifying social complexity (through labor expenditure). Thus the arguments I have made with respect to the Amaybamba roads I believe have a more global relevance and there is value in archaeologists taking an infrastructural perspective on road projects in other non-modern contexts, even if we would not necessarily expect the analysis to yield the same conclusions at, say, Chaco as it might for the Inkas.

In this brief chapter I have tried to convey that there is nothing less power-laden about the day-to-day cleaning of roads and emptying drains. It therefore says something about how power was reproduced in the Inka Empire, but also more locally within the Amaybamba as well – bearing in mind that the road there was unusual with respect to certain aspects of Inka highways throughout the empire. The emphasis on quotidian matters also reminds us that the division between what seems to us to be functional and ritualistic can be misleading in the understanding of pre-colonial Andean worlds and their ontological frameworks. Moreover, such everyday things require more explicit marking in our analyses precisely because they do not appear so overtly or performatively ‘political’.

This chapter is also intended to accomplish one further goal within the broader context of the dissertation. As I have stated, the overarching aim of the analysis is to consider the non-human subjects of the Inka Empire, and how they operated within a political ontology quite distinct from our modern, Western one. As a result, the majority of the dissertation focuses on non-humans such as mountains and rock outcrops. This I think is a necessary move since non-human subjects have largely been excluded from the analysis of politics within Inka contexts, and indeed most archaeological studies of non-modern polities generally. That said, humans are far from unimportant – and in this chapter at least, have taken a more central role in the presentation. So, although humans have been strategically set aside somewhat in the other chapters, this is intended as a corrective to their traditional *overemphasis* in accounts of ancient politics. This is not to suggest that in the final analysis they do not matter deeply.

## Chapter Six: Lithic Subjects at Empire's Edge

### I. On the Alterity of Inka Architecture

Various aspects of Inka built spaces have been presented as essential to their architectural-aesthetic tradition: the predilection for trapezoidal apertures, the use of cut masonry blocks so finely joined that bonding mortar was unnecessary and the near-absence of any kind of iconographic embellishments or ornamentation. Yet perhaps most distinctive of all is the blending of constructed spaces with their surrounding landscapes – to the point where the natural and built environments appear somewhat blurred. These all certainly seem to have been core elements within Inka approaches to built spaces and much could be said about them in turn, and the relationship of each to the others. All architecture must adapt itself to the what was there before, wherever it is produced, and so it is a truism to say that such material negotiations are found in all times and places. Yet the Inkas were especially striking in this respect. To our eyes at least, their blending of landscape and site seems to exhibit a level of virtuosity for which there are few rivals - ancient or modern - and a simultaneous concern for the melding of nature and artifice to a degree that appears to exceed most other civilizations. This quality of Inka architecture is best exemplified in the grand sweeping terraces of royal centers such as Machu Picchu, Písac and Ollantaytambo and how the built landscape at these places reshapes and simultaneously accommodates the underlying topography – reflecting, we



presume, some deeply ingrained principles with respect to how engagements with the material world ought to proceed (van de Guchte 1999).

However, my aim in this chapter is to focus on another of those 'quintessences' of Inka built spaces, namely the integration of native rock outcrops with stone architecture and carving. The inclusion of bedrock formations in Inka sites is often taken as one of the key arenas for observing their blending of constructed space and natural landscape, while also being seen as indicative of a preference for aesthetic elaborations that are abstract, aniconic and derived from unmodified natural forms. Yet any examination of such sites must begin with a critical reflection on the fact that Inka engagements with rock have long struck us as especially emblematic of their alterity. While much of the infrastructure of the Inka Empire – its roads, canals, bridges, storehouses, fortresses and plazas - all make a certain sense to us, its elaborately carved rock outcrops are another matter. By contrast, they offer us something altogether different, not so 'rational' seeming and by extension much less *explicable*.

This sense of inexplicability and perplexity has been aptly expressed by John Hyslop (1990: 103) who suggests that researchers 'may often wander in a sea of lost meaning as they walk among the boulders and outcrops of an Inka settlement'. That this enigmatic component of Inka built environments stands out so markedly in our eyes is perhaps not so surprising when one considers the contrasting architectural imprint left by the other ancient states with which we are most familiar. Walking among the ruins of classical Greece or Rome for example, we see much of our own architecture reflected back at us, canons we have sought to emulate through centuries of neo-classical revival beginning with the Renaissance. The architectural and

aesthetic forms of the Hellenistic past are hyper-saturated with meaning for any modern observer as a consequence of our now dominant genealogy of Western Civilization.

And yet even walking amidst the ruins of ostensibly more 'distant' civilizations - the Classic Maya, the ancient Egyptians, or the great empires of Near Eastern antiquity - there is still a seeming familiarity to it all. We look upon statues of rulers strewn across plazas, pedestals and fora, sitting atop temples and immortalized in postures of authority and power. We see friezes and stelae, where the images and words and deeds of 'Great Men' throughout the ages are commended to posterity. And of course, the gods too must be honoured, both in word and in icon. When we see these things we understand what we see - or at least we imagine we do - because we do all these things too. Any visitor to the great imperial cities of the modern world - to Washington DC, or London or Paris or Moscow - sees much the same sort of things; monuments, images and inscriptions dedicated to both gods and men. Certainly, the names of the rulers and the divinities may have changed and new languages may have replaced more ancient ones, but we still recognize the logic in what we are seeing, because ultimately it is a logic we (imagine we) share.

But the ruins of Inka civilization do not quite conform to these expectations. They are not as we would normally anticipate the traces of an ancient empire to appear. There are no statues, no elaborate friezes, no inscriptions, no stelae and precious few icons (so far as we can recognize). After the Inka had shaped their masonry and fit it together into the desired form, their general preference seems to have been to leave it without further ornament or accessory - at least in a form which survives today. It is true that there are occasional zoomorphic sculptures on

masonry blocks (in Cuzco, snakes are not unknown) but these are still quite rare. And perhaps most bizarre of all, across an empire that spanned over 4,000 kilometers, there is not a single statue or figurative representation of an identifiable ruler known to exist. That, quite frankly, is not what a great empire is supposed to look like. The standing architecture of the Inka Empire presents itself to us as so many anonymous walls and plazas, with no hint as to their royal patrons or the deities who their foundations were intended to honor.

It is difficult here not to think of the kinds of contrasting modern romantic responses that have been evoked by encounters with ruins and the fragments of the other ancient empires, and note the absence of such for the Inkas. Consider this excerpt from Shelley's (1818) famous sonnet that was inspired by an encounter with one of the many broken images of Rameses the Great that litter the temples of New Kingdom Egypt:

"My name is Ozymandias, king of kings:  
Look on my works, ye Mighty, and despair!"  
Nothing beside remains. Round the decay  
Of that colossal wreck, boundless and bare

In that disintegrated statue, Shelley saw an object lesson that was both universal and immediately translatable into his own world, a deeply iconic reminder that all empires must eventually fall, and all empire-builders with them. No doubt he was acutely aware too that his own native empire would one day pass away like its predecessors and its great works and rulers would leave ruins to be pondered by future travellers. As different a world as we might imagine the Egyptian New Kingdom to have been in comparison with the much later empire of the

British, a nineteenth-century traveler such as Shelly was *still* able to see a profound and uncanny glimpse of self in the other of Rameses' broken sandstone visage. It seems difficult to imagine how an Inka rock outcrop could inspire such reflections. Carved into steps and other geometric designs, its form seems a much more difficult surface from which to extract such timeless lessons. Whether in anonymous and abstract form, or nature left unaltered, the typical Inka integrated outcrop seems rich in enigmatic alterity rather than the nostalgic and desolate evocation of the mortality of empires.

Yet if such aniconic alterity is something quintessentially Inka, it also seems impossible to read in this mode of material expression something particularly representative of the Andes – for it is not all that typical of the Andes. Even a cursory survey of architectural history in the ancient Andes makes it clear that the Inkas in their preference for abstraction were as unusual with respect to their local predecessors as they were with respect to other archaic states around the world. One only has to think of such sites as Tiwanaku with its great anthropomorphic monolithic stelae, and its Gateway of the Sun, proffering an array of iconographically complex motifs, that have been described as encapsulating the 'metaphoric association between images of agropastoral productivity and the representation of royal office' (Kolata 1993: 141). While recent excavations at the Huaca de la Luna on the northern Peruvian coast have demonstrated that the ancient Moche too were quite willing to decorate their structures with iconographic abandon, creating extensive friezes as lurid and colorful as they were violent (Quilter 2001). Moreover, when we consider Initial Period sites like the Cerro Sechin with its striking stone façade replete with axe-wielding warriors and dismembered body parts, thought to date to at

least 1300 B.C. (Samaniego et al. 1985), it seems that such monumental iconographic traditions have deep roots indeed.



**Figure 6.1.** *Pre-Inka iconographic traditions in the Andes: the Ponce Stela (left) at the Middle Horizon monumental complex of Tiwanaku in Bolivia and in a frieze (right) from the Early Intermediate Period (Moche) site of Huaca de la Luna, Peru.*

The point I wish to underscore here is that Inka aniconism must be treated as a historically distinct phenomenon since it is neither a general feature of ancient nor modern Andean polities. Taken over the *longue durée* of the last four millennia (including the colonial era), Andean states have made frequent and dramatic use of iconography within architecture as well as a variety of other widely-circulated media. At that historical scale of analysis, the Late Horizon of the Inka Empire is something of an anomaly - a figurative lacuna in an otherwise dense field of iconographic expression. And not only is this relative aniconism expressed architecturally, but in Inka ceramics and textiles too, which during the Late Horizon were typically decorated with abstract motifs and patterns – again an often marked contrast to their Andean precursors in similar media.

In this respect there is something of an inconsistency in how archaeologists, taken as a whole, have sought to frame ancient Andean states. In contemporary archaeology it is widely accepted that the material cultural products of any given society are closely related to the underlying cosmological principles held by its members, something that is perhaps especially true in the context of highly inegalitarian polities. Often this is not so much a theoretical model that is consciously applied, but rather an unstated axiom that is expressed time and again in the assumptions underpinning much archaeological writing. With respect to the already mentioned ceremonial complex at Tiwanaku in Bolivia, Kolata (1993: 135) for example states that such 'monumental sculpture visually encoded the principle tenets of Tiwanaku state ideology and cosmology'. Similar sentiments are widespread within anthropology, and have in some cases been developed into a more fully realized theoretical model by notable Andeanists. The influential discussion in an essay by DeMarrais *et al.* (1996) on the 'materialization of ideology' is an excellent case in point. Critiquing an older tendency to see ideology as epiphenomenal with respect to the 'real' prime movers such as environment or political economy, DeMarrais, Castillo and Earle argue that in order for ideology to be propagated beyond a local group it is necessary for it to be given material form and they go on to suggest that this materialization is more acutely observed where societies consist of a ruling group seeking to extend its power over other, subordinate communities.

Yet if this is true, it cannot but be remarked on that there has been limited effort on the part of archaeologists to explain why Inka 'material culture' looks so dramatically different from that of its predecessors - especially those that formed large, hierarchical polities. Whether the medium is ceramic, textile, architecture or sculpture, the Inka tendency towards aniconism and

abstraction emerges in stark relief to many of its antecedents. While in the realm of settlement planning and site layout also, the fact that Inka sites are so topographically 'accommodating' is presented as a notable contrast to their predecessors, such as the rigidly cellular and gridded installations produced by the Wari Empire (van de Guchte 1999) which appear to ignore the underlying topography completely. Yet if the material worlds shaped by the Inka were so unusual with respect to those that lie deeper in Andean prehistory, must this not also imply a very different ideological or cosmological framework for the Inkas as compared with the Wari, the Tiwanaku, the Moche, the Nazca and so on? And yet the Inkas have much more frequently been taken as a model for interpreting earlier Andean states and empires, rather than been cast as a radical departure from them. One is left to wonder too at the frequent appeal to modern or historically documented Quechua or Aymara communities in the highlands, who are taken to be carriers (however partial) of remnant Inka (or primordially Andean) worldviews. For they too, just as the inhabitants of pre-Inka polities in the Andes once did, live in iconographically dense worlds.

Here then is the bind we find ourselves in. It is axiomatic that past communities made things and also thought about things in specific, historically situated ways. If we accept this, then we must surely take seriously the idea that in the material culture of such groups is reflected (however partially, imperfectly and dynamically) something of their ideas, cosmologies and conceptual forms. If we do not, then much of the entire enterprise of archaeological interpretation is called into question – especially with respect to its dominant theoretical trends over the last two decades (i.e. post-processualism). Yet if such is the case, Inka aniconism becomes the elephant in the room we cannot ignore. As archaeologists surely we must

somehow account for such an anomalous material signature in terms of the culture that produced it. It does not seem sustainable to simply continue drawing continuities across large swathes of time, connecting the Inkas to both more ancient as well as modern Andean communities, while carefully tip-toeing around the highly atypical material traces that the Inka artifactual horizon presents us.

The aim of this chapter is thus to address this seemingly archetypal manifestation of Inka 'aniconism', namely the architecturally-marked rock outcrop. Such entities exist in the Amaybamba, as they do in many Inka contexts. My goal then is to consider how we ought to think about these archaeological traces of the Inka Empire, especially in the light of the alterity they present to us. Moreover, the chronicles often present these outcrops as much more than mere rocks or architectonic embellishments. In many cases, particularly, they seem to represent a very important set of non-human subjects, of the kind that are the central concern of this dissertation. So the analysis will consider them as beings whose manipulation was a fundamental political concern for the Inkas, as they expanded their domain into new territories and landscapes.

## II. Autochtoliths, Megaliths and the Inka 'Culture of Stone'

In conceptualizing the kinds of archaeological traces of stone-centered activities, especially with regards to the technical and analytical vocabulary we use, it seems useful to draw an initial distinction between megaliths and what I would alternatively term 'autochtoliths'. The adjective 'megalithic' is often used to describe ancient architectural traditions that employed



large stones as a core element in their constructions - the best known cases being the celebrated Neolithic and Bronze Age monuments of Western Europe such as Stonehenge, Avebury and Carnac. Considering the potential size of such stones and the distances they were often moved before they were set in their final positions, megalith ('great stone') seems quite an appropriate descriptor. Not only are they great in terms of their physical mass, but also in the congealed labor and energetic exertion they embody. Here we cannot help but think of the famous dolerite bluestones of Stonehenge, transported some 250 kilometers from the Preseli Hills in Wales and the analytical significance that is attached to such movements in archaeological accounts<sup>1</sup>.

Yet if it matters analytically when stones are quarried and moved over great distances, it must surely also matter when they are not. The Inka use of stone in their architecture certainly had megalithic elements, as attested by the massive quarried masonry blocks used in constructing the walls of the Saqsaywaman complex and many other sites in the Cuzco region. In a great deal of cases however a better term might be autochtolith ('native stone'), since clearly there was also a deep interest in rocks that we archaeologists would describe as *in situ*. Many of the most revered Inka rocks (modified and unmodified) appear to have been left in their places of origin – a fact that is unlikely to have been incidental to the logics of Inka interactions with these entities.

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<sup>1</sup> It is of course debated whether the Stonehenge bluestones were brought to Salisbury through glacial action or instead via anthropogenic agency much later in prehistory. For the purposes of my argument here, it is unimportant where one stands on the issue – the point is it *matters* to the analysis if the stones were or were not deliberately moved a great distance by humans.

That said, this apparent *in situ* quality should not be mistaken for an emic characterization. From our perspective, autochtoliths may well be in their original positions (geologically-speaking). Yet if we consider the fact that many of the important Inka rock outcrops described in the chronicles did not begin their biographies as rocks, it is clear that in many cases they moved a great deal prior to their final petrification. For example, the lithic body of the Inka culture-hero Ayar Uchu did not originate at the Hill of Wanakawri near Cuzco where he eventually came to rest as a rock outcrop, but at Pacariqtambo, the 'Inn of Dawn' (e.g. Betanzos 1996: 15; Sarmiento de Gamboa 2007: 66) located 30 kilometers to the south of Cuzco. It is significant then from the point of view of our archaeological analyses that the Inkas did not seek to move certain rocks *again* in contrast to cases (such as the megalithic walls of Saqsaywaman) where they did choose to cut very large stones and transport them to 'secondary' locations.

One of the most sophisticated attempts to provide a unified framework for thinking about Inka engagements with rock (including integrated stone outcrops) is the art historian Carolyn Dean's (2010) recent work *A Culture of Stone* - a turn of phrase referenced in the title of the present section. Dean's text represents a major synthetic approach to interpreting Inka material practice towards stone entities. Dean directly addresses the autochtolith phenomenon, understanding it as a general practice of politically charged place-marking in the context of Inka imperial expansion,

If the integrated outcrop is indeed the *symbol* of conjuncture between Inka order and disorder (whether of nature or subjugated peoples), then nowhere is it so

important as in places where the Inka desired to make powerful statements about belonging and staying put. In the early decades of Inka expansion... the integration of outcrops would have been important as *statements of ownership* of any newly incorporated lands (Dean 2010: 112, my emphasis).

In this excerpt is offered a good example of the underlying concern with elucidating meaning in material culture that dominates many accounts, whereby manipulations of the physical world on the part of the Inkas are construed as a form of signage - *symbols* and *statements* to the effect of 'we are here to stay' and 'this is now ours'. Engagements with the land are thus seen as symbolic instantiations of imperial power and presencing gestures.

In addition to seeing Inka claims to important rocks as a politically potent practice of co-opting spaces that were cosmologically resonant, Dean also uses ethnohistoric data to consider certain kinds of everyday material engagements with respect to stone and heavily constructed environments. A number of valuable insights are found within Dean's account, particularly with respect to her discussion of the concept of *tiqsirumi*, an old Quechua word which refers to a foundational stone or origin stone used in a masonry wall (Dean 2011: 82). In this context, Dean offers the apt suggestion that we,

replace the word *buildings* with *graftings* when describing Inka structures that are incorporated into outcrops... architecture very nearly becomes agriculture, as the grafted edifices grow from foundations of living rock' (Dean 2011: 82; emphases in original).

The logic here is that from an Andean perspective, stone is not the inert, 'inorganic' substance we imagine it to be within a Western conception – but rather a living and vital medium. Thus the term 'grafting' provides a better translation of why Inka structures frequently make use of autochtoliths in their walls and entrance jambs.

The incorporation of autochtoliths into masonry, so that architecture becomes a kind of agricultural outgrowth of the earth is certainly one manifestation of Inka engagements with native outcrops. Another is the incorporation of an (unworked) autochtolith into a significant masonry structure, where the wall or building is crafted around the rock which remains a standalone feature, rather than being incorporated into the masonry as an architectural element. In these cases, the autochtolith becomes the central focus of the building and is a singular element within it. Susan Niles (1987: 28) discusses this occasional feature of Inka architecture, noting its occurrence at a number of royal estates near Cuzco, including Machu Picchu and Callachaca. Perhaps Niles' most intriguing statement on the phenomenon of enclosed unmodified autochtoliths is that they - the rocks jutting out of the floors of buildings -

...seem to be impediments to comfortable living. It may well be the case that the outcrops occasionally found in Inca domestic structures are not part of the house or its furnishings but are, rather, the denizens of the house (Niles 1987: 28).

There are two unambiguous cases of this houses-for-rocks practice in the Amaybamba, one at the site of Inkacarcel and the other at Capillayoq – both of which deserve close scrutiny and which will be described in the following section.

Before doing so, however, it is useful to consider what Dean has to say about the Inka tradition of enclosed rock outcrops specifically:

The rectilinear frame draws attention to what is enclosed, and separates the extraordinary from the ordinary, the special from the regular, and the sacred from the mundane. Sometimes the frame is low, allowing a view of what is framed, and sometimes the frame encloses the rock, housing it as human residents would be (Dean 2010: 27).

These ideas offer a semiotic interpretation of such practices, grouping Inka enclosed outcrops under a rubric of 'framing'. In other words the architectural frame is a signifier of specialness. It marks what was considered important or distinct, indicating that which was considered sacred as opposed to that which belonged to the realm of the profane. I agree that such semiotic practices were likely a part of Inka logics of stone manipulation. However, the question of alterity remains to be addressed, I think, despite the value in taking account Inka methods of marking and framing rock outcrops. Such semiotics analyses tend to offer *general* theories, for which the Inka treatments of stone act as examples. Yet we might also ask: what about interpretations which are dependent on the incommensurable elements of Inka ontological frameworks? That is, what about accounts which cannot easily be expressed in terms of *local* manifestations of general phenomena?

At stake here are issues of translation and the impact that the work of translation has upon the concepts that are being deployed (see Viveiros de Castro 2004). Apropos of the present discussion, we might consider that the unifying rubric of the category of stone is itself

dependent on the *a priori* view that this particular substance is a meaningful entity outside of a Western framework. In one context, we consider Inka practices where native stones are grafted onto architectural forms (*tiqsirumi*), while elsewhere we observe architectural enclosures that appear to have been houses-for-rocks as Niles (1987) suggests – and we assume that in these cases we are looking at two separate kinds of practice directed towards the *same thing*. In other words because an enclosed autochtolith and a *tiqsirumi* autochtolith might be made of the same substance in our eyes (i.e. stone) we imagine that they were equally the same substance for the Inkas. This however is far from given.

Following Viveiros de Castro (2004), our interpretations of Inka interactions with stone ought to do *something* to the category of ‘stone’ itself, such that it is not left as stable and unproblematized by the end of the analysis as it was at the beginning. Saying that the Inkas had a certain disposition towards stone might be akin to suggesting that we Westerners have a ‘culture of flesh’ because we attribute the kind of human-like subjectivity to certain flesh-formed things that the Inkas attributed to certain lithic entities. That may well be true, as far as it goes. After all, we do consider all living matter to be composed of organic tissues which are generally ‘fleshy’ in form. So, saying we have a culture of flesh does represent *something* of the ontological tenets of (many) native Westerners. Yet we also know, as natives, that saying we have a culture of flesh to describe our commitment to the sentience of human beings, would not be exactly correct. It ignores the fact that within the world of living fleshforms we recognize, there exists enormous ontological divides, not least the one between humans and animals.

This perhaps provides an instructive example of how such translation problems operate, to the effect that treating the *tisqirumi* and housed rocks under the general rubric of stone-based practices, might be akin to conflating Western ontologies of the human and animal because they happen to be composed of the same substance (i.e. flesh). The potential conflation arises through using the initial awareness of alterity (seeing that the Inkas treat rocks differently than we would) and using that to construct a positive interpretation (the Inkas really did treat rocks differently because they had a belief in the animacy of stone *qua* stone) rather than examine the fundamental ontological assumptions we hold that make the observation appear alter in the first place (i.e. questioning if our understanding of rock is in fact a universal one).

The first possibility might then be framed as follows: Westerners and Inkas seem to treat stones in quite different ways. This must mean that the objective substance called stone is viewed differently by Inkas and Westerners – that is they believe different things about it, and so act accordingly towards it. This possibility however would be an example of the kind of mononaturalism that Viveiros de Castro (1998) attributes to modernist ontologies, in which cultural difference is framed as plural worldviews, while external reality remains fixed (as discussed in chapter three). The alternative I suggest is as follows: the Inkas did not treat stones as would we, and so their actions towards them seem inexplicable in Western terms. Rather than seeing this as a different cultural conception of what stone is, we might question whether our category of stone itself is relevant to the Inka case in the first place. The Inkas may have instead been interacting with entities which we either do not understand, or of which we are largely unaware, and so it only appears as if they are treating stones in unfamiliar ways – since from their perspective they were not dealing with ‘stone’ at all.

My more specific contention then is that in the Inka world, a being in the lithic form of an autochthonous outcrop is not necessarily the same thing as a *tiqsirumi* stone in a masonry wall, despite them both being composed of the substance we call stone. And if our anthropological aim is to effect a kind of translation, then the housed rocks might need to be understood as a much more person-like<sup>2</sup> entity (i.e. a *wak'a*) than the quite different context of using *tiqsirumi* autochtholiths as a rootstock for the grafting of masonry elaborations onto the earth. The fact that the housed rocks and the root stones are both made of petrous substance is not necessarily a sign they were the 'same thing'. Stone (or certain types of stone) might have been widely regarded as a vital, living substance, but not all stone things were necessarily *wak'as* or attributed with sentience.

### III. Capillayoq and Inkacarcel: Two Enclosed Outcrops in the Amaybamba

Here follows a description of the two enclosed autochtholiths recorded in the survey, two lithic entities that are ultimately the main concern of the current chapter. In contrast to other forms of engagement with stone noted in the survey zone, the enclosed autochtholith type is defined as bedrock outcrops that 1) are in their original location, geologically speaking, 2) lack evidence of significant anthropogenic carving, grinding or polishing on their surfaces, 3) are completely enclosed within an elaborate masonry structure resembling norms of residential or ceremonial architecture 4) and are spatially situated as standalone elements within that structure. In the

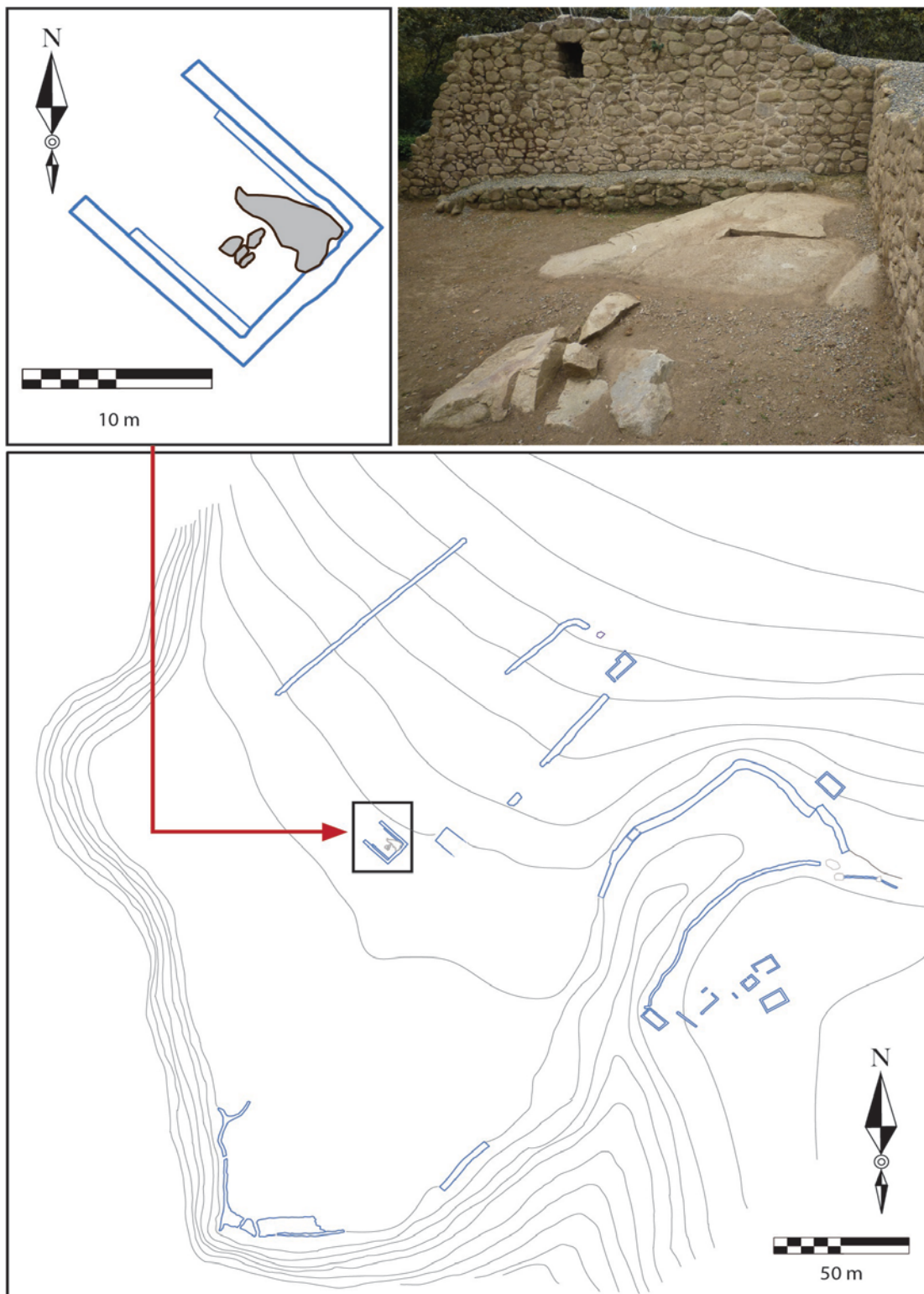
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<sup>2</sup> This step of considering *wak'as* as persons however is a temporary one, which will be addressed in greater detail towards the end of the present chapter.



Amaybamba, this type of interaction with lithic entities was documented at structures that were parts of the sites of Capillayoc and Inkacarcel.

The site of Capillayoc, just over two kilometers west of the royal complex at Wamanmarka, is situated upon a large natural terrace with a gentle gradient and lies overlooking the Rio Lucumayo from its north bank. Such terraces are among the prime agricultural lands in the Amaybamba today, and in the pre-colonial era were likely used for coca and maize production. The architecture at Capillayoc is spread over a relatively large area on this flat expanse; however, it is distinctive in that very little of the infrastructure entails actual buildings. Instead several substantial stone walls run across the terrace on which Capillayoc rests, subdividing it, and these are articulated with a few relatively modest rectilinear buildings and ceramic scatters consisting mostly of typical Late Horizon wares. The site of Capillayoc as a whole, including its impressive walls, will be the focus of more detailed discussion at a later point; at present however I wish to consider one structure (S-076) at the site in closer detail. The building S-076 rests in the middle of a large flat area bounded by the aforementioned walls on virtually all sides, and now sits at the heart of a tea plantation. This structure is rectilinear in form and measures approximately nine by twelve meters at its base, while the surviving masonry suggests a minimum wall height of at least three meters as measured from the interior floor surface. The structure has been partially rebuilt by the INC and therefore all architectural details are not necessarily original in their entirety, although an entrance (now sealed with



**Figure 6.2.** Partial plan of Capillayoq with inset showing S-076 (top left) and photo of the enclosed outcrop looking northeast (top right).

masonry) exists in the southwestern wall and was probably original, while a small window is visible in the opposing northeastern wall. One wall (on the northwestern face) appears to be absent (see fig. 6.2.). It is unclear if the structure was originally intended to be open on one side, or this reflects its state following its abandonment and partial collapse. Since the remains of all collapsed masonry has been cleared away from the structure by the INC, it will only be possible to say with certainty whether such a wall once existed by excavating its potential foundations.

The most distinctive aspect of the structure is not its architecture, however, but what is enclosed within it (see figure 6.2.). A native rock outcrop protrudes from the floor of the northeastern corner of the structure, roughly trapezoidal in shape and occupying approximately ten square meters of the interior space. No evidence of carving, working or any other human modification is evident on the rock surface itself. Yet it is clearly intended as the central focus of the architecture that surrounds it. Given that the natural flat on which the structure rests is largely free of rock outcrops, it would easily have been possible to have offset the building by a few meters and thereby avoid having a sizeable chunk of bedrock protruding from the floor of the structure – suggesting it was a quite intentional feature of its design. In which case, it is difficult not to see S-076 at Capillayoq as an example of a ‘house’ intended more for occupation by lithic rather than human denizens. It should be noted that it is the only structure at the site that has a rock outcrop enclosed within it.

It is also worth noting that the architecture of the structure enclosing the autochtolith at Capillayoq is similar to that of other residential sectors within the Amaybamba Valley, in that masonry blocks were selected with care for their size and shape so that a well-faced surface is

presented on the inner and outer façades of the structure. Non-residential structures were noted at multiple sites in the survey, often in the form of large open-air enclosures or corrals. In contrast with the construction of S-076 at Capillayoq, these structures showed no evidence of being well-faced, implying that there was a desire to house the autochtolith at Capillayoq in a structure of similar construction quality to that found in many of the human residences throughout the valley – indeed, not all residential structures surveyed were as well-faced as S-076. The best example outside the Amaybamba where I know of a similar enclosed autochtolith within a non-elite residential complex is a set of structures at Callachaca A, surveyed several decades ago by Susan Niles (1987: 24-30). The thirteen residential buildings at this site, a component of a royal estate in the Huatanay Valley to the east of Cuzco, include one structure (number 11) that contains within it a native rock outcrop of similar dimensions to the one at Capillayoq. Also like S-076 at Capillayoq, building 11 at Callachaca A is rectilinear in form.

Few ceramics of any date are evident in the immediate vicinity of S-076, although a very small number of identifiably Late Horizon sherds are visible. The ground surface of the area is highly disturbed, mainly as a result of the INC interventions as well as the present-day cultivation activities. It is also highly likely that systematic collection of surface artifacts occurred during the reconstruction activities. Interestingly however, one non-diagnostic sherd from a large Inka vessel decorated in a geometric polychrome slip was noted several meters west of S-076. Unlike S-076, the other structures within the Capillayoq complex have been subject to much less modern disturbance and have significant amounts of ceramic materials inside and around them. While some of this consists of glazed colonial wares, approximately 95 per cent of the ceramics were estimated to date to the Late Horizon. Polychrome wares are typical of a variety

of Inka ceramic forms used in politically-charged feasting, ceremonial and ritual events (Bray 2003) and may indicate that such activities took place at Capillayoq – possibly directed at the autochtolithic entity itself.

The second example of an enclosed outcrop within the Amaybamba region is located at the site of Inkacarcel - one of the more distinctive Late Horizon complexes in the Amaybamba Valley. Unlike Capillayoq, where the enclosed outcrop was one component of a much more extensive complex, the Inkacarcel site consists of only two structures and has no other architectural elements such as large subdividing walls. It lies towards the eastern extreme of the Amaybamba, high on the western slopes of a tributary valley cut by the Rio Condormayo, and is situated along a relatively well-developed section of Inka road. The site was originally noted by von Kaupp and Carrasco (2010) in their 2001 survey of the Vilcabamba region, although they produced no plans of the structure. By their estimation, just less than 50 per cent of the building was intact prior to its later reconstruction by the INC (von Kaupp and Carrasco 2010: 178).

The Inkacarcel complex centers on a curvilinear structure (S-103) with a single entrance facing almost due north, resting on a curved architectural terrace retained by stone walls. Adjacent to the architectural terrace is a second platform or terrace, somewhat trapezoidal in shape and set at a lower level, which extends outwards from S-103 for 10.1 meters to the east. The interior of S-103 is bifurcated by a curved wall that creates two distinct internal spaces. The larger space - a roughly circular enclosed area that varies in diameter from 4.7 to 5.0 meters - contains a single autochtolithic outcrop, found immediately to the left of the entrance as one enters, and



**Figure 6.3.** *Image of the autochtolith outcrop inside S-103 at Inkacarcel. In the center of the photograph is seen the entrance to the secondary, roofed chamber.*

which touches the northern perimeter wall. This rock feature is a typical example of the local schist geology, shows no visible signs of having been worked or carved and forms a roughly teardrop or leaf shape, with a maximum length of 3.0 meters. Its top is not entirely flat, although it is sufficiently planar and uniform to have been used as a 'table', although it was not evidently modified for such a purpose. The smaller of the two interior subdivisions is an ancillary chamber that offers a floor space a little over 2 meters squared, and could not easily accommodate more than two or three people. According to a number of the local farmers, this

small room is the origin of the modern name for the site, Inkacarcel ('Inka prison'). Due to the curvature of the walls, the interior of the smaller chamber is not readily visible from the larger space to which it adjoins, although sounds are somewhat amplified when heard from without. While the larger interior space is open to the sky, the smaller chamber is enclosed by a roof constructed from locally acquired slabs of flat schist, taking advantage of the naturally formed thin layers within the sedimentary rock.

A second structure (S-104) is located 13 meters to the northeast of S-103. Only the foundations now remain, however the footprint of this structure is a true circle measuring 7.4 meters in diameter. An entrance is visible in western face of the building, appearing to be oriented towards the entrance of S-103. The purpose of this structure is not immediately clear, however it appears given its orientation, that it along with S-103 together form a larger complex with two associated buildings. The quality of masonry construction seen at the Inkacarcel complex is relatively high when compared with other sites noted within the survey zone (excepting of course the 'royal' construction at Wamanmarka). Masonry blocks were clearly chosen with care and in some cases modified so that they would be roughly rectilinear in form and present relatively flat faces. Both the interior and exterior façades of S-103 are well-faced and the sizes of the masonry blocks used are relatively uniform. The doorframe to S-103 is trapezoidal in shape, although given the partial reconstruction carried out and the lack of uniformly trapezoidal doorways at other Inka sites in the region, this should not be assumed as a true representation of its original form.

As a rule, Inka structures are not normally circular or ovaloid in plan. Indeed, a shift from round to rectilinear buildings is often used as a proxy indicator to distinguish between Late Horizon and Late Intermediate Period occupations within a given region, while the persistence of round structures in Inka centers is usually attributed to local, ‘indigenous’ influences. This is particularly true when applied to residential buildings, which are seen as typically representing pre-Inka occupation architecture when constructed on circular footprints. *Qollqa* (state storehouses used for warehousing a mixture of agricultural and craft products) are the only well-established case of a widespread and standardized preference for a circular form in any manifestation of classically imperial architecture. Both round and rectilinear *qollqa* are found at



**Figure 6.4.** A plan (left) of the Inkacarcel site, showing S-103 with the autochtolith inside (coloured dark brown) and further to the north S-104. On the right is an image of S-104 looking southwest from inside S-104.

Inka installations throughout the Andes (often aligned in rows), although a satisfactory account as to why the two distinct forms exist has yet to be offered. Morris (1971), for example, has



argued that circular storehouses may have been designated for maize storage, while rectilinear ones were intended for tubers. However excavations carried out by D'Altroy and Hastorf (1984: 347) at the major Inka administrative center of Hatun Xauxa were unable to support such a distinction. In any event some *qollqa* were not used for agricultural goods at all. Even if the reasons for the circular/rectangular distinction in *qollqa* are still unclear, it remains the only exception to the 'rule' that Inka structures are normally rectilinear in form.

This is not to say that there are not multiple examples of circular Inka buildings, rather all those that do exist (except *qollqa*) are *singular* iterations. In other words, circular or ovaloid structures were intended to be exceptional and out-of-the-ordinary when encountered at Inka sites, to the degree that most rounded structures at major Inka locales are the only such structure in evidence at those places. This is true for the circular edifice at the heart of the Saqsaywaman complex in Cuzco and the 'Oval Building' at Ingapirca in Ecuador. Similarly, irregularly circular structures (i.e. largely rectilinear but with one end or corner being rounded off) are also known from several sites. Yet the best-known examples of these forms, such as the western wall of the Qorikancha ('Golden Enclosure') in Cuzco, or the Torreón at Machu Picchu (Hyslop 1990: 7), only further sustain the idea that such unusual architectural elaborations were reserved for very important structures. Taking all this into account, it seems that the presence of the ovaloid building at Inkacarcel warrants it being placed in this special subset of Inka architectural expressions.

It should be noted that with respect to the curvilinear form of the Inkacarcel structure, an alternative perspective has been offered by von Kaupp and Carrasco (2010: 178) who argue

that it exhibits ‘características constructivas y formales de estilo chachapoya’<sup>3</sup>. The Chachapoya people were a major people group who resided in the cloud forests of northeastern Peru, in the vicinity of the Amazon headwaters. They were subject to Inka conquests and as a result, many were dispersed throughout the Andes to work as *mitmaquna*, a class of labour colonists in the service of the state (Schjellerup 1997). However, Chachapoya influence is attributed more often than it is demonstrated, and in this case there seems little ground for regarding Inkacarcel as being constructed in a ‘Chachapoya style’ beyond the fact that it is circular in plan. While circular architecture is undoubtedly a basic pattern in the layout of Chachapoya sites during later prehistory (Schjellerup 1997, Church and von Hagen 2008: 915), circularity is by no means a peculiarly Chachapoya signature or ‘diagnostic’ of Chachapoya ethnicity. And as has already been discussed, curvilinear architectural forms were by no means antithetical to the Inkas; they were simply less common and reserved only for structures that were given special attentions<sup>4</sup>.

If we go on to consider only those circular structures that are clearly designed to enclose a particular rock outcrop, then we are reduced to dealing with an even more selective category. Stone outcrops enclosed within architectural shells are known from a number of Inka sites, particularly on lands associated with the royal estates of the imperial heartland around Cuzco. It is interesting to note a close parallel between the site of Inkacarcel and another complex referred to as the ‘Sacred Rock’ at Calca. A small village, Calca lies in the Urubamba Valley,

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<sup>3</sup> ‘Construction characteristics and forms of Chachapoya style’.

<sup>4</sup> A much more convincing signature of Chachapoya influence in architectural terms would be residential architecture that was circular in form, but which was clearly built under Inka influence and in association with Inka ceramics. Curvilinear architecture is quite common in the Cuzco region during the Late Horizon, albeit always associated with special or important ‘ritual’ sites – especially ones which enclose rock outcrops. However *residential* curvilinear architecture is virtually unknown in the Cuzco Late Horizon (see Kendall 1984: 14-15). Thus the Inkacarcel site is quite typically Inka, and no Chachapoya influence need be implied by its shape.

some 22 kilometers due north of Cuzco – and is named in several colonial documents as among the royal landholdings of Waskar (Niles 1999: 76-7), the half-brother and dynastic rival of Atawallpa. The only published description of the site is by G. E. Squier (1877: 517-20) who described a large limestone outcrop of just over 18 meters in length, incorporated into a complex of rectilinear rooms. Not only does it share with Inkacarcel the central focus of an enclosed bedrock outcrop, but lying approximately 18 meters to the east is what Squier (1877: 517) calls a ‘round building, too low, strictly speaking, to be called a tower’. The dimensions of this building are given as 7.3 meters in diameter and 5.49 meters in height, and an entrance is noted in the south-southwestern façade. The circular structure at Inkacarcel is also approximately 7.3 meters in diameter, while only the foundations remain so no estimation of its height is possible. Why both Inkacarcel and Calca should have enclosed outcrops, associated with nearby circular structures of very similar dimensions is not clear. However, it seems a reasonable hypothesis that both complexes represent some kind of similar engagement with lithic entities in the landscape.

#### IV. The Wiraqocha Concept and the Fashioning of Empire

The Inka material practices directed towards the Amaybamba landscapes must be considered in the context of the region’s intimate association with *wiraqochas*. The specifics of the association between *wiraqochas* and the Amaybamba region will be dealt with in the following section, although first some general discussion of the concept is required. That said, it is difficult to provide a succinct account of what this term actually means; it has been much

debated within the scholarly literature on Andean religion, and the multitude of entities which are described alternately as either Wiraqocha or *wiraqochas*<sup>5</sup> seems to offer a confusing tangle of beings and concepts from which it is not easy to extract a clear picture. Although we are probably wiser to assume that this apparent lack of clarity is not due to emic confusion with regard to *wiraqochas*, so much as their failure to conform to European ontological categories. The term itself is a Quechua one and literally means something akin to ‘sea of grease’ or ‘foam of the sea’, although the best etymological interpretation of the term is open to debate (see Rowe 1960: 17-8). In any event, it is important to give some consideration to the *wiraqocha* phenomenon since it is apparent the Amaybamba region was a significant hub for their activities.

Perhaps the primary (scholarly) valence of the term *wiraqocha* is to denote the Inka version of the Andean ‘High God’. John Rowe’s (1960) essay is undoubtedly the seminal account of the topic, in which he sees the being called Wiraqocha as a clear analog to the monotheist Creator God and Supreme Being. For Rowe, the term Wiraqocha (capitalized, as a proper noun) refers to the greatest of a class of divinities, who are all referred to collectively as *wiraqochas*. In this formulation then, Wiraqocha is to *wiraqocha* as God is to gods in English. He also argues that it was often the case that when referring to the greatest of the *wiraqochas*, the Supreme Creator, the Inkas applied an honorific suffix or additional identifying epithet such as *Wiraqochan*

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<sup>5</sup> Sometimes Wiraqocha (capitalized) is treated by the chroniclers as a proper name, belonging to some form of deity or creator god – although some chroniclers give the impression there were two of him (e.g. Cieza de León 2005: 6). At other times it seems to refer to a species of supernatural, called *wiraqochas* who may or may not be duplicates, agents or avatars of *the* Wiraqocha. Elsewhere it is recorded as a term that was used by the Inkas to describe the newly-arrived *conquistadores*, as well as the name of the eighth Inka emperor, Wiraqocha Inka.

(‘respected Wiraqocha’) or *teqzi* Wiraqocha (‘fundamental Wiraqocha’) (Rowe 1960: 415-6). This made it possible to distinguish between the Creator God Wiraqocha and lesser divinities of the same name.

Virtually all the Spanish chronicles begin their narrative with a cosmogonic story that describes a being or man called Wiraqocha who emerges from Lake Titicaca and then sets about creating the world and its inhabitants. Afterwards, following a period of travels and further acts of creation, he eventually disappears into the sea (or sky depending on the account followed). However, despite Wiraqocha’s apparent role as a Creator God in Inka cosmogony, the word and its variable referents remain difficult to pin down. A particular problem in this respect lies in the degree to which Wiraqocha has been strained through the filter of Spanish Catholicism so as to provide an Andean mould into which could be poured the Yahweh of monotheist tradition. As Franklin Pease (1970: 11) argues, the Wiraqocha given down to us in the chronicles has taken on a ‘messianic’ quality, having been reworked through European and Christian influences.

Certainly a range of Old Testament elements have clearly been woven into Inca cosmogonic narratives as they were recorded by the Spanish chroniclers, one clear example being seen in the description of the universal deluge sent as a punishment on humanity:

...above all he [Wiraqocha] sent them a universal flood that they called *unu pachacuti*, which means “water that overturned the world”. They say that it rained for sixty days and sixty nights, and all that had been created was drowned. (Sarmiento 2007: 46).

While a global flood myth sent by the Creator is potentially a co-incidence, later in the narrative, the first Inkas climb a hill that overlooks the site where they will eventually found the city of Cuzco, and,

[c]limbing to the summit, they saw over it a rainbow, which the natives call huanacauri.

Taking this to be a good sign, Manco Capac said: "Take this as a sign that the world will never again be destroyed by water! Let us go there, and from there we will choose where we will found our town"... (Sarmiento 1997: 66).

The impact of the Biblical narrative is clearly seen here (assuming we do not take the Book of Genesis to be literally true, of course).

However the difficulties run deeper than the simple importation of narrative elements from the Old Testament into Inca creation stories – and we cannot arrive at an original version through mere redaction of such supposedly intrusive elements. In particular, creation is not a concept that can be deployed universally without care being paid to the connotations it has accrued within the Western and monotheistic traditions. Specifically, the divine Creation of monotheism is understood to have been the willful act of a transcendent - and Himself uncreated - being who fashioned the world *ex nihilo* ('from nothing'). The idea that creation was an unprefigured emanation from God's Word, rather than a fashioning of order from a primordial chaotic assemblage of matter is a core theological tenet in most orthodox branches of monotheism - bound up in the efforts of a nascent Christianity to reject a Hellenistic (and thus pagan) understanding of the world's origins. Creation as applied to the monotheistic divinity, and the capacity to create things such as works of craft or art possessed by ordinary humans are thus

ontologically quite distinct. Put another way, human beings can remold, shape and refashion the world around them, whereas pure creation from nothing (*ex nihilo*) is reserved to the divinity alone.

This matters because in the Andean context, the kind of creation which is attributed to Wiraqocha is not necessarily distinct from the creativity possessed by people. The everyday weaving of a textile or the planting of maize may not be different in kind from Wiraqocha's creation of the sun and the moon, or indeed of the first humans. For example, Tamara Bray (2009: 358) makes reference to the ontological incompatibility of the Christian sense of Creation and the Andean term *kamay*, noting that this word was originally rejected as a translation of the biblical notion of Creation by the early Church authorities in Peru, as it implied a charging of already existent matter rather than a fashioning from nothing. In that case, both Wiraqocha's deeds and what the ordinary Andean weaver does on a daily basis may both equally be examples of *kamay*. The difference between such everyday creations and Wiraqocha's creative acts then is more to do with scale and potency, rather than an absolute distinction. The idea that Wiraqocha is the 'fundamental' (*teqzi*) implies that his *kamay* is the first and most basic manifestation of creative potency, from which other more quotidian instantiations of *kamay* flow or are secondarily related. It should be noted here that grammatical derivatives of *kamay* are used in the recorded Inka prayers addressed to Wiraqocha wherein he is repeatedly referred to both as *kamaq* ('creator') and *kay pacha kamaq* ('creator of the world') (Rowe 1960: 415). Thus when Andean scholars speak of a 'Creator God', which they identify with Wiraqocha, they are in fact implying a Western model of creative divinity which ought to be regarded with a high degree of skepticism. Pease (1970)

makes some gesture to this incompatibility where, instead of referring to Wiraqocha as a 'Creator God' as does Rowe, he uses the more ambiguous formulation 'creative god'.

Although typically thought of as a kind of trinity and represented as such by the Catholic chroniclers, the triumvirate of Wiraqocha, alongside Inti (the Sun) and Illapa (often glossed as kind of storm or weather deity) probably bore little resemblance to the Christian concept of a Trinitarian Godhead (Urton 1999: 37-8). Although here I would also be hesitant in calling it a *pantheon* (of three) either, since it seems a Hellenistic concept of divinity is unlikely to be preferable to a Christian one, insofar as it can be applied to the Inkas. There is more at stake here than mere conventions of nomenclature. Such terms as 'trinity' and 'pantheon' are heavily laden with baggage from their Western origins and thus can actively obscure what such terms as *wiraqocha* referred to in the pre-colonial Andes. In particular, the idea that the Inkas recognized a set of discrete gods as distinct agents, personalities or beings seems unlikely. Consider in this respect Urton's (1981: 67) ethnographic description of the range of terms used by the contemporary Andean communities to name the Sun, including *Nuestro Dios* ('our lord'), *Jésus Cristo* (Jesus Christ) and *Wayna Qhapaq* (the name of the tenth Inka emperor) among others. While some might assume that present-day indigenous Andeans are confused between or actively conflate the Sun, Jesus Christ and the tenth Inka ruler, it seems more likely that our (Western) insistence that deities be clearly separated into discrete entities, while also being held distinct from human personalities, simply does not hold for Andean ontological frameworks.



Arthur Demarest's (1981) essay on Wiraqocha offers one of the most comprehensive attempts to extract a unified logic from the often confusing Spanish accounts of the Inka triumvirate of 'gods'. In the early Spanish texts there are numerous references to a godlike Wiraqocha and yet the same actor is later referred to as the Sun - sometimes in the same account, or in a description of the same events in another chronicle. Yet as Demarest (1981: 22-31) underscores, the frequent reference to the Sun as Inti, Wiraqocha and PUNCHAO in different contexts does not represent confusion or conflicting opinions on the part of Andean informants, but rather describes the various and shifting aspects of the same entity (a generalized Sky-Sun-Creator divinity). In particular, the Sun of the winter solstice, when it is at its weakest, is named Churi-inti and PUNCHAO, the 'young' or child-sun, whereas the Sun of the summer solstice, when it is strongest and most forceful, is described as Apu-Inti *and* Wiraqocha, the 'mature' or lord-sun. To summarize then, for Demarest the three gods (Inti, Wiraqocha, PUNCHAO) of the Inkas are not in fact separate beings, but three ways in which the Sun is manifest and experienced at different times during the calendar round. Following on from Demarest's account, Wiraqocha in this context is not then so much a being, as a state-of-being; the term describes the Sun, Inti, in his most potent and mature life-giving aspect.

In that sense, *wiraqocha* may not be a discrete divinity (or aspect of a more generalized god) so much as a manifestation of highly potent creative force, which could be expressed in a variety of entities at any given time – the Sun as *wiraqocha* for example, during the Capac Raymi of the summer solstice when it is at the height of its (creative, generative) power. Consider in this vein, the creation account recorded by Cieza de León (2005: 6-7) where a 'second' Wiraqocha visits a place called Cacha:

...a long time having passed, they saw another man resembling the first [Wiraqocha], whose name they do not mention... wherever this personage came, and there were sick, he healed them...leaving the place where these things happened , the man arrived on the sea coast, where, holding his mantle, he went in amongst the waves and never more seen. And as he went so they gave him the name of [*W*]iracocha.

Yet in the other chroniclers accounts of this same episode (the visit to Cacha) there is no distinction between the first Wiraqocha who emerges from Titicaca and the second one described by Cieza de León (e.g. Sarmiento 1997: 51-2). Moreover, the temple of Wiraqocha at Cacha dedicated following this visit is elsewhere acknowledged as belonging to *teqzi* Wiraqocha (the 'fundamental' Wiraqocha) *including* in Cieza de Leon's (2005: 7-8) own account.

Such accounts seem confusing, but I suspect this arises primarily because we are inclined to insist on a distinction between being and practice within our own ontological commitments, especially *vis-à-vis* the divine<sup>6</sup>. Gods, we imagine, are discrete entities defined by a particular essence or core being that simply is – irrespective of what they might do. God is God *a priori*, whether he engages in the act of creation or not. *Wiraqocha* in the Andean context is a term that scholars have long tried to fit into the mould of an essential being, either a God or a class of gods – but it may be better thought of as a concept of creation lying somewhere between being and practice, while still encapsulated imperfectly by both terms. This helps explain why

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<sup>6</sup> It is absolutely axiomatic within orthodox monotheisms that there must be an ontological divide between the divinity and His acts. Witness the insistence that although there is but one Creator and He must be understood as utterly uncreated and thereby lack all the qualities that are essential to a created thing (temporal and spatial finitude, changeability, obligate materiality and so on).

sometimes the Sun is sometimes Wiraqocha and other times not; the Sun's status as Wiraqocha evidently depends on what the Sun is doing at a given moment.

It is worth considering in this respect the account Sarmiento de Gamboa (1997: 98-99) provides of the events which precede and follow the eighth emperor Hatun Tupa Inka's taking of the new name Wiraqocha Inka. The tale runs that while in Urcos (the location of the most important Wiraqocha shrine) the Inka was visited by a vision of *teqzi* Wiraqocha who proclaimed he and his descendant's were destined for greatness. Following this episode, Hatun Tupa Inka is renamed Wiraqocha Inka by one of his generals, after which the rechristened emperor begins a war of conquest on the independent polities that surrounded the Cuzco Basin. In other words, he takes on the name Wiraqocha just prior to fashioning a new imperial order through militarism and conquest. In the eyes of sixteenth-century Spanish Catholics (and perhaps our own) this reads like a ruler naming himself after a powerful deity as a sort of gesture of fealty or obeisance, and also a claim therefore to the divinity's associated authority and prestige. As an alternative, we might see this renaming as Hatun Tupa Inka's attempt to be a manifestation of potent creative and order-generating force in the world – he was *wiraqocha* or at least an expression of Wiraqocha, rather than simply seeking to pay homage to another being which carried that name.

Without getting drawn further into parsing the various potential meanings of *wiraqocha*, it is important to close this section by emphasizing why it matters so much in this particular context. Rather than seeing *wiraqochas* as a class of creator divinities acting within some distant mythical time whose primordial acts left traces in the present to be venerated as 'temples to

the gods', it seems that *wiraqocha* could be manifest as creative potency in the time of the Inkas also. In that sense, Wiraqocha Inka too could be a manifestation of that same cosmic order-generating force as *teqzi* Wiraqocha. He was perhaps Wiraqocha Inka in the same way that his son and successor was Pachakuti Inka – both an agent for and a manifestation of transformative change. The term *pachakuti*, taken as an epithet by Wiraqocha Inka's son Tupa Inka Yupanqui, is another Quechua concept that describes a kind of revolution or cataclysm, literally a 'turning of all things' or when applied to a person, 'the turner of all things'. My contention here is that we may be best to see the names taken by Inkas as indications that they sought to be vehicles for certain kinds of creative and destructive agency (i.e. *pachakuti* and *wiraqocha*) in the context of empire-building.

The act of conquest then was for the Inkas intimately bound up with *wiraqochas*, war being one means for the generation of new kinds of order. One could be *wiraqocha* through such wars of civilization, or alternatively one might call on beings that were *wiraqochas* to aid in such projects (or both). As Pachakuti Inka is claimed to have stated during his war on the Chankas, '[W]iraqocha will give the victory to whomever he wishes' (Sarmiento 1997). In other words, however we construe *wiraqochas*, they were apparently key actors and vehicles of imperial expansion and militarism, especially insofar as these are imagined to be exercises in the creative refashioning of the world. It is interesting to note in this context that not only were *wiraqochas* identified with the ruins of the pre-Inka polity at Tiwanaku, but also that the ruined sites of Wari and Jinkamocco (both associated with the Wari Empire, the predecessor state of the Inkas throughout much of the southern highlands) were attributed to a people called Wiraqochas also (D'Altroy and Schreiber 2004: 271). Thus both past and present empire

builders (Wari, Inka and Spanish) were apparently referred to as Wiraqochas by early colonial inhabitants of the Andes – a fact that may not be coincidental.

#### V. Subordinating the Wiraqochas and the Conquest of Antisuyu

Although information from the chronicles pertaining to the Amaybamba is relatively limited due to the fact that it lay beyond the control of the Spanish viceroyalty for much of the Sixteenth Century, the writer Cristóbal de Molina's 1573 *Ritos y Fabulas de los Incas* makes reference to a number of *wak'as* in the Amaybamba area. He names these entities 'Apoticci Huiracocha' and 'Urcosuyu Huiracocha'<sup>7</sup> (Molina 2011: 43), as part of a description of the distribution of *wiraqochas* in the Inka heartland. In this account the two Amaybamba *wakas* are described via a transcription of an indigenous hymn and grouped along with three others; one located on a mountaintop at Urcos some 42 kilometers southeast-east of Cuzco, another near the bridge at Chuquichaka which marked the easternmost boundary of the lowland region of Vilcabamba and the third at Huaypon, the location of which is not entirely clear, but probably near Maras, located on a plateau 22 kilometers to the northwest of Cuzco (see: Bauer *et al.* 2011: 107).

Name/description of <i>Wak'a</i>	Location	References
Stone quarry and <i>waka</i> named Wiraqocha	Fourth shrine on the fourth <i>zeq'e</i> of Antisuyu (Cuzco)	(Cobo 1990: 55, 66)
Turuca, a <i>wawqi</i> (brother) of	Second shrine on the first <i>zeq'e</i>	(Cobo 1990: 63)

<sup>7</sup> Huiracocha is an alternate, Hispanicized spelling for *wiraqocha*.

Tiki Wiraqocha	of Antisuyu (Cuzco)	
A <i>waka</i> , Chanka Wiraqochan	At Chuquichaca, on the eastern boundary of Vilcabamba	(Molina 2011: 43)
A <i>waka</i> , Atun Wiraqochan	At Urcos, on a nearby hill	(Betanzos 1996: 7-10) (Molina 2011: 43) (Sarmiento 1997: 52)
A <i>waka</i> , Apotin Wiraqochan	Amaybamba	(Molina 2011: 43)
A <i>waka</i> , Urusaywa Wiraqocha	Amaybamba	(Molina 2011: 43)
A <i>waka</i> , Chuqwichanka Wiraqochan	Huaypon, probably near Maras	(Molina 2011: 44)
A Temple and idol of Teqzi Wiraqocha	Cacha, in Collao	(Cieza de León 2005: 5-7)

**Figure 6.5.** Shrines named in the Spanish chronicles as associated with *Wiraqocha* in the Cuzco region.

When we look at the distribution of known *wakas* with an explicit association with *wiraqocha* in the area around Cuzco, it is clear that the Amaybamba region exhibits a significant cluster of such entities (see figure 6.6). The archaeological evidence with respect to the Inka occupation there, and the manipulation of the local landscape is best understood in its regional context as a center for *wiraqocha* manifestations. It is also worth noting in this respect that the Quechua name for the major peak on the northern side of the Rio Lucumayo in the Amaybamba Valley is Wiraqochan ('revered Wiraqocha') also. Thus we have a number of indicators that suggest the

Amaybamba in terms of its *wakas* and mountains was a landscape deeply associated with entities that were manifestations/manifestors of creative agency.

A consideration of the broader geopolitical character of the Inka world is useful in addressing why the Amaybamba specifically might have been a magnet for *wiraqochas*. First, as Urton (1999: 38-9) has discussed, there is a general northwesterly direction of movement of *wiraqocha* figures in the Cuzco-based cosmogonic narratives, beginning with the emergence at Lake Titicaca and culminating at the Pacific coast. The *wiraqocha* sites local to Cuzco are largely clustered along the northwesterly-running Vilcanota-Urubamba River, the central sacred axis of the Cuzco region (Urton 1999). The northwestern end of this riverine *axis mundi*, at least within a local Cuzcocentric geography, is the Amaybamba region itself. Thus the Amaybamba is an important terminus for the mapping of cosmogonic acts of creation onto the landscape in the Inka accounts.

Second, from an Inka perspective, the Amaybamba was a kind of liminal space that lay on the margins of the civilized, ordered world of the highlands. The reader may recall that the Inka name for their political project, was *tawantinsuyu*, meaning ‘the four parts that are made whole’. Their world, centered on the city of Cuzco was ordered into four parts or *suyu*, and each was ordered hierarchically with respect to the others and understood to possess certain kinds of distinguishing attributes. The tropical lowlands, largely contained within Antisuyu, are frequently represented within post-conquest imperial discourse as the domain of chaos, disorder and a home to a variety of ‘uncivilized’ practices that the Inkas deemed to be immoral<sup>8</sup>.

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<sup>8</sup> Presumably, however, the uncivilized character of Antisuyu did not extend to Inka efforts to establish their imperial order in the region. Complexes such as Inka royal estates (including the Amaybamba

This 'savage' aspect of the lowlands appears to have been equally attributed to its landscapes, its flora and fauna and its human denizens – with little distinction being drawn between them. This is particularly relevant to the present discussion given that the Amaybamba was the primary gateway to the Antisuyu lowlands near Cuzco, and represented the beginnings of the vast forested zones that lay to the east of the Andes.

For example, in Betanzos' narrative the peoples of Antisuyu are described through a range of pejorative terms, supposedly prone to idleness, violence and cannibalism of dead bodies. Interestingly, the warlike nature of the inhabitants of Antisuyu is critiqued, not for its own sake, but because they fought so as to feed their anthropophagic desires, rather than in an effort to politically subjugate other groups (Betanzos 1996: 125). Cieza de León (2005: 338-9) recounts similar tales of 'animal-like', unclothed peoples living deep within the forests, and goes on to describe the frequent difficulty the Inkas had in subjugating the region and its inhabitants. Chaotic and uncivilized as it was, the Inkas were deeply interested in Antisuyu for it was also a highly potent region, holding powers that were manifest in all its inhabitants and which could be harnessed through them. Most accounts of Inka conquests in the lowlands included reports of the remarkable and exotic animals that were brought back, especially large cats (jaguars, referred to as '*tigres*') and giant snakes (probably anacondas) (Betanzos 1996: 88). The forests of Antisuyu were also intimately associated with coca leaf, and much of the Inka interest in the lowlands near Cuzco was geared towards accessing this plant for the purposes of the Inka elites (Covey 2006: 226-7).

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landholdings) would likely have been conceptualized as islands of 'civilization' amid the broader chaotic landscape.



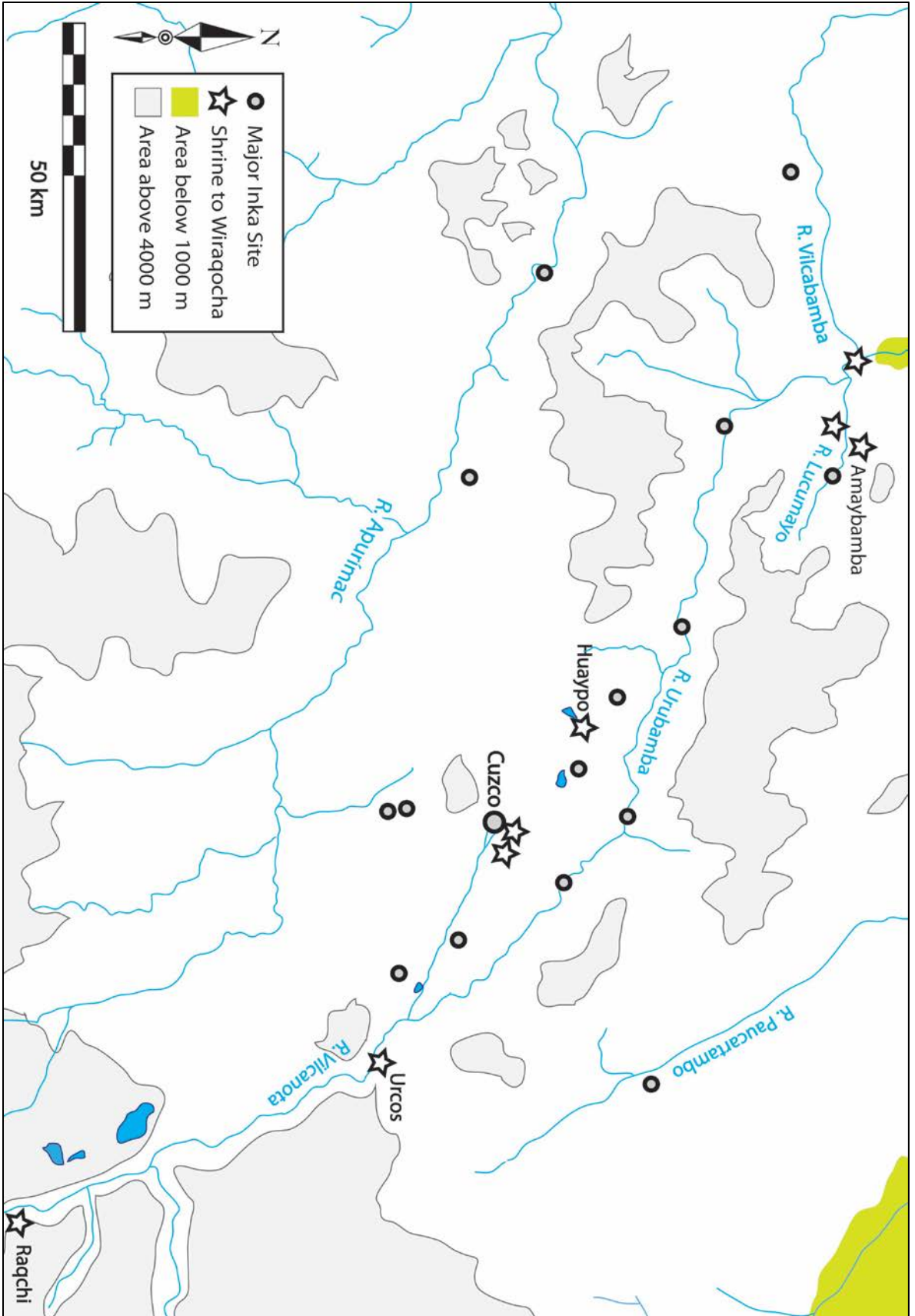


Figure 6.6. Map of the Cuzco region in the central highlands, showing the locations of known sites associated with wiraqochas.

Given the Amaybamba's situation as a liminal space that lay on the margins of order - an order dependent on and crafted through the Inka Empire, the interest in manifestations of *wiraqocha* in the region becomes more intelligible. In their desire to 'civilize' the region and access the potent lowland products it contained, the *wiraqochas* located there were likely an essential set of recruits: conscripts to the Inka political project whose acquiescence and support were a primary goal in the Inka dominion of the Antisuyu lowlands near Cuzco. If *wiraqocha* is a manifestation of creative action, which permits order and was therefore an essential component of empire-building and conquest, then dominating the Amaybamba with the cooperation of its *wiraqocha* entities would seem to have been an essential strategy of Inka statecraft in the region.

The fact that Molina (2011: 43) names two *wakas* of *Wiraqocha* in the Amaybamba and two enclosed outcrops were noted within the survey is probably best assumed to be a coincidence. Drawing direct correspondences between historically documented *wakas* and extant archaeological sites is fraught even at the best of times. It is even more difficult in areas that are more remote to Cuzco, as the geographical details provided by the chronicles are much richer nearer to the capital. While individual *wakas* named in historical texts can often be identified near Cuzco with some degree of confidence - as Bauer's (1998) research has demonstrated well - as one moves farther afield in the Cuzcocentric narratives, the information often becomes much vaguer and thus less helpful. And in any case, as already discussed, a *waka* need not have any form of 'cultural' elaboration that would be archaeologically visible.

That said, the outcrops at Inkacarcel and Capillayoq do stand out as specially marked by the kinds of architectural elaboration they were given. The use of circular masonry at Inkacarcel, and the lack of any other structures at the site, strongly suggest the autochtolith as a *waka* of some kind, and certainly no ordinary Inka installation. Given its unusual elaboration it should probably be considered a strong candidate for one of the *wakas* described in Molina's transcribed hymn. More broadly, the presence of multiple *wiraqochas* in Amaybamba, along with the fact that the sacred peak on the north bank of the Río Lucumayo is referred to by the name Wiraqochan<sup>9</sup> indicates that the local landscape was heavily associated with iterations of the creative agency that these entities embodied. Engagement with autochthonous powers manifest in rocks in the Amaybamba is likely inextricable from the desire to manipulate such forces in the task of empire-building and producing civilization.

At this point I have suggested that the Inka interest in *wiraqochas* in the Amaybamba, rock outcrops that were likely *wak'as*, needs to be articulated within a consideration of several overlapping aspects of the ways the Inka approached the world they sought to dominate. This must be set alongside the broader characterization of the Inka political project, Tawantinsuyu, which they perceived as a global reshaping so as to bring all things into an (Inka-dominated, Cuzcocratic) state of order and balance. There is also the local understanding of Antisuyu, that part of the empire that consisted of the tropical lowlands of the eastern Andes - a chaotic, uncivilized region that was nonetheless abundant with potent forces and material products which were of great interest to the imperial elites, and a buttress of their power. Finally, there

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<sup>9</sup> The site of Capillayoq is situated within the watershed of Wiraqochan, while the Inkacarcel site is on the far bank of the Río Lucumayo.

is the fact that the Amaybamba region was the principal gateway between the highlands around Cuzco and the vast territories of the Amazonian lowlands, occupying the liminal space where civilization graded into chaos and the margins of the Inka political project were to be found.

This provides the broader context for thinking about why the Inkas were so interested in the kinds of autochtolithic entities that were resident in the Amaybamba, and how they might have been considered fundamental to the broader strategies with respect to acquiring resources and securing important new territories for the empire. How then was the support and acquiescence of the non-human entities achieved in practice? What did the Inkas do in material terms in order to ensure that lithic entities were loyal and reliable political *subjects*, whose activities and potential were marshalled effectively so as to fall in line with greater political project of Tawantinsuyu, the four-parts-made-whole?

## VI. Interiority and Subjectivity

Alfred Gell's (1998) seminal essay on agency provides an important background for how we theorize the apparent 'mindedness' of entities that are not human – and so the remainder of this chapter will seek to engage critically with some of the ideas he outlines. Gell (1998: 129) makes much of the consciousness that lies (or appears to lie) within the *idol*, arguing that,

Whoever imagines that the idol is conscious, thinking, intentional, etc. is attributing 'mental states' to the idol... that it has something *inside* it 'which thinks' or 'with which

it thinks'... if it has 'intentional psychology' attributed to it, then it has something like a spirit, a soul, an ego, lodged within it.

Here Gell is talking about the relationship between interiority and subjectivity. Such a relationship is often a basic assumption in anthropological conceptions of what is meant by subjectivity, and for the framing of its analysis. Indeed, looking at the ways in which the term subjectivity is used by many scholars, this assumption is clearly seen. The following collection of statements from a recent synthetic essay on the ethnographic analysis of subjectivity by João Biehl *et al.* (2007: 5, my emphasis), are perhaps representative, with subjectivity presented as,

...an exploration of the *inner* lives of subjects...

...the remaking of culture as well as the *inner* transformations of the human subject...

...ways in which people's *inner* states reflect lived experience within everyday worlds...

... *inner* life processes and affective states...

Inner lives, inner states, inner transformations - the notion that subjectivity is at base an engagement with some form of interiority is repeatedly expressed here. For these scholars it also seems this inner realm is interesting mainly insofar as it provides a lens through which to examine bigger things. For example, the set of cases to which the essay quoted above provides an introduction, explores the subject's instantiation within a range of wider institutional contexts such as medicalized senescence, mental illness, violence, impoverishment and the

state. Therefore the ethnographic attraction in the study of interiority is that it offers a localized field and a grounding for things that are otherwise expansive, unwieldy and by definition translocal. The external forces that run through the inner lives of individual subjects allow an ethnographic handle on matters that would otherwise be too grand and too omnipresent to be studied empirically.

Other anthropologists emphasize the centrality of interiority to the ethnographic analysis of the subject. As Luhrmann (2005: 345, my emphasis) suggests,

‘Subjectivity’ is a term loosely used by anthropologists to refer to the shared *inner* life of the subject, to the way subjects feel, respond, experience.

Similarly Sherry Ortner (2005: 31, my emphasis) provides an explicit and anthropological framing of the matter, stating that,

By subjectivity I will mean the ensemble of modes of perception, affect, thought, desire, fear, and so forth that animate acting subjects. But I always mean as well the cultural and social formations that shape, organize, and provoke those modes of affect, thought and so on. Indeed this... will move back and forth between the examination of such cultural formations and the *inner* states of acting subjects.

So, subjectivity in this definition refers at once to the inner life and the external forces through which it is produced. Of course, these internal and external domains of life are not presented as separated or starkly delineated in the accounts of these writers. They are all at pains to emphasize the dynamic and recursive relationship between what happens within and what

happens without – how, in other words, the external forces work to ‘shape, organize and provoke’ Ortner (2005: 31) what exists in the interior and vice versa. Gell (1998: 127) suggests this attribution of interiority is potentially innate in that ‘ordinary human beings are natural dualists, inclined, more or less from day one, to believe in some kind of ‘ghost in the machine’.

What then of idols? Such things are also regularly attributed interiority in certain contexts, in that they are thought by many to have intentional psychology and inner states, just like persons. But within a normative ‘scientific’ ontology, this is seen as a false attribution. Non-living beings, and certainly not rocks, do not really possess an inner life of the mind – such subjectivity is the preserve of humans alone (or at least certain higher mammals, depending on whom you ask). Of course, this false attribution was the basis for Tylor’s concept of animism, which was by definition a belief in the agency of beings which were in reality inanimate. Gell (1998: 132) discusses this matter explicitly in terms of anthropomorphism and idols, saying,

...the development of idols which depict the visible, superficial, features of the human body make possible the abduction of the ‘invisible’ mind, awareness and will from the visible image... [a]dding features which apparently make... [it] more ‘anthropomorphic’ (by the addition of eyes, a mouth, etc.)... render it more spiritual, more inward, by opening up *routes of access* to this inwardness.

Thus for humans and idols alike, *surface* features like eyes make inner lives apparent to others. Hence it is not surprising that anthropomorphism is so common in idols cross-culturally – for how else could we seek to communicate with them? Yet as discussed above, the Inkas are noted for their aniconism, that is, for the production of idols that lack obviously human-like

features such as eyes and mouths. Is it possible then to produce such interiority by means that were more (apparently) abstract?

If we shift to another generator of surface effects of much more recent historical emergence than eyes - such as the polygraph machine - we can see another sort of medium through which inner states might be read. This device was a contrivance of two men from Berkeley, California, named James Larson and Leonarde Keeler, who announced their new invention to the world in the 1920s as a revolutionary technology in the identification of truth and falsehood in the interrogation of criminal suspects. It became a significant part of everyday life in the United States in the decades that followed and by the 1980s it is estimated that some two million Americans were being subjected to polygraph tests each year (Alder 2007: xiii-xiv).

The device worked by taking a variety of subcutaneous and surface conditions of the body which were not normally legible to the interrogator and making them so by translating them into a graphical form. While the detection of criminality is perhaps the best known application of the polygraph, by the 1950s it was also being put to a range of innovative purposes, including concerted efforts by state authorities to identify potential homosexuals and communists hidden within the ranks of government agencies (Alder 2007: 218-26). Thus formerly illegible phenomena such as one's blood pressure and the electrical conductivity of the skin were reconfigured as indices of honesty, loyalty and even concealed political or sexual deviancy. This was achieved by generating a new kind of surface across which such things could be read indexically. As the polygraph subjects spoke, the previously hidden depths of their inner lives were rendered as inked lines produced by the stylus as it oscillated back and forth across the



roll of paper that was relentlessly unfurled from within the machine. A lie, the utterance of a statement which the test subject knew in their heart to be a falsehood would cause the stylus to twitch excitedly, producing peaks and troughs of greater than normal amplitude. So powerful was its impact that by the later 1950s government employees increasingly referred to the polygraph machine as the 'Soul-Washer' (Segrave 2004: 56). Thus it offers a disturbing and potent example of the ways in which new modes of indexicality might be produced within particular technological and political regimes, creating new surface effects via which interiority may be mediated, while at the same time generating new forms of political domination with them.

Here then it is tempting to apply the polygraph example analogically to the autochthonic outcrops of the Inka Empire – as a means to explain how interiority was potentially produced in non-anthropomorphic ways. In particular, it opens up a wide variety of new avenues for considering the seeming alterity of Inka practices towards bedrock outcrops and their supposed aniconism and abstraction. If we take seriously the contention that is offered again and again in the chronicles - that certain rocks were sentient and person-like and that they were therefore capable of treason, a desire for self-preservation, hunger, speech and a broad array of different internal affective states - then we need to consider the ways in which the inner lives of these lithic entities might have been made legible to others. And here we might find a way to circumvent the confounding 'sea of lost meaning' that troubles Hyslop (1990: 103) and many other Inka scholars gazing upon the steps, platforms, niches and knobs that adorn the surfaces of modified Inka rock outcrops. In fact the impulse to extract representative meaning from the rocks may be entirely the wrong approach to take, albeit bound up with a centuries, if not

millennia-deep, Western and monotheist traditions of thinking about images. And yet we know that such outcrops, often described as *wak'as* by the Inkas, a term we gloss as 'shrine', were really neither art objects nor sacred places. This is not a particularly controversial view within Andean scholarship either. As Frank Salomon (1991: 19) states with respect to *wakas*, 'clearly [they] are living beings, persons in fact'.

It is important to underscore that although the lines on the polygraph readout are a medium for expressing interiority, they do not *look like* something else. By considering the numerous stone entities that the Inkas carved across the imperial heartland in such light, we might recast their apparent aniconism as something quite different from their traditional presentation as a kind of abstract art or sculpture. Instead, their shapes allow for a complex and constantly changing array of surface effects to be presented to the external subject interacting with a given autochtolith, through which the inner states of the rock-as-subject can be apprehended. By modifying their surfaces into steps, geometric shapes, channels and overhangs, the play of colors, light and shadow is altered too, as is the flow of fluids such as rainwater, or perhaps in many cases *chicha*<sup>10</sup> libations. Changing from one moment to the next, their surfaces are like the ever variable polygraph readout of the human subject, offering a dynamic set of signs through which to read the inner life of the lithic being. Such surface effects and their shifting sensory properties are essential for one subject to engage with the interior life of another. Under such circumstances, asking what the shapes carved on autochtoliths might 'mean' or 'represent' as if they were an artistic form of abstraction, is entirely the wrong question. They do not mean anything, at least outside the specific moment of their production.

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<sup>10</sup> An Andean alcoholic drink made from fermented maize.

This requires a somewhat more dynamic understanding of signification than has typically been applied to ancient 'artifacts' in Andean contexts. In humans, interpreting our inner dispositions is not achieved by looking at the form surface effects take *per se*, but rather their transformations. A similar principle might hold for geometrically carved lithic subjects also. The abstract three-dimensional shapes into which they have been reformed do not convey inner states through those geometric forms themselves; rather it is in the always shifting patterns of moisture, light and shadow on those surfaces that their interiority is made legible. Unfortunately the conventions for interpreting such unstable surface effects are lost to us, and so although we might still see them today, we can no longer render them legible.

It would be like looking at polygraph readout when one has not been trained to interpret the peaks and troughs left by the stylus as it moves across the page. For someone who did not know what it was, the polygraph machine's graphical readout would convey nothing of the inner thoughts of the test subject – it might even look like a piece of abstract art. Moreover, it should be remembered that the graphical readout from the lie detector is never meaningful on its own. If you were to show the peaks and troughs generated by the machine to someone they could not extract very much sense from it at all. The readouts must always be considered *in real time* as they are produced alongside the questions being asked and so without the simultaneous interaction between the two subjects as a context, they do not reveal interiority. In other words the forms themselves, whether abstractly carved rock surfaces or lines produced by a polygraph stylus, convey very little. In the contemporary Andes, where the Inka realm has long passed away, the abstractly carved rocks of the heartland are not ossifications of inner subjective states, where the inner lives of the autochtoliths have been frozen in particular

expressions, they are more like broken 'machines' through which the interiority of lithic beings was once conveyed. However, this is not to say where autochthonous outcrops were left uncarved by the Inkas, these could not be subjects also. Where unmodified outcrops were considered to be sentient entities, it may simply have been the case that the apparatus for conveying their interior lives was different and perhaps not so heavily manipulated by external (i.e. state) agencies.



**Figure 6.7.** *An isolated autochtholith outcrop in the Saqsayqaman area near Cuzco, carved into aniconic geometric shapes and steps-forms.*

In this respect our discussion of the polygraph machine might offer another useful analogy. The invention of the polygraph machine offered the American State new and powerful possibilities for accessing the interior lives of its subjects, but it was not used on all, nor even a majority of American citizens. Instead it was targeted against individuals who were placed in sensitive positions within the government itself, on persons who were relatively powerful or in a position to acquire influence in the future. With that in mind, we might consider that the rocks that were carved by the Inkas into such abstract forms were lithic beings who were of special interest to the Inka elites in the context of their evolving political project. For whatever reasons, they were entities whose inner lives were of particular import to the state and it was therefore an imperative that means be established for better accessing them.

## VII. Lithic Subjects and Layer Effects

Yet here we are led to an obvious question with regard to lithic subjects and the interest shown them by state agencies. The practice of geometric carving is one thing, but in many cases the Inka material engagement with rocks took the form of enclosure rather than surface reshaping. This is certainly the condition in which the autochtoliths of the Amaybamba are found; not carved into abstract step-forms, but encapsulated within buildings similar to the houses of humans. How are we to account for this specific kind of physical trace with respect to Inka engagements with autochtolithic subjects?

Gell offers his own approach to enclosure, seeing it as another widespread means to generate interiority in the idol, distinct from the strategy of anthropomorphism. He argues that,

The [idols] were kept, except when being served by priests, in a box or ark, which in turn, was kept in the darkest and most central sanctuary of a vast temple complex, consisting of innumerable lesser sanctuaries, shrines, courtyards, barracks and workshops... [W]e may readily imagine that the idols (immured in the temple complex, and animating it like a giant body) come to stand for 'mind' and interiority not just by physical resemblance to the human body, but by becoming the minds of the huge, busy and awe-inspiring temple complex... The seclusion of the idol has, automatically, the effect of motivating the abduction of agency, on the basis of the equation: idol : temple :: mind : body (Gell 1998: 136).

So it seems following Gell, we could account for both sets of Inka practices towards autochtholiths in terms of producing interiority in non-human beings, whether this takes the form of surface reshaping or architectural enclosure. The Inkas placed rock outcrops inside houses (or 'temples', which are after all, basically houses for divinities) so as to permit the abduction of agency in the rock, just as the mind appears to have agency when enveloped by a body.

Such arguments are powerful and indeed, quite beguiling, offering a theoretical lens for the interpretation of many phenomena observed in the ancient Andes, and a range of other non-modern contexts. Yet, despite the attractiveness of such ideas, here I wish to stop and pause for a second and ask: are such explanations not simply too neat? Certainly, they amount to logical arguments that explain the empirical material we have available, but even logical arguments may be wrong if the premises from which the reasoning occurs is incorrect.

Examining those premises more closely, we might ask: did the actually Inkas impute interiority to non-humans? Did they even attribute an inner mind or spirit to humans, for that matter? It seems a real question whether or not such a conception of subjectivity (i.e. one that relies on a notion of interiority) can be assumed to be a universally relevant one. In that regard, if we consider the evidence for the particular kinds of persons that exist and have existed within Andean ontologies, the assumed interiority seems increasingly difficult to sustain. Recall the discussion presented in chapter four based on Catherine Allen's ethnography of the mountains that were important to the Quechua-speaking community of Sonqo. As Allen (2002: 26) points out, the *tirakuna* (fathers or 'mountains') are explicitly *not* spirits that inhabit geological bodies. Rather the *tirakuna* are the mountains, rather than their spectral possessors, and so in this case there is in fact no matter/spirit distinction in effect. In a similar vein, Salomon (1991: 19) also discusses how in his reading of the Huarochirí manuscript there is a notable absence of the Western/Christian distinction of matter and spirit with respect to animate beings.

Henry Stobart's ethnographic work in Bolivia is also potentially useful here. As he points out, the word for 'soul' or 'spirit' used by Kalankiras Quechua-speakers is not an indigenous one, but a European borrowing: *animu* (from the Spanish *animó*) (Stobart 2006: 27). Moreover, its use seems not to fully follow the ordinary Western understanding of such concepts. *Animu* can be quantified for example, with some beings like mountains having twice as much of it as male humans. Also, its departure from the person in the form of bodily fluids or other corporeal substance is usually the basis of illness as locally conceptualized, and is often translated into English as 'soul-loss' (Stobart 2006: 27). Concepts such as *animu*, and similar ideas found elsewhere in the Andes do not seem like 'spirit' in the European sense, insofar as they do not

imply a distinction between incorporeal substance and corporeal matter. Souls do not leave bodies in immaterial form within most indigenous Andean accounts, but rather depart as either fluid or fat (see also Bastien 1984). Indeed, it is not enough to suggest that the ‘stuff’ of Andean spirit is always embodied within material substance, rather it *is* vital material substance with the matter/spirit distinction simply not present at all. By contrast European souls *possess* material bodies, or *reside* in them – the distinction between the two ‘substances’ being absolute, at least within the Christian and Cartesian metaphysical traditions<sup>11</sup>.

Such observations bring additional light to the kinds of Andean entities discussed in chapter three, such as the *Runakuna* and the *wak’as*. As I pointed out there, these beings possessed no given essence, but were constituted through the ongoing material exchanges of the appropriate solids and fluids. A *wak’a*, for example, only remained a *wak’a* if it continued to receive the libations of *chicha* and offerings of coca that sustained it – otherwise, it would become *atiqsa* (van de Guchte 1999). This seems not so much a death, whereby the soul is sundered from the material body, but rather a deactivation - a cessation of the energizing flow. Perhaps then a better analogy than the Christian notion of death (where spirit is separated from matter) would be switching off a computer. When the flow (of electrical current) is cut off, the animacy is lost. It is not lost because the immaterial essence leaves however; instead it is lost because the energy flow is interrupted. It can always be reactivated at some future point, indeed, not unlike a *wak’a*.

So, while it may be attractive to think of the carved surfaces of autochtoliths as polygraph-like vehicles for expressing inner lives, this logic only works if Andean subjects were actually

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<sup>11</sup> Descartes referred to the two substances as *res extensa* and *res cogitans*.



attributed interiority that was expressed through surface indices. That is to say, we have to assume the relevance of a Western notion of subjectivity in the ancient Andes for the argument to hold. But what if indigenous Andean understandings of persons cannot be aligned with the idea of the *deus ex machine* - the spirit that inhabits the body, controlling it like an automaton? Alternatively, if Andean persons were more akin to potent accumulations of flowing and energized substance, then the means to controlling them and bringing them into one's political orbit would entail manipulation of such circulations. In that respect the libations flowing over the rock outcrop are not indices of the spiritual essence that lies 'underneath' or 'inside' the *wak'a*, they are its essence – fully visible and fully material.

Here it is important to consider not just the surface effects through which interiority is made externally legible, but the additional phenomenon of what I call *layer effects*. Shifting superimpositions of physical layers, no less than the shifting conditions of surface features like eyes, are central to the constitution of human subjectivity. In this respect, clothing is perhaps the most basic example of such layering effects. It matters especially in this context because layer effects that are produced by such phenomena as clothing not only reveal the condition of the subject's inner life, but can be used by external power structures to *alter* it as well. Saba Mahmood's (2005) discussion of veiling practices in the piety movements operating within the context of the Islamic Revival in contemporary Egypt is a good example of this. As outlined in her text, Egyptian women within such movements generally conceive of their interior subjective states as dependent on bodily expressions and habits. As she (Mahmood 2005: 23, emphasis in original) argues,

A majority of participants in the mosque movement... argue that the veil is a necessary component of the virtue of modesty because... the veiled body is becomes the necessary means through which the virtue of modesty is both created *and* expressed.

In other words the internal subjective conditions (especially in this case, modesty and by extension, piety) are dependent on the disposition of the subject between material layers. Not only does it make their interior piety legible, but that piety is actually constituted via the layering practices themselves. The reason why external forces and political structures within Egyptian society might seek to regulate such practices therefore becomes obvious, since it provides a means to manipulate the interiority of political subjects.

In other contexts, layer effects can be used to produce different kinds of affective states which are intersubjective. In this vein, it is perhaps useful to consider the concept of 'intersubjectivity' as it has been deployed in the anthropological literature – with Michael Jackson's (1998) ethnographic studies of self-narratives through the lens of intersubjective relations being particularly valuable in this respect. As Jackson (1998: 10) points out '[s]elf is everywhere reciprocal to other selves, both behaviorally and experientially' (Jackson). The analytical distinction between subjectivity and intersubjectivity is thus primarily in terms of emphasis. Subjectivity is construed as the relationship of the interior life to the outer world, where that outer world is understood to be impersonal institutions and forces at a variety of scales (e.g. the state, society, history, the prison). Intersubjectivity is not the relationship between interior and exterior, but between one interior and another, the constitution of self in relation to other

selves, each possessed of their own inner lives. These are not oppositions of course, since intersubjective relations must always take place within the external world of institutions and grand, sweeping forces. In that sense, they represent something more akin to complementary analytical stances.

There is clearly a close relationship between the operation of layer effects and sustaining intersubjective relationships. It is hard to imagine many forms of humiliation without the audience to perceive it - that is, humiliation must often take place before others to be truly felt. Private nakedness is not necessarily humiliating the way public nakedness might be, and it is the absence of the layer (of clothing) between one's skin and the audience that is the necessary material condition for the humiliation to be brought into effect in such a case. Similarly, while certain affective states might be thought to occur without the need to relate to another subject (e.g. one might be able to express anger or irritation entirely in private), some inner states seemingly require intersubjective interaction. Intimacy in particular is inherently a dyadic condition; it requires at least one another subject to be intimate with.

By definition, intimacy implies a high degree of *closeness* between several subjects, necessarily excluding others. It too is deeply bound up in layer effects, since positioning between layers is profoundly constitutive of the closeness in which intimacy is engendered. Consider the naked embrace of lovers, beneath their bedclothes for example. Being naked *together*, beneath a physical layer which places other subjects in an external position is essential to the constitution of everyday states such as intimacy. The removal of a layer that surrounds the subject, such as clothing is potentially to expose it and make it vulnerable. Where that shift in layers is voluntary,

the exposure of nakedness can create intimacy between two subjects, where it is forced and public, the interior effect is humiliation and thus much more violent. However, it is inescapable that manipulating material layers and the positioning of subjects between does not simply reflect inner states, but is necessary to constituting them.

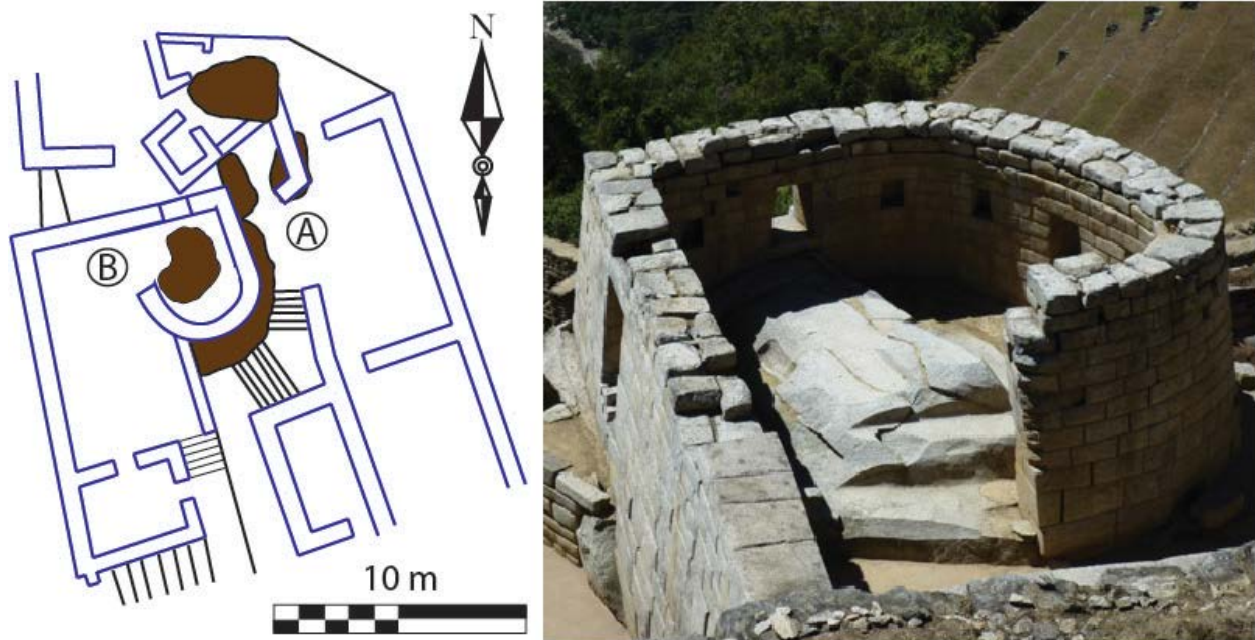
The manipulation of the conditions in which layering effects are made manifest can never be extracted from its wider political contexts. With that in mind it is possible to reflect further upon the logics underpinning the autochtolithic subjects in the Amaybamba: at Inkacarcel and Capillayoq. Enclosing lithic persons within masonry structures that permit the exclusion of some but not others, allows a degree of intimate access to those who are able to enter within the concealing layers of stone walls. The kinds of practices that may have taken place behind such walls are indicated in Cristóbal de Molina's (2011: 43) account, in which he describes how the *wiraqocha* at Urcos would be fed by *camayos* ('specialists') when it was hungry, through the burning of appropriate offerings. According to Molina these specialists described themselves as kin to the *wiraqocha* – as its sons and brothers.

Here we see that those who interacted with these lithic subjects are described in terms of familial relationships with them, itself suggestive of intimacy – and it does not therefore seem unreasonable that similar practices were taking place directed towards the Amaybamba *wiraqochas* that are named alongside the one resident at Urcos. My argument is that in situating acts such as the feeding of autochtoliths behind the walls of masonry structures, the capacity for intersubjective intimacy between human specialist and the rock being is enhanced. It is an example of a layer effect, in which closeness between subjects is engendered through

their shared positioning of their bodies behind a layer which acts to exclude others (visually and materially).

Considering the masonry enclosure of autochtoliths as a kind of layer effect in the constitution of intersubjective relations between certain groups of humans and lithic beings may shed light on the material engagements with rocks at other sites in the Inka polity. The Torreón at Machu Picchu is perhaps one of the best known examples of an enclosed outcrop, exhibiting a very high degree of architectural elaboration. The curvilinear wall that surrounds the highest point of the outcrop is perhaps the most striking and atypical element in the structure, while other parts of the outcrop are visible at lower levels in the complex. The plan of the Torreón and its adjacent architecture is worth considering for a moment. In the area marked 'A' in the plan, one is able to see a large section of the lower surface of the outcrop, although the highest points are concealed (or made selectively visible) by the curving wall which crowns the rock formation. Climbing the steps to the higher level of the complex, one is able to eventually enter the space marked 'B', allowing access to the very top of the autochtolith that had previously been concealed from the lower vantage point.

One gets the impression of the architecture limiting access by creating layers between the human subject and the lithic subject, which permits one to interact with different faces of the rock from different locations. As the human specialists moved through the complex, eventually entering the area enclosed by the curving wall, they would have entered the presence of another part of the outcrop, previously closed off and access to which seems to have been quite strictly controlled. Rather than seeing this as a kind of restricted access to sacred space,



**Figure 6.8.** *The Torreón autochtolith at Machu Picchu (right) alongside a plan view of the structure (left) showing the relationship between the rock outcrop (coloured brown) and the associated masonry (in navy blue). Plan is based on Wright and Valencia Zegarra (2000: 19).*

something like the reserving of the ‘holy of holies’ for the high priest – the consideration of the subjectivity of lithic beings compels us to think along different lines. My suggestion is that intersubjective interaction between the autochtolith and human attendants was facilitated through the layering effects that were made possible by the physical walls that surrounded and sat atop it. As one moved through the complex, seeing different parts of the rock and as new areas of its surface were revealed, one could ‘get to know’ it better, building a kind of exclusive intimacy (through bounded closeness) that was denied to those outside the complex. While the situating of certain kinds of material exchanges between human specialists and autochtoliths (like feeding) behind layers, permitted those acts to be intimate through their exclusion of

others, thus building intersubjective bonds between the participants – whether lithic or flesh-and-blood.

The very high level of architectural elaboration around autochtoliths at major centers such as Machu Picchu may therefore be instructive in indicating the overall logic on which Inka practices of enclosing rock outcrops rests. It therefore provides a sort of model for examining the way in which enclosed outcrops in places such as Inkacarcel and Capillayoq may have been the target for intersubjective interactions, where the architectural investment was not quite so extensive as that seen at the most important royal estates. It is interesting to note that the structures surrounding autochtoliths are seldom uniform in shape, whether the curving ‘P-shape’ of the Torreón, the rectilinear building at Capillayoq or the elongated oval around Inkacarcel. A certain level of individuality seems to have been maintained in the way each autochtolith was enclosed.

However, there are important differences between the layering effects seen in the autochtoliths of the Inka Empire, and the Egyptian women in Mahmood’s example related above. In the context of Islamic (and Christian) subjects, the condition of the outer body acts back upon an inner spirit which the body conceals. Piety is ultimately a condition of the soul, even if it cannot be constituted without the cultivation of certain bodily dispositions and habits. No such mind/body dualism is in effect in the Inka case however. Enclosures might allow for closer and more exclusive relationships between certain humans and certain *wak’as*, but this is not a meeting of minds through the *medium* of bodies – because that can only make sense within the Western (or monotheist) logic of the *deus ex machina*. Rather, if Andean subjects are

constituted through concentrated hydraulic flows and interactions between vital substance, then enclosures of the sort we see at the Amaybamba *wak'as* would likely do several things. First, they would concentrate those circulations in a particular location, by bounding them and regulating them through walls and channels. This concentration might have the effect of increasing the potency of the *animu* (or equivalent) of the lithic being in question, since (as discussed) bodily coherence is central to health and vitality in Andean contexts. However, it would also tie together the humans who feed the *wak'as* and the lithic beings into *shared* circulations. In other words, it would create shared substance between the *wak'as* and the individuals who offered them libations and engaged in ritual exchanges with them. This might afford a kind of exclusive intimacy that was politically potent when it involved such powerful entities; however the ontological frameworks entailed are quite distinct from those relevant to common Western notions of personhood.

Once again we may also need to reconsider the polygraph analogy with respect to carved outcrops. In indigenous Andean contexts, auditory phenomena (and especially music) are themselves forms of vital substance (such as *animu*) (Stobart 2004) – and they are certainly communicative and expressive. They permit both knowledge and vitality to be shared between humans and non-humans in a variety of contexts. But this is not communication in the Cartesian vein, whereby the voice is a medium for a mind or spirit that is hidden and unseen within the interior of a body. Such Andean substances do not express the consciousness of an immaterial essence; they *are* the entity's essence in a fully present and non-mediating sense. Thus the changing plays of light and shadow, and of flowing water and *chicha* over an autochtolith may well be expressive and communicative with respect to such beings, but they



do not express the spirit that lies 'within' in a non-visible realm. Instead, they are manipulations of its manifest vitality that may have made such beings more expressive and accessible to the Inkas - by tying together their flows of vital substance with those of the Inkas. Thus they are more than abstractions. Not only do they not look like anything, they do not represent anything (that is absent) either.

### VIII. Conclusions

*Wak'as*, such as those in the Amaybamba, have been discussed in this chapter as person-like entities – but it is important to remember that this is, in the end, only a *translation*. There were no 'persons' in the ancient Andes, and so it is not strictly correct to ask what Inka personhood (whether human or non-human) entailed in ontological terms. To do so presupposes the universality of the person as a category, that is as something existing everywhere, albeit always through a range of local manifestations. Instead, alongside *wak'as* there were *runakuna*, *apukuna* and perhaps many other similar entities. Gell's discussion of idols and how they work offers us a universal account of subjectivity, based on the idea that interiority (inner minds that are expressed through outer manifestations) is assumed to exist by humans cross-culturally and so presumably reflects some sort of innate response. The same model thus accounts for personhood in Western and non-Western contexts.

Perhaps the most widely influential idea taken from Gell's work is that of the 'distributed mind' or 'distributed person'. He sums up this approach stating that,

...a person and a person's mind are not confined to particular spatio-temporal coordinates, but consist of a spread of biographical events and memories of events, and a dispersed category of material objects, traces and leavings, which can be attributed to a person and which, in aggregate, testify to agency and patienthood during a biographical career... The person is thus understood as the sum total of the indexes which testify... to the biographical existence of this or that individual (Gell 1998: 222-3).

This approach offers a quite deliberate attempt to break down the long-running Cartesian distinction between mind as the internal, immaterial component of the person and body as the external, material component. Indeed, that is one of the main reasons why his work has been so influential among archaeologists who show increasing skepticism towards such dualistic ontologies. Yet it remains a kind of meta-ontology, which has 'the same implied claim to universality' (Alberti and Marshall 2009: 348). Gell's case-studies range widely in time and space, and take in Hindu gods, Melanesian statues, Cambodian land-mines, Egyptian temples and the works of Marcel Duchamp – and he impressively elaborates his general theory through all these myriad examples. My argument is not that meta-ontologies like this are *wrong per se*; however by virtue of their universality they provide little help in dealing with the problem of alterity. Universal frameworks and incommensurabilities are by definition, the analytical equivalents of oil and water. If we wish the 'case-study' to act back on the theory, an approach I have adopted from Viveiros de Castro – so that it changes the explanation in ways that *only it could* – then such a meta-ontology (however critical of Cartesianism) will not take us where we wish to go.

Given this problem with respect to the use of meta-ontologies, I wish to conclude with a few final comments about the arguments made in this chapter. When I say that for the Inkas, certain rock outcrops were treated as persons, it is important to be clear what I mean. This is not a literal description of Inka 'ontology' to the effect that for the Inkas, rocks really were persons. Instead, it is a means of expressing the alterity of the Inka world from the perspective of our own (i.e. the West). In other words, the ways in which the Inka dealt with (what seem to us to be) rocks is very similar to the ways we would normally deal with persons. This implies that whatever we think rocks are, was not an understanding shared by the Inkas (since for us rocks cannot be persons) – but moreover, it must also be the case that whatever we imagine persons to be, was not a view shared by the Inkas either (since persons for us, cannot be rocks). The formula 'the Inkas regarded rocks as persons' is therefore a way of expressing difference so as to highlight what is alter about Inka ontological frameworks with respect to modern, Western ones. It is not in itself the final explanation for what they were doing.

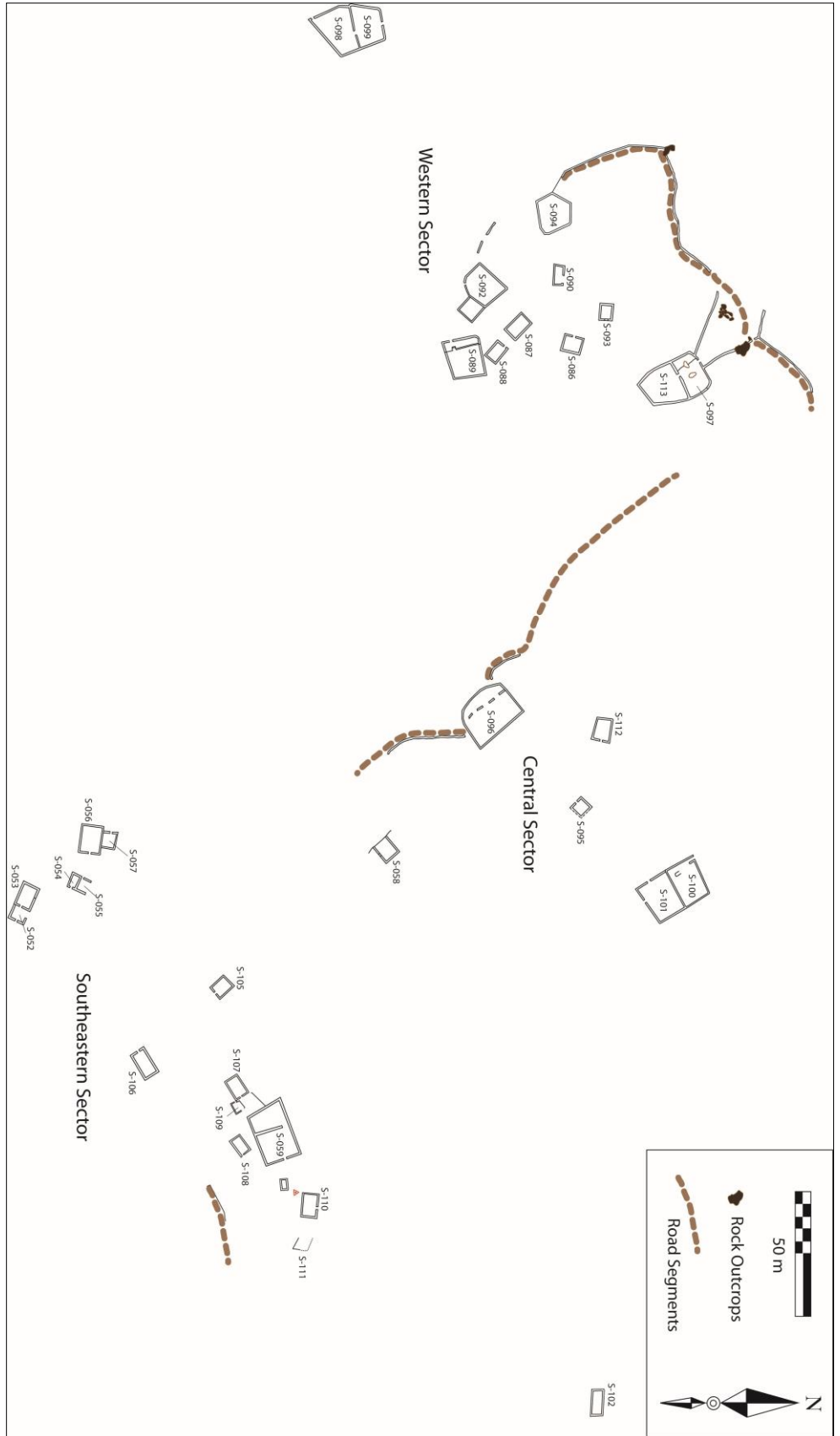
The 'better' translation that this formula leads to (after the description of alterity has highlighted wherein the incommensurability lies) is that in the Inka world there were circulations of vital substance (like *animu*) that flowed widely, and in some cases were concentrated and bounded into specific entities (e.g. *wak'as* and *apukuna*). These accretions of substance were potent and animate, and possessed attributes that from a Western perspective seem similar to our ontological concept of personhood. Manipulating such accretions could be and were deployed by the Inkas to significant political effects, in the Amaybamba and elsewhere. This account is still a translation of course, but it is a translation that is produced after the consideration of alterity and the explicit questioning of the initial categories of

analysis which generated it (i.e. rocks and persons). The comparison with personhood is therefore a useful, even necessary one, but we must remember it is always a comparison of incommensurables not commensurables. As such no *general* theory can be produced, at least if we wish to address alterity rather than elide it. My descriptions of Inka person-like rocks is non-Cartesian too, but is not intended to work outside of the encounter which generated it. Indeed, if were I to apply the same approach to, say, a Maya or a Neolithic case, I would be undermining the original goal of the analysis.

## Chapter Seven: Coca Logistics in the Amaybamba

This chapter summarizes the data collected with respect to a major Late Horizon site in the Amaybamba called Qochapata. Although this site does not figure directly in the arguments that make up the main thesis of the dissertation, it does offer some important lines of evidence with respect to our understanding of the infrastructural basis of the Inka Empire – and particularly the movement of material goods (including coca) over long distances within it. The following material therefore comprises a summary of the archaeological data collected for the site, and offers some interpretations as to its place within the imperial political economy. In particular, I suggest that Qochapata offers an example of a specialized Inka distribution (but not storage) center for coca and other lowland products. The chapter is intended to read as a somewhat more descriptive presentation than the others, however it provides an important piece of context for the broader relationships in which the Inka occupation of the Amaybamba is set.

The site of Qochapata lies near the western limits of the study zone and is distinctive in several respects when compared to other Late Horizon sites in the Amaybamba. While most of the Inka sites in the region are situated either on, or near to, the level of the valley floor, Qochapata is spread across a north-facing slope at an altitude range between 2,250 and 2,350 m.a.s.l.. The valley floor lying immediately to the north is therefore over 1,000 meters below the elevation of the site. Here, it might also be noted that Qochapata sits at approximately the same altitude as the Late Intermediate Occupation settlements known in the region (see chapter two).



**Figure 7.1.** A plan of the site of Qochapata. Note the direct articulation of the pre-colonial road system with the site.

The site consists of at least 34 structures that are arranged in what seems a relatively unplanned, dispersed manner across the hillside. From the overall plan of the site, it appears that there are three loose clusters of structures – labeled as the Western, Central and Southeastern Sectors. There is clear evidence of a pre-colonial road running directly through the center of the site, and an additional segment of road flanking the northwestern edge of the Western Sector. The site was mapped by using a Brunton compass and measuring tape to record the orientations and dimensions of individual structures, or groups of multiple adjacent structures where feasible. These groups of structures were then related to each other using GPS points taken for each mapped group. Due to the dispersed and sprawling character of the site – and the dense vegetation present – it was not possible to relate the structures spatially without the use of GPS points.

The structures at Qochapata are readily distinguishable into two basic kinds – based on their size - and also the construction techniques and styles seen in their walls. One type I have designated as ‘buildings’ in that they were likely primarily intended for housing humans, and so probably performed some kind of residential function, perhaps on a seasonal basis. The second type I refer to as ‘enclosures’, and were likely used as corrals for housing herds of camelids.

Structure Number	Structure Type	Internal Area	Bonding Method	Architectonic Notes
S-052	Building	23 m <sup>2</sup>	Mud mortar bond	Sealed entrance in E wall
S-053	Building	45 m <sup>2</sup>	Mud mortar bond	
S-054	Building	10 m <sup>2</sup>	Mud mortar bond	
S-055	Building	15 m <sup>2</sup>	Mud mortar bond	
S-056	Building	88 m <sup>2</sup>	Mud mortar bond	Stone-lined pit near S wall
S-057	Building	22 m <sup>2</sup>	Mud mortar bond	
S-058	Building	77 m <sup>2</sup>	Mud mortar bond	
S-059	Enclosure	263 m <sup>2</sup>	Dry wall	

S-086	Building	35 m <sup>2</sup>	Mud mortar bond	
S-087	Building	42 m <sup>2</sup>	Mud mortar bond	
S-088	Building	30 m <sup>2</sup>	Mud mortar	
S-089	Enclosure	185 m <sup>2</sup>	Dry wall	Split-level interior and steps
S-090	Building	23 m <sup>2</sup>	Dry wall	
S-091	Building	43 m <sup>2</sup>	Dry wall	
S-092	Enclosure	154 m <sup>2</sup>	Dry wall	
S-093	Building	21 m <sup>2</sup>	Dry wall	
S-094	Enclosure	155 m <sup>2</sup>	Dry wall	
S-095	Building	21 m <sup>2</sup>	Mud mortar bond	
S-096	Enclosure	326 m <sup>2</sup>	Dry wall	Split-level interior
S-097	Enclosure	119 m <sup>2</sup>	Dry wall	Split-level interior, Aperture in E wall
S-098	Enclosure	181 m <sup>2</sup>	Dry wall	
S-099	Enclosure	137 m <sup>2</sup>	Dry wall	
S-100	Enclosure	182 m <sup>2</sup>	Dry wall	Rect. structure nr. W wall
S-101	Enclosure	208 m <sup>2</sup>	Dry wall	
S-102	Building	21 m <sup>2</sup>	Mud mortar bond	
S-105	Building	33 m <sup>2</sup>	Mud mortar bond	
S-106	Building	31 m <sup>2</sup>	Mud mortar bond	
S-107	Building	39 m <sup>2</sup>	Mud mortar bond	
S-108	Building	19 m <sup>2</sup>	Mud mortar bond	
S-109	Building	15 m <sup>2</sup>	Mud mortar bond	
S-110	Building	25 m <sup>2</sup>	Dry wall	
S-111	Building	8 m <sup>2</sup>	Mud mortar bond	
S-112	Building	49 m <sup>2</sup>	Mud mortar bond	
S-113	Enclosure	208 m <sup>2</sup>	Dry wall	

**Table 7.2.** *A full list of structures recorded at Qochapata. Structures designated as ‘enclosures’ have been highlighted.*

### I. ‘Building’ Type Structures

The majority of structures at Qochapata (approximately 66 per cent) fall under the category of buildings, indicating they were primarily intended for human use. They exhibit the following general characteristics:



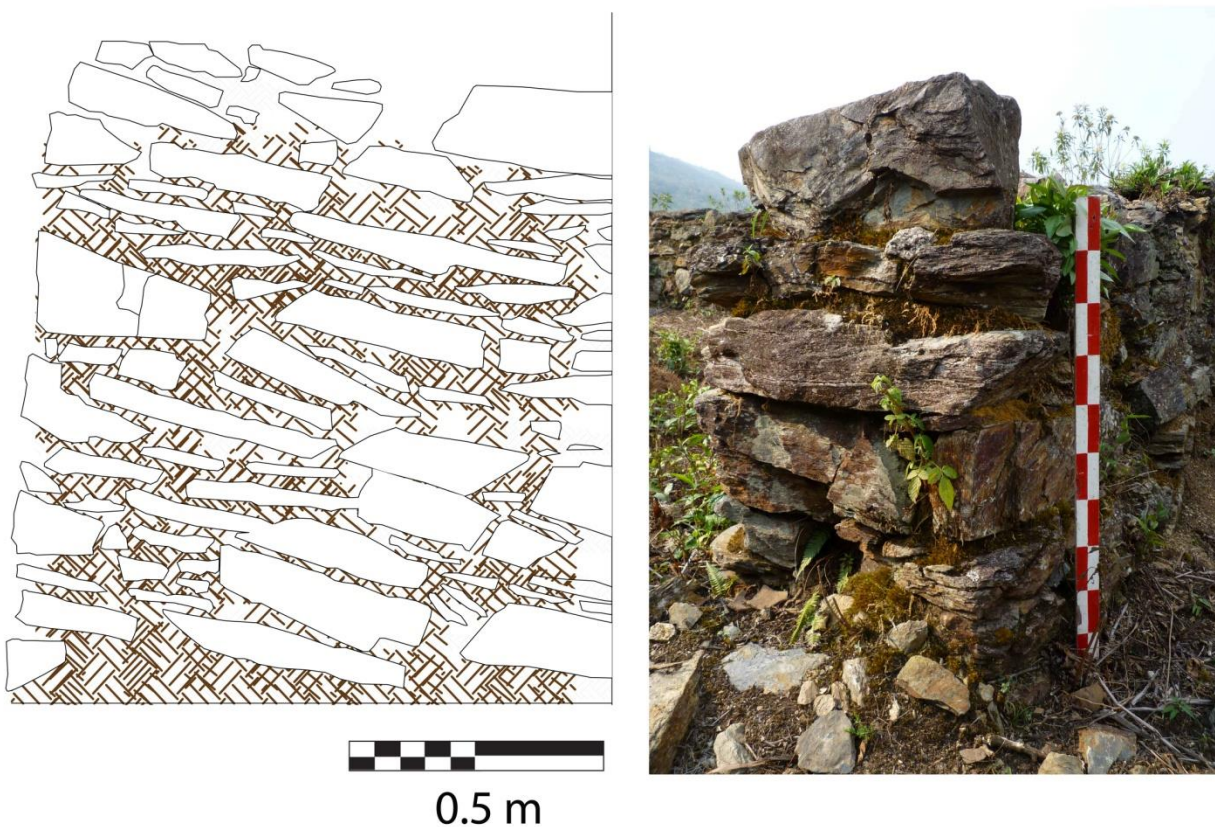
1. These structures are significantly smaller in size than the enclosures recorded at the site, with most providing an internal floor space of between 20 and 40 meters squared (See figure 7.2 for individual areas). Eight structures have an internal area of between 19 and 25 meters squared, indicating that a portion of them were intended to be of a similar size.



**Figure 7.3.** Photographs indicating typical entranceway construction (upper left), interior corner masonry (lower left) and interior wall masonry (upper and lower right) in building-type structures at Qochapata.

2. Generally they are constructed using a mud mortar matrix as a bond (with four exceptions - S-090, S-091, S-093 and S-110 - where little evidence of a mortar was visible). The masonry

blocks are all locally acquired and unworked pieces of schist, that have been lain lengthways and often with a slight incline of 15-20 degrees from the horizontal axis (see fig. 7.4) The masonry is either uncoursed or very irregularly coursed, although some effort has been made to give the appearance of ‘facing’, particularly on the interior walls of the structures. This facing effect has been achieved by orienting the blocks of schist so that the flat surfaces produced via its natural breakage pattern are visible and roughly aligned. In some cases, large *in situ* boulders have been used as a part of the masonry (such as in the southeast corner of S-087).



**Figure 7.4.** Profile view (left) of masonry construction in interior wall of S-057. Note the 15-20 degree incline of the schist blocks. A photograph (right), showing the use of larger blocks in entranceways in building-type structures at Qochapata.

3. There is limited evidence for additional architectonic embellishments or features in any of the structures, such as niches or windows. A stone-lined, roughly square pit measuring 0.8 by 0.7 meters was noted near the southwestern corner of S-056 – although the purpose of this feature is unclear and it is not replicated within any other structure at the site. Most structures at Qochapata have a single entranceway, or two entrances in cases where there is a communicating entry between adjoining structures. There seems relatively little evidence for standardization in terms of the dimensions (i.e. height, width) of the walls or entrances. Many structures were not sufficiently well preserved for reliable measurements to be taken, although the following table gives a sample of dimensions from some of the better-preserved examples:

<b>Structure Number</b>	<b>(Internal) Wall Height</b>	<b>Typical Wall Width</b>	<b>Entrance width</b>
S-053	1.10 m	<i>Unclear</i>	<i>Unclear</i>
S-056	1.66 m	0.88 m	0.92 m
S-086	1.28 m	0.84 m	1.20 m
S-087	1.10 m	0.63 m	<i>Unclear</i>
S-088	0.70 m	0.72 m	<i>Unclear</i>
S-090	0.70 m	0.87 m	<i>Unclear</i>
S-093	1.14 m	0.69 m	1.05 m
S-095	1.10 m	0.60	0.90 m

**Table 7.5.** *Sample measurements taken from several of the better-preserved building-type structures at Qochapata.*

As indicated in figure 7.5 above, there is considerable variation in the size of features such as doorways and widths of walls. Original wall heights are difficult to gauge since nearly all structures have undergone some degree of masonry collapse - however, a number of the better preserved structures have extant wall heights between 1.10 and 1.30 meters. There is little evidence of collapse in the vicinity of these structures, and so this may be taken to reflect

something close to the original height of the stone masonry used for a substantial subset of the buildings. The relatively low heights of these stone masonry walls indicate that the upper portions of the structures were almost certainly made from a more perishable material, such as adobe or wood. However, no evidence of such constructions now survives.



**Figure 7.6.** *View of S-058, looking east. Note that the southwestern end of the structure is set into the adjacent hillslope.*

4. Most of the building-type structures at Qochapata are rectangular in plan, although S-105 and S-095 for example are roughly square. The use of rectangular architecture reflects general Inka canons, although clearly the execution of the site was not overly standardized. Considering

the dimensions for the ten most uniformly rectangular structures, there is a very approximate tendency for the lengths to be around 1.5 times their widths. However, this preference was obviously not adhered to very strictly (see figure 7.7.).

Structure Number	Length/width	Structure Number	Length/width
S-056	1.35	S-102	2.15
S-087	1.63	S-106	1.63
S-088	1.40	S-107	1.44
S-090	2.09	S-108	2.10
S-093	1.29	S-110	1.53
The mean width/height quotient of the structures is 1.62, with a standard deviation of 0.30.			

**Figure 7.7.** *The quotients of the lengths divided by the widths (external measurements) for the rectangular structures at Qochapata.*

## II. 'Enclosure' Type Structures

The remainder of the structures recorded at Qochapata have been classed as 'enclosures' and were likely primarily intended for the corralling of llamas to be used as pack animals. These structures exhibit the following general characteristics:

1. As indicated in figure 7.2., the enclosure type structures are significantly greater in scale than the others noted at the site. They all reach over 119 meters squared in internal area, while the largest is approximately 326 square meters. These structures are clearly too large to have been roofed over, at least without interior supports of some kind. The absence of such features therefore indicates that they were almost certainly designed to serve as open-air spaces. The total combined area afforded by all the enclosures is approximately 2118 meters squared.



**Figure 7.8.** Image showing enclosure S-059, seen looking east. The smaller structure visible in the foreground is S-107.

2. Unlike the smaller building-type structures at Qochapata, the enclosures-type structures are all comprised of dry wall masonry. The walls are constructed from locally obtained schist blocks that have been lain without formal courses, and with no attempt at facing. In several of the larger enclosures, the walls were constructed in abutting masonry segments of roughly similar length (between 1.0 and 1.8 meters). An example of this mode of segmented construction is highlighted in figure. The maximum (internal) surviving heights recorded for the enclosure walls seem fairly uniform across each structure – a little over one meter in most cases. The internal

wall heights are generally lower than the exterior heights, suggesting some soil development in the interior of the structures. One possible explanation is that the higher interior ground surfaces represent the accumulation of dung over time if the enclosures had been used as corrals for groups of llamas. However, one exception to this is seen in S-094 which has a sunken interior, with its walls retaining the surrounding earth, especially on its southern side.

Structure Number	Internal wall height	External wall height	Typical wall width
S-059	1.07 m	1.20 m	0.69 m
S-089	1.11 m	1.31 m	0.80 m
S-092	1.13 m	1.18 m	0.77 m
S-094	1.11 m	0.42 m	0.59 m
S-096	1.05 m	1.50 m	0.60 m

**Table 7.9.** Wall dimensions for several of the enclosures at Qochapata.



**Figure 7.10.** Panoramic montage of the interior face of the northern wall in S-059, with the abutting parts of the construction segments highlighted. The wall in the image is approximately one-meter in height.

3. The enclosures are not so uniform in shape as the building-type structures, and although they are very roughly rectilinear in most cases, some of them are more trapezoidal in plan and in several cases have rounded corners at one or both ends. Most of the enclosures have at least one visible entrance, and in the case of the two combined examples of S- 098 and S-099 there is also a communicating entrance in their shared wall.

4. The walls of the enclosures have few architectonic embellishments beyond their entrances. One exception is seen in S-097 which has a roughly trapezoidal aperture at the base of its eastern wall (see figure). The purpose of this feature is not clear, although it may have a drainage-related function. S-097 is notable for the incorporation of a number of large *in situ* boulders into its construction. This may be an example of the *tiqsirumi* phenomenon discussed by Carolyn Dean (2010: 83-4), whereby masonry is understood to be ‘grafted’ onto existing rocks, so that architecture partakes in some of the vitality inherent in the earth.



**Figure 7.11.** Photograph (left) showing the aperture in the eastern wall of S-097 – and a photograph (right) of two incorporated boulders with overlying masonry in the same structure.



5. Three enclosures are notable for having a split-level interior subdivision (S-097, S-096 and S-089) – presumably indicating areas with distinct functions inside the enclosure. In each case, the smaller of the subdivisions is located along the southwestern end of the structure and is at a higher level than the larger subdivision. In all three enclosures the higher level is retained by



**Figure 7.12.** *Photograph showing a view of S-096, seen looking northwest. Note the higher level interior of the enclosure (on the left side of the image) and the masonry divide where the split-level occurs.*

masonry, identical to that of the outer walls of the structures. In S-089 the higher level is 0.6 meters above the ground level of the remainder of the enclosure, and there is a single step

towards the southern end of the retaining wall comprised by a single block of stone 1.15 meters in length. The purpose of these subdivisions is not immediately clear. However, it is worth noting that the walls are substantially greater in height (by approx. 0.45 meters) in the upper-level portion of S-089. One potential explanation for this is that the upper portions of some of the dual-level enclosures were roofed over, and the sheltered areas were thus constituted as distinct activity zones.

In general terms, the enclosure-type structures at Qochapata seem consistent with Andean corral architecture. Given the height of their walls, their overall size and their lack of roofs, it is difficult to hypothesize alternative functions they might have fulfilled.

### III. Archaeological signatures of Inka coca infrastructure

The production, exchange and consumption of coca leaf have long been of interest to Andean scholars, and there are now a considerable number of ethnohistoric analyses which take either coca growing or coca use as their primary focus. John Murra's (1991) study of historical documents from the seventeenth-century Spanish *visita* to the *cocales* (coca estates) in the valleys of Sonqo near La Paz is a core piece of scholarship on the organization of coca production in the early colonial period – particularly insofar as it intersected with ethnicity and household-level economies. Similarly, Karen Spalding's (1984) work on the written evidence relating to coca cultivation by state colonists (*mitmaqkuna*) in Huarochirí has developed our understanding of the importance of the leaf to regional Inka strategies. More recently, research on the coca-growing region of Paucartambo (in the cloud forests northeast of Cuzco) by

Percovich (2009) has provided useful new data on the development of coca lands in the early colonial era under the *encomienda*, and the associated demographic collapse of the indigenous population. Also, Julien's (1995) ethnohistoric study on coca production in the Yungas lowlands near Cochabamba is of considerable value, especially in developing our understanding of the local organization of coca leaf under the Inkas as a form of tribute. On the opposing side of the Andes, Espinoza Soriano (1973) and Rostworowski (1988) have presented important documentary evidence on the coastal coca-growing lands north of Lima during the Sixteenth Century. At a broader geographical scale, Parkerson (1967) has assessed early claims that the Inkas held an empire-wide monopoly on coca leaf consumption, an assertion presented in some early chronicles – particularly Juan de Matienzo's 1567 chronicle *Gobierno del Perú* – and rejects such claims as historically unsupported.

With respect to more archaeological lines of evidence, the study of ancient Andean coca use and production has generally focused on palaeobotanical (ecofactual) evidence for coca or identifying its traces in human remains. Ancient mummies have been analyzed by a number of archaeologists in order to determine the antiquity of coca chewing in the Andes (e.g. Cartmell et al. 1991, Rivera et al. 2005) – while botanical remains uncovered in house floors on the north coast have been used by Dillehay et al. (2010) to establish that the regular consumption of coca leaf within Andean communities was taking place as early as 6,000 years BC. Although it is much rarer to find palaeobotanical remains in the central highlands than on the north coast due to its wetter climate – Christine Hastorf (1987) has published evidence for coca use in the Upper Mantaro Valley prior to the incorporation of the area into the Inka Empire. In the case presented by Hastorf, the coca was located in an elite burial context, underscoring the

important association between high social status and chewing coca in the pre-colonial Andes. A similar point is made by Lauren Finley Hughes (2010) with respect to Inka coca bags. As Hughes discusses, small woven coca pouches were intricate and prestigious items that were used to carry coca by high-status individuals and were clearly important in signifying the standing of such persons – as indicated in the frequent association with Inka rulers and coca bags in early colonial artistic representations.

In comparison with the ethnohistoric and archaeological evidences noted above, large-scale landscape infrastructure given over to the growing of coca leaf – that is, the material remains of actual plantations or *cocales* - has been relatively little documented through archaeological methods. Karen Spalding (1984: 100), however, notes the possible existence of Inka coca-drying terraces along the Chaclla River in Huarochirí. Also, archaeological reconnaissance in the lowlands to the northeast of Cuzco (around the rivers Tono and Toaima) has provided evidence of stone-built terraces and structures that have been attributed to Inka coca production activities there (see Gade 1999: 147-9). One particularly good case for archaeological signatures of Inka coca production activities may exist on the north coast in the Chillón Valley - a major coca-producing zone at the time of the Spanish Conquest, already mentioned above with respect to Rostworowski's (1988) ethnohistoric work. For example, Dillehay (1977: 401) has noted potential drying terraces in the lower portion of the Chillón Valley at the site of Huancayo Alto<sup>1</sup>; the drying of coca leaf certainly offering one likely use for such spaces. Perhaps more interesting with respect to the current discussion, are the sites in the lower sierra zone above

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<sup>1</sup> However, the site of Huancayo Alto has limited evidence of a heavy Inka presence. Inka 'control' over this region, as with much of the coast, was therefore likely indirect (see Dillehay 1977).

the Chillón Valley that show clear evidence of Inka occupation and which also contain several corrals. The fact that such structures were used for holding herds of llamas has been confirmed via the presence of sub-surface coprolites, identified through excavations (Dillehay 1977: 403).

Catherine Julien's (1995) in-depth ethnohistoric examination of documents pertaining to the procedures used in Inka coca production in the eastern Andes<sup>2</sup> region of Chuquioma provides a number of significant insights into what we might expect to find in similar contexts in archaeological terms. As Julien indicates, harvesting of coca occurred three or four times annually via *mit'a*<sup>3</sup> rotations. While the valley-dwelling population involved in coca production was likely relatively small for most of the year, large numbers of additional laborers would have arrived to assist with the periodic harvesting of the crops. According to Julien (1995: 139) it is also unlikely that coca would be stored for long in the planting areas, since the heat and humidity of the lower Andes led to rapid spoilage – for which reason it was rapidly distributed outside the areas of production after harvesting.

Julien (1995) discusses the lack of evidence for animal transport of the packed coca leaves from the growing areas, and therefore suggests that there is unlikely to be much evidence for camelid corrals in such locales as a result. However, in the Chuquioma region, she notes that harvested coca was taken (on human backs) to a permanent and higher altitude settlement (called Totorá) some ten kilometers along the road from the main growing and harvesting zone. This site was described as regularly accommodating some 100-125 llamas for the further transport and distribution of the coca throughout the empire (Julien 1995: 139). There is also a

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<sup>2</sup> This study by Julien draws considerably on Juan de Matienzo's account in *Gobierno del Perú*.

<sup>3</sup> The term *mit'a* means 'turn' or 'to take a turn' in Quechua and was the basis for organizing the seasonal labor tribute system under the Inkas.

description of a similar higher-altitude distribution center in the documents pertaining to the coca fields at Sonqo, near La Paz (Murra 1991: 77, cited in Julien 1995: 139). This evidence thus sheds some additional light on the aforementioned Inka sites with their multiple corrals at the higher elevations of the Chillón Valley, lying above the main coca-growing zone. Dillehay (1977) interprets these as likely fulfilling a primarily military function, as large numbers of llamas were often made available for purposes of logistically supporting the Inkas armies<sup>4</sup>. However, it is possible here to see a broader pattern in the macro-scale organization of coca lands under the Inkas - whereby camelids were not housed in the immediate vicinity of the low-lying *cocales*, but each coca growing zone was associated with a nearby and higher-altitude distribution node, where packed leaf was shifted from human backs onto those of llamas. This is certainly the system described in the documentary evidence for Chuquioma and Sonqo - and so it seems is also a plausible hypothesis through which to re-read the archaeological evidence in the Chillón Valley.

Taking these regions just discussed as a broader contextual comparison, we might note that it is almost precisely what we see in archaeological evidence for the Amaybamba as well. There is a general absence of corrals, or structures that could be interpreted as such, along the valley floor of the Amaybamba. This lower portion of the valley is of course the optimal zone for coca production (between 1,200 and 1,900 meters above sea level) and the place where *cocales* are attested in the available colonial documents from the Sixteenth Century. However, some eight to nine kilometers west along the Inka highway, and at a higher elevation, we find the site of

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<sup>4</sup> The relatively indirect rule of the coasts meant that the Inkas had to sustain the possible threat of military intervention to ensure compliance. This at least is the predicted pattern under a hegemonic model of imperialism (see the discussion in chapter seven).

Qochapata, containing multiple enclosures that appear designed for corralling groups of camelids. Moreover, this site at the western limit of the Amaybamba is excellently located to take advantage of the region's pre-colonial transport arteries: to the east runs the main Amaybamba low road that heads towards Ollantaytambo and the central portion of the Sacred Valley, to the south the road runs (via Inkacarcel) to the western end of the Sacred Valley (and thus to Machu Picchu)<sup>5</sup> – and finally to the west is the bridge at Chuquichaca, the other side of which is located the Vilcabamba lowlands and the road to Vitcos-Rosasapata. Of course, we should not assume that coca was the only lowland product being redistributed through such a center. Qochapata is also well-positioned for the articulation of goods moving across the imperial heartland with lowland tribute items coming in from the wider Vilcabamba area and Amazonia beyond. Corraling of llamas may of course be linked to pastoral economies (which were central to Inka power in certain regions), however this interpretation seems implausible for the Amaybamba as the eastern slopes provide a poor environment for camelid-herding. Corrals are very common in highland communities living above 4,000 meters at *puna* elevations (historically and prehistorically) – but Andean camelids are not suited to dwelling in cloud forests (Gade 1977). The available data for the Amaybamba, and the site of Qochapata, therefore strongly suggests that the latter functioned as distribution center similar to those described in documents relating to other coca production zones in the Andes – with llama-based transport of goods the preferred method of moving the harvested goods.

Considering the archaeological signatures of coca production visible at the broader landscape scale, the data from the Amaybamba indicates that it may be relatively difficult to 'see' coca

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<sup>5</sup> See chapter four for further details on the highway system within the Amaybamba.

production in terms of the actual fields in which it was grown, or the populations responsible for its planting and harvest. The archaeological remains along the valley bottom of the Amaybamba provide strong evidence for a well-developed set of royal estate lands, however there is little to indicate that it was geared especially towards the cultivation of coca<sup>6</sup>. This can only be established in light of the documentary evidence and of course the ecological conditions which are optimal for lowland products such as coca. Thus the strongest archaeological signature for coca may lie in the evidence for its immediate distribution outside the region, rather than its production within it.

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<sup>6</sup> That said, future excavations may reveal ecofactual evidence for coca production in the Amaybamba – although given the local climate, the probability of finding well-preserved botanical remains is likely to be quite low.



## Chapter Eight: Conclusions

...it is only worth comparing the incommensurable, comparing the commensurable is a task for accountants, not anthropologists.

- Eduardo Viveiros de Castro (2004b: 11)

In the introduction I made the point that throughout I would draw contrasts between modern, Western perspectives and those of the Inkas. My justification for doing so was that such was the necessary step in producing an encounter with alterity. In that vein, I have argued for seeing Inka royal estates as something less like colonial plantations and instead as apparatus for regulating the bodies of sentient non-human beings that were political subjects of the Inka polity in their own right. I have also considered particular rock outcrops as neither places nor things, but as people – a view which I regard as a better translation of what such entities were in pre-colonial Andean contexts. Elsewhere, I have explored the divergences between how anthropologists as modern cosmopolitans might think of roads, and the very different engagements that the human inhabitants of the Amaybamba would likely have had with such material infrastructure. As I said at the beginning, the task of producing these contrasts requires a degree of ‘overstatement’. In other words, since such a presentation necessarily draws on ethnographic and ethnohistoric materials from a range of Andean sources that are not all of them Inka, the inevitable outcome is somewhat binary interpretation. An almost monolithic Western ‘ontology’ comes to be contrasted with a similarly monolithic ‘Andean’ ontology.

Drawing contrasts of course tends to produce starkly delineated accounts of difference. One focuses on divergences, rather than trying to emphasize similarities. This is the move that underpins the encounter with alterity. Viveiros de Castro (2004b: 5) suggests that with respect to anthropology:

...cultural translation is our discipline's distinctive task... [and] to translate is always to betray, as the Italian saying goes. However, a good translation... is one that betrays the destination language, not the source language. A good translation is one that allows the alien concepts to deform and subvert the translator's conceptual toolbox...

It is in the spirit of such a translation project that I have sought to deploy my comparisons between Andean and Western worlds. For example, translating the Inka treatment of the *apukuna* in terms of discipline is intended to *betray* its (Western) source – for discipline within a European ontological framework is a means for understanding the constitution of human subjects, not mountains. Its applicability to non-humans rather than humans is therefore intended as the gesture of subversion, to use Viveiros de Castro's term. Such comparisons deployed to such ends, are I think necessarily dependent on the drawing sharp contrasts in exactly this way. Alterity always emerges through the encounter between the two *comparanda* (in this case, the Andes and the West) since difference is inherently a relational phenomenon. For example, with Levi-Strauss' tale of the distinct responses to each other for by the indigenous inhabitants of the Americas and the European colonists, we see just such a moment of alterity. The Amerindians were drowning Europeans to determine whether they had bodies, to see if they corpses would putrefy – while the Europeans assumed the natives had bodies, the

question for them was whether they also possessed souls. As discussed in chapter three, Viveiros de Castro (1998: 475) uses this encounter to highlight the mononaturalism of the Europeans and the multinaturalism of the Amerindians. In this moment the contrasts between the two 'sides' seems not only to be a very sharp one, but indeed it is an apparent *inversion*: Amerindian and European views are not only different, but in fact produced as polar opposites through the analysis. But of course, in that encounter it is not the totality of 'Europe' or 'Native America' that are being compared. The alterity lies directly in the encounter itself and the specific moment around which it turns. If alterity is inherently relational then difference can only ever exist at the edge, where worlds meet. Without the meeting, there can be no comparison.

All this is simply to say that although the method used by Viveiros de Castro – and which I attempt to deploy here – produces a problematic binary representation of both sides of the encounter, no ontological frameworks we could label as either 'Western' or 'Andean' are, or were ever, monolithic in such a sense. There is always contestation, indeterminacy and flux. Yet if such contextual essentialism is an important and productive analytical step, for me it is only justifiable if the monolithic and binary representation is also redressed somewhere along the way. My goal in this final chapter is thus to place the arguments offered throughout this dissertation within two broader contexts that seek to effect just such a remedy. The first sets the Inka relationship with the *apukuna* alongside a deeper timescale, contrasting them with other interactions with earth beings over a millennium or so of Andean history. The second compares Inka approaches to the heartland *apukuna* with those residing much farther away; in the southern reaches of the empire in what are now Chile and Argentina - contextualizing the

phenomenon at a wider spatial scale. The point of these two final steps is to produce difference *within* the Andes itself – to show that although the Inka case might be contrasted with Western modernity in useful ways, it is not ‘typically’ Andean or derived from a monolithic and essentialist notion of Andean culture (or indeed, ontology). Put another way, the same analytical approach can produce encounters with alterity within the ancient Andes, as well as without.

### I. The *Longue durée*: Wari versus Inka approaches to earth beings

The site of Tipón, lying just over 20 kilometers east of Cuzco, is an excellent locale from which to consider the relationships between different human communities and the heartland *apukuna* over long periods of time. Today, Tipón is best known for its impressive royal estate remains, although there is also evidence occupations for considerably earlier than the Inka period. These occupations are quite distinct, however. The earliest known human engagement with the site is evidenced in the series of petroglyphs in the forms of spiral, linear and cupule-like motifs at the summit of the Tipón mountain known as Cruz Moqo. Bauer (2004: 36) suggests this is likely an Archaic Period site, although the dating of rock art produced via subtractive techniques is always tenuous.

The idea that this mountaintop was visited and accorded significance as far back as the Archaic (c. 5,000 – 2,200 BC during the later phase) is of course interesting when we seek to consider long-term interactions with earth beings in the Cuzco region; however the limited evidence for this time period makes it difficult to say much about such interactions with confidence. More

directly relevant to the present discussion is the evidence for a much later occupation, although still pre-Inka in date, on the same site. At the peak of the Tipón mountain there is a very large and impressive monumental wall that crowns its summit, surrounding the likely Archaic petroglyphs. The wall is 5 metres in height and in total runs for over 6 kilometers (Bauer 2004: 86). It has been argued that this is a fortified Killke Period settlement dating to c. 1000 – 1400 AD (Bauer 2004: 86-7; Bauer and Covey 2002: 858-9). McEwan (1984: 189) takes a different view, however, and suggests the wall atop Tipón is of Wari date, and part of the broader hinterland of the Pikillacta<sup>1</sup> site (8.4 kilometers to the southeast).

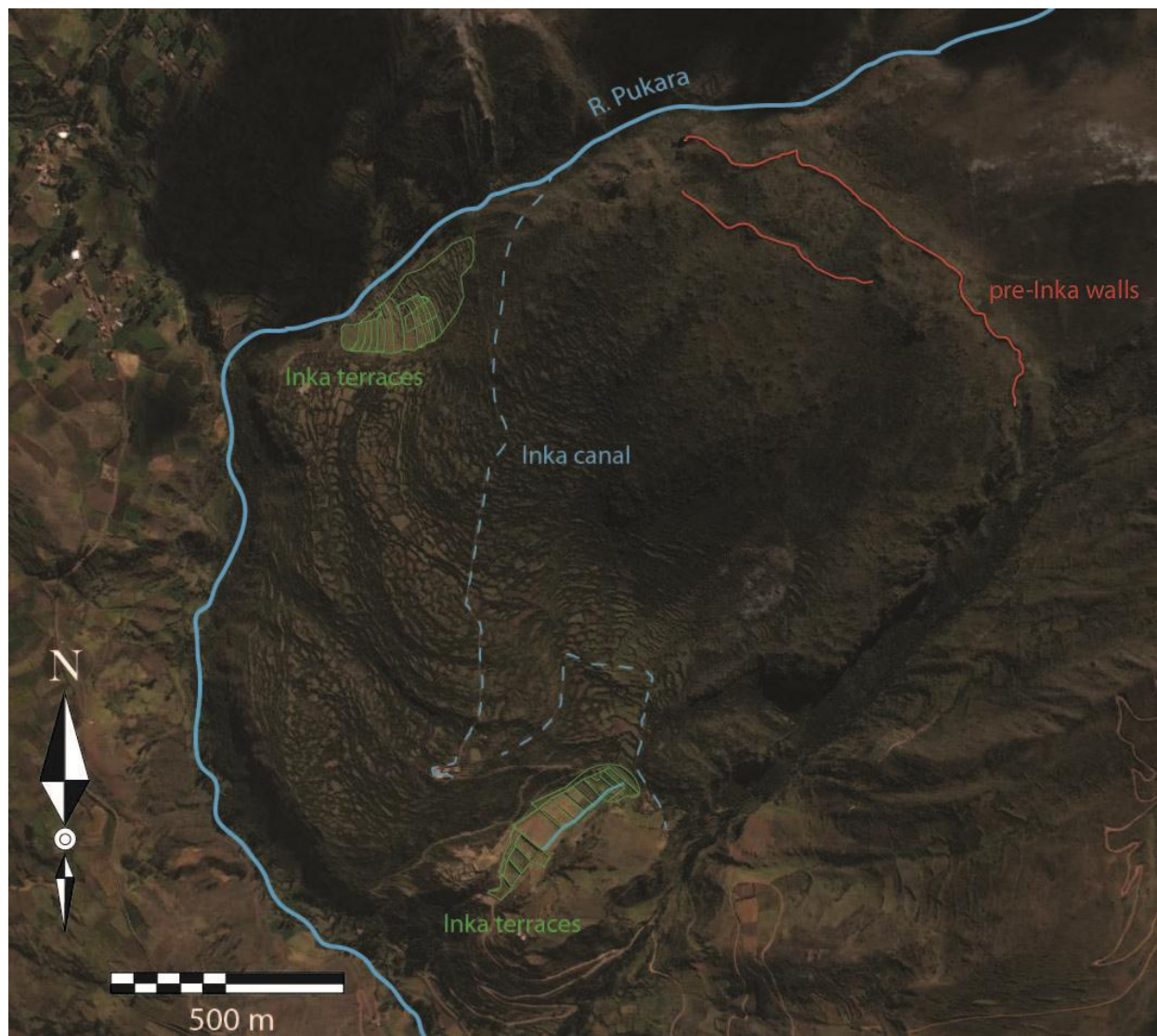
Architecturally, there are as yet no demonstrated criteria for distinguishing between Wari and LIP walls in terms of construction techniques, styles and so on. However, I am inclined to agree with McEwan that the walls are Wari in date. The idea that it represents a fortified LIP settlement is at variance with the fact that there is no demonstrated evidence of settlement at the site (the walls are the only documented remains, and no residential structures are in evidence). Also, Bauer and Covey's claims that the site is an LIP settlement seem at odds with their view that the area between the Cuzco and Lucre basins was a 'depopulated buffer zone' during the LIP (Covey 2006: 87). As a general rule, a massive fortified settlement is not compatible with its presence in a buffer zone *between* two polities, since it would be a political center itself, by definition. Moreover, we should be wary of the tendency to assume that any set of walls on a hilltop must represent some kind of 'fortification'. The outer circuit of the pre-Inka walls at Tipón is 3.2 kilometers in length, and would have required a very substantial body

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<sup>1</sup> Pikillacta is a major architectural complex nearly 200 hectares in area that represents the former center of Wari influence in the Cuzco region (McEwan 2005).

of warriors to defend it from attack. Thus the lack of settlement evidence raises the question of where these soldiers would have come from, and which LIP polity would have been able to field such an army. Also, there are no water sources inside the circuit of the walls themselves, making it a precarious location to find oneself while under siege. Any argument that these remains are part of a fortified settlement needs to adequately explain what it was intended to defend and by whom it could have been defended. It may well be the case that the pre-Inka walls at Tipón were part of an unfinished settlement that was abandoned prior to its completion. However, the absence of other LIP settlements in the area around it would make it a fairly unusual location for such a center in terms of the local occupation patterns of the period. We therefore need to consider alternative explanations as to why a pre-Inka polity might have been interested in crowning a hilltop with a wall that otherwise has no discernible purpose (to us).

The great precursor empire to the Inkas - the Wari – extended its influence throughout much of the central highlands during the latter half of the First Millennium AD. Although it has often been interpreted as a ‘secular’ and ‘militaristic’ polity by Andean scholars in the past, more recent research has sought to emphasize its religious character. Glowacki and Malpass (2003), for example, have argued that major Wari sites are closely associated with significant lakes or ritually important mountains. They suggest that Middle Horizon complex of Pikillacta near Cuzco, was deliberately associated with the adjacent Lake Huaycarpo, while other Wari sites lying farther to the south, at Huaro and K’ullupata are also next to major lakes. Lakes are often



**Figure 6.1.** A satellite image from GoogleEarth showing the Tipón site. Note the highlighted pre-Inka walls that crown the summit, and the Inka terraces and canals built on its lower slopes.

thought of as origin points (*paqarinas*) for nearby communities in more recent Andean contexts and Glowacki and Malpass suggest that this is one reason for the Wari interest in bodies of water. In other words, they sought to dominate groups by intervening in the relationship between human communities and sacred sites in the landscape (especially those associated with mythical origins).

Williams and Nash (2006) have also made a number of related arguments on Wari imperial strategies with respect to their interactions with major non-human beings. The architectural complex of Cerro Baúl, a significant Wari settlement, was constructed on a massif near the southern border of modern Peru, an area believed to have been close the Wari-Tiwanaku frontier. Based on the analysis of Williams and Nash using GIS-derived viewsheds, the site represents an attempt to visually articulate ritual activities with a number of key *apukuna* in the region. Moreover, they suggest that such interactions with mountains were a major rationale for the Wari expansion and substantially determinative of the locations of (some) Wari settlements.

Assuming these scholars are correct in their view that settlement patterns during the Middle Horizon reflect a desire to access important landscape entities, then the Tipón site offers a place to draw contrasts between Wari and Inka practices of mountain manipulation. The crowing wall on top of Tipón is quite a direct way to claim (by monumental means) a mountain peak and thereby effect some form of control over it. We might see it as an attempt to capture or even imprison an *apu* so as to bring it under imperial control. It contrasts markedly with the Inka presence on the same topographic formation. The royal estate at Tipón (much like the other estates) exhibits an elaborate and complex series of canals, aqueducts, high-style terraces and prestige architecture. Like the other royal sites discussed in chapter four, Inka Tipón is situated with respect to a nearby snowcapped mountain peak known as Pachatusan. According to one account this mountain was given a sacrifice of three hundred males in response to cold weather during the reign of Tupa Yupanqui (Besom 2009: 46-8). Its present-day reputation is also one of considerable awe and fear. For example, the contemporary people of Sonqo are



aware of Pachatusan; however they are afraid of it, and do not like to openly mention its name (Allen 2002: 28). Pachatusan is the highest major peak in the Huatanay Valley to the east of Cuzco, and is the only snowcapped summit in that drainage. Although the ice coverage is now very limited, it is still visible from the Inka ruins at Tipón.

The Inka architecture at Tipón is not situated directly on the slopes of the snowcapped ridge itself, and like most royal estates it is constructed on a hilltop adjacent to and below the main summit of the *apu*. The link between the estate and the mountain (visible from the site) is clearly seen in the principal canal that feeds the Tipón terraces draws its water from the río Pukara which is fed by run-off from Pachatusan. It is also worth noting that Tipón has its own spring source that produces enough water to sustain the terraces several times over (Wright 2006), indicating that the desire to canalize both the waters from the glacier and those emanating from inside the Tipón mountain was a deliberate choice. The particular *source* of the water, and not simply a desire to have enough moisture for the crops, was evidently key. The Tipón estate therefore seems to replicate the same logic that was described in chapter four. Rather than a site for maximizing production of agricultural wealth *per se*, it reflects an effort to discipline the earthy body of a major *apu* entity. The agricultural products are then a sign and a material outcome of such disciplinary regimes being enacted.

Moreover, certain aspects of the architecture at Tipón draw our attention to some of the highly elaborate disciplinary techniques that were deployed at certain royal estates. Kenneth Wright (2006: 68) uses the wonderfully apt phrase 'hydraulic poetry' to describe the canal drop structures at the site of Tipón. The channels in the high-style terraces that allow the water to

flow from each terraced level to next are very precisely constructed, so as to control the flow in terms of its splash size, the annularity of the water column and angle of its jet. The effect produced is a tightly ordered and directed auditory and visual display. As has already been discussed, we cannot explain the complex Inka fountains at royal estates in terms of a purely functional need to irrigate crops. Nor is it adequate to explain these things purely in terms of aesthetics, since 'pleasure gardens' are unlikely to be a good frame for thinking about Inka landscapes. Manipulating the fluids that emerge from within powerful earth beings cannot simply be treated on the levels of artistry or pleasing craftwork.

Yet if the hydraulic drops at Tipón (and certain other estates) are producing a form of poetry, this begs the question: whose poetry are we listening to at such places? Here we might consider the local association between the river Apurímac with an ancient oracle. The name Apurimac means 'lord who speaks' and there is an implied association between the sound of water flowing and the speech of the oracle (Morris and von Hagen 2011: 135). Thus at Tipón we have the comparative image of the wild, erratic and unstructured flow of water being remade into a regular, modulated force by the Inkas. The water is not only controlled in its physical movements (i.e. where it goes, how much of it goes and how fast it goes) but also in its acoustic capacities. The hydraulic drops at Tipón therefore are not only highly structured instantiations of water flow, but almost like producers of distinct musical notes. The height of the drops and annularity of the water jets produced by the channels controls in very precise and regularized fashion their auditory performance – in terms of pitch, loudness and quality. Indeed, looking at Inka runs of fountains all set in consecutive drops from above it is not difficult to get the sense of a flute-like musical instrument on a very large scale. The training of a body to produce music

or lyrical poetry is perhaps one of the most paradigmatic examples of corporeal discipline. To produce music the body must become subject to a very strict set of rules and habituated way of producing sounds, however this discipline is also highly generative in that it allows the body to obtain a level of virtuosity in such performances. As always, both potency and subjugation are simultaneously amplified in the disciplinary process.

Corroborating evidence for this interpretation can be found by returning to the *wak'a* called Catequil that resided at Guamachuco and which was executed by Atawallpa. Topic et al. (2002) have studied the archaeological remains of Catequil and note some features there that are of particular interest to the present discussion. Inside the sanctuary at the site, there are two miniature canals, one of which has been interpreted as performing an oracular function. According to Topic et al. (2002: 322-3) the manipulation of water flows is a central aspect of the design and therefore likely was the means through which the divinatory pronouncements of the *wak'a* were given. This data therefore provides strong support for the existence of a general practice in ancient Andes, whereby the voices of *wak'as* could be heard or augmented through particular kinds of architectural construction. Particularly, canalized water flowing on mountains as a means for communicating with an *apu* seems directly relevant to how we ought to think about channels such as those built into the bodies of major *apukuna* at the heartland royal estates. Indeed, the hydraulic drops at Tipón and the fountains we see there and elsewhere in the Cuzco region are far more elaborate than what is seen in Guamachuco.

Limited attention is paid to music in the Spanish chronicles, in large part (I suspect) because musical practices were not as commonly associated with idolatry in the eyes of sixteenth

century Iberians – whose concerns were more focused on diabolical objects and images. However, ethnographic accounts from the Andes clearly show that music is not only perceived as vital to life, but in fact *is* a form of life. Stobart's (2006) study of music in the Bolivian highlands underscores the intimate relationship between the production of sounds and agricultural production, to the degree that both them are best thought of as instantiations of the same process of creation. In his words,

Sound is equivalent to life and its shaping in music may, in certain respects, be seen as shaping life... [it is] the energy or animating quality (*animu*) of living beings or their potential (Stobart 2006: 27-9).

We can probably infer from this that the musical aspects of Inka agriculture, such as the *haylli* song of triumph that was sung at first ground-breaking each year (Bauer 1996) represented something much more than simple aesthetic accompaniment to the digging of the earth. However, there is perhaps a sense that the Inkas' understanding of music was a more martial one than we find in contemporary indigenous communities of the highland Andes. Interestingly, shamans in modern Bolivia make use of brass instruments (called *wala*) to communicate with the mountains (Stobart 2006: 29). If earth beings were a target for corporeal manipulation at the hands of the Inka state, then it is not surprising that their acoustic expressions were also a important element in this process. Not only then are the fluids and earth of the *apukuna* subject to control, but so too are the sounds that they produce. And if the mountains can understand music as a form of communication, then perhaps they could also communicate via their own musical voices – at least under Inka tutelage and with the appropriate material aid.

My argument here then is that the Inka horizon represents a very distinctive material engagement with the earth beings of the central Andes – of a sort that is much less visible, or even absent, in its precursor and successor imperial polities. To put it briefly, the Inka engagement with the *apukuna* (or at least a selection of them) was much more intensive. It was, to follow from my arguments in chapter four, based on *disciplinary* instantiations of power – something which relies on continuous, regulation of a body and its productive capacities. This is quite different from the visual gestures towards the *apukuna*, carried out from a distance, as William and Nash argue for at Cerro Baúl. That said, the Wari site at Pikillacta seems to be more directly articulated with nearby earth-beings such as Lake Huaycarpo and the crowned mountaintop at Tipón. Yet this articulation too seems to represent a very different approach to politically incorporating earth beings into the empire. It implies a more brute and forceful claim of control and subjugation, rather than the order and meticulousness of continuous discipline. It was apparently important to the Wari to establish complexes nearby, so that rites could make visual reference to them, or in order to make occasional votive offerings to the earth beings. However the intensive bodily manipulation, of both earth and waters (and sounds) that we see in the Inka royal estates seems unique to the Late Horizon. Certainly, the virtuosity of the acoustic performances that we see in the hydraulic drops built at Tipón is unparalleled with respect to either pre-Inka or colonial-era interactions with *apukuna*. Thus If royal estates can be seen as part of a project to intensely regulate *apu* bodies, then such high levels of regulation were not matched by the Inkas' predecessors in their earlier engagements with mountain beings.

This highlights the issue of internal alterity within the ancient Andes. The difference between past and present approaches to mountains however is not one that is framed in external (i.e. Western) terms. That is to say, the reason for the quite distinct Inka and Wari approaches to peaks is not that the former sought to economically profit from them through terraces and irrigation, while the latter had a more religious or ritualistic set of priorities. Rather both polities operated from within non-Western ontological frameworks whereby earth beings were important political actors with whom one sought to have positive and productive relations. Yet the Inkas possessed a level of audacity (and perhaps hubris) that their predecessors and successors did not display. Unlike the present day peoples of the region, who speak the name of Pachatusan only with trepidation and even fear, the Inkas thought they could tame the *apu* and force it to comply with their will. Where modern Quechua peoples' gesture is one of respect and awe, the Inkas was closer to the desire for control and even subordination.

## II. The grand strategy of the Inka Empire

Having discussed the changes over time in mountain-empire interactions, the second aspect I wish to consider is variations over large spatial scales. One strong spatial pattern is noted in the different material signatures of interactions between the Inka state and major mountains in central and southern Andes. Johan Reinhard (1985: 302-4) notes that the peaks of the southern Andes commonly incorporate high-altitude shrines, containing small enclosures or dry stone structures with various kinds of offerings, including (on occasion) children. However this is not a feature of the northern Andes, and is either very rare or absent in Peru, Ecuador and Bolivia.

Indeed, there are no confirmed archaeological remains of similar high-altitude shrines north of latitude 15° South (Reinhard 1985: 304) – or put another way, they are non-existent in the Andes north of Lake Titicaca. While it is always possible that this pattern reflects a bias in terms of where fieldwork has been carried out, as new evidence continues to reinforce the observed pattern, the likelihood that it is merely an investigative artifact recedes. The issue to consider then is: why are southern *apukuna* treated in this particular way, while those closer to Cuzco have a much different and more elaborate treatment?

D'Altroy (1992: 19-24) has been particularly prominent in considering Inka strategies of imperial control along a 'territorial-hegemonic' continuum. This analytic frame draws on arguments from other contexts, especially those developed with respect to Mesoamerica by Hassig (1988) and by Luttwak (1979) for the Roman Empire. As one idealized pole along the continuum, territorial empires seek to maximize direct control over their subject populations. Normally this entails high infrastructural investment, sophisticated mechanisms of oversight and monitoring and a well-developed capacity to quickly crush resistance should it arise. Although it is an intensive form of imperial control with considerable costs to the polity, the level of extraction is proportionally higher if the strategy is successfully deployed. Hegemonic control is a much more indirect affair, which seeks to sustain tributary relationships between the center and a range of vassal kingdoms or client polities. At this end of the spectrum, the desired flow of tribute is likely to be underpinned by the threat of direct conquest; however, logically the strategy only works if such threats are not (for the most part) actually carried out. If obtaining compliance required direct invasion on a frequent basis, then the strategy would become too

costly and likely be unsustainable. Hegemonic control requires much less material investment in subject regions, although the returns are proportionately lower.

D'Altroy's (1992: 24) use of the territorial-hegemonic continuum is primarily geared towards the provision of 'analytic concepts that embrace both systematic patterns and variations over time and space'. And in that respect, his work on the Inka Empire has highlighted the highly variable manifestation of Inka control in provincial contexts, which could in some contexts be very intensive and in others, much more indirect and low-level. Moreover, as D'Altroy underscores, the relationship between core and periphery is a structural one, not a geographical one - and so the territorial-hegemonic spectrum (perhaps especially in the Andes) does not map onto a simple correlation with distance from the imperial heartland. Revisions and extensions to this approach have been developed by other scholars, such as Sonia Alconini based on her research on the Inka occupation on the eastern frontier in what is now Bolivia. Alconini (2008) argues that in some contexts such as the Oroncota region under the Late Horizon, the Inkas adopted a strategy of 'disembedded centers'. In her view, these are sites that indicate high-investment on the part of the empire, as seen in the construction of prestige architecture, even though the immediate region around them was not intensively administered or directly governed. Alconini suggests that this implies a more ideologically-oriented form of extractive control, lying somewhere between the hegemonic and territorial poles and striking an optimum balance between the two.

In general terms, I think this recent research on the spatial variability in Inka strategies has opened up a number of highly productive avenues for understanding the empire and its



material traces in terms of their spatial variability. However, a limitation arises in that modernist ontological commitments undermine a fuller understanding of the Inkas and their motivations. My basic disagreement with prior deployments of territorial-hegemonic models, is that they frequently seek to understand Inka *strategies* by using categories that the Inka themselves did not recognize. To talk of strategy seems to unavoidably imply a conscious set of choices, procedures and goals and so is particularly problematic in this instance. Thus the explicit breaking-up of power into 'economic', 'political' and 'ideological' elements represents an attempt to understand Inka motivations in etic terms that were not meaningful to them. My alternative view is that analyzing the actions performed by 'strategizers' can only proceed if we assume that understanding their reality and the categories through which they apprehended it is a necessary pre-requisite. Categories that have no emic value therefore must be avoided to the extent possible (again, only when directly assessing *motivations*). Obviously this maxim rests on a difference of degree, rather than an absolute one. Purging an analysis of *any* etic projections is both an impossible and unending task – thus the aim is the ongoing minimization of such projections through a constant cycle of critical evaluation with respect to the assumptions being brought to bear.

Thus one way to explain this empirical pattern of interactions between the empire and the mountains is to extend the hegemonic-territorial model so as to include both human and non-humans. In other words, we should consider how territorial and hegemonic strategies might be applied respectively to different communities of *apukuna*. However, this only works if we set aside the assumption that mountains are not real subjects who do not provide real labor to the state. In so doing we must recognize the non-universality of our ontological commitments as a

necessary step in understanding the specificities of the Inka's. This allows us to cast new light on why mountains in the heartland were treated in such a different fashion to those far to the south. Apu Waqaywillka (associated with Amaybamba), Apu Pachatusan (associated with Tipón) and Apu Salkantay (associated with Machu Picchu, Patallacta and others) for example, with their elaborate terraces and water systems that sought to reshape their bodily forms so as to conform to Inka productive goals, were *known* entities. They existed close to Cuzco and were undoubtedly important personalities for its human inhabitants long before the days of the empire. They were also a set of political subjects who were relatively few in number. This means that these *apukuna* could be disciplined and made compliant through highly intensive (or territorial) strategies of manipulation, since they were better understood and more pragmatically accessible from the heartland. The rewards from such intensive government of the near mountains would presumably be larger, reflecting the degree of investment in the relationship.

By contrast the *apukuna* of the far south were much more distant. This meant that the Inkas knew much less about them and so were potentially less able to manipulate them. Certainly, they were brought into the empire at a later stage in the development of the Inka polity (see Covey 2006). Moreover, the infrastructural investment required to discipline so many powerful entities at such a geographical distance would have been daunting. Therefore the Inkas may well have opted for a low-intensity, low-return strategy (i.e. hegemony) in the case of the Chilean and Argentinean peaks. It is far easier to acquire the loyalty and co-operation of such beings by propitiating them with occasional gifts and preciosities, even human servants if necessary, than to seek direct control on a continuous basis (as is required with disciplinary

modes). Paying off socio-economic elites outside the direct spheres of the government's control is after all a classic imperial policy seen in multiple contexts. The apparently backwards flow of tribute from empire to subject (rather than the reverse) is worth noting in this instance. Barfield (2001) offers an interesting discussion of this variant on hegemonic strategies with respect to the evolution of the Chinese Empire and its interactions with the various nomadic Mongols living on the eastern Eurasian steppe. In his analysis, the highly mobile groups at the imperial periphery were a constant threat to the sedentary, farming populations in the core. Thus the common strategy was to placate the Mongol elites with the kind of luxuries and preciosities that could only be manufactured in the center. These elite individuals then redeployed such artifacts in order to sustain their own local political hierarchies through down-the-line exchanges (see: Renfrew 1977) Barfield refers to this arrangement, and the kind of control it institutes, as a form of 'shadow empire'. It seems an appropriate analogy with respect to the southern *apukuna*. They were far from the central highlands that the Inkas knew and its more familiar landscapes, communities and non-human powers.

Moreover, in the same fashion as the Chinese tended to regard the Mongols, through Inka eyes the *apukuna* were powerful, dangerous and 'wild'<sup>2</sup>. And we also see precisely the same sort of gifts being made to these earth beings as were made to mummified rulers in Cuzco – right down to the paired male and female child servants. The parallels between the Chinese treatment of the Mongols and the Inka relationship with the southern *apukuna* are striking - and even become obvious once we move beyond our modern ontological commitment to the idea that mountains cannot be either political subjects or sentient personalities.

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<sup>2</sup> See discussions on Pachatusan (this chapter) and Salkantay (chapter five).

In the colonial encounters generated through the European expansions of the last five centuries, there were of course interactions that were not primarily governed by violence. The Amerindians killing Europeans to see if they had bodies and the Europeans killing Amerindians to see if they possessed souls was not the only sort of alterity that was generated in such encounters. Chris Gosden (2004), borrowing a term from Richard White, has elaborated on a mode of colonial interaction that is based on 'The Middle Ground'. The paradigmatic example of this sort of relationship is the trade between Algonquian Native Americans and the French in the Great Lakes region during the early modern era – and prior to the more territorial (and destructive) forms of settler colonialism that were to follow. The interaction between the Europeans and native groups in this context were based on exchanges; the Europeans provided exotic items like glass beads and metal objects, for which the Algonquians gave beaver furs, much prized in the European fashions of the day. It was a delicate negotiation on both sides, and both parties sought to accommodate the other so to gain advantages from the trade. Of course neither the Algonquians nor the French truly understood their counterparts. The Europeans mused at the foolishness of the Indians in parting with such fine furs for mere baubles and trinkets. No doubt the Algonquians thought the European obsession with everyday animal pelts and the lack of value they placed in such powerful metal and glass artifacts equally incomprehensible.

If the Catholic priests of the New World were in a search to uncover essences, to find out what the Native Americans were - to see if they had souls – the French merchants of the Great Lakes were less interested in finding out what their exchange partners were, so much as learning what they *wanted*. Neither side understood the other very much, by-and-large, nor likely

wanted to understand, beyond the exigencies of continuing their trades. Exchanges do not always require mutual understanding, or even commensurable regimes of value. This fact therefore suggests another way in which we might consider the very different approach the Inkas took to the *apukuna* of the southern Andes.

Upon their conquest of the areas now within Argentina and Chile the Inkas were entering relatively unknown territory, as is often the case with large-scale imperial expansions. The southern Andes was a region filled with mountain peaks that the Inkas would likely have recognized as powerful earth beings, not unlike those that they had long known and interacted with in the lands further to the north. Such beings were significant players in the local political scene, and could hardly be ignored - but for the Inkas they were a much more unknown quantity. They were not like the *apukuna* of the heartland whom they knew many stories about, whose voices they heard regularly and with whom they had long and intimate connections. How then to politically incorporate such entities into the polity? As the Middle Ground indicates such deep understanding is not necessary for relationships to be sustained. It is possible for two parties in the encounter with alterity to come to an understanding without actually having a good grasp of each other's perspectives. There is no reason why this should be less true when one of the parties is not human. Thus the Inkas sought to propitiate them with the same sort of gifts they gave to *mallki* and other powerful beings closer to home, perhaps in the hope that they would accept them as sufficient to warrant their co-operation. But it seems that a deeper, more intensive engagement – like those seen at the *apukuna* in the north - was not a practical option for the Inkas in a land and among mountains that they did not know.



My aim in this final chapter has been to demonstrate that the kinds of interactions that I have described in the Amaybamba are very much part of a specific time and place. They are the result of one particular moment - a moment where I am, through my analysis, creating an encounter in my text between the ontological frameworks underpinning the Western and modern discipline of archaeology, and the material traces of a very different, non-modern world. Such an analysis relies on deep contrasts, but we should always take care not to essentialize the alterity that emerges in such an encounter. The modern West and the Andes that I compare are very much products of that moment – differences brought into being through a meeting of different worlds. They do not represent *the* West or *the* Andes in some grander or more totalizing sense. It is for this reason that I argue that we can also engage in the same analytical procedure within the Andes (and also within the West if one wished) to ensure that our binaries remain the tool through which the analysis proceeds, rather than its end-product.



The kind of relationships with the earth beings I talk about in the Amaybamba of the past no longer hold. Today, the *apukuna* no longer act as docile and compliant subjects. Much of the infrastructure that the Inkas built to bring them under their dominion has fallen into disrepair.

Also, the *panaqas* no longer exist, and so the intense relationships established between the royal *ayllus* and the mountain lords have entirely disintegrated. The material exchanges and two-way circulations of tribute and productive labor that sustained the system no longer flow. The royal estates with their enclosed *wak'as* and disciplined mountain bodies were therefore very much of a particular time and place – a moment that has passed away. In the preceding chapters I have argued that these entities – the heartland *apukuna* and *wak'as* - were among the most intensively manipulated non-human subjects of Tawantinsuyu. These two kinds of being are not necessarily an exhaustive list, however, and there may well be others to be added through future research.

Yet the *apukuna* still exist of course, and remain powerful actors in the lives of many contemporary communities in the Andean highlands. They still accept coca and other offerings as a sign of the veneration they are due from the humans who live on or around them. Present-day shamans in particular have a very close relationship with the *apukuna*, and depend on them for their abilities. But now the mountains are unruly again. They no longer labor in pulse to the rhythms of the Inka state. And they are no longer conscripts to the Inka's imperial project of Tawantinsuyu, of making the four parts whole. Their agricultural products, direct emanations from their powerful bodies, have ceased to be stored in the empire's great warehouse facilities, to be redistributed among the various clients of the Inka aristocracy. These days the Inka high-style terraces grow little of anything, and are more commonly wandered by tourists and sometimes, llamas. The *apukuna* have become feral, we might say, prone to violent and unpredictable behaviors – seen in the 2004 avalanche near Machu Picchu that destroyed a large chunk of the transport infrastructure in the Sacred Valley and killed six people. It seems

no-one knows how to control them the way the Inka once did. The techniques of that elaborate mode of discipline, the knowledge it depended on, have been mostly lost.

Yet it is unlikely that the Inkas were the first empire to seek to manipulate the *apukuna*. Their Wari predecessors undoubtedly made offerings to them as well, and the great walls that crown Tipón suggest that more violent means of constraining and containing them may have been attempted during the Middle Horizon. Despite the monumentality of such projects, they seem less subtle than the intensive discipline instituted by the Inkas – for their efforts went far beyond enclosure and brute claims of dominance. Instead the Inkas reshaped their very bodies, right down to the flows of water and the properties of the earth. Their every action and movement was ordered and directed, incorporating them into an intensive and continuous apparatus of control. Under the Inkas, the *apukuna* were more subjugated, but more powerful too, and the material products of their labor underwrote the largest empire of the pre-colonial Americas. And so it seems that despite the great potency of the *apukuna*, the Inkas were able to put them in their place as another productive subject of their empire – an achievement unmatched by any of their predecessor or successor polities. They even taught them how to sing.



## Bibliography

Abercrombie, Thomas A.

1998. *Pathways of memory and power: Ethnography and history among an Andean people*. Madison: University of Wisconsin Press.

Acuto, Félix A.

2005. The materiality of Inka domination: Landscape, spectacle, memory, and ancestors. In *Global archaeological theory: Contextual Voices and Contemporary Thoughts*. Pedro Paulo Abreu Funari, Andr es Zarankin and Emily Stovel (eds.) New York: Kluwer Academic/Plenum, pp. 211-235.

Alberti, Benjamin.

2008. Whose Thing Theory? Unraveling the entangled rhetoric of "indigenous theory" in archaeology's theories of matter. Paper presented at the annual Theoretical Archaeology Group meeting, New York, May 22.

Alberti, Benjamin and Tamara L. Bray.

2009. Introduction. *Cambridge Archaeological Journal* 19(3): 337-343.

Alberti, Benjamin, Severin Fowles, Martin Holbraad, Yvonne Marshall, and Christopher Witmore.

2011. Worlds Otherwise. *Current Anthropology* 52(6): 896-912.

Alberti, Benjamin and Marshall, Yvonne.

2009. Animating archaeology: local theories and conceptually open-ended methodologies. *Cambridge Archaeological Journal* 19(3): 344-356.

Albornoz, Crist bal de.

1984 [1582]. Instrucci n para descubrir todas las guacas del Pir  y sus camayos y haziendas. *Revista Andina* 2(1): 169-222.

Alcina Franch, Jos .

1976. *Arqueolog a de Chinchero, 1*. Madrid: Ministerio de Asuntos Exteriores.

Alconini, Sonia.

2008. Dis-embedded centers and architecture of power in the fringes of the Inka empire: New perspectives on territorial and hegemonic strategies of domination. *Journal of Anthropological Archaeology* 27(1): 63-81.

Alder, Ken.

2007. *The Lie Detectors: The History of an American Obsession*. New York: Free Press.

Allen, Catherine J.

2002. *The Hold Life Has: Coca and Cultural Identity in an Andean Community*. Washington: Smithsonian Books.
- Althusser, Louis.  
1971. *Lenin and Philosophy and Other Essays*. London: New Left Books.
- Asad, Talal.  
1979. Anthropology and the Colonial Encounter. In *The Politics of Anthropology*, Gerrit Huizer and Bruce Mannheim (eds). The Hague: Mouton, pp. 85-96.
- Augé, Marc.  
1995. *Non-places: Introduction to an Anthropology of Supermodernity*. London: Verso Books.
- Avilés Loayza, Sonia V.  
2008. *Qhapaqñan: Camínos Sagrados de los Inkas*. La Paz: Producciones CIMA Editores.
- Barfield, Thomas J.  
2001. The shadow empires: imperial state formation along the Chinese-Nomad frontier. In *Empires: Perspectives from Archaeology to History*, Susan Alcock, Terence N. D'Altroy, Kathleen D. Morrison and Carla M. Sinopoli (eds). Cambridge: Cambridge University Press, pp. 10-41.
- Bastien, Joseph W.  
1985. Qollahuaya-Andean Body Concepts: A Topographical-Hydraulic Model of Physiology. *American Anthropologist* 87(3): 595-611.
- Bauer, Brian S.  
1992. *The Development of the Inca State*. Austin: University of Texas Press.  
  
1996. Legitimization of the state in Inca myth and ritual. *American Anthropologist* 98(2): 327-337.  
  
1998. *The sacred landscape of the Inca: The Cusco ceque system*. Austin: University of Texas Press.  
  
1999. The early ceramics of the Inca heartland. *Fieldiana* 31: 1-156.  
  
2004. *Ancient Cuzco*. Austin: University of Texas Press.
- Bauer, Brian S., and Alan R. Covey  
2002. Processes of state formation in the Inca heartland (Cuzco, Peru). *American Anthropologist* 104(3): 846-864.

- Bauer, Brian S., and Lucas C. Kellett.  
2010. Cultural transformations of the Chanka homeland (andahuaylas, Peru) during the late intermediate period (AD 1000-1400). *Latin American Antiquity* 21(1): 87-111.
- Bauer, Brian and Charles Stanish.  
1990. Killke and Killke-Related Pottery from Cuzco, Peru, in the Field Museum of Natural History. *Fieldiana* 15: 1-17
2001. *Ritual and pilgrimage in the ancient Andes: the islands of the sun and the moon*. Austin: University of Texas Press.
- Besom, Thomas.  
2009. *Of summits and sacrifice: an ethnohistoric study of Inka religious practices*. Austin: University of Texas Press.
- Biehl, João, Byron Good, and Arthur Kleinman.  
2007. Introduction: rethinking subjectivity. In *Subjectivity: ethnographic investigations*, João Biehl, Byron Good, and Arthur Kleinman (eds). Berkeley: University of California Press, pp. 1-23.
- Blaser, Mario.  
2009. The threat of the yrho: the political ontology of a sustainable hunting program. *American Anthropologist* 111(1): 10–20.
- Bowser, Frederick P.  
1974. *The African Slave in Colonial Peru: 1524-1650*. Palo Alto: Stanford University Press.
- Bray, Tamara.  
2003. To Dine Splendidly: Imperial Pottery, Commensal Politics and the Inca State. In *The Archaeology of Politics and Food and Feasting in Early States and Empires*, Tamara Bray (ed). New York: Kluwer Academic/Plenum Press, pp. 93-142.
2009. An archaeological perspective on the Andean concept of Camaquen: thinking through late Pre-Columbian Ofrendas and Huacas. *Cambridge Archaeological Journal* 19(3): 357-366.
- Brown, Bill.  
2004. Thing theory. In *Things*. Bill Brown (ed). Chicago: University of Chicago Press, pp. 1-16.
- Buchli, Victor.  
2000. *An archaeology of socialism*. Oxford: Berg.

Burger, Richard L.

2004. Scientific Insights into Daily Life at Machu Picchu. In *Machu Picchu: Unveiling the Mystery of the Incas*, Richard L. Burger and Lucy C. Salazar (eds). New Haven: Yale University Press, pp. 85-108

Carneiro, Robert L.

1970. A Theory of the Origins of the State. *Science* 169: 733-738

Carrier, James G.

1994. *Gifts and commodities: exchange and Western capitalism since 1700*. London: Routledge.

Carrithers, Michael, Matei Candea, Karen Sykes, Martin Holbraad and Soumhya Venkatesan.

2010. Ontology is just another word for culture. *Critique of Anthropology* 30(2): 152-200.

Cartmell, Larry W., Arthur C. Aufderheide, Angela Springfield, Cheryl Weems, and Bernardo Arriaza.

1991. The frequency and antiquity of prehistoric coca-leaf-chewing practices in northern Chile: Radioimmunoassay of a cocaine metabolite in human-mummy hair. *Latin American Antiquity* 2(3): 260-268.

Castro, Victoria, Varinia Varela, Carlos Aldunate, and Edgardo Araneda.

2004. Principios Orientadores y Metodología para el Estudio del Qhapaqñan en Atacama: Desde El Portezuelo del Inka hasta Río Grande. *Chungará* 36(2): 463-481.

Choque, María Eugenia, and Carlos Mamani.

2001. Reconstitución del ayllu y derechos de los pueblos indígenas: el movimiento indio en los Andes de Bolivia. *Journal of Latin American Anthropology* 6(1): 202-224.

Church, Warren B., and Adriana von Hagen

2008. Chachapoyas: cultural development at an Andean cloud forest crossroads. In *The Handbook of South American Archaeology*, Helaine Silverman and William H Isbell (eds). New York: Springer, pp. 903-926.

Coben, Lawrence S.

2010. Some roads do lead to Incallajta: the Inca double road from Vacas. *Ñawpa Pacha, Journal of Andean Archaeology* 30(1): 53-63.

2012. Theatres of Power: Inca Imperial Performance. Unpublished Ph.D dissertation, Department of Anthropology, University of Pennsylvania.

Cobo, Bernabé.

1979a [1653]. *History of the Inca Empire: An Account of the Indians' Customs and Their Origins Together with a Treatise on Inca Legends, History and Social Institutions*. Austin: University of Texas Press.

1979b [1653]. *Historia del nuevo mundo*. Austin: University of Texas Press.

1990 [1653]. *Inca Religion and Customs*. Austin: University of Texas Press.

Coello Rodríguez, Antonio.

2000. El camino inca en el distrito de San Damián, provincia de Huarochirí, Perú. In *Caminos Precolombinos: las Vías, los Ingenieros y los Viajeros*, Leonor Herrera and Marianne Cardale de Schimpff (eds). Bogotá: Instituto Colombiano de Antropología y Historia, pp. 167-193.

Cook, Noble David.

1981. *Demographic Collapse: Indian Peru, 1520-1620*. Cambridge: Cambridge University Press.

Costin, Cathy and Timothy Earle.

1989. Status distinction and legitimation of power as reflected in changing patterns of consumption in late prehispanic Peru. *American Antiquity* 54: 691-714.

Covey, R. Alan.

2003. *The Vilcanota Valley (Peru): Inka State Formation and the Evolution of Imperial Strategies*. Ph.D. Dissertation, Department of Anthropology, University of Michigan, Ann Arbor.

2006. *How the Incas Built Their Heartland*. Ann Arbor: University of Michigan Press.

2008. Multiregional perspectives on the archaeology of the Andes during the Late Intermediate Period (c. AD 1000–1400). *Journal of Archaeological Research* 16(3): 287-338.

Covey, R. Alan, and Donato Amado González (eds).

2008. *Imperial transformations in sixteenth-century Yucay, Peru*. Ann Arbor: Memoirs of the Museum of Anthropology 44, University of Michigan.

Covey, R. Alan, and Christina M. Elson.

2007. Ethnicity, demography, and estate management in sixteenth-century Yucay. *Ethnohistory* 54(2): 303-335.

Dalakoglou, Dimitris.

2010. The road: An ethnography of the Albanian–Greek cross-border motorway. *American Ethnologist* 37(1): 132-149.

D'Altroy, Terence N.

1987. Transitions in power: Centralization of Wanka political organization under Inka rule. *Ethnohistory* 43(1): 78-102.

1992. *Provincial Power in the Inka Empire*. Washington and London: Smithsonian Institution Press.

2001. Politics, resources and blood in the Inka Empire. In *Empires: Perspectives from archaeology and history*, Susan E. Alcock, Terence N. D'Altroy, Kathleen D. Morrison and Carla M. Sinopoli (eds). Cambridge: Cambridge University Press, pp. 201-226.

2005. *Remaking the Social Landscape*. Colonization in the Inka Empire. In *The Archaeology of Colonial Encounters. Comparative Perspectives*, Gil Stein (ed). Santa Fe: SAR Press, pp. 263-296.

D'Altroy, Terence N. and Christine A. Hastorf.

1984. The Distribution and Contents of Inca State Storehouses in the Xauxa Region of Peru. *American Antiquity* 49(2): 334-349

D'Altroy, Terence N. and Katharina J. Schreiber.

2004. Andean Empires. In *Andean Archaeology*, Helaine Silverman (ed). New York: Blackwell, pp. 255-279.

Dean, Carolyn.

2010. *A Culture of Stone: Inka Perspectives on Rock*. Durham: Duke University Press.

De la Cadena, Marisol.

2010. Indigenous cosmopolitics in the Andes: Conceptual reflections beyond "Politics". *Cultural Anthropology* 25(2): 334-370.

2012. An Archive that Exceeded History, or the Eventfulness of the Ahistorical. Paper presented at the annual meeting of the American Anthropological Association, San Francisco, November 17.

Demarest, Arthur A.

1981. *Viracocha: the nature and antiquity of the Andean High God*. Cambridge: Peabody Museum of Archaeology and Ethnography, Harvard University.

DeMarrais, Elizabeth, Luis Jaime Castillo and Timothy Earle.

1996. Ideology, materialization, and power strategies. *Current Anthropology* 37(1): 15-31

- De Ocampo, Baltasar.  
1999 [1610]. *An Account of the Province of Vilcapampa and a Narrative of the Execution of Inca Yupac Amaru*. Cambridge: In parentheses Publications.
- Descola, Phillipe.  
1996. *Nature and Society: Anthropological Perspectives*. London: Routledge.  
  
2009. Human natures. *Social Anthropology/Anthropologie Sociale* 17(2): 145–157.
- Diez de Betanzos, Juan.  
1996 [1557]. *Narrative of the Incas*. Austin: University of Texas Press.
- Dillehay, Tom D.  
1977. Tawantinsuyu integration of the Chillón Valley, Peru: a case of Inca geo-political mastery. *Journal of Field Archaeology* 4(4): 397-405.
- Dillehay, Tom D., Jack Rossen, Donald Ugent, Anathasios Karathanasis, Víctor Vásquez, and Patricia Netherly.  
2010. Early Holocene coca chewing in northern Peru. *Antiquity* 84(326): 939-953.
- DiNovelli-Lang, Danielle.  
2010. *Nature, Value and Territory in Alaskan Subsistence Politics: the View from Brown Bear Bay*. Ph.D. dissertation, Department of Anthropology, Columbia University.
- Donkin, Robin. A.  
1979. *Agricultural Terracing in the Aboriginal New World*. Tucson: University of Arizona Press.
- Drew, David.  
1984. The Cusichaca Project: Aspects of Archaeological Reconnaissance: The Lucumayo and Santa Teresa Valleys. In *Current Archaeological Projects in the Central Andes: Some Approaches and Results*, Ann Kendall (ed). Oxford: BAR International Series 210, pp. 345-365.
- Duffait, Erwan.  
2005. Choquequirao en el siglo XVI: etnohistoria e implicaciones arqueológicas. *Bulletin de L'Institute d'études Français Andines* 34 (2): 185-196.
- Duncan-Jones, Richard.  
1982. *The Economy of the Roman Empire: quantitative studies*. Cambridge: Cambridge University Press.
- Durkheim, Émile.

2001. *The Elementary Forms of Religious Life*. Oxford: Oxford University Press.
- Earls, John.  
1969. The organization of power in Quechua mythology. *Journal of the Steward Anthropological Society* 1(1): 63-82.
- Erickson, Clark L.  
1995. Archaeological methods for the study of ancient landscapes of the Llanos de Mojos in the Bolivian Amazon. In *Archaeology in the American Lowland Tropics: Current Analytical Methods and Recent Applications*, Peter Stahl (ed.). Cambridge: Cambridge University Press, pp. 66-95.
- Espinoza Soriano, Waldemar.  
1973. La coca de los Mitmas Cayampis en el reino de Ancara, Siglo XVI; una información inédita de 1566-1567 para la etnohistoria andina. *Anales Científicos* 2: 7-65.
- Fabian, Johannes.  
2002. *Time and the other: How anthropology makes its object*. New York: Columbia University Press.
- Foucault, Michel.  
1973. *The birth of the clinic: An archaeology of medical perception*. New York: Pantheon.  
1995. *Discipline and Punish: The Birth of the Prison*. New York: Vintage.
- Fowles, Severin.  
2008. The perfect subject: Postcolonial object studies. Paper presented at the annual Theoretical Archaeology Group meeting, New York, May 22.  
2010. People without things. In *An Anthropology of Absence: materializations of transcendence and loss*, Bille, Mikkel, Frida Hastrup, and Tim Flohr Sørensen (eds). New York: Springer-Verlag, pp. 23-41.  
2013. *An Archaeology of Doings: Secularism and the Study of Pueblo Religion*. Santa Fe: SAR Press.
- Gabriel, Kathryn.  
1991. *Roads to the Center Place. A Cultural Atlas of Chaco Canyon and the Anasazi*. Boulder: Johnson Books.
- Gade, Daniel W.  
1977. Llama, alpaca y vicuña: ficción y realidad. In *Pastores de Puna, uywamichiq punarunakuna*, Jorge Flores Ochoa (ed). Lima: Instituto de Estudios Peruanos, pp. 113-120.



1979. Inca and colonial settlement, coca cultivation and endemic disease in the tropical forest. *Journal of Historical Geography* 5(3): 263-279.
1999. *Nature and Culture in the Andes*. Madison: University of Wisconsin Press.
- Gasparini, Graziano and Luise Margolies.  
1980. *Inca Architecture*. Bloomington: Indiana University Press.
- Gell, Alfred.  
1998. *Art and agency*. Oxford: Clarendon.
- Gelles, Paul H.  
2000. *Water and Power in Highland Peru*. New Brunswick: Rutgers University Press.
- Glave, Luis Miguel T. and María Isabel Remy.  
1983. *Estructura agraria y vida rural en una región andina: Ollantaytambo entre los siglos XVI-XIX*. Cusco: Centro de Estudios Andinos Bartolomé de las Casas.
- Glowacki, Mary, and Michael Malpass.  
2003. Water, huacas, and ancestor worship: traces of a sacred Wari landscape. *Latin American Antiquity* 14(4): 431-448.
- Godelier, Maurice.  
1999. *The enigma of the gift*. Chicago: University of Chicago Press.
- González-Holguín, Diego.  
1608. *Vocabulario de la Lengva General de todo el Perv llamada Lengva Qquichua o del Inca*. Lima.
- González - Ruibal, Alfredo.  
2008. Time to destroy. *Current Anthropology* 49(2): 247-279.
- Gosden, Chris.  
2004. *Archaeology and colonialism: cultural contact from 5000 BC to the present*. Cambridge: Cambridge University Press.
- Gose, Peter.  
1986. Sacrifice and the Commodity Form in the Andes. *Man* 21(2): 296-310.
1994. *Deathly waters and hungry mountains: agrarian ritual and class formation in an Andean town*. Toronto: University of Toronto Press.

1996. Oracles, divine kingship, and political representation in the Inka state. *Ethnohistory* 43(1): 1-32.
- Gramsci, Antonio.  
1992. *Further Selections from the Prison Notebooks*. Minneapolis: University of Minnesota Press.
- Graubart, Karen B.  
2000. Indecent living: indigenous women and the politics of representation in early colonial Peru. *Colonial Latin American Review* 9(2): 213-235.
- Graves, William M., and Scott Van Keuren.  
2011. Ancestral Pueblo Villages and the Panoptic Gaze of the Commune. *Cambridge Archaeological Journal* 21(2): 263-282.
- Guillet, David.  
1987. Terracing and Irrigation in the Peruvian Highlands. *Current Anthropology* 28(4): 409-430.
- Gupta, Akhil, and James Ferguson.  
1992. Beyond "culture": Space, identity, and the politics of difference. *Cultural anthropology* 7(1): 6-23.
- Haber, Alejandro F.  
2009. Animism, Relatedness, Life: Post-Western Perspectives. *Cambridge Archaeological Journal* 19(3): 418-430.
- Harman, Graham.  
2005. *Guerilla metaphysics: Phenomenology and the carpentry of Things*. Chicago: Open Court.  
  
2009. *Prince of Networks: Bruno Latour and Metaphysics*. Prahnan: Re.press.  
  
2010. *Towards Speculative Realism: Essays and Lectures*. London: Zone Books.
- Harris, Oliver J. and Robb, John.  
2012. Multiple Ontologies and the Problem of the Body in History. *American Anthropologist* 114(4): 668-679
- Harrison, Rodney.  
2009. Towards an archaeology of the Welfare State in Britain, 1945-2009. *Archaeologies* 5(2): 238-262.
- Hassig, Ross.

1988. *Aztec Warfare: Imperial Expansion and Political Control*. Norman: University of Oklahoma Press.
- Hastorf, Christine A.  
1987. Archaeological evidence of coca (*Erythroxylum coca*, erythroxylaceae) in the upper mantaro valley, Peru. *Economic Botany* 41(2): 292-301.
- Hawkes, Christopher.  
1954. Archaeological theory and method: some suggestions from the Old World. *American Anthropologist* 56: 155-68.
- Hemming, J.  
2003. *The Conquest of the Incas*. Orlando: Houghton Mifflin Harcourt.
- Henare, Amiria, Martin Holbraad, and Sari Wastell.  
2007. Introduction: thinking through things. In *Thinking through things: theorizing artefacts ethnographically*, A. Henare, M. Holbraad, and S. Wastell, (eds). London: Routledge, pp. 1-31.
- Hobbes, Thomas.  
1985[1651]. *Leviathan*. London: Penguin.
- Hobsbawm, Eric J.  
1969. A case of neo-feudalism: La Convencion, Peru. *Journal of Latin American Studies* 1(1): 31-50.
- Hodder, Ian.  
2012. *Entangled: An archaeology of the relationships between humans and things*. Oxford: Wiley-Blackwell.
- Hughes, Lauren Finley.  
2010. Weaving Imperial Ideas: Iconography and Ideology of the Inca Coca Bag. *Textile: The Journal of Cloth and Culture* 8(2): 148-179.
- Huizer, Gerrit.  
1983. Social polarisation as a disruptive force in cooperatives: The case of the Te Huyro Central Cooperative in la Convención, Perú. *Boletín de Estudios Latinoamericanos y del Caribe* 35: 21-38.
- Humphrey, Caroline.  
2005. Ideology in infrastructure: architecture and Soviet imagination. *Journal of the Royal Anthropological Institute* 11(1): 39-58.
- Huxley, George L.

1980. Aristotle, Las Casas and the American Indians. *Proceedings of the Royal Irish Academy* 80: 57-68.

Hyslop, John.

1984. *The Inka Road System*. Orlando: Academic Press Inc.

1990. *Inka Settlement Planning*. Austin: University of Texas Press.

Hyslop, John, and Mario Rivera.

1984. An Expedition on the Inca Road in the Atacama Desert. *Archaeology* 37: 33-39.

Ingold, Tim.

2007. *Lines: a brief history*. London: Routledge.

2006. Up, Across and Along. *Koht Ja Paik/Place and Location: Studies in Environmental Aesthetics and Semiotics* 5: 21-36.

Isbell, Billie Jean.

1978. To Defend Ourselves. *Ecology and Ritual in an Andean Village*. Austin: University of Texas Press.

Isbell, William H.

1997. *Mummies and mortuary monuments: a postprocessual prehistory of Central Andean social organization*. Austin: University of Texas Press.

Jackson, Michael.

1998. *Minima Ethnographica: Intersubjectivity and the Ethnographic Project*. Chicago: University of Chicago Press.

Jenkins, David

2001. A Network Analysis of Inka Roads, Administrative Centers, and Storage Facilities. *Ethnohistory* 48(4): 655-687.

Jordan, Glenn.

1995. Flight from Modernity Time, the other and the Discourse of Primitivism. *Time & Society* 4(3): 281-303.

Julien, Catherine.

1998. Coca production on the Inca frontier: the yungas of Chuquioma. *Andean Past* 5: 129-147.

2007. Francisco de Toledo and his campaign against the Incas. *Colonial Latin American Review* 16(2): 243-272.

Kantner, John.

1997. Ancient Roads, Modern Mapping: Evaluating Chaco Anasazi Roadways Using GIS Technology. *Expedition* 39(3): 49-62.

Kay, Bruce H.

1999. Violent opportunities: The rise and fall of "King Coca" and Shining Path. *Journal of Interamerican Studies and World Affairs* 41(3): 97-127.

Kendall, Ann.

1984. Archaeological Investigations of the Late Intermediate Period and Late Horizon Period at Cusichaca, Peru. In *Current Archaeological Projects in the Central Andes: Some Approaches and Results*, Ann Kendall (ed). Oxford: BAR International Series 210, pp. 247-290.

1985. *Aspects of Inca Architecture: Description, Function and Chronology (part i)*. Oxford: BAR International Series 242.

2000. Una red de caminos prehispánicos: rutas de comercio en el distrito de Ollantaytambo, Cuzco, Perú. In *Caminos Precolombinos: las Vías, los Ingenieros y los Viajeros*, Leonor Herrera and Marianne Cardale de Schrimppff (eds). Bogotá: Instituto Colombiano de Antropología y Historia, pp. 221-241.

Knapp, A. Bernard, and Wendy Ashmore.

1999. Archaeological landscapes: Constructed, conceptualized, ideational. In *Archaeologies of landscape: Contemporary perspectives*, Bernard A. Knapp and Wendy Ashmore (eds). Oxford: Blackwell, pp. 1-30.

Kolata, Alan L., and Gina Kolata.

1993. *The Tiwanaku: portrait of an Andean civilization*. Oxford: Blackwell.

Kosiba, Steven.

2010. *Becoming Inka: The Transformation of Political Place and Practice during Inka State Formation (Cusco, Peru)*. Ph.D. dissertation, Department of Anthropology, University of Chicago.

2011. The politics of locality: Pre-Inka social landscapes of the Cuzco Region. In *The archaeology of politics: The materiality of political practice and action in the past*, Peter Johansen & Andrew Bauer (eds). Newcastle: Cambridge Scholars Publishing, pp. 114-150.

Kosiba, Steven, and Andrew M. Bauer.

2013. Mapping the Political Landscape: Toward a GIS Analysis of Environmental and Social Difference. *Journal of Archaeological Method and Theory* 20(1): 61-101.

- Larkin, Brian.  
2008. *Signal and noise: media, infrastructure, and urban culture in Nigeria*. Durham: Duke University Press Books.
- Latour, Bruno.  
1993a. *We have never been modern*. Cambridge: Harvard University Press.  
1993b. *The Pasteurization of France*. Cambridge: Harvard University Press.  
2004. *Politics of Nature*. Cambridge: Harvard University Press.  
2005. *Reassembling the social: an introduction to actor-network-theory*. Oxford: Oxford University Press.
- Laurence, Ray.  
1999. *The roads of Roman Italy: mobility and cultural change*. London: Routledge
- Lee, Vincent R.  
1997. *Inca Choqek'iraw*. Wilson: Sixpac Manco Publications  
2000. *Forgotten Vilcabamba*. Wilson: Sixpac Manco Publications.
- Leone, Mark P.  
2005. *The archaeology of liberty in an American capital: excavations in Annapolis*. Berkeley: University of California Press.  
1995. A historical archaeology of capitalism. *American anthropologist* 97(2): 251-268.
- Lévi-Strauss, Claude.  
1973 . *Anthropologie Structurale Deux*. Paris: Plon.
- Levy-Bruhl, Lucien.  
1923. *How natives think*. New York: Washington Square.
- Locke, John.  
1980. *Second treatise of government*. London: Hackett.
- Luhrmann, Tanya M.  
2006. Subjectivity. *Anthropological Theory* 6(3): 345-361.
- Lumbreras, Luis  
1974. *The Peoples and Cultures of South America*. Washington, D.C.: Smithsonian Institution.

Luttwak, Edward.

1979. *The Grand Strategy of the Roman Empire: From the First Century AD to the Third*. Baltimore: Johns Hopkins University Press.

MacCormack, Sabine.

1993. *Religion in the Andes*. Princeton: Princeton University Press.

MacLean, Margaret G.

1986. *Sacred Land, Sacred Water: Inca Landscape Planning in the Cuzco Area*. Ph.D. Dissertation, Department of Anthropology, University of California, Berkeley.

Mahmood, Saba.

2011. *Politics of Piety: The Islamic Revival and the Feminist Subject*. New Haven: Princeton University Press.

Marshall, Michael P.

1997. The Chacoan Roads: A Cosmological Interpretation. In *Anasazi Architecture and American Design*, Baker H. Morrow and V. B. Price (eds). Albuquerque: University of New Mexico Press, pp. 62-74.

Mathien, Frances Joan.

1991. Political, Economic, and Demographic Implications of the Chaco Road Network. In *Ancient Road Networks and Settlement Hierarchies in the New World*, Charles Trombold (ed). Cambridge: Cambridge University Press, pp. 99-110.

McEwan, Gordon F.

1984. *The middle horizon in the Valley of Cuzco, Peru: the impact of the Wari occupation of Pikillacta in the Lucre Basin*. Ph.D. dissertation, Department of Anthropology, University of Texas at Austin.

2005. *Pikillacta: The Wari Empire in Cuzco*. Iowa City: University of Iowa Press.

Meskill, Lynn.

2005. Introduction: object orientations. In *Archaeologies of materiality*, Lynn Meskill (ed). Wiley-Blackwell, pp. 1-17

Mitchell, Timothy.

2002. *Rule of experts: Egypt, techno-politics, modernity*. Berkeley: University of California Press.

Molina, Cristóbal de.

2011. *Account of the Fables and Rites of the Incas*. Austin: University of Texas Press.

Moore, Jerry D.

1989. Pre-Hispanic Beer in Coastal Peru: Technology and Social Context of Prehistoric Production. *American Anthropologist* 91(3): 682-695.

Morgan, Edmund S.

1989. *Inventing the people: The rise of popular sovereignty in England and America*. New York: WW Norton & Company.

Morris, Craig.

1971. The identification of function in Inca architecture and ceramics. *Actas y Memorias del XXXIX Congreso Internacional de Americanistas*. Vol. 3.

1979. Maize Beer in the Economics, Politics, and Religion of the Inca Empire. In *Fermented Foods in Nutrition*, C. Gasteau, W. Darby and T. Turner, (eds). New York: Academic Press, pp. 21-34.

1995. Symbols to Power: Styles and Media in the Inka State. In *Style, Society and Person: Archaeological and Ethnological Perspectives*, Christopher Carr and Jill E. Neitzel (eds). New York: Plenum Press, pp. 419-433.

1998. Inka Strategies of Incorporation and Governance. In *Archaic States*, Gary Feinman and Joyce Marcus (eds). Santa Fe: SAR Press, pp. 293-309.

Morris, Craig, and Adriana Von Hagen.

2011. *The Incas: Lords of the Four Quarters*. London: Thames & Hudson.

Morris, Craig, R. Alan Covey, and Pat H. Stein.

2011. *The Huánuco Pampa Archaeological Project: Volume 1, The plaza and palace complex*. Anthropological papers of the American Museum of Natural History 96.

Morris, Craig, and Donald E. Thompson.

1985. *Huánuco Pampa: an Inca city and its hinterland*. London: Thames and Hudson.

Murra, John V.

1962. Cloth and Its Functions in the Inca State. *American Anthropologist* 64(4): 710-728.

1972 El "control vertical" de un máximo de pisos ecológicos en la economía de las sociedades andinas. In *Visita de la Provincia de Leon de Huánuco en 1562*, John Murra (ed). Huánuco: Universidad Nacional Hermilio Valdizan, pp. 427-476.

1980. *The economic organization of the Inka state*. Greenwich: Jai Press,



1982. The Mit'a Obligations of Ethnic Groups to the Inka State. In *The Inca and Aztec States 1400-1800: Anthropology and History*, George Collier, Renato Rosaldo and John Wirth (eds). Cambridge: Cambridge University Press, pp. 237-262.

1985 "El Archipiélago Vertical" Revisited. In *Andean Ecology and Civilization*. Shozo Masuda, Izumi Shimada, and Craig Morris (eds). Tokyo: University of Tokyo Press, pp. 3-13

1991. *Visita de los valles de Sonqo en los yunka de coca de La Paz (1568-1570)*. Madrid: Instituto de Cooperación Iberoamericana.

Nair, Stella E.

2003. *Of Remembering and Forgetting: The Architecture of Chinchero, Peru from Thupa 'Inka to the Spanish Occupation*. Ph.D. Dissertation, Department of Architecture, University of California, Berkeley.

Niles, Susan A.

1982. Style and function in Inca agricultural works near Cuzco. *Ñawpa Pacha: Journal of Andean Archaeology* 20: 163-182.

1987. *Callachaca: Style and Status in an Inca Community*. Iowa City: University of Iowa Press.

1999. *The Shape of Inca History*. Iowa City: University of Iowa Press.

2004. The Nature of Inca Royal Estates. In *Machu Picchu: Unveiling the Mystery of the Incas*, Richard L. Burger and Lucy C. Salazar (eds). New Haven: Yale University Press, pp. 49-70.

Nowack, Kerstin.

2006. *Las mercedes que pedía para su salida: The Vilcabamba Inca and the Spanish State, 1539-1572*. In *New World, First Nations: Native Peoples of Mesoamerica and the Andes under Colonial Rule*, David Patrick Cahill and Blanca Tovías (eds). Brighton: Sussex Academic Press, pp. 57-91.

Nozick, Robert.

1974. *Anarchy, state, and utopia*. New York: Basic Books.

Olsen, Bjørnar.

2003. Material culture after text: re-membering things. *Norwegian Archaeological Review* 36(2): 87-104.

2007. Keeping things at arm's length: a genealogy of asymmetry. *World Archaeology* 39(4): 579-588.

2010. *In defense of things: archaeology and the ontology of objects*. Lanham: AltaMira.
- Olsen, Bjørnar, Michael Shanks, Timothy Webmoor and Christopher Witmore.  
2012. *Archaeology: the Discipline of Things*. Berkeley: University of California Press.
- Ortner, Sherry B.  
2005. Subjectivity and cultural critique. *Anthropological Theory* 5(1): 31-52.
- Parkerson, Phillip T.  
1983. The Inca Coca Monopoly: Fact or Legal Fiction? *Proceedings of the American Philosophical Society* 127(2): 107-123.
- Pärsinnen, Martti.  
1992. *Tawantinsuyu: The Inca State and Its Political Organization*. Helsinki: Suomen Historiallisen Seuran.
- Pease, Franklin.  
1970. The Andean Creator God. *Numen* 17(3): 161-175.
- Percovich, María Fernanda.  
2012. Análisis de una encomienda cuzqueña (Paucartambo, 1597-1612). *Histórica* 33(2): 29-64.
- Pizarro, Pedro.  
1986. *Relación del Descubrimiento y Conquista de los Reinos del Perú*. Lima: Pontificia Universidad Católica, Fondo Editorial.
- Power, Nina.  
2006. Towards an Anthropology of Infinitude: Badiou and the Political Subject. *Cosmos and History: The Journal of Natural and Social Philosophy* 2: 186-209.
- Protzen, Jean-Pierre.  
1993. *Inca Architecture and Construction at Ollantaytambo*. Oxford: Oxford University Press.
- Quilter, Jeffery.  
2001. Moche mimesis: Continuity and change in public art in early Peru. *Studies in the History of Art* 63(1): 21-46.
- Raffino, Rodolfo.  
1993. *Inca: Arqueología, historia y urbanismo del altiplano andino*. Buenos Aires: Editorial Corregidor.

Regal, Alberto Matienzo.

1936. *Los Caminos del Inca en el Antiguo Perú*. Lima: Sanmartí.

Reinhard, Johan.

1985. Sacred mountains: An ethno-archaeological study of high Andean ruins. *Mountain Research and Development* 5(4): 299-317.

1995. House of the sun: The Inka temple of Vilcanota. *Latin American Antiquity* 6(4): 340-349.

2007. *Machu Picchu: Exploring an Ancient Sacred Center*. Los Angeles: Cotsen Institute of Archaeology, UCLA.

Renfrew, Colin.

1977. Models for exchange and spatial distribution. In *Exchange Systems in Prehistory*, Timothy K. Earle and James. E. Ericson (eds). New York: Academic Press, pp. 71-90.

Rivera, Mario A., Arthur C. Aufderheide, Larry W. Cartmell, Constantino M. Torres, and Odin Langsjoen.

2005. Antiquity of coca-leaf chewing in the south central Andes: a 3,000 year archaeological record of coca-leaf chewing from northern Chile. *Journal of psychoactive drugs* 37(4): 455-458.

Rostworowski de Diez Canseco, María.

1963. Dos manuscritos inéditos con datos sobre Manco II, tierras personales de los Incas y mitimaes. *Nueva Cronica* 1: 223-239.

1983. *Estructuras Andinas del Poder*. Lima: IEP.

1988. *Conflicts over Coca Fields in XVIth Century Peru*. Ann Arbor: Memoirs of the Museum of Anthropology, University of Michigan 21.

1999. *History of the Inca Realm*. Cambridge: Cambridge University Press.

2001. *Pachacutec Inca Yupanqui*. Lima: Instituto de Estudios Peruanos.

Rowe, John H.

1946. Inca Culture at the Time of the Spanish Conquest. In *Handbook of South American Indians*, Julian Steward (ed). Washington, D.C.: Bureau of American Ethnology, Bulletin 143, pp. 183-330

1960. The Origins of Creator Worship among the Incas. In *Culture in History*, Stanley Diamond (ed). New York: Columbia University Press, pp. 408-429

1990. Machu Picchu a la luz de documentos de siglo XVI. *Histórica* 14(1): 139-154.
- Sahlins, Marshall D.  
1993. *Waiting for Foucault*. Cambridge: Prickly Pear Press.
- Salazar, Lucy C.  
2004. Machu Picchu: Mysterious Royal Estate in the Cloud Forests. In *Machu Picchu: Unveiling the Mystery of the Incas*, Richard L. Burger and Lucy C. Salazar (eds). New Haven: Yale University Press, pp. 21-48.
- Salomon, Frank L.  
1991. Introductory essay: the Huarochirí manuscript. In *The Huarochirí Manuscript: a testament of ancient and Colonial Andean religion*, Frank L. Salomon and Urioste, Jorge (eds). Austin: University of Texas, pp. 1-38.  
  
2004. *The cord keepers: Khipus and cultural life in a Peruvian village*. Durham: Duke University Press Books.
- Samaniego, Lorenzo, Enrique Vergara, and Henning Bischof.  
1985. New Evidence on Cerro Sechin, Casma Valley, Peru. In *Early Ceremonial Architecture in the Andes*, Christopher Donnan (ed). Ann Arbor: Dumbarton Oaks, pp. 165-190.
- Sánchez Garrafa, Rodolfo.  
1999. *Wakas y Apus de Pamparaqay: estructuras simbólicas en la tradición oral de Grau, Apurímac*. Lima: Optimice.
- Sanhueza Tohá, Cecilia.  
2004. Medir, Amojonar, Repartir: Territorialidades y Prácticas Demarcatorias en el Camino Incaico de Atacama (II Región, Chile). *Chugara* 36(2): 483– 89.
- Sarmiento de Gamboa, Pedro.  
2007 [1557]. *The History of the Incas*. Austin: University of Texas Press.
- Schiffer, Michael B., Alan P. Sullivan, and Timothy C. Klinger.  
1978. The design of archaeological surveys. *World archaeology* 10(1): 1-28.
- Schjellerup, Inge R.  
1997. *Incas and Spaniards in the Conquest of the Chachapoyas. Archaeological and Ethnohistorical Research in the North-eastern Andes of Peru*. Arkeologiska institutionen Department of Archaeology, The National Museum of Denmark, Department of Ethnography.
- Schreiber, Katharina J.

1992. *Wari Imperialism in Middle Horizon Peru*. Ann Arbor: University of Michigan Museum.
1991. The Association between Roads and Politics. In *Ancient Road Networks and Settlement Hierarchies in the New World*, Charles Trombold (ed). Cambridge: Cambridge University Press, pp. 243-252.
1987. Conquest and consolidation: a comparison of the Wari and Inka occupations of a highland Peruvian valley. *American Antiquity* 52: 266-284.
1984. Prehistoric Roads in the Carahuarazo Valley. *Current Archaeological Projects in the Central Andes: Some Approaches and Results*, Ann Kendall (ed). Oxford: BAR International Series 210, pp. 75-94.
- Segrave, Kerry.  
2004. *Lie detectors: A social history*. McFarland & Company.
- Shanks, Michael.  
2007. Symmetrical archaeology. *World Archaeology* 39(4): 589–596.
- Sherbondy, Jeanette.  
1986. Los ceques: código de canales en el Cusco Incaico. *Allpanchis* 27: 39-73.
- Sikkink, Lynn and Braulio Choque.  
1999. Landscape, gender, and community: Andean mountain stories. *Anthropological Quarterly* 72(4): 167-182.
- Silverblatt, Irene M.  
1987. *Moon, sun, and witches: Gender ideologies and class in Inca and colonial Peru*. Princeton: Princeton University Press.
- Sistrunk, Hannah.  
2010. Road to empire: documenting an Inca road in northern Ecuador. *Ñawpa Pacha, Journal of Andean Archaeology* 30(2): 189-208.
- Smith, Monica L.  
2005. Networks, territories, and the cartography of ancient states. *Annals of the Association of American Geographers* 95(4): 832-849.
- Snead, James, Clark Erickson and Andrew Darling.  
2011. Making Human Space: the Archaeology of trails, paths and roads. In *Landscapes of movement: trails, paths, and roads in anthropological perspective*, Snead, James, Clark Erickson, and Andrew Darling (eds). Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology, pp. 1-19.

Spalding, Karen.

1984. *Huarochirí: an Andean society under Inca and Spanish rule*. Palo Alto: Stanford University Press.

Spivak, Gayatri Chakravorty.

1995. Can the subaltern speak? In *The Postcolonial Studies Reader*, Bill Ashcroft, Gareth Griffiths and Helen Tiffin (eds). London: Routledge, pp. 24-28.

Squier, George E.

1877. *Peru: Incidents of Travel and Exploration in the Land of the Incas*. Henry Holt & Company.

Staller, John E.

2008. Dimensions of place: The significance of centers to the development of Andean civilization: An exploration of the Ushnu concept. In *Pre-Columbian Landscapes of Creation and Origin*, John E. Staller (ed). New York: Springer, pp. 269-313.

Stanish, Charles, and Brian Bauer.

2007. Pilgrimage and geography of power in the Inca state. In *Variations in the Expressions of Inka Power*, Richard L. Burger, Craig Morris and Ramiro Matos Mendieta (eds). Washington, D.C.: Dumbarton Oaks, pp. 45-84.

Starn, Orin.

1991. Missing the revolution: anthropologists and the war in Peru. *Cultural Anthropology* 6(1): 63-91.

1994. Rethinking the Politics of Anthropology: The Case of the Andes. *Current Anthropology* 35(1): 13-38.

Stehberg, Rubén, and Nazareno Carvajal.

1986. Road System of the Incas in the Southern Part of Their Tawantinsuyu Empire. *National Geographic Research* 4(1): 74-97.

Stein, Gil J. Understanding ancient state societies in the Old World.

2007. In *Archaeology at the Millennium: a Sourcebook*, Gary M. Feinman and T. Douglas Price (eds). New York: Springer, pp. 353-380.

Stein, John R.

1983. Road Corridor Descriptions. In *Chaco Roads Project Phase I*, Chris Kincaid (ed). Albuquerque: Bureau of Land Management, New Mexico State Office, pp. 8-15.

Stein, John R. and Peter J. McKenna.

1988. *An Archaeological Reconnaissance of a Late Bonito Phase Occupation near Aztec Ruins National Monument, New Mexico*. Santa Fe: Southwest Cultural Resources Center, National Park Service.

Stobart, Henry.

2006. *Music and the Poetics of Production in the Bolivian Andes*. Burlington: Ashgate Publishing.

Stoehert-Stockman, Karen.

1967. *Pre-Colonial Highways of Bolivia. Part 1: The La Paz-Yungas Route Via Palca*. La Paz: Academia Nacional de Ciencias de Bolivia.

Strathern, Marilyn.

1988. *The Gender of the Gift: Problems with Women and Problems with Society in Melanesia*. Berkeley: University of California Press.

Strube, Leon E.

1963. Vialidad Imperial de los Incas. *Instituto de Estudios Americanistas* 33. Cordoba: Universidad Nacional de Cordoba.

Thomas, Julian.

2004. *Archaeology and modernity*. London: Routledge.

Tilley, Christopher Y.

1994. *A phenomenology of landscape: places, paths, and monuments*. Oxford: Berg.

Topic, John R., Theresa Lange Topic and Alfredo Melly Cava.

2002. Catequil: The Archaeology, Ethnohistory, and Ethnography of a Major Provincial Huaca. In *Andean Archaeology I: Variations in Sociopolitical Organization*, William H. Isbell and Helaine Silverman (eds). New York: Kluwer Academic/Plenum Press, pp. 303-338.

Toups, Melissa A., Andrew Kitchen, Jessica E. Light and David L. Reed.

2011. Origin of clothing lice indicates early clothing use by anatomically modern humans in Africa. *Molecular biology and evolution* 28(1): 29-32.

Turner, Bethany. L., George D. Kamenov, John D. Kingston and George J. Armelagos.

2009. Insights into immigration and social class at Machu Picchu, Peru based on oxygen, strontium, and lead isotopic analysis. *Journal of archaeological science* 36(2): 317-332.

Tylor, Edward B.

1871. *Primitive Culture*. London: John Murray.

Urton, Gary

1981. *At the Crossroads of the Earth and Sky: An Andean Cosmology*. Austin: University of Texas Press.

1997. *The Social Life of Numbers*. Austin: University of Texas Press

1999. Inca myths. Austin: University of Texas Press.

Van Buren, Mary.

1996. Rethinking the vertical archipelago. *American Anthropologist* 98(2): 338-351.

Van de Guchte, Maarten.

1999. The Inca cognition of landscape: archaeology, ethnohistory, and the aesthetic of alterity. In *Archaeologies of landscape: contemporary perspectives*, Wendy Ashmore and A. Bernard Knapp (eds). Oxford: Blackwell, pp.149-168.

Van Dyke, Ruth.

2008. *The Chaco Experience: Landscape and Ideology at the Center Place*. Santa Fe: SAR Press.

Varón Gabai, Rafael.

1997. *Francisco Pizarro and his brothers: the illusion of power in sixteenth-century Peru*. Norman: University of Oklahoma Press.

Viveiros de Castro, Eduardo.

1998. Cosmological deixis and Amerindian perspectivism. *The Journal of the Royal Anthropological Institute* 4(3): 469–88.

2002. O nativo relativo. *Mana* 8(1): 113–48.

2003. Anthropology (AND) science. <http://abaete.wikia.com/wiki/>. (Also published in Manchester Papers in Social Anthropology 7)

2004a. Exchanging Perspectives: The Transformation of Objects into Subjects in Amerindian Ontologies. *Common knowledge* 10(3): 463-484.

2004b. Perspectival Anthropology and the Method of Controlled Equivocation. *Tipiti* 2(1): 3-22.

Villaneuva, Horacio Urteaga.

1971. Documentos sobre Yucay, siglo XVI. *Revista del Archivo Historica de Cuzco* 13: 1-148.

Von Hagen, Victor W.

1979. *The Royal Road of the Inca*. London: Gordon and Cremonesi.



- Von Kaupp, Robert and Octavio Fernández Carrasco.  
2010. *Vilcabamba desconocida: exploraciones 1997-2003*. Cusco: Editorial Gráfica Rivera.
- Webmoor, Timothy.  
2007. What about “one more turn after the social” in archaeological reasoning? Taking things seriously. *World Archaeology* 39(4): 563–578.
- Wightman, Ann M.  
1990. *Indigenous Migration and Social Change: The Foresters of Cuzco, 1570–1720*. Durham: Duke University Press Books.
- Wilkinson, Darryl.  
2011. The apartheid of antiquity. *World Archaeology* 43(1): 26-39.
- Willey, Gordon R.  
1953. Prehistoric settlement patterns in the Viru Valley, Peru. *Bureau of American Ethnology Bulletin*, 155: 1-453.
- Williams, Patrick R. and Donna J. Nash.  
2006. Sighting the apu: a GIS analysis of Wari imperialism and the worship of mountain peaks. *World Archaeology* 38(3): 455-468.
- Witmore, Christopher.  
2007. Symmetrical archaeology: excerpts of a manifesto. *World Archaeology* 39(4): 546–562.
- Wittfogel, Karl A.  
1956. *The hydraulic civilizations*. Chicago: University of Chicago Press.
- Wright, Kenneth R., Gordon Francis McEwan, and Ruth M. Wright.  
2006. *Tipon: Water engineering masterpiece of the Inca Empire*. Reston: American Society of Civil Engineers.
- Wright, Kenneth R., and Alfredo Valencia Zegarra.  
2000. *Machu Picchu: A civil engineering marvel*. Reston: American Society of Civil Engineers.
- Yoffee, Norman.  
2005. *Myths of the archaic state: Evolution of the earliest cities, states, and civilizations*. Cambridge: Cambridge University Press.
- Zovar, Jennifer.

2012. Post-Collapse Constructions of Community, Memory, and Identity: An Archaeological Analysis of Late Intermediate Period Community Formation in Bolivia's Desaguadero Valley. Ph.D. dissertation, Department of Anthropology, Vanderbilt University.

Zuidema, Tom R.

1964. *The ceque system of Cuzco: the social organization of the Empire of the Inca*. Leiden: EJ Brill.

1990. *Inca Civilization in Cuzco*. Austin: University of Texas Press.